

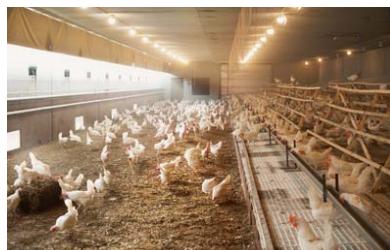


Overview of animal welfare standards and initiatives in selected EU and third countries

Final Report Deliverable 1.2

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Research Institute of Organic Agriculture (FiBL)



Colophon



EconWelfare is a European research project aiming to provide suggestions for national and European policy makers to further improve farm animal welfare. In collaboration with stakeholder groups it collates and investigates the options and their impacts on the livestock production chain, the animal and European society.

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A PDF version can be downloaded free of charge from the project internet site: www.econwelfare.eu

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List of abbreviations

EU	European Union
FiBL	Research Institute of Organic Agriculture, Switzerland
NGO	Non-governmental organisation
na	not applicable
nv	not available

Country codes

AR	Argentina
AU	Australia
BR	Brazil
CA	Canada
CH	Switzerland
CN	China
DE	Germany
ES	Spain
IT	Italy
MK	Macedonia
NL	Netherlands
NZ	New Zealand
PL	Poland
SE	Sweden
UK	United Kingdom
US	United States of America

Abbreviations private and other animal welfare relevant initiatives

ABP	Assured British pigs, UK
AQ	Agriqualita, IT
BL	Bioland, Germany
ER	Elmwood Range, UK
ET	EU traditional free range
DM	Demeter, DE
KRAV	Swedish certification body for organic farming
LAIQ	Legambiente for an Italian Quality Agriculture, IT
MS	Marks & Spencer, UK
MV	Milieukeur Varkens, NL
NL	Naturland, DE
NU	Neuland, DE
RSPCA	Royal Society for the Prevention of Cruelty to Animals (link to Freedom Food)
SA	Soil Association, UK
SKAL	Dutch certification body for organic farming
VW	Volwaard, NL
NOP	National Organic Programme of the US
IFOAM BS	International Federation of Organic Agriculture Movements – Basic Standards
Codex GL	Codex Alimentarius Guidelines for organically produced food

Foreword

EconWelfare is a European research project aiming to provide suggestions for national and European policy makers and to further improve farm animal welfare. In collaboration with stakeholder groups it collates and investigates policy options and their impacts on the livestock production chain, the animal and European society.

The project started with a detailed overview on animal welfare standards and initiatives in eight European countries (Germany, Spain, Italy, the Netherlands, Poland, Sweden, United Kingdom and Macedonia), which are described in detail in a first EconWelfare report on "Animal welfare initiatives in Europe" (Deliverable 1.1, see website www.econwelfare.eu). The aim of this overview was to facilitate discussions in the EconWelfare project on the advantages and disadvantages of different types of welfare initiatives contributing to improved animal welfare. In this report an overview and summary of the analysis of different animal welfare initiatives in Europe is included.

Beside the analysis of current animal welfare initiatives in selected EU-countries another important focus was on the analysis of the content and the level of different legislations and standards in Europe as well as in selected countries exporting animal products to the European Union. The goal of the analysis and an assessment was to identify the state, level and potential for improvement of animal welfare in legislation and private standards schemes based on a broad and in depth investigation. Furthermore such an assessment might be helpful for labelling systems or for governments dealing with equivalency issues, when importing products under EU rules (like for products from organic production).

This report looked at four different groups of regulatory frameworks for animal welfare:

- Legislation on animal welfare in European Countries. involved in the EconWelfare Project (Germany, Spain, Italy, Netherlands, Poland, Sweden, United Kingdom and Macedonia);
- Private standards schemes (with independent inspection and certification) in Europe focusing on improved animal welfare;
- Legislation relevant for animal welfare in EU third countries, exporting to Europe: Switzerland, Argentina, Australia, Brazil, Canada, China, New Zealand, USA (including legislation on organic farming);
- International private standards schemes, relevant as business to business standard for international trade such as GLOBAL.G.A.P., Codex Alimentarius Guidelines for organically produced food and the International Guarantee System of IFOAM (International Federation of Agriculture Movements).

The project coordination and the editors of this report appreciated the big efforts of the whole project team, the external experts, which participated in a workshop in September 2009 in Madrid (R. Bennet, H. Fuller, M. Vaarst, B. Wechsler) and many national experts, which contributed with their information to facilitate the description and the assessment of the animal welfare initiatives. A special thanks goes to the experts involved in the chapter on EU third countries for their valuable and detailed contributions: B. Wechsler and H.U. Huber (CH), D. A. Campagna (AR), A. Sheridan and Australian Government Animal Welfare Unit (AU), O. L. Silva Filha and A. Escosteguy (BR), A. Bell Stoneman & C. Ramsay (CA), Li Baoming (CN), N. Cross and K. Todd (NZ), P. Gary Egrie, D. Jones, Diana Bowen and Jim Pierce (USA), R. Aumüller (GLOBAL.G.A.P.). Additional experts for organic farming have contacted in all Non-EU countries and have sent additional information. Details see Annex.

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Executive summary

The analysis and comparison of animal welfare standards and initiatives in eight European and selected 3rd countries was compiled as part of the EU funded project “Good animal welfare in a socio-economic context: Project to promote insight on the impact for the animal, the production chain and European society of upgrading animal welfare standards (EconWelfare)”. The project provides scientific support for the development of European policies implementing the Community Action Plan on the Protection and Welfare of Animals for 2006-2010.

Taking into account the cultural and geographic differences within the EU and the importance of livestock production in individual member states, the synthesis focused on relevant standards and initiatives in Germany, Spain, Italy, the Netherlands, Poland, Sweden, the United Kingdom and Macedonia. A comparative analysis of welfare standards was made of the legislation from the EU itself, selected EU countries as well as from Australia, Brazil, Canada, Switzerland, China, New Zealand and the United States of America.

Analysis of different animal welfare initiatives in Europe

An important part of the work was the identification and analysis of current animal welfare standards and initiatives in the EU and Non-EU third countries. This report now integrates all subtasks' results to a preliminary assessment of the animal welfare situation in the EU.

The documentation is based on a standardised (on-line) survey approach which was conducted by the project partners in Germany, Spain, Italy, the Netherlands, Poland, Sweden, the United Kingdom and Macedonia. The Swiss project partners were responsible for the survey in Germany.

The survey asked for general information about different public and private initiatives in Europe focusing on improved animal welfare as well as for specific information concerning objectives, implementation, evaluation and impact of each of them. Basis for this information were the regulatory documents of the different countries and initiatives, websites of research institutes, animal welfare and consumer NGOs and interviews with experts. This information helped to classify and to cluster the different actors, goals and instruments and to identify interesting approaches.

The survey and analysis was conducted on 84 Animal Welfare Initiatives (AWIs) in DE, ES, IT, NL, PL SE, UK and Macedonia. A special grouping and assessment system has been developed. 40 regulatory initiatives (legislation or voluntary organic and non-organic standards) and 44 non-regulatory initiatives (e.g. education/information, research, quality assurance and cross-compliance) were assessed.

The main goals of AWIs were, besides improving AW, also the creation of awareness amongst target groups and response to consumer concerns.

Main instruments were regulatory instruments (legislation and private combined with penalties); labelling (mostly private); financial incentives (private and public); codes of practice and mostly private information/education campaigns.

Farmers and farmers groups, major retailers, processors and abattoirs, certification bodies and national governments were main actors in the regulatory initiatives, and in the non-regulatory initiatives AW organisations and researchers.

The analysis showed also country specific differences regarding goals, instruments and actors. Few AWIs have already been quite successful in reaching multiple goals by using different policy instruments and involving broader networks. But many of the AWIs still have too narrow goals, do not combine enough instruments and neglect important actors (e.g. farmers).

Analysis and comparison of national animal welfare legislation in selected European countries with the EU legislative framework

The comparison of the regulatory framework with the national legislation in the participating EU countries in the EconWelfare project showed that one group of countries does not really differ from EU rules. Italy and Spain have transposed EU legislation into their own law without major changes. This is why their national legal rules are not especially mentioned in the comparisons made in this report. Polish animal welfare requirements differ from EU legislation in some aspects but not to a large extent. An animal protection law is already implemented.

The other group of countries has in some areas some additional requirements. The United Kingdom and the Netherlands have national farm animal welfare regulations which differ in quite a few aspects from EU law. Swedish and partly also German animal welfare legislation go beyond EU law in more aspects than other project partner countries. Swedish legislation defines requirements more precisely.

From the potential accession countries Macedonia is still on its way to develop different “Books of rules” for the regulation of animal welfare.

A detailed analysis was made regarding the different main animal categories, which showed the following differences between national and EU legislation:

Dairy cows: additional requirements are in SE legislation regarding feeding, drinking, accommodation, calving, breeding and mutilations.

Pigs: more requirements for feeding and accommodation (space requirements) are laid down in legislation in SE, DE, NL and partly UK.

Poultry: main differences were identified regarding accommodation (DE and SE) in non-cage and enriched cage systems.

Transport and slaughter: mainly DE and SE and partly UK have additional requirements beyond the EU legislation.

Comparison of private standards relevant for animal welfare with EU legal framework

The main focus of the analysis was on those aspects of animal welfare, where differences relevant for animal welfare between private standards, both non-organic and organic, and the EU legislation have been identified. Basically these differences can be more precise; beyond existing requirements of EU legislation or completely new or not found in the current EU legislation.

The comparison focused on the most relevant or most interesting standards for animal welfare in the participating countries of the EconWelfare project and where the project partners did get the necessary information to make a detailed analysis. All the information was collected with a detailed questionnaire, which covered all main animal groups as well as transport and slaughter. The analysis was following the same methodology used in the EU and national animal welfare legislations, focusing mainly on areas such as barn environment, accommodation, feeding/drinking, health care, breeding mutilations and handling of animals. A differentiation has been made between the non-organic and organic standards schemes for legal reasons (special EU regulations for organic production in place).

The comparison of private standards for **cattle**, both for dairy cows and beef, showed most differences regarding tethering (restrictions), light requirements, space requirements (in the stables), slatted floors in the lying area, frequency of access to outdoor and pasture, feeding requirements (in particular roughage), provision of calving pens, castration and other surgical practices (like tail trimming and dehorning).

For **calves** the requirements for group accommodation, the litter/bedding material as well as the feeding (fiber, iron supply, weaning) were in several standards beyond or additional to EU legislation.

When looking at those differences or new aspects in private standards for **pigs in general**, the main aspects for animal welfare in several private standards being beyond or additional to EU legislation are: requirements for outdoor access, lighting, availability of litter on lying

area, restriction or exclusion of slatted floor area, environmental enrichment (possibility for investigation and manipulation activities), feeding (mainly provision of roughage), health care (limitation or non-use of therapeutic of growth promoting type of substances), frequency of regular visits, availability of segregation pens, no or very limited mutilations (major issue castration, but also tail docking, tooth clipping and nose ringing).

The main difference in private standards in comparison with EU legislation for **boars** was found regarding space requirements; for **sows and gilts** the duration of group housing, space requirements and the feeding system; and for **piglets**: space requirements and the feeding system, temperature requirements and minimum age of weaning.

For **poultry in general** the main aspects in several private standards being beyond or additional to EU legislation were: the lighting requirements, the feeding (grit, the non-use or limitation of feed additives in organic farming, permanent access to fresh water, the avoidance or limitation of mutilations (in particular beak trimming), moulting and the choice of more adapted breeds or strains to organic farming.

For **laying hens in non-cage systems** main issues found in several private standards beyond or additional to EU legislation were: maximum flock size, maximum stocking densities (lower than EU legislation), requirements for perches and nests, dust/sand bath and regular visits. In systems with free range area the main differences were a higher number of pop-holes, more requirements for outdoor run, stocking density, duration of outdoor access and pasture management.

Main aspects for **broilers** (chicken kept for meat production) found in several private standards were: maximum flock size, maximum stocking densities (lower than EU legislation), requirements for perches and nests, dust/sand bath and regular visits. In systems with free range area the main differences a higher number of pop-holes, more requirements for outdoor run, stocking density, duration of outdoor access and pasture management.

For **rearing chicks** the main differences are more restrictive requirements for the stocking density indoors and outdoors, the feeding requirements, perches, litter and scratching areas. Main aspects related to **transport of animals** found in several private standards beyond or additional to EU legislation were: the interdiction of sedatives/tranquilisers, bedding material for the youngest in transport vehicles, drinking, resting and feeding possibilities before transport, the pathway/ramps design, the separation of unfamiliar groups, the length of journey.

The main differences regarding **slaughter of animals** found in several private standards compared to EU legislation were: lairage requirements (start of lairage, space, lighting, floors etc.), the avoidance of group mixing, the non-use of electric stimulation, the time between stunning and bleeding as well as further processing and the education of the staff.

Analysis and comparison of EU animal welfare legislation with national legislation and standards in Non-EU third countries

Animal Welfare legislation was analysed from seven third countries, which are important livestock trading partners of the EU (AR, AU, BR, CN, CA, NZ and US) as well as from one additional third country that has relative strict animal welfare legislation (CH). A questionnaire has been worked out and was sent to experts in these countries. The experts have been recommended either by the EU Commission or by partners in the project, who have already established contacts with experienced and knowledgeable experts in these countries.

The main focus of the comparison with the EU regulatory framework was on selected aspects for cattle, pigs, poultry, transport and slaughter, which came out of the analysis of EU legislation and national governmental regulations in EU countries.

The status quo of animal welfare legislation in the eight analysed countries is quite different. In **Switzerland** animal welfare is regulated mainly through the animal protection law and several consecutive regulations. In addition in 1994 direct payments for two animal-friendly programmes (regular outdoor access and animal-friendly indoor systems) to farmers have been introduced.

In **Argentina** and **Brazil** animal welfare is predominantly regulated through legislation both for non-organic and organic production (more detailed in Argentina).

Under **Australia's** federal structure, animal welfare legislation resides with the Australian States and Territories rather than the Commonwealth. State and territory regulators and animal welfare groups have developed a system of national Model Codes of Practice that contain detailed requirements to deliver sound animal welfare outcomes for livestock in all states and territories. These are applied under the existing animal welfare laws of the states and territories to deliver nationally acceptable animal welfare outcomes throughout Australia. A national system of directly enforceable standards for animal welfare in each of the livestock industries is being developed to replace the national Model Codes. These standards are to be implemented consistently in each of Australia's eight states and territories

Canada does not have a national act dedicated to protecting animals but sections of the (national) Criminal Code do pertain to animals. Most provinces then have provincial legislation under a Prevention of Cruelty to Animals Act. Canada has national laws pertaining to the transport of farm animals listed under the Health of Animals Regulations.

In **China** the legal framework is set by the "Animal Husbandry Law of the People's Republic of China" of December 2005. The focus of this law is more on health and veterinary aspects. For slaughtering of pigs, a designated slaughter act is applicable.

The welfare of animals in **New Zealand** is primarily legislated according to The Animal Welfare Act, 1999. Codes of Welfare are an integral part of this framework.

In the **USA** Farm animal welfare has been a growing issue in the United States since the 1990s but the federal government remained long time relatively inactive on the issue. Legislation at the federal level is limited to the Humane Slaughter Act and the Twenty-Eight Hour Law for transport. Industry-driven, animal protection organization-driven, and retailer guidelines all exist; some (not all) are based on the work of third-party (independent) scientific committees and have third-party audits.

Generally in most third countries all the **main animal categories** are covered by the regulatory framework (US: birds are excluded from slaughter and transport regulation).

In all eight countries with the exception of NZ there is a **legal regulatory framework for organic farming**, which includes also animal welfare aspects in the livestock sections. In New Zealand the governmental organic farming rules, called OOAP (Official Organic Assurance Programme) are for export, limited to some countries, but not for internal market.

In several Non-EU third countries (CH, AR, AU, BR, CA) legislation for the transport and slaughtering of animals exist with the exception of China (which has only slaughtering rules for pigs), New Zealand (no specific legislation, articles in general Animal welfare act, detailed in additional Codes of Practice) and for poultry in the US (only industry-led Codes of Practice).

In all analysed Non-EU third countries the **terms** organic (ecological or biological as similar terms) are protected by law. Switzerland has like the European Union also protected the terms "Free range eggs" and "Barn eggs". Other governmental indications or logos for animal welfare according to legislation do not exist in the analysed Non-EU third countries.

In the analysis three **internationally voluntary standards** schemes other than legislation relevant for international trade are described.

- **GLOBALG.A.P.** as a retail chain initiative, which is a standard and private third party based certification system of growing importance for international trade as a business to business standard.
- **Codex Alimentarius** Guidelines for organically produced food, as these have influenced mainly national legislation for organic farming outside Europe.
- **IFOAM** Basic Standard and Accreditations system, which is a private umbrella standard and a worldwide accreditation system.

Generally the involved experts from the Non-EU countries denied that farmers do not care about animal welfare. However experts from CA, CN and the US reported that a majority of citizens/consumers in general are rather indifferent to animal welfare. Argentina mentioned that animal (welfare) friendly produced livestock products are mainly for export.

The need to develop animal welfare legislation arose under different circumstances, depending on the country. Widespread diseases were an important factor in Brazil. Media campaigns were very important in Switzerland, Argentina and the US. But also animal welfare scandals in the media in Argentina and the US played an important role. Pressure from other countries was important for Argentina and the US.

In several countries (CH, AR, CA and US) animal interest groups are mentioned most often as major driving force. Other important driving forces were retailers in Switzerland, New Zealand and the US. In China and New Zealand the animal industry in general was seen as important. Farmers associations were indicated by the experts as important stakeholder category in Switzerland, Brazil and New Zealand. Consumer interest groups only play a major role in China and NZ. Standard-setting organisations were important in New Zealand. Governmental bodies were mentioned as important drivers in Switzerland, Argentina and New Zealand.

Animal interest groups in most countries are very much involved in discussions related to animal welfare issues with the exception of China. Farmers were also important in Switzerland (and also government), Canada, New Zealand and US. New Zealand experts mentioned that all groups were strongly involved. In Argentina scientists (besides government officials) were also seen as important.

There is an indication given by the experts that in several countries the goals for animal welfare legislation were not so ambitious: many farmers can easily comply.

Generally government authorities are generally responsible for monitoring of animal welfare legislation, but this is often delegated to the regional authorities of states or provinces/territories. For voluntary private labelling schemes, the inspection and auditing is in most cases delegated to independent (third party) inspection and certification bodies.

Only few third countries (CH, AR, and CA) reported some experiences with the introduction of more animal-based indicators in national legislation or codes of practices. Only few socio-economic studies on the impact of farm animal welfare legislation were mentioned by the Non-EU third countries experts.

Generally experts in CH, AR, BR and CN judged the success of animal welfare legislation more positive than experts from CA and US.

The SWOT analysis gave quite varying pictures of the situation in the different EU third countries. As weaknesses were mentioned: no clear goals (CH), not enough control (AR), only voluntary codes (AR, AU), lack of third party verification (CA), agricultural industry lobbying against national legislation (US); slow implementation (US). As strengths were mentioned: regular on farm control (CH), interest of companies (AR), natural conditions for pasture and outdoor of a country (AR), Codes can be changed more quickly (CA, NZ)), market opportunity (CN), public supportive for better animal protection (US), consistency in application and enforcement and elimination of "bad actors" (US). Threats were seen in: economic and industry pressure to set lower AW standards (CH, CA, US), government apathy (CA), lack of resources (CA, NZ). Opportunities are seen in: education and training (CH, NZ, US), more research (CH, NZ, US), better animal environment will benefit animal health (CN), Role of government in development of private standards (NZ), Codes of welfare as education and enforcement tool (NZ)

Some of the experts of the EU third countries are optimistic that animal welfare will be improved (CH, NZ, CN), whereas others see the development process rather slow (CA, US).

Synthesis and conclusions from the comparison

The report concludes in identifying the most often found (major and minor) aspects of animal welfare found on international level as well as EU level in legislation and private standards and possible fields for harmonisation.

Many aspects relevant for animal welfare of **cattle**, found in both organic and non-organic legislation and private standards in EU and Non-EU countries, which are beyond EU rules are: tethering, space and light requirements, slatted floors, bedding, outdoor access, feeding requirements, weaning and calving, castration and other surgical practices.

There are several often found aspects relevant for animal welfare of **pigs**, which are beyond EU rules: availability of litter, slatted floors, possibilities for investigation and manipulating activities, roughage, no hormonal treatments, castration and other surgical practices as well as space allowance.

Areas regarding **poultry**, where mainly private standards but also the organic legislation in EU and Non-EU third countries have requirements beyond the EU legislation, are: light requirements, perches and nests, dust baths, outdoor run and pasture, indoor and outdoor stocking densities, access to fresh water, breeding (mainly broilers) as well as frequency of regular visits.

Main aspects related to **transport** of animals which are beyond or additional to EU legislation were: the interdiction of sedatives/tranquilisers, bedding material for the youngest in transport vehicles, drinking, resting and feeding possibilities before transport, the pathway/ramps design, the separation of unfamiliar groups, the length of journey. In several third countries the length of journey is limited and in organic legislation the use of sedatives and electric shocks is forbidden.

The main differences regarding **slaughter** of animals found in several private standards compared to EU legislation were: lairage requirements (start of lairage, space, lighting, floors etc.), the avoidance of group mixing, the non-use of electric stimulation, the time between stunning and bleeding as well as further processing, the education of the staff. Several non-EU countries have legislation for slaughter, comparable with the EU framework

The detailed analysis of the legislation and standards in EU and Non-EU countries has shown that much more aspects beyond the EU rules were found in legislation and private standards than listed above. Not all aspects are found equally important by the EconWelfare experts from an animal point of view. This suggests that a differentiation in major points, minor points and mere recommendations, as is done for instance within the Global GAP initiative, might be an interesting approach.

The results show the following:

- national legislation of EU countries on farm animal welfare, in particular regarding pigs and the slaughter process, are more often beyond the EU legislation than national legislation in the third countries that are important livestock trade partners of the EU;
- private non-organic standards and organic standards and legislation within the EU countries often go further than organic and non-organic legislation in the selected third countries.

The already existing differences in levels of welfare legislation and standards between EU countries and important trade partners outside the EU (can) affect the competitiveness of the animal productions sectors within the EU.

The third country analysis shows that there are different conceptional approaches concerning regulation of animal welfare within EU member states and third countries. Third countries for instance often make use of Codes of Practice. Several countries like AU, CA and US until now have left the animal welfare legislation to their member states. As the selected third countries are important trading partners of the EU, it is important to find ways to better reconcile these different approaches.

In order to group the animal welfare status of EU third countries with regard to the main animal categories as well as to transport and slaughter four main categories were made:

- Group A: + beyond EU legislation: more than 4 main aspects clearly beyond EU rules => Switzerland;
- Group B: = comparable to EU legislation in main points (deviations on minor points) => Argentina and New Zealand;
- Group C: - slightly below EU legislation (in more than 4 main aspects deviations) => Australia, Canada and Brazil;
- Group D: -- clearly below EU rules (many main aspects not regulated by national legislation) => China and USA.

Being aware about the importance of the different national contexts and systems, like the strong emphasis on voluntary Codes of Practice approaches and private industry approaches, which play an important role in countries like Australia, Canada, New Zealand and USA, this information has to be taken into account, when comparing animal welfare legislation outside the EU.

Four development lines toward improved and higher animal welfare in Europa

Basically there were mainly four development lines towards higher animal welfare levels identified, supporting improvement through EU and/or national legislation:

The analysis of welfare initiatives and standards indicates that basically four development lines towards improved animal welfare can be observed, beside EU and/or national legislation development:

a. Further development and implementation of high level animal welfare standards:

This approach is followed by some initiatives, which are very ambitious in reaching a high level of farm animal welfare and have developed very detailed standards with independent inspection and certification (like Neuland Germany and Freedom Food in the UK).

b. An overall approach with the integration of high animal welfare in the rules for organic farming (or other high level sustainability initiatives):

For organic farming this overall approach to high animal welfare was already implemented in the EU regulations for organic production EC Regulation 834/2007 and EC Regulation 889/2008 (higher level than before). Additional requirements beyond the EU rules for organic production are found in some private organic standards (of which some are more animal-focused like Bioland, Germany). Currently several organic legislations are in the process of updating their rules (e.g. for poultry in EU, CA, AU and US).

c. Middle level approach to upgrade animal welfare standards

One approach is done by several large retailers, like the one organised in GLOBALG.A.P, which are integrating in their company standards animal welfare and try to ensure this through a business to business cooperation model.

Another middle level approach for animal welfare is followed by some mostly local or regional initiatives, where AW is integrated in their requirements as part of a social corporate responsibility and sustainability policy (e.g. in some local or territorial marketing initiatives or in community supported agriculture systems).

d. Modest improvement of basic animal welfare:

This is often done through better implementation of the legislation and complementary Codes of Practice as well as general assurance schemes, often linked to food safety and quality assurance systems:

Examples of **interesting animal welfare initiatives** are given, which can inspire farmers, NGOs, consumers and other actors in giving more emphasis to animal welfare. They indicate possible instruments, which might be considered in the further work in the EconWelfare project.

Reflections have to be made how different policy instrument can best be combined for achieving multiple goals and with which actor networks. More dynamic governance models are needed. As countries are in different states/levels of AW development, we will need also varying policy instruments to realise improvements.

1 Introduction

77% of European citizens demand high levels of animal welfare (EuroBarometer, 2007). A main area within the Community Action Plan on the Protection and Welfare of Animals 2006-2010 is therefore upgrading current standards for animal welfare minimizing the occurrence of harmful behaviour. But rules or programs to secure progress in animal welfare, however, raise fear of increased costs for farmers and unfair competition of EU farmers in the world market. Another main area of the EU Action Plan on Animal Welfare addresses this aspect: any new measures should take socio-economic impacts into account. European Community policies on animal welfare for the coming years should be in line with needs of the animal, perceptions of society and sustainability of the livestock production chain on a national and international level.

This situation is the background for the EU funded project EconWelfare ("Good animal welfare in a socio-economic context: Project to promote insight on the impact for the animal, the production chain and European society of upgrading animal welfare standards"), which is related to the policy instruments needed to achieve the aims of the EU Action Plan on Animal Welfare. The objective of the project is to reveal what policy instruments might be effective in the route towards higher animal welfare representing the concerns of civil society and in which competitiveness of the livestock industry is guaranteed. The project provides scientific support for the development of European policies implementing the Community Action Plan on the Protection and Welfare of Animals for 2006-2010.

Starting point of the project work was a detailed overview on animal welfare standards and initiatives in eight European and selected 3rd countries, which is the main focus of this report.

1.1 Objectives of the analysis of animal welfare standards and initiatives

The main aim of the first work package of EconWelfare was first the identification and then the analysis of current animal welfare standards and initiatives in the EU and third countries. This report now integrates all subtasks' results to a preliminary assessment of the animal welfare situation in the EU.

Therefore, the project partners have selected in their countries several relevant and interesting public and private instruments and measures, summarised with the terms "standards and initiatives", which intend to improve animal welfare.

These different instruments and measures also referred to the animal welfare initiatives, which have been investigated for specific information concerning objectives, implementation, evaluation and impact of each of them, considering the national and regional backgrounds. Detailed husbandry, transport and slaughter requirements have been collected and integrated into a database. Additionally, information on legislation in Non-EU third countries has been collected and compared to EU legislation.

Taking into account the cultural and geographic differences within the EU and the importance of livestock production in individual member states, the synthesis is focused on relevant standards and initiatives in Germany, Spain, Italy, the Netherlands, Poland, Sweden, the United Kingdom and Macedonia. A comparative analysis of welfare standards is made between the EU legislation and the legislation from some EU countries as well as from Australia, Brazil, Canada, Switzerland, China, New Zealand and the United States of

America. The selection consists of Non-EU third countries with relatively strict animal welfare standards as well as important livestock trade countries.

A clustering workshop with external invited experts in September 2009 had the aim to cluster the current animal welfare standards in the EU and third countries in order to ease the insight into the different ranges and topics covered within existing animal welfare legislation world-wide.

1.2 Instruments and approaches for improved animal welfare in literature.

The analysis of the different initiatives should help to identify the main instruments, approaches and issues, which can be found in the different standards and initiatives. Furthermore this should allow clustering the current animal welfare standards in the EU and third countries in appropriate and useful ways. This will ease the insight into the different ranges and topics covered within existing animal welfare legislation world-wide and will inform the discussions which will take place in other working areas of the EconWelfare project: in WP2 (on strength and weaknesses) and in WP3 (on policy instruments).

One of the key questions was, what EU, national or regional governmental measurements, schemes and policy instruments for good animal welfare do exist. Based on the literature and reports from former EU Projects (e.g. like Welfare Quality) it is reported that there are many different ways to reach a better level of animal welfare both on public sector as well as in the private sector or in a public-private partnership. The short summary below should help to reflect about possible clusters of different measurements and instruments for improved animal welfare.

All Government policies in the European Union are framed within the context of EU law. The policy instruments and measurements are not mutually exclusive; they are used in combination. Furthermore the private sector has also developed measurements to promote animal welfare, which sometimes do also get governmental support.

A good overview is given in an FAWC-Report on the “Opinion on Policy Instruments for Protecting and Improving Farm Animal Welfare” (2008)¹, summarising different policy and instruments and measurements in the UK. The table 1.1 below shows different categories used in the respective report. The categories may be also valid for the EU.

¹ Farm Animal Welfare Council (FAWC) (2008): Opinion on Policy Instruments for Protecting and Improving Farm Animal Welfare. Report

Table 1.1 Policy instruments and measurements applied to animal welfare and health in UK

Type of policy instrument	Example of measurement	Examples applied to animal welfare and health
1. Legal rights & liabilities	Rules of tort law.	Animal Welfare Act 2006 (England and Wales). Animal Health and Welfare (Scotland) Act 2006.
2. Command & control	Secondary legislation. Health & safety at work	Minimum space rules for poultry.
3. Direct action (by government)	Armed forces	Welfare inspections by state veterinarians and local authorities. Border controls.
4. Public compensation/ social insurance	Unemployment benefit.	Compensation for animals slaughtered for welfare reasons during 2001 FMD outbreak. Pillar II money for additional farm animal welfare improvements beyond EU rules in few member states.
5. Incentives and taxes	Car fuel tax.	Pillar II money for additional farm animal welfare improvements.
6. Institutional arrangements	Departmental agencies, levy boards, local government.	Animal Health, Meat Hygiene Service, Veterinary Laboratories Agency, Local Authorities.
7. Disclosure of information	Mandatory disclosure in food/drink sector.	Reporting of notifiable diseases. Labelling.
8. Education and training	National curriculum.	Animal welfare in veterinary education, national school curriculum.
9. Research	Research Councils.	Funding for animal welfare research through BBSRC, Defra, charities etc.
10. Promoting private markets	Office of Fair Trading. Airline industry.	Market power of companies in the food supply chain and prices to farmers to meet production costs.
a) Competition laws	Telecommunications.	
b) Franchising and licensing	Rail, television, radio.	Veterinary drugs/treatments. Animal husbandry equipment.
c) Contracting	Local authority refuses services.	Hire of private vets to provide public services.
d) Tradable permits	Environmental emissions. Milk quotas.	Permits for intensive livestock production systems (e.g. the Netherlands).
11. Self regulation (a) private (b) enforced	(a) Insurance industry. (b) Income tax.	(a) Farm assurance schemes, veterinary profession, industry codes of practice. (b) Defra 'welfare codes'.

Source: FAWC 2008

The animal welfare initiatives collected for this report mainly belong either to the categories "command and control", "education and training", "research", "incentives and taxes" or "self regulation".

The many policy instruments listed above shall not be explained and discussed into detail as this will be the subject of work later in the EconWelfare project. However to better understand

the context of the different standards and initiatives and to facilitate the clustering exercise below a brief short explanation is given for the main type of policy instruments and measurements.

1.2.1 Legislation

The most popular policy instrument for the regulation of animal welfare is legislation. In the case of the EU, the Treaty of Amsterdam 1997 contains legally binding protocols recognizing that animals are sentient beings and require full regard to be paid to their welfare when policies are formulated or implemented.

The EU lays down minimum animal welfare standards for farmed animals by means of Directive 98/58/EC and other directives related to the welfare requirements of specific categories of farmed animals (calves, pigs, laying hens and broilers) as well as specific requirements for transport and slaughter.

The individual EU member states then implement EU regulatory framework by means of national legislation at a national level (and sometimes also on regional level). While some countries have adopted EU law as minimum governmental standards, others have created national legislation which goes beyond EU law in certain aspects.

Potential candidate countries, such as Macedonia as one of the project partner countries, are step by step adopting EU animal welfare standards.



Figure 2.1 Levels of animal welfare legislation in the EU

Source: own design

Not mentioned in the picture above is the legislation for organic agriculture, which is legally regulated throughout the EU by Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products. More detailed rules on organic production, processing, distribution; labelling and controls are laid down by Commission Regulation (EC) No 889/2008 of 5 September 2008 for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control.

All organic farmers in the EU have to comply with these standards and are subject to annual on-farm inspections to ensure that they comply with legal requirements. The regulations on organic livestock farming reach a level that is clearly above legal minimum animal welfare standards, which will be shown later in the report. Furthermore the EU regulations for organic production are also applied for imported organic products.

On the international level, most of the investigated countries only have an animal protection law but no detailed regulations for husbandry, transport and slaughter of the different

categories of farm animals. In some countries, every region has its own legislation, which makes comparison with EU law a very complex task. Therefore as reported later in the report only the main national legislations of “third countries” exporting to the EU (Australia, Brazil, Canada, Switzerland, China, New Zealand and the United States of America) will be analysed. An outstanding example for detailed and high animal welfare legislation is Switzerland with standards which go beyond EU law in many aspects. Details of the specific situation in each country cannot be described here but can be found in chapter 7.1.1a)

1.2.2 Education and training

As a consequence of EU animal welfare legislation animals shall be cared for by a sufficient number of staff who possesses the appropriate ability, knowledge and professional competence. This requires education and training programs for farmers, transporters and butchers. Education and training is often also provided to veterinarians. There are also education programs for school kids where they learn about animals' needs. In the analysis some of these programs will be described and characterised in this report.

1.2.3 Research

Many research projects receive governmental support and so do also the research programmes and projects for animal welfare both on national as well as EU level. (EconWelfare is a good example), which are described later in the report.

1.2.4 Incentives

Incentives are used by government and others to influence behaviour and to raise revenue to fund various activities. For example, in Germany in some regional states livestock farmers get direct payments (according to COUNCIL REGULATION (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development) to encourage farmers who make on a voluntary basis animal welfare commitments. The animal welfare payments cover only those commitments going beyond the relevant mandatory standards and other relevant mandatory requirements established by national legislation and identified in the programme. More examples are found in the description of some initiatives in the Annex.

1.2.5 Self regulation

In several countries, farm assurance schemes guarantee the fulfillment of legal requirements to the consumer. These schemes can be either organic or non-organic.

Farm assurance schemes can help to ensure that current legislation pertinent to farm animal welfare is positively implemented (FAWC, 2008).

Besides farm assurance schemes there are other measures to enhance animal welfare on a private basis, for example by initiating campaigns, founding animal welfare NGOs or programming a consumer website. These measures will be presented later in this report and with more details.

2 Methods and procedure

The documentation in this report is based on a standardised survey approach. Guidelines were developed to facilitate a systematic investigation by the project partners in Germany, Spain, Italy, the Netherlands, Poland, Sweden, the United Kingdom and Macedonia. The Swiss project partner FiBL was responsible for this workpackage and was also responsible for the survey in Germany.

The survey end of 2008 and beginning of 2009 asked for general information about different public and private instruments and measures for improved animal welfare as well as for specific information concerning objectives, implementation, evaluation and impact of each of them. Basis for this information were the legislation documents of the different countries, websites of research institutes, animal welfare and consumer NGOs and interviews with experts.

The survey of animal welfare initiatives in European countries has been realized by using semi-structured online and structured Excel-questionnaires for data. Information which could not be extracted from the initiatives' websites was obtained by telephone interviews with responsible persons at the initiatives and by reviewing relevant literature. The specific standards of every initiative have been integrated into an Access database.

The third countries' questionnaire was also semi-structured. The information was obtained by contacting animal welfare legislation experts in the respective country (at least 3 experts were searched and contacted, but often only one expert answered).

A clustering workshop was conducted as a focus group discussion with different animal welfare policy experts in September 2009 in Madrid in order to better group and assess the different animal welfare initiatives. The outcome, which is described in the EconWelfare report D1.1 (Kilchsperger et al. 2010) is summarised in this report.

2.1 Selection procedure and collection of information

How have the animal welfare initiatives been selected and collected for this report?

The challenge was to decide if the relevance of an initiative was enough to be taken into account for the data collection. However it was not possible to define absolute criteria for relevance such as, for example percentage of participating producers or market share of products, since there were a large variety of types of initiatives. Furthermore these mentioned criteria could have been used mainly as measures for relevance for farming standards and/or assurance schemes but not for research programs or animal welfare campaigns.

This is why it was decided to ask project partners to select themselves five to ten relevant animal welfare initiatives in their country, according to the relevance from an animal view, a society view and supply chain point of view (e.g. consumer's opinion, high husbandry standards, market share).

It was recommended to have a mix of different standards schemes and other initiatives out of the following categories know from literature:

- Legislation;
- National organic legislation on animal welfare;
- Governmental incentives;
- Farm assurance schemes (non-organic and organic, with outstanding requirements);
- Education programs (of school children, farmers, transporters, butchers);

- Information campaigns;
- Research;
- Others.

The partners were invited to choose those initiatives that can be considered successes as well as initiatives that can be considered failures (from the different perspectives), very well-known initiatives and very specialized ones. The coordinators of this work package compiled a list with different categories or initiatives the partners should look for in order to avoid uniform selection against a specific category of initiatives such as farm assurance schemes.

After the selection of initiatives the partners started to collect information with the semi-structured online questionnaires. For initiatives with own standards and legislation an Excel-file had to be completed by dividing the requirements into specific aspects like accommodation, feeding, health care for the three categories of farm animals considered in the EconWelfare project, namely cattle, pigs and poultry. The Excel data have then been exported to an Access database, where they could later on be compared by using a Pivot table.

Additionally, data on i) the number of farms participating in voluntary schemes, ii) the number of farm animals kept in each scheme, iii) headage premiums paid for farmers that comply with higher animal welfare standards and iv) level of price premiums for products produced under higher welfare standards were collected via direct contacts with the organisations and screening of economic literature. Since these data were too delicate for many organisations to be published, the data set presented in this report is incomplete. Nevertheless the information gained can help to identify better the relevance of these schemes. The data is integrated in the detailed descriptions of the animal welfare initiatives in the EconWelfare report D1.1 (Kilchsperger et al. 2010).

For the Non-EU third countries a semi-structured questionnaire was sent to local experts for animal welfare legislation. No other initiatives than legislation have been collected for third countries. The local experts were mainly personally known by one of the project partners or chosen via personal contacts in the respective country or have been recommended by DG SANCO of the EU Commission. It was intended that the questionnaire should be completed by at least three experts (somebody from a governmental institution, an animal welfare NGO and an animal welfare researcher), but this goal could not be realized in all countries because of the complexity of the questionnaire and a lack of appropriate contact persons.

The data collected and summarised on the situation in Non-EU third countries are found in a separate chapter in this report.

3 Overview of selected initiatives per EU country

3.1 Overview of all collected standards and initiatives

In Figure 3.1 an overview map names the initially collected initiatives, including standards, which were analysed. Details are found in the Annex II.

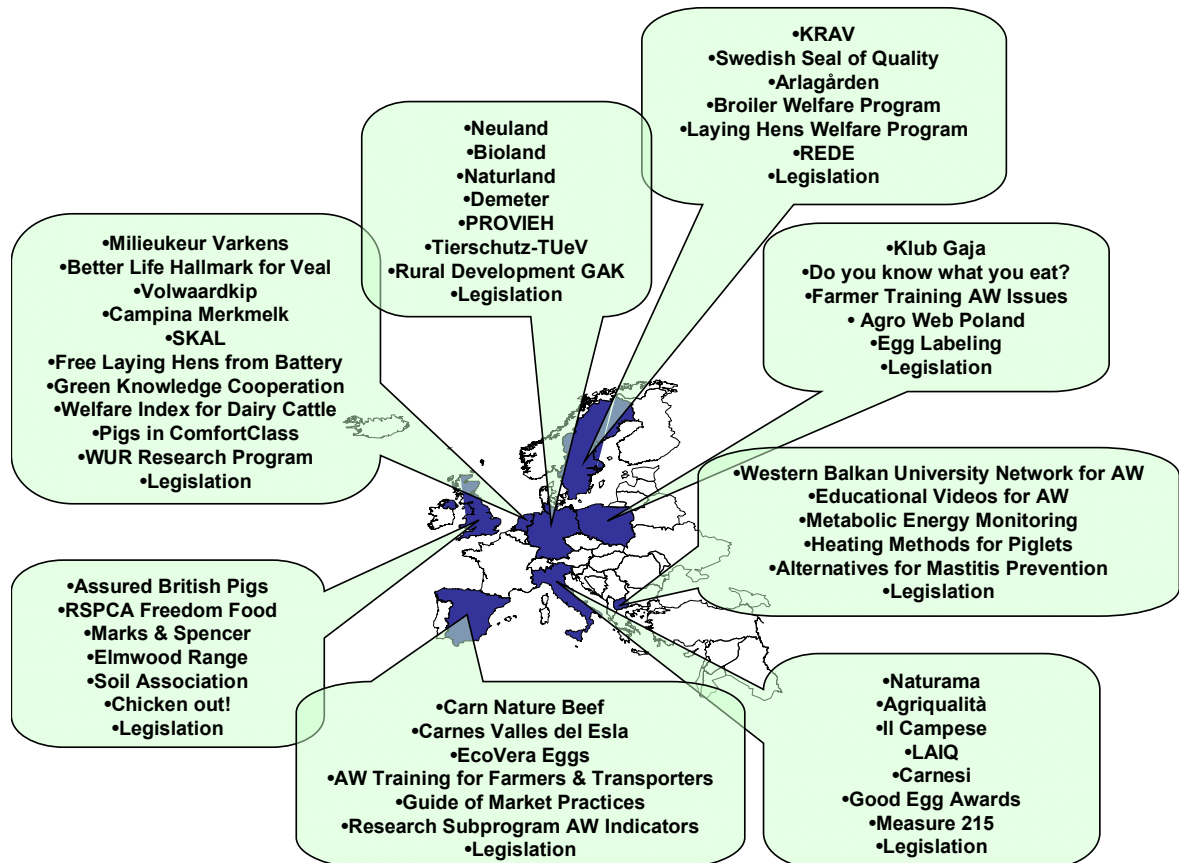


Figure 3.1 Overview of initially collected and selected EU initiatives and standards

In the next chapter an overview is given on the following types of initiatives:

- National governmental legislation in the EU and in countries exporting to the EU;
- Voluntary non-organic production schemes and standards;
- Voluntary organic production schemes and standards;
- Education and training programs;
- Governmental financial AW support (cross compliance);
- Animal welfare research programs;
- Other (AW NGOs, campaigns, websites, AW assessment tools, AW awards, guidelines).

3.2 Overview of national governmental legislation for animal welfare in several EU member states and a potential EU candidate country

The following chapter summarizes the state and characteristics of animal welfare legislation in several EU countries involved in this project. Then a detailed comparison of the animal welfare requirements is done. The exact references for the corresponding EU documents can be found in the annex of this report.

The following table 3.1 shows which aspects of animal welfare are regulated into detail in the different countries and for which animal category.

Tab. 3.1 Coverage of governmental animal welfare legislation related to different animal groups in selected European countries

	EU	DE	ES	IT	NL	PL	SE	UK	MK
General	✓	✓	✓	✓	✓	✓	✓	✓	+/-
Dairy cattle							✓	+/-	
Calves	✓	✓	✓	✓	✓	✓	✓	✓	+/-
Fattening pigs	✓	✓	✓	✓	✓	✓	✓	✓	+/-
Sows	✓	✓	✓	✓	✓	✓	✓	✓	+/-
Laying hens	✓	✓	✓	✓	✓	✓	✓	✓	+/-
Broilers	✓	6/2010	+/- ²	6/2010	6/2010	6/2010	+/-		
Transport	✓	✓		✓	✓	✓	✓	✓	+/-
Slaughter	✓	✓		✓	✓	✓	✓	✓	✓

✓ There are detailed requirements; +/- there are few requirements; 6/2010 by this date Council Directive 2007/43 will be transposed.

In order to better understand the situation and context in the different European countries involved in the EconWelfare project the main legislative documents for animal welfare are described below.

3.2.1 Germany

Germany had its own AW standards before the EU animal welfare law was adopted (first efforts 1933, on national/federal level since 1972). Present German animal welfare legislation integrates different societal concerns. There is an animal protection law and different regulations.

Animal protection law:

- "Tierschutzgesetz in der Fassung der Bekanntmachung vom 18. Mai 2006 (BGBl. I S. 1206, 1313), zuletzt geändert durch g vom 18. Dezember 2007 (BGBl. I S. 3001; 2008, 47) Stand: Neugefasst durch Bek. v. 18.5.2006 I 1206, 1313; zuletzt geändert durch g v. 18.12.2007 I 3001; 2008, 47"

Regulation for the husbandry of farm animals:

- "Tierschutz-Nutztierhaltungsverordnung in der Fassung der Bekanntmachung vom 22. August 2006 (BGBl. I S. 2043), geändert durch die Verordnung vom 30. November 2006 (BGBl. I S. 2759)" Stand: Neugefasst durch Bek. v. 22.8.2006 I 2043; geändert durch V v. 30.11.2006 I 2759

Transport regulation:

- "Tierschutztransportverordnung in der Fassung der Bekanntmachung vom 11. Juni 1999 (BGBl. I S. 1337), geändert durch Artikel 419 der Verordnung vom 31. Oktober 2006 (BGBl. I S. 2407)" Stand: Neugefasst durch Bek. v. 11.6.1999 I 1337; geändert durch Art. 419 V v. 31.10.2006 I 2407

Slaughter regulation:

- "Tierschutz-Schlachtverordnung vom 3. März 1997 (BGBl. I S. 405), geändert durch Artikel 19 des Gesetzes vom 13. April 2006 (BGBl. I S. 855)" Stand: Geändert durch Art. 19 G v. 13.4.2006 I 855

² Meat aviculture is regulated in Spain by Royal decree 1084/2005, but requirements are more on animal health than welfare. The EU Directive will be implemented at latest by 6/2010.

The regulations implement EU directives at a national level and contain general requirements for the keeping of farm animals as well as specific standards for the husbandry of calves, pigs, laying hens, transport and slaughter. A regulation for the keeping of poultry for meat production will soon be adopted. In certain aspects, the German standards go beyond EU minimum standards in terms of animal welfare, which will be analysed later.

3.2.2 Italy

Animal protection legislation on farms was mainly introduced in Italy by the transposition of EU legislation. The basic horizontal rules were introduced by legislative Decree 26/03/2001 n. 146 translating Directive 98/58/CE regarding animal control, freedom of movement, buildings, equipment, feeding and mutilations.

The following documents further regulate farm animal welfare:

- Decree n. 267 issued on 29/07/2003 regulates the welfare of laying hens and registration of hen farms. The Ministry of Agriculture Informative n.1 19/01/2004 stating the main rules of Regulation 2295/2003 regulates egg labelling.
- At the moment there is no national regulation on broiler welfare, but EU-directive 2007/43/EC laying down minimum rules for the protection of chickens kept for meat production should be going to be applied also in Italy soon. At national level the rules regarding breeding systems and feeding of meat poultry have been issued by the Ministerial Decree n. 465 19/09/1999.
- Legislative Decree 30/12/1992 n. 533 modified by the Legislative Decree 1/09/1998 n.331 regulates the protection of calves.
- Decrees n. 534 of 30/12/1992, respectively n. 53 of 20/02/2004 regulates the welfare of pigs.
- The welfare of farmed animals during transport is ruled in Italy, as well as in the other EU countries, by Regulation (EC) 1/2005 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97.
- The welfare of farmed animals before slaughtering is ruled in Italy by the legislative Decree 333/98 in application of the Directive 93/119/EC on the protection of animals at the time of slaughter or killing.

3.2.3 Netherlands

In the Netherlands animal welfare first became an issue in the late 1960s, when intensive livestock production developed. People started to realise that animals were not created just for the benefit of man and that they have their intrinsic value. This intrinsic value is one of the main points of the 1992 Animal Health and Welfare Act. This Act applies to vertebrate animals kept by people, from production animals and circus animals to pets. The Animal Health and Welfare Act lay down general provisions which apply to all animals and which prohibit, for example: inflicting unnecessary pain or injury, or damaging an animal's health or welfare; the withholding of essential care; surgical operations on animals other than those allowed by law. The act also states that animals in need must be attended to. The act also lays down rules on: animal housing; slaughter procedures; animal transport. Regulations concern laying hens, calves, pigs and other species. The claims are to implement European Legislation and to further enhance animal welfare levels in the Netherlands. Directive 2007/43/EG on the welfare of broilers will be implemented in Dutch legislation at June 30th 2010. Specific welfare requirements for dairy cows are in preparation. A discussion between the government and the broiler production sector is ongoing about including maximum mortality rate and maximum incidence of foot lesions in Dutch legislation.

3.2.4 Poland

Before EU accession Polish Animal Welfare legislation was generally less strict than the EU one. After joining the EU the implementation of the new rules became mandatory together

with overtaking the Common Agricultural Policy. However transition periods were decided to adjust farm conditions to those new requirements (deadline for sanitary and veterinary requirements - end of 2006; deadline for AW within cross-compliance schemes – January 2011). Thus the main problem of the Polish legislation is not compulsory accomplishment due to the transition periods, which effects in slow improvement of AW at the farm level.

The main Polish regulations concerning animal welfare are:

- **For slaughter:** Regulation of Minister of Agriculture and Rural Development from 9.IX.2004 concerning specific qualifications of persons employed in professional killing and specifying conditions and methods of slaughtering and killing the animals (Dz. U. Nr 205 poz. 2102) IMPLEMENTING REQUIREMENTS OF COUNCIL DIRECTIVE 93/119/EC 1993 amended by CR 806/2003
- **For transport:** Regulation of Minister of Agriculture and Rural Development from 25.VI.2008 concerning specific requirements for animal turnover, mediation in that turnover and purchase of animals IMPLEMENTING REQUIREMENTS OF COUNCIL DIRECTIVE nr 1/2005 of 22 December 2004 and Regulation of Minister of Agriculture and Rural Development from 2. II.2009 concerning special veterinarian requirements for the quarantine places and stations, places of animal rest, animal reloading places and places of water change for aqua-animals (Dz U. 27, poz 167)
- General: Regulation of Minister of Agriculture and Rural Development from 2.09.2003 concerning minimal conditions of animal keeping for farming purposes (Dz U. Nr 167 Poz.1629) with following changes: Dz U. Nr 47 Poz.456 from 8.III.2004; Dz U. Nr 27 Poz.228 from 2005, Dz U. Nr 181 Poz.1514,1515 from 13.IX.2005; Dz U. Nr 128 Poz.900 from 3.VII.2007.

3.2.5 Spain

Spanish animal welfare concerns date back to 1883, when teachers got the order to teach to the children goodwill and respect for animals. Nowadays, animal welfare legislation in Spain does not differ from EU minimum standards.

The decrees regulating animal welfare are:

- Royal decree 348/2000, transposition of directive 98/58/CE
- Royal decree 1135/2005 about minimum standards for pig production
- Royal decree 3/2002 about minimum standards for the protection of laying hens
- Royal decree 1084/2005 about meat aviculture planning.
- Royal decree 1047/1994 about minimum standards for the protection of calves

Royal decree 1084/2005 regulates certain aspects of meat aviculture, but Council Directive 2007/43 of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production has to be transposed to Spanish law until 30 June 2010.

3.2.6 Sweden

The first legislation that took animals into concern came 1857; the royal ordinance about the abuse of animals. However the first animal welfare legislation in Sweden came 1944. This legislation was, and still is, preventive, i.e. aiming at preventing animal suffering, not only punishing cruelty to animals.

The animal welfare legislation in Sweden consists of:

- The animal welfare act (decided by the Parliament)
- The animal welfare ordinance (decided by the government)
- The animal welfare regulations (decided by the Swedish Board of Agriculture)

The rules are more general in the animal welfare act and more specific in the regulations.

The regulations that mainly are of current interest for farm animals are:

- National regulations and general recommendations (DFS 2007:5) on animal husbandry in agriculture, L 100
- National regulations and general recommendations (SJVFS 2007:77) on the Welfare of Animals at Slaughter and Killing of animals, L 22

- National regulations and general recommendations (DFS 2004:10) on the transport of living animals, L 5
- National regulations (SJVFS 1999:95) on prior approval of livestock buildings, L 35
- National regulations (DFS 2004:14) on surgical procedures and injections to animals, L 41

The present animal welfare law and ordinance are from 1988. The Swedish government has just recently appointed a commission to investigate the Swedish animal welfare legislation, both to its contents and design, and to see if it is possible to make it more modern without reducing the animal welfare level. This commission shall be presented for the government the 31st of January 2011.

In comparison with the other countries participating in this review Sweden has detailed standards for the husbandry of dairy cows.

3.2.7 United Kingdom

The United Kingdom is made up of England, Scotland, Wales and Northern Ireland and recently changes have been made at governmental level to allow each of these to prepare their own legislation. There may be some minor differences in legislation between different parts of the UK, but often this relates simply to the title of the document. Thus, for the purposes of this report, 'UK legislation' is taken to mean that for England. The welfare of all farm animals is protected by the Animal Welfare Act 2006 which makes it an offence to cause unnecessary suffering to any animal. The Act also contains a duty of care to animals, meaning that anyone responsible for an animal must take reasonable steps to ensure that the animal's welfare needs are met. This was an important addition to animal welfare legislation, emphasising that positive steps need to be taken rather than ensuring that negative (i.e. cruel) practices do not take place. Welfare of farm animals is additionally protected by the Welfare of Farmed Animals (England) Regulations 2007 which replace and update previous regulations from 2000. Primarily these regulations are implementing EU directives on the welfare of calves, pigs, laying hens and a general welfare framework directive.

The publication of the book "Animal Machine" by Ruth Harrison in 1964 touched the conscience of the UK public and resulted in considerable public discussion which put pressure on Members of Parliament (MPs). The government responded by setting up a committee and the Farm Animal Welfare Advisory Committee (later changed to the Farm Animal Welfare Council) and legislation on animal welfare were established afterwards (1967 and 1968 respectively).

Within the UK (England specifically), monitoring of welfare legislation is carried out by veterinarians from Animal Health (the governments veterinary service) who visit farms to ensure that legislation and welfare codes (recommendations to help farmers comply with legislation) are being followed. Animal Health carry out both planned visits to farms and unannounced visits ('spot checks') and respond to any information from other agencies (animal welfare charities, local government agencies) and the public where there is concern about farm animal welfare. Where problems are found, Animal Health officers offer advice and sometimes a warning to the farmer to bring about improvements. Sometimes, return visits are made to check that these improvements have been implemented but occasionally prosecutions may be sought against the farmer who fails to improve conditions to the acceptable level.

3.2.8 Macedonia

Macedonia is an interesting case how potential candidate countries for the EU are dealing with the EU regulatory framework for animal welfare.

Macedonia is transposing EU legislation into its own legal acts. Macedonia has adopted a law on animal welfare in September 2007, in which they have transposed part of EU legislation. In May 2008 the "Book of Rules for protection of animals during slaughtering in slaughterhouses" was adopted (transposing EU Directive No 93/119 of the European

Parliament and of the Council of 22 December 1993 on the protection of animals at the time of slaughter or killing).

The future steps will be the adoption of further “Books of Rules” for farm animals, (BoR for protection of farm animals, BoR of protection of Experimental Animals, BoR of protection of animals during transport). In the “Crime law of the Republic of Macedonia” there is an article concerning torture of animals.

3.3 Overview of national governmental legislation for animal welfare in third countries exporting animal products to the EU

In chapter 7 a detailed description is given about the legislation and regulatory framework in these EU third countries.

Tab. 3.3 Coverage of governmental non-organic animal welfare legislation related to different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Legal Framework	Leg	Leg	Leg	VCoP Leg in states	Leg	VCoP Leg in provinces	Leg	Leg	VCoP
Calves	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR Dairy cattle / bobby calves	VCoP
Dairy cows	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR Dairy cattle	VCoP
Suckling cows	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR Dairy cattle	VCoP
Fattening bulls, beef	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	Leg	VCoP
piglets	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR pigs	VCoP
Weaners and rearing pigs	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR pigs	VCoP
Sows and gilts	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR pigs	VCoP
Boars	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR pigs	VCoP
Chicks	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR layer hens	VCoP
Laying hens	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR	VCoP
Broilers	Leg	Leg	Leg	VCoP	Leg	VCoP	nA	MCoR broilers	VCoP
Others	Leg	Leg	Leg	VCoP	Leg	VCoPs for others	nA	MCoR for deer, spp.	VCoPs for others

Leg = Legislation
Recommendations,

VCoP = Voluntary Code of Practice
nA = no answer from expert(s)

Mandatory Codes of

For organic farming all these countries have a legal regulatory framework, covering all main animal categories cattle, pigs and poultry.

3.4 Overview about voluntary non-organic animal welfare schemes (with standards and/or quality assurance schemes)

The table 3.4 shows, which animal categories are covered by non-organic AW schemes.

Tab. 3.4 Coverage of non-organic voluntary (private) animal welfare schemes in selected European countries related to different animal groups

		Country	Calves	Dairy cows	Sucking cows	Fattening bulls	Piglets	Weaners	Rearing & fattening pigs	Boars	Chicks	Laying hens	Broilers	Transport	Slaughter	Other animals
non-organic	Agriqualita	IT	x	x	x	x	x	x	x	x	x	x	x			Buffalo, rabbits, bee, sheep, goats
	Arlagarden	SE	x	x	x	x										
	Assured British Pigs	UK					x	x	x	x				x		
	Better Life															
	Hallmark for Veal	NL	x											x	x	
	Broiler Welfare Program	SE											x			
	Campina Merkmelk	NL		x												
	Carn Nature	ES	x	x	x	x			x							
	Carnes Valles del Esla	ES	x			x							x			Lambs
	Elmwood Range	UK							x**				x		x	Turkeys.
	Il Campese	IT											x			
	LAIQ	IT		x												
	Laying Hens Welfare Program	SE										x				

	Marks and Spencer	UK	x	x			x	x	x		x	x	x	x	Turkey, geese, sheep, fish
	Milieukeur Varkens	NL					x	x	x	x				x	
	Naturama	IT				x			x			x	x		turkeys, rabbits, fish
	Neuland	DE	x		x		x	x	x	x	x	x	x	x	Sheep and goats
	Seal of Quality	SE	x	x*	x	x	x	x	x	x			x		*Only milk standards compulsory
	QMP	PL				x									
	Volwaard kip	NL											x	x	x
	RSPCA Freedom Food	UK	x	x	x	x	x	x	x	x	x	x	x	x	Ducks, salmon, sheep, turkeys

More details are found in the EconWelfare report D1.1 “Animal welfare initiatives in Europe” (Kilchsperger, Schmid, Hecht, 2010).

3.5 Overview about voluntary organic farming standards schemes

Within the project several voluntary schemes have been analysed which deal with organic products, which are listed below in Table 3.4.

Tab. 3.5 Coverage of organic voluntary (private) animal welfare schemes in selected European countries related to different animal groups

		Country	Calves	Dairy cows	Sucking cows	Fattening bulls	Piglets	Weaners	Rearing and fattening pigs	Boars	Chicks	Laying hens	Broilers	Transport	Slaughter	Other animals
organic	Bioland	DE	x	x	x	x	x	x	x	x	x	x	x	x	x	All farm animals + carp
	CarneSi (EU-Bio)	IT				x			x				x	x	x	
	Demeter	DE	x	x	x	x	x	x	x	x	x	x	x	x	x	fish

	EcoVera (EU-Bio)	ES											x		x	x	
																	Sheep, goats, deer, aquacultu re and fishing.
	KRAV	SE	x	x	x	x	x	x	x	x	x	x	x	x		x	
	Naturland	DE	x	x	x	x	x	x	x	x	x	x	x	x	x	x	fish
	Soil Associatio n	UK	x	x	x	x	x	x	x	x	x	x	x	x	x	x	Sheep, goats, deer, bees, fish, bivalves, geese, turkeys, guinea fowl, duck.

More details are found in the EconWelfare report D1.1 “Animal welfare initiatives in Europe” (Kilchsperger, Schmid, Hecht, 2010).

3.6 Overview on non-regulatory initiatives in Europe

Tab. 3.5 Coverage of non-organic voluntary animal welfare schemes in selected European countries related to different animal groups

Genre	Country	Name of initiative	Calves	Dairy cows	All cattle	Piglets	Rearing pigs	All pigs	Laying hens	Broilers	All chicken	Others
Activists	DE	PROVIEH	x	x	x	x	x	x	x	x	x	all farm animals + fish and fur animals
Activists	PL	Klub Gaja	x	x	x	x	x	x	x	x	x	all animals
Campaign	NL	Free Laying Hens from Battery							x			
Campaign	PL	Do you know what you eat?	x	x	x	x	x	x	x	x	x	
Campaign	UK	Chicken out!								x		
Award	IT	Good Egg Awards							x			
Education	ES	AW Training for Farmers and Transporter s	x	x	x	x	x	x	x	x	x	Sheep, goats and horses
Education	MK	Educational videos for AW	x	x	x							
Education	NL	Green Knowledge Cooperatio n	x	x	x	x	x	x	x	x	x	All domesticated animals
Education	PL	Farmer Training on AW Issues	x	x	x	x	x	x	x	x	x	
Education	SE	REDE	x	x	x	x	x	x	x	x	x	all animals

Research	ES	Research Subprogram AW Indicators		x	x	x	x	x	x	x	x	many research areas
Research	MK	Alternatives for Mastitis Prevention		x								
Research	MK	Metabolic Energy Monitoring		x								
Research	MK	Heating Methods for Piglets				x						
Research	NL	WUR Research Program on AW	x	x	x	x	x	x	x	x	x	
Research	NL	Pigs in Comfort Class					x					
Research / Activists	MK	Western Balkan University Network for AW	x	x	x	x	x	x				laboratory animals

Genre	Country	Name of initiative	Calves	cows	All cattle	Piglets	pigs	All pigs	hens	Broilers	chicken	Others
Tools	ES	Guide of Market Practices	x	x	x	x	x	x				Equine, sheep, goat
Tools	NL	Welfare Index for Dairy Cattle		x								
Tools	PL	Agro Web Poland	x	x	x	x	x	x	x	x	x	all farm animals
Governmental	DE	Tierschutz-TUeV	x	x	x	x	x	x	x	x	x	all farm animals

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		Rural Development National Strategy										
Governmental	DE	Plan GAK	x	x	x	x	x	x				all farm animals
Governmental	IT	Measure 215	x	x	x	x	x	x	x	x	x	Sheep
Governmental	PL	Egg Labeling							x			

More details are found in the EconWelfare report D1.1 “Animal welfare initiatives in Europe” (Kilchsperger, Schmid, Hecht, 2010).

4 Clustering the different initiatives from a policy perspective

The starting point of describing the different standards and initiatives was a systematic, following the UK Farm Animal Welfare Council (FAWC), which has defined the following policy instruments as effective for improving farm animal welfare:

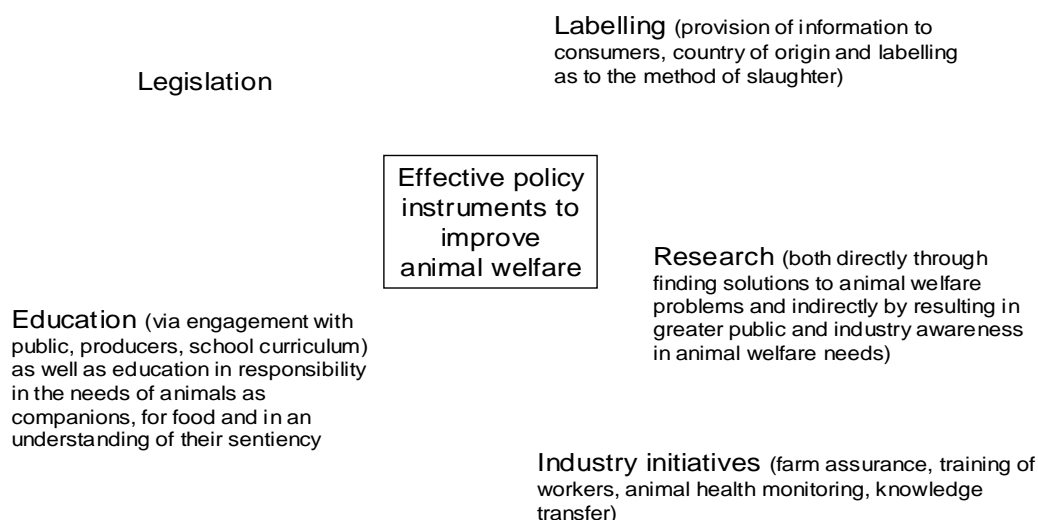


Figure 4.1 Effective policy options for improved animal welfare

Source: FAWC 2008

4.1 Summary of the analysis of animal welfare initiatives in Europe

Below is a summary from the detailed analysis made in EconWelfare Report D1.1 on "Animal Welfare Initiatives in Europe (Kilchsperger, 2010).

The documentation is based on a standardised on-line survey approach was conducted by the project partners in Germany, Spain, Italy, the Netherlands, Poland, Sweden, the United Kingdom and Macedonia. The Swiss project partner was responsible for the survey in Germany. The survey asked for general information about different public and private initiatives for improved animal welfare as well as for specific information concerning objectives, implementation, evaluation and impact of each of them. The source of this information included legislation and other regulatory documents of the different countries, websites of research institutes, animal welfare and consumer NGOs and interviews with experts.

The analysis of the animal welfare initiatives was made in two steps. First an analysis of the initially selected initiatives was made with the on-line questionnaire. In a second step a more in-depth analysis was made with a newly elaborated clustering methodology and a higher number of initiatives (totally 84) as in the beginning.

The analysis of the first selected animal welfare initiatives was made mainly with two groups of initiatives: 33 regulatory (e.g. legislation, private standards) and 29 non-regulatory initiatives (e.g. campaigns).

For the group of regulatory initiatives the following characteristics were observed:

- One major group of considered regulatory initiatives was initiated by the government (30%), another group by individual farmers or small groups of farmers (27%) and a third group either by the industry or non-governmental organisations (33%).
- The costs for products with animal welfare standards were estimated by the experts to be higher than for mainstream products, with the exception of transportation costs.
- For organic farming initiatives the most important barriers are to find sufficient farmers to adopt new standards and to a less degree the distribution.
- For non-organic initiatives a major barriers are the production and processing, the distribution and to a less degree the trading of products. For legal animal welfare legislation initiatives no major barriers were reported.
- A majority of initiatives indicated that farmers are not compensated for guaranteeing higher animal welfare standards (between 56% and 94% of the surveyed regulatory initiatives), in particular in the case of non-organic initiatives.

The group of non-regulatory initiatives is characterised by the following findings:

- One important initiator of this category of non-regulatory initiatives was the industry. Other initiatives were initiated by animal interest groups of the government.
- Contrarily to the regulatory initiatives, the experts assessing programs and other non-regulatory initiatives did not necessarily expect cost items for AW-friendly products to be higher than for mainstream products
- The majority of the programs and other non-regulatory initiatives do not mention major barriers for the implementation of their initiatives and the need for financial compensation.

4.2 Clustering and assessing animal welfare initiatives in Europe

In order to make an appropriate grouping of initiatives, an expert workshop was held on the 28./29th of September 2009 in Madrid. Goals of the workshop were:

- To get an overview and to complete the list of interesting initiatives for animal welfare;
- To define suitable and appropriate criteria to cluster/group the different initiatives;
- To cluster different initiatives in general and from a policy perspective;
- To discuss the main issues and approaches, relevant for policy measures.

One of the main outcomes of the workshop was the development of an assessment system by internal and external experts. Each national research team in the EconWelfare project has assessed their national initiatives with this scoring system.

Altogether 84 initiatives were analysed:

- 40 regulatory initiatives (with production rules either ruled by legislation or voluntary standards), of which 8 have standards for organic production, including the relevant EC regulations for organic agriculture as well as 26 non-organic standards/labelling schemes and 7 governmental AW legislation
- 44 non-regulatory initiatives (with no production rules) of which 29 are education and information initiatives, 5 research initiatives, 3 quality assurance schemes, 2 cross-compliance (financial incentive) initiatives.

The initiatives were grouped as: all initiatives, regulatory initiatives (all, organic, non-organic) and non-regulatory initiatives (all, education & information initiatives).

The outcome of the workshop and the scoring exercise is summarised. The main part is the analysis of the different initiatives, which are characterised systematically, based on their actors, goals and instruments and also related to some success factors.

Main actors of animal welfare initiatives in Europe

Which were the main actors in these initiatives? The summary of the assessment of the actors in table 4.1 shows that farmers and farmer groups, major retailers (and for organic farming initiatives also specialist retailers), processors and abattoirs, certification bodies and national governments are mentioned and scored as the main actors in the regulatory initiatives. In the non-regulatory initiatives Animal Welfare organisations and researchers have main roles.

Table 4.1: Main actors in different groups of AW initiatives in Europe

ACTORS	ASPECTS	All initiatives	All Regulatory initiatives with standards	Organic Regulatory initiatives	Non-Organic Regulatory initiatives	All NON-Regulatory initiatives - no standards	Education and information initiatives
FARMING COMMUNITY	Farmers	1.2	1.4	1.8	1.3	1.8	0.8
	Farmers groups	1.2	1.5	1.8	1.4	0.9	0.9
CHAIN ACTORS	Retailers - specialist	0.4	0.7	1.3	0.5	0.2	0.1
	Retailers - major	0.7	1.0	1.0	1.0	0.4	0.4
	Abattoirs, processing industry	0.9	1.3	1.7	1.2	0.5	0.4
	Input industry	0.6	0.7	0.8	0.7	0.4	0.3
	Certification bodies	0.5	1.0	1.8	0.7	0.2	0.1
VET'S	Veterinarians	0.5	0.6	0.4	0.6	0.5	0.4
CIVIL SOCIETY ACTORS	NGOS - Animal welfare	0.8	0.6	0.6	0.6	1.0	1.2
	NGOS-Consumers	0.2	0.2	0.3	0.2	0.1	0.0
	NGOS - others	0.2	0.2	0.0	0.3	0.2	0.2
PUBLIC REGULATORY AND HALF-PUBLIC ACTORS	European Commission	0.5	0.6	1.0	0.5	0.4	0.3
	National governments	1.2	1.1	1.1	1.1	1.2	0.9
	Agencies	0.1	0.2	0.1	0.2	0.1	0.0
OTHER (PRIVATE) ACTORS	Researchers	0.9	0.7	0.6	0.7	1.1	1.0
	Media	0.4	0.4	0.8	0.2	0.5	0.7
	Political parties	0.2	0.3	0.1	0.3	0.1	0.2
	Celebrity chiefs	0.2	0.3	0.5	0.3	0.0	0.0
	Schools	0.1	0.1	0.3	0.0	0.1	0.2

0= no role at all, 1 = give/offer advice, 2 = important role in the process, 3 = main decision makers

Source: Kilchsperger, Schmid, Hecht (2010)

Main goals of animal welfare initiatives in Europe

The overall analysis of the goals of AW initiatives summarised in Table 4.2 shows that other relevant goals beside animal welfare were to raise awareness amongst target groups, to highlight and improve AW issues in the public and to respond to consumer concerns.

Table 4.2: Characteristics and relevance of the main goals of different groups of AW initiatives

GOALS	ASPECTS	All initiatives	All Regulatory initiatives with standards	Organic Regulatory initiatives	Non-Organic Regulatory initiatives	All NON-Regulatory initiatives - no standards	Education and information initiatives
ANIMAL RELATED GOALS	Animal welfare: system focused	2.3	2.2	2.3	2.1	2.3	2.2
	Animal welfare: animal focused	1.7	1.5	1.9	1.4	1.8	1.7
	Sustainability	1.1	1.4	2.3	1.1	0.9	0.9
CHAIN RELATED GOALS	Profit in high value chain	1.0	1.3	1.8	1.1	0.7	0.4
	Competitive market	1.0	1.5	1.8	1.4	0.6	0.5
	EU livestock production	0.5	0.4	0.6	0.3	0.7	0.4
	Risk management in the chain	0.9	1.2	1.3	1.2	0.6	0.4
FARMER RELATED GOALS	Support farmers	1.3	1.4	2.0	1.2	1.2	1.0
	Farmers skills	1.3	1.2	1.4	1.1	1.4	1.2
SOCIETY RELATED GOALS	Awareness amongst target groups	1.7	1.5	1.8	1.4	1.9	2.3
	Knowledge AW	1.7	1.4	1.3	1.4	2.0	2.1
CONSUMER RELATED GOALS	Food safety	0.9	1.4	1.4	1.4	0.5	0.4
	Transparency	1.2	1.7	2.3	1.5	0.7	0.8
	Customer fidelity	1.2	1.7	2.4	1.5	0.7	0.6
	Consumer concerns	1.8	2.2	2.6	2.1	1.4	1.4

0= not relevant, 1 = somewhat relevant, 2 = relevant, 3 = very relevant

Source: Kilchsperger, Schmid, Hecht (2010)

Main instruments used by animal welfare initiatives in Europe

In table 4.3 the main instruments used by animal welfare initiatives in Europe to promote animal welfare are summarised. These are: regulatory instruments, which are both public (legislation, EC Regulations for organic production) and private combined with penalties; labelling, which may be public (public only for organic products) or private; financial incentives (private and public), Codes of practice (assurance schemes or guidelines) in combination with standards requirements and private information campaigns or other forms.

Table 4.3: Main instruments in different groups of AW initiatives

INSTRUMENTS	ASPECTS	All initiatives	All Regulatory initiatives with standards	Organic Regulatory initiatives	Non-Organic Regulatory initiatives	All NON-Regulatory initiatives - no standards	Education and information initiatives
REGULATORY	Regulation: Public	1.2	1.5	2.7	1.2	1.0	0.6
	Regulation: Private	1.2	1.8	1.9	1.8	0.6	0.6
	Penalties (fine)	0.9	1.5	2.0	1.3	0.4	0.3
	Cross Compliance	0.2	0.3	0.0	0.3	0.1	0.1
LABELLING	Labeling: Public	0.5	0.8	2.4	0.3	0.2	0.2
	Labeling: Private	1.3	1.9	1.9	1.9	0.7	0.7
FINANCIAL, INCENTIVES	Incentives: Public	0.3	0.2	0.1	0.3	0.4	0.2
	Incentives: Private	0.9	1.5	2.2	1.2	0.3	0.3
ASSURANCE, GUIDANCE	Codes of practice: Public	0.8	0.9	1.2	0.8	0.7	0.5
	Codes of practice: Private	1.2	1.7	2.2	1.6	0.7	0.5
EDUCATION, INFORMATION	Education: Public	0.6	0.4	0.2	0.4	0.8	1.0
	Education: Private	0.7	0.6	1.0	0.4	0.8	0.9
	Training: Public	0.5	0.3	0.1	0.4	0.6	0.7
	Training: Private	0.6	0.8	1.4	0.6	0.4	0.4
	Information: Public	0.9	0.9	1.2	0.8	0.8	0.9
	Information: Private	1.2	1.3	2.0	1.1	1.2	1.5
DEVELOPMENT	Research: Public	0.8	0.6	1.1	0.5	0.9	0.7
	Research: Private	0.5	0.5	0.6	0.5	0.5	0.4

0= no role at all, 1 = give/offer advice, 2 = important role in the process, 3 = main decision makers

Source: Kilchsperger, Schmid, Hecht (2010)

A specific analysis was made with regard to the country-specific issues of the different initiatives, which shows that there are relevant differences between the goals, the use of instruments and the involvement of actors between different European countries. For example creating awareness among citizens and also a demand by consumers for AW friendly products was generally scored higher in DE, IT, NL and SE compared with PL, ES and MK.

Success factors of AW initiatives

In order to better identify success factors of different initiatives, an analysis was with regard to four impact factors: improving welfare of the animals involved, creating awareness among citizens, generating demand among consumers and inspiring others to develop new animal-friendly initiatives. Generally the regulatory initiatives were considered as more successful to improve AW for all four factors than the non-regulatory initiatives, including education and information initiatives. The organic farming standards schemes had the highest score of all clustered groups.

Tab. 4.4: Assessment of success factors of different groups of AW Initiatives

	SUCCESS FACTORS	All initiatives	All Regulatory initiatives with standards	Organic Regulatory initiatives	Non-Organic Regulatory initiatives	All NON-Regulatory initiatives - no standards	Education and information initiatives
Question 1	Improving the welfare of the animals involved	3.7	4.0	4.4	3.9	3.4	3.2
Question 2	Creating awareness among citizens	3.2	3.4	4.0	3.3	3.0	3.2
Question 3	Generating a demand among consumers	2.7	3.1	3.6	3.0	2.4	2.6
Question 4	Inspiring others to animal-friendly initiatives	3.0	3.3	3.4	3.3	2.8	2.8

Score: 1 = very little, 2 = little, 3 = medium, 4= high, 5=very high

Source: Kilchsperger, Schmid, Hecht (2010)

The analysis and assessment of the Animal Welfare Initiatives has shown that a few actor networks have already been quite successful in reaching multiple goals, using different policy instruments involving broader networks.

However the authors identified several other initiatives with a number of weaknesses, such as:

- Goals that are sometimes too narrow (e.g. more focus on technical stable systems than on Animal Welfare);
- Some instruments that are not used sufficiently in combination with each other (e.g. labelling schemes with education in non-organic schemes);
- Some important or potentially interesting actors are neglected or even not enough involved (e.g. farmers in campaigns or in the design of research projects).

More reflections are found in the synthesis Chapter 8, where conclusions are formulated.

5 Detailed comparison of EU and national legislation in selected European countries

Since the EU regulatory framework with their regulations and directives are the basis for national legislation in the EU, it could be expected that the national legal rules for the welfare of farm animals does not differ substantially from EU in many cases.

Indeed there is one group of countries, where legislation does not really differ from EU rules. Italy and Spain have transposed EU legislation into their own law without mayor changes. Polish animal welfare requirements differ from EU legislation in some aspects but not to a large extent. An animal protection law is already implemented. This is why IT, ES and PL are not especially considered in the comparisons of national legislations for animal welfare made in this chapter.

The other group of countries has in some areas some additional requirements. The United Kingdom and the Netherlands have national farm animal welfare regulations which differ in a few aspects from EU law (sometimes they are more detailed). Swedish and partly also German animal welfare legislation go beyond EU law in more aspects than the other project partner countries. Swedish legislation defines requirements more precisely. Details are given later.

From the potential accession countries Macedonia is still on its way to develop different "Books of rules" for the regulation of animal welfare.

National legislation can go beyond EU legislation in several ways:

- Requirements of national legislation are stronger than EU law;
- Requirements of national legislation are more precisely defined than EU law;
- National legislation covers a topic which is not covered by EU law.

This chapter focuses on the main aspects where national legislation for farm animal husbandry goes beyond EU requirements. The reader can presume that where no differences are mentioned, national standards are the same as set by EU legislation.

5.1 General aspects of farm animal husbandry

On EU-level, the following documents concern general aspects of farm animal husbandry:

- European Convention for the protection of animals kept for farming purposes Official Journal L 323 , 17/11/1978 p. 0014 - 0022
- 78/923/EEC: Council Decision of 19 June 1978 concerning the conclusion of the European Convention for the protection of animals kept for farming purposes Official Journal L 323 , 17/11/1978 p. 0012 - 0013
- Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes Official Journal L 221 , 08/08/1998 p. 0023 - 0027
- Commission Decision (2006/778/EC) 14 November 2006 amending Decision 2000/50/EC concerning minimum requirements for the collection of information during the inspections of production sites on which certain animals are kept for farming purposes (Text with EEA relevance) (Official Journal L 314, 15.11.2006 p. 0039-0047)

The table 5.1a below shows the aspects which have been reviewed for comparison of national and EU legislation in the case of general aspects of farm animal husbandry:

Tab. 5.1a General relevant aspects in EU and national legislation for animal welfare

CHAPTER	Relevant aspects
Accommodation	Lighting, climate, sound level, materials, surfaces, flooring
Equipment	Inspection frequency, maintenance, alarm system
Outdoor keeping	Shelter
Freedom of movement	Space requirements, tethering
Socialising opportunity	Group keeping, intervisibility
Feeding	Adequate diet, feeding frequency, feed additives, forbidden substances, design of facility
Drinking	Access to fresh water
Health care	Medicine and methods, vaccination, de-worming, hormonal treatments, withholding period for veterinary medicine, prophylactic treatments
Regular visits	Frequency of visits, care of ill or injured animals
Record keeping	Medical treatments, number of mortalities, other records
Breeding	Reproduction methods
Staffing	Number of staff, knowledge
Inspection	Obligation

The following table 5.1b shows where and how general farm animal welfare legislation differs from EU legislation. All the aspects where no positive differences in comparison with EU law could be identified do not show up in the table below.

Tab. 5.1b Different requirements of general nature identified in EU and national legislation for animal welfare

Chapter	Aspect	DE	MK	NL	PL	SE	UK
Accommodation	Daylight windows	s		s	s	d	s
	Climate conditions	s		s	s		s
	Sound level	n				n	
	Approval of buildings					n	
Equipment	Approval of new management technologies	n				n	
Feeding	Feeding frequency	p				p	
Drinking	Access to fresh water	s	s	s	s	p	s
Health care	Prophylactic use of antibiotics					n	
	Use of beta-antagonists prohibited						p

d = same as EU; + = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

As showed in the table 5.1b above, Sweden and Germany show the biggest differences in relation to the general aspects of animal husbandry, regulated mainly through Council Directive 98/58/EC. Sweden brings in several new requirements and stipulates detailed standards for feeding and drinking.

Where exactly is the difference?

The following list shows key differences.

- (SE) Daylight inlets are mandatory;
- (SE) Detailed rules for indoor climate (see below in standards for cattle);
- (SE) Maximum sound volume is regulated (only temporarily >65 dBA, with ventilation <75 dBA)
- (DE) Sound must be minimized;

- (SE) Livestock buildings and new animal management technologies must be approved;
- (SE) Water must be given to animals at least twice every 24 hours;
- (SE, DE) Feed must be given daily;
- (SE) The prophylactic use of antibiotics is not allowed;
- (UK) Prohibition of beta-agonists in animal production: generally not allowed, but certain of these compounds can be allowed under prescription.

5.2 Differences regarding the welfare of cattle

Sweden is the only country with specific legislation for the husbandry of dairy cattle. The United Kingdom and Germany have regulated some aspects concerning dairy cattle in its animal welfare legislation, while all the other project partner countries do not yet have any requirements in this area.

The following directive exists at EU level: Council Directive 2008/119/EC of 18 December 2008, Official Journal L 010, 15/01/2009 P. 0007 - 0013 laying down minimum standards for the protection of calves.

The following aspects have been reviewed for dairy cattle (mainly based on EU and SE legislation):

Tab. 5.2a Aspects for husbandry of dairy cattle

Chapter	Relevant aspects
Quantity of animals	<i>Maximum herd size, number of animals where regulations apply</i>
Accommodation	<i>Lighting, climate, sound level, stable systems, dimensions, lying area, space requirements</i>
Calving pens	<i>Obligation, dimensions</i>
Freestall barns	<i>Stocking rate, activity area, passageways, floor surface, slatted floors, feeding area, number and dimension of lying boxes, shelter, out-door area</i>
Tethering systems	<i>Tethering system, use of electric cow trainer, space/animal, outdoor area</i>
Feeding	<i>Feed composition, additives, frequency, facilities, trough width</i>
Grazing	<i>Frequency</i>
Drinking	<i>Access to fresh water, drinking facilities</i>
Health care	<i>Medicine and methods, vaccinations, de-worming, dry off milk, hormonal treatments, prophylactic treatments, withholding periods</i>
Regular visits	<i>Frequency</i>
Cleaning	<i>Frequency</i>
Breeding	<i>Recommended, allowed and prohibited methods</i>
Mutilations/ surgical practices	<i>Castration, tail trimming, dehorning</i>

The table 5.2b below shows the topic which are regulated in Swedish, German and UK legislation:

Tab. 5.2b Aspects for husbandry of dairy cattle in considered partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Loose housing					n	
	Bedding in lying area					n	n
	Space requirements in different systems				p	n	
	Use of electric cow trainer					n	
Freestall barns	Width of passageways					n	
	Feeding facilities					n	
	Number of lying boxes					n	
	Dimensions of lying boxes					n	
	Separated resting area for calves					n	
Calving	Provision of calving pens	n				n	
	Size of calving pens					n	n
	Covering dung channel behind cow					n	
	Calving aids					n	
Grazing	Pasturing, roughage					n	
Drinking	Number of drinking spots					n	
Breeding	Protection of heifers					n	
	Conditions for mating					n	
Mutilations/ surgical practices	Castration					d	
	Tail trimming					d	
	Dehorning					p	

D = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

Where exactly is the difference?

First the focus should be put on the **Swedish standards for dairy cattle welfare**. Some key aspects shall be listed below:

Accommodation

- In after 1. April 2007 built stables bovines shall be kept in loose housing. Male animals >6 months shall be kept in loose housing from 1 August 2017.
- Stall floors and cubicles for dairy cows shall be provided with adequate bedding of straw or similar material.
- The use of electrical cow trainers is not allowed.
- Space requirements are regulated to a detailed degree. The dimensions depend on the weight of the animal and what type of stall (long stall, short stall, feeding stall or restricting stall).

Freestall barns

- Passageways must not be so narrow that the animals can get stuck. There are detailed regulations about the minimum dimensions.
- For feeding facilities, there are regulations about minimum dimensions in case of a straight feeding table simultaneous feeding. When the entire ration is provided through feed concentrate stations, the number of cows per station must not exceed 20 animals in high-lactating groups, 25 animals in mixed groups, and 35 animals in dry cow groups.
- Same number of lying boxes is required as there are animals in the barn.

- There are detailed regulations about the dimensions of the lying boxes depending on the weight of the animal.
- Loose housing stables for suckling cows shall have separate resting areas for calves younger than three months.

Calving

- Before calving, there shall be calving pens at holdings of cows or heifers. Cows and heifers shall not be tethered at the time of calving, but tethering is allowed in case difficulties arise during calving.
- There are detailed regulations about the dimensions of the calving pen. Single cow: 9m² with the shortest side 3 m. Group calving: 8 m² per cow with the shortest side 5m.
- The dung channel behind a tethered cow or heifer shall be covered during calving.
- Mechanical calving aids may be used only after the approval of a veterinarian in each individual case.

Feeding and drinking

- Pasturing for dairy cattle over 6 months of life mandatory. Other cattle shall be sent out to pasture or otherwise allowed to graze outdoors in the summer each day and have access to this area for at least 6 hours. Exceptions dairy calves < 6 months or bulls. Other bovine animals which are to be kept outdoors or put out to pasture shall be outdoors 24 hours a day. Specific requirements for pasturing periods varying between counties. There are several exceptions why an animal can be kept indoors.
- The number of drinking spots with automatic water supply per animal shall be at least. One drinking spot per 10 lactating cows kept for dairy production, -one drinking spot per 25 other bovine animals.

Breeding

- Heifers <13 months shall be kept in a way that reduces the risk of service.
- Heifers and cows must not be serviced by a bull, inseminated or receive embryos if problems can be expected at calving. There are detailed regulations about hereditary lethal dispositions and other defects that shall not be used in breeding.

Mutilations

- Castration is allowed, but must be done under anaesthesia and by a veterinarian.
- Tail trimming is not allowed.
- Dehorning is recommended, but shall be done under anaesthesia and by a veterinarian or a person considered suitable for this purpose by a veterinarian.

Germany has a few specific additional requirements beyond or more precise as the EU legislation for dairy cattle: roughage in feed ration, allowance of calving pens, the availability of an emergency power generator, the limitation of sound level and noise.

The **United Kingdom** has as well a few specific additional requirements for dairy cattle husbandry:

- Lactating dairy cows or calving cows in buildings must always have access to a well-drained and bedded lying area.
- Calving pen must be of such a size as to permit a person to attend the cows.

Details on strength and weaknesses of governmental standards of some EU member states can be found in the EconWelfare Report 3.2. (Ferrarri et al. 2010).

5.2.1 Standards for the husbandry of calves kept for rearing and fattening

All the partner countries except Macedonia have their own regulations for the welfare of calves kept for rearing and fattening.

The following aspects have been reviewed for calves:

Tab. 5.2.1a Aspects for husbandry of calves for rearing and fattening

Chapter	Relevant aspects
Accommodation	<i>Lighting, climate, stable systems, design of accommodation, dimensions of group and individual pens, lying area, bedding material, flooring, installations, maintenance, materials</i>
Tethering	<i>Allowance, design</i>
Feeding	<i>Colostrum drinking period, diet, fiber, iron supply, feeding frequency, simultaneous feeding</i>
Drinking	<i>Access to fresh water, drinking facilities</i>
Health care	<i>Procedure</i>
Regular visits	<i>Frequency</i>
Cleaning	<i>Frequency</i>
Muzzling	<i>Allowance</i>

The following differences have been identified:

Tab. 5.2.1b Aspects for husbandry of calves for rearing and fattening in considered partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Light intensity and period	d		s	s		s
	Gas concentration	p		s	p	p	
	Air moisture	p				p	
	Dimensions of group pens			s	s	d	d
	Design and dimensions of individual pens	o		s	s	o	s
	Drained floor in lying area	s		s	s	n	s
	Number of lying boxes			n			
	Bedding material	s		p	s	p	s
Feeding	Milk drinking period	d	s	s	s	s	s
	Fiber	d		s	s	d	d
	Iron supply	d		s	s		s
	Need for suckling	n					
	Number of feeding places, width			n			
Health care	Sickbay			p	s	s	

d = same as EU; + = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely; o = other approach to same topic

Where exactly is the difference?

The table 5.2.1c below shows the main differences concerning accommodation:

Tab. 5.2.1c Accommodation aspects in different partner countries

Aspect	EU-legislation	Main differences
Light intensity	Calves must not be kept permanently in darkness. To meet their behavioural and physiological needs, provision must be made, for appropriate natural or artificial lighting 9 a.m. - 5 p.m. (8 hours). In addition, suitable lighting (fixed or portable) strong enough to allow the calves to be inspected at any time must be available.	In DE longer lighting period (10 hours) and defined light intensity (80 Lux).
Gas concentration	Insulation, heating and ventilation of the building must ensure that gas concentrations are kept within limits which are not harmful to the calves.	Regulated gas concentrations in DE, PL (same limits both) and SE (lower limits for NH ₃ and H ₂ S, same for CO ₂). See below.
Air moisture	Insulation, heating and ventilation of the building must ensure that relative air humidity is kept within limits which are not harmful to the calves.	SE: general rules for rel. air moisture; DE rules specific to calves. Other countries same as EU.
Space requirements – group keeping	Where calves are housed in groups, they must have sufficient unobstructed floor space to be able to turn round and lie down without hindrance of at least 1.5 m ² for each calf of 150 kg live weight. Group keeping: 1.5 m ² for each calf <150 kg, 1.7 m ² for each calf 150-220 kg, and 1.8 m ² for each calf >220 kg.	Differing space requirements in SE (only for littered bed pens, on slatted floor it is the same) and UK. See below.
Design and dimensions of individual pens	Individual pens for calves (Exception: those for isolating sick animals) must not have solid but perforated walls which allow the calves to have direct visual and tactile contact. Dimensions depending on width and body length of calf.	In DE dimensions of individual pens depend on age, in SE on weight.
Number of lying boxes	(not mentioned)	NL: Same as number of calves
Draining floors in lying area	The lying area must be comfortable, clean, and adequately drained and must not adversely affect the calves.	SE: Draining floor as lying areas for calves is only accepted under some conditions and not at all for calves less than one month old.
Bedding	Appropriate bedding must be provided for all calves less than two weeks old.	NL: Calves <2 months sawdust, rubber mattress, wooden slatted floor or rubber floor coating (for other than fattening calves this requirements is for the whole period 6 month). SE requires litter or similar bedding <1 month.

*Limits of gas concentration***Tab. 5.2.1d Limits of gas concentration in different partner countries**

Gas	EU	DE	PL	SE
CO ₂	"not harmful"	3000 ppm	3000 ppm	3000 ppm
NH ₃	"not harmful"	20 ppm	20 ppm	10 ppm
H ₂ S	"not harmful"	5 ppm	5 ppm	0.5 ppm

Sweden additionally has a limit for organic dust: 10 mg/m³.

Sweden has detailed rules for stable climate in general, which do not differ from the ones Germany has set for climate in stables where calves are being kept:

- Sweden: Insulated stables max. 80% relative air moisture, unless the temperature indoors is less than 10°C. In such cases, the numeric sum of the stable temperature and the relative air moisture must not exceed 90. In stables without insulation, relative moisture may only in exceptional cases exceed the outdoor moisture content by ten percentage points.
- Germany: Relative humidity should be between 60 and 80%.

*Space requirements – group keeping***Tab. 5.2.1e Space requirements in different partner countries**

Weight of calves	EU	SE	UK
Up to 60 kg		1.5 m ² in littered bed pens	
Up to 90 kg		1.7 m ² in littered bed pens	
Up to 150 kg	1.5 m ²	2.2 in littered bed pens	1.5 m ²
Up to 220 kg	1.7 m ²		2 m ² (150 - 200 kg)
More than 220 kg	1.8 m ²		3 m ² (>200 kg)

Sweden: Calves kept on slatted floors 1.5 m² per calf.

*Dimensions of individual boxes***Tab. 5.2.1f Box dimensions in different partner countries**

EU	DE	UK
Where calves are housed in individual boxes or by tethering in stalls, the boxes or stalls shall have perforated walls and their width must be no less than 90 cm plus or minus 10%, or 0.80 times the height at the withers. The width of any individual pen for a calf shall be at least equal to the height of the calf at the withers, measured in the standing position, and the length shall be at least equal to the body length of the calf, measured from the tip of the nose to the caudal edge of the tuber ischii (pin bone), multiplied by 1.1.	Dimensions depending on age: For calves (-2weeks) length 120 cm, width 80 cm and height 80 cm. Calves (2-8 weeks) length (160cm trough outside/180 cm trough inside), width 90-100cm. For calves (8weeks+) length at least (180cm trough outside/200cm trough inside) width: min 100-120cm.	A single pen for a calf that weight <60 kg must have a shortest length of 1.2 m and a shortest breadth of 1 m. A single pen for a calf that weight <90 kg must have a shortest length of 1,4 m and a shortest breadth of 1,1 m.

*Differences in feeding of calves***Tab. 5.2.1g Aspects in relation to calf feeding**

Aspect	EU-legislation	Main differences
Colostrum	Each calf shall receive bovine colostrum as soon as possible after it is born and in any case within the first six hours of life.	In DE calves shall receive colostrum within first 4h of life.
Fibre	A minimum daily ration of fibrous food shall be provided for each calf >2 weeks, the quantity being raised from 50 g to 250 g per day for calves from eight to 20 weeks old.	DE: starts from >8 days. Ad libitum offering of fibrous food in DE and SE. Higher starting ration in UK (100 g)
Iron	The food shall contain sufficient iron to ensure an average blood haemoglobin level of at least 4.5 mmol/litre	DE: Calves (-70 kg): Milk replacer feed (88% TS) must contain 30 mg/kg of iron. Calves' (70 kg+) average blood haemoglobin level min. 6 mmol/litre.
Suckling	(not mentioned)	DE: Need for suckling must be covered.
Feeding places and transport preparation	(not mentioned)	NL: At least one feeding place per calf or at least 0.40 m trough width per calf

Sickbay

The Netherlands have requirements about space in sickbay for at least 1% of calves on the farm (with minimum of one place). The number of sickbays is not regulated elsewhere.

5.3 Differences regarding the husbandry of pigs

At EU level there is one directive regulating the welfare of pigs on farms:

- Council Directive 91/630/EEC of 19 November 1991 laying down minimum standards for the protection of pigs Official Journal L 340 , 11/12/1991 p. 0033 - 0038

The directive contains detailed standards for the welfare of piglets, weaners, rearing pigs, sows, gilts and boars.

Differences concerning all pigs

The following table shows the aspects concerning the husbandry of pigs which have been reviewed for this comparison.

Tab. 5.3a Relevant aspects for all pigs in EU and national legislation for animal welfare

Chapter	Relevant aspects
Quantity of animals	Maximum herd size, number of animals where regulations apply, stocking density
Accommodation	Lighting, sound level, lying area, intervisibility, flooring surface, width of openings in slatted floors
Feeding	Feeding system, composition, additives, frequency, facilities and trough width
Drinking	Access to fresh water, drinking facilities
Health care	Medicine and methods, vaccinations, hormonal treatments, prophylactic treatments, withholding periods
Regular visits	Frequency, staffing
Cleaning and disinfection	Frequency
Breeding	Recommended, allowed and prohibited methods
Aggressive behaviour	Measures for aggressive animals
Mutilations/ surgical practices	Castration, tail docking, tooth clipping, tooth grinding, nose ringing
Inspection	Frequency

Relevant differences have been found regarding the following aspects

Tab. 5.11 Different requirements for all pigs identified in EU and national legislation for animal welfare

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Quantity of animals	Maximum herd size					n	
Accommodation	Light intensity and duration	d		s	s		s
	Heat stress	n					n
	Separate areas for different behaviour	n				n	
	Slatted floors in lying area	p		s	s	p	s
Feeding	Number of feeding spots					n	
	Feeding trough width					n	
	Protection of pig from the back					n	
Health care	Hoof inspection					n	
Aggressive behaviour	Measures for aggressive animals	d		s	s	s	d
Mutilations	Tail docking	s	p	d	s	d	
	Tooth clipping	s		d	s	d	
	Nose ringing	s	s	s	s	d	

d = same as EU; + = requirements stricter than EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

Where exactly is the difference?

Differences concerning the accommodation of all pigs:

Tab. 5.3b Relevant aspects for the accommodation of all pigs in different partner countries

Aspect	EU-legislation	Main differences
Lighting	Pigs must be kept in light with an intensity of at least 40 Lux for a minimum period of minimum eight hours per day. Air circulation, dust levels, temperature, relative air humidity and gas concentrations must be kept within limits which are not harmful to the animals	DE: 80 Lux, rest 40 Lux.
Heat stress	(not mentioned)	DE and UK regulate heat stress
Separated areas	(not mentioned)	SE and DE demand separate areas for different behaviour (for example feeding and drinking)
Lying area and intervisibility	The accommodation for pigs must be constructed in such a way as to allow the animals to have access to a lying area physically and thermally comfortable as well as adequately drained and clean which allow all the animals to lie at the same time, rest and get up normally, see other pigs.	SE: Lying area not slatted. In DE max. 15% perforation in lying area. Rest same as EU.

Sweden has the following additional requirements for pig welfare:

- Maximum number of pigs in continuous production: Max 200 pigs/compartment. All-in-all-out production and recruiting from more than one holding: Max 400 pigs/compartment.

Feeding facilities:

- A feeding station controlled by a transponder or a responder must not be used for so many pigs that they cannot all eat their daily rations within 12 hours;
- Regulation of feeding trough width according to size and weight of pig;
- Protection at the back of pen, preventing the pigs from hurting one another.

Health care:

- Hooves of adult pigs shall be inspected and if necessary pared regularly.

In **Germany and the United Kingdom** aggressive, injured and sick animals must be kept in individual pens whereas in the other countries it is only recommended.

The few differences regarding surgical practices on pigs are summarized in the table below:

Tab. 5.3.c Requirements for surgical practices on pigs of different partner countries

Aspect	EU-legislation	Main differences
Tail docking	Allowed: Docking of a part of the tail. After 7th day of life only performed under anaesthetic and additional prolonged analgesia by a veterinarian.	NL: Tail docking only up to 4 days rather than 7. MK Not more than half of the tail should be docked. SE: not allowed
Tooth clipping	Allowed: Clipping of corner teeth not later than the 7th day of life of the piglets leaving an intact smooth surface, only where there is evidence that injuries to sows' teats or to other pigs' ears or tails have occurred.	NL and SE: Tooth clipping not allowed
Nose ringing	Allowed: Nose ringing only when the animals are kept in outdoor husbandry systems	SE: Nose ringing is not allowed

An interesting difference is that tail docking without anaesthetics in the Netherlands is only allowed up to 4 days of life rather than 7 days. The Netherlands ban tooth clipping; Sweden bans tooth clipping and nose ringing.

5.3.1 Differences concerning the keeping of boars

There are very few requirements specific to the keeping of boars. Differences have been found concerning the following aspects:

Tab. 5.3.1a Requirements for husbandry of boars in different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Space requirements for boars	s		p	s	d	s
	Slatted floors			n			

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

Where exactly is the difference?

The space requirements for boars are higher in Sweden than in the EU and the other countries: Sweden requires 7 m² of total area in comparison with 6 m² total area. The Netherlands have an additional requirement for younger boars < 12 month of age: 4 m²; and boars between 12-18 months: 5 m².

The other difference concerns flooring. In the Netherlands, in the case of partly slatted floors at least 2/3 of the floor area should be solid. This is an aspect which is not regulated in EU legislation.

5.3.2 Differences concerning the keeping of sows and gilts

The following table shows the aspects concerning the husbandry of sows and gilts which have been reviewed for this comparison.

Tab. 5.3.2a Aspects for husbandry of sows

Chapter	Relevant aspects
Accommodation	Duration of group keeping, dimensions of group and individual pens, intervisibility, flooring surface, slatted floors, tethering, protection of piglets
Environmental enrichment	Material for environmental enrichment
Farrowing	Nesting material
Feeding	Food quality, feeding system
Health care	Cleaning of sow, parasite treatment
Aggressive behaviour	Minimization of aggressive behaviour

The following differences are described below in Table 5.3.2b:

Tab. 5.3.2b Aspects for husbandry of sows in different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Duration of group keeping	s		d	s	o	o
	Floor in lying area					n	
	Space requirements for sows and gilts	d	o	d	s	s	s
Farrowing	Nesting material	s	s	s	s	d	s

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely; o = other approach to same topic

Where exactly is the difference?

Duration of group keeping

EU legislation stipulates: Sows and gilts shall be kept in groups during a period starting from 4 weeks after the service to 1 week before the expected time of farrowing. Exceptions: Sows and gilts raised on holdings of fewer than 10 sows may be kept individually during the period mentioned, provided that they can turn around easily in their boxes, From 1 January 2013 those provisions shall apply to all holdings.

In comparison, the Netherlands require group housing from 4 days after service (rather than 4 weeks in the other countries). The UK stipulates group keeping after weaning, and Sweden during pregnancy.

Space requirements

In Germany and Sweden, space requirements for sows and gilts depend on group size. The Netherlands demand the same space for gilts after service and sows. The space requirements are showed in the following table and indicated in square meters:

Tab. 5.3.2c Space requirements of sows in different partner countries

	EU		Germany		Netherlands	Sweden	
Group size	Gilts	Sows	Gilts	Sows	Gilts	Gilts	Sows
- 5 animals	1.8	2.5	1.85	2.5		1.81	2.48
6 - 39 animals	1.64	2.25	1.65	2.25	2.25	1.64	2.25
40 animals			1.5	2.05			

These numbers do slightly differ from EU legislation.

Lying area in relation to total area

Sweden and Germany define lying area for sows and gilts. In Sweden, for gilt after service the lying area must be at least 0.9 m²; for dry sows the lying area must be of at least 1.1 m². Whereas in Germany at least 0.95 m² per gilt or 1.3 m² per sow must be provided as lying area. In this case, Germany has slightly higher requirements than Sweden and both regulate a topic which is not covered by EU legislation.

Nursing sows

Sweden additionally has precise space requirements for nursing sows: The minimum lying area for nursing sows in littered laying pens is 4 m², and the total area 6 m². In litter bed pens the minimum total area is 7 m². 3/4 of lying area must be solid and a continuous rectangular space covering the entire breadth of the pen.

Nesting material

The EU stipulates that “in the week before the expected farrowing time sows and gilts must be given suitable nesting material in sufficient quantity unless it is not technically feasible for the slurry system used in the establishment”. In Sweden the provision of nesting material is absolutely mandatory and it is no question of technical feasibility.

5.3.3 Differences concerning the keeping of piglets

The following table shows the aspects concerning the husbandry of piglets which have been reviewed for this comparison.

Tab. 5.3.3a Aspects for husbandry of piglets

Chapter	Relevant aspects
Accommodation	<i>Space requirements, floor surface, slatted floors, space for suckling</i>
Weaning	<i>Minimum age at weaning</i>

The following differences can be mentioned:

Tab. 5.3.3b Aspects for husbandry of piglets in different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Temperature in piglets' lying area	n					
	Provision of litter					n	
Weaning	Minimum age at weaning	s	s	s	s	d	s

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU

Where exactly is the difference?

Age at weaning

Generally, piglets are weaned at the age of 28 days throughout the EU, but piglets may be weaned up to seven days earlier if they are moved into specialised housings which are emptied and thoroughly cleaned and disinfected before the introduction of a new group and which are separated from housings where sows are kept, in order to minimise the transmission of diseases to the piglets. In the case of Sweden, there is no such exception.

Provision of litter

Additionally to EU legislation Sweden stipulates that pens for pigs up to the age of one month shall be provided with litter bedding or similar material.

Temperature in piglets' lying area

Germany defines the minimum temperature in the lying area of piglets, dependent on weight and the provision of litter. During the first 10 days after birth temperature in lying area must not fall below 30 °C.

After the 10th day of life the temperature must be as follows:

Tab. 5.3.3.c Temperature requirements for piglets

Weight	with litter	without litter
Up to 10 kg	16 °C	20 °C
10-20kg	14 °C	18 °C
More than 20kg	12 °C	16 °C

5.3.4 Differences concerning the husbandry of weaners and rearing pigs

The following table shows the aspects concerning the husbandry of weaners and rearing pigs which have been reviewed for this comparison.

Tab. 5.3.4a Aspects for husbandry of weaners and rearing pigs

Chapter	Relevant aspects
Accommodation	<i>Space requirements, slatted floors</i>
Group keeping and mixing	<i>Group keeping, mixing conditions, tranquilising medicaments</i>
Aggressive behaviour	<i>Prevention, measures for aggressive animals</i>

The following differences can be mentioned:

Tab. 5.3.4b Aspects for husbandry of weaners and rearing pigs in different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Space requirements for weaners and rearing pigs	d		d	s	d	o
Group keeping and mixing	Group mixing conditions	p		d			s
Feeding	Number of feeding spots and dimensions	n		n			
Drinking	Number of drinking spots	n					

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely; o = other approach to same topic

Where exactly is the difference?

Mixing conditions

EU-legislation: "If pigs unfamiliar with one another have to be mixed, this should be done at as young an age as possible, preferably before or up to one week after weaning. When pigs are mixed they shall be provided with adequate opportunities to escape and hide from other pigs."

In Germany, mixed group weight must vary only up to a maximum of 20%, additionally. In the Netherlands, mixing is allowed only up to one week after weaning.

In Sweden the following general recommendations are given: Growing pigs should be reared in an all-in-all-out system. Pigs weighing less than 20 kg should not be brought together with pigs from other holdings. Piglet litters should be kept together during their growth phase, after any evening out of the litters. A pig with reduced ability to fend for itself in a piglet litter should however be removed and kept in an environment better suited to it

Feeding and drinking facilities

The Netherlands and Germany have detailed requirements for the design and dimensions of feeding facilities:

- Germany: Trough feeding: simultaneous feeding. Automatic rationed feeding: one feeding facility / 2 weaners. Ad libitum feeding: 1 feeding facility / 4 weaners.
- The Netherlands: 30 cm trough width per rearing pig.
- Sweden: there is a regulation about the minimum area per animal in case of a straight feed trough when all pigs are fed at the same time. For pigs 10-130 kg the minimum area (m) are calculated using this formula: $0,164 + (\text{weight (kg)} / 538)$.

Additionally, Germany regulates that one drinking facility has to be provided per 12 weaners.

Unobstructed floor area available to each weaner or rearing pig kept in a group.

The Netherlands have slightly higher space requirements for weaners and rearing pigs. German and Swedish space requirements differ only slightly. UK space requirements are defined related to the size of the pig. The Dutch legislation also requires that, when slats are used, at least 40% of the total area is laying area with a solid floor.

Tab. 5.3.4c Detailed differences of aspects reviewed for weaners and rearing pigs between considered partner countries

Live weight	EU	DE	NL	SE	UK
			With transition period until 2013 for barns built before 1998	Depends on stable system, category of pig and group size. Area dependent on weight of pigs and calculated like this for littered lying pen; lying area = $0.10 + \text{weight}/167$ and total area = $0.17 + \text{weight (kg)}/130$. => 30 kg: 0.40 m^2 , => 110 kg: 1.02 m^2 .	Internal area is not less than the square of length of pig, and no internal side is less than 75% of the length of the pig.
- 10 kg	0.15 m^2	0.15 m^2	up to 15 kg: 0.20 m^2		
over 10 - 20 kg	0.20 m^2	0.20 m^2			
over 20 kg - 30 kg	0.30 m^2	0.35 m^2	15-30 kg: 0.40 m^2		
over 30 kg - 50 kg	0.40 m^2	0.5 m^2	0.60 m^2		
over 50 kg - 85 kg	0.55 m^2	0.75 m^2	0.80 m^2		
over 85 kg - 110 kg	0.65 m^2	0.75 m^2	1 m^2		
more than 110kg	1.00 m^2	1.0 m^2	1.3 m^2		
			Available floor areas may be reduced by 10% for animals > 15 kg in case of housing in groups with > 40 animals		

5.4 Differences regarding the husbandry of chickens

The following documents regulate the welfare of chickens at EU level:

Laying hens:

- Council Directive 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens Official Journal L 203 , 03/08/1999 p. 0053 - 0057
- Council Regulation (EC) no 1028/2006 of 19 June 2006 on marketing standards for eggs (OJ L 186, 7.7.2006 p. 0001-0005)
- Commission Regulation (EC) no 557/2007 laying down detailed rules for implementing Council Regulation (EC) no 1028/2006 23 May 2007 on marketing standards for eggs (OJ L 132 24.5.2007 p. 0005-0020)
- Commission Directive 2002/4/EC of 30 January 2002 on the registration of establishments keeping laying hens, covered by Council Directive 1999/74/EC Official Journal L 30 , 31/01/2002 p. 0044 - 0046

Chickens kept for meat production:

- Council Directive 2007/43 of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production (OJ L 182, 12.7.2007 p. 0019-0028)

5.4.1 Requirements for all chickens kept

The table 5.2 below shows the aspects which have been reviewed for comparison of national and EU legislation concerning requirements for all systems in which chickens are kept:

Tab. 5.4.1a Relevant aspects for all chicken in EU and national legislation for animal welfare

Chapter	Relevant aspects
Quantity of animals	<i>Stocking density, number of animals where regulations apply</i>
Accommodation	<i>Lighting, darkness and twilight period, climate, sound level, security, cage doors, perches, nests, floor surface, litter, arrangement of different levels.</i>
Feeding	<i>Feed composition, additives, frequency, facilities, distribution of feeding spots</i>
Drinking	<i>Access to fresh water, drinking facilities, distribution of drinking spots</i>
Health care	<i>Medicine and methods, prophylactic treatments</i>
Regular visits	<i>Frequency, inspection, removal of dead animals</i>
Cleaning and disinfection	<i>Frequency, methods, agents</i>
Breeding	<i>Recommended, allowed and prohibited methods</i>
Mutilations	<i>Beak trimming, comb dubbing, despurring, declawing, toe removal</i>
Inspection	<i>Frequency</i>

Even if there are many aspects to be regulated in the husbandry of chickens, only a few relevant differences can be mentioned here, since the animal welfare legislation of chickens is very much the same in EU and partner countries.

Tab. 5.4.1b Different requirements for all chicken identified in EU and national legislation for animal welfare

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Provision of natural daylight		s	s	s	d	s
	Sand bathing					n	

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

Where exactly is the difference?

Only one difference could be found for chicken husbandry in general:

- In Sweden, one square meter of group nest serves for 100 hens whereas according to EU legislation there is a higher maximum of 120 hens per square meter.

5.4.2 Requirements for laying hens kept in non-cage systems

The table 5.5 below shows the aspects which have been reviewed for comparison of national and EU legislation concerning requirements for the keeping of laying hens in non-cage systems

Tab. 5.4.2a Relevant aspects for laying hens in non-cage systems in EU and national legislation for animal welfare

Chapter	Relevant aspects
Quantity of animals	<i>Maximum flock size, number of roosters, maximum stocking density</i>
Accommodation	<i>Perches, nests, arrangement of levels, floor surface, litter, space requirements</i>
systems with free range area	<i>Number of pop holes and dimensions of openings, outdoor area requirements, shelter, drinking facilities outdoors</i>
Feeding	<i>Feed composition, frequency, facilities and distribution</i>
Drinking	<i>Access to fresh water, drinking facilities, distribution of drinking spots</i>
Regular visits	<i>Frequency, removal of dead animals</i>

Germany has some requirements for the husbandry of laying hens in non-cage systems which are not covered by EU law.

Tab. 5.4.2b Requirements for husbandry of lying hens in non-cage systems of different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Quantity of animals	Maximum flock size	n					
Accommodation	Group nest size	s		s	s	d	s
	Mesh in nest area	n					
	Size of husbandry unit	n					
	Habituation to husbandry system	n					

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

Where exactly is the difference?

The specific differences are summarized in the list below:

- (DE) Husbandry units must have a minimum area of 2.5 m²;
- (DE) The maximum flock size is limited to 6000 laying hens per compartment, whereas in the other countries there is no restriction;
- (DE) Hens shall not touch the mesh when they are in the nest;
- (DE) Laying hens must be habituated to the housing system they move in;
- (SE) 100 laying hens per 1m m² of group nest compared to 120 in the EU.
- (SE) “young hens“ shall be raised in housing systems that prepare them for the system they live in, when they are grown.

5.4.3 Requirements for broilers kept for meat production

To date, Council Directive 2007/43 on broiler husbandry has not been transposed to national legislation in the project partner countries. Sweden has some articles concerning the husbandry of poultry for meat production, but they do not go beyond EU requirements. Spain has also adopted some basic rules for meat aviculture planning, but they mostly concern animal health rather than animal welfare issues.

5.4.4 Requirements for laying hens kept in enriched cage systems

More differences can be found regarding the keeping of laying hens in enriched cages. These differences are mainly related to the newly introduced so-called “Kleingruppenhaltung” husbandry system in Germany, which can be seen as some kind of enriched cage system with bigger groups of hens and slightly stricter requirements.

The table below shows the aspects which have been reviewed for comparison of national and EU legislation concerning requirements for the keeping of laying hens in enriched cage systems:

Tab. 5.4.4a Aspects reviewed for enriched cage systems of laying hens

Chapter	Relevant aspects
Accommodation	Area and height of the cage, equipment, floor surface, slope, nest, perches, litter, aisle width
Feeding	Feed composition, frequency, facilities and distribution
Drinking	Access to fresh water, drinking facilities
Regular visits	Frequency, removal of dead animals

Differences have been found concerning the following aspects:

Tab. 5.4.4b Differences of aspects reviewed for enriched cage systems of laying hens between considered partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Accommodation	Area of the cage	d		s	s	d	s
	Headroom	d				d	
	Closed side walls					n	
Feeding	Feeding trough width	p		p	s	s	s

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; p = aspect is regulated more precisely

Where exactly is the difference?

The differences for the keeping of laying hens in enriched cage systems are shown below in Table 5.4.4c:

Tab. 5.4.4c Detailed differences of aspects reviewed for enriched cage systems of laying hens between considered partner countries

	EU, ES, IT, MK, PL	Germany	Netherlands	Sweden
	Enriched cages	Enriched cages in small groups ("Kleingruppenhaltung")	Enriched cages	Enriched cages
Area	Min. 750 cm ² of cage area per hen, 600 cm ² of which shall be usable; no cage shall have a total area that is less than 2 m ²	Min. 800 cm ² of usable area / hen. If the hens are heavier than 2 kg min. 900 cm ² . No cage shall have a total area that is less than 2.5 m ²	Same as EU	Same as EU.
Height of cage	The height of the cage shall be at least 45cm in the useable area, elsewhere at least 20 cm at every point.	Above feed trough 60 cm, elsewhere not less than 50 cm	Same as EU	Same as EU
Feed trough	The length must be at least 12 cm multiplied by the number of hens in the cage.	Length per hen 12 cm; if hens are heavier than 2 kg 14.5 cm feed trough.	Length per hen 12 cm; if hens are heavier than 2 kg 14.5 cm feed trough.	
Side walls	(not mentioned)			Cages for layers or young hens shall have closed side walls.

The two following strengths of the German "Kleingruppenhaltung" can be mentioned:

- In comparison to the EU and the partner countries, husbandry units for laying hens must be of at least 2.5 m² rather than 0.2 m². The minimum usable area per hen is also higher and the area has to be extended for heavier hens.
- The height of the enriched cage for hens in Germany is beyond the EU minimum requirement.

Sweden also regulates those cages for layers or young hens shall have closed side walls. No corresponding article could have been found in other countries' or EU legislation.

Germany and the Netherlands have special requirements regarding the feed trough width for hens heavier than 2 kg.

5.5 Differences concerning the welfare of animals during transport

Differences concerning the welfare of animals during transport

The following documents regulate animal welfare during transport at EU level:

- Council Regulation (EC) No 1/2005 of 22 December 2004, on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97
- Council Decision (2004/544/EC) of 21 June 2004 on the signing of the European Convention for the protection of animals during international transport
- European Convention for the Protection of Animals during International Transport
- Commission Regulation (EC) 639/2003 of 9 April 2003 laying down detailed rules pursuant to Council Regulation (EC) 1254/1999 as regards requirements for the granting of export refunds related to the welfare of live bovine animals during transport Official Journal L 093, 10/04/2003 p.0010 - 0017
- Council Regulation (EC) No 1255/97 of 25 June 1997 concerning Community criteria for staging points and amending the route plan referred to in the Annex to Directive 91/628/EEC (OJ L 174, 2.7.1997, p.1)

The following aspects in relation to transport have been investigated for this project.

Tab. 5.5a Aspects in relation to transport

Chapter	Relevant aspects
Animal fitness for transport	Conditions for being transported, illness during transport, use of sedatives, milking of lactating animals
Means of transport	Features and functionality, space requirements, ventilation, bedding material, availability of means of killing. Additional provisions for transport by rail, road, vessel, air and in containers
Loading, unloading and handling	Facilities and procedures, handling, separation of animals
During transport	Space requirements, ventilation, drinking, resting and feeding
Journey times cattle and pigs	Intervals, end of journey, prolongation of journey
Journey times poultry	General
Provisions for long journeys	Roof, floor and bedding, feeding, partitions, space requirements
Ventilation for means of transport by road and temperature monitoring	Ventilation capacity, temperature monitoring, warning system
Navigation System	Availability
Cattle	Transport requirements by rail and road
Pigs	Transport requirements by rail and road
Poultry	Densities applicable to the transport of poultry in containers
Journey Log	Content
Training of road drivers and attendants	Training courses content

The differences concern only three aspects, which are shown below in Tab. 5.5b:

Tab. 5.5b Aspects in relation to transport in different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Means of transport	Bedding material for the youngest			s	s	d	s
	Water access for pigs	s		s	s	s	n
Navigation System	Navigation system		s	s	s		n

s = same as EU; d = requirements beyond the EU; n = negative difference in comparison with EU

Where exactly is the difference?

Since transport in the EU is mainly an international task, there are not many differences between EU and national transport legislation.

Tab. 5.5c Major differences of transport regulations

Aspect	EU-legislation	Main differences
Bedding	Piglets of less than 10 kg, lambs of less than 20 kg, calves of less than six months and foals of less than four months of age shall be provided with appropriate bedding material or equivalent material which guarantees their comfort appropriate to the species, the number of animals being transported, the journey time, and the weather. This material has to ensure adequate absorption of urine and faeces.	SE: all animals must have bedding material, not only the youngest.
Access to water for pigs	Pigs may be transported for a maximum period of 24 hours. During the journey, they must have continuous access to water.	UK: pigs are not required to have continuous access to water, but must be offered water at appropriate intervals and offered an adequate opportunity to drink.
Navigation system	Means of transport by road must be equipped from 1 January 2009 onwards for all means of transport, with the appropriate Navigation System allowing for recording and providing information.	UK: Satellite navigation systems are not required

5.6 Differences concerning the welfare of animals at the time of slaughter or killing

Relevant EU legislation for the protection of animals at the time of slaughter and killing:

- European Convention for the protection of animals for slaughter Official Journal L 137, 02/06/1988 p. 0027 - 0038
- 88/306/EEC: Council Decision of 16 May 1988 on the conclusion of the European Convention for the Protection of Animals for Slaughter Official Journal L 137, 02/06/1988 p. 0025 - 0026
- Council Directive 93/119/EC of 22 December 1993 on the protection of animals at the time of slaughter or killing Official Journal L 340 , 31/12/1993 p. 0021 - 0034
- Commission proposal COM 2008/553 of 18 September, 2008 for a Council Regulation the protection of animals at the time of killing

The following aspects have been considered when comparing EU and national legislation concerning the welfare of animals at the time of slaughter or killing:

Tab. 5.6a Aspects in relation to time of slaughter

Chapter	Relevant aspects
General requirements	<i>Plan</i>
Unloading	<i>Time, treatment, equipment and facilities</i>
Installations	<i>Ramps</i>
Requirements for animals awaiting slaughter or killing	<i>Floors, ventilation, lighting, security, care, drinking, feeding, availability of field lairages</i>
Separation	<i>Group mixing</i>
Climatic conditions	<i>Cooling down</i>
Treatment	<i>Tethering, animals in containers</i>
Leading	<i>Waiting pen, facilities, electric shocks</i>
Restraining	<i>Obligation of restraining, prohibited methods of restraint, equipment and facilities</i>
Methods allowed for stunning and killing	<i>Allowed stunning (and killing) methods</i>
Stunning	<i>Monitoring of stunning, checking for effectivity; specific requirements for captive bolt pistol stunning, stunning through concussion, electronarcosis through electrodes, electronarcosis through waterbath stunners, water bath stunning equipment, carbon dioxide stunning, stunning equipment for pigs and stunning equipment for poultry</i>
Killing	<i>Specific requirements for the use of free bullet pistols or rifles, decapitation and dislocation of neck, use of carbon dioxide, head-to-back electrical killing of pigs, maceration.</i>
Bleeding	<i>Start of bleeding, incision of arteries, poultry bleeding</i>
Instruments to use	<i>Maintenance, spare equipment</i>
Injured or diseased animals	<i>How to proceed</i>
Killing of surplus chicks and embryos in hatchery waste	<i>Permitted methods for killing chicks, specific requirements, permitted methods for the killing of embryos</i>
Provisions for slaughter by a religious method	<i>Allowance, specific requirements</i>
Slaughter and killing outside slaughterhouses	<i>Allowance, specific requirements</i>
Competence of slaughtermen	<i>Competence, examination</i>

The following differences have been identified:

Tab. 5.6b Aspects in relation to time of slaughter in different partner countries

Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK
Unloading	Inclination of ramps and passageways	<i>p</i>	s	s	s	<i>p</i>	s
Lairage	Milking interval	<i>p</i>	s	s	s	<i>p</i>	s
	Sound level					n	
Restraining	Exception for small slaughter horses	n	s		s	s	s
Stunning and killing	Electronarcosis, current intensity	+				d	
	Frequency and current intensity waterbath	<i>p</i>			s	d	
	Carbon dioxide stunning for pigs			s	s	<i>p</i>	s
	CO2 gas concentration for pigs	d				<i>p</i>	
	Gas concentration for poultry	n				n	
	Allowance of free bullet pistols	s	s	+	s	s	s
	Gun maintenance					n	
Bleeding	Time between stunning and bleeding	<i>p</i>	s	s	<i>p</i>	<i>p</i>	s
	Duration of bleeding						n
Kosher / halal slaughtering	Allowance and provisions	s		n	s	d	n

s = same as EU; d = requirements beyond the EU; n = new requirement for an aspect which is not covered by EU; *p* = aspect is regulated more precisely

Where exactly is the difference?

The Swedish slaughter regulation is very detailed. Requirements are not generally stricter than those of EU legislation but often regulated more precisely.

Most of the differences between national and EU legislation can be found in Germany and Sweden. This is why the following table focuses on these two countries. Where other countries' standards differ from EU law, it is mentioned separately below.

Tab. 5.6c Aspects in relation to time of slaughter and their differences in Germany and Sweden

Aspect	Main differences
Incline of ramps and passageways	DE: Ramps: Max 20°, passageways max 10° (9° for pigs). SE: Slope of passageways < 17%.
Milking interval	Proposal: 12 hours, DE 15 hours, SE if udders of high-yielding cows are obviously distended.
Noise level in lairage	SE: Noise in lairage only temporarily exceed 75 dB
Stunning traps	DE: If >20 LU of pigs/week, pigs >30 kg must be restrained in a stunning trap.
Electronarcosis, current intensity	DE and SE: Different current intensities. SE: no electrical stunning of bovines.
Frequency and current intensity waterbath	SE: Higher current intensity for high frequency.

Aspect	Main differences
Carbon dioxide stunning for pigs	SE: More detailed description of equipment.
CO2 gas concentration for pigs	DE: CO2 concentration at least 80% vol at first and last stop. SE: Considerably higher requirements for concentration and duration of CO2 exposure.
Gas concentration for poultry	DE: Specific requirements for CO2 concentration and duration. SE has two phases of CO2 stunning for poultry.
Free bullet pistols	NL: Killing of livestock animals by bullet not allowed.
Gun maintenance	SE: Detailed requirements for gun maintenance and procedure of shooting.
Start of bleeding	DE, PL, SE and UK regulate maximum time between stunning and the starting of bleeding.
Duration of bleeding	UK: No further procedure before bleeding has ended - not before the expiry of 90 sec (chickens); 30 sec (bovines); and 20 sec (pigs).
Kosher and halal slaughtering	SE does not allow slaughter of animals which are not stunned (halal slaughter of stunned animals is carried out). In NL cattle must be fixed for 45 sec after neck cut, UK in upright position.

Current intensities for electrical stunning:

Tab. 5.6d Details on intensity requirements for electrical stunning

	Proposal	DE	SE
Bovine animals of 6 months or older	1.28 A	2.5 A	No electrical stunning of bovines
Bovine animals less than 6 months	1.5 A	1.0 A	No electrical stunning of bovines
Animals of porcine species	1.0 A	1.3 A	1.25 A
Chickens	240 mA		300 mA
Duration		At least during 4sec. If stunned in groups time doubles.	Maintained through the animal's brain until the animal is stunned

Current intensities differ considerably. Sweden does not allow electrical stunning of cattle.

Current intensity for poultry stunning in waterbath

Tab. 5.6e Details on intensity requirements for poultry stunning in waterbaths

	Proposal	DE		SE	
		With bleeding	Without bleeding	Broilers, laying hens	Ducks and geese
< 200 Hz	100mA	0.12A	0.16A	0.12A	0.13A
200 to 400 Hz	150mA			0.12A	0.15A
400 to 1500 Hz	200mA			0.15A	0.20A
Duration	at least 4 seconds	4sec	10sec	Current shall be maintained until the animal is stunned.	

The actual EU law has no requirements regarding current intensity for poultry stunning in waterbaths. Sweden differentiates current intensity for broilers and for ducks and geese and does not define time of application. Germany differentiates between stunning with or without bleeding and stunning without bleeding requires a longer stunning time and higher current intensity. Intensities do not substantially differ from the EU proposal.

*Time between slaughter and killing***Tab. 5.6f Details on the time between slaughter and killing in different partner countries**

EU	DE	PL	SE
For animals which have been stunned, bleeding must be started as soon as possible after stunning before the animal regains consciousness.	Bleeding must start immediately after stunning while animals do not feel and register anything. Captive bolt gun: Cattle 60 sec, pig 20 sec. Electro narcosis: 10 sec when lying, 20 sec when hanging. CO2: 20 sec after leaving chamber, 30 sec after last stop in chamber.	Bleeding must be started as soon as possible after stunning but not later than: 60 sec - cattle; 10 sec - pigs in recumbent position; 20 sec - pigs in hanging position.	Bleeding shall be commenced within 60 sec after mechanical stunning with guns, within 20 sec after electrical stunning, and within 60 sec after carbon dioxide stunning.

Germany here differentiates between stunning methods, and Germany and Poland

6 Results of the detailed comparison of EU regulatory framework with private standards in Europe

The following tables try to synthesise the differences found through the comparison of the regulatory framework of the EU and private standards in Europe. The main focus was on those aspects of animal welfare, where differences between private standards, both non-organic and organic standards, and the EU legislation relevant for animal welfare have been identified. Basically these differences can be:

- more precise (marked with p);
- beyond existing requirements of EU legislation (marked with d); or
- completely new or not found in the current EU legislation (marked with n).

The comparison focused on the most relevant or most interesting standards for animal welfare in the participating countries of the EconWelfare project and where the project partners had the necessary information to make a detailed analysis. All the information was based on detailed questionnaires, which covered all main animal groups as well as transport and slaughter.

The analysis is following the same methodology used in the EU and national animal welfare legislations and which was already applied in Chapter 4. The issues deal mainly with the barn environment, accommodation, feeding/drinking, health care, breeding mutilations and handling of animals. New aspects found in private standards were amended. The comparison of the different aspects for animal welfare has the main focus on the more technical requirements and not primarily on the principles and criteria of the EU-funded WelfareQuality project. This has been made with a group of experts from outside the project team, in a workshop in September 2009 in Madrid and is summarised in the EconWelfare Report D2.3 (Ferrari et al. 2010). However some of the most distinguishing/relevant aspects, identified by these experts, are taken up in this report and are highlighted in the tables in blue colour and are marked with a star *.

In the tables a differentiation was made between non-organic and organic standards schemes. The reason was that many requirements of private standards for organic farming have to fulfil the EU regulations for organic production, the Council Regulation (EC) 834/2007 and the Commission Regulation (EC) 889/2008.

The commentary will mainly look at those differences or new aspects, which were found in several (generally more than three) private standards.

6.1 Differences in private standards regarding the welfare of cattle

As already mentioned, all private standards in Europe have to fulfil the EU legislation and in addition also the national legislation for animal welfare.

6.1.1 Private standards for cattle

The table 6.1.1 below shows the most important topics regulated in private standards.

The comparison of cattle standards, both for dairy cows and beef, show most differences regarding tethering (restrictions), light requirements, space requirements (in the stables), slatted floors in the lying area, frequency of access to outdoor and pasture, feeding requirements (in particular roughage), provision of calving pens, castration and other surgical practices (like tail trimming and dehorning).

Tab. 6.1.1 Aspects for husbandry of cattle in non-organic and organic standards

	CATTLE - Private standards EU	Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	Better life hallmark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
		DE	IT	IT	UK	UK	UK	NL	EU Or	DE	DE	DE	NL	SE	UK
Chapter	Relevant aspects	Private non-organic standards								Private organic standards					
Conditions that apply to the keeping of cattle															
Group keeping	Maximum herd size	n													
	Mixing of animals	n													
Stable systems	Allowance of tethering	d	d	p	d	d	d		d	S	S	S	S	S	S
	Space requirements in different systems *									n					
	Use of electric cow trainer									n	n	n		n	
	Housing with / without outdoor access	n			n				n	S	S	S	S		
Barn environment	Natural daylight	n							d	S	S	S	S	S	S
	Duration of light phase			n		p	p								
	Light intensity			n		n	n								
	Twilight period					n	n								
	Ventilation	p	s	s		p	p								
	Air space					n	n								
	Gas concentration					p	p								
	Air humidity					p	p								
	Sound level and noise			n			n								
Freestall barns	Space requirements *	n				n	n		n	S	S	S	S	p	n
	Floor surface					n	n								
	Slatted floors	n	n				n		n	S	S	S	S	S	S
	Structure/elements in barn	n													
	Space for avoidance						n			n					
	Feeding area					n				n					
	Bedding in lying area	n			n	n	n		n	S	S	S	S	S	S
	Number of lying boxes					n	n			n	n				n
	Dimensions of lying boxes					n	n			n					n
	Details on lying area						n								
	Electric wires indoor	n													
Outdoor access	Duration of access	n				n			n	S	S	S	S	S	S
	Dimensions of open run	n				n									
Pasture	Frequency of access	n				n			n	S	S	S	S	S	p
	Exception from grazing	n													

	CATTLE - Private standards EU	Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	Better life mainmark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
		DE	IT	IT	UK	UK	UK	NL	EU Or	DE	DE	DE	NL	SE	UK
Chapter	Relevant aspects	Private non-organic standards								Private organic standards					
Feeding	Feed composition	n	s	s		s	s		p	S	n	n	S	S	S
	Feeding frequency	d	s	s		p	p								
	Feeding facilities	n				n					n	n			
	Feeding trough width			n		n	n								
	Roughage*	n				n	n		n	S	S	S	S	S	S
	GMO feed	n	n	n											
	Feed additives	d	d	s		d	d								
Drinking	Access to fresh water *					n	n								p
	Drinking facilities					n	n								
	Number of drinking spots			n		n	n								
Calving	Provision of calving pens					n	n			n		n		n	
	Size of calving pens														
	Inspection of calving cows and heifers						n								
	Calving aids														
Health care	Medicine and methods	n				s	s								
	De-worming	p				n									
	Hormonal treatments	p							p	S	S	S	S	S	S
	Prophylactic treatments	n	n												
	Veterinary visits					n	n								
Regular visits	Frequency of inspection by farmer			n		n									
Cleaning	Frequency	n				n	n								
	Keeping cattle clean					n									
Breeding	Recommended races/breeds	n							p	S	S	S	S	S	S
	Double-musled breeds				n		n								
	Keeping of male sires											p			
	Protection of heifers														
	Conditions for mating														
	Prohibited Methods					n	n		n	S	S	S	S	S	s
Mutilations/surgical practices	Castration	n		n		n	n		n	S	S	S	S	p	p
	Tail trimming	n		n						d	S	d			
	Dehorning	n		n		n	n		p	S	S	d	S	S	S
	Removal of teaths					n	n								
Handling	Rules for moving					n									
	Rushing					n									
	Sensitive parts					n									
	Handling unit					n									
	Use of sticks and electric goads	n				n			n	S	S	S	S	S	S
Identification	Marks						n								
Emergency slaughter equipment	Emergency slaughter equipment					n									
Bull pens	Design					n									

** Neuland no dairy standards

Legend

	Important aspect (Questionnaire 3rd countries)
s	Same as EU general legislation
S	Same as EU -Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU
	Standard does not cover category of species
p	More precise than EU-Bio/Organic
d	Stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic

* **Important aspect for EconWelfare experts**

Where exactly is the difference?

The table 6.1.2 illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.1.2 Aspects in different private European standards for cattle

Aspect	EU-legislation	Main differences
Maximum herd size		NU: Maximum flock sizes regulated.
Tethering and tethering system	Where an animal is continuously or regularly tethered or confined, it must be given the space appropriate to its physiological and ethological needs	NU, RSPCA: No tethering systems. AQ: Allowed until Oct 2012. LAIQ: Loose housing recommended. <i>EU Organic: Tethering allowed in small holdings when access to pasture in summer 2x/week.</i> <i>BL: specific requirements for tethering.</i>
Use of electric cow trainer		<i>BL, NL, DM electrical cow trainers not allowed.</i>
Housing without outdoor access		NU, MS: No permanent indoor housing. RSPCA dairy: access to outdoor area mandatory <i>EU Organic: Generally not allowed except in final fattening phase (max. 3 months).</i>
Natural daylight	Animals kept in buildings must not be kept either in permanent darkness or without an appropriate period of rest from artificial lighting. Where the natural light available is insufficient to meet the physiological and ethological needs of the animals, appropriate artificial lighting must be provided.	NU: Regulates window-floor ratio 1:20 <i>EU Organic: Natural daylight.</i>

Aspect	EU-legislation	Main differences
Duration of light phase		LAIQ: Not more than one lighting phase/24h.
Light intensity		RSPCA: Beef 100lux, cows 200lux, LAIQ: Min light level in resting period
Twilight period		RSPCA: Twilight periods for beef and cows.
Ventilation		NU, RSPCA beef: No air draft.
Air space		RSPCA regulates air space.
Gas concentration		RSPCA: details about concentrations.
Air humidity		RSPCA: details about air humidity
Sound level and noise		RSPCA beef and LAIQ: Noise minimization, no details.
Space requirements *	No detailed legal requirements, only national recommendations.	NU, RSPCA d&b: Details on space regulated. RSPCA: take into account horns. <i>EU Organic: Space requirements for cows in freestall barns: <100kg 1.5m² indoors +1.1m² outdoors, <200kg 2.5 indoors +1.9 outdoors, <350 4.0 indoors + 3 outdoors, >350 5 indoors (min 1m²/100kg) +0.75/100kg outdoors. Dairy 6m² indoors +4.5m² outdoors. Bulls 10m² indoors + 30m² outdoors. SA: requires extra space for horned cattle.</i>
Floor surface		RSPCA: Details about flooring.
Slatted floors		NU, AQ: forbidden. RSPCA beef: Are permitted but must be scraped 2x daily. <i>EU Organic: at least half of the floor not slatted or of grid construction.</i>
Structure/elements in barn		NU: Mandatory scratch brushes
Space for avoidance		RSPCA beef: Minimize blind alleyways and passages enough wide. <i>EU Organic: more space for avoidance. BL: No dead ends and bottle necks.</i>
Feeding area		RSPCA dairy: No competition for food, details regulated. <i>BL: One feeding place per animal.</i>
Bedding in lying area *		RSPCA dairy & beef: Regulates dimension and bedding of lying area. MS&NU lying area and bedding material mandatory. <i>EU Organic: Dry, clean and comfortable, littered lying area mandatory, floor not slatted.</i>
Number of lying boxes		RSPCA b&d: 1 cubicle/animal, pref. +5%. <i>BL, NL, DM: One lying box per cow; SA 5% more cubicles than cows.</i>
Dimensions of lying boxes		RSPCA d&b: Animal must be able to stand with all 4 feet in the dry cubicle. RSPCA beef: 0.5m forward lunging space. <i>SA: defined via live-weight. BL vague.</i>
Details on lying area		RSPCA beef: loafing space, slope, bedding, frequency of new bedding.
Electric wires indoor		NU: No barbed or electric wires to avoid mounting.
Duration of access to outdoor area		NU, RSPCA dairy: access to outdoor area mandatory
Dimensions of open run		NU: regulates dimensions of open run. RSPCA dairy: regulates stocking density in open run.

Aspect	EU-legislation	Main differences
Frequency of access to pasture		NU, RSPCA dairy: Grazing mandatory. <i>EU Organic: Herbivores shall have access to pasturage for grazing whenever conditions allow. Rearing systems for herbivores are to be based on maximum use of grazing pasturage according to the availability of pastures in the different periods of the year. SA defines grazing area per cow, no zero grazing.</i>
Exception from grazing		NU: Fattening bulls & calving cows. <i>EU Organic: for fattening of cattle – max. last 3 months.</i>
Feed composition	Animals must be fed a wholesome diet which is appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health and satisfy their nutritional needs. No animal shall be provided with food or liquid in a manner, nor shall such food or liquid contain any substance, which may cause unnecessary suffering or injury.	NU: No import feed, major part roughage. Max 30% maize silage in ration. <i>EU Organic: Maximum use of grazing pasturage according to the availability of pastures in the diff. periods of the year. >60 % DM in daily rations shall consist of roughage, fresh or dried fodder, or silage. A reduction to 50 % for animals in dairy production for a maximum period of three months in early lactation is allowed.</i> NL, DM: No year-round silage. DM: min. 3kg hay in winter per day/cow unit.
Feeding frequency		NU: Roughage permanently, other feed 2x, RSPCA: 1x.
Feeding facilities	Feeding and watering equipment must be designed, constructed and placed so that contamination of food and water and the harmful effects of competition between the animals are minimised.	RSPCA d: No contamination of food. NU: Outdoor feeding places protected. NL, DM: freestall one feeding place per cow.
Feeding trough width		LAIQ: Adequate to number of cows. RSPCA d&b: Specified lengths.
Roughage*		NU, RSPCA d&b: Provision of roughage mandatory. <i>EU Organic: Defined ration: 60% of DM as roughage, fresh or dried fodder, silage.</i>
GMO feed		NU, AQ, LAIQ: No GMO. NU: No growth promoters. <i>EU Organic: exclusion of GMO and growth promoters</i>
Feed additives		NU, AQ, RSPCA: more details, positive lists. <i>EU Organic: Restricted use of additives - positive list.</i>
Access to fresh water*	All animals must have access to a suitable water supply or be able to satisfy their fluid intake needs by other means.	RSPCA: Continuous fresh water access, also on pasture. <i>SA regulates details about water supply (check piped water, never more than 8 hours without water).</i>
Drinking facilities		RSPCA beef: Emergency supply for water.

Aspect	EU-legislation	Main differences
Number of drinking spots		LAIQ: Adequate number. RSPCA d&b specified (10c/1bowl), for trough according weight.
Provision of calving pens		RSPCA d&b: Fully bedded calving pens, separation and equipment for restraint mandatory. For beef 5 places/100cattle. BL, DM: Freedom of movement at calving. Calving box recommended; KRAV: Calving box mandatory.
Inspection of calving cows and heifers		RSPCA: twice a day
Medicine and methods		NU: alternative methods preferred. <i>EU Organic: Phytotherapeutic, homoeopathic products and other alternative products preferred. Chemically synthesised allopathic veterinary medicinal products or antibiotics - double withholding period.</i>
De-worming		NU: annual parasite control. RSPCA dairy: control parasites. <i>EU Organic: Twice the legal withholding period after treatment of an animal with an allopathic veterinary product.</i>
Hormonal treatments	Generally not allowed for beef, dairy and calves in the EU (but not all growth stimulating additives covered)	NU: No hormonal treatments. <i>EU Organic: The use of substances to promote growth or production (including antibiotics, coccidiostats and other artificial aids for growth promotion purposes) and the use of hormones or similar substances to control reproduction or for other purposes (e.g. induction or synchronisation of oestrus), is prohibited.</i>
Prophylactic treatments		NU, AQ: No medicinal fodder.
Veterinary visits		RSPCA dairy: Written health plan, 2 vet visits per year (for beef only 1 vet visit for finishing units and 2 for breeding units).
Frequency of inspection by farmer	No details	LAIQ: Check feeding and drinking equipment every day. RSPCA dairy: 2xdaily
Frequency of cleaning		NU: Disinfections only on advice of veterinarian. RSPCA: Where possible troughs accessed from concrete.
Keeping cattle clean		RSPCA dairy: Many details on cleanliness: Surfaces, calving, udder.
Recommended races/breeds		NU: Meat races/breeds
Double-muscled breeds		NU, MS, RSPCA beef: No double-muscled breeds which need regular cesarean section.
Keeping of male sires		<i>EU Organic: Preference is to be given to indigenous breeds and strains.</i> <i>DM: Keeping of male sires recommended.</i>
Prohibited breeding methods		RSPCA dairy: No ET, no ovum pick-up, no cloning or GMO. <i>EU Organic: No cloning or embryo transfer.</i>
Castration*	Issue in discussion	NU: Only bloodless & anesthetized. <i>EU Organic: Physical castration is allowed in order to maintain the quality of products and traditional production practices. Any suffering to the animals shall be reduced to a minimum by applying adequate anaesthesia and/or analgesia and by carrying out the operation only at the most appropriate age by qualified personnel.</i> <i>KRAV and SA: Before 8 weeks, with anaesthesia.</i>

Aspect	EU-legislation	Main differences
Access to fresh water*	All animals must have access to a suitable water supply or be able to satisfy their fluid intake needs by other means.	RSPCA: Continuous fresh water access, also on pasture. <i>SA regulates details about water supply (check piped water, never more than 8 hours without water).</i>
Drinking facilities		RSPCA beef: Emergency supply for water.
Tail trimming		LAIQ, NU: No. <i>DE, BL: No tail trimming.</i>
Dehorning		NU, LAIQ: No dehorning. RSPCA d&b: -5 weeks, hot iron under local anaesthesia. <i>EU Organic: not be carried out routinely in organic farming. However, some of these operations may be authorised by the competent authority for reasons of safety or if they are intended to improve the health, welfare or hygiene of the livestock on a case-by-case basis.</i> <i>BL, NL, DM: Not with cautery sticks; KRAV, SA: before 8 weeks of age. DM: not allowed.</i>
Removal of teats		RSPCA d&b: -5w, local anaesthesia.
Rules for moving		NU: Prohibition of mixing, same age and weight. RSPCA beef: Move only if way forward is clear.
Rushing		RSPCA beef: Not rush cattle.
Sensitive parts		RSPCA beef: Not pull or lift.
Handling unit		RSPCA beef: Availability of handling unit.
Use of sticks and electric goads		RSPCA beef: Not permitted. <i>EU Organic: Loading/unloading with electrical stimulation.</i>
Marks		RSPCA beef: Details about means of identification.
Emergency slaughter equipment		RSPCA beef: Must be available.
Design of bull pens.		RSPCA beef: Detailed requirements for the keeping of bulls

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

6.1.1 Private standards for calves

The table 6.1.3 below shows the most important topics regulated in private standards.

Tab. 6.1.3 Aspects for husbandry of calves in non-organic and organic standards

CATTLE - Private standards EU		Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	better life nammark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
Additional conditions that apply to the keeping of calves confined for rearing and fattening															
Tethering	Allowance	d				d	d		d	S	S	S	S	S	S
Barn environment	Lighting	d				s	s		d	S	S	S	S	S	S
	Light intensity and period														
	Gas concentration														
	Air moisture														
Accom-modation	Dimensions of group pens	d				s	s		d	S	S	S	S	S	S
	Group/Individual accommodations	d				o	o		d	S	S	S	S	S	S
	Number of lying boxes														
	Litter/bedding material	d				d	d		p	S	S	S	S	S	S
	Drained floor in lying area	d				d	d								
	Calf hutches						n								
Health care	Availability of sickbay														
Feeding	Mother-offspring contact	n				n	n			n	n				
	Fibre, roughage	d				d	d	d	d	d	S	S	S	S	S
	Iron supply					d	d	d	d						
	Weaning						n		n	S	S	S	S	S	S
	Colostrum drinking period														
Drinking	Access to fresh water					d	d								
Regular visits	Frequency of inspection by farmer					d									

Legend

	Important aspect (Questionnaire 3rd countries)
s	Same as EU general legislation
S	Same as EU -Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU
	Standard does not cover category of species
p	More precise than EU-Bio/Organic
d	Stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic

*

Important aspect for EconWelfare experts

** Neuland no dairy standards

For calves the requirements for group accommodation, the litter/bedding material, the feeding (fiber, iron supply, weaning) were in several standards beyond or additional to EU legislation.

Where exactly is the difference?

The table 6.1.4 illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.2.2 Aspects and differences in different private European standards for calves

Aspect	EU-legislation	Main differences
Tethering allowance	Calves shall not be tethered, with the exception of group-housed calves which may be tethered for periods of not more than one hour at the time of feeding milk or milk substitute. No calf shall be confined in an individual pen after the age of eight weeks. Exception: unless a veterinarian certifies that its health or behaviour requires it to be isolated in order to receive treatment.	RSPCA d&b: No tethering at all. <i>EU Organic: The housing of calves in individual boxes shall be forbidden after the age of one week.</i>
Lighting	Calves must not be kept permanently in darkness. To meet their behavioural and physiological needs, provision must be made, allowing for the different climatic conditions in the Member States, for appropriate natural or artificial lighting; if the latter, it must function for a period at least equivalent to the period of natural light normally available between 9 a.m. and 5 p.m. In addition, suitable lighting (fixed or portable) strong enough to allow the calves to be inspected at any time must be available.	NU: Natural daylight and outdoor access with sucking cow. <i>EU Organic: Natural daylight mandatory.</i>
Dimensions of group pens	For calves kept in groups, the unobstructed space allowance available to each calf shall be at least equal to 1,5 m ² for each calf with a live weight of less than 150 kilograms, at least equal to 1,7 m ² for each calf with a live weight of 150 kilograms or more but less than 220 kilograms, and at least equal to 1,8 m ² for each calf with a live weight of 220 kilograms or more. Exception: Does not apply to holdings with fewer than six calves and calves kept with their mothers for suckling.	NU: 1qm per calf additional to the space requirement for mother cow. <i>EU Organic: Higher area requirements: <100kg 1.5m² Indoors +1.1m² outdoors.</i>
Individual accommodations	Individual pens for calves (Exception: those for isolating sick animals) must not have solid walls, but perforated walls which allow the calves to have direct visual and tactile contact. The width of any individual pen for a calf shall be at least equal to the height of the calf at the withers, measured in the standing position, and the length shall be at least equal to the body length of the calf, measured from the tip of the nose to the caudal edge of the tuber ischii (pin bone), multiplied by 1,1.	RSPCA d&b: Detailed dimensions for quarantine pens.
Litter / bedding material	Appropriate bedding must be provided for all calves less than two weeks old.	NU, RSPCA d&b: Litter required for all ages.
Drained floor in lying area	Floors must be smooth but not slippery so as to prevent injury to the calves and so designed as not to cause injury or suffering to calves standing or lying on them. They must be suitable for the size and weight of the calves and form a rigid, even and stable surface.	NU, RSPCA d&b: No slatted floors. <i>EU Organic: No slatted floor.</i>

Aspect	EU-legislation	Main differences
Calf hutches		RSPCA beef: Details for calf hutches.
Mother-offspring contact		NU: Always together, RSPCA d&b 24h together. <i>BL, DE: Calf should stay 1 day with mother.</i>
Fibre rich feeding	A minimum daily ration of fibrous food shall be provided for each calf over two weeks old, the quantity being raised from 50 g to 250 g per day for calves from eight to 20 weeks old.	RSPCA dairy: from 8d old, unlimited access; RSPCA beef higher quantities. BH: Quantity of roughage 2x. MS: No white meat. NU: Mother has roughage access.
Iron supply	The food shall contain sufficient iron to ensure an average blood haemoglobin level of at least 4,5 mmol/litre	LAIQ, M&S, RSPCA d&b, BH: Higher iron levels. MS: not known, but rose meat.
Weaning		RSPCA not before 5 weeks of age. <i>EU Organic: All young mammals shall be fed on maternal milk in preference to natural milk, for a minimum period of 3 months for bovines.</i>
Access to fresh water	All calves over two weeks of age must have access to a sufficient quantity of fresh water or be able to satisfy their fluid intake needs by drinking other liquids. Exceptions: In hot weather conditions or for calves which are ill, fresh drinking water shall be available at all times.	RSPCA: Continuous water access after 7days old.
Frequency of inspection by farmer	All housed calves shall be inspected by the owner or the person responsible for the animals at least twice daily and calves kept outside shall be inspected at least once daily.	RSPCA dairy: Twice daily.

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

6.2 Differences in private standards regarding the welfare of pigs

6.2.1 Private standards for pigs kept in general

The table 6.2.1 below shows the most important topics regulated in private standards

Tab. 6.2.1 Aspects for husbandry of pigs in non-organic and organic standards

	PIGS - Private standards in EU	Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
		DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK
Chapter	Relevant aspects	Private non-organic standards									Private organic					
Conditions that apply to the keeping of pigs																
Husbandry system	Outdoor access	d			d	d		n		d	S	S	S	S	e	S
Quantity of animals	Maximum herd size	n														
Barn environment	Ventilation	s						n								
	Temperature							p	p							
	Prevention of heat stress							n			p				n	n
	Climate alarm system								p							
	Natural daylight	d				d		d		d	S	S	S	S	S	S
	Light intensity					d	d		s							
	Darkness period					n	n									
Accommo-dation	Availability of litter on lying area	d					s	n	s	d	S	S	S	S	S	S
	Separate areas for different behaviour															
	Slatted floor area*	d					d	d	s	d	S	S	S	S	S	S
	Width of openings in slatted floors	d				d	p	d	s							
	Wallow / cooling down installation								n						n	n
Environmental enrichment	Possibility for investigation and manipulation activities	d					p			d	S	S	S	S	S	S
Group keeping	Group keeping / Isolation*	d							d	d						
Feeding	Feeding system					n		n								
	Provision of roughage	d					s		s	d	S	S	S	S	S	S
	Feeding frequency	s					s	d	s							
	Number of feeding spots															
	Feeding facilities							n								
	Feeding trough width							n	n							
	Protection of pig from the back								n							
Drinking	Number of drinking spots						n		n							
	Drinking trough width								n							
	Flow rate	s					n	n	n							p
Health care	Medicine and methods	d							s							
	Growth promoters	d					n		n	d	S	S	S	S	S	S
	Hormonal treatments	d								d	S	S	S	S	S	S
	Prophylactic treatments	d														
	Monitoring								n							
	Parasite treatment	n														
	Blood samples								n							
	Hoof inspection															
	Health plan							n								
Regular visits	Frequency	d					d		s							d
	Veterinary visit								n	n						
Cleaning and disinfection	Frequency	n														
	Abrasion facilities							n								
Breeding	Recommended methods/breeds	n						n		n	S	S	S	S	S	S
	Prohibited Methods	n														
Aggressive behaviour	Availability of segregation pens	d					d	d				d				
	Segregation mandatory															
	Management plan							n								n
	Sedatives	n														
Mutilations and surgical practices	Castration	d					d	d	d	d	d	S	S	S	S	e
	Tail docking	d					p	d	d	p		d		d		d
	Tooth clipping	d					p	p	p	p		d		d		d
	Tooth grinding	p					p	p	p	p				d		d
	Nose ringing	d					d	p	d	p		d		d		d
	Ear notching							n	n							

Legend	
	Important aspekt (Questionnaire, 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU
	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

When looking at those differences or new aspects for pigs, which were found in several (generally more than three) private standards, the main aspects for animal welfare in several private standards being beyond or additional to EU legislation are: requirements for outdoor access, lighting, availability of litter on lying area, restriction or exclusion of slatted floor area, environmental enrichment (possibility for investigation and manipulation activities), feeding (mainly provision of roughage), health care (limitation or non-use of therapeutic of growth promoting type of substances), frequency of regular visits, availability of segregation pens, no or very limited mutilations (major issue castration, but also tail docking, tooth clipping and nose ringing).

Where exactly is the difference?

The table 6.2.1b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.2.1b Aspects and differences in different private European standards for pigs in general

Aspect	EU-legislation	Main differences
Outdoor access		NU: Outdoor access mandatory. ER: Free farrowing outdoor system. MS: Outdoor breeding. MV: Bonus points for outdoor access. <i>EU Organic: Access to open areas mandatory, whenever weather conditions and state of the ground allow.</i> <i>KRAV: more detailed: 4 month period outdoor access. 2w after farrowing.</i>
Maximum herd size		NU: Only Neuland has limits.
Ventilation	Temperature must be kept within limits which are not harmful to the animals.	MV: Regular test of ventilation.
Temperature	Air circulation, dust levels, temperature, relative air humidity and gas concentrations must be kept within limits which are not harmful to the animals.	MV: Bonus points for prevention of heat stress.
Prevention of heat stress		<i>KRAV, SA: pigs must have access to mud or other water bath in warm season.</i> <i>Bioland: more precise.</i>
Climate alarm system	Alarm system - provision for intensive pig farms	ABP: Alarm system, more detailed back-up provisions.**
Natural daylight	Not mandatory.	NU, ER: Daylight mandatory. MV: bonus points for daylight. <i>EU Organic: natural daylight.</i>

Aspect	EU-legislation	Main differences
Light intensity	Pigs must be kept in light with an intensity of at least 40 Lux.	ER, RSPCA: Higher light intensity (50).
Darkness period		ER, RSPCA: Darkness period 6h.
Availability of litter on lying area	The accommodation for pigs must be constructed in such a way as to allow the animals to have access to a lying area physically and thermally comfortable as well as adequately drained and clean which allow all the animals to lie at the same time, rest and get up normally, see other pigs.	NU: Litter mandatory <i>EU Organic: Comfortable, clean and dry laying/rest area of sufficient size, consisting of a solid construction which is not slatted. Ample dry bedding strewn with litter material shall be provided in the rest area.</i>
Separate areas for different behaviour	(not in EU but in SE and DE legislation)	
Slatted floor area*	Floors must be smooth but not slippery so as to prevent injury to the pigs and so designed, constructed and maintained so as not to cause injury or suffering to pigs. They must be suitable for the size and weight of the pigs and, if no litter is provided, form a rigid, even and stable surface.	RSPCA: No slatted floor in lying area. NU: Litter mandatory. MV: Points for litter. <i>EU Organic: Livestock housing shall have smooth, but not slippery floors. At least half of the indoor surface area shall be solid, that is, not of slatted or of grid construction.</i>
Wallow		MV: wallow required.
Possibility for investigation and manipulation activities	Pigs must have permanent access to a sufficient quantity of material to enable proper investigation and manipulation activities, such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such, which does not compromise the health of the animals.	NU: Straw. <i>EU Organic: Exercise areas shall permit dunging and rooting by porcine animals. For the purposes of rooting different substrates can be used.</i> KRAV requires mud bath.
Group keeping*		NU, ABP: Group keeping mandatory. <i>EU Organic: S</i>
Feeding system		MV: Bonus points for individual feed supply or ad libitum. ER: Feed not restricted.
Provision of roughage	Animals must be fed a wholesome diet which is appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health and satisfy their nutritional needs. No animal shall be provided with food or liquid in a manner, nor shall such food or liquid contain any substance, which may cause unnecessary suffering or injury.	NU: Roughage mandatory. NU&ER: No GMO. <i>EU Organic: Roughage, fresh or dried fodder, or silage shall be added to the daily ration for pigs and poultry.</i>
Feeding frequency	All pigs must be fed at least once a day.	MV: Bonus points if 2x/d.
Number of feeding spots		
Feeding facilities		RSPCA: Scatter feed over wide area to minimize bullying.
Feeding trough width		RSPCA: 1.1xshoulder width. MV: Bonus point-30cm.
Protection of pig from the back		MV: Bonus point for protection.

Aspect	EU-legislation	Main differences
Number of drinking spots		RSPCA: 1/10. ABP: Different for ad-libitum feeding and restrict feeding.
Drinking trough width		ABP: Regulates feeding trough width according to weight of pig.
Flow rate		RSPCA and ABP: Flow rates specified. <i>SA: High flow rate, number of drinking spots defined.**</i>
Medicine and methods	Any animal which appears to be ill or injured must be cared for appropriately without delay and, where an animal does not respond to such care, veterinary advice must be obtained as soon as possible. Where necessary sick or injured animals shall be isolated in suitable accommodation with, where appropriate, dry comfortable bedding.	NU: Alternative methods preferred. <i>EU Organic: Phytotherapeutic, homeopathic products and other alternative products preferred. Chemically synthesised allopathic veterinary medicinal products or antibiotics - double withholding period.</i>
Growth promoters		ER, ABP: No substances to promote abnormal muscle growth.
Hormonal treatments		NU: No hormonal treatments.
Prophylactic treatments		NU: No prophylactic treatments.
Monitoring		ABP: Various data to be monitored.
Parasite treatment		NU: Annual test, de-worming before pigs move to another barn.
Blood samples		MV: Bonus points if blood samples collected in slaughterhouse.
Health plan		RSPCA: Veterinary health plan required.
Frequency		NU, RSPCA: twice daily
Veterinary visit		MV: Farm is visited every 4 weeks by vet, ABP: Inspection by vet quarterly.
Frequency of visits		NU: Frequency of cleaning according to category. <i>SA: Check pigs twice a day.</i>
Abrasion facilities		MV: Bonus points for abrasion facilities.
Recommended breeding methods /breeds or strains		NU: Genetic diversity, resistant races. MV: Bonus points if breeding pigs not purchased. <i>EU Organic: detailed criteria for the selection of breeds/strains.</i>
Prohibited breeding methods		NU: No GMO, no stress susceptible breeds.
Availability of segregation pens	Pigs which have to be kept in groups, which are particular aggressors, which have been attacked by other pigs or which are sick or injured, may temporarily be kept in individual pens. In this case the individual pen used shall allow the animal to turn around easily if this is not in contradiction with specific veterinary advice. From 1 January 2013 this last sentence shall apply to all holdings.	NU, RSPCA: Segregation pens mandatory. <i>NL: Pens for aggressive animals must be available.</i>

Aspect	EU-legislation	Main differences
Segregation mandatory	(not in EU but in DE and UK legislation)	
Management plan		RSPCA: Plan to prevent injuries after occurring.
Sedatives		NU: Prohibited.
Castration	Allowed: castration of male pigs by other means than tearing of tissues. If castration is practiced after seventh day of life, it shall only be performed under anaesthetic and additional prolonged analgesia by a veterinarian.	NU, ER, RSPCA, MV, ABP: Not without anaesthesia. EU Organic: <i>The castration of piglets may be carried out without the application of anaesthesia and/or analgesia during a transition period expiring on 31 December 2011.</i>
Tail docking	Allowed: Docking of a part of the tail. If castration or docking of tails is practiced after seventh day of life, it shall only be performed under anaesthetic and additional prolonged analgesia by a veterinarian.	NU: Prohibited, MV: bonus points if not. ER, RSPCA, ABP: Not routinely.** EU Organic: <i>Shall not be carried out routinely. However, some of these operations may be authorised by the competent authority for reasons of safety or if they are intended to improve the health, welfare or hygiene of the livestock on a case-by-case basis.</i>
Tooth clipping	Allowed: Clipping of corner teeth not later than the seventh day of life of the piglets leaving an intact smooth surface; boars' tusks may be reduced in length where necessary to prevent injuries to other animals or for safety reasons, only where there is evidence that injuries to sows' teats or to other pigs' ears or tails have occurred	NU: Prohibited. ER, RSPCA, ABP: not routinely.** MV: Bonus points if not or if grinding. EU Organic: <i>Not be carried out routinely. However, some of these operations may be authorised by the competent authority for reasons of safety or if they are intended to improve the health, welfare or hygiene of the livestock on a case-by-case basis.</i>
Tooth grinding	Allowed: Grinding of corner teeth not later than the seventh day of life of the piglets leaving an intact smooth surface; boars' tusks may be reduced in length where necessary to prevent injuries to other animals or for safety reasons, only where there is evidence that injuries to sows' teats or to other pigs' ears or tails have occurred.	NU, ER, RSPCA, ABP: Not routinely.** MV: Bonus points if not.
Nose ringing	Allowed: Nose ringing only when the animals are kept in outdoor husbandry systems.	NU: Prohibited. ER, RSPCA, ABP: Not routinely.** MV: No nose rings for boars.
Ear notching		ER, RSPCA: Not permitted.

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.2.2 Private standards for pigs – additional conditions for keeping boars

The table 6.2.2a below shows the most important topics regulated in private standards

The main difference in private standards in comparison with EU legislation for boars was found regarding space requirements.

Tab. 6.2.2a Aspects for husbandry of boars in non-organic and organic standards

	PIGS - Private standards in EU		Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs		EU Organic		Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
			DE	IT	IT	UK	UK	UK	NL	UK		EU		DE	DE	DE	NL	SE	UK
Additional conditions that apply to the keeping of boars																			
Accommo-dation	Design of boar pen and intervisibility							p											
	Space requirements*	d						d	d	s		d		S	S	S	S	S	S
	Lying area							n											
	Slatted floor area							n											

Legend

	Important aspect (Questionnaire. 3rd countries)		Standard does not cover category of species
s	Same as EU general legislation	P	More precise than EU-Bio/Organic
S	Same as EU-Bio	e	Even stricter than EU-Bio/Organic
p	More precise than EU	n	Topic not regulated by EU-Bio/Organic
d	Stricter than/beyond EU-rule	o	Other approach to same topic
n	Topic not regulated by EU	*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.2.2b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.2.2b Aspects and differences in different private European standards for boars

Aspect	EU-legislation	Main differences
Design of boar pen and intervisibility	Boar pens must be sited and constructed so as to allow the boar to turn round and to hear, smell and see other pigs.	RSPCA: Boar must be able to lie fully stretched.**
Space requirements*	The unobstructed floor area available to an adult boar must be at least 6 m ² . Where pens are also used for natural service the floor area available to an adult boar must be at least of 10 m ² and the pen must be free of any obstacles.	NU: +1m ² of floor area. RSPCA: +0.5m ² . MV: Bonus points on area. <i>EU Organic: Male breeding pigs: 6.0m² indoor + 8.0m² outdoor. (If pen is used for natural service 10m² indoors).</i>
Lying area		RSPCA: Lying area 7.5m ² .
Slatted floor area		MV: 2/3 solid floor (by NL legislation)

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.2.3 Private standards for pigs – additional conditions for sows and gilts

The table 6.2.3a below shows the most important topics regulated in private standards

The main differences for sows and gilts in private standards in comparison with EU legislation were found regarding: duration of group keeping, space requirements and the feeding system.

Tab. 6.2.3a Aspects for husbandry of sows and gilts in non-organic and organic standards

PIGS - Private standards in EU		Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
		DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK
Additional conditions that apply to the keeping of sows and gilts																
Group keeping	Duration of group keeping	s			d		d	d	p				p	p		
	Stable groups							n								
Accommodation	Space requirement sow with piglets*	d			d		p	d	d	d	S	S	S	S	S	S
	Floor area per sow in group pen	d					d	d	s							
	Floor area per gilt in group pen									d	S	S	S	S	S	e
	Flooring surface						d									
	Protection of piglets/farrowing crate	p					s									
	Outdoor farrowing								n							
Environmental enrichment	Manipulable material						s	d	s							
Farrowing	Nesting material						d		s							
Feeding	Feeding frequency						d	d								
	Feeding system	n					n		n							
Service pen	Own service pen	n														
Health care	Cleaning of sow	n														
	Body condition								n							

Legend

	Important aspect (Questionnaire. 3rd countries)		Standard does not cover category of species
s	Same as EU general legislation	P	More precise than EU-Bio/Organic
S	Same as EU-Bio	e	Even stricter than EU-Bio/Organic
p	More precise than EU	n	Topic not regulated by EU-Bio/Organic
d	Stricter than/beyond EU-rule	o	Other approach to same topic
n	Topic not regulated by EU	*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.2.3b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.2.3b Aspects and differences in different private European standards for sows and gilts

Aspect	EU-legislation	Main differences
Duration of group keeping	Sows and gilts shall be kept in groups during a period starting from 4 weeks after the service to 1 week before the expected time of farrowing. Exceptions: Sows and gilts raised on holdings of fewer than 10 sows may be kept individually during the period mentioned, provided that they can turn around easily in their boxes, From 1 January 2013 those provisions shall apply to all holdings.	MS: Permanent outdoor keeping in groups. RSPCA, ABP: Confined only in permitted circumstances.** MV: Bonus for group housing and larger group sizes. <i>EU Organic: Notwithstanding Article 3(8) of Council Directive 91/630/EEC (11) sows shall be kept in groups, except in the last stages of pregnancy and during the suckling period.</i>
Stable groups		MV: Points for stable groups, extra bonus when escaping facilities.
Space requirement sow with piglets*	An unobstructed area behind the sow or gilt must be available for the ease of natural or assisted farrowing.	NU: 5m ² , MS only outdoor. RSPCA: sow lie down fully outstretched. MV: 30cm behind sow.
Floor area per sow in group pen	The total unobstructed floor area available to each gilt after service and to each sow when gilts and/or sows are kept in groups must be at least 1,64 m ² and 2,25 m ² respectively. Exceptions: When these animals are kept in groups of less than 6 individuals the unobstructed floor area must be increased by 10 %. When these animals are kept in groups of 40 or more individuals the unobstructed floor area may be decreased by 10 %; From 1 January 2013 those provisions shall apply to all holdings.	NU: additional outdoor area. RSPCA: More space. MV: More points for more area. <i>EU Organic: Sow with piglets <40 days: 7.5m² indoor + 2.5m² outdoor.</i>
Flooring surface	A part of the area, equal to at least 0,95 m ² per gilt and at least 1,3 m ² per sow, must be of continuous solid floor of which a maximum of 15 % is reserved for drainage openings. From 1 January 2013 those provisions shall apply to all holdings.	RSPCA: At least 75% of floor area solid. <i>EU Organic: Brood pig: 2.5m² indoor + 1.9m² outdoor.</i> SA: Higher space requirements

Aspect	EU-legislation	Main differences
Protection of the piglets	Farrowing pens where sows are kept loose must have some means of protecting the piglets, such as farrowing rails.	NU: Sows can be restrained with safety bar -10 days after farrowing.**
Outdoor farrowing		ABP: Detailed requirements for outdoor pig production.
Manipulable material	Without prejudice to the requirements laid down in the Annex, sows and gilts shall have permanent access to manipulable material at least complying with the relevant requirements of that Annex, From 1 January 2013 those provisions shall apply to all holdings	MV: Bonus points depending on accessibility.
Nesting material	In the week before the expected farrowing time sows and gilts must be given suitable nesting material in sufficient quantity unless it is not technically feasible for the slurry system used in the establishment.	RSPCA: Nesting material mandatory without exceptions.
Feeding frequency		RSPCA: Foraging substrate ev.3 days, pellets eventually week. MV: Bonus points if permanently available.
Feeding system	Sows and gilts kept in groups must be fed using a system which ensures that each individual can obtain sufficient food even when competitors for the food are present.	NU: Pasture recommended. RSPCA: shoulder barriers between feeding places. ABP: Possibility to escape and avoid other sows.
Own service pen		NU: Every sow own service pen.
Cleaning of sow	If they are placed in farrowing crates, pregnant sows and gilts must be thoroughly cleaned.	NU: Washing place required.
Body condition		ABP: Suitable body condition for farrowing.

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.2.4 Private standards for pigs – additional conditions for keeping of piglets

The table 6.2.4a below shows the most important topics regulated in private standards

The main differences in private standards in comparison with EU legislation for piglets were found regarding space requirements and the feeding system, temperature requirements and minimum age of weaning.

Tab. 6.2.4a Aspects for husbandry of keeping of piglets in non-organic and organic standards

PIGS - Private standards in EU		Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
		DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK
Additional conditions that apply to the keeping of piglets																
Accommo-dation	Space requirements					d	d			d	S	S	S	S	S	S
	Floor surface	d				p	s	s								
	Flat decks or piglet cages									n	S	S	S	S	S	S
Barn environment	Temperature in piglets' lying area	n				n										
Feeding	Minimum age at weaning	d				s	d	s		d	S	S	S	S	S	S
	Drinking & feeding facilities for sow and piglets	n						n								
	Milk quality															p
	Additional iron supply										n				n	
Social behaviour	Contact to other piglets	n														
	Activity							n								

Legend

	Important aspekt (Questionnaire. 3rd countries)		Standard does not cover category of species
s	Same as EU general legislation	P	More precise than EU-Bio/Organic
S	Same as EU-Bio	e	Even stricter than EU-Bio/Organic
p	More precise than EU	n	Topic not regulated by EU-Bio/Organic
d	Stricter than/beyond EU-rule	o	Other approach to same topic
n	Topic not regulated by EU	*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.2.4b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.2.4b Aspects and differences in different private European standards for piglets

Aspect	EU-legislation	Main differences
Space requirements*	Up to 10kg (Live weight) 0,15m ² ; over 10 up to 20kg 0,20m ² ; over 20kg up to 30 0,30m ² ;	RSPCA: Higher requirements, MV: bonus points for more space. <i>EU Organic: <30kg 0.6m² indoors plus 0.4m² outdoors per piglet.</i>
Floor surface	A part of the total floor, sufficient to allow the animal to rest together at the same time, must be solid or covered with a mat, or be littered with straw or any other suitable material.	RSPCA: 75% of floor solid.** NU: Litter required.
Flat decks or piglet cages		<i>EU Organic: Piglets shall not be kept on flat decks or in piglet cages.</i>
Temperature in piglets' lying area		NU, RSPCA: Thermally comfortable.
Minimum age at weaning	No piglets shall be weaned from the sow at less than 28 days of age unless the welfare or health of the dam or the piglet would otherwise be adversely affected. Exception: piglets may be weaned up to seven days earlier if they are moved into specialised housings which are emptied and thoroughly cleaned and disinfected before the introduction of a new group and which are separated from housings where sows are kept, in order to minimise the transmission of diseases to the piglets.	NU: 6 weeks. MV: Bonus if weaned not before 28 days, bonus if piglet stays after weaning for 3days with sow. <i>EU Organic: All young mammals shall be fed on maternal milk in preference to natural milk, for a minimum period of 40 days for pigs.</i>
Drinking & feeding facilities for sow and piglets		NU: Easy accessible facilities for both. MV: Bonus if co-feeding for piglets after 14d.
Milk quality		<i>EU Organic: suckling mammals shall be fed with natural, preferably maternal, milk.**</i> <i>SA: Precise composition.**</i>
Additional iron supply		<i>NL, KRAV: Iron provision.</i>
Contact to other piglets		NU: Rec. Contact to other piglets.
Social activity		MV: Bonus if piglets can run along edges.
Floor area per gilt in group pen		

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.2.5 Private standards for pigs – additional conditions for keeping of weaners and rearing pigs

The table 6.2.5a below shows the most important topics regulated in private standards

The main difference in private standards in comparison with EU legislation for keeping weaners and rearing pigs was found regarding space requirements.

Tab. 6.2.5a Aspects for husbandry of sows and gilts in non-organic and organic standards

PIGS - Private standards in EU		Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
		DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK
Additional conditions that apply to the keeping of weaners and rearing pigs																
Group keeping	Group size	n														
	Group mixing conditions															
Accommodation	Space requirements	d				d	d	d		d	S	S	S	S	e	S
Feeding	Feed composition	n							s							
	Feeding frequency	n														
	Number of feeding spots and dimensions	n														
	Feeding trough width	n														
	Reversible fattening practices									n	S	S	S	S	S	S
	Daily weight gain	n														
Drinking	Number of drinking spots															

Legend

	Important aspect (Questionnaire. 3rd countries)		Standard does not cover category of species
s	Same as EU general legislation	P	More precise than EU-Bio/Organic
S	Same as EU-Bio	e	Even stricter than EU-Bio/Organic
p	More precise than EU	n	Topic not regulated by EU-Bio/Organic
d	Stricter than/beyond EU-rule	o	Other approach to same topic
n	Topic not regulated by EU	*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.2.5b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.2.5b Aspects and differences in different private European standards for keeping of weaners and rearing pigs

Aspect	EU-legislation	Main differences
Group size		
Group mixing conditions		NU: Allowed: Up to 60 weaners per group. Fattening pigs: max 30 animals per group.
Space requirements	Over 30kg up to 50: 0,40m ² ; over 50kg up to 85: 0,55m ² ; over 85kg up to 110: 0,65m ² ;	NU: Floor area required per animal: 0.5qm. With open run 0.3 m ² in barn and 0.2 m ² outdoors. Per fattening pig (-60kg) inside 0.5 m ² plus outside 0.3 m ² ; Per fattening pig (-120kg) in barn 1qm, outside 0.5 m ² ; Per fattening pig (120kg+) inside 1.6 m ² , outside 0.8 m ² . Clear separation between different areas. <i>EU Organic: <50kg: 0.8m² indoors + 0.6m² outdoors; <85kg: 1.1m² indoors + 0.8m² outdoors; <110kg: 1.3m² indoors + 1m² outdoors.</i>
Feed composition	Animals must be fed a wholesome diet which is appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health and satisfy their nutritional needs. No animal shall be provided with food or liquid in a manner, nor shall such food or liquid contain any substance, which may cause unnecessary suffering or injury.	NU: Roughage must be offered all the times, separate feeding rack is recommended.
Feeding frequency		NU: Two times a day.
Number of feeding spots and dimensions, Feeding facilities		NU: Automatic feeding systems: One feeding facility per 3 animals. One self waterer for max. 10 weaners.
Feeding trough width		NU: 33cm per fattening pig.
Reversible fattening practices		<i>EU Organic: Fattening practices shall be reversible at any stage of the rearing process. Force-feeding is forbidden.</i>
Daily weight gain		NU: Max 700g per animal and day.
Number of drinking spots	(in German legislation; one drinking facility has to be provided per 12 weaners).	

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

6.3 Differences in private standards regarding the welfare of poultry

6.3.1 Private standards for poultry in general

The table 6.3.1 below shows the most important topics regulated in private standards.

Tab. 6.3.1a Aspects for husbandry of poultry in non-organic and organic standards in general

	Poultry - private standards in EU	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	
		DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	
Chapter	Relevant aspects	Private non-organic standards												Private organic standards					
Conditions that apply to all systems in which chicken are kept																			
Accommodation	Lighting, darkness and twilight period	d				d						d	S	S	S	S	S	S	
	Natural daylight	d				d							n		n				
	Climate (cold & heat stress)	p				p									p				
	Floor surface											n	S	S	S	S	S	d	
	Area for collection of droppings											n	S	S	S	S	S	S	
Feeding	Feed composition (e.g whole grain)											p	S	S	n	S	S	S	
	Grit	n				n							n	n	n			n	
	Feed additives											d	p	S	n	S	S	p	
	Feeding frequency																	n	
	Feeding facilities	d				p													
Drinking	Distribution feeding facilities	n				n												n	
	Permanent access to fresh water	d				d						p	d	d	S	S	S	d	
	Drinking facilities	d				p													
Health care	Drinking in outdoor run													n	n				
	Medicine and methods	n																	
	Prophylactic treatments	n																	
Regular visits	Frequency	d																d	
	Emergency killing					n													
Cleaning and disinfection	Agents											n	S	S	p	S	S	S	
Mutilations/ surgical practices	General															d		d	
	Beak trimming	d											d		d			d	
Outdoor access	Moulting	n				n							n	n					
	Duration of outdoor access	n																	
Breeding	Recommended methods / breeds or strains											n	S	S	S	S	S	S	
Inspection	New stables														n				

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

When looking at those differences or new aspects, which were found in several (generally more than three) private standards, the main aspects for animal welfare of poultry in general in several private standards being beyond or additional to EU legislation are: the lighting requirements, the feeding (grit, the non-use or limitation of feed additives in organic farming, permanent access to fresh water, the avoidance or limitation of mutilations (in particular beak trimming), moulting and the choice of more adapted breeds or strains to organic farming.

Where exactly is the difference?

The table 6.3.1b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards of poultry in general.

Tab. 6.3.1b Aspects and differences in different private European standards for poultry in general

Aspect	EU-legislation	Main differences
Lighting, darkness and twilight period	All buildings shall have light levels sufficient to allow all hens to see one another and be seen clearly, to investigate their surroundings visually and to show normal levels of activity.	RSPCA: More detailed: The lighting system in hen houses must be designed and maintained in order to give a min. 10 Lux throughout the house. For pullets, the lighting system in the pullet unit min. 5 Lux throughout the house. <i>EU Organic: Natural light must be provided.</i>
Natural daylight	Where there is natural light, light apertures must be arranged in such a way that light is distributed evenly within the accommodation.	NU, RSPCA: Natural daylight required. <i>BL, DM: Window 5% of floor area. DM: No stroboscope effect.</i>
Twilight	A period of twilight of sufficient duration ought to be provided when the light is dimmed so that the hens may settle down without disturbance or injury.	<i>DE: 20 min twilight period (not on very small farms).</i>
Climate	Air circulation, dust levels, temperature, relative air humidity and gas concentrations must be kept within limits which are not harmful to the animals.	<i>DE: Barns must have different climate areas.**</i>
Floor surface	The floors of installations must be constructed so as to support adequately each of the forward-facing claws of each foot.	<i>EU Organic: at least one third of the floor area shall be solid, that is, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf.</i> <i>SA: Minimum of 50% solid floor area.</i>
Area for collection of droppings		<i>EU Organic: in poultry houses for laying hens, a sufficiently large part of the floor area available to the hens shall be available for the collection of bird droppings.</i>
Feed composition	Animals must be fed a wholesome diet which is appropriate to their age and species and which is fed to them in sufficient quantity to maintain them in good health and satisfy their nutritional needs. No animal shall be provided with food or liquid in a manner, nor shall such food or liquid contain any substance, which may cause unnecessary suffering or injury.	NU, MS: No GM fodder, daily grains. <i>EU Organic: Roughage fresh or dry fodder or silage mandatory.</i> <i>BL, NL, DM: Entire grains on the ground.</i>
Grit		NU: Grit and crushed oyster shells regularly. RSPCA weekly. <i>DM, BL, SA: Access to insoluble grit mandatory.</i>

Aspect	EU-legislation	Main differences
Feed additives	No other substance, with the exception of those given for therapeutic, or prophylactic purposes or for the purposes of zootechnical treatment as defined in Article 1(2)(c) of Directive 96/22/EEC (1), must be administered to an animal unless it has been demonstrated by scientific studies of animal welfare or established experience that the effect of that substance is not detrimental to the health or welfare of the animal.	<i>EU Organic: There is a positive list in the annex of the regulation. Growth promoters and synthetic amino-acids shall not be used.</i>
Feeding frequency	All animals must have access to feed at intervals appropriate to their physiological needs.	<i>SA: Permanent access to feed, except before transport.</i>
Feeding facilities	All systems must be equipped in such a way that all laying hens have either linear feeders providing at least 10 cm per bird or circular feeders providing at least 4 cm per bird.	NU: More trough length per animal. RSPCA: No hand replenished feed systems without integral store of food, no electric wires over feeders or drinkers.**
Distribution feeding facilities		NU: feeding facility within 3m, RSPCA: within 8m, 60cm apart from each other. <i>SA: Distribution of feeders must allow development of social groups</i>
Access to fresh water	All animals must have access to a suitable water supply or be able to satisfy their fluid intake needs by other means.	NU: Permanent access to water, 2l/8hens; RSPCA: Permanent access. <i>BL, DM: Water from open surface; SA: Permanent water access during daylight.</i>
Drinking facilities	All systems must be equipped in such a way that all laying hens have either continuous drinking troughs providing 2,5 cm per hen or circular drinking troughs providing 1 cm per hen. In addition, where nipple drinkers or cups are used, there shall be at least one nipple drinker or cup for every 10 hens. Where drinking points are plumbed in, at least two cups or two nipple drinkers shall be within reach of each hen	NU: more space per hen, less hens per nipple: At continuous drinking troughs every hen must have 3 cm. Round drinkers are for 80 animals, a nipple drinker for 6 animals, within 3m radius Facilities must be kept clean. RSPCA: For less than 20hens always 2 drinkers.**
Drinking in outdoor run		<i>NL, DE: Water in outdoor area.</i>
Medicine and methods		NU: Pharmaceuticals only on advice of vet. Preference to alternative methods. <i>EU Organic: Phytotherapeutic, homoeopathic products and other alternative products preferred. Chemically synthesised allopathic veterinary medicinal products or antibiotics - double withholding period.</i>
Prophylactic treatments		NU: Prohibited, except vaccinations on recommendation of veterinarians.
Frequency of regular visits	All animals kept in husbandry systems in which their welfare depends on frequent human attention shall be inspected at least once a day.	NU: Inspection of barn twice a day. RSPCA: Three times a day. <i>SA: Check poultry at least 3 times a day.</i>

Aspect	EU-legislation	Main differences
Emergency killing		RSPCA-Laying hens: provisions for humane emergency killing.
Cleaning and disinfection agents	Those parts of buildings, equipment or utensils which are in contact with the hens shall be thoroughly cleansed and disinfected regularly and in any case every time depopulation is carried out and before a new batch of hens is brought in. While the cages are occupied, the surfaces and all equipment shall be kept satisfactorily clean. Droppings must be removed as often as necessary and dead hens must be removed every day.	NU: Feeding troughs must be cleaned every day. <i>EU Organic: Positive list for cleaning agents (not persistent agents).</i>
Beak trimming	In order to prevent feather pecking and cannibalism, however, the Member States may authorise beak trimming provided it is carried out by qualified staff on chickens that are less than 10 days old and intended for laying.	NU: Prohibited; RSPCA only between 5-10days of age. <i>EU Organic: not be carried out routinely in organic farming. However, some of these operations may be authorised by the competent authority for reasons of safety or if they are intended to improve the health, welfare or hygiene of the livestock on a case-by-case basis.</i> <i>BL, DM, SA: Beak trimming forbidden.</i>
Moulting		NU RSPCA-Laying hens: No force moulting, <i>BL, NL: No force moulting by restriction of feed and water, light may be limited to 5 hours.</i>
Duration of outdoor access		NU: Year-round open housing. ET: Broilers open-air runs accessible from 6 weeks.
Recommended breeding methods		<i>EU Organic: Preference is to be given to indigenous breeds and strains. To prevent the use of intensive rearing methods, poultry shall either be reared until they reach a minimum age or else shall come from slow-growing poultry strains.</i>
Inspection of new stables		<i>DM: Stables with more than 1000 laying hens or 2000 young hens must be inspected by specialized controller before use.</i>

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.3.2 Private standards for poultry – additional conditions for keeping laying hens in non-cage systems

The table 6.3.2a below shows the most important topics regulated in private standards

These were the main aspects for laying hens in non-cage systems found in several private standards (generally more than three) differences or new aspects, which are beyond or additional to EU legislation: maximum flock size, maximum stocking densities (lower than EU legislation), requirements for perches and nests, dust/sand bath and regular visits. In systems with free range area the main differences a higher number of pop-holes, more requirements for outdoor run, stocking density, duration of outdoor access and pasture management.

Tab. 6.3.2a Aspects for husbandry of laying hens in non-organic & organic standards

	Poultry - private standards in EU	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	
		DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	
Chapter	Relevant aspects	Private non-organic standards											Private organic standards						
Additional conditions that apply to the keeping of laying hens in non-cage systems																			
Quantity of animals	Maximum flock size	n				n						n	S	S	S	S	S	d	
	Size of husbandry unit																		
	Roosters	n											n		n				
	Maximum stocking density (indoor)	d				p	d					d	S	S	S	S	S	d	
	Conditions for higher stocking densities												d						
Accommodation	Perches *	d				p	s					d	p	p	S	S	S	p	
	Nests	d				d	s					d	d	S	d	S	S	d	
	Arrangement of different levels					n	s						n						
	Dropping pig	n																	
	Claw shortening devices					n	n												
	Ramps					n													
	Litter (e.g. straw)	s				p	s					p	S	S	S	S	S	d	
	Dust/sand bath	n				n							n	n	n		n		
systems with free range area	Number of pop holes and dimensions of opening	d				d						d	d	S	p	S	S	S	
	Outdoor area / run	d				d	d	s				d	d	d	d	S	S	S	
	Pasture	d				d	d					d	S	S	S	S	S	S	
	Outdoor stocking rate	n				n						n	S	S	S	S	S	S	
	Duration of outdoor access											n	p	S	p	p	p	d	
	Area and perimeter of range					n													
	Shelter	s				p	s												
Regular visits *	Frequency of regular visits *	d				d													
Cleaning and disinfection	Frequency of cleaning and disinfection	n																	
Moult	Force moulting												n	n					

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.3.2b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.3.2b Aspects and differences in different private European standards for laying hens in non-cage systems

Aspect	EU-legislation	Main differences
Maximum flock size		NU: Max 2000 per flock, 10'000 per farm. RSPCAL: Max 4000 per colony (32000 in barn, 16000free range). <i>EU Organic: Flock size: max 3000 laying hens.</i> <i>BL: max. 6000 LH per poultry house. SA: only 2000 LH per poultry house.</i>
Size of husbandry unit		NU: 10'000 per farm.
Roosters		NU: Should 1 rooster/30-50LH, in larger groups per 70-90 hens. <i>BL: If possible 1 rooster/100hens, DE: Roosters mandatory, 2/100LH.</i>
Maximum stocking density**	The stocking density must not exceed 9 laying hens per m ² usable area. Exception: where the usable area corresponds to the available ground surface, Member States may, until 31 December 2011, authorise a stocking density of 12 hens per m ² of available area for those establishments applying this system on 3 August 1999.	NU: relatively detailed, e.g. barn 5/m ² , aviaries 10/m ² . RSPCA: Defines usable area**; FBH: Usable area at least 1111cm ² /hen. <i>EU Organic: 6 hens/m² indoors plus 4m² per hen outdoors in rotation but can be as many as 12/m².</i> <i>SA: Max 6LH/m², no exception.</i>
Conditions for higher stocking densities		<i>BL: conditions for higher stocking densities well defined:</i>
Perches	All systems must be equipped in such a way that all laying hens have adequate perches, without sharp edges and providing at least 15 cm per hen. Perches must not be mounted above the litter and the horizontal distance between perches must be at least 30 cm and the horizontal distance between the perch and the wall must be at least 20 cm.	NU: longer perches, greater distance to roof: Perches over dropping-pit must be of 4-5cm in diameter with beveled edges. Distance of 3cm in between. Distance to roof at least 70cm. 1 meter of perch for 5 animals. Elevated areas should be available. RSPCA more detailed**: Same as EU plus: Top surface ~4cm in width, no sharp edges and of non-slip material. Perch space >460cm ² per bird must be provided on slatted or mesh floored area. There must be a gap of no less than 1.5cm on either side of any perch to allow hens to grip the perches without risk of trapping their claws. <i>EU Organic, at least 18 cm per hen.</i> <i>BL, NL, SA detailed requirements about installation.</i> <i>NL: Perches must be at different levels.</i>

Aspect	EU-legislation	Main differences
Nests	All systems must be equipped in such a way that all laying hens have at least one nest for every seven hens. If group nests are used, there must be at least 1 m ² of nest space for a maximum of 120 hens.	NU: fewer hens per nest in single and group nests. 1 nest for 4 hens. In groups nesting areas for 50 animals 1qm. Nests must be dark and provided with a species-appropriate floor or littering. RSPCA: Less hens per single nest plus details on nest: 1 nest/5hens or 1m ² of nesting substrate per 120 hens. The boxes must have a suitable floor substrate that encourages nesting behaviour and minimises the risk of parasite build up and disease. The floor must not consist of wire or plastic-coated wire that can come into contact with the birds and the boxes must be draught-free. <i>EU Organic: 7 hens/nest; 120cm² per hen in group nest.</i> <i>BL, DM: 80LH/m² of group nest; 5LH/single nest.</i>
Arrangement of different levels	If systems of rearing are used where the laying hens can move freely between different levels, (i) there shall be no more than four levels; (ii) the headroom between the levels must be at least 45 cm; (iii) the drinking and feeding facilities must be distributed in such a way as to provide equal access for all hens; (iv) the levels must be so arranged as to prevent droppings falling on the levels below.	RSPCA: Specific requirements for dimensions and equipment of multilayer-systems
Dropping pit		NU: Dropping pit max 2/3 of floor area.
Claw shortening		RSPCA, FBH: Requirement for claw shortening
Ramps		RSPCA: Where area is 1m above litter ramps or alighting rails must be provided at a minimum of 2m for every 600 birds and evenly distributed.
Litter	All systems must be equipped in such a way that all laying hens have at least 250 cm ² of littered area per hen, the litter occupying at least one third of the ground surface.	RSPCA: Litter depth defined at 10 cm must allow dust bathing.** <i>EU Organic: at least one third of the floor area shall be solid, that is, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf**;</i> <i>Where poultry are kept indoors due to restrictions or obligations imposed on the basis of Community legislation, they shall permanently have access to sufficient quantities of roughage and suitable material in order to meet their ethological needs.</i> <i>BL: Litter 5 cm deep.</i>
Open run		
Dust /sand bath*		NU: Sand bath mandatory. RSPCA: Litter must allow dust bathing. <i>BL, NL, DM, KRAV: Dust bath mandatory.</i>

Number of pop holes and dimensions of opening	If laying hens have access to open runs: (i) there must be several popholes giving direct access to the outer area, at least 35 cm high and 40 cm wide and extending along the entire length of the building; in any case, a total opening of 2 m must be available per group of 1 000 hens.	<p>NU: Higher popholes, distribution regulated: There must be several popholes giving direct access to the outer area, at least 40 cm high and 40 cm wide and one pophole every seven meters extending along the entire length of the building.</p> <p>RSPCA: Regulates when they are open, popholes are higher and wider, less hens per pophole, other details: Popholes must be opened no later than 9am and closed at dusk, unless bad weather or vet advice dictates that this cannot happen. Each pophole must be at least 450mm high and 2m wide to allow more than one hen through at a time. There must be at least 1 pophole per 600 birds. Popholes must be evenly distributed along the line of access. The maximum distance travelled by a hen to reach the nearest pophole must not exceed 20m.</p> <p><i>EU Organic: 4m of opening per 600 hens (100m²) rather than 2m per 1000 hens.</i></p> <p><i>BL: The minimum measures of the openings are 50 cm width and 45 cm free height.</i></p> <p><i>DM: Measures for openings defined precisely: Popholes must be dispersed over whole length of barn. Width=70cm. 7m of opening per 1000 laying hens and 4m per 1000 young hens. If weather is very cold some holes can be closed.</i></p>
Outdoor area, open run		<p>NU: Open run with permanent access mandatory, details; RSPCA: When free range mandatory.</p> <p><i>EU Organic: Open air areas may be partially covered. 4m² per hen in rotation.</i></p> <p><i>BL, DM: defines perimeter and time (from noon on):</i></p> <p><i>NL, BL DM: Daily access to covered outdoor area.</i></p>
Pasture	Open runs must be of an area appropriate to the stocking density and to the nature of the ground, in order to prevent any contamination.	<p>NU, MS, RSPCA: Pasture mandatory.</p> <p><i>EU Organic: Open air areas for poultry shall be mainly covered with vegetation. When the rearing of each batch of poultry has been completed, runs shall be left empty to allow vegetation to grow back.</i></p>
Outdoor stocking rate*		<p>RSPCA: Outdoor stocking rate defined: The stocking rate must not exceed 1,000 birds per hectare of range available to the hens over the flock life.</p> <p><i>EU Organic: 4m² per hen in rotation.</i></p>
Duration of outdoor access		<p><i>EU Organic: minimum 1/3 of their life access to an outdoor run.</i></p> <p><i>SA, NL: all the life, SKAL: 8 hours a day. KRAV: Every batch season with outdoor access. DM, BL: After lunch.</i></p>
Area and perimeter of range		<p>RSPCA: defines perimeter:</p> <p>The perimeter of the range must be within 350m from the house.</p>
Shelter	Open runs must be equipped with shelter from inclement weather and predators	<p>RSPCA: Roof area defined**: A minimum area of overhead shade/shelter of 8m² per 1,000 hens must be provided; they must be evenly distributed and sited 30 to 50m from the house.</p>
Frequency of regular visits*	All hens must be inspected by the owner or the person responsible for the hens at least once a day.	

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.3.3 Private standards for poultry – additional conditions for keeping meat chicken (broilers) in non-organic and organic systems

The table 6.3.3a below shows the most important topics regulated in private standards.

Tab. 6.3.3a Aspects for husbandry for keeping meat chicken (broilers) in non-organic and organic systems

	Poultry - private standards in EU	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	
		DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	
Chapter	Relevant aspects	Private non-organic standards												Private organic standards					
Additional conditions that apply to the keeping of meat chicken (broilers)																			
Age at slaughter	minimum age							n			n	n	S	S	S	S	S	S	
	Maximum stocking density	d			d			d	d	d		d	S	S	d	S	S	S	
	Environmental conditions / air quality *	d								d									
Quantity of animals	Maximum flock size	n						n				n	S	S	d	S	S	d	
	Lighting, darkness and twilight period	d							d	p	p				d				
	Perches				n			n		n			n	n	n				
Accommodation	Litter *	s			p		s					p	S	S	p	S	p	p	
	Free range / Outdoor / Open run	n			d			d	d										
	Age	n						n		n	n								
	Environmental enrichment									n	n								
	Dust bath	n															n		
systems with free range area	Number of pop holes							n		n	n								
	Dimensions of opening									n									
	Shelter	n			n			n		n									
	Floor in open run	n									n								
	Outdoor area (and pastature)											n	S	S	p	S	S	d	
Feeding	Feed composition (e.g. whole grain)	n			n			n	n		n								
	Feeding frequency	d			d				d	d	d								
	Feeding facilities									n								n	
	Distribution									n									
	Other	d			d				d	d									
Drinking	Reversible fattening											n	S	S	S	S	S	S	
	Permanent access to fresh water				d					d									
	Drinking facilities									n									
	Distribution									n					n				
	Water storage tank									n									
Regular visits *	Frequency of regular visits *	d								d									
	Withholding period	n																	
Record keeping	Requirements									n									
Breeding	Breeds	n			n			n	n	n				n	n				

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

The analysis showed quite a number of main aspects for broilers found in several private standards (generally more than three) differences or new aspects, which are beyond or additional to EU legislation: maximum flock size, maximum stocking densities (lower than EU legislation), requirements for perches and nests, dust/sand bath and regular visits. In systems with free range area the main differences a higher number of pop-holes, more requirements for outdoor run, stocking density, duration of outdoor access and pasture management.

Where exactly is the difference?

The Council Directive 2007/43 of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production (OJ L 182, 12.7.2007 p. 0019-0028) shall apply to chickens kept for meat production. It shall apply to rearing stock on holdings which have both breeding stock and rearing stock.

However, it shall not apply to:

- (a) holdings with fewer than 500 chickens;
- (b) holdings with only breeding stocks of chickens;
- (c) hatcheries;
- (d) extensive indoor and free range chickens and organically reared chickens.

The table 6.3.3b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.3.3b Aspects and differences in different private European standards for meat chicken (broilers)

Aspect	EU-legislation	Main differences
Minimum age of slaughter	<i>EU traditional free range for broilers: slower growing strains.</i>	NU: 81d; VW: 56d. <i>EU Organic: 81 days at slaughter.</i>
Maximum stocking density *	Member States shall ensure that the maximum stocking density in a holding or a house of a holding does not at any time exceed 33 kg/m ² . Exceptions: see below. <i>EU traditional free range for broilers: the indoor stocking rate per m² does not exceed in the case of chickens: 12 but not more than 25 kg live-weight; however, in the case of mobile houses not exceeding 150 m² floor space and which remain open at night, the stocking rate may be increased to 20, but not more than 40 kg live-weight per m².</i>	ET, NU, MS, ER, RSPCA: Lower stocking densities: NU: Admissible live weight: 21 kg/m ² . Broilers: Admissible live weight: 21 kg/m ² . MS: For "Oakham" chicken: 30kg/m ² . For "Oakham" Free Range chickens: 27kg/m ² . ER: The maximum stocking density for Elmwood chicken products is 30 kg/m ² RSPCA: Stocking density must never exceed 30kg/m ² or be likely to exceed this, and must also not exceed 19 birds/m ² . Volwaard: Maximum of 38 kg/m ² (exclusive a covered outdoor area; maximum 17 animals/m ² in the barn; average of 14 animals/m ² with the used slower growing breed). This is 40% more space than regularly held animals get. <i>EU Organic: 21kg/m² indoors + 2.5m² outdoors in mobile housing, 10broilers/m² indoors plus 4m² outdoors in fixed housing.</i> <i>DM: In immobile barns 16 kg live weight (40 animals/ m² until 28days old), in mobile barns 18kg live weight per m². Animals with less than 35g weight gain per day 30animals/ m² until 28days old.</i>

Aspect	EU-legislation	Main differences
Environmental conditions / Air Quality *	The owner or keeper shall ensure that each house of a holding is equipped with ventilation and, if necessary, heating and cooling systems designed, constructed and operated in such a way that: (a) the concentration of ammonia (NH ₃) does not exceed 20 ppm and the concentration of carbon dioxide (CO ₂) does not exceed 3 000 ppm measured at the level of the chickens' heads; (b) the inside temperature, when the outside temperature measured in the shade exceeds 30 °C, does not exceed this outside temperature by more than 3 °C; (c) the average relative humidity measured inside the house during 48 hours does not exceed 70 % when the outside temperature is below 10 °C.	RSPCA: Gas concentrations, air humidity: Air quality parameters should be maintained under all foreseeable climatic conditions, below the following levels at bird head height: Ammonia: 15ppm, Carbon dioxide: 5,000ppm. The Relative Humidity should be between 50 and 70%. There must be, averaged over an 8 hour period, dust not exceeding 10mg/m ³ and carbon dioxide not exceeding 50ppm. All buildings must be able to cope with a temperature lift of 3 degrees C. Max and min temps must be recorded daily.
Maximum flock size	EU traditional free range for broilers: <i>each poultry house does not contain more than 4 800 chickens.</i>	ET: 4800 broilers; NU: 500 broilers. <i>EU Organic: Max 4800 broilers or 3000 laying hens, the total usable area of poultry houses for meat production on any single unit, shall not exceed 1 600 m².</i> <i>DM: 2500 broilers. SA: 1000 broilers.</i>
Lighting, darkness and twilight period	All buildings shall have lighting with an intensity of at least 20 Lux during the lighting periods, measured at bird eye level and illuminating at least 80 % of the useable area. A temporary reduction in the lighting level may be allowed when necessary following veterinary advice. Within seven days from the time when the chickens are placed in the building and until three days before the foreseen time of slaughter, the lighting must follow a 24-hour rhythm and include periods of darkness lasting at least six hours in total, with at least one uninterrupted period of darkness of at least four hours, excluding dimming periods.	NU, ER: Natural daylight. NU: longer period of lights-out. RSPCA Details on lighting. Average minimum 20 Lux with many details on variation during the day and age of birds: In 24h broilers min. 8 hours continuous light and min. 6 hours and max. 12 hours continuous, exception: -7 days of age and 3 days prior to slaughter, when the min. cont. darkness must be >2 hours, and where nat. light is provided and the nat. period of darkness is <6 hours. Twilight same as EU plus this must occur over a period of at least 15 minutes. Broilers: There must be an average minimum illumination of 100 Lux over at least 75% of the floor area. No area must be lit at less than 20 Lux. VW: Minimum of 15 Lux at all places within the barn; further variation in lighting intensity; 6 hours per day or 2 x 3 hours an uninterrupted dark period. <i>DM: eight hours of darkness.</i>
Perches	EU traditional free range for broilers: <i>Perches of at least 10 cm length are available per bird in total (house and perchery).</i>	ET, RSPCA, ER: Perches for broilers. MS: Straw bales available. <i>BL, NL, DE: Perches for broilers mandatory.</i>

Aspect	EU-legislation	Main differences
Litter *	All chickens shall have permanent access to litter which is dry and friable on the surface.	RSPCA: Litter topped up daily and other requirements.** <i>EU Organic: at least one third of the floor area shall be solid, that is, not of slatted or of grid construction, and covered with a litter material such as straw, wood shavings, sand or turf.**</i> <i>DM: 2/3 of floor area for scratching; SA: 50%.</i> <i>KRAV: Other poultry than laying hens shall go on the littered area. (Includes a sandbath New sand should be provided even during the outdoor period).</i>
Range	<i>EU traditional free range for broilers:</i> <i>there is continuous day-time access to open-air runs</i>	ET, NU, MS (if free range), RSPCA (if free range), VW mandatory. NU: Detailed requirements on design of open run.
Age	<i>EU traditional free range for broilers:</i> <i>At least as from the age of six weeks in the case of broilers.</i>	ET, NU, RSPCA, VW: Access from 3/6weeks old.
Environmental enrichment,		RSPCA, VW: Environmental enrichment: Environmental enrichment must be available to chicks no later than 7 days and maintained/replaced throughout the rearing period as necessary. For every 1,000 birds there must be a minimum provision of 1.5 straw bales, 2m or perch space and one pecking object e.g. peck-a-block, brassicas.
Dust bath		NU: Dust bath required. <i>KRAV, DM: Sand and dust bath mandatory.</i>
Number of pop holes	<i>EU traditional free range for broilers:</i> <i>The poultry house is provided with popholes with a combined length at least equal to 4 m per 100 m² surface of the house.</i>	ET, RSPCA, VW: Number of popholes.
Dimensions of opening		RSPCA: dimensions of openings.
Shelter	<i>EU traditional free range for broilers:</i> <i>Open-air runs comprise an area mainly covered by vegetation amounting to at least 2 m² per chicken.</i>	ET, NU, MS, RSPCA, VW: Shelter requirements précised.
Floor in open run		NU, VW: Floor requirements for open run.
Outdoor area (pasture)		<i>EU Organic: Poultry shall have access to an open air area for at least one third of their life. Poultry houses shall be constructed in a manner allowing all birds' easy access to open air area.</i> <i>EU Organic: Open air areas may be partially covered.</i> <i>DM, NL, BL: Daily access to covered outdoor area.</i> <i>DM: pasture access 75% daylight period, rotation. SA: 2/3 of life.</i>

Aspect	EU-legislation	Main differences
Feed composition	<i>EU traditional free range for broilers: The diet used in the fattening stage contains at least 70 % of cereals.</i>	NU: Green fodder, grains and no GM. ET: Grains. MS: Cereal based. ER: No fish meal, cereals. VW: Grains.
Feeding frequency	Feed shall be either continuously available or be meal fed and must not be withdrawn from chickens more than 12 hours before the expected slaughter time.	NU, MS, ER, RSPCA: No feed restriction
Feeding facilities		RSPCA defines sizes of feeders
Distribution		RSPCA defines distribution of feeders. <i>SA: Distribution of feeders must allow development of social groups</i>
Other	No other substance, with the exception of those given for therapeutic, or prophylactic purposes or for the purposes of zootechnical treatment as defined in Article 1(2)(c) of Directive 96/22/EEC (1), must be administered to an animal unless it has been demonstrated by scientific studies of animal welfare or established experience that the effect of that substance is not detrimental to the health or welfare of the animal.	NU, MS, ER, RSPCA: No growth promoters, no animal proteins except fish meal for RSPCA.
Reversible fattening		
Access to fresh water	All animals must have access to a suitable water supply or be able to satisfy their fluid intake needs by other means.	MS, RSPCA: Permanent access to water. <i>DM: Sufficient water bowls in free range area.</i>
Drinking facilities		RSPCA regulates number of drinkers.
Distribution		RSPCA: perimeter of 4 m
Water storage tank		RSPCA: Availability of water storage tank
<i>Frequency of regular visits *</i>	All chickens kept on the holding must be inspected at least twice a day. Special attention should be paid to signs indicating a reduced level of animal welfare and/or animal health.	NU: 2x, RSPCA: 3x
Withholding period		NU: 2x
Requirements record keeping.	The owner or keeper shall maintain a record for each house of a holding of: (a) the number of chickens introduced; (b) the useable area; (c) the hybrid or breed of the chickens, if known; (d) by each control, the number of birds found dead with an indication of the causes, if known as well as the number of birds culled with cause; (e) the number of chickens remaining in the flock following the removal of chickens for sale or for slaughter.	RSPCA: Leg weakness control strategy
Breeds	<i>EU traditional free range for broilers: The birds fattened are of a strain recognized as being slow growing.</i>	EU-T, NU, MS, ER, RSPCA: Slow growing strain <i>EU-Organic: slow growing strains</i>

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** more precise (better interpretation/implementation)

6.3.4 Private standards for poultry – additional conditions for rearing chicks in non-organic and organic systems

The table 6.3.4a below shows the most important topics regulated in private standards.

Detailed standards for rearing chicks have been developed mainly by RSPC Freedom food and private standard setting bodies for organic farming, where the main differences compared with the EU legislation are more restrictive requirements for the stocking density indoors and outdoors, the feeding requirements, perches, litter and scratching areas.

Tab. 6.3.4a Aspects for husbandry for rearing chicks in non-cage systems in non-organic and organic standards

	Poultry - private standards in EU	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	
		DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	
Chapter	Relevant aspects	Private non-organic standards											Private organic standards						
Requirements for rearing chicks																			
Quantity of animals, indoor and outdoor keeping	Stocking density indoors					n							n	n	n	n		n	
	Flock size					n									n			n	
	Stocking density outdoors					n												n	
	Start of outdoor access					n							n	n	n			n	
	Size of outdoor area					n								n	n				
Feeding and drinking	Feeding					n							n		n			n	
	Drinking					n									n				
Accommodation	Lighting					n							n					n	
	Perches					n							n	n					
	Dust bath					n							n						
	Litter					n							n	n					
	Shelter					n							n						
	Scratching area					n							n	n					
Learning	Housing system equivalence					n							n		n				
Hatchery	Hatchery					n									n			n	

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.3.2b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.3.4b Aspects and differences in different private European standards for rearing chicks

Aspect	EU-legislation	Main differences
Stocking density indoor	No details for young chicken	<i>BL, NL, DM, SKAL and SA have own requirements for the husbandry of rearing young chickens.</i>
Flock size		<i>DM: 3000 young hens per flock if systems separated. SA: max. 2000 young hens in a flock</i>
Stocking density outdoors		<i>RSPCA: not be likely to exceed 20kg/m² at 16 weeks of age. BL: After 6th life week exterior climate area may be taken into account for stocking density.</i>
Start of outdoor access		<i>BL, NL, DM, SA have special requirements for access to open runs (generally after 10-12 weeks)</i>
Size of outdoor area		<i>BL: Outdoor area size of at least one quarter of the accessible barn area. More details regarding size of openings and outdoor run.</i>
Feeding		<i>RSPCA: feed must be readily available at all times throughout the lighting period. Minimum of feeding place for pullets. BL, DE, SA: Access to feed for all chicks all the time. Other details</i>
Drinking		<i>RSPCA: minimum number of drinkers, nipples. DM: Water and feed must be fed on different levels. Nipple drinkers should be offered additionally.</i>
Lighting		<i>BL, SA: Details on daylight period</i>
Perches		<i>RSPCA: detailed requirements on perches from 10 days of age on. BL, NL: Elevated rearing possibilities must be offered in the second week of life. After 12 weeks 12cm of perch per chicken, 1/3 of which are elevated.</i>
Dust bath		<i>BL: Dust bath from 1st week on.</i>
Litter		<i>RSPCA: at least one half of the area, access all the time. BL, NL: manipulable material as soon as young chickens are installed. Littering must be kept clean, dry and loose.</i>
Shelter		<i>BL: From the 1st week of life on the animals must have opportunities for shelter.</i>
Scratching area		<i>BL, NL: 50% of floor area for scratching.</i>
Housing system equivalence		<i>BL; DM: young hens should learn the behaviour they need as laying hens.</i>
Hatchery		<i>SA: Details on the handling and separation/ sorting of chicks to reduce risks of injury.</i>













6.4 Differences in private standards regarding animal welfare in transport

6.4.1 Private standards for animal transport in general

The table 6.4.1 below shows the most important topics regulated in private standards.

Tab. 6.4.1a Aspects of animal transport in non-organic and organic standards

	ANIMAL TRANSPORT - private standards EU	Neuland	Marks and Spencer	RSPCA Broilers and laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Assured British Pigs	Volwaard	Better life hallmark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
Chapter	Relevant aspects	DE	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK
		Private non-organic standards									Private organic standards					
Transport																
Animal fitness for transport	Illness during transport				n	p	n									
	Use of sedatives / tranquillisers	d								d	S	S	S	S	S	S
Means of transport	Transport features			n	s		s									
	Space and ventilation				s											
	Partitions						n									
	Bedding material for the youngest				d	d	d								d	
	Additional provisions for transport in containers	n														
Livestock markets	Allowance					n										
Exports	Live exports					n										
Training	Additional requirements staff			p	p	p									p	
Transport practices																
Before loading	Drinking, resting and feeding	n			n	n					n					
	Catching of hens			n												
Loading, unloading and handling	Inclination of ramps, pathway design				d	d					p	p			d	
	Lighting				d						d					
	Electric shocks	d			d	d	d			d	S	S	S	S	S	S
	Tethering for transport														n	
	Mixing / separation of unfamiliar groups	d			d						d	d			d	d
	Loading	n				n	n				n					
During transport	Headroom					n										
	Ventilation, Temperature				n											
	Documentation					n										
Watering and feeding interval, journey times and resting periods																
Journey times cattle and pigs	Length of journey	d	o		o	d			d		p	p	p			
	Intervals /resting periods				n											
	Activities at end of journey				p											
	Prolongation of journey	d	d	d	d	d		d		d	S	S	S	S	S	S
Journey times poultry	Length of journey	d	n	d				d								
	Intervals /resting periods	d	n	d				d								
	Transport of chicks other requirements															n

Legend	
	Important aspekt (Questionnaire. 3rd countries)
	Same as EU general legis
	Same as EU-Bio/Organic
	More precise than EU
	Stricter than/beyond EU-r
	Topic not regulated by EU
	Standard does not cover category of species
	More precise than EU-Bio/Organic
	Even stricter than EU-Bio/Organic
	Topic not regulated by EU-Bio/Organic
	Other approach to same topic
	Important aspect for EconWelfare experts

The analysis showed quite a number of main aspects related to transport found in several private standards (generally more than three) differences or new aspects, which are beyond or additional to EU legislation: the interdiction of sedatives/tranquilisers, bedding material for the youngest in transport vehicles, drinking, resting and feeding possibilities before transport, the pathway/ramps design, the separation of unfamiliar groups, the length of journey.

Where exactly is the difference?

The table 6.4.1b illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards.

Tab. 6.4.1b Aspects and differences in different private European standards for transport

Chapter	Aspect	EU-legislation	Main differences
Transport			
Animal fitness for transport	Illness during transport	When animals fall ill or are injured during transport, they shall be separated from the others and receive first-aid treatment as soon as possible. They shall be given appropriate veterinary treatment and if necessary undergo emergency slaughter or killing in a way which does not cause them any unnecessary suffering.	RSPCAp: Levels of transit mortality above 0.1% investigated.** ABP: Written contingency plan.
	Use of sedatives / tranquillisers	Sedatives shall not be used on animals to be transported unless strictly necessary to ensure the welfare of the animals and shall only be used under veterinary supervision.	NU: No sedatives EU Organic: not allowed.
Means of transport	Transport – features	Means of transport, containers and their fittings shall be designed, constructed, maintained and operated so as to: (a) avoid injury and suffering and to ensure the safety of the animals; (b) protect the animals from inclement weather, extreme temperatures and adverse changes in climatic conditions; (c) be cleaned and disinfected; (d) prevent the animals escaping or falling out and be able to withstand the stresses of movements; (e) ensure that air quality and quantity appropriate to the species transported can be maintained; (f) provide access to the animals to allow them to be inspected and cared for; (g) present a flooring surface that is anti-slip; (h) present a flooring surface that minimises the leakage of urine or faeces; (i) provide a means of lighting sufficient for inspection and care of the animals during transport.	RSPCAc: Chickens to be transported at night in periods of hot weather

Chapter	Aspect	EU-legislation	Main differences
Means of transport	Space and ventilation*	Sufficient ventilation shall be provided to ensure that the needs of the animals are fully met taking into account in particular the number and type of the animals to be transported and the expected weather conditions during the journey. Containers shall be stored in a way which does not impede their ventilation.	
	Transport – Partitions	Partitions shall be strong enough to withstand the weight of animals. Fittings shall be designed for quick and easy operation.	ABP: Partitions <3.1m wide and 76cm high.
	Bedding material for the youngest	Piglets of less than 10 kg, lambs of less than 20 kg, calves of less than six months and foals of less than four months of age shall be provided with appropriate bedding material or equivalent material which guarantees their comfort appropriate to the species, the number of animals being transported, the journey time, and the weather. This material has to ensure adequate absorption of urine and faeces.	RSPCA,d&b, ABP: Bedding mandatory.
	Additional provisions for transport in containers	1. Containers in which animals are transported shall be clearly and visibly marked, indicating the presence of live animals and with a sign indicating the top of the container. 2. During transport and handling, containers shall always be kept upright and severe jolts or shaking shall be minimised. Containers shall be secured so as to prevent displacement due to the movement of the means of transport. 3. Containers of more than 50 kg shall be equipped with a sufficient number of adequately designed, positioned and maintained securing points enabling them to be securely fastened to the means of transport where they are to be loaded. Containers shall be secured to the means of transport before the start of the journey to prevent displacement due to the motion of the means of transport.	NU: Not more than 10 laying hens per box
Livestock markets	Allowance of livestock markets		RSPCA d&b: No livestock markets.
Exports	Live exports		RSPCA: No live calves' exports from UK.
Training	Additional training requirements	Personnel handling animals are trained or competent as appropriate for this purpose and carry out their tasks without using violence or any method likely to cause unnecessary fear, injury or suffering.	RSPCA d&b, ABP: approved training course.**
Transport practices			
Before loading	Catching of hens		RSPCA c: Detailed regulations for catching of hens.

Chapter	Aspect	EU-legislation	Main differences
Transport before loading	Catching of hens		RSPCAc: Detailed regulations for catching of hens.
	Drinking, resting and feeding*	During transport, animals shall be offered water, feed and the opportunity to rest as appropriate to their species and age, at suitable intervals. If not otherwise specified, Mammals and Birds shall be fed at least every 24 hours and watered at least every 12 hours. The water and feed shall be of good quality and presented to the animals in a way which minimises contamination. Due regard shall be paid to the need of animals to become accustomed to the mode of feeding and watering.	RSPCA d&b: Cattle access to food -4h before loading, water until loading. RSPCAp: food access -4h before loading. NU: Pigs no feed 12h before transport. <i>BL: Pigs empty stomach, no food for max 12 hours, cattle no food for max 16 hours. Milking before transport (dairy cows).</i>
Loading, unloading and handling	Inclination of ramps, pathways*	20 degrees	RSPCA: Lower inclination <i>BL: pathway not mirroring, not slippery.**</i>
	Transport - Lighting	Appropriate lighting shall be provided during loading and unloading.	RSPCAp: Lighting all the time available. <i>BL: pathway illuminated.</i>
	Electric shocks	The use of instruments which administer electric shocks shall be avoided as far as possible. In any case, these instruments shall only be used for adult bovine animals and adult pigs which refuse to move and only when they have room ahead of them in which to move. The shocks shall last no longer than one second, be adequately spaced and shall only be applied to the muscles of the hindquarters. Shocks shall not be used repeatedly if the animal fails to respond.	NU, RSPCA-pigs, dairy&beef, ABP: No electric goads permitted. (The same is valid also for slaughterhouses). <i>EU Organic: Loading and unloading of animals shall be carried out without the use of any type of electrical stimulation to coerce the animals.</i>
	Tethering for transport	Animals shall not be tied by the horns, the antlers, the nose rings or by legs tied together. Calves shall not be muzzled. When animals need to be tied, the ropes, tethers or other means used shall be: (a) strong enough not to break during normal transport conditions; (b) such as to allow the animals, if necessary, to lie down and to eat and drink; (c) designed in such a way as to eliminate any danger of strangulation or injury, and so as to allow animals to be quickly released.	KRAV: Only animals used to tethering may be tethered during transport.
	Separation of unfamiliar groups	Animals shall be handled and transported separately in the following cases: (a) animals of different species; (b) animals of significantly different sizes or ages; (c) adult breeding boars or stallions; (d) sexually mature males from females; (e) animals with horns from animals without horns; (f) animals hostile to each other; (g) tied animals from untied animals. It shall not apply where the animals have been raised in compatible groups, are accustomed to each other, where separation will cause distress or where females are accompanied by dependent young. Also applies during transport.	NU, RSPCAp: Natural groups must not be mixed with others and stay together. <i>BL, NL, KRAV, SA: Separated by fattening group and origin.</i>

Chapter	Aspect	EU-legislation	Main differences
Loading, unloading and handling	Loading		ABP: Use boards to move pigs, RSPCA d&b : Way forward must be clear. NU: Pigs always from dark to light. <i>NL: pigs from dark to light.</i>
During transport	Headroom		RSPCA d&b : Headroom regulated
	Ventilation	Sufficient ventilation shall be provided to ensure that the needs of the animals are fully met taking into account in particular the number and type of the animals to be transported and the expected weather conditions during the journey. Containers shall be stored in a way which does not impede their ventilation.	RSPCA p , ABP: Ventilation must be adjusted if weather and travel conditions change.
	Documen- tation		RSPCA d&b : All transporters have documentation about species, transporter, and capacity.
Watering and feeding interval, journey times and resting periods			
Journey times cattle and pigs	Length of journey	Journey times for cattle and pigs shall not exceed eight hours. Exception: Additional rules see below. During transport, animals shall be offered water, feed and the opportunity to rest as appropriate to their species and age, at suitable intervals. If not otherwise specified, Mammals and Birds shall be fed at least every 24 hours and watered at least every 12 hours. The water and feed shall be of good quality and presented to the animals in a way which minimises contamination. Due regard shall be paid to the need of animals to become accustomed to the mode of feeding and watering.	NU: Max 4 hours. MS, RSPCA p : nearest slaughterhouse. RSPCA d&b : No prolonged journeys, transport from loading of first animal until unloading of last. BH: Calves to slaughterhouse max 4 h. <i>EU Organic: duration of transport of livestock shall be minimised.</i> <i>BL, NL: Max 4h, max 200km (+4 hours). DM: If possible max 200 km.</i>
	Intervals	The watering and feeding intervals, journey times and rest periods when using road vehicles are defined as follows: (a) Unweaned calves which are still on a milk diet and unweaned piglets must, after nine hours of travel, be given a rest period of at least one hour sufficient in particular for them to be given liquid and if necessary fed. After this rest period, they may be transported for a further nine hours; (b) Pigs may be transported for a maximum period of 24 hours. During the journey, they must have continuous access to water; (d) All other animals of the species must, after 14 hours of travel, be given a rest period of at least one hour sufficient for them in particular to be given liquid and if necessary fed. After this rest period, they may be transported for a further 14 hours.	RSPCA p : Delays of 0.5hours notified to abattoir.
	Activities at end of journey	After the journey time laid down, animals must be unloaded, fed and watered and be rested for at least 24 hours.	RSPCA p : Pigs unloaded immediately.**

Chapter	Aspect	EU-legislation	Main differences
Journey times cattle and pigs	Prolongation of journey	In the interests of the animals, the journey times may be extended by two hours, taking account in particular of proximity to the place of destination.	NU, M&S, RSPCA, VW: not prolongation possible. <i>EU Organic: no prolongation allowed.</i>
Journey times poultry	General journey times	For poultry suitable food and water shall be available in adequate quantities, save in the case of a journey lasting less than: (a) 12 hours disregarding loading and unloading time; or (b) 24 hours for chicks of all species, provided that it is completed within 72 hours after hatching.	NU: Max 4h, MS: 6h for broilers. RSPCA: 8h. VW: 1.5h
	Transport of chicks		<i>SA: Details for transport of chicks.</i>
	Length of journey	All necessary arrangements have been made in advance to minimise the length of the journey and meet animals' needs during the journey.	MS, RSPCA-pigs: nearest available abattoir. RSPCA-dairy&beef: transport plan. ABP: Detailed regulations of standstills after animals have been moved around.

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).** more precise (better interpretation/implementation)

6.5 Differences in private standards regarding slaughter of animals

6.5.1 Private standards for slaughter of animals in general

The table 6.5.1 below shows the most important topics regulated in private standards.

The analysis showed main aspects regarding slaughter of animals found in several private standards (generally more than three) differences or new aspects, which are beyond or additional to EU legislation: Lairage requirements (start of lairage, space, lighting, floors etc.), the avoidance of group mixing, the non-use of electric stimulation, the time between stunning and bleeding as well as further processing, the education of the staff).

Tab. 6.5.1 Aspects of slaughter of animals in non-organic and organic standards

	ANIMAL SLAUGHTER - private standards EU	Neuland	Elmwood range	RSPCA broilers	RSPCA laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Better life hallmark for veal	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
Chapter	Relevant aspects	DE	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK
		Private non-organic initiatives									Private organic initiatives					
Slaughter																
Unloading to slaughter	Time after arrival			s	s	d										
	Duration	n		n												
	Inclination of ramps and passageways															
Lairage accommodation	Requirement / start of lairage			n		p									d	d
	Space requirements in lairage					n	n									
	Lying area					n	n									
	Floors				n		n									p
	Feeding					n	s									
	Cleaning of lairage					n	n									
	Cooling down															n
	Milking interval															
	Lairage environment	Ventilation					p	s								
Lighting				n	n	p	p									
Sound level						s	s									
Grouping	Group mixing					d	d									
	Isolation pens					n	n									
Climatic conditions	Cooling down	p														
Treatment	Tethering															
	Moving animals					p	p									p
	Electric shocks / stimulation	d				d	d			d	S	S	S	S	S	S
Restraining	Obligation restraining before stunning														p	p
	Floor dropping						n									

	ANIMAL SLAUGHTER - private standards EU	Neuland	Elmwood range	RSPCA broilers	RSPCA laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Better life hallmark for veal	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association
Chapter	Relevant aspects	DE	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK
Methods allowed for stunning/killing	Allowed stunning (and killing) methods		p	p	p	p	p									
Stunning and killing	Checking				s	n						s			s	p
	Electronarcosis, current intensity	d														p
	Specific requirements for electronarcosis through waterbath stunners			p	p										s	p
	Waterbath stunning equipment	s														
	Gas stunning equipment for pigs					p										
	CO2 gas concentration for pigs															
	Gas concentration for poultry			s	s											
	Specific requirements for heat-to-back electrical killing of pigs					p										
Bleeding	Instruments for bleeding					n	n								d	p
	Incising arteries			s	s	s	p									
	Time between stunning and bleeding	n		n	n	n										
	Time between bleeding and further processing			n	n	n	n									n
Killing of surplus chicks and embryos in hatchery waste	Permitted methods for killing chicks			d												
Competence of slaughtermen	Education	s		s		n	n									
	Examination			n												
Kosher / halal slaughtering	Allowance of Kosher/Halal slaughtering															

Legend

	Important aspekt (Questionnaire. 3rd countries)		Standard does not cover category of species
s	Same as EU general legislation	p	More precise than EU-Bio/Organic
S	Same as EU-Bio/Organic	e	Even stricter than EU-Bio/Organic
p	More precise than EU	n	Topic not regulated by EU-Bio/Organic
d	Stricter than/beyond EU-rule	o	Other approach to same topic
n	Topic not regulated by EU	*	Important aspect for EconWelfare experts

Where exactly is the difference?

The table 6.5.2 illustrates the main differences between the EU animal welfare legislation and private non-organic and organic standards regarding slaughter.

Tab. 6.5.2 Aspects and differences in different private European standards for slaughter

Chapter	Aspect	EU-legislation	Main differences
Unloading to slaughter	Time after arrival	Animals must be unloaded as soon as possible after arrival. Exception: If delay is unavoidable they must be protected from extremes of weather and provided with adequate ventilation.	RSPCAp: Pigs must be unloaded immediately.
	Duration	If they are not slaughtered immediately on arrival they must be lairaged.	RSPCA Broilers: Slaughter within 4h. NU: 2h of rest before slaughter.
	Inclination of ramps and passageways	(DE legislation more precise).	
Lairage accom- modation	Start of lairage	Animals which are kept for 12 hours or more at a slaughterhouse must be lairaged and, where appropriate, tethered, in such a way that they can lie down without difficulty. Slaughterhouses must be equipped with a sufficient number of pens for adequate lairaging of the animals with protection from the effects of adverse weather. In addition to complying with requirements already laid down in Community rules, lairages must have:— where necessary, equipment for tethering animals, — where necessary, adequate supplies of a suitable bedding material for all animals kept in the lairage overnight.	RSPCAbro: Chickens must be placed immediately in environmentally controlled lairage.** <i>SA: Lairage after 6 hours (bedding, water). After 12 hours feeding. KRAV: Poultry slaughtered immediately.</i>
	Space requirements in lairage		RSPCAp: Adequate size. RSPCA d&b: Same as husbandry requirements. <i>KRAV has detailed space requirements</i>
	Lying area		RSPCAp: dry lying area.
Lairage accom- modation	Floors	Lairages must have: — floors which minimize the risk of slipping and which do not cause injury to animals in contact with them.	RSPCAIh: Floors not uneven. RSPCAp,d&b: Drainage facilities for urine and faeces. <i>SA: Details for floors during waiting.**</i>
	Feeding	Animals which have not been slaughtered within 12 hours of their arrival must be fed, and must subsequently be given moderate amounts of food at appropriate intervals. Where animals are not tethered, food must be provided in a way which will permit the animals to feed undisturbed.	RSPCAp: Fasting not exceed 18h.

Chapter	Aspect	EU-legislation	Main differences
Lairage accommodation	Cleaning of lairage		RSPCAp,d&b: Lairage must be able to be cleaned thoroughly
	Cooling down		SA: <i>Record temperature when water sprays used.</i>
	Milking interval	(more detailed in DE legislation)	
	Ventilation	Lairages must have: — adequate ventilation, taking into account the extremes of temperature and humidity which may be expected. Where mechanical means of ventilation are required, provision must be made for emergency back-up facilities in the event of breakdown,	RSPCAp: Draught-free ventilation.**
Lairage environment	Lighting	Lairages must have: — artificial lighting at a level sufficient to permit inspection of all animals at any time; if necessary, adequate back-up lighting must be available.	RSPCAc: Reduced or blue lighting.** RSPCAp, d&b: No bright artificial light or direct sunlight, short inspection with 220lux.
	Sound level		
Grouping	Group mixing	Animals which might injure each other on account of their species, sex, age or origin must be kept and lairaged apart from each other.	RSPCAp,d&b: On-farm groups maintained.
	Isolation pens		RSPCAp: Isolation pens for sick or injured animals.
Climatic conditions	Cooling down	Animals must be protected from adverse weather conditions. If they have been subjected to high temperatures in humid weather they must be cooled by appropriate means.	NU: Shower for pigs**
Treatment	Tethering		KRAV: <i>Only animals used to tethering shall be tethered.</i>
	Moving animals	Animals must be moved with care. Passageways must be so constructed as to minimize the risk of injury to animals, and so arranged as to exploit their gregarious tendencies. Instruments intended for guiding animals must be used solely for that purpose, and only for short periods. When necessary, they must be led individually.	RSPCAp,d&b: Details about race design and construction (non-slip flooring).**

Chapter	Aspect	EU-legislation	Main differences
Treatment	Electric shocks	Instruments which administer electric shocks may be used only for adult bovine animals and pigs which refuse to move, provided that the shocks last no more than two seconds, are adequately spaced out and that the animals have room ahead of them in which to move. Such shocks may be applied only to the muscles of the hindquarters.	NU, RSPCAp,d&b: Not permitted.
Restraining	Obligation	Animals must be restrained in an appropriate manner in such a way as to spare them any avoidable pain, suffering, agitation, injury or contusions.	SA, KRAV: <i>Restraining only immediately before stunning.</i> **
	Floor dropping		RSPCA d&b: Cattle must be fully in the stunning pen before the floor is dropped.
Methods allowed for stunning and killing	Allowed stunning (and killing) methods	Allowed stunning methods: 1. Captive bolt pistol 2. Concussion 3. Electronarcosis 4. Exposure to carbon dioxide. Stunning must not be carried out unless it is possible to bleed the animals immediately afterwards. Allowed killing methods: 1. Free bullet pistol or rifle 2. Electrocution 3. Exposure to carbon dioxide.	ER, RSPCA all categories: more detailed**
Stunning and killing	Checking		RSPCAp: 10 animals every 2h. SA: <i>Precise definition about stunning.</i> **
	Electronarcosis, current intensity	1. Electrodes must be so placed that they span the brain, enabling the current to pass through it. Appropriate measures must also be taken to ensure that there is good electrical contact, in particular by removing excess wool or wetting skin. 2. Where animals are stunned individually, the apparatus must: (a) incorporate a device which measures the impedance of the load and prevents operation of the apparatus if the minimum required current cannot be passed; (b) incorporate an audible or visible device indicating the length of time of its application to an animal; (c) be connected to a device indicating the voltage and the current under load, positioned so as to be clearly visible to the operator.	NU: 250V for electronarcosis in pigs. RSPCA d&b: Details for electronarcosis of calves. ** SA: <i>Some technical requirements on electronarcosis through electrodes.</i> **

Chapter	Aspect	EU-legislation	Main differences
	Specific requirements for electronarcosis through waterbath stunners	Detailed requirement in EU legislation.	SA: <i>Precise requirements for waterbath stunner.</i> **
	Gas stunning equipment for pigs		RSPCAp: Details for stunning equipment. **
	CO2 gas concentration for pigs	(more detailed in DE legislation)	SA: <i>Live animals should not see the stunning process.</i> KRAV: <i>Cattle same, but pigs can be stunned in flock.</i>
	Gas concentration for poultry	(detailed in DE legislation)	
	Specific requirements for heat-to-back electrical killing of pigs		RSPCAp: Must be attained within 3sec**
Bleeding	Instruments for bleeding	1. For animals which have been stunned, bleeding must be started as soon as possible after stunning and be carried out in such a way as to bring about rapid, profuse and complete bleeding. In any event, the bleeding must be carried out before the animal regains consciousness. 3. Where one person is responsible for the stunning, shackling, hoisting and bleeding of animals, that person must carry out those operations consecutively on one animal before carrying them out on another animal.	RSPCAp: sharp knife 12cm long must be used + thoracic bleeding stick.
	Incising arteries	2. All animals which have been stunned must be bled by incising at least one of the carotid arteries or the vessels from which they arise. After incision of the blood vessels, no further dressing procedures or any electrical stimulation may be performed on the animals before the bleeding has ended.	RSPCA: Both carotid arteries severed. For cattle 2 knives must be used. **
	Time between stunning and bleeding	(more detailed in DE legislation)	RSPCAc: 10sec for broilers. NU: 20sec for pigs. SA: <i>60 sec for pigs and cattle, poultry 10 sec.</i> KRAV: <i>immediately.</i>

Chapter	Aspect	EU-legislation	Main differences
	Time between bleeding and further processing	(more detailed in DE legislation)	RSPCAc: 90sec for chickens. RSPCAp: 20sec for Pigs. RSPCA d &b: 30sec. SA: <i>Nothing for 20sec, cattle 30 sec after bleeding.</i>
Killing of surplus chicks and embryos in hatchery waste	Permitted methods for killing chicks	1. Use of a mechanical apparatus causing rapid death. 2. Exposure to carbon dioxide. 3. However, the competent authority may permit the use of other scientifically recognized killing methods provided that they comply with the general provisions of Article 3.	RSPCAbro: No exposure to 100% CO2
Competence of slaughtermen	Education	No person shall engage in the movement, lairaging, restraint, stunning, slaughter or killing of animals unless he has the knowledge and skill necessary to perform the tasks humanely and efficiently, in accordance with the requirements of this Directive. The competent authority shall ensure that persons employed for slaughtering possess the necessary skill, ability and professional knowledge.	RSPCA: Animal Welfare Officer implements AW policy in slaughter house.
	Examination		RSPCAbro: Recorded per flock hock burn, foot pad burn, breast blisters, back scratches and dirty feathers.
Kosher / halal slaughtering	Allowance of Kosher/Halal slaughtering	(more detailed in SE legislation)	

* In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).).** more precise (better interpretation/implementation)

7 Detailed comparison of EU animal welfare legislation with national legislation and standards in EU third countries

The aim of this Chapter 7 is to make a detailed comparison of the EU animal welfare standards with the current state in 2008/2009 of national animal welfare legislation in Non-EU third countries. The starting point for this analysis was work done by the EU Commission, in particular the Study on Animal Welfare Legislation on farmed animals in Third Countries and the implications for the EU reported in COM(2002)626).

Welfare legislation was analysed from seven Non-EU third countries, which are important livestock trading partners of the EU (AR, AU, BR, CN, CA, NZ, US) as well as from one additional third country that has relative strict animal welfare legislation (CH).

As already outlined in Chapter 2 on the methodology a questionnaire has been worked out and was sent to experts in these countries. The experts have been recommended either by the EU Commission or by partners in the project, who have already established contacts with experienced and knowledgeable experts in these countries. In each country at least three experts were approached. With some experts telephone interviews were conducted. At the end of a relative intensive search and dialogue with these informants, in 6 countries one expert or expert group from one institution and in two countries (CH, US) two experts from a private and governmental institution has filled in the questionnaire. In addition other experts dealing with organic farming in these countries have provided additional information.

As a reference also experts from DG SANCO of the European Commission have filled in the same questionnaire in order to have a benchmark/reference for comparison.

The list of the experts is in the Annex. Their strong support and their detailed information are appreciated very much. Without their strong engagement such a detailed overview would not be possible.

This information from the questionnaire is summarised in this Chapter 7, following the 5 sections of the questionnaire:

Question 1: Farm animal welfare legislation

Question 2: Key aspects of legal animal welfare standards

Question 3: Development of animal welfare legislation

Question 4: Further description of animal welfare legislation

Question 5: General questions

The main focus was on selected aspects for cattle, pigs, poultry, transport and slaughter, which came out from the analysis of EU legislation and national governmental regulations in EU countries.

A verification of the information was made regarding the most crucial issues based on the materials and links provided by the experts of the third countries.

In a few cases diverging views and opinions of experts are reported (e.g. for the US).

As in the Chapter 5 relating to the comparison of national legislations in the EU this chapter focuses on the main aspects where national legislation for farm animal husbandry in third countries is different from EU requirements. The reader can presume that where no differences are mentioned, national standards are the same or at least comparable as set by EU legislation, which is taken as a reference.

National legislation can go beyond or below EU legislation in several ways:

- Requirements of national legislation are stronger than EU law.
- Requirements of national legislation are more precisely defined than EU law.
- National legislation covers a topic which is not covered by EU law.

The differences will be analysed in a systematic way in general and then for the main animal groups and areas (cattle, pig, poultry, transport, slaughter) on the current practice in Switzerland (CH) as well as the non-European countries in the alphabetical order: Argentina (AR), Brazil (BR), Canada (CA), China (CN), New Zealand (NZ), United States (US).

In Chapter 8 a synthesis will be made also relating these differences to the most important animal welfare issues as defined by the experts in the EconWelfare project.

7.1 General aspects of farm animal welfare legislation

7.1.1 How is farm animal welfare regulated?

a) How is farm animal welfare regulated predominantly in third countries?

In this chapter it is reported how in the investigated countries animal welfare is regulated predominantly considering animal husbandry, transport or slaughter for cattle, pigs and chicken. Furthermore it was of interest to know on which level and with which policy instruments animal welfare is regulated and/or promoted: through international rules, national legislation, on sub-national (state) or regional legislation, through national legislation for organic production, codes of practice/conduct (voluntary), animal welfare requirements linked to direct payment systems and/or private animal welfare initiatives with their own standards.

European Union

A detailed description of the legal framework is found in Chapter 5.

Switzerland

National legislation:

Animal welfare is predominantly regulated through legislation both for non-organic and organic production.

Governmental direct payment system for animal-friendly husbandry systems

Since 1994 also direct payments for two animal-friendly programmes (regular outdoor access and animal-friendly indoor housing) on voluntary basis have been introduced through the Swiss government.

Private AW initiatives:

Several animal welfare initiatives exist since long time.

Argentina

National legislation:

Animal welfare is predominantly regulated through legislation both for non-organic and organic production.

Private AW initiatives: several animal welfare initiatives do exist, mainly linked to organic farming.

Australia

International rules and national legislation:

Australia is a Federation of eight States and Territories. Under Australia's Constitution, the Commonwealth's powers are limited³. Animal welfare requirements for people in Australia are specified in legislation that is controlled by the State and Territory governments.

The Commonwealth government has been involved in a process of working with the States and Territories in order to improve national processes and requirements so that equivalent animal welfare outcomes are delivered throughout the nation. Since the late 1980's a series of national Model Codes of Practice have been developed and kept up to date by an inclusive process that involves animal welfare groups, livestock industries and regulators. They provide detailed advice on how to deliver sound animal welfare outcomes and are signed off at the national level by Ministers from all the states and territories as well as the Commonwealth during meetings of the Primary Industries Ministerial Council (PIMC)⁴. The advice in those Model Codes is then applied under the animal welfare laws of the States and Territories. In addition, some national industry bodies have detailed quality management programs for their members that apply the advice in the national Model Codes.⁵

More recently PIMC has agreed that directly enforceable national standards for animal welfare should be developed and implemented harmoniously in every jurisdiction. An inclusive development process has been established⁶ and it has been agreed that these documents will include guidelines for better practice, to be applied through industry quality management programs. The new series of documents will be termed the *Australian Standards and Guidelines for the Welfare of Animals*. In addition, the PIMC agreed that the states and territories would implement a nationally consistent legislative framework, focused on delivery of a duty of care to animals, through which the new national animal welfare standards and guidelines will be given direct legislative effect⁷.

Australia's requirements covering animal welfare are consistent with international guidance provided by the World Organisation for Animal Health, the OIE. Where animals are involved in Commonwealth-controlled processes or on Commonwealth owned lands within Australia, the animal welfare laws of the jurisdiction within which the processes or lands occur still apply. Sound animal welfare outcomes are delivered under the processes and structures required by Commonwealth legislation where it has authority for live export of animals and export of meat and meat products.

One important difference is that export legislation requires that a number of matters be taken into account before issuing an export certificate. This has allowed for the application of guidelines and/or standards additional to the *Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption*, AS 4696, as well as importing country requirements. These are applied under officially approved arrangements that describe the operational requirements for exporting abattoirs under direct supervision by the national Competent Authority, the Australian Quarantine and Inspection Service, AQIS.

Commonwealth Legislation, not animal welfare legislation per se, is listed below. While this does not accurately portray the regulation of farm animal welfare in Australia, more details are found in the reference list in the Annex as are the animal welfare laws of Australia's

³ The *Commonwealth of Australia Constitution Act* 1900 (UK) specifies 39 areas that were voluntarily given up by the existing states at that time and over which the Government of Australia (the Federal Parliament) was given legislative power. Those 'heads of power' are enumerated in S 51 and 52 of the Constitution Act, at: <http://www.comlaw.gov.au/ComLaw/Legislation/ActCompilation1.nsf/0/CB49A63C9DF867ACCA256F71004F2624?OpenDocument>

⁴ To facilitate national approaches to various matters, all Australia's governments meet together under a framework called the Council of Australian Governments, or CoAG, to consider matters of common and national interest. Under CoAG the Primary Industries Ministerial Council (Ministers of Agriculture from the Commonwealth and each state and territory) determine common approaches to animal welfare matters.

⁵ This structure is well described at: <http://www.daff.gov.au/animal-plant-health/welfare/aaws/online/framework>

⁶ The Standards and Guidelines Development Plan is freely available online from Animal Health Australia at [http://www.animalhealthaustralia.com.au/programs/livestock-welfare/livestock-welfare_home\\$.cfm](http://www.animalhealthaustralia.com.au/programs/livestock-welfare/livestock-welfare_home$.cfm)

⁷ The communiqué from PIMC 15 is available from http://www.mincos.gov.au/media_releases

states and territories and links to the national Model Codes and the first of the new series of national Standards and Guidelines documents, the *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock*.

a) *Export Control Act*.⁸

b) *Australian Meat and Livestock Industry Act 1997*.⁹

c) Meat exports – special legal document.¹⁰

Regional/local legislation:

Animal welfare legislation resides with the Australian States and Territories as described under 7.1.1 a). Details of animal welfare legislation in the states and territories of Australia are in the reference list in chapter 7.6. In 2009/2010 some of these Acts are being revised and their availability and currency via those links should be checked.

Codes of practice:

The existing system of national Model Codes for Animal Welfare applied through the laws of Australia's states and territories has provided a sound platform for the development of reasonably consistent, appropriate and effective requirements for animal welfare in relation to animals that are farmed across Australia. Those Codes provide the actual requirements expected of farmers and animal handlers in the different states and territories and were developed at the national level with input from industry groups, government regulators and community-based animal welfare groups, as mentioned by Australia under Table 7.3.3 of section 7.3 d).

The requirements of the Model Codes have also been applied through national industry quality management systems and quality assurance (QA) programs. For example, Australia's pig industry has developed APIQ™, an on farm quality assurance system based on managing farm risks by following Good Agricultural Practices (GAP) and applying the principles of Hazard Analysis and managing Critical Control Points (HACCP). Under APIQ™ a producer's Piggery Management Manual includes a "Model Code Compliance Plan" which outlines the certified producers plans and actions to comply with the revised *Model Code of Practice for the Welfare of Animals – Pigs* (2007). Also the Australian Egg Corporation Limited (AECL) has established Egg Corp Assured (ECA), a national egg quality assurance program that is designed to help commercial egg producers develop an approved quality assurance program for their business involving independent third party audits. The associated registered trademark is promoted to consumers by the AECL.

Recent National changes - Standards and Guidelines:

The national Model Codes were developed in each case by a national writing group, convened for the purpose by one or other of Australia's state governments. They were endorsed at PIMC for adoption and apply through state and territory animal welfare laws and subsidiary legislation. There is a degree of inconsistency in how they are applied under the laws of the states and territories, which has in large part led to the current dual processes of:

- (1) harmonizing the state and territory laws to focus more on a requirement that people deliver a 'duty of care' to animals in their care rather than on punishing cruelty, and
- (2) work to develop a set of clear and directly enforceable 'standards' for livestock welfare that are also accompanied by guidelines for industry better practice. These will be included in a new series of publications, the *Australian Standards and Guidelines for the Welfare of Animals*.

It should be noted that in general those standards that are to be enforced will be given direct legislative force under the animal welfare legislation in every state and territory. The difference between national application of these standards, as opposed to the previous requirements in the national Model Codes, is analogous to the Commission's distinction between EC Regulations and Directives.

The first in this new series of documents, the *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock*, was endorsed by Ministers with responsibility for subsequent implementation at PIMC 15 in May 2009¹¹. Preparation of

⁸ See: <http://www.comlaw.gov.au/comlaw/management.nsf/lookupindexpagesbyid/IP200506289?OpenDocument>

⁹ See: <http://www.comlaw.gov.au/comlaw/management.nsf/lookupindexpagesbyid/IP200400871?OpenDocument>

¹⁰ See: <http://www.comlaw.gov.au/comlaw/management.nsf/lookupindexpagesbyid/IP200506347?OpenDocument>

¹¹ The communiqué from PIMC 15 is available from http://www.mincos.gov.au/media_releases

similar documents covering Sheep and Cattle is underway. Further information on this and the Model Codes see link below.¹²

Brazil

National legislation:

Animal welfare is regulated through legislation both for non-organic and organic production, according to the second expert predominantly through organic production. The general legislation predominantly regulates transport and slaughter.

Private AW initiatives:

Several animal welfare initiatives do exist, mainly linked to organic farming.

Canada

Codes of practice:

In 1980, the Canadian Federation of Humane Societies (CFHS) identified the need for on-farm standards of care for farm animals (there was at that time standards for slaughter and transport but not on-farm care.) The CFHS's desire was for legislation; however, it agreed to a compromise involving the development of voluntary codes. In part, this compromise was reached because it was believed that codes could be revised more quickly, more often and in a more cost effective way versus legislation. The intent was for each code to be revised based on scientific knowledge; however, the codes went largely without revision for years. The federal government funded the development of the codes and the work was coordinated by CFHS working with producers, vets, scientists and government during the 1980s.

In 1993, the federal government (Ministry of Agriculture) asked the Canadian Agri-Food Research Council (CARC) to lead the code development process in conjunction with CFHS. The government suspended funding to this process in 2002 and instead funded a consultative process involving stakeholders to discuss animal welfare, and this led to the formation of the National Farm Animal Care Council (NFACC) of which CFHS was a founding member. NFACC was to determine the new codes process. The codes remain voluntary, and while SPCAs in Canada can use them in cruelty investigations (to argue what is reasonable, generally accepted practices), the codes are criticized for setting too low a standard, for lacking in a scientific basis and for their lack of enforcement and adherence. For a description of the new code process there is a special internet link (see below) with the name 'New code of practice development process 2009'.¹³

In 2009 only the dairy code has been revised under this process with other code revisions forthcoming and under this new process. The new dairy code represents a substantial improvement over the original; however, it is yet to be determined in 2010 whether it will be enforced. Please note that the revised dairy code does not indicate 'Recommended' in its title (as others do) – but this does not mean that it has been made mandatory.

Private AW initiatives:

The BC SPCA has developed a farm certification and food labelling program called "SPCA Certified" dedicated to improving farm animal welfare. This program sets a higher standard than the codes (e.g. no battery cages, no gestation stalls, etc.). Participating farms are inspected annually by third-party inspectors, and random audits are also conducted. All documents from the inspection process are sent to an independent Review Panel (comprises welfare researchers, vets, agronomists), which determines whether to grant certification, and will provide farmers with recommendations. Standards are science-based and reviewed by producers, veterinarians, researchers all with expertise in each species.

Until end of 2009 standards have been developed for pigs, sheep, laying hens, meat chickens, beef cattle and dairy cattle. Sheep and turkey standards are in development.

¹² http://www.daff.gov.au/animal-plant-health/welfare/model_code_of_practice_for_the_welfare_of_animals

¹³ <http://www.nfacc.ca/Projects/Detail.aspx?id=5>

Furthermore several animal welfare initiatives do exist, mainly linked to organic farming with standards and third party certification. The Organic Agriculture Centre of Canada has published several leaflets and detailed guidance documents on “Farm Animal Welfare in Organic Livestock Production” for dairy, beef, swine and poultry as well as slaughter, which are supporting the implementation of the governmental rules for organic agriculture.¹⁴

China

The legal framework is given by the “Animal Husbandry Law of the People's Republic of China” promulgated in December 2005, which went into effect in July 1, 2006. The focus of this law is more on animal's health and veterinary aspects. For slaughtering of pigs, a designated slaughter act is applicable since 2008.

Private AW initiatives:

Several private initiatives for animal welfare, also with organic farming, have started.

New Zealand

National legislation:

The welfare of animals in New Zealand is primarily legislated according to The Animal Welfare Act, 1999. This Act was developed to replace the former legislation, the Animals Protection Act, 1960. It was appropriate that the law be reviewed in 1999 to reflect changing practice, advances in scientific knowledge and shifts in societal values since 1960. The Animal Welfare Act includes most animals capable of feeling pain and applies to all such animals whether domesticated or in a wild state. It excludes animals such as shellfish and insects as there is insufficient evidence that these are capable of feeling pain; but it does however cover octopus, squid, crab, lobster and crayfish.

The Act also requires that anyone wishing to perform research on a non-human hominid must only do so after obtaining approval from the Director General, and in accordance with conditions set by the Director-General. Organisations using animals in research, testing or teaching must follow a government-approved code of ethical conduct. Every project performed for the purposes of research, testing or teaching in New Zealand must be firstly approved, and then monitored, by an animal ethics committee (AEC) prior to commencement of the project. Code holders and their animal ethics committees are independently reviewed at least once every five years. In addition, all code holders have to submit annual animal use statistics on the number of animals used in research, testing or teaching, and the impact of the procedure on animal welfare, from little or none to severe. These statistics are published annually.

The full Animal Welfare Act¹⁵ and a guide to the Animal Welfare act can be accessed at governmental website (see below).¹⁶

Codes of practice:

Codes of Welfare are an integral part of the framework and philosophy of the Animal Welfare Act. The purpose and function of these codes and the process involved in their development is outlined in Section 7 of the Animal Welfare Act, 1999. Codes of Welfare are used to promote appropriate behaviour, establish minimum standards and promote best practice in relation to animals owned or in a person's charge. Codes of Welfare may be drafted by any person or organisation. They are issued by the Minister of Agriculture, following a public consultation process and advice from the National Animal Welfare Advisory Committee (NAWAC).

¹⁴ http://www.organicagcentre.ca/AnimalWelfare/aw_welcome.asp

¹⁵ link see:

http://www.legislation.govt.nz/act/public/1999/0142/latest/DLM49664.html?search=ts_act_animal+welfare_resel&sr=1

¹⁶ <http://www.biosecurity.govt.nz/legislation/animal-welfare-act/guide/index.htm>

As required under the Animal Welfare Act, Section 73 (2), all minimum standards contained within the Codes of Welfare must be supported by scientific knowledge. To assist with this, the ministry (MAF) has a close working relationship with experts both within New Zealand and internationally. The Animal Welfare Act also states the requirement to take into account the availability of technology and to consider good practice when developing standards.

The formal process for the development of codes of welfare is summarised in the National Animal Welfare Advisory Committee annual report (section 3.1): link see below.¹⁷ . Also see the attached Guidelines for Writing Codes of Welfare: link see below.¹⁸

Prior to the development of Codes of Welfare, Codes of Recommendations and Minimum Standards were used to regulate animal welfare in New Zealand. However, as these Codes of Recommendations and Minimum Standards were made prior to the 1999 Act, they have no legal effect but they are still used for guidance on best practice. They are gradually being replaced with the codes of welfare made under the Animal Welfare Act according to a Codes of Welfare development plan.

Private AW initiatives:

New Zealand livestock industries have taken a pro-active approach to consumer requirements by incorporating Codes of Welfare into their quality assurance programmes. Science-based, auditable measures are practiced by producers and promoted to consumers as part of the industries' marketing programmes. For further information see 'Animal Welfare in New Zealand': link see below¹⁹

An example of a private animal welfare initiative with its own standards in New Zealand is the quality assurance scheme that exists for the transport of deer: link see below²⁰. This program sets the minimum standards that a transport operator must satisfy to achieve accreditation under the programme. The road transport forum of New Zealand (link see below²¹) also supports driver training for transportation of livestock by road: link see below.²² Furthermore several standards schemes related to organic farming exist.

USA

Farm animal welfare has been a growing issue in the United States since the 1990s but the federal government remained long time relatively inactive on the issue. Legislation at the federal level is limited to the Humane Slaughter Act and the Twenty-Eight Hour law on transport. Although there have been many attempts at passing legislation at the state level, progress has been slow. Initiatives to improve farm animal welfare standards have been taken up mainly by food retailers and industry organizations.

There are several state regulations for animal welfare (according to the USDA), but very few for farmed animals (according to the US Animal Welfare Institute), which are very variable.

There is also a governmental organic farming program that includes general animal welfare requirements, the National Organic Programme (NOP).

Codes of practice and private AW initiatives:

Industry-driven, animal protection organization-driven, and retailer guidelines all exist; some (not all) are based on the work of third-party (independent) scientific committees and have third-party audits. The USDA Slaughter Horse Transport Program (SHTP) is a performance driven program. There is increasing private programs including now from retailers (Wal Mart, Whole Foods) and fast food companies (McDonalds, Wendy's). All are customer driven. The National Organic Programme (NOP) allows for private standards that go beyond NOP (they are voluntary not mandatory); so there are biodynamic and other programs which NOP certifiers offer and clients can choose.

¹⁷ <http://www.biosecurity.govt.nz/files/regs/animal-welfare/pubs/nawac/nawac-ar-07.pdf>

¹⁸ <http://www.biosecurity.govt.nz/files/regs/animal-welfare/pubs/nawac/naw>

¹⁹ <http://www.biosecurity.govt.nz/files/regs/animal-welfare/pubs>

²⁰ www.deernz.co.nz

²¹ <http://www.rtfnz.co.nz>

²² <http://www.nzqa.govt.nz/nqfdocs/units/doc/21472.doc>

b) Is there a national “umbrella” animal welfare or animal protection act²³?

European Union

Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes gives the frame for all the additional directives. More details are found in chapter 5. Additionally Member States may have Animal Protection Acts.

Legislation for organic production and livestock

The most important regulations are: Commission Regulation (EC) No 889/2008 of September 2008, laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control.

Switzerland

The most relevant national legislation is the „Swiss Animal Protection Law” (Tierschutzgesetz): link see below²⁴

Legislation for organic production and livestock

In 1997 the Swiss regulation for organic agriculture has been introduced. Since then several adaptations to the EU Regulations for organic production have been made.²⁵ Switzerland is on the EU third country list for organic products.

Argentina

The main legal framework is the legislation for animal protection (in Spanish): Ley 14.346/84 de protección contra el maltrato y actos crueles en todas las especies. Sancionada el 27/09/1954: link see below²⁶

Legislation for organic production and livestock

Organic production is regulated already since 1993 with regulation 1286/93 and later through the Decree 206/2001²⁷. The governmental rules of Argentina and several private certification standards (e.g. Argencert as pioneer standard and world-wide recognized national certification program, which is more detailed as the governmental rules²⁸) are recognised by the European Union (listed on third country list in EC Regulation for imports of organic products No 1235/2008).

Australia

As has been already described in 7.1.1 a) there is no national umbrella legislation for animal welfare in Australia. The national Model Codes that exist at present are applied under the animal welfare laws of Australia's eight states and territories. It has recently been agreed that those laws will be harmonized to facilitate the delivery of consistent animal welfare outcomes through the direct implementation of national standards for livestock welfare in documents called the *Australian Standards and Guidelines for the Welfare of Animals* that are being developed to replace the existing Codes. The first of these, the *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock*, has already been approved.

National governmental standards for organic production and livestock

Australia regulates the marketing of products that are specified as ‘organic’ in origin through the general provisions of the *Trade Practices Act 1974* (Cth). This law requires that label claims on products are not false or likely to mislead consumers. To meet this requirement businesses can underpin their organic labelling claims by having their products certified by

²³ i.e. an act covering all animals – including pets and those kept for scientific purposes - but usually not including specific provisions on methods of farming animals, e.g. stocking densities

²⁴ <http://www.admin.ch/ch/d/sr/c455.html>

²⁵ http://www.admin.ch/ch/d/sr/c910_18.html

²⁶ <http://www1.hcdn.gov.ar/proyxml/expediente.asp?fundamentos=si&numexp=4314-D-2007>

²⁷ <http://www.senasa.gov.ar/contenido.php?to=n&in=1142&io=5960>

²⁸ http://www.argencert.com.ar/contenido/eng/soluciones/cert_organica.php

one of a number of private certifiers, which have their own specified definitions of 'organic' that must be met for the label claim to be acceptable under Australian law.

The *Australian Standard for Organic and Biodynamic Products* was published by Standards Australia in October 2009²⁹. It is accompanied by the miscellaneous Publication 100-2009 - *Procedures for certification of organic and biodynamic products*. It provides a broadly agreed common industry standard for substantiation of claims that products are 'organic' or 'biodynamic'. A further update of this voluntary Australian standard commenced in 2009 and it is intended to review and revise the livestock stocking section.

That Australian Standard is based on the *National Standard for Organic and Bio-dynamic Produce*, Edition 3.3, which covers export of such products. The Australian competent authority overseeing this export standard is the Australian Quarantine and Inspection Service (AQIS). Under the *Export Control Act 1982* and subsidiary legislation, organic and biodynamic products for export must be certified as complying with the requirements of the *National Standard for Organic and Bio-dynamic Produce* (the export standard) by a body approved by the Australian Quarantine and Inspection Service (AQIS). Exports are also subject to any specified requirements set by the importing country.

The export standard and, typically, domestic standards contain provisions about the treatment of animals. While those provisions may have an effect on animal welfare outcomes, they were not designed for that purpose.

Brazil

The basic legislation in Brazil is a very old law, the "Animals protection law" (documents are in Portuguese): Decree 24,645 from July 10th 1934: links see below^{30 31 32}. No detailed information was given about an updating process.

Legislation for organic production and livestock

This is based on Law 20.831 de 23/ December/ 2003 and the decreto 6.323 of 27/December/2007 as well as the instruction to the norms: Instrução Normativa 64 de 18/diciembre/2008.³³

Canada

Canada does not have a national act dedicated to protecting animals but sections of the (national) Criminal Code do pertain to animals see sections 444-447: link see below³⁴. Most provinces then have provincial legislation under a Prevention of Cruelty to Animals Act. For British Columbia (BC): link see below³⁵,

Canada has national laws pertaining to the transport of farm animals listed under the Health of Animals Regulations see section XII: link see below³⁶ As well as national laws pertaining to ante mortem and slaughter practices listed under the Meat Inspection Regulations, Part III section 61 to 80: link see below³⁷

Further information provided by the Canadian Food Inspection Agency (CFIA) regarding animal welfare legislation, at the national and provincial level can be found here: link see below³⁸

Legislation for organic production and livestock

²⁹[1] Further information about the application of this Standard is available on the website of the Australian Competition and Consumer Association, the ACCC, at

<http://www.accc.gov.au/content/index.phtml/itemId/907148?pageDefinitionItemId=86167>

³⁰ <http://www6.senado.gov.br/sicon/ExecutaPesquisaBasica.action>

³¹ http://www.agricultura.gov.br/pls/portal/docs/PAGE/MAPA/LEGISLACAO/PUBLICACOES_DOU/PUBLICACOE_S_DOU_2008/PUBLICACOES_DOU_NOVEMBRO_2008/DO1_2008_11_07-MAPA_0.PDF

³² <http://www6.senado.gov.br/legislacao/ListaPublicacoes.action?id=39567>

³³ <http://www.prefiraorganicos.com.br/agrorganica/legislacaonacional>

³⁴ <http://www.efc.ca/pages/law/cc/cc.html>

³⁵ <http://www.bclaws.ca/Recon/document/freeside/--%20P%20-->

[/Prevention%20of%20Cruelty%20to%20Animals%20Act%20%20RSBC%201996%20%20c.%20372/00_96372_01.xml](http://www.bclaws.ca/Recon/document/freeside/--%20P%20--/Prevention%20of%20Cruelty%20to%20Animals%20Act%20%20RSBC%201996%20%20c.%20372/00_96372_01.xml)

³⁶ <http://laws.justice.gc.ca/en/showtdm/cr/C.R.C.-c.296//?showtoc=&instrumentnumber=C.R.C.-c.296>

³⁷ http://laws.justice.gc.ca/en/showdoc/cr/SOR-90-288/bo-ga:l_III/20090805/en#anchorbo-ga:l_III

³⁸ <http://www.inspection.gc.ca/english/anima/trans/infrae.shtml>

In 2009 the new Organic Production Systems Standards of Canada have been finalised. They are both for the internal market and the website. In 2010 a revision of the pig and poultry section has started. The Quebec governmental standards for organic agriculture from 2010 generally include more details on livestock and animal welfare than the Canadian Standards.³⁹ They include also details for the different animal groups as well as for transport and slaughter.

China

The main national legislation is the “Animal Husbandry Law of the People's Republic of China” of December 2005: link see below⁴⁰.

Legislation for organic production and livestock

For organic production a national standards for organic products (2005 GB/T 19630.1-2005) has been introduced and enforced in April 2005.⁴¹

New Zealand

The welfare of animals in New Zealand is legislated according to The Animal Welfare Act, 1999. More details see sub-chapter before.

Legislation for organic production and livestock

New Zealand does not have legislation for organic production. However there is an Official Organic Assurance Programme (OOAP) which provides government to government assurances of organic production from New Zealand to the markets covered by this programme.⁴² The Technical Rules provide the technical requirements that must be met by organic operators participating in the OOAP.⁴³ They do not apply to products for other export markets or to products sold on the domestic NZ market. The requirements of the OOAP are additional to legislated requirements, so in terms of animal welfare, organic farmers would need to meet the relevant animal welfare laws plus the organic requirements. Under this programme the authorities (NZFSA) have recognised two organic certification agencies to verify that the relevant standards are met. These two agencies also have their own standards.⁴⁴

New Zealand is listed on third country list in EC Regulation for imports of organic products No 1235/2008.

USA

There is national legislation for animal welfare; however, farm animals are not covered by the U.S. Animal Welfare Act, with the exception of farm animals used for research purposes.

The Animal Welfare Act covers research animals, dogs supplied for the commercial pet trade (by wholesalers, excludes retailers) and exhibitors. It applies in the case of livestock only to animals used for non-agricultural (not related to production of food/fiber) research. The USDA Food Safety Inspection Service regulates the humane slaughter of livestock under the Humane Methods of Slaughter Act of 1978. Additionally, in 1991 the American Meat Institute (AMI), which represents more than 90% of the beef, pork, veal and lamb industry and more than 75% of the turkey industry in the U.S., established its Recommended Animal Handling Guidelines (according to the US Animal Welfare Institute, the AMI-Guidelines are more detailed but do not exceed federal regulations on slaughter and are in fact in some areas like for cattle stunning accuracy lower). The U.S. also has a Twenty-eight Hour Law for livestock transportation (excluding poultry).

Legislation for organic production and livestock

The US Congress passed the Organic Foods Production Act (OFPA) in 1990, which was amended through public law 109-97 in November 2005. The OFPA required the U.S.

³⁹ <http://www.cartvquebec.com/en/quebec-organic-reference-standards>

⁴⁰ http://www.agri.gov.cn/zcfg/nyfl/t20060119_539110.htm

⁴¹ http://www.unctad.org/trade_env/ITF-organic/meetings/misc/Chinaorganicstandard.pdf

⁴² <http://www.nzfsa.govt.nz/organic/index.htm>

⁴³ <http://www.nzfsa.govt.nz/organic/documents/technical-rules.pdf>

⁴⁴ <http://www.organiccertification.co.nz/> and <http://www.biogro.co.nz/main.php?page=230>

Department of Agriculture (USDA) to develop national standards for organically produced agricultural products to assure consumers that agricultural products marketed as organic meet consistent, uniform standards. The OFPA and the National Organic Program (NOP) regulations require that agricultural products labelled as organic originate from farms or handling operations certified by a State or private entity that has been accredited by USDA. The NOP is a marketing program housed within the USDA Agricultural Marketing Service. The NOP developed national organic standards and established an organic certification program.⁴⁵ Details on the NOP Regulations/standards, which contain also a section on livestock, are found on the USDA Website⁴⁶. Since 2009 the National Organic Standards Boards (NOSB) is working on recommendations and more detailed rules for the “Livestock health care standard” and the “Livestock living conditions” with a specific focus on animal welfare⁴⁷ (including stocking densities and space requirements). Additionally, the “Access to Pasture Final Rule” was published on February 17, 2010, and the NOP anticipates that it will impact parts of the animal welfare recommendation.

c) Do any rules on the farming of animals exist, and, if so, in which form and for what species?

The following table 7.1.1 shows how animal welfare is regulated in the different third countries and for which animal category for non-organic production. In several countries (CH, AR, BR, NZ) there is national legislation in place for all main animal categories.

⁴⁵ <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELDEV3004443>

⁴⁶ <http://www.ams.usda.gov/AMSV1.0/ams.fetchTemplateData.do?template=TemplateF&navID=RegulationsNOPNationalOrganicProgramHome&rightNav1=RegulationsNOPNationalOrganicProgramHome&topNav=&leftNav=&page=NOPResourceCenterRegulations&resultType=&acct=noprulemaking>

⁴⁷ <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5081490>

Tab. 7.1.1 Coverage of governmental non-organic animal welfare legislation related to different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Legal Framework	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP Leg in provinces	Leg	Leg	VCoP
Calves	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR Dairy cattle / bobby calves	VCoP
Dairy cows	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR Dairy cattle	VCoP
Suckling cows	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR Dairy cattle	VCoP
Fattening bulls	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	Leg	VCoP
piglets	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR pigs	VCoP
Weaners and rearing pigs	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR pigs	VCoP
Sows and gilts	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR pigs	VCoP
Boars	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR pigs	VCoP
Chicks	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR layer hens	VCoP
Laying hens	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR	VCoP
Broilers	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoP	VCoP	MCoR broilers	VCoP
Others	Leg	Leg	Leg	nMCoP-Leg	Leg	VCoPs for others	VCoPs for others	MCoR for deer, spp.	VCoPs for others

Leg = Legislation VCoP = Voluntary Code of Practice MCoR = Mandatory Codes of Recommendations,
 nMCoP-Leg = national Model Code of Practice under equivalent State and Territory Legislation in Australia

The following table 7.1.2 shows how animal welfare is regulated into detail in the different third countries and for which animal category for ORGANIC agriculture. All analysed countries have a regulation for organic agriculture with the exception of NZ, which include all animal categories. In some countries like BR, CA and CN some part of the livestock standards are in the process of revision, mainly due to the fact of the new implementing rules in Regulation (EC) 889/2008 of the European Union.

Tab. 7.1.2 Coverage of governmental ORGANIC animal welfare legislation related to different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU**	BR	CA	CN	NZ	USA
Legal Framework	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	NOP-LEG
Calves	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Dairy cows	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Suckling cows	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Fattening bulls	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
piglets	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Weaners and rearing pigs	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Sows and gilts	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Boars	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Chicks	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Laying hens	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
Broilers	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
others	Leg	Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg

Leg = Legislation NOP = National Organic Program

* Official Organic Assurance Programme (OOAP) which provides government to government assurances of organic production from New Zealand to the markets covered by this programme. The OAAP is not covered by legislation.

** Export legislation requires that all exported products claiming to be 'organic' must be certified as complying with the requirements of Australia's *National Standard for Organic and Bio-dynamic Produce* by a body approved by the national competent authority, the Australian Quarantine and Inspection Service (AQIS).

In order to better understand the situation and context in the different third countries involved in the EconWelfare project the main legislative framework and other relevant documents for animal welfare are described below.

European Union

A specific EU Directive on the protection of calves exists, while dairy cows are covered by the general farming Directive 98/58. Furthermore directives exist for: pigs, laying hens, chicken for meat production as well as for transport and slaughter. Details see chapter 5 and chapter 9 References.

Switzerland

National rules for all main animal groups exist both non-organic and organic. Animal Protection Regulation („Tierschutzverordnung“): link see below⁴⁸; Regulation for pet and farm animals (“Verordnung des BVET über die Haltung von Haustieren und Nutztieren”): link see below⁴⁹; Organic Regulation: link see below:⁵⁰

Argentina

The main legislations and decretes are: Ley de Policía Sanitaria N° 3959 y en la Ley n° 17.160 por la que se sustituye el Artículo 10° de la Ley N° 3.959 de Policía Sanitaria Animal (1889-1919) modificada por Decreto Ley N° 2.872/58 y los artículos aplicables de los

⁴⁸ http://www.admin.ch/ch/d/sr/c455_1.html

⁴⁹ http://www.admin.ch/ch/d/sr/c455_110_1.html

⁵⁰ http://www.admin.ch/ch/d/sr/c910_18.html

Decretos N° 5.514 del 29 de junio de 1961, N° 80.297 del 21 de diciembre de 1940, N° 1.778 del 6 de marzo de 1961 y N° 89.048 del 26 de agosto de 1936.
Al mismo tiempo es de aplicación la Ley 14.346 del 27 de setiembre de 1954 de protección de los animals: link see below⁵¹.

Australia

The main livestock species (sheep, beef and dairy cattle, goats, pigs, layer hens and broilers) as well as less economically important species such as deer, camelids, rabbits, emus, ostriches, buffalo and horses have national Model Codes of Practice for the Welfare of Animals⁵². The national Model Codes detail the husbandry and management procedures that are agreed as necessary in order to ensure good animal welfare outcomes wherever and however these species are farmed.

The Model Codes are given authority that extends to all animals farmed in Australia under the animal welfare laws of Australia's states and territories. There can be problems with this, however as the national Model Codes are generally not written in imperative case. Australian courts of law have at times found it difficult to determine whether an offence has been committed where a person hasn't complied with practices defined in the Model Code as a 'should do' rather than a 'must do'. Implementation of the new *Australian Standards for the Welfare of Animals* is intended to address this as they are to be written in imperative case. The revised national *Model Code of Practice for the Welfare of Animals - Pigs* (2007) already includes standards for direct regulation that were written in the imperative case.

In addition, Australia's export and domestic organic standards contain provisions that specify animals must be calmly loaded and transported. They include that during loading, transport and unloading animals are not subjected to pain, dragging and pushing, electric prods (exceptions are however possible) and are not given chemical tranquilizers.

Brazil

Legislation for main animal categories does exist, but on a very general level.

Canada

General legislation for main animal categories exists.

Voluntary Codes of exist for beef, turkey, bison, horses, veal calves, sheep, deer, goats, ranched fox.

For codes: link see below⁵³.

For organic regulations: link see below⁵⁴.

China

There is only a very general legislation but no special rules for different animal groups, with the exception of an Act related to slaughtering of pigs: GB/T 22569-2008 Technical criterion of pig humane slaughtering: link see below⁵⁵.

New Zealand

The Animal Welfare Act requires that owners and persons in charge of animals meet the physical, health and behavioural needs of animals in their care. These needs are defined in terms of the "Five freedoms"; their requirements for food, water, shelter, appropriate handling, protection from injury and disease and the ability to display normal patterns of behaviour. The Codes of Welfare detail these needs for specific species or 'categories of use' of animals. These codes are developed using an outcome-based approach, rather than prescriptive inputs-based approach to enable the Codes to be applied to a large range of animals used for different purposes within the same category (e.g. the Dog Code of Welfare

⁵¹ http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/06-manual_procedimientos_bienestar_animal.pdf

⁵² All are available via <http://www.publish.csiro.au/nid/22/sid/11.htm>

⁵³ <http://nfacc.ca/code.aspx> (cattle)

⁵⁴ <http://laws.justice.gc.ca/en/C-0.4/SOR-2009-176>

⁵⁵ http://www.gov.ch/zilao/flfg/2005-12/29/content_141833.htm

covers dogs kept as pets, working dogs, sporting dogs, dogs in boarding kennels etc). This means that the requirement for all animals to experience physical and behavioural wellbeing as an 'outcome' is accentuated in these codes, rather than specifying prescriptive 'inputs' that it is thought will produce good welfare. This structure within a Code of Welfare also enables farmers and producers to monitor the health of their livestock and modify their facilities or husbandry techniques when and if necessary to ensure that their animals are experiencing good welfare whilst remaining within the scope of the Code.

Detailed information:

1. *National legislation exists for broiler chickens and layer hens:*
 Animal Welfare (Broiler Chickens: Fully Housed) Code of Welfare, 2003: link see below⁵⁶
 Animal Welfare (Layer Hens) Code of Welfare, 2005: link see below⁵⁷.
National legislation exists for pigs:
 Animal Welfare (Pigs) Code of Welfare, 2005: link see below⁵⁸.
2. *National legislation is being developed for cattle:*
 Animal Welfare (Dairy Cattle): a Code of Welfare was issued in February 2010⁵⁹. A Code of Welfare for farming of sheep and beef cattle in New Zealand has been developed. It is anticipated that this will be issued by mid 2010. These two Codes of Welfare are replacing the previous Code of Recommendations and Minimum Standards for Sheep and the Code of Recommendations and Minimum Standards for Dairy Cattle that were developed prior to 1999.
3. *Other Codes of Welfare* are relevant to the welfare of these species in New Zealand including:
 Animal Welfare (Painful Husbandry Procedures) Code of Welfare 2005: link see below⁶⁰
 A Code of Welfare for transport of animals in New Zealand is in 2010 under development. It is anticipated that this code will be issued in 2010/2011. This Code of Welfare is replacing the previous Code of Recommendations and Minimum Standards for Animals Transported within New Zealand.
 A new Code of Welfare for commercial slaughter is anticipated for issue by the end of 2010. This replaces the current deemed code of welfare for commercial slaughter which incorporates the Code of Recommendations and Minimum Standards for Animals at the time of Slaughter at Licensed and Approved Premises and related legislation.

USA

Beside the slaughter and transport legislation as well as the organic legislation, no specific legislation for farm animals exists. There are however several *private voluntary Codes of Practice*. See links below.⁶¹

U.S. Organic standards apply to all animals raised under the National Organic Program but are not species-specific. An exception is the new "Pasture Regulation" (February 2010) which is in parts species-specific to ruminants. This is NOP regulation not NOSB Recommendation so it is enforceable.⁶²

⁵⁶ <http://www.biosecurty.govt.nz/regs/animal-welfare/req/codes/broiler-chickens>

⁵⁷ <http://www.biosecurty.govt.nz/animal-welfare/codes/layer-hens/index.htm>

⁵⁸ <http://www.biosecurty.govt.nz/animal-welfare/codes/pigs/index.htm>

⁵⁹ <http://www.biosecurty.govt.nz/files/regs/animal-welfare/req/codes/dairy-cattle/dairy-cattle.pdf>

⁶⁰ <http://www.biosecurty.govt.nz/animal-welfare/codes/painful-husbandry/index.htm>

⁶¹ www.fmi.org/animal_welfare/; www.bqa.org; www.nationaldairyfarm.com;

www.uepcertified.com/media/pdf/UEP-Animal-Welfare-Guidelines.pdf;

www.nationalchickencouncil.com/files/AnimalWelfare2005.pdf;

www.eatturkey.com/foodsrv/pdf/2009_guidelines.pdf; www.pork.org/Producers/PQAP.aspx?c=PQAP;

thehumanetouch.org; certifiedhumane.org; www.animalwelfareapproved.org/standards;

⁶² <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5082838&acct=noprulmaking>

d) Which categories of animals are covered by regulation of the farming of animals?

Some answers are already summarised in the sub-chapter before. Some additional information is found below.

European Union

Covered by the general directive 98/58: Dairy cows, suckling cows, fattening bulls, all other farm animals.

Specific minimum standards for: calves, piglets, weaners and rearing pigs, Sows and gilts, boars, chick, laying hens, broilers.

Switzerland

All main animal groups are covered by legislation.

Argentina

All animals are covered by legislation.

Australia

The animal welfare laws of Australia's states and territories provide authority for the national Model Codes and in some instances those same Model Codes are applied directly through industry-owned quality assurance programs. The husbandry and management practices that are seen as necessary to deliver good animal welfare outcomes throughout the Commonwealth of Australia are therefore covered for the following species: beef and dairy cattle, sheep, goats, pigs, layer and broiler hens, deer, camelids, rabbits, emus, ostriches, buffalo and horses. These Model Codes are to be progressively replaced over time by new *Australian Standards and Guidelines for the Welfare of Animals*. This process is mentioned under 7.1.1 c) and is explained at 7.1.1 a).

Brazil

All main animal groups covered by legislation, but on a very general level.

Canada

Voluntary Codes of Practice (CoP) for main animal groups. Voluntary CoP for beef, turkey, bison, horses, veal calves, sheep, deer, goats, ranched fox, mink, beef, turkey, sheep, goats.

China

See above – only a general legislation and a criterion on pig slaughtering are relevant.

New Zealand

All main animal groups covered by Codes of Recommendations. Detailed information:

The Animal Welfare Act 1999 covers the welfare of animals in New Zealand, where the term 'animal':

(a) means any live member of the animal kingdom that is:

(i) a mammal; or

(ii) a bird; or

(iii) a reptile; or

(iv) an amphibian; or

(v) a fish (bony or cartilaginous); or

(vi) any octopus, squid, crab, lobster, or crayfish (including freshwater crayfish); or

(vii) any other member of the animal kingdom which is declared from time to time by the Governor-General, by Order in Council, to be an animal for the purposes of this Act; and

(b) includes any mammalian foetus, or any avian or reptilian pre-hatched young, that is in the last half of its period of gestation or development; and

- (c) includes any marsupial pouch young; but
- (d) does not include—
 - (i) a human being; or
 - (ii) except as provided in paragraph (b) or paragraph (c), any animal in the pre-natal, pre-hatched, larval, or other such developmental stage

Therefore all the categories of animals stated below are covered by national legislation according to the Animal Welfare Act, 1999. In addition specific Codes of Welfare also exist, or are being developed in 2009/2010, that covers some of the categories of farm animals outlined in this report.

USA

No national legislation or mandatory codes of practice exist for the farming of any animal groups, with the exception of those raised for organic production. However, voluntary industry guidelines have been developed for the raising of beef cattle, dairy cattle, veal calves, sheep, goats, pigs, turkeys, chickens and egg-laying hens.

e) Do any regulations for transportation of animals exist, and if so, in which form and for what species?

In several EU third countries (CH, AR, AU, BR, CA) legislation for the transport of animals exist with the exception of China, New Zealand (articles in general Animal Welfare Act as well as detailed in Codes of Practice) and for poultry in the US (only Codes of Practice).

Tab. 7.1.3 Coverage of governmental non-organic animal welfare legislation related to transport of different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Transportation non-organic cattle	Leg	Leg	Leg	nMCoP-Leg	Leg	Leg / VCoP	no Leg / VCoP	Leg / VCoP	Leg / VCoP
Transportation non-organic pigs	Leg	Leg	Leg	nMCoP-Leg	Leg	Leg / VCoP	no Leg / VCoP	Leg / VCoP	Leg / VCoP
Transportation non-organic chicken	Leg	Leg	Leg	nMCoP-Leg	Leg	Leg / VCoP	no Leg / VCoP	Leg / VCoP	no Leg / VCoP

Leg = Legislation VCoP = Voluntary Code of Practice nMCoP-Leg = national Model Code of Practice under equivalent State and Territory Legislation.

European Union

Legislation on transport of animals for all main animal categories for non-organic and organic farms does exist.

Switzerland

Legislation on transport for all main animal categories for non-organic and organic farms in place.

See references in chapter 7.6. In addition Switzerland has agreed to participate in the European Agreement on international transport of animals ("Europäisches Übereinkommen zum Schutz von Tieren beim internationalen Transport"): link see below⁶³.

Argentina

Legislation for transport of all main animal categories exists. These apply also for organic farming.

⁶³ http://www.admin.ch/ch/d/sr/c0_452.html

Australia

At present there are a number of national Model Codes that detail the essential requirements for transporting these species in ways that provide for good animal welfare outcomes. These requirements are given authority under the animal welfare laws of the states and territories as, in most cases, compliance with the requirements in the Model Codes provides a legal defense against charges of cruelty.

The new *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock*, which was endorsed by Ministers with responsibility for subsequent implementation at PIMC 15 in May 2009⁶⁴ will be implemented through harmonized state and territory legislation. It updated all the requirements for transport of cattle, sheep, pigs, goats, poultry (broilers, layers, turkeys, ducks, geese), ratites (emus and ostrich), buffalo, deer, camels, alpacas and horses (including horses used for sport and recreation) that exist in seven national Model Codes as well as provisions on livestock transport that appear in 13 other Codes. Details of its content see link below.⁶⁵

Brazil

Legislation in place for the transport of cattle, pigs and poultry. These apply also for organic farming.

Canada

Link see below⁶⁶.

Please note that while there is legislation in place, government resources are inadequate for a meaningful enforcement.

China

The relevant rules for transport are in 2010 in process.

New Zealand

The transport of animals is outlined in sections 22 and 23 of the Animal Welfare Act, 1999. A mandatory Code of Welfare for the transport of animals within New Zealand is also being developed in 2009/2010. It is expected that this legislation will be issued in 2010/2011. This Code of Welfare is replacing the previous Code of Recommendations and Minimum Standards for Animals Transported within New Zealand.

USA

Binding legislation for cattle and pigs: link see below⁶⁷.

Many of the voluntary industry guidelines referenced have transportation components.

f) Do any regulations for slaughtering of animals exist, and if so, in which form and for what species?

Table 7.1.4 shows that in several EU third countries (CH, AR, AU, BR, CA) legislation for the slaughtering of animals exist with the exception of China (in the case of cattle and poultry), New Zealand (only Codes of Practice) and for poultry in the US (only voluntary Codes of Practice).

⁶⁴ The communiqué from PIMC 15 is available from http://www.mincos.gov.au/media_releases

⁶⁵ <http://www.animalwelfarestandards.net.au/australian-animal-welfare-standards-and-guidelines/land-transport/background.cfm>

⁶⁶ <http://laws.justice.gc.ca/en/showtdm/cr/C.R.C.-c.296//?showtoc=&instrumentnumber=C.R.C.-c.296> Codes of practice for transport can be found at <http://nfacc.ca/code.aspx>.

⁶⁷ http://awic.nal.usda.gov/nal_display/index.php?info_center=3&tax_level=3&tax_subject=182&topic_id=1118&lev el3_id=6739&level4_id=0&level5_id=0&placement_default=0

Tab. 7.1.4 Coverage of governmental non-organic animal welfare legislation related to slaughtering of different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Slaughtering cattle	Leg	Leg	Leg	Leg / AS / nMCoP / NAWS	Leg	Leg / VCoP	no Leg / VCoP	Leg / VCoP	Leg / VCoP
Slaughtering pigs	Leg	Leg	Leg	Leg / AS / nMCoP / NAWS	Leg	Leg / VCoP	no Leg / (Criterion)	Leg / VCoP	Leg / VCoP
Slaughtering chicken	Leg	Leg	Leg	Leg / AS / nMCoP	Leg	Leg / VCoP	no Leg / VCoP	Leg / VCoP	no Leg / VCoP

Leg = Legislation VCoP = Voluntary Code of Practice AS = Australian Standard under Legislation nMCoP = national Model Code of Practice NAWS = AMIC National Animal Welfare Standards at Livestock processing Establishments (for exporting establishments under direct AQIS supervision)

European Union

For all main animal categories EU rules for slaughter are established.

Switzerland

For all main animal categories for non-organic and organic farms governmental legislation for slaughter is in place. See references in chapter 7.6. Furthermore Switzerland is a member of the European Convention for the Protection of Animals for Slaughter ("Europäisches Übereinkommen über den Schutz von Schlachttieren"): link see below⁶⁸.

Argentina

National legislation for slaughtering of all main animal categories exists.

Australia

All slaughtering in Australia is performed in compliance with the relevant Australian Standard, which is directly called up by the legislation that regulates slaughtering establishments in the states and territories as well as those that produce meat and meat products for export under direct Commonwealth oversight.

For livestock (cattle, sheep, goats, buffalo, deer, camelids, pigs and horses) this is the *Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption*, AS 4696⁶⁹ and for poultry, the *Australian Standard for the Construction of Premises and Hygienic Production of Poultry Meat for Human Consumption*, AS 4465⁷⁰.

Demonstrated compliance with approved arrangements that meet the requirements in the *AMIC National Animal Welfare Standards* is required at exporting establishments that are directly overseen by AQIS. In addition, for export of meat the *Export Control Act 1982* (Cth) requires compliance with importing country requirements. Slaughter and handling of animals that provide products exported to the EU complies with EC requirements for third countries. Meat produced from pigs and chickens in Australia is not currently exported to the EU.

Brazil

For all main animal categories for non-organic and organic farms governmental legislation for slaughter is in place.

⁶⁸ http://www.admin.ch/ch/d/sr/c0_458.html

⁶⁹ downloadable from <http://www.publish.csiro.au/pid/5553.htm>

⁷⁰ downloadable from <http://www.publish.csiro.au/nid/18/pid/5203.htm>

Canada

National slaughter laws found under the Meat Inspection Regulations: link see below⁷¹.

China

Only for pigs: GB/T 22569-2008 Technical criterion of pig humane slaughtering.

New Zealand

Section 12 of the Animal Welfare Act provides legislation for the slaughter of animals in New Zealand and states that “no person must kill an animal in such a manner that the animal suffers unreasonable or unnecessary pain and distress”. The link for the Animal Welfare Act is as stated above in section 1a. A deemed Code of Welfare for commercial slaughter is to be replaced by a new code of welfare for commercial slaughter, expected to be issued by the end of 2010, as noted above.

USA

Binding legislation for slaughtering of cattle and pigs: link see below⁷².

Many of the voluntary industry guidelines referenced earlier have slaughter components; see also special website on animal handling (link below).⁷³ Private standards are driving, as consumer demand increases the awareness and value of animal welfare friendly products

g) Please indicate the names of the most important legislation⁷⁴ or Codes of Practice or Codes of Conduct documents which are improving farm animal welfare.

In chapter 7.6 all relevant documents (legislation and Codes of Practice) of the different third countries are listed. Below only the most important

European Union

A detailed list of all the relevant Directives of the European Union is found in Chapter 5 and also under references.

Switzerland

The legal framework is based on the animal protection law (link see below⁷⁵) and the Regulation for animal protection (TSchV, 2009) and the Regulation for organic production. Other regulations and directives are listed under references in chapter 7.6. Furthermore several agreements with the European Union exist – e.g. with regard to Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes.

Argentina

Most important laws and decrees are:

- Ley (Law) 14346/54; Ley (Law) 18.819/70;
- Res. 1286/93 SENASA ; Decreto 206/2001; Resolucion 413/2003; Resolucion 259/2004.

Details are found in reference list in chapter 7.6.

Australia

There is a large amount of subsidiary legislation and regulations that apply the national Model Codes throughout Australia, as has previously been detailed. A detailed list of state

⁷¹ <http://laws.justice.gc.ca/en/M-3.2/SOR-90-288/index.html>

⁷² http://awic.nal.usda.gov/nal_display/index.php?info_center=3&tax_level=3&tax_subject=182&topic_id=1118&level3_id=6736&level4_id=0&level5_id=0&placement_default=0

⁷³ www.animalhandling.org.

⁷⁴ No private animal welfare initiatives. By legislation we mean any kind of official document which regulates standards for farm animal welfare in a way which is binding for everybody (e.g. law, regulation and act) as well as legal standards for organic production.

⁷⁵ <http://www.admin.ch/ch/d/sr/c455.htm>

and territory animal welfare laws as well as links to facilitate downloading of national Model Codes of Practice is found in section 7.6 of this report.

Brazil

The animal welfare is based on the national constitution: Constituição da República Federativa do Brasil (Federal Republic of Brazil Constitution) from 1988; Capítulo VI do Título VIII, Art. 225, 1. Inc. VII, da Constituição da República Federativa do Brasil from 1988. There is no detailed legislation in place for the different animal categories except for transport and slaughter. More details see references in chapter 7.6.

Canada

The laws and codes listed (see references) all have the potential to improve welfare but until they are routinely enforced and revised based on scientific evidence; none of them are improving the conditions for farm animals. The BC SPCA standards as well as the organic standards are a significant improvement, but this applies only to member farms and BC SPCA standards in particular have not been adopted by a significant number of farms.

China

Animal Husbandry Law of the People's Republic of China. More details see references in chapter 7.6.

New Zealand

All legislation listed is national legislation that is effective throughout New Zealand. In total the names and links of 12 Codes – see references in chapter 7.6.

USA

A detailed list of legal framework and Codes of Practices is found in the references in chapter 7.6.

There are quite different opinions between the USDA representative and the representative of the AW Institute how far these laws and Codes have improved animal welfare of farm animals in the United States.

h) Are there protected terms for livestock products?

Table 7.1.5 shows that in all investigated third countries, with the exception of New Zealand, the terms organic, ecological or biological as similar terms are protected. Switzerland and the European Union have protected the terms “Free range eggs” and “Barn eggs” as well as organic (or biological, ecological as similar terms).

Tab. 7.1.5 Protected terms for animal welfare friendly livestock products in selected third countries & trading partners with EU

Protected terms for livestock products	EU	CH	AR	AU	BR	CA	CN	NZ *	US
Free range eggs	yes	yes	no	no	no	no	no	no	no
barn eggs	yes	yes	no	no	no	no	no	no	no
eggs from caged hens	yes	no	no	no	no	no	no	no	no
organic or biological	yes	yes	yes	yes	yes	yes	yes	yes	yes
ecologic production (in EU and Codex Alimentarius synonym to organic)	yes	yes	no	no	yes	no	no	yes	no
others	no	no	no	no	no	no	no	no	few

* NZ comment see below

European Union

Discussions have started since a few years on introducing a specific labelling scheme for products with upgraded animal welfare.

Switzerland

In Switzerland the terms “barn eggs”, “free range eggs” as well as “biological” for organic products are protected by national legislation.

Argentina, Brazil, Canada, China:

All these countries have protected organic products by national legislation, generally following the Guidelines for organically produced food of Codex Alimentarius (Codex Alimentarius, 2009).⁷⁶ These guidelines state that “a product will be regarded as bearing indications referring to organic production methods where, in the labelling or claims, including advertising material or commercial documents, the product, or its ingredients, is described by the terms “organic”, “biodynamic”, “biological”, “ecological”, or words of similar intent including diminutives which, in the country where the product is placed on the market, suggests to the purchaser that the product or its ingredients were obtained according to organic production methods.” (Art. 1.2).

No information was found about special animal welfare labelling in these countries.

Australia

Australia regulates labeling of products as far as is necessary to protect consumers. Australia’s governmental position is that labelling animal products according to their method of production provides no consumer protection benefit. In addition, mandating such a requirement would result in additional expense for producers, processors and consumers. As such, it is not justified. There are no legal definitions that cover method of production labelling for produce traded within Australia, all that is mandatory is that such labelling must be accurate and not likely to mislead consumers. Marketing of products with specific labelling claims within Australia is regulated nationally under identical provisions in consumer protection laws of the states, territories and Commonwealth, as per the *Trade Practices Act 1974* (Cth).

Coverage of organic and bio-dynamic products is discussed in detail under section 7.1.1 b). Organic and biodynamic products for export must be certified as complying with the requirements of the *National Standard for Organic and Bio-dynamic Produce* (the export standard) by a body approved by the national competent authority, the Australian Quarantine and Inspection Service (AQIS). Exports are also subject to any requirements of the importing country. The export standard and voluntary domestic organic standards contain provisions about the treatment of animals. While those provisions may have an effect on animal welfare outcomes, they were not designed for that purpose.

New Zealand

There is no legal definition for protected terms used on products in New Zealand. Specific retailers or label assurance schemes may specify their own definitions and standards required to meet the labels requirements. In NZ the use of the term ‘organic’ is not protected by legislation as in the EU. New Zealand has no mandatory organic production standards covering all export markets and domestic production. However, any product sold as ‘organic’ must be labelled truthfully and accurately as required by the Fair Trading Act 1986.

USA

There are numerous recognized government labelling terms used in U.S. but only a few (“organic,” “grass fed” and “naturally raised”) are codified in law or regulation. Organic is the

⁷⁶ Codex Alimentarius (2009): Guidelines for the production, processing, labelling and marketing of organically produces foods. CAC-1999. Adopted 1999. Revisions 2001, 2003, 2004 and 2007. Amendments 2008 and 2009. Rome. (in English, French and Spanish).
http://www.codexalimentarius.net/download/standards/360/cxg_032e.pdf

only one that is certified, others where there is regulation in place, are “process verified” through system plans and affidavits.

h) Internationally voluntary standards schemes other than legislation relevant for international trade

Whereas on national level in many countries different private standards schemes exist for animal welfare and for organic agriculture, which aim for improved animal welfare, there are on international level only few such schemes. We describe here only three schemes, as these are currently the most important ones.

- GLOBAL-G.A.P, as a retail chain initiative, which is of growing importance for international trade as a business to business standard.
- Codex Alimentarius Guidelines for organically produced food, as these have influenced mainly national legislation for organic farming outside Europe.
- IFOAM Basic Standard with the IOAS Accreditations system, which is a private umbrella standard and worldwide-accreditation based on IFOAM Standards.

GLOBALG.A.P.

GLOBALG.A.P. is a private sector body that sets voluntary standards for the certification of agricultural products around the globe.⁷⁷ It was formerly known as EUREPGAP and has established itself as a key reference for Good Agricultural Practices (G.A.P.) in the global market place. By translating consumer requirements into agricultural production the aim is to establish one standard for G.A.P. with different product applications capable of fitting to the whole of global agriculture.

GLOBALG.A.P. is a pre-farm-gate standard, which means that the certificate covers the process of the certified product from farm inputs like livestock, feed or seedlings and all the farming activities until the product leaves the farm. With its holistic approach of farm production assurance the allocation of the weighting is according to the GLOBALG.A.P expert in 2009 58% on food safety, 16% on animal welfare, 14% on environment and 12% on workers health and safety.

GLOBALGAP is a business-to-business label and is therefore not directly visible to consumers.

GLOBALG.A.P. certification is carried out by more than 100 independent and accredited certification bodies in more than 100 countries and on every continent. It is open to all producers worldwide and includes annual inspections of the producers and additional unannounced inspections. It does consist of a set of normative documents. These documents cover the GLOBALG.A.P. General Regulations, the Control Points and Compliance Criteria plus the Checklists.

As many other on-farm assurance systems have been in place for some time prior to the existence of GLOBALG.A.P., a way had to be found to encourage the development of regionally adjusted management systems and so to prevent farmers from having to undergo multiple audits. Existing national or regional farm assurance scheme, which have successfully completed the benchmarking process, are recognized as an equivalent to GLOBALG.A.P. .

The standard is subject to a three year revision cycle of continuous improvement to take into account technological and market developments.

Codex Alimentarius.

The Codex Alimentarius Commission was created in 1963 by the two UN Organisations, FAO and WHO with the aim to develop food standards, guidelines and related texts under the Joint FAO/WHO Food Standards Program. Through its Codex Committee on Food

⁷⁷ http://www.globalgap.org/cms/front_content.php?idcat=9

Labeling, it established Guidelines for the Production, Processing, Labelling and Marketing of Organically Produced Foods. The Codex Commission approved plant production guidelines in June 1999, and animal production guidelines in July 2001.⁷⁸ The requirements in these Codex Guidelines are in line with the IFOAM Basic Standards and the EU Regulation (EC) 834/2007 and EU Regulation (EC) 889/2008. There are, however, differences with regard to the details and some specific areas that are covered by the varying standards.

These Codex guidelines define the nature of organic food production and prevent claims that could mislead consumers about the quality of the product or the way it was produced. They could also be important for equivalence judgments under the rules of WTO. An indication for this relevance is that the revised EC Regulation 834/2007 mentions explicitly that for the assessment of equivalency *Codex Alimentarius* guidelines CAC/GL 32 shall be taken into account. In terms of developing the market for organically produced food, the Codex Guidelines provide guidance to governments in developing national regulations for organic food and they are an important step towards the harmonization of international rules that serve to build consumer trust.

IFOAM Basic Standards and IFOAM Accreditation

IFOAM (International Federation of Organic Agriculture Movements) is the world-wide umbrella organization for organic agriculture with over 600 organizations in more than 110 countries. In 1980 the first world-wide standards for organic food and farming were published by IFOAM as recommendations for private sector standards. Since then the standards have been regularly revised and in particular the section on livestock and animal welfare has constantly improved.

The IFOAM Basic Standards⁷⁹ define how organic products are grown, produced, processed handled and labeled. They reflect the current state of organic production and processing methods and provide organic standards-setting organizations worldwide with guidance for developing their own certification standards. The IFOAM Basic Standards - together with the IFOAM Accreditation Criteria - constitute the IFOAM Norms, which provide a framework for the IFOAM Accreditation Program, which is administered by the International Organic Accreditation Service (IOAS). IOAS evaluates and accredits organic certification bodies for compliance with the IFOAM Norms.⁸⁰

⁷⁸ Information about Codex Alimentarius is available via the homepage [www. codexalimentarius.net](http://www.codexalimentarius.net). The Codex-Alimentarius-Guidelines on organic agriculture, amended in 2009, can be downloaded from: http://www.codexalimentarius.net/download/standards/360/cxg_032e.pdf

⁷⁹ On the homepage of IFOAM www.ifoam.org under "Organic Guarantee System," the IFOAM Norms, consisting of the IFOAM Basic Standards for Organic Production and Processing and the IFOAM Accreditation Criteria for Bodies certifying Organic Production and Processing may be purchased. The website also provides information on the IFOAM Accreditation Program.

⁸⁰ <http://www.ioas.org/index.htm>

7.1.2 How is farm animal welfare perceived in third countries?

i) How is farm animal welfare viewed amongst citizens?

Table 7.1.6 shows that beside the European Union in Switzerland and in New Zealand and it seems also in China animal welfare is high on the political agenda and is much discussed in contrast to AR, AU, BR, CA and the US. High media attention on animal welfare is given in CH, NZ and the US.

Tab. 7.1.6 How is farm animal welfare perceived in selected third countries & trading partners with EU?

How is the farm animal welfare viewed amongst citizens?	EU	CH	AR	AU	BR	CA	CN	NZ	US
Very high on the political agenda = 5 Very low on the political agenda = 1	5	5/ 4*	2	nA	3/ 1*	2	4	5	3
Much discussed in society = 5 Not very discussed in society = 1	5	5/ 4*	1	nA	2	3	4	4	2
Very much media attention = 5 No media attention = 1	4	4	2	nA	2	3	3	5	3/ 4*

nA = no Answer

* different views: first governmental expert view /second AW NGO view.

k) Please rate the following statements

The experts were asked to rate a few statements related to animal welfare. The results are summarised in Tab. 7.1.7. Generally the experts found that local people can afford animal welfare friendly products with the exception of AR. All experts denied that farmers do not care about animal welfare. For CA, CN and the US experts think that a majority of citizens/consumers in general are rather indifferent to animal welfare. Only for Argentina the animal (welfare) friendly produced livestock products are mainly for export.

Tab. 7.1.7 Statements related to animal welfare – expert opinion

Rating the following statements	EU	CH	AR	AU	BR	CA	CN	NZ	US
Animal (welfare) friendly produced livestock products are mainly for export	-2	-2	2	nA	-1/ 2*	-1	1	-2	-2
Local people cannot afford animal welfare friendly products	-1	-2	1	nA	-1	-1	1	-2	-1
Farmers don't care about farm animal welfare	-1	-1	-1	nA	-1/ 2*	-1	-1	-2	-2/ -1
Citizens/Consumers don't care about farm animal welfare	-2	-2	-2	nA	-1/ 1*	0	0	-2	0

2=strongly agree; 1=agree; 0=indifferent; -1=disagree; -2=strongly disagree

nA = no Answer

* different views: first governmental expert view /second expert or private AW NGO view.

7.2 Key aspects of animal welfare standards

7.2.1 Cattle

a) Requirements for internal production (home market) and export

Table 7.2.1a shows the differences for cattle production between the EU and investigated third countries. The animal welfare legislation of Switzerland of BR and also partly AR have several additional aspects regulated compared with the EU legislation. NZ has formulated some aspects more precisely. Several countries have no national legal requirements but are working with voluntary codes of practice.

Tab. 7.2.1a Different animal welfare requirements for cattle identified in EU and national legislation of third countries and EU trading partners

Is/are ... allowed for CATTLE?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Permanent tethering	1	1	x	nL/r	x/r	1	nL	1/r	nL	1/r
Electric cow trainer	1	1/d	x	nL	x/r	x	nL	1/r	nL	x
Castration without anaesthesia	1	0/d	x	nL/r	x	1	nL	1/p	nL/r	1/r
Tail trimming	x	0/n	x	nL/r	x/r	0/n	nL	1/p	nL	x
Muzzling	1	x	x	nL	x		nL	1/p	nL	1/r
Dehorning without anaesthesia	x	0/d	x	nL/r	x/r	1	nL	1/p	nL	x
Dehorning through hot iron	x	1	x	nL	x	1	nL	1/p	nL	x
Dehorning through acids	x	0/d	x	nL/r	x	1	nL	1/p	nL	x
Dehorning through freezing	x	x	x	nL	x	1	nL	1/p	nL	x
Branding	x	0/d	x	nL/r	x	1	nL	1/p	nL	x
Surgical interventions against cross sucking or tongue rolling	x	0/d	x	nL	x	x	nL	x	nL	x
Hormonal treatments for growth *	x	0/n	0/n	nL	x/r	1	nL	1	nL	0/M
Hormonal treatments for fertility	x	1	x	nL	x/r	1	nL	1	nL	x
Breeds which cannot give birth in a natural way	x	0/n	x	nL	x	x	nL	x	nL	0/r
Keeping cattle in permanent darkness	0	0/d	0/s	nL/r	x	x	nL	0/p	nL	0/m
Keeping cattle on fully slatted floors	1	1/p	x	nL	x	0/d	nL	x	nL	1/m
Isolation of calves	0	0/d	x	nL/r	x	1	nL	1/r	nL	x
Keeping fattening bulls permanently indoors during last three months before slaughter	1	1	x	nL	x/r	x	nL	x	nL	x
Is/are ... mandatory for CATTLE?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Regular access to an open run	0	0	0	nL	x/r	0	nL	0	nL/r	x
Barns where cattle can move freely (freestall barns)	0	0	1/d	nL/r	x	0	nL	0	nL	x
Group keeping of calves	1	1/d	x	nL/r	x	0	nL	0	nL	0/m
Regular pasture access	0	0	0	nL/r	x/r	0	nL	0/r	nL/r	x
Offering roughage to calves*	1	1/n	0	nL/r	x/r	0	nL	0/r	nL/r	x
Permanent access to water	0	1/n	1/n	nL/r	x/r	1/n	nL	1/p	nL	x
Dry lying area	0	1/n	1/n	nL/r	x/r	1/n	nL	1	nL/r	1/M
Protection against adverse climatic conditions	1	1/d	1/s	nL/r	x/r	1/s	nL	1/p	nL/r	1/m
Litter or bedding material	0	1/d	1/d	nL	x/r	1/n	nL	0/r	nL	1/m
Provision of calving pens	x	1/n	1/n	nL/r	x	0	nL	x	nL	x
Drinking of colostrum during first hours of life	1	1/n	x	nL/r	x/r	1/n	nL	1/p	nL	1/m
Officially approved and controlled education of staff	x	1/n	x	nL/r	x	x	nL	0/r	nL	x

How is ... fixed in legislation for CATTLE?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Minimum frequency of access to open run	x	1/n	0	nL	x/r	nL	nL	x	nL	x
Maximum stocking density including fattening bulls*	x	1/n	1/n	nL	x/r	nL	nL	x	nL	x
Minimum age of calf at weaning from milk	x	x	0	nL/r	x/r	nL	nL	1/r	nL	x
Maximum age for castration without anaesthesia	x	0	x	nL/r	x/r	nL	nL	1/p	nL	1/M
Maximum herd size	x	x	1/n	nL	x	nL	nL	x	nL	x
Number of adult animals per feeding places (ratio)	x	1/n	1/n	nL	x/r	nL	nL	x	nL	x
Minimum amount of roughage for adult animals*	x	x	x	nL	x	nL	nL	x	nL	x
Haemoglobin level in blood	1	x	0	nL	x	nL	nL	x	nL	x
Dietary iron supply	1	1/s	0	nL/r	x	nL	nL	x	nL	x
Composition of milk replacer	x	x	0	nL/r	x	nL	nL	x	nL	x
Stable climate (gas concentrations, temperature, humidity)	1	1/s	0	nL/r	x	nL	nL	1	nL	x

x not mentioned 1= yes 0 = no nL = no national Legislation p = more precise
s = the same as EU rules d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU Regulation **GLOBALG.A.P.: M = major point m = minor point**
In blue text and with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

Where exactly is the difference?

Table 7.2.1b shows the detailed requirements and explanations given by the third country experts for cattle. *In italics specific differences regarding organic production are mentioned.*

Tab. 7.2.1b Detailed differences and explanations for cattle in EU third countries

Aspect	EU-legislation	Main differences / explanations
Is/are ... allowed for CATTLE?		
Permanent tethering	Calves shall not be tethered except for feeding. <i>EU Organic: Tethering allowed in small holdings when access to pasture in summer 2x/week.</i>	<i>Organic: CH only allowed with regular access to pasture and outdoor area in winter 13 times/month. CA: same as EU Organic. US opportunity to exercise.</i> <i>Codex Organic Guidelines (GL): tethering must be allowed by national competent authority.</i>
Electric cow trainer		CH: not allowed for new installations. <i>Organic: BR not allowed.</i>
Castration without anaesthesia	<i>EU Organic: Physical castration is allowed. Any suffering to the animals shall be reduced to a minimum by applying adequate anaesthesia and/or analgesia and by carrying out the operation only at the most appropriate age by qualified personnel.</i>	CH: not allowed. NZ: when castrating over the age of 6 months pain relief must be used + additional requirements. <i>Organic: CH, not allowed (already by general legislation). CA: not allowed for organic.</i> <i>US-NOP (National Organic Programme): All physical alterations are to be done as needed to promote animal welfare and in a manner that minimizes pain and stress.</i>
Branding		CH: not allowed. NZ: Hot branding must not be used without pain relief'.

Is/are ... allowed for CATTLE?		
Dehorning	Allowed	CH: Dehorning without anaesthesia and with acids not allowed and with hot iron only after use of anaesthesia. NZ: Dehorning without anaesthesia is only allowed under the age of 9 months. <i>Organic: CH, BR, CA not allowed.</i>
Hormonal treatments for growth	<i>EU Organic: not allowed</i>	NZ: detailed comments – see below <i>Organic: CH, AR, AU, BR, CA, CN, Codex Organic GL, IFOAM Basic Standards (BS): not allowed.</i>
Hormonal treatments for fertility		NZ: detailed comments – see below <i>Organic: CA, CN, IFOAM BS: not allowed</i>
Keeping cattle on fully slatted floors	Allowed.	CH: more precise (soft floors required).
Isolation of calves / Group keeping of calves	Where calves are housed in groups, they must have sufficient unobstructed floor space to be able to turn round and lie down without hindrance of at least 1.5 m ² for each calf of 150 kg live weight. Group keeping: 1.5 m ² for each calf <150 kg, 1.7 m ² for each calf 150-220 kg, and 1.8 m ² for each calf >220 kg. Not for holdings <6 calves and calves <8 weeks, on veterinary advice. <i>EU Organic: not allowed except for calves < 1 week.</i>	CH: group keeping required but not in iglus with outdoor access. Group keeping already from the 3 rd week on (beyond EU). <i>Organic: CH (same as non-organic), CA (following weaning), CN: Group keeping required. NZ: isolation not allowed, Codex Organic GL, IFOAM BS: individual houses in boxes must be allowed by national competent authority.</i>
Keeping fattening bulls permanently indoors during last three months before slaughter	<i>EU Organic: if it does not exceed 1/5 of life time.</i>	CH: allowed but only if not kept in tie-stalls. <i>Organic: BR: not allowed. CA: only in final fattening phase with 23m²/animal space. US: addressed in the NOP-Pasture regulation. 120 days or 1/5 of the animal's lifespan. Codex Organic GL, IFOAM BS: allowed for final fattening but with no time indication.</i>
s/are ... mandatory for CATTLE?	EU-legislation	Main differences / explanations
Regular access to an open run	Not required. <i>EU Organic: mandatory except in final fattening phase (max. 3 months).</i>	CH: not necessary for loose-housed systems. For all farms which get general direct payments: 90 days/year. <i>Organic: CH, AR, AU, BR, CA: mandatory. CH except for 10 days before and after birth. Codex Organic GL, IFOAM BS: exceptions for bulls and final fattening phase must be allowed by national competent authority. NZ mandatory, except when herbivores can graze whole year and winter-house freedom of movement.</i>

s/are ... mandatory for CATTLE?	EU-legislation	Main differences / explanations
Regular pasture access	Not required <i>EU Organic: grazing whenever conditions allow.</i>	CH: For all farms which get general direct payments: 90 days/year. <i>Organic: CH, AR, AU, CA: mandatory (same conditions as EU Organic). CA: calves for dairy replacement over 9 months access to pasture. Codex Organic GL: exceptions for bulls and final fattening phase must be allowed by national competent authority.</i>
Offering roughage to calves *	Fibrous food for calves must be given >2 week old calves up to 20 weeks. <i>EU Organic: Defined ration: 60% of DM as roughage, fresh or dried fodder or silage.</i>	CH: except <3 weeks old. <i>Organic: CH, AR, CA, Codex Organic G, IFOAM BS: mandatory.</i>
Permanent access to water	Must be always accessible in hot weather or when calves are ill.	CH: permanently for calves, 2x per day for adults.
Dry lying area	No details, except for calves: The lying area must be comfortable, clean, and adequately drained and must not adversely affect the calves.	CH, AR: more details <i>Organic: US-NOP: Requires appropriate clean, dry bedding.</i>
Protection against adverse climatic conditions	Mandatory for calves.	CH: only if outdoors for long periods. More precise than EU. AU: detailed recommendations in Codes. NZ: all classes of cattle must be provided with means of minimising the effects of adverse weather. Sick animals and calves must be provided with shelter. <i>Organic: US-NOP: Requires that producer must "provide shelter designed to allow for the natural maintenance, comfort level and opportunity to exercise appropriate to the species".</i>
Litter/bedding material *	No details on type of materials. Appropriate bedding must be provided for all calves less than two weeks old. <i>EU Organic: Dry, clean and comfortable, littered lying area mandatory, floor not slatted.</i>	CH: only for calves and dairy cows but not for beef cattle. <i>Organic: all third countries, Codex Organic GL and IFOAM BS: mandatory. US-NOP: Requires "appropriate clean, dry bedding" and of organic origin (based on new pasture regulation February 2010)</i>
Provision of calving pens	Individual pens for calves (Exception: those for isolating sick animals) must not have solid but perforated walls which allow the calves to have direct visual and tactile contact. Dimensions depending on width and body length of calf. No details on size.	CH: mandatory in freestall barns. AU: detailed recommendations in Codes. <i>Organic: CA: detailed requirements: until 3 months, not tethered, visual contact, at least 2.5 m² and 1.5 m width, access to a run.</i>

How is ... fixed in legislation for CATTLE?	EU-legislation	Main differences / explanations
Minimum frequency of access to open run	Not mentioned <i>EU Organic: twice a week when grazing is not possible. (Exception for beef for last 3 months).</i>	CH: for cattle kept in tie-stall barns: 60 days in summer, 30 days in winter, max. 2 weeks interval. <i>Organic: CH: 26 days per month and in winter 13 days per month in open run. AR: until 16 h per day. CA, NZ: like EU Organic.</i>
Maximum stocking density, including fattening bulls *	Not mentioned <i>EU Organic: Space requirements for cows in freestall barns: <100kg 1.5m² indoors +1.1m² outdoors, <200kg 2.5i +1.9o, <350 4.0i+3o, >350 5i (min 1m²/100kg) +0.75/100kg outdoors. Dairy 6m² I +4.5m² o. Bulls 10m² I + 30m² o.</i>	CH: Detailed rules, e.g. 3 m ² per animal > 450 kg. AR: 250 animals per pen under outdoor conditions. BR: not in legislation, voluntary industry standard: 8 cattle / hectare but it depends on the systems and animal category <i>Organic: CH: Detailed rules equivalent to EU organic rules. AU: 3 m² for medium to large ruminants. BR: 1.5m²/100 kg living weight. CA: Indoors 6 m²/head, incremental increase of 2.5 m² for young calves to 5 m². Outdoor 5-9 m²/head. NZ: like EU Organic. Codex Organic GL, IFOAM BS: general criteria mentioned.</i>
Minimum age of calf at weaning from milk	Not mentioned <i>EU Organic: fed on maternal milk in preference to natural milk, for a minimum period of 3 months.</i>	BR: not in legislation, voluntary industry standard: 5 months. AU: detailed recommendations in Codes. <i>Organic: AR, BR: 3 months. NZ: 6-8 weeks. CR, Codex Organic GL: only general principle.</i>
Maximum age for castration without anaesthesia	Not mentioned <i>EU Organic: not allowed anymore since 2009.</i>	CH: forbidden BR: not in legislation, voluntary industry standard: 2 years NZ: maximum 6 months.
Maximum herd size	Not mentioned	AR: feed lots: 50X60 m outdoor pens BR: not in legislation, voluntary industry standard: 8,5 – 12 m ² per head.
Number of adult animals per feeding places (ratio)	Not mentioned	CH: animal/feeding place ratio: 1:1 for restricted feeding and max. 2.5:1 for ad libitum feeding; 65-78cm per animal. AR: at least 30 cm per animal. BR: not in legislation, voluntary industry standard: 60 cm per animal.
Minimum amount of roughage for adult animals in daily feed ration	Not mentioned. <i>EU Organic: min. 60 % of daily intake (exception on MS state level but only for 3 months 50 % in early lactation).</i>	BR: not in legislation, voluntary industry standard: 15%, depends on breeding system and available foods. <i>Organic: CH, AR, CA, CN, NZ: min. 60 % of daily intake. CA, NZ: for ruminant animals, when silage is fed, at least 25 % hay in forage ration. US-NOP: The producer must provide "a feed ration, including vitamins, minerals, protein and/or amino acids, fatty acids, energy sources, and, for ruminants, fiber." Pasture Regulation for 120 days 30% dry matter intake requirement. Codex Organic GL, IFOAM BS: only general principles.</i>
Haemoglobin and iron level in blood:	4.5mmol/litre.	CH: for iron supply – for calves minimum 2mg/kg milk if only milk is given.
Dietary iron supply		<i>Organic: US-NOP: The producer must provide "a feed ration, including vitamins, minerals, protein and/or amino acids, fatty acids, energy sources, and, for ruminants, fiber."</i>

How is ... fixed in legislation for CATTLE?	EU-legislation	Main differences / explanations
Stable climate (gas concentrations, temperature, humidity):	Sufficient air renewal. Insulation, heating and ventilation of the building - gas concentrations not harmful.	CH: 15 Lux, natural daylight, adequate climate, fresh air.

Below some special characteristics of cattle production in some countries are described.

Canada

Detailed requirements related to cattle are not fixed in Canadian legislation, unless it is a required component of the codes of practice or Marketing Board orders. See code for list of requirements and recommendations. Marketing Board orders are set provincially, but there are federal/provincial agreements between provincial marketing boards and the federal association as well as e.g. between Dairy Farmers of Canada and the BC Milk Marketing Board. Please note: pigs and beef cattle do not have marketing boards (i.e. are not supply managed). Their prices are set by commissions and the commodity market. The following commodities are supply managed in Canada: dairy, turkey, laying hens, meat chickens.

New Zealand

New Zealand's temperate climate generally provides good conditions for extensive farming of cattle and this is the preferred technique in this country; however more intensive farming is also performed when conditions dictate that this is necessary to uphold the welfare of the livestock. It is a requirement of the Animal Welfare (Sheep and Beef Cattle) Code of Welfare that cattle are provided with sufficient quantities of food and water to enable them to maintain good health. Cattle kept extensively must also be provided with adequate shelter to minimise the effects of heat stress or exposure to cold.

Detailed requirements and recommendations can be found in the Animal Welfare Code for dairy cattle or the draft Code of Welfare for sheep and beef cattle except for the two comments below.

New Zealand's national animal welfare standards apply for all animals regardless of the intended market and so no distinction is made between requirements for domestic and export markets.

Comment to hormonal treatments for growth promotion:

Cattle can be treated in New Zealand with hormonal growth promotant (HGP), however cattle that have been treated with this hormone are identified and their products cannot be subsequently exported to the EU. Further information regarding the use of Hormonal Growth Promotants can be found in 'The Animal Products (Regulated Control Scheme – Hormonal Growth Promotants) Notice 2009' which has been issued by the New Zealand Food Safety Authority for implementation 1 August 2009: link see below⁸¹.

Comment to hormonal treatments for fertility:

The use of oestradiol was prohibited for use in food producing animals in 2007 for product destined both for the internal market and for export. However hormonal products including progesterone, gonadotrophin releasing hormone, and prostaglandin are still used in cattle and have replaced those programmes that may have previously included oestradiol. Cattle treated with these substances may be destined for either the internal market or may be exported.

⁸¹ <http://www.nzfsa.govt.nz/animalproducts/legislation/notices/hgp/hormonal-growth-promotants-notice-2009.pdf>

b) Requirements for ORGANIC production of cattle (home market and export)

Several EU third countries (CH, AR, BR, CA, NZ) have the same (or equivalent) requirements for organic production like the EU organic rules laid down in the EC Regulation 834/2007 and EC Regulation 889/2008. This can also be explained as CH, AR and NZ are on the EU third country list for organic products. There are only few issues, where the requirements are beyond the EU rules, e.g. for some mutilations (such as tail trimming of cattle), which are not allowed.

Differences have been found concerning the following aspects:

Table 7.2.1c Different animal welfare requirements for ORGANIC cattle identified in EU and national third country legislation

Is/are ... allowed for ORGANIC CATTLE?	EU Org	CH Org	AR Org	AU Org	BR Org	CA Org	CN Org	NZ Org	US Org	Co-dex	IFO-AM
Permanent tethering	0**	0/s	0	x	0/s	0/s	0	1/r	0	0	0
Electric cow trainer	1	1/s	x	x	0/d	x	0	1/	1/r	x	x
Castration without anaesthesia	0**	0/s	x	1	1	1	0	1/p	1	x	x
Tail trimming	x	0/d	0/d	0	0/d	0/d	0	1/p	1	1	0/d
Muzzling	x	0/s	x	x	x	x	0	1/p	x	x	x
Dehorning without anaesthesia	0**	0/s	x	1	1	0/s	0	1/p	1	1	1
Dehorning through hot iron	x	1	x	x	x	x	x	1/p	1	x	1
Dehorning through acids	x	0/n	x	x	x	x	x	1/p	1	x	x
Dehorning through freezing	x	x	x	x	x	x	x	1/p	1	x	x
Branding	x	0/n	x	1	x	1	x	1/p	x	x	x
Surgical interventions against cross sucking or tongue rolling	x	0/n	x	x	x	x	x	x	x	x	x
Hormonal treatments for growth*	0**	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0/s
Hormonal treatments for fertility	0	1	0	x	1	0/s	0/s	0/s	x	x	0/s
Breeds which cannot give birth in a natural way	0	0/s	x	x	x	x	x	0/s	x	x	x
Keeping cattle in permanent darkness	0	0/s	x	x	x	0/s	x	0/s	0/s	0/s	0/s
Keeping cattle on fully slatted floors	0**	0/s	x	x	x	0/s	x	0/p	x	0/s	0/s
Isolation of calves	0**	0/s	x	x	x	0/s	x	1/p	x	0/s	0/s
Keeping fattening bulls permanently indoors during last three months before slaughter	1	1/s	0/d	x	0/d	1/s	x	1	0/d	1/s	x

Is/are ... mandatory for ORGANIC CATTLE?	EU Org	CH Org	AR Org	AU Org	BR Org	CA Org	CN Org	NZ Org	US Org	Co-dex	IFO-AM
Regular access to an open run	1**	1/s	1	1	1	1	1	1/s	1	1	1
Barns where cattle can move freely (freestall barns)	0	0	1/d	x	x	0	x	0	x	x	x
Group keeping of calves	1**	1/s	1/s	x	x	1/s	1	1/s	x	1/s	1/s
Regular pasture access	1**	1/s	1/s	1/s	1/s	1	1	1/s	1	1/s	1/s
Offering roughage to calves*	1**	1/s	1/s	1/s	x	1	1	1/s	1	1/s	1/s
Permanent access to water	1	1/s	1/s	1/s	1/s	1/s	1/s	1/s	1/s	1/s	1/s
Dry lying area	1**	1/s	1/s	1/s	x	1/s	1/s	1/s	1/s	1/s	1/s
Protection against adverse climatic conditions	1	1/s	1/s	1/s	1/s	1/s	1/s	1/s	1/s	1/s	1/s
Litter or bedding material	1	1/s	1/s	1/s	x	1/s	1/s	1/s	1	1/s	1/s
Provision of calving pens	x	1/n	X	x	x	1/n	x	x	x	x	x
Drinking of colostrum during first hours of life	1	1/s	1	x	x	1/s	1/s	1/p	1/s	1/s	1/s
Officially approved and controlled education of staff	1	1/s	1/s	x	x	x	x	1	0/r	x	x

How is ... fixed in legislation for ORGANIC CATTLE?	EU Org	CH Org	AR Org	AU Org	BR Org	CA Org	CN Org	NZ Org	US Org	Co-dex	IFO-AM
Minimum frequency of access to open run	1**	1/s	1/s	x	x	1/s	x	1	x	x	x
Maximum stocking density (inside / outside), including fattening bulls *	1**	1/s	X	x	1/s	1	x	1/s	x	1	1
Minimum age of calf at weaning from milk	1**	1/s	1/s	x	1	1	x	1/s	x	x	1
Maximum age for castration without anaesthesia	x	x	X	x	x	x	x	x	x	x	x
Maximum herd size	x	x	X	x	x	x	x	x	x	x	x
Number of adult animals per feeding places (ratio)	x	1/n	X	x	x	x	x	x	x	x	1
Minimum amount of roughage for adult animals*	1	1/s	1/s	x	x	1/s	x	1/s	x	1	1
Haemoglobin level in blood	1	x	X	x	x	x	x	x	x	x	x
Dietary iron supply	1	1/s	X	x	x	x	x	x	x	x	x
Composition of milk replacer	0	x	X	x	x	x	x	x	x	x	x
Stable climate (gas concentrations, temperature, humidity)	1	1/s	X	x	x	1/s	x	x	x	x	x

x not mentioned

1= yes

0 = no

nL = no national Legislation for organic

s = the same as EU Organic rules

d = stricter than/beyond the EU Organic rules

r = only

recommended, not mandatory n = not in EU Organic Regulation

P = more precise

In blue text and with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** beyond EU general AW legislation

c) Requirements of international private voluntary farm assurance and standards schemes for cattle

GLOBALG.A.P.

GLOBALG.A.P. integrates in its quality assurance standard in the modules beef and dairy the most important animal welfare issues for cattle. See website.⁸²

Furthermore GLOBALG.A.P. has within its integrated farm assurance scheme a specific module for calves/young beef (see website under standards – Calf/Young Beef module), which is based on the EU Regulation 2008/118/EC addressing all important welfare items for producer certification. The module consists of 7 chapters: in general provisions feed and water, housing and facilities, calves health, loading to dispatch. All important animal welfare issues are requested.

Codex Alimentarius Organic Guidelines / IFOAM Basic Standards

Both standards include special requirements for cattle.

7.2.2 Pigs

a) Requirements for internal production (home market) and export for pigs

Several Non-European countries have no national legal requirements but are working with voluntary codes of practice. Switzerland goes in several aspects beyond the EU rules or applies the same comparable rules. In several aspects AR and NZ have also comparable rules like the EU.

Differences have been found concerning the following aspects (see table 7.2.2a below):

⁸² www.globalgap.org

Table 7.2.2a Different animal welfare requirements for pigs identified in EU and national legislation of third countries and EU trading partners

Is/are ... allowed for PIGS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Tethering of sows	0	0/s	0/s	nL/r	x	1	nL	0/s	nL	0/M
Castration without anaesthesia	1	0/d	x	nL/r	x/r	1	nL	1/p	nL/r	1/r
Tail docking	1	0/d	x	nL/r	x	1	nL	1/p	nL/r	1/M
Ear notching	x	x	x	nL	x	1	nL	1/r	nL/r	x
Tooth clipping	x	0/d	x	nL/r	x	1	nL	1/p	nL/r	1/M
Tooth grinding	x	1	x	nL/r	x	X	nL	1	nL	1/M
Nose ringing	x	0/d	x	nL/r	x	X	nL	1/r	nL	x
Hormonal treatments for growth	x	x	0/d	nL	x	X	nL	x	nL	1/M
Breeds highly susceptible to stress	x	x	x	nL/r	x	X	nL	1/r	nL	x
Keeping animals in permanent darkness	0	0/d	x	nL/r	x	X	nL	0	nL/r	x
Fully slatted floors *	1	0/d	x	nL	x	1	nL	1/r	nL	1/m
Isolation of pigs *	0	0/s	1	nL/r	x	1	nL	1/p	nL	0/m
Farrowing crates	1	1/d	1	nL/r	x/r	1	nL	1/p	nL	1/M
Is/are ... mandatory for PIGS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Regular access to open run	x	0	x	nL	x	0	nL	0	nL	x
Group keeping of sows and gilts	1	1/d	x	nL/r	x	0	nL	0/r	nL	x
Pigs can see each other	1	x	x	nL/r	x	0	nL	x	nL	1/m
Regular pasture access	x	0	x	nL	x	0	nL	x	nL	x
Feeding roughage to adult sows and gilts	1	1/s	x	nL	x	0	nL	0/r	nL	x
Shower, wallow or other installation for cooling down	x	1/n	1/n	nL/r	x	0	nL	1/p	nL/r	x
Permanent access to water *	1	1/s	1/s	nL/r	x/r	1	nL	1/p	nL	1/m
Manipulable material like straw or wood *	1	1/s	x	nL/r	x	0	nL	0/r	nL	1/M
Dry lying area	1	1/s	1/s	nL/r	x	X	nL	1/r	nL/r	1/M
Litter/ bedding material	x	0	x	nL	x	0	nL	1/r	nL/r	1/M
Nesting material	1	1/s	x	nL	x	0	nL	x	nL	x
Heat source for piglets *	x	1/n	x	nL/r	x/r	1/n	nL	1/r	nL/r	x
Officially approved and controlled education of staff	1	1/s	x	nL/r	x	X	nL	0/r	nL	x

How is ... fixed in legislation for PIGS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Mandatory minimum frequency of access to open run	x	x	x	nL	x	nL	nL	x	nL	x
Maximum stocking density including weaners and rearing pigs *	1	1/d	1/s	nL/r	x/r	nL	nL	1/p	nL/r	1/M
Minimum age at weaning *	1	x	x	nL/r	x/r	nL	nL	0/p	nL/r	1/M
Maximum age for castration without anaesthesia	1	0	x	nL/r	x/r	nL	nL	1	nL/r	1/M
Maximum herd size	x	x	x	nL/r	x/r	nL	nL	x	nL	x
Number of adult animals per feeding places (ratio) *	1	1/s	x	nL	x/r	nL	nL	0	nL	x

x not mentioned 1= yes 0 = no nL = no national Legislation p = more precise
s = the same as EU rules d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU Regulation *GLOBALG.A.P.: M = major point m = minor point*
In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

The Table 7.2.2b below shows the detailed requirements and explanations given by the third country experts for pigs.

In italics specific differences regarding organic production are mentioned.

Tab. 7.2.2b Detailed differences and explanations for pigs in EU third countries

Aspect	EU-legislation	Main differences / explanations
Is/are ... allowed for PIGS?		
Tethering of sows	Not permanently allowed.	CH: Not allowed. Exceptions only if aggressive towards piglets or problems with legs. BZ: specific criteria in voluntary private industry standards. NZ: tethering is forbidden for confinements of pigs. <i>Organic: CH, AR: not allowed. NZ: not allowed, except in the last stages of pregnancy and during the suckling period.</i>
Castration without anaesthesia	Allowed with specific restrictions. <i>EU Organic: not allowed</i>	CH: not allowed any more since 1.1.2010. NZ: allowed, over 7 days of age must be done by veterinarians and after 4 weeks using analgesics (recommended). US: allowed (voluntary industry guideline: anaesthesia required only for castration of weaned pigs). <i>GLOBALG.A.P.: only within 7 days.</i> <i>Organic: CH: not allowed. US-NOP: All physical alterations are to be done as needed to promote animal welfare and in a manner that minimizes pain and stress.</i>
Tail docking	Allowed with specific restrictions. <i>EU Organic: Not routinely.</i>	NZ: before 8 days of age (additional restrictions). US: allowed but recommended to be done shortly after birth (voluntary industry guideline). <i>GLOBALG.A.P.: only within 7 days of piglet birth (written confirmation of need by vet or advisor).</i> <i>Organic: CH,AR, AU, CN, IFOAM BS: not allowed</i>
Ear notching	<i>EU Organic: Not routinely.</i>	CH: without anaesthesia but with ear tags and not by cutting off pieces. NZ: within max. 72 hours of birth (recommendation). US: allowed, recommended be done within first week of life (voluntary industry guideline). <i>GLOBALG.A.P.: only within 7 days of piglet birth (written confirmation of need by vet or advisor).</i> <i>Organic: CH,AR, AU,BR, CN, IFOAM BS: not allowed</i>

Aspect	EU-legislation	Main differences / explanations
Is/are ... allowed for PIGS?		
Tooth clipping	Allowed with specific restrictions. <i>EU Organic: Not routinely.</i>	NZ: before 3 days of age. US: allowed, recommended to be done within 24 hours after birth (voluntary industry guideline). <i>GLOBALG.A.P.: only within 7 days of piglet birth. (Written confirmation of need by vet or advisor).</i> <i>Organic: CH, AR, AU, CN, IFOAM BS: not allowed.</i>
Nose ringing	Allowed when kept outdoors <i>EU Organic: Not routinely.</i>	CH: generally not allowed. NZ: only recommendations. <i>Organic: CH, AR, IFOAM BS: not allowed.</i>
Hormonal treatments for growth	<i>EU Organic: Not allowed.</i>	US: hormones not allowed in pork production per U.S. federal law <i>Organic: CH, AR, AU, BR, CN, NZ Codex Organic GL, IFOAM BS: not allowed.</i>
Breeds highly susceptible to stress	<i>EU Organic: not allowed.</i>	CH: Breeding since 1980 on stress-resistant animals and limitation of daily growth rate.
Keeping animals in permanent darkness	Not allowed	CH, NZ: not allowed. US: allowed, however light levels may be kept very low. 15 ft candles for breeding, gestation, farrowing; 10 ft candles for nurseries; 5 ft candles for growing & finishing areas (voluntary industry guideline). <i>Organic: CH (as in non-organic), BR, CN, NZ, Codex Organic GL, IFOAM BS: not allowed.</i>
Fully slatted floors *	Allowed except for gilts and pregnant sows after service. <i>EU Organic: not allowed.</i>	CH: fully slatted floors phasing out until 2018 (considered as not animal-friendly). NZ: not more than 6 weeks + more detailed recommendations. <i>Organic: CH, NZ; Codex Organic GL: not allowed.</i>
Isolation of pigs *	Not allowed for sows except around farrowing.	CH: generally not allowed (exception see above). AR: only in quarantine for ill animals. NZ: This will be equivalent to the standards in the EU after phase out of current practice by 2015.
Farrowing crates		CH: Not for rearing pigs or boars; for dry sows and gilts during 10 days for insemination; for farrowing sows only if aggressive towards piglets or problems with legs; from beginning of nesting behaviour up to 3 days after birth. NZ: detailed recommendations for farrowing crates. <i>Organic: US: Farrowing crates are not specifically prohibited under NOP but by application of the other sections of the regulation they are not permitted.</i>

Is ... mandatory for PIGS?	EU-legislation	Main differences / explanations
Regular access to open run		<i>Organic: CH: 10 days after farrowing and around insemination. AR, BR, CR, NZ: mandatory. CN, Codex Organic GL, IFOAM BS: Exceptions during limited time.</i> <i>US: Permanent continuous confinement is not allowed (Pasture Regulation).</i>
Group keeping of sows and gilts	Required, except 1 week before farrowing until 4 weeks after farrowing. <i>EU Organic: except for last stages of pregnancy and during suckling period.</i>	CH: mandatory also for fattening pigs. NZ: recommendations. <i>Organic: CH (as for non-organic), NZ: mandatory.</i>
Regular pasture access		<i>Organic: AR, AU, BR: only in organic production. US: The producer must provide access to the "outdoors."</i>
Feeding roughage to adult sows and gilts	Not specifically mentioned, but high fiber food or bulky food (not explicitly roughage).	CH: if feed is rationed, not roughage but fiber. <i>Organic: US: The producer must provide "a feed ration including vitamins, minerals, protein, and/or amino acids, fatty acids, energy sources and, for ruminants, fiber."</i>
Shower, wallow or other installation for cooling down		CH: in new barns when temperature >25°C. <i>Organic: CH, AR, AU: required. NZ: to protect pigs from the sun a shelter or a wallow or both must be provided. US: The producer must provide "shelter designed to allow for the natural maintenance, comfort level and opportunity to exercise appropriate to the species".</i>
Permanent access to water *	Over 2 weeks.	CH: required, except if watered regularly in outdoor systems. <i>Organic: all organic legislation in third countries and Codex Organic GL, IFOAM BS: mandatory.</i>
Manipulable material like straw or wood *	Permanent access to a sufficient quantity of material, such as straw, hay, wood, sawdust, mushroom compost, peat or a mixture of such (not health disturbing).	<i>Organic: CH, AR: more details</i>
Dry lying area:	Not "dry" but thermally comfortable.	CH: few slats in lying area. <i>Organic: US: The producer must provide "appropriate, clean dry bedding."</i>
Litter/ bedding material		<i>Organic: CH, AR, AU, BR, CN, NZ, US, Codex Organic GL, IFOAM BS: mandatory.</i>
Nesting material	Required, unless technically not feasible.	CH: must after 112d of pregnancy. <i>AR: only in organic production.</i>
Heat source for piglets		CH: required: 30°C must be reached. <i>Organic: NZ: provision must be made (MS) to ensure appropriate ambient temperature range to maintain the normal body temperatures of piglets'. US: The producer must provide shelter designed to allow for "the natural maintenance, comfort level, and opportunity to exercise appropriate to the species".</i>
Officially approved and controlled staff education		CH: yes, except if less than 4 pigs. <i>Organic: AR: only in organic production.</i>

How is ... fixed in legislation for PIGS?	EU-legislation	Main differences / explanations
Mandatory minimum frequency of access to open run		<i>Organic: CH: daily. AR: mandatory whenever possible.</i>
Maximum stocking density including weaners and rearing pigs *	20-30kgLW 0.3m ² ; 30-50kgLW 0.4m ² ; 55-85kgLW 0.55m ² ; 85-110kgLW 0.65m ² ; >110kgLW 1.0m ² . <i>EU Organic: < 30 kg 0.6m²; < 50 kg 0.8m²; 85kg 1.1m²; <110 kg 1.3m²; <40days old with sow 7.5m²</i>	CH: weaners 0.2m ² /pig; finishing pigs 0.9m ² /pig; growing pigs 25-85kgLW 0.6-0.75m ² /pig; transitional period lasting until August 2018. AR: Enough space for lying, standing, feed and drinking. AU: AU: detailed recommendations in Codes. BR: not in legislation, voluntary industry standard: 0,6 & 1 m ² , depends on the farming systems intensity. NZ: detailed rules. US: For indoor housing: 12-30 lbs weight – 1.7-2.5 sq ft/pig; 30-60 lbs weight – 3-4 sq ft/pig; 60-100 lbs weight – 5 sq ft/pig; 100-150 lbs weight – 6 sq ft/pig; 150+ weight – 8 sq ft/pig. (Voluntary industry guideline). <i>Organic: CH: weaners 1.1 m² per pig; Fattening pigs 1.65m² per pig. AU: 1.5 m²/pig. BR: same norms as EU Organic. NZ: like EU Organic.</i> <i>Codex Organic GL, IFOAM BS: general criteria</i>
Minimum age at weaning	28 days (minus 7 under special conditions).	BR: not in legislation, voluntary industry standard: 15 days, depends on average weight. US: Early weaning allowed (voluntary industry guideline). NZ: more precise in general wording. Comment see below. <i>GLOBALG.A.P.: < 28 days (exceptionally 21 days).</i> <i>AR: 35 days. NZ: 40 days (see comment below).</i>
Maximum age for castration without anaesthesia:	7 days.	CH: not allowed anymore. BR: not in legislation, voluntary industry standard: before 12 days. NZ: Before 4 weeks. US: not required, recommended: weaned pigs should receive anesthesia but age not specified, (voluntary industry guideline). <i>GLOBALG.A.P.: within 7 days.</i>
Number of adult animals per feeding places (ratio)	All sows and gilts shall feed at the same time.	CH: animal/feeding place ratio: 1:1 for restricted feeding, 1:5 for ad libitum feeding with dry feeders and 1:10 for ad libitum feeding with tube feeders; 27-45 cm per animal according to weight. BR: not in legislation, voluntary industry standard: 10 – 20, depends on group size & feeders.

Below some special characteristics of pig production in some countries are described.

Canada

Above aspects related to animal welfare of pigs are not fixed in Canadian legislation, unless it is a required component of the codes of practice. See code for list of requirements and recommendations.

New Zealand

More information can be found in the Animal Welfare (Pigs) Code of Welfare: link see below⁸³. New Zealand's national animal welfare standards apply for all animals regardless of

⁸³ <http://www.biosecurity.govt.nz/animal-welfare/codes/pigs/index.htm>

the intended market and so no distinction is made between requirements for domestic and export markets.

A number of factors such as the minimum age of weaning, although a precise date for weaning is not given in the Code of Welfare as a minimum standard, the Minimum Standard for weaning does cover the fact that a piglet must not suffer stress or negative effects to their health and welfare as a result of weaning. This would prevent owners or persons in charge from weaning a piglet too early. Therefore this is not a recommendation, it is enforceable under law. NZ works largely on outcome based standards and this should be taken into account as the same principle applies for a number of the other factors examined in these tables that are marked as 'recommendation only'.

b) Requirements for ORGANIC pig production (home market and export)

Several EU third countries (CH, AR, BR, CA, NZ) have the same (or equivalent) requirements for organic production like the EU. There are only few issues, where the requirements are beyond the EU rules, e.g. for some mutilations (such as tail docking or tooth grinding or clipping), which are not allowed.

Regarding important animal welfare aspects few countries do not exclude fully slatted floors or isolation of pigs in organic livestock production.

Table 7.2.2c Different animal welfare requirements for ORGANIC pigs identified in EU and national third country legislation

Is/are ... allowed for ORGANIC PIGS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Tethering of sows	0	0/s	0/s	x	0	0/s	0	0/s	0	x	x
Castration without anaesthesia	0**	0/s	x	1	1	1	0	1/p	1	x	x
Tail docking	1	0/d	0/d	0/d	0/d	1	0	1/p	1	1	1
Ear notching	x	1	x	0/d	1	0/d	0	1/r	1	x	0/d
Tooth clipping	1	0/d	0/d	0/d	1	0/d	0	1/p	1	1	0/d
Tooth grinding	1	1	x	0/d	x	1	x	1	1	1	0/d
Nose ringing	x	0/d	x	1	0	0	x	1/r	1/r	x	0/d
Hormonal treatments for growth	0**	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0/s
Breeds highly susceptible to stress	0	x	x	x	x	0	x	1/r	1/r	0	0
Keeping animals in permanent darkness	0	0/s	0/s	0	0/s	0/s	0/s	0/s	0	0	0
Fully slatted floors *	0**	0/s	x	x	x	0	x	0/s	x	0	0
Isolation of pigs *	0	0/s	0	x	x	0/s	0	0/s	x	0	0
Farrowing crates	x	1	1	x	x	x	x	x	x	x	x
s/are ... mandatory for ORGANIC PIGS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Regular access to open run	1**	1/s	1/s	1	1	1	1	1	1	1	1
Group keeping of sows and gilts	1	1/s	x	x	x	1/s	1	1	x	1	1
Pigs can see each other	1	x	x	x	x	x	x	x	x	x	x
Regular pasture access	1**	x	1	1	1	0	0	0	x	0	0
Feeding roughage to adult sows and gilts	1	1/s	x	x	x	1/s	1	1	x	1	1
Shower, wallow or other installation (ventilation) for cooling down	x	1/d	1/d	1/d	x	X	x	1/p	x	x	x
Permanent access to water *	1	1/s	1/s	1/s	1/s	1/s	1/s	1/p	x	1/s	1/s
Manipulable material like straw or wood *	1	1/s	1/s	x	x	x	1	0/r	x	x	x
Dry lying area	1	1/s	1/s	x	x	1	1	1/r	1	1	1
Litter/ bedding material	1**	1/s	x	1	1	x	1	1/r	1	1	1
Nesting material	1	1	1/s	x	x	x	x	x	x	x	x
Heat source for piglets *	x	0	x	x	1/d	x	x	1/r	x	x	x
Officially approved and controlled education of staff	1	1/s	1/s	x	x	x	x	0/r	x	x	x

How is ... fixed in legislation for ORGANIC PIGS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Mandatory minimum frequency of access to open run	x	1/d	x	x	1	x	x	x	x	x	x
Maximum stocking density, including weaners and rearing pigs *	1	1/s	1	1	1	1/s	x	1/s	x	1	1
Minimum age at weaning	1	1/s	1/d	x	1	x	x	1/d	x	1	1
Maximum age for castration without anaesthesia	x	0	x	x	x	x	x	x	x	x	x
Maximum herd size	x	x	x	x	0	x	x	x	x	x	x
Number of adult animals per feeding places (ratio) *	x	1/d	x	x	0	x	x	x	x	x	x

x not mentioned

1= yes

0 = no

nL = no national Legislation for organic

s = the same as EU Organic rules

d = stricter than/beyond the EU Organic rules

r = only

recommended, not mandatory n = not in EU Organic Regulation

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** beyond EU general AW legislation

c) Requirements of international private voluntary farm assurance and standards schemes for pigs

GLOBALG.A.P.

GLOBALG.A.P. integrates the relevant animal welfare criteria in its pig module. The welfare of sows, piglets and finishers is addressed in multiple control points and compliance criteria.

Codex Alimentarius Organic Guidelines / IFOAM Basic Standards

Both standards include special requirements for pigs.

7.2.3 Laying hens

a) Requirements for internal production (home market) and export

Several Non-European countries have no national legal requirements but are working with voluntary codes of practice. Switzerland goes in several aspects beyond the EU rules or applies the same comparable rules. In several aspects NZ has also comparable rules like the EU.

Differences with the EU rules have been found concerning the following aspects:

Table 7.2.3a Different animal welfare requirements for laying hens identified in EU and national legislation of third countries and EU trading partners, amended with G-GAP

Is/are ... allowed for LAYING HENS	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Beak trimming *	1**	1/p	x	nL/r	x	1	nL	1/p	nL/r	1/m
Toe removal	x	1	x	nL/r	x	nL	nL	0/n	nL	1/m
Comb dubbing (trimming)	x	0/n	x	nL	x	nL	nL	0/n	nL	1/m
Keeping hens without periods of darkness	0	0/s	x	nL/r	x	nL	nL	0/p	nL	
Conventional cages/battery cages/laying cages	1/0	0	x	nL/r	x	1	nL	1	nL	1/0
Is/are ... mandatory for LAYING HENS	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Regular access to open run	0	0	x	nL	x	0	nL	0	nL	0/1
Litter with straw	x	1/n	x	nL/r	x	0	nL	0	nL	1/M
Possibility of sand or dust bathing *	1/0	1/d	x	nL	x	0	nL	0/r	nL	1/M
Regular access to pasture	0	0	x	nL	x	0	nL	0	nL	0
Uptake of whole grain feed	x	0	x	nL	x	0	nL	0	nL	0
Permanent access to water	x	1/n	1	nL/r	x	1	nL	1	nL	1/M
Keeping of roosters	x	0	x	nL	x	0	nL	0	nL	0
Claw shortening devices	1	1/s	x	nL	x	0	nL	0	nL	x
Minimizing of sound	1	1/s	x	nL	x/r	0	nL	X	nL/r	x
Light dimming phase	1	0	x	nL/r	x/r	0	nL	1	nL/r	1/M
Provision of nest boxes	1	1/s	x	nL/r	x/r	0	nL	1	nL	x
Officially approved and controlled education of staff	0	1/d	x	nL	0	0	nL	0/r	nL	x
How is ... fixed in legislation for LAYING HENS	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Minimum length of darkness period	1	1/d	x	nL/r	x/r	nL	x	1	nL	x
Maximum flock size	x	x	x	nL	x	x/r	x	x	nL	x
Maximum indoor stocking density *	1	1/d	x	nL/r	x	nL	x	1	nL/r	1/m
Maximum outdoor stocking density in systems with open run *		1/n	x	nL/r	x	nL	x	1/n	nL	x
Number of roosters per hens	x	x	x	nL	x	nL	x	x	nL	x
Length of perches per animal	1	1/d	x	nL/r	x	nL	x	1	nL/r	x
Group nests: area per animal	1	1/d	x	nL/r	x/r	nL	x	1	nL	x
Individual nests: hens per nest	1	1/s	x	nL/r	x/r	nL	x	1	nL	x
Percentage of floor area littered	x	1/n	x	nL	x	nL	x	1	nL/r	x

x not mentioned 1= yes 0 = no nL = no national Legislation p = more precise
s = the same as EU rules d = stricter than/beyond the EU rules r = only recommended, not mandatory
n = not regulated in EU ** can be allowed by EU member states

GLOBAL G.A.P.: M = major point m = minor point

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

The Table 7.2.3b below shows the detailed requirements and explanations given by the third country experts for laying hens.

In italics specific differences regarding organic production are mentioned.

Tab. 7.2.3b Detailed differences and explanations for laying hens in EU third countries

Aspect	EU-legislation	Main differences / explanations
Is/are ... allowed for LAYING HENS?		
Beak trimming *	All mutilations are prohibited. However Member States may authorise beak trimming, provided that it is carried out by qualified staff on chickens that are less than 10 days old and intended for laying <i>EU Organic: not routinely, the operation should be carried out only at the most appropriate age by qualified personnel.</i>	CH: grinding is allowed. NZ: allowed – specific details given in appendix III – Layer Hen Code of Welfare. US: allowed, recommended: 10 days old or younger, remaining beak should be 2-3 mm, 2nd trim after 5-8 weeks allowed. All physical alterations are to be done as needed to promote animal welfare and in a manner that minimizes pain and stress (voluntary industry guideline). GLOBALG.A.P.: detailed restrictions & justification needed. <i>Organic: AR, AU, IFOAM BS: not allowed. CA, Codex Organic GL: with restrictions and justification.</i>
Toe removal	Not regulated, generally included in the context of all mutilations which shall be prohibited.	CH: without anaesthesia only in male chicks reared for laying hen breeder herds. NZ: not allowed for layer hens. <i>Organic: AR, AU, NZ IFOAM BS: not allowed</i>
Comb dubbing (trimming)	Not regulated, generally included in the context of all mutilations which shall be prohibited.	<i>Organic: AR, AU, CA, NZ IFOAM BS: not allowed.</i>
Keeping hens without periods of darkness	Not allowed	CH: allowed for chicks during first 3 days of life. <i>Organic: CH, AR, AU, CA, Codex Organic GL, IFOAM BS: not allowed.</i>
Conventional cages/battery cages/laying cages	Prohibited after 1.1.2012, afterwards only enriched cages. <i>EU Organic: not allowed.</i>	US: allowed, recommended: 67 to 86 square inches of usable space per hen (voluntary industry guideline). <i>Organic: in all EU third countries, Codex Organic GL, IFOAM BS not allowed.</i>
Is ... mandatory for LAYING HENS?	EU-legislation	Main differences / explanations
Regular access to open run	Only in alternative systems. <i>EU Organic: 1/3 of their life mandatory.</i>	CH, NZ: mandatory for free-range systems. GLOBALG.A.P.: special requirements for outdoor poultry. Not applicable for house poultry. <i>Organic: CH AR, AU, CA, US: mandatory. CA: Details on outdoor run (protective facilities, vegetation). NZ: like EU Organic.</i>
Litter with straw	Litter should be provided in enriched and alternative systems but it is not specified the material. <i>EU Organic: permanently access to sufficient quantities of roughage and suitable material in order to meet their ethological needs.</i>	CH: required, except 2 first weeks of life. GLOBALG.A.P.: required but not specifying the material. <i>Organic: CH (like for non-organic). AR, AU, CA, CN, NZ; Codex Organic GL, IFOAM BS: mandatory.</i>

Is ... mandatory for LAYING HENS?	EU-legislation	Main differences / explanations
Possibility of sand or dust bathing *	Only in alternative systems and enriched cages. <i>EU Organic: straw or wood shavings, sand or turf.</i>	NZ: The ability for birds to dust bathe is recommended within the Code of Welfare. <i>GLOBALG.A.P.: allowance for birds to dust bath must be given.</i>
Uptake of whole grain feed		<i>Organic: CA: in finishing phase. US-NOP: not required, however the producer must provide "a feed ration including vitamins, minerals, protein, and/or amino acids, fatty acids, energy sources and, for ruminants, fiber."</i>
Regular access to pasture		NZ: Free range hens must have access to outdoors which often consists of grass. <i>Organic: CH AR, AU, CA: mandatory. CA: at least 1/3 of their life.</i>
Provision of nest boxes	Only in alternative systems and enriched cages.	AU: detailed recommendations in Codes (one bird nest per 7 hens or nest box area of 1 m ² / 120 hens). <i>Organic: AR: only in organic production.</i>
Officially approved and controlled education of staff		CH: yes, except when less than 150 laying hens. NZ: This is a Minimum Standard in the Code that personnel have the ability to maintain the health and welfare of the animals, knowledge and are competent. <i>Organic: AR: only in organic production.</i>
How is ... fixed in legislation for LAYING HENS?	EU-legislation	Main differences / explanations
Minimum length of darkness period:	One third of the day (8h).	CH: 8 hours, except for chicks <3 days. BR: not in legislation, voluntary industry standard: In the three first weeks, from 2nd day, 9 hours. <i>Organic: CH, BR: 8h. NZ: must be given light between 8 min and 16 hours max per 24 hours.</i>
Maximum flock size	<i>EU Organic: 3000 laying hens/poultry house.</i>	AR, AU: <i>In organic productions "flock size can not affect individual behaviour patterns negatively". AU: max. 2500 birds under one roof. NZ: 4800 laying hens/poultry house.</i>
Maximum indoor stocking density *	- 550 cm ² per hen in battery cages - 750 cm ² per hen of cage area, 600 cm ² of which shall be usable. - 9hens/m ² usable area in alternative systems <i>EU Organic: 6 hens/m² (this differs in mobile houses).</i>	CH: 6-7 animals/m ² useable area. BR: not in legislation, voluntary industry standard: It depends on the system used. Recommended 450 cm ² /animal. US: no legal requirements, recommended: 1.5 sq ft per hen; for perching areas, 1.2 sq ft for brown layers and 1.0 sq ft for white hens; for multi-tiered systems, 1.0 sq ft. (industry voluntary guideline for cage free systems); 67 sq in for white hens and 76 sq in for brown hens (industry voluntary guideline for caged production) <i>GLOBALG.A.P.: no figures but criteria such as: 1. freedom of movement 2. stand normally 3. Turn around 4. Stretch their wings 5. Perch 6. Sit without interface with other birds.</i> <i>Organic: CH, BR: 6 animals/m². AU: 5 animals/m² including the roosting area.</i> <i>CA: 6 birds/m². NZ like EU</i> <i>Codex Organic GL, IFOAM BS: only general criteria.</i>

How is ... fixed in legislation for LAYING HENS?	EU-legislation	Main differences / explanations
Maximum outdoor stocking density in systems with open run *	<i>EU Organic: 4/m² p provided that the limit of 170 kg/ha/year is not exceeded.</i>	CH: in outdoor systems 5 m ² /animal required. <i>Organic: CH same as outdoor systems (5m²/hen). BR: 3 hens/m². CA: 4 birds/m². For mobile houses: max. 2000 layers/ha. NZ: like EU. Codex Organic GL, IFOAM BS: only general criteria.</i>
Number of roosters per hens		BR: not in legislation, voluntary industry standard: 1 rooster per 12 hens, in traditional system, but it may change.
Length of perches per animal	15cm/animal defined in battery and enriched cages. <i>EU Organic: 18 cm/animal.</i>	CH: 14 cm. US: no legal requirement, recommended 6 inch linear perch space per hen (voluntary industry guideline for cage free production; however 95% of US hens are – according to the view of US Animal Welfare Institute - caged and have no access to perches <i>Organic: CH: 14 cm (as non-organic). BR, NZ: 18cm/hen.</i>
Group nests: area per animal	120hens/m ² .	CH: 100 hens/m. BR: not in legislation, voluntary industry standard: It depends on the system used. Recommended 450 cm ² /animal. NZ: depending on the caging system. <i>Organic: BR: 1200 cm²/8 hens.</i>
Individual nests: hens per nest	7hens/nest.	CH: 5 hens per nest BR: not in legislation, voluntary industry standard: 4 hens/nest, but it depends on the nest size. NZ: 7 hens/nest or if common nest 120 cm ² /bird (given in Code)
Percentage of floor area littered.	1/3 in alternative systems <i>EU Organic: 1/3.</i>	CH: 20 %. NZ: Layer Hen Code of Welfare states that 'Indoor solid floors must be completely covered with litter material'. US: no legal requirement, recommended: 15% of usable floor area (voluntary industry guideline for cage free production; however 95% of US hens are caged and have no access to litter, according to the view of US Animal Welfare Institute.

Below some special characteristics of poultry production in some countries are described.

Canada

Several requirements like flock size are not fixed in legislation, unless it is a required component of the codes of practice or Marketing Board orders. See code for list of requirements and recommendations. Marketing Board orders are set provincially, but there are federal/provincial agreements between provincial marketing boards and the federal association (e.g. between Egg Farmers of Canada and the BC Egg Marketing Board). Please note: pigs and cattle do not have marketing boards (i.e. supply managed); their prices are set by commissions and the commodity market. The following commodities are supply managed in Canada: dairy, turkey, laying hens, meat chickens.

New Zealand

More information can be found in the Animal Welfare (Layer Hens) Code of Welfare: link see below⁸⁴. New Zealand's national animal welfare standards apply for all animals regardless of the intended market and so no distinction is made between requirements for domestic and export markets.

b) Requirements for ORGANIC production (home market and export)

Several EU third countries (CH, AR, BR, CA, NZ) have the same or equivalent requirements for organic production like the EU. There are only few issues, where the requirements are beyond the EU rules, e.g. for some mutilations (such as beak trimming, toe removal or comb dubbing), which are not allowed. Regarding important animal welfare aspects few countries as well as the EU organic rules and the Codex Alimentarius Organic Guidelines do not exclude beak trimming and do not require sand or dust bathing in organic livestock production. Few countries (AR, CN, US) have no specific indoor and outdoor stocking densities laid down.

Differences have been found concerning the following aspects:

Table 7.2.3c Different animal welfare requirements for ORGANIC laying hens identified in EU and national third country legislation

Is/are ... allowed for ORGANIC LAYING HENS	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Beak trimming *	1	0/d	0/d	0/d	0/d	1	0	1/p	1/p	1	0/d
Toe removal	x	0	0	0	0	1	0	0	1	1	0/d
Comb dubbing (trimming)	x	0/d	0/d	0/d	0/d	0/d	0	0	1	1	0/d
Keeping hens without periods of darkness	0	0/s	0	0	0	0	0	0/p	x	0	0
Conventional cages/battery cages/laying cages	0**	0/s	0/s	0/s	0/s	0/s	0/s	0/s	0	0/s	0/s
Is/are ... mandatory for ORGANIC LAYING HENS	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Regular access to open run	1**	1/s	1	1	1	1/s	1	1	1	1	1
Litter with straw	1**	1/s	1	x	x	1	1	1	x	1	1
Possibility of sand or dust bathing *	0	x	x	x	x	x	x	0	x	x	x
Regular access to pasture	1**	1/s	1	1	1	1/s	1	0	x	0	0
Uptake of whole grain feed	0	1/d	x	x	x	1	x	x	x	x	x
Permanent access to water	1**	1/s	1/s	1/s	1/s	1/s	1/s	1/s	x	1/s	1/s
Keeping of roosters	0	0	x	x	x	x	x	0	x	x	x
Claw shortening devices	1	x	x	x	x	x	x	0	x	x	x
Minimizing of sound	1	1/s	1	x	x	x	x	x	x	x	x
Light dimming phase	1	0	x	x	x	x	x	1	x	x	x
Provision of nest boxes	1**	1/s	1	x	1	x	x	1	x	x	x
Officially approved and controlled education of staff	1**	1	1	x	X			1/s	x	x	x

⁸⁴ <http://www.biosecurity.govt.nz/animal-welfare/codes/layer-hens/index.htm>

How is ... fixed in legislation for ORGANIC LAYING HENS	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Minimum length of darkness period	1	1/s	x	x	1	x	x	1/s	x	1	1
Maximum flock size	1**	x	1	1	x	x	x	1	x	x	x
Maximum indoor stocking density *	1**	1/d	x	1	1	1/s	x	1/s	x	1	1
Maximum outdoor stocking density in systems with open run *	1**	1/d	x	x	1	1/s	x	1/s	x	1	1
Number of roosters per hens	0	x	x	x	x	x	x	x	x	x	x
Length of perches per animal	1**	1/d	x	x	1	x	x	1	x	x	x
Group nests: area per animal	1**	1/s	x	x	1	x	x	1	x	x	x
Individual nests: hens per nest	1	1/s	x	x	x	x	x	1	x	x	x
Percentage of floor area littered	1**	1/s	x	x	x	x	1/s	1	x	x	x

x not mentioned 1= yes 0 = no nL = no national Legislation for organic
s = the same as EU Organic rules d = stricter than/beyond the EU Organic rules r = only recommended, not mandatory n = not in EU Organic Regulation

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** beyond EU general AW legislation

c) Requirements of international private voluntary farm assurance and standards schemes for laying hens

GLOBALG.A.P.

The GLOBALG.A.P. standard integrates a great variety of requested animal welfare issues in the poultry module, addressing especially hatcheries and welfare requirements for indoor and outdoor poultry.

Codex Alimentarius Organic Guidelines / IFOAM Basic Standards

Both standards include a few special requirements for poultry.

7.2.4 Broilers

a) Requirements for internal production (home market) and export

Several Non-European countries have no national legal requirements but are working with voluntary codes of practice. Switzerland and partly NZ go in several aspects beyond the EU rules or applies the same comparable rules. Differences with the EU rules have been found concerning the following aspects (see Table 7.2.4a):

Table 7.2.4a Different animal welfare requirements for broilers identified in EU and national legislation of third countries and EU trading partners

Is/are ... allowed for BROILERS	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Beak trimming	1	1/s	1	nL/r	x	1	nL	1	nL	1/m
Toe removal	0	1	1	nL/r	x	1	nL	0	nL/r	1/m
Comb dubbing (trimming)	0	0/s	1	nL	x	1	nL	0	nL/r	1/m
Keeping animals in permanent darkness	0	0/s	x	nL/r	x/r	0/r	nL	0	nL	x
Is/are ... mandatory for BROILERS	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Access to open run	0	x	0	nL	x	0	nL	0/1	nL	0/1
Provision of litter *	1	1/s	0	nL/r	x/r	0	nL	1	nL	1/M
Possibility of sand or dust bathing	x	1/d	0	nL	x	0	nL	1	nL	1/M
Regular pasture access	x	0	0	nL	x	0	nL	0/1	nL	0
Uptake of whole grain feed	x	x	x	nL	x	0	nL	x	nL	x
Permanent access to water	1	1/s	1/s	nL/r	x/r	0	nL	1	nL	1/M
Minimizing of sound	1	1/s	x	nL	x/r	0	nL	x	nL	x
Light dimming phase	1	x	x	nL/r	x	0	nL	1	nL/r	1/M
Officially approved and controlled education of staff	1	1/s	x	nL	x	0	nL	0/r	nL	x
How is ... fixed in legislation for BROILERS?	EU	CH	AR	AU	BR	CA	CN	NZ	US	GG
Maximum flock size	x	x	0	nL	x	nL	nL	x	nL	0
Maximum stocking density *	1	1/d	1	nL/r	x/r	nL	nL	1	nL	0
Minimum age of broilers at slaughter *	x	x	x	nL	x/r	nL	nL	x	nL	0

x not mentioned 1= yes 0 = no nL = no national Legislation

s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation *GLOBAL-G.A.P.: M = major point m = minor point*

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

The Table 7.2.4b below shows the detailed requirements and explanations given by the third country experts for broilers.

In italics specific differences regarding organic production are mentioned.

Tab. 7.2.4b Detailed differences and explanations for broilers in EU third countries

Aspect	EU-legislation	Main differences / explanations
Is/are ... allowed for BROILERS?		
Beak trimming *	All surgical interventions shall be prohibited. Beak trimming may be authorised by Member States on chickens (less than 10 days old). <i>EU Organic: not routinely.</i>	CH: not allowed but grinding is allowed. <i>GLOBALG.A.P.: detailed restrictions & justification needed.</i> <i>Organic: AR, IFOAM BS: not allowed. US-NOP: All physical alterations are to be done as needed to promote animal welfare and in a manner that minimizes pain and stress.</i>
Toe removal	Not allowed.	CH: without anaesthesia only in male chicks reared for laying hen breeder herds. NZ: not allowed. US: allowed for breeding cockerels (voluntary industry guideline). <i>Organic: AR, IFOAM BS: not allowed</i>
Comb dubbing (trimming)	Not allowed.	CH, NZ: not allowed. US: Allowed for breeding cockerels (voluntary industry guideline). <i>Organic: AR, IFOAM BS: not allowed</i>
Is ... mandatory for BROILERS?	EU-legislation	Main differences / explanations
Access to open run	<i>EU Organic: 1/3 of their life mandatory.</i>	NZ: Free range broilers must have access to an outdoor area – a Minimum Standard stating this is included in the new Code of Welfare for Broilers, which is in 2010 under development. <i>GLOBALG.A.P.: special requirements for outdoor poultry. Not applicable for house poultry.</i> <i>In all non-EU third countries, Codex Organic GL, IFOAM BS: mandatory. NZ: iike EU. US-NOP: The producer must provide access to the “outdoors.”</i>
Provision of litter *	Required. <i>EU Organic: more detailed: straw, wood shavings sand or turf.</i>	<i>GLOBALG.A.P.: required but not specifying the material.</i> <i>Organic: all mandatory. AR: more detailed. Organic: US-NOP: Requires “appropriate clean, dry bedding”.</i>
Possibility of sand or dust bathing		NZ: Free range broilers must have access to an outdoor area – a Minimum Standard stating this is included in the new Code of Welfare for Broilers, which is currently under development. <i>GLOBALG.A.P.: allowance for birds to dust bath must be given.</i> <i>Organic: AR, NZ: mandatory.</i>
Regular pasture access	<i>EU Organic: mandatory.</i>	NZ: Free range chickens will have access to an outdoor area – which often consists of pasture. <i>Organic: AR: mandatory.</i>
Uptake of whole grain feed		<i>Organic: CA: in finishing phase. US-NOP: not required, but the producer must provide “a feed ration including vitamins, minerals, protein, and/or amino acids, fatty acids, energy sources and, for ruminants, fiber.”</i>
Light dimming phase	Mandatory.	US: Recommend at least 4 hours darkness per day, not necessarily continuous (voluntary industry guideline).
Officially approved and controlled staff education		NZ: This is a Minimal Standard in the Code that personnel have the ability to maintain the health and welfare of the animals, knowledge and are competent. CH: yes, except if less than 500 broilers produced per year.

How is ... fixed in legislation for BROILERS?	EU-legislation	Main differences / explanations
Maximum flock size	<i>EU Organic: max 4800 per poultry house.</i>	<i>Organic: AR: In organic productions "flock size can not affect individual behaviour patterns negatively"</i>
Maximum stocking density *	33kg/m ² (+ under certain cond. in member states up to 39kg + max. 3 kg/m ² . <i>EU Organic: 10/m² indoors (max. 21kg/m²)+4/m² outdoors.</i>	CH: 30kg/m ² . BR: not in legislation, voluntary industry standard: 10 - 12 broilers / m ² . NZ: max. 38kg /m ² (exceptions 40 kg/m ²). US: no legal requirements, recommended: below 4.5 lbs live weight -- 6.5 lbs per sq ft; 4.5-5.5 lbs live weight -- 7.5 lbs per sq ft; more than 5.5 lbs live weight -- 8.5 lbs per sq ft. (voluntary industry guideline). <i>Organic: AU: not more than 10kg/m². BR: 6/m². CA: indoor 21 kg/m² and outdoor 4 birds/m², with mobile units max. 2500 broilers/ha. NZ: like EU. Codex Organic GL, IFOAM BS: only general criteria.</i>
Minimum age of broilers at slaughter *	<i>EU Organic: 81 days or slow-growing strains.</i>	BR: not in legislation, voluntary industry standard: 35 days. <i>EU Organic: 81 days or slow-growing strains.</i>

Below some special characteristics of broiler production in some countries are described.

Canada

Several aspects are not fixed in legislation, unless it is a required component of the codes of practice or Marketing Board orders. See code for list of requirements and recommendations. Marketing Board orders are set provincially, but there are federal/provincial agreements between provincial marketing boards and the federal association, e.g. between Chicken Farmers of Canada and the British Columbia Chicken Marketing Board.

New Zealand

Detailed requirements and recommendations can be found in the Animal Welfare (Broiler Chickens: Fully Housed) Code of Welfare: link see below⁸⁵. Note that dubbing, toe removal and beak trimming are not conducted on broilers in New Zealand. New Zealand's national animal welfare standards apply to all animals regardless of the intended market and so no distinction is made between requirements for domestic and export markets.

b) Requirements for ORGANIC production (home market and export)

Several EU third countries (CH, AR, BR, CA, NZ) have the same or equivalent requirements for organic production of broilers like the EU. There are only few issues, where the requirements are beyond the EU rules, e.g. for some mutilations (such as beak trimming, toe removal or comb dubbing), which are not allowed. Regarding important animal welfare aspects few countries as well as the EU organic rules and the Codex Alimentarius Organic Guidelines do not exclude beak trimming and do not require sand or dust bathing in organic livestock production. Few countries (CN, US) have no specific indoor and outdoor stocking densities laid down.

⁸⁵ <http://www.biosecurity.govt.nz/regs/animal-welfare/req/codes/broiler-chickens>

Differences have been found concerning the following aspects:

Table 7.2.4c Different animal welfare requirements for ORGANIC broilers identified in EU and national third country legislation

Is/are ... allowed for ORGANIC BROILERS	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Beak trimming	1	0/d	0/d	0/d	0/d	1	0	1	1	1	0/d
Toe removal	0	0/s	0/s	0/d	0/s	1	0/s	0/s	1	1	0/s
Comb dubbing (trimming)	0	0/s	0/s	0/s	0/s	0/s	0/s	0/s	1	1	0/s
Keeping animals in permanent darkness	0	0/s	0	0/s	0/s	0/s	0	0/s	0	0/s	0/s
Is/are ... mandatory for ORGANIC BROILERS	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Access to open run	1**	1/s	1/s	1	1/s	1/s	1	1	1	1	1
Provision of litter *	1	1/s	1/s	1	x	1	1	1	x	1	1
Possibility of sand or dust bathing	0	x	1/n	x	x	x	x	1	x	x	x
Regular pasture access	1**	1/s	1/s	1	1/s	1	1	1	x	0	0
Uptake of whole grain feed	0	1/d	0	x	x	x	x	x	x	x	x
Permanent access to water	1	1/s	1/s	1/s	1/s	1/s	1/s	1/s	x	1/s	1/s
Minimizing of sound	1	1/s	x	x	x	x	x	x	x	x	x
Light dimming phase	1	x	x	x	x	x	x	1	x	x	x
Officially approved and controlled education of staff	0	1/d	1/d	x	x	x	x	0/r	x	x	x
How is ... fixed in legislation for ORGANIC Broilers?	EU	CH	AR	AU	BR	CA	CN	NZ	US	Co-dex	IFO-AM
Maximum flock size	1**	x	1	1	x	x	x	1/s	x	x	x
Maximum stocking density *	1**	1/d	1	1/d	1/d	1/s	x	1/s	x	1	1
Minimum age of broilers at slaughter *	1**	1/s	x	x	x	x	x	1/s	x	x	x

x not mentioned 1= yes 0 = no nL = no national Legislation
s = the same as EU Organic rules d = stricter than/beyond the EU Organic rules r = only recommended, not mandatory n = not in EU Organic Regulation

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010). ** beyond EU general AW legislation

c) Requirements of international private voluntary farm assurance and standards schemes for broilers

GLOBALG.A.P.

The GLOBALG.A.P. standard integrates a great variety of requested animal welfare issues in the poultry module, addressing especially hatcheries and welfare requirements for indoor and outdoor poultry .

Codex Alimentarius Organic Guidelines / IFOAM Basic Standards

Both standards include special requirements for poultry but not specifically for broilers.

7.2.5 Transport

The analysis was differentiated related to the main animal categories.

a) Requirements for internal production (home market) and export

Several Non-European countries have no national legal requirements but are working with voluntary codes of practice. Switzerland goes in several aspects beyond the EU rules or applies the same comparable rules. In several aspects AR has also comparable rules like the EU. Regarding the Chinese transport rules; it was assumed that these requirements were recommendations.

Differences with the EU rules have been found concerning the following aspects (see Table 7.2.5a below):

Table 7.2.5a Different animal welfare requirements for transport identified in EU and national legislation of third countries and EU trading partners – CATTLE

Is/are ... allowed in CATTLE TRANSPORT?	EU	CH	AR	AU	BR	CA	CN	NZ	US
Mixing of unfamiliar groups of animals	0	0/s	0/s	1/nr**	1/nr	1	x	1/nr	x
Transport sick or injured animals	0	0/s	0/s	1/nr***	x/nr	1	0	0	x
Use of sedatives	1	0/d	x	1/nr**	x/nr	x	x	0	x
Use of electric shock instruments *	1	1/s	0	1/nr**	1/nr	1	x	1/nr	x
Is ... mandatory in CATTLE TRANSPORT?									
Minimize transport length and distance	1	1/s		1/r**	1/r	x	1/r	1/r	1
Access to water during transport	0	0	1/d	1/r**	x	0	1/r	1/r	x
Access to feed during transport	0	0	1/d	1/r**	x	0	1/r	1/r	x
Ventilation	1	1/s	1/s	1/r**	1/r	x	1/r	1/r	x
Regulation of temperature	1	1/s	1/s	1/r**	x	x	1/r	1/r	x
Officially approved and controlled education of staff	1	1/s	1/s	1/r**	x	0	x	1/r	x
How is ... fixed in CATTLE TRANSPORT requirements?									
Maximum journey time for healthy adult animals (h)	29	6/d	12/d	1/r**	x	x	x	1/r	x
Resting periods after how many hours (in h)	29	x	x	1/r**	1	x	x	1/r	28
Length of resting periods (in h)	24	x	x	1/r**	x	x	x	1/r	5

x not mentioned

1= yes

0 = no

d = day

s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation nr = not recommended r** = competency of

handlers -recommended by nMCoP Leg = national Model Code of Practice under equivalent State and Territory Legislation of Australia⁸⁶ *** = only with veterinary advice of suitability for the journey

In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

⁸⁶ Advised requirements for good welfare outcomes in Australia are in the national *Model Code of Practice for the Welfare of Animals: Land Transport of Cattle*, that can be downloaded from <http://www.publish.csiro.au/nid/22/pid/2483.htm>

Table 7.2.5b Different animal welfare requirements for transport identified in EU and national legislation of third countries and EU trading partners – PIGS

Is/are ... allowed in PIG TRANSPORT?	EU	CH	AR	AU	BR	CA	CN	NZ	US
Mixing of unfamiliar groups of animals	0	0/s	0	1/nr**	1/nr	1	x	1/nr	x
Transport sick or injured animals	0	0/s	0/s	1/nr***	1/nr	1	x	0	x
Use of sedatives	1	0/d	x	1/nr**	1/nr	x	x	0	x
Use of electric shock instruments *	1	1/s	0/d	1/nr**	1/nr	1	x	1/nr	x
Is ... mandatory in PIG TRANSPORT?									
Minimize transport length and distance	1	1/s	1/s	1/r**	1/r	x	x	1/r	1/s
Access to water during transport	1	0	1/d	1/r**	x	0	x	1/r	x
Access to feed during transport	x	0	1	1/r**	x	0	x	1/r	x
Ventilation	1	1/s	1/s	1/r**	1/r	x	x	1/r	x
Regulation of temperature	1	1/s	1/s	1/r**	x	x	x	1/r	x
Officially approved and controlled education of staff	1	1/s	1	1/r**	x	0	x	0/r	x
How is ... fixed in PIG TRANSPORT requirements?									
Maximum journey time for healthy adult animals (in h)	24	6	12	1/r**	x	x	x	24/r	x
Resting periods after how many hours (in h)	24	x	x	1/r**	1	x	x	1/r	28
Length of resting periods (in h)	24	x	x	1/r**	x	x	x	1/r	5

x not mentioned 1= yes 0 = no d = day

s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation nr = not recommended r** = competency of handlers -recommended by nMCoP Leg = national Model Code of Practice under equivalent State and Territory Legislation of Australia⁸⁷ *** = only with veterinary advice of suitability for the journey

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

⁸⁷ Advised requirements for good welfare outcomes in Australia are in the national *Model Code of Practice for the Welfare of Animals: Land Transport of Cattle*, that can be downloaded from <http://www.publish.csiro.au/nid/22/pid/2483.htm>

Table 7.2.5c Different animal welfare requirements for transport identified in EU and national legislation of third countries and EU trading partners – POULTRY

Is/are ... allowed in POULTRY TRANSPORT?	EU	CH	AR	AU	BR	CA	CN	NZ	US
Mixing of unfamiliar groups of animals	0	0/s	0/s	1/nr**	x/nr	1	x	1	nL
Transport sick or injured animals	0	0/s	0/s	0/s	x/nr	1		0	nL
Use of sedatives	1	0/d	x	1/nr**	x/nr	x	x	0	nL
Use of electric shock instruments *	1	1/s	0/d	x	x/nr	1	x	x/nr	nL
Is ... mandatory in POULTRY TRANSPORT?									
Minimize transport length and distance	1	1/s	1/s	1/nr**	x/r	x	1/r	1	nL
Access to water during transport	0	0	1/d	1/nr**	x	0	x	1/r	nL
Access to feed during transport	0	0	1/d	1/nr**	x	0	x	1/r	nL
Ventilation	1	1/s	1/s	1/nr**	x/r	x	x	1/r	nL
Regulation of temperature	1	1/s	1/s	1/nr**	x	x	x	1/r	nL
Officially approved and controlled education of staff	1	1/s	1/s	1/nr**	x	0	x	0/r	nL
How is ... fixed in POULTRY TRANSPORT requirements?									
Maximum journey time for healthy adult animals (h)	12	6/d	12	1/nr**	x	x	x	12/r	nL
Resting periods after how many hours (in h)	24	x	x	1/nr**	1	x	x	1/r	nL
Length of resting periods (in h)	24	x	x	1/nr**	x	x	x	1/r	nL

x not mentioned 1= yes 0 = no nL = no national Legislation d = day
s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation nr = not recommended r** = competency of handlers -recommended by nMCoP Leg = national Model Code of Practice under equivalent State and Territory Legislation of Australia.

In blue text with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

The Table 7.2.5d below shows the detailed requirements and explanations given by the third country experts for transport.

Tab. 7.2.5d Detailed differences and explanations for TRANSPORT in EU third countries

Aspect	EU-legislation	Main differences / explanations
Is/are ... allowed for TRANSPORT?		
Mixing of unfamiliar groups of animals		CH, AR, BR: not allowed. AU: not recommended under Model Codes, including after unloading NZ: Not allowed in the new Code of Welfare issued in 2010 (unless the individual animals are previously familiar with each other).
Use of sedatives		NZ: This depends on the individual animal. Not recommended for use 'across the board' but used in cases where it will benefit the animal and/or reduce risk for the handler.
Use of electric shock instruments *		AU: Model Codes advises restrict use to battery-powered units and only the amount necessary to assist loading. Not to be used on sensitive areas - face, genitals. Not mentioned for poultry as poultry transported in cages and catching occurs on-farm. NZ: To be used on adult animals and not on sensitive parts of the body.

Is ... mandatory for TRANSPORT?	EU-legislation	Main differences / explanations
Access to water during transport	General requirements.	AU: detailed recommendations in Model Codes about maximum permissible water deprivation times are to become mandatory requirements in new standards. NZ: The frequency of food and water provision prior to, during and after transport must be appropriate to the species and age of the animal to meet their health and thermoregulatory needs. Recommendation that the maximum that cattle should be without water is 24 hrs, for pigs 6 h. US: Current law requires that animals may not be confined within a vehicle or vessel for more than 28 consecutive hours without unloading the animals for feeding, water and rest. Does not apply when animals are transported in a vehicle or vessel in which the animals have food, water, space and an opportunity for rest
Access to feed during transport		AU: detailed recommendations in Codes. NZ: As 'provision of water during transport'. Recommendation that the max that cattle should be without food is 36 hrs, for pigs 24h. US: see above for water.
Ventilation	Specific rules.	CH, AR, BR: same as EU. AU: adequate air flow for the comfort of animals under Model Codes. NZ: minimum standard: ventilation during travel and rest must be appropriate to address the thermoregulatory.
Regulation of temperature	Specific rules	CH, AR, BR: same as EU. AU: avoidance of extremes under Model Codes. Loading densities to be adjusted in line with anticipated temperature and specified for certain temperature thresholds. NZ: as for ventilation.
Officially approved and controlled education of staff		NZ: At every stage of transport, animals must be cared for by a sufficient number of personnel, who collectively possess the appropriate ability, knowledge and competence necessary to maintain the health and welfare of the animals in accordance with the code'.
How is ... fixed in legislation for TRANSPORT?	EU-legislation	Main differences / explanations
Maximum journey time for healthy adult animals (in h)	Cattle 29 h, pigs 24 h, poultry 12 h	CH: cattle, pigs and poultry 6 h, AR: cattle, pigs and poultry 12h
Resting periods after how many hours (in h)	Cattle 29 h, pigs and poultry 24 hours.	US: cattle and pigs 28 h.
Length of resting periods (in h)	Cattle 24 h, pigs and poultry 24 hours.	AU: Model Code specifies: Cattle: unload and rest with feed and water for at least 12 h plus time to 'empty out' before recommencing journey Pigs: 12-24 hours rest with feed and water after 24 hours travel. Poultry: Model Code specifies breaks are undesirable but where essential or after 24h time off water poultry to be offloaded into a shed with feed and water. US: cattle and pigs 5h

Below some special characteristics of transportation of animals in some countries are described.

European Union

Maximum journey time for healthy adult animals: for pigs with permanent water access.

Australia

Australia advises that the requirements for transportation of livestock and poultry will fall under the new *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock* that have been endorsed for implementation in a nationally consistent manner through the laws of Australia's states and territories.

Canada

Above questions are fixed through legislation regarding journey time. A research project started in 2008 on transportation of animals for slaughter in Canada (Cockran, 2008).⁸⁸

New Zealand

Legislation concerning transportation is included in the Animal Welfare Act (sections 22 and 23). In addition, a Code of Welfare for transport of animals in New Zealand is under development in 2009/2011. It is anticipated that this legislation will be issued in 2010/2011. This Code of Welfare is replacing the previous Code of Recommendations and Minimum Standards for Animals Transported within New Zealand.

A quality assurance scheme exists in New Zealand for the transport of deer: link see below⁸⁹. This program sets the minimum standards that a transport operator must satisfy to achieve accreditation under the programme. The road transport forum of New Zealand: link see below⁹⁰ also supports driver training for transportation of livestock by road: link see below⁹¹. The NZFSA VA provide feedback regarding condition and meat quality as livestock arrive for processing and MAF Enforcement Group and the SPCA are involved in enforcing the requirements to meet the conditions for transportation of animals as stated in the Animal Welfare Act, 1999. MAF has also published a brochure providing information about the welfare of bobby calves during transport: link see below⁹²

USA

Current law requires that animals may not be confined within a vehicle or vessel for more than 28 consecutive hours without unloading the animals for feeding, water and rest. Does not apply when animals are transported in a vehicle or vessel in which the animals have food, water, space and an opportunity for rest.

Poultry is not covered by national transport legislation in the US.

b) Requirements for ORGANIC production (home market and export)

European Union

EU Organic: The use of sedatives and electric shock instruments during transport is not allowed.

Switzerland, Argentina, Canada, New Zealand

The organic standards require explicitly: minimize stress, injury and suffering; no electric stimulation and allopathic tranquilizers.

⁸⁸ Cockran M: (2008): Transportation of animals for slaughter in Canada: current practice, welfare issues and regulatory control. University of Prince Edward Island, Charlottetown PEI.
http://www.awfc.ca/english/news/upei_program.pdf

⁸⁹ see www.deernz.co.nz

⁹⁰ <http://www.rtfnz.co.nz>

⁹¹ (<http://www.nzqa.govt.nz/nqfdocs/units/doc/21472.doc>)

⁹² <http://www.biosecurity.govt.nz/files/regs/animal-welfare/pubs/calves-trans-welfare-guide.pdf>

Australia

Australia's export and voluntary domestic organic standards contain provisions that specify animals must be calmly loaded and transported. They include that during loading, transport and unloading animals are not subjected to pain, dragging and pushing, electric prods (exceptions are however possible) and are not given chemical tranquilizers.

Brazil

The organic rules do not allow transporting animals without water and feed related to the vital functions of the animals.

China

The organic standards have some requirements to reduce stress: no mixture of livestock, appropriate vehicles, temperature regulation, avoidance of hunger and thirst.

c) Requirements of international private voluntary farm assurance and standards schemes for transport**GLOBALG.A.P.**

The GLOBALG.A.P. standard integrates a great variety of requested animal welfare issues in the poultry module, addressing especially hatcheries and welfare requirements for indoor and outdoor poultry .

Codex Alimentarius Organic Guidelines and IFOAM Basic Standards

Calm loading and transport, no electric stimulation and allopathic tranquilizers.

7.2.6 Slaughter

a) Requirements for internal production (home market) and export

Several Non-European countries have no national legal requirements but are working with voluntary codes of practice. Switzerland goes in several aspects beyond the EU rules or applies the same comparable rules. In several aspects AR and BR also have comparable rules to the EU.

Differences with the EU rules have been found concerning the following aspects:

Table 7.2.6a Different animal welfare requirements for slaughtering identified in EU and national legislation of third countries and EU trading partners - CATTLE

CATTLE - SLAUGHTER - Is/are ... allowed?	EU	CH	AR	AU**	BR	CA	CN	NZ	US
Mixing of unfamiliar groups of animals	1	0/d	0/d	1	0/d	1	x	0/r	x
Killing animals without stunning	1	0/d	0/d	0***	0/d	1	x	0/p	0
Use of electric shock instruments *	1	1	x	1	1	1	x	1/r	1
Slaughtering outside slaughterhouse	1	0/d	0/d	0****	0/d	1	x	1	1
CATTLE – SLAUGHTER – Is ... mandatory?									
Lairaging of animals after a certain time if not slaughtered immediately	1	1/s	x	1	1/s	1/s	x	1/p	x
Officially approved and controlled education of staff	0	1/d	x	1/d	1/d	0	x	1/r	x
Killing animals in the presence of peers	x	1/n	0	nA	0	x	x	x	x
Restraining of animals before stunning *	0	0	x	1	1/d	1	x	1/r	x
How is ... fixed in CATTLE - SLAUGHTER requirements? Please indicate									
Maximum time before animals must be watered and fed if they cannot be slaughtered (in h)	12	x	x	24/r	1	nA	x	36	x
Maximum time between stunning and start of bleeding (in h) *	x	x	x	1	1	nA	x	1	x
Allowed stunning methods	1	1/s	1/s	1/s	1/s	nA	x	1/r	1
Allowed slaughtering methods	1	1/d	1/s	1/s	1/s	nA	x	1/r	x

x not mentioned 1= yes 0 = no nL = no national Legislation

s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation

** = requirements covered under officially Approved Arrangements (AA) to meet or exceed the Australian Standard and (for export establishments under AQIS supervision) the *AMIC National Animal Welfare Standards* plus relevant importing country requirements *** = only permitted in Australia to supply religious groups and only under specified Approved Arrangements **** see comment Australia

In blue text and with *: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

Table 7.2.6b Different animal welfare requirements for slaughtering identified in EU and national legislation of third countries and EU trading partners - PIGS

	EU	CH	AR	AU**	BR	CA	CN	NZ	US
PIG - SLAUGHTER - Is/are ... allowed?									
Mixing of unfamiliar groups of animals *	1	0/d	0/d	1	0	1	0/d	0/r	x
Killing animals without stunning	1	0/d	0/d	0***	0/d	1	0/d	0/d	0/d
Use of electric shock instruments	1	1	x	1	1	1	x	0/d	1
Slaughtering outside slaughterhouse	1	0/d	0/d	0****	0	1	0/d	1	1
PIG - SLAUGHTER - Is ... mandatory?									
Lairaging of animals after a certain time if not slaughtered immediately	1	1/s	1/s	1	1/s	1/s	0	1/p	x
Officially approved and controlled education of staff	0	1/d	1/d	1/d	1/d	0	x	0/r	x
Killing animals in the presence of peers	x	1/n	0	nA	0	x	x	x	x
Restraining of animals before stunning	0	1/d	x	1	1/d	1/d	x	1	x
How is ... fixed in PIG - SLAUGHTER requirements? Please indicate									
Maximum time before animals must be watered and fed if they cannot be slaughtered (in h)	12	x	x	24/r	x	x	x	24	x
Maximum time between stunning and start of bleeding (in h) *	x		x	1	1	x	1	1	x
Allowed stunning methods	1	1/s	1/s	1/s	1/s	x	1	1	1/s
Allowed slaughtering methods	1	1/d	1/s	1/s	1/s	x	1	1	x

x not mentioned 1= yes 0 = no nL = no national Legislation

s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation

** = requirements covered under officially Approved Arrangements (AA) to meet or exceed the Australian Standard and (for export establishments under AQIS supervision) the *AMIC National Animal Welfare Standards* plus relevant importing country requirements *** = only permitted in Australia to supply religious groups and only under specified Approved Arrangements **** see comment Australia

In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

Table 7.2.6c Different animal welfare requirements for slaughtering identified in EU and national legislation of third countries and EU trading partners – POULTRY

	EU	CH	AR	AU	BR	CA	CN	NZ	US
POULTRY - SLAUGHTER - Is/are ... allowed?									
Mixing of unfamiliar groups of animals	1	0/d	0/d	1	0	1	x	0/d	nL
Killing animals without stunning	1	1	0/d	0***	0/d	1	x	0/d	nL
Use of electric shock instruments	1	1	nA	1	1	1	x	0	nL
Slaughtering outside slaughterhouse	1	0/d	0/d	0****	0/d	1	0	1	nL
POULTRY – SLAUGHTER – Is ... mandatory?									
Lairaging of animals after a certain time if not slaughtered immediately	1	1/s	1/s	1	1	1/s	x	1/s	nL
Officially approved and controlled education of staff	0	1/d	1/d	1/d	1	0	x	1/r	nL
Killing animals in the presence of peers	x	1/n	0	nA	0		x	x	nL
Restraining of animals before stunning	0	0	x	1	1	1/d	x	1/d	nL
How is ... fixed in POULTRY - SLAUGHTER requirements?									
Maximum time before animals must be watered and fed if they cannot be slaughtered (h)	12	x	x	24/r	X	x	x	18	nL
Maximum time between stunning and start of bleeding (seconds) *	x	x	x	1	12/d	x	x	1	nL
Allowed stunning methods	1	1/s	1/s	1/s	1/s	nL	x	1	nL
Allowed slaughtering methods	1	1/d	1/s	1/s	1	nL	x	1	nL

x not mentioned 1= yes 0 = no nL = no national Legislation

s = the same as EU regulation d = stricter than/beyond the EU rules r = only recommended, not mandatory n = not in EU regulation regulation ** = requirements covered under officially Approved Arrangements (AA) to meet or exceed the Australian Standard and (for export establishments under AQIS supervision) the *AMIC National Animal Welfare Standards* plus relevant importing country requirements *** = only permitted in Australia to supply religious groups and only under specified Approved Arrangements **** see comment Australia

In blue text: aspects considered as particular important by the EconWelfare experts in the EconWelfare report D2.3 (Ferrari et al. 2010).

The Table 7.2.6d below shows the detailed requirements and explanations given by the third country experts for slaughtering.

In italics specific differences regarding organic production are mentioned.

Tab. 7.2.6d Detailed differences and explanations for slaughtering in EU third countries

SLAUGHTER - Is/are ... allowed?	EU-legislation	Main differences / explanations
Killing animals without stunning	Allowed	CH: not allowed except for poultry for kosher/halal slaughtering. AR, BR: not allowed. AU: Australian Standards permit it under limited approved arrangements for halal or kosher 'ritual slaughter' at abattoirs. Cattle must be stunned immediately after sticking. NZ: Not allowed although there are some religious ritual based exemptions. US: Allowed, religious/ritual exemptions available.
Slaughtering outside slaughterhouse		AU: Illegal as commercial activity, detailed recommendations for on-farm euthanasia in Model Codes. US: Cattle can be slaughtered 'on farm' as long as it is performed humanely using a recognised and approved technique.
Use of electric shock instruments		US: Use to be minimized, excessive use prohibited.
SLAUGHTER - Is ... mandatory?		
Lairaging of animals after a certain time if not slaughtered immediately	Required.	AU, US: Animals shall have access to water in all holding pens and, if held longer than 24 hours, access to feed. There shall be sufficient room in the holding pen for animals held overnight to lie down.
Officially approved and controlled education of staff	Not required	AU: under the Australian Standard, appropriate training is mandatory for all staff including those that handle live animals. Export establishments must have competent staff trained in animal welfare where relevant. CH: mandatory. NZ: It is a minimum standard that all staff involved in the slaughter of animals must be competent, knowledgeable and possess the ability to perform their job efficiently. US: States only that individuals must be trained and competent.
How is ... fixed in SLAUGHTER requirements?	EU-legislation	Main differences / explanations
Maximum time before animals must be watered and fed if they cannot be slaughtered (in h)	Cattle, pigs and poultry 12 h.	AU: 24 h for cattle, pigs and poultry (recommendations in Codes). Exporting establishments must meet importing country requirements. NZ: cattle 36 h, pigs 24 h, poultry 18 h.

How is ... fixed in SLAUGHTER requirements?	EU-legislation	Main differences / explanations
Maximum time between stunning and start of bleeding	Not mentioned.	CH: as fast as possible. AU: Specified according to the stunning modality in officially Approved Arrangements to meet animal welfare outcomes required by Australian Standards and (for export) the <i>AMIC National Animal Welfare Standards</i> . The AMIC Standards define appropriate intervals. US: No times specified; however language states that approved stunning methods shall be effectively applied prior to animals being shackled, hoisted, thrown, cast or cut.
Allowed stunning methods	Captive bolt, Concussion, Electronarcosis Carbon dioxide (not for cattle)	CH: Bolt or bullet pistols into brain, electricity, pneumatic pistols. For poultry also hitting on head. AR: Captive bullet gun & jackhammer (Cranial percussion), electric shock and modified atmosphere (CO ₂). AU: Method employed must ensure animals are continually unconscious and insensible to pain from the time of stunning to the point of death from exsanguination. Recognized approved methods include mechanical penetrating captive bolt (pneumatic or percussive) non-penetrating percussive devices, electrical or controlled atmosphere. BR: Cranial percussion, electric shock, modified atmosphere. Poultry: Electronarcosis. US: Gun shot, mechanical (captive bolt), electrical, carbon dioxide. For poultry not covered.
Allowed slaughtering methods	Free bullet, Electrocutation (not for cattle) Carbon dioxide (not for cattle)	CH: no kosher/halal slaughter, except for poultry. AR: yugular slaughter allowed. AU: Effective stunning to render the animal insensible to the point of death is required under the Australian Standard. There is very limited allowance for slaughter of conscious animals by exsanguination under the 'ritual slaughter' provisions of the Standard. BR: yugular slaughter & kosher/halal slaughter allowed. US: Stunning animals before being shackled, hoisted, thrown, cast or cut; slaughtering in concurrence with religious faith whereby animal suffers loss of consciousness as a result of simultaneous and instantaneous severance of the carotid arteries with a sharp instrument. For poultry not covered.

Below some special characteristics of slaughtering of animals in some countries are described.

Australia

All commercial slaughtering in Australia is performed in accordance with the relevant Australian Standard, which is directly called up by the legislation that regulates slaughtering establishments in the states and territories as well as those that produce meat and meat products for export under direct Commonwealth oversight.

For livestock (cattle, sheep, goats, buffalo, deer, camelids, pigs and horses) the *Australian Standard for the Hygienic Production and Transportation of Meat and Meat Products for Human Consumption*, AS 4696⁹³ must be met, and for poultry, the *Australian Standard for the Construction of Premises and Hygienic Production of Poultry Meat for Human Consumption*, AS 4465⁹⁴.

⁹³ downloadable from <http://www.publish.csiro.au/pid/5553.htm>

⁹⁴ downloadable from <http://www.publish.csiro.au/nid/18/pid/5203.htm>

The poultry Standard calls up the *Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments*⁹⁵ as well as the *Model Code of Practice for the Welfare of Animals: Domestic Poultry*⁹⁶. Approved procedures in place at the establishment must demonstrably meet or exceed the requirements of these Model Codes.

Australia's meat processing industry has recently developed a standard for animal welfare for application by its members, the *AMIC National Animal Welfare Standards at Livestock processing Establishments*⁹⁷ (the AMIC Standards). It draws on the *Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments*. Demonstrated compliance with approved arrangements to meet the AMIC Standards is required at exporting establishments that are directly overseen by AQIS. In addition, for export of meat the *Export Control Act 1982* (Cth) requires compliance with importing country requirements. Slaughter and handling of animals that provide products exported to the EU complies with EC requirements for third countries. Meat produced from pigs and chickens in Australia is not currently exported to the EU.

New Zealand

All slaughter, including emergency slaughter, must be conducted as required by the Animal Welfare Act. The commercial slaughter code is still in 2010 under development so many of these aspects are legislated currently under the Animal Welfare Act. Further information regarding the emergency slaughter of livestock in New Zealand can be found in the Code of Recommendations and Minimum Standards Emergency Slaughter of Farm Livestock. This document was made under previous legislation and as such, has no legal effect. However, it can still be used for guidance on best practice in New Zealand.

USA

There is no national humane slaughter legislation for birds in the US.

b) Requirements for ORGANIC production for slaughter (home market and export)

European Union

EU Organic: education of staff is required. Otherwise no specific rules for slaughter.

Third countries (CH, AR, AU, BR, CA, CN, NZ, US) and Codex Organic GL, IFOAM

Generally no specific slaughter rules exist for organic livestock, which are different from non-organic livestock, except the avoidance of electric stimulation.

c) Requirements of international private voluntary farm assurance and standards schemes for slaughter

GLOBALG.A.P.

The GLOBALG.A.P. does not cover slaughtering as it is a pre-farm-gate standard, which means that the certificate covers the process until the product leaves the farm.

Codex Alimentarius Organic Guidelines and IFOAM Basic Standards

No electric stimulation and allopathic tranquilizers.

⁹⁵ downloadable from <http://www.publish.csiro.au/nid/22/pid/2975.htm>

⁹⁶ Downloadable from <http://www.publish.csiro.au/nid/22/pid/3451.htm>

⁹⁷ available online as <http://www.amic.org.au/SiteMedia/w3svc116/Uploads/Documents/829d68cf-f177-4602-aeeb-cf23db0e54a2.pdf>. It is accompanied by a manual for auditing purposes that is at <http://www.amic.org.au/SiteMedia/w3svc116/Uploads/Documents/ed92dbf3-80a2-42fc-a716-127e513f9558.pdf>

7.3 Development of animal welfare legislation - introduction

a) Under what circumstances did the need for animal welfare legislation arise?

As Table 7.3.1 shows, the need to develop animal welfare legislation raised under different circumstances, depending of the country. Widespread diseases were an important factor in Brazil. Media campaigns were very important in Switzerland, Argentina and the US but also animal welfare scandals in the media in Argentina and the US. Pressure from other states was important for Argentina and the US.

Table 7.3.1 Most important factors and circumstances for AW legislation in EU third countries and EU trading partners

Factors and circumstances for AW legislation	EU	CH	AR	AU	BR	CA	CN	NZ	US
widespread diseases	nA				yes				
AW scandals in the media	nA		yes						yes
media campaign by animal interest group(s)	nA	yes	yes						yes
Pressure from other states	nA		yes		yes				yes
Other	nA	yes		yes		yes	yes	yes	

nA = no answer

Some other reasons and circumstances in different countries have been reported and are described below.

Switzerland

- Other reasons: public concern.

Argentina

- AW scandals: In 1902 an animal protection organisation was founded in Argentina: the "Sociedad Protectora de Animales Sarmiento (Animal Protection Society Sarmiento)". It was founded by concerned people about animal abuse. Society name (Sarmiento) is a former republic president tribute. He was involved in animal protection and he developed the first "decreto" about this topic.
- Pressure: Export livestock productions are set by buyer countries. They do pressure by reference their own animal welfare standards. For instance, export products refer to SENSA, European regulations (UE-Directiva 93/119CE). www.fabaonline.com
- Media campaign: Actually there are organizations linked animal welfare in Argentina, and they exert pressure over national, regional and local government. For instance, Fundacion Argentina para el Bienestar Animal (FABA).

Australia

The legislation in place in Australia at the time of federation (1901) incorporated Prevention of Animal Cruelty laws in every state. Those laws developed from the English Prevention of Animal Cruelty laws that were part of the initial legal framework of each Australian state when it was granted self government by the British Parliament, the first being New South Wales in 1856 and the last Western Australia in 1890. As has already been mentioned, the states did not cede to the Commonwealth their responsibility for preventing animal cruelty at that time so those laws remain under their individual and collective control.

Nevertheless, there has been movement to ensure that the required animal welfare outcomes across the nation are relatively the same despite those differences. This has been eased by the fact that all those laws sprang from a common origin. This process led to the inclusive development of the national Model Codes for the welfare of animals. In addition

state and territory governments have formally accepted the need to update the 'prevention of cruelty' provisions through a focus on individuals delivering a 'duty of care' in a common manner in order to prevent poor welfare outcomes. The recent work to develop the new *Australian Standards and Guidelines for the Welfare of Animals*, with formal consultative processes that involve farmer associations, community animal welfare groups, regulators, and industry peak bodies recognizes this approach and the responsibility of all parties to deliver that duty of care.

Brazil

- Widespread diseases: Pressure from other countries.

Canada

- Other reasons: pressure from humane organizations, change in society's philosophy regarding farm animals, due to Astrid Lindgren and Ruth Harrison. Issue of humane slaughter brought to light.

China

- Other reasons: when most of people become rich in China and national economy developed quickly.

New Zealand

- Other reasons: The first 'Protection of Animals Act' was brought into New Zealand in 1835 with early British settlers and was put in place as legislation to protect animals in New Zealand. The Animals Protection Act 1960 was replaced in 1999 by the Animal Welfare Act to meet the expectations of New Zealanders and international consumers. This change was supported by the all the groups/organisations/associations.

USA

- AW scandals: Original humane slaughter law was passed in response to publicity surrounding cruel treatment of farm animals in slaughter plants. Media portrayals of animals being inappropriately processed (handling, slaughter) for food/fiber (but also related to the use of animals in research, etc.)
- Media campaigns: Citizen Initiatives banning confinement practices have passed in several states as a result of advertising campaigns by animal advocacy groups. Media campaigns arose from animal interest groups in conjunction with incidents above.
- Pressure: Using "states" in the context of U.S. states and not foreign states, 2 U.S. states (Colorado & Michigan) have enacted farm animal welfare legislation in order to avoid potential citizen initiatives that have been passed in other states. Occasionally one state will pass legislation to avoid inheriting problems from another state (e.g., relocation of substandard breeding facilities).

b) Which category did the major driving force for farm animal welfare legislation belong to?

In table 7.3.1 the categories of major driving forces for farm animal welfare legislation are categorized. In several countries (CH, AR, CA and US) animal interest groups are mentioned most often as major driving force. Other important driving forces were retailers in Switzerland, New Zealand and the US. In China and New Zealand the animal industry in general was seen as important. Farmers associations were indicated by the experts as important category in Switzerland, Brazil and New Zealand. Consumer interest groups play only in China and NZ a major role. Standard setting organisations were important in New Zealand. Governmental bodies were mentioned as important drivers in Switzerland, Argentina and New Zealand.

Table 7.3.2 Major driving forces for AW legislation in EU third countries and EU trading partners

Categories of major driving force for AW legislation	EU	CH	AR	AU	BR	CA	CN	NZ	US
Retailer	nA	yes		nA				yes	yes
industry	nA			nA			yes	yes	yes
farmer association	nA	yes	yes	nA	yes			yes	
animal interest group	nA	yes	yes	nA	yes	yes		yes	yes
consumer interest group	nA			nA			yes	yes	
standard-formulating/setting organisations	nA			nA				yes	
government	nA	yes	yes	nA	yes			yes	
other	nA			*	yes			yes	yes

nA = no answer

* = see AU country comment

Some other categories' of major driving forces in different EU third countries are described below.

Australia

A significant factor in the ongoing development of animal welfare legislation covering livestock in Australia is the awareness by all parties that poor management of livestock increased the risk of poor animal welfare outcomes, of disease transmission to other animals and to public health by food safety breaches. With Australia's historical focus on exporting livestock and their produce for long distances to other markets it was critical that those risks were controlled. This is reflected in the statement in the introduction to the Australian Animal Welfare Strategy⁹⁸ that animal welfare and animal health and production are intimately linked.

New Zealand

Animal welfare legislation is also supported by the veterinary profession.

USA

Most important: "animal interest group." Retailers have been driving force for voluntary industry standards more than for legislation.

c) Please describe the three major driving forces for farm animal welfare with a few words:

European Union

No answer.

Switzerland

1. National main farmer association ("Schweizer Bauernverband, SBV) is mostly interested in economic consequences of AW regulation. (*Operating area: farmers / market power: medium*).
2. Animal interest group: Schweizer Tierschutz STS, largest AW organisation in CH, not very offensive with regard to farm AW (*Operating area: campaigns / market power: medium*).
3. Federal Veterinary Office, responsible for drafting the revised Swiss AW legislation enforced in 2008, good support by the minister heading the Federal Department of Economic Affairs who is also responsible for agriculture. (*Operating area: government / market power: high*).

⁹⁸ Available online from <http://www.daff.gov.au/animal-plant-health/welfare/aaws/online>

Argentina

1. National food safety and health service: Servicio Nacional de Sanidad y Calidad Agroalimentaria (SENASA). (*Operating area: government / market power: high*).
2. Animal Welfare NGO: Argentina de Bienestar Animal (FABA). (*Operating area: farmer partnerships / market power: medium*).
3. Other actor: Instituto de Promocion de la Carne Vacuna Argentina (IPCVA). (*Operating area: farmer partnerships / market power: medium*).

Australia

1. Market assurance,
2. Industry integrity backed up by on-farm quality,
3. public expectations.

Brazil

1. UBA - Uniao Brasileira de Avicultura. (*Operating area: partnerships around country / market power: high*).
2. ABIPECS - Associacao Brasileira Ind Prod Carne Suína. (*Operating area: partnerships around country / market power: high*).
3. ABIEC: Associação Brasileira das Industrias Exportadoras de Carnes. (*Operating area: partnerships around country / market power: high*).

Canada

1. Animal Welfare Groups (*Operating area: information, campaigns, etc. Market power: medium to high, depending on the campaign and the target group. In relation to industry/legislation, low to medium. In relation to campaigns, medium to high.*)
2. Consumer Interest groups. (*Operating area: Information. Market power: High*). Consumer demand and questions can effect great change to industry practices (e.g. animal care assurance programs) and how companies operate. In Canada, retailers are increasing shelf space for organic and alternative products (e.g. free range eggs). There is a way to go, but movement is heading in this direction.
3. Retailers/Companies. (*Operating area: food sector. Market power: High*). When a retailer or company like McDonalds requires their suppliers to make changes, change will occur. There is a variance in the changes demanded, from an increase in battery cage space/hen to slaughter audits, to third party certification (e.g. organic certification, animal welfare certification).

China

No information.

New Zealand

1. New Zealand society. (*Operating area: government and livestock industry / market power: high*).
2. Development of animal welfare standards within New Zealand agriculture which will contribute to market success and optimum product positioning for New Zealand animal products and animals. (*Operating area: government / market power: medium-high*).
3. Voluntary compliance with animal welfare standards and, where necessary, to enforce the law. (*Operating area: government with NZ society and industries / market power: high*).

USA

1. Animal advocacy movement. (*Operating area: political action/lobbying, media/campaigning / market power: medium*)
2. Food retail industry (grocery stores & restaurants). (*Operating area: animal care requirements, purchasing preferences / market power: high*).
3. Alternative, sustainable agriculture movement. (*Operating area: information, / market power: medium*).

d) To what extent were the following groups *involved in the discussions* during the development process of animal welfare legislation?

Table 7.3.3 shows the experts opinion on the degree of involvement of different actor groups in discussions on animal welfare legislation. Animal interest groups are much involved in most countries with the exception of China. Farmers were also important in Switzerland (and also government), Canada, New Zealand and US. New Zealand experts mentioned that all groups were strongly involved. In Argentina also scientists besides the government were important.

Table 7.3.3 Groups involved in discussions on AW legislation in EU third countries and EU trading partners

	EU	CH	AR	AU	BR	CA	CN	NZ	US
Farmers	nA	4	2	4	2	4	1	4	5/4*
Animal interest group	nA	4	3	4	5	4	2	4	5
Retailer	nA	3	2	1	3/ 1*	2	2	4	3/2*
Brand manufacturer	nA	3	4	1	4/2*	2	2	4	4/2*
Other chain members (e.g processors)	nA	3	3	3	2	nA	1	4	4/3*
Scientists	nA	3	4	4	3	3	3	4	5/3*
Consumer interest group	nA	3	3	2	2	2	2	4	3/2*
Government	nA	5	5	5	3	3	3	4	5/3*
Other	nA	nA	nA	nA	nA	nA	nA	nA	nA

1 = no involvement 2 = little involvement 3 = medium 4 = strong involvement

5 very strong involvement nA = no answer

* different views: first governmental expert view /second expert, more AW NGO view.

Some additional information on stakeholder involvement in different countries has been reported and is described below.

Australia

While the Australian Government has no legislative responsibility for animal welfare, it played a leadership role by working with regulators from the states and territories to develop Model Codes of Practice for the Welfare of Animals, known as the Model Codes. The government also ensured the inclusion of farming industries and community based animal welfare organisations, including the Royal Society for the Prevention of Cruelty to Animals (RSPCA), in this process.

The new Standards and Guidelines development process that was approved at ministry level⁹⁹, as previously mentioned, ensures the formal inclusion of all these stakeholders during development of this series of documents. In addition there is a formal requirement for any proposal to change regulatory frameworks that may have a financial impact on the industry involved to be considered through a process involving direct public consultation. This is termed a Regulation Impact Analysis process. It necessitates preparation of a discussion document that posits various options for the new regulation that is then publicly available for comment for a period of time. Once that period is over the comments are assessed and, for new animal welfare regulations, a report is put to the Primary Industries Ministerial Council to determine the form of the new regulation.

New Zealand

There was substantial public and stakeholder consultation in the development of the primary legislation (the Animal Welfare Act). Additionally, the Act requires consultation with the public

⁹⁹ That process is well described by Animal Health Australia's Standards and Guidelines Development Plan at [http://www.animalhealthaustralia.com.au/programs/livestock-welfare/livestock-welfare_home\\$.cfm](http://www.animalhealthaustralia.com.au/programs/livestock-welfare/livestock-welfare_home$.cfm)

and with representatives of those likely to be affected, as part of the development of every code of welfare. Consultation includes public notification, and is considered important to ensure that the range of views held within the community is taken into account when standards are being determined for the care of animals. Such consultation is important given that failure to meet the standards could lead to legal action, albeit for breaches of the Act itself rather than breaches of the code. Wide consultation is particularly important for contentious issues, such as killing in accordance with religious requirements, on which there is a range of community views.

Within the framework for animal welfare in New Zealand there is a highly cohesive structure for the promotion of animal welfare policy and practice, with industry, research, professional and voluntary organisations providing input into areas such as education and training, technical standards, research and development of quality systems. The MAF Animal Welfare Directorate works closely with the National Animal Welfare Advisory Committee (NAWAC) and the National Animal Ethics Advisory Committee (NAEAC), the NZFSA Verification Agency and other MAF and MAF Biosecurity New Zealand groups (e.g. MAF Legal Services, International Trade Policy, Domestic Policy, Communications, Enforcement, and MAFBNZ, Policy and Risk, Business Services, Strategy and Transformation). A visual representation of the number and types of organisations that contribute to animal welfare policy and practice in New Zealand can be found on p17 of the document 'Animal Welfare in New Zealand', MAF Biosecurity: link see below¹⁰⁰.

7.4 Animal welfare legislation - statements

a) How much do you agree/disagree with the following statements?

In Table 7.3.4 the answers of the involved experts in EU third country mirrors differences in different countries. This is influenced also by the level, where the animal welfare legislation is set. There is an indication given by the experts that in several countries the goals for animal welfare legislation were not so ambitious, that farmers can easily comply.

Table 7.3.4 Characteristics regarding animal welfare in EU third countries and EU trading partners

Agreement or disagreement with statement:	EU	CH	AR	AU	BR	CA	CN	NZ	US
The requirements are really ambitious in improving animal welfare	nA	-1	-2	nA	-1/ -2*	-1	0	-1	nA/ -2*
The requirements are set in such a way that many farmers can easily comply	nA	0	1	nA	-1/ 1*	1	1	-1	nA/ 2*
The requirements were deliberately set lower to include as many farmers as possible	nA	-1	-1	nA	- 1/1	nA	-1	-1	nA/ 1*
Non-compliance with some requirements can be compensated with others	nA	0	0	nA	1/ -2*	-1	-1	-2	nA/ -2*
Farmers don't comply with the requirements	nA	-1	0	nA	1/ -1*	nA	0	-1	nA/ -1*
Farmers are very well informed about animal welfare legislation	nA	0	-2	nA	-2	-1	1	1	nA/ 0*
The inspection and control system for the implementation of animal welfare legislation on farms does not work at all	nA	-1	0	nA	1/ 2*	0	1	-1	nA/ -1*

- 2 = strongly disagree -1 =disagree = neutral +1 = agree ++2 = strongly agree

* different views: first governmental expert view /second AW/ NGO view

¹⁰⁰ <http://www.biosecurity.govt.nz/regs/animal-welfare/pubs>

Some additional information on characteristics regarding animal welfare in different countries has been reported and is described below.

Australia

While there are varying views from different commentators on the effectiveness of animal welfare legislation within Australia, there has been recognition of the fact that all stakeholders need to be involved in the development of animal welfare regulations to assure delivery of the required animal welfare outcomes across the nation in a way that facilitates incremental improvement. This led to the inclusive development of the national Model Codes for the welfare of animals, driven by regulators but involving direct input from scientists, community based animal welfare groups and animal industries. The recent work to develop the new *Australian Standards and Guidelines for the Welfare of Animals* includes formal consultative processes that involve farmer associations, community animal welfare groups, regulators, and industry peak bodies and that is informed by evidence and scientific opinion.

In addition there is a formal requirement for any proposal to change regulatory frameworks that may have a financial impact on the industry involved to be considered through a process involving direct public consultation. This is termed a Regulation Impact Analysis process. It necessitates preparation of a discussion document that posits various options for the new regulation which is then publicly available for comment for a period of time. Once that period is over the comments are assessed and, for new animal welfare regulations, a report is put to PIMC to decide on the form of the new regulation.

New Zealand

National Animal Welfare Advisory Committee (NAWAC) promotes animal welfare standards that are supported by science and societal exceptions. The standards that stakeholders are required to meet (in the Codes of Welfare) are not aimed to be developed at a level so that it is easy for stakeholders to comply with the standards, but instead are developed using an approach that encourages an achievable advancement of animal welfare using a science-based approach.

While promoting animal welfare standards, New Zealand aims at achieving a balance between differing interests. NAWAC consults with and develops codes in consultation with stakeholders to ensure that all groups and persons that are likely to be affected by the Code are given the opportunity to provide input during development of the legislation. This also enables NAWAC to develop appropriate legislation that is practical. Following development of the legislation, NAWAC and MAF maintain communications with industry to provide support and advice when necessary following the issue of the Code.

USA

According to USDA this question is difficult to answer under US approaches. Animal welfare is primarily a market-driven voluntary system with which there is reasonably good compliance.

According to the US Animal Welfare Institute, there is no empirical research suggesting good compliance; in fact, ongoing investigations conducted by animal advocacy organizations suggest compliance with even minimum industry guidelines is a problem. This is one of the reasons that advocacy organizations in the US support government regulation of farm animal welfare.

b) Is there a special logo on the animal products which have been produced according to animal welfare legislation?

In none of the EU third countries there is a special logo for animal products according to animal welfare legislation.

Some additional information on the use of a special logo regarding animal welfare in different countries has been reported and is described below.

European Union

There is no logo for animal welfare friendly products; however there is an ongoing discussion in the European Union on the introduction of a special labelling system. However for organic products a mandatory EU logo will be introduced from 2011 on.

Australia

In relation to animal welfare, Australia takes the view that competent stockmanship and good management are essential to reliably deliver good animal welfare outcomes under any production system. All animal production systems that are acceptable under Australian law, if well managed and controlled, are capable of delivering sound animal welfare outcomes that meet regulated animal welfare requirements and that can be objectively verified.

Industries or other groups with commercial interests are free to develop and register logos for products that are prepared in particular ways as long as the information is accurate and not presented in a way that is likely to mislead consumers. As mentioned under section 7.1.1 h) a number of industries have already developed such commercial labelling schemes based on voluntary industry QA schemes. However, describing the qualities of any particular system as 'animal welfare friendly' by comparison to other systems without reference to specific animal welfare indices is likely to be misleading.

A good example of such a scheme in Australia at the present time is Egg Corp Assured (ECA). Egg Corp Assured is a quality assurance (QA) program that has been developed privately by the industry body the Australian Egg Corporation Limited. It is based on HACCP (Hazard Analysis Critical Control Point) and covers production practices relating to Pullet Rearing, Egg Production and Egg Grading/Packing. The Egg Corp Assured QA program addresses issues including food safety, biosecurity, animal welfare and egg labelling. Producers voluntarily involved in the program must have their operations audited by a registered third party auditor.

For each respective egg production system, the animal welfare scope of the quality assurance program is referenced to the national *Model Code of Practice for the Welfare of Animals, Domestic Poultry* – 4th Edition for audit points and industry guidelines. Each ECA licensee is audited on an annual basis by independent third party ECA Accredited auditors and the program is administered by AECL with the assistance of two senior accredited auditors assessing each business audit report. To obtain accreditation as an ECA auditor the person must be RABQSA International certified.

Only egg businesses that have had their quality assurance program audited against Egg Corp Assured standards by an accredited ECA auditor are entitled to apply for the officially registered ECA trade mark. The trade mark is promoted to consumers by the AECL.

USA

Since programs are voluntary, there are market-driven labels that reflect adherence to voluntary programs. Other than organic, these are not labels that are defined by legislation; however, some adhere to audit processes that are USDA-recognized. A logo only applies to National Organic Program in US; the use of "USDA Organic" logo on products is voluntary.

Each of the private US welfare certification programs – Animal Welfare Approved, Certified Humane, American Humane Certified – has its own logo which appears on animal derived products.

c) Who is monitoring the implementation of animal welfare legislation (control/inspection)?

Generally government authorities are generally responsible for monitoring of animal welfare legislation, but this is often delegated to the regional authorities of states or

provinces/territories. For voluntary private labelling schemes, the inspection and auditing is in most cases delegated to independent (third party) inspection and certification bodies.

The situation of monitoring animal welfare in the different EU third countries is described below.

Switzerland

Competent authorities and certified (private) control organisations with a mandate of the counties (government) and/or labelling schemes.

Argentina

National food safety and quality service: Servicio Nacional de Sanidad y Calidad Agroalimentaria (SENASA).

Australia:

All states and territories have a government agency with responsibility for the primary animal welfare legislation. The ultimate responsibility for enforcement lies with the state and territory governments except where animal welfare requirements are specified under the approved arrangements at exporting abattoirs under the direct supervision of the national competent authority, AQIS. There are different ways in which the states and territories undertake enforcement, and areas that involve cross-border responsibilities and enforcement are currently being addressed.

Outside the AQIS system enforcement of that legislation generally starts by investigating reports of suspected non-compliance. In some cases the primary investigation is performed by government employees, which can include members of the Police force. In most states and territories however a community animal welfare group - generally the RSPCA - provides the inspectorate service as an independent fee-for-service operation. In most instances the investigation report is handed to the government agency responsible for the legislation and a decision is taken on whether an attempt to prosecute is warranted on the evidence and/or would be seen as 'in the public good'. In one state prosecution can be undertaken directly by the investigating welfare group or, in fact, any third party. In general this has not improved the animal welfare landscape, in particular, it seems to have been used for purposes other than the promotion of sound animal welfare and has led to unnecessary anguish for some of the farmers involved and a great distrust of the animal rights proponents who were seen to be involved.

Under the new 'duty of care' approach intensive production industries in some states are working with the inspectorates and/or the state or territory agency to develop a pro-active risk-based system of scheduled visits and assessment through audit. Details of that are still being worked out.

Brazil

Agricultural Ministry: Ministerio de Agricultura, Pecuária e Abastecimiento (MAPA).

Canada

Legislation is usually overseen by the federal government and in cases where the provinces/territories have jurisdiction, it is at this level. Outside groups (e.g. animal welfare, industry associations) monitor and put pressure on the government to make changes to animal welfare legislation, or government pressure to stall changes/watering down requirements.

China

No information.

New Zealand

Complaints made about non-compliance with the legislation are investigated by MAF Enforcement, Royal New Zealand SPCA or the Police. In future there may be other approved

agencies. While the vast majority of complaints are dealt with through consultation and education, successful prosecutions against persistent or blatant offenders are routinely taken. MAF, Federated Farmers of New Zealand and other industry groups have signed Memoranda of Understanding with a commitment to collaborate on animal welfare issues, including situations where an animal complaint has been made. Additional information regarding enforcement procedures and the role of MAF in ensuring animal welfare on farms can be found in the booklet 'A practical toolkit for farmers helping to resolve animal welfare incidents' (2006): link see below¹⁰¹.

USA

For legislative approaches, generally departments of agriculture at the federal and state levels are responsible. For voluntary programs with third party audits, generally private auditing companies or the not-for-profit organizations that sponsor the assurance programs. USDA also provides the process verification program for a number of the voluntary programs, such as UEP-Certified.

Certifiers are approved by the U.S. Department of Agriculture (for National Organic Program). For humane slaughter, inspections are conducted by vets or other personnel employed by the U.S. Dept of Agriculture or state departments of agriculture.

d) Are there any well-known loopholes or gaps in animal welfare legislation?

The answers of the involved experts in EU third countries reflect not only differences in the national implementation but are somehow also influenced if an expert sees animal welfare more in a governmental perspective or an perspective of an animal welfare organisation. The answers are therefore quite different.

Switzerland

Excessive breeding in farm animal species, animal diseases associated to excessive breeding.

Argentina, Brazil, China

No detailed answer.

Australia,

One of the drivers for the work to develop the new system of *Standards and Guidelines for the Welfare of Animals* in Australia has been the variability in the way in which the national Model Codes have been applied under state and territory animal welfare laws. A project under the Australian Animal Welfare Strategy provided an officially endorsed 'roadmap' in 2009 for state and territory governments to amend their animal welfare legislation and remedy much of the underlying cause of these issues plus provide a consistent mechanism for direct application of the new standards once developed.

In addition, the area of inconsistency where transport of livestock occurs across state and territory borders has caused issues, including for defining where an offence may have occurred. This is a particular concern for land transport and a specific working group of government officials from the states and territories is in 2010 looking at how they may better address this as further work towards achieving consistent animal welfare outcomes at the national level.

Canada

Loopholes: where generally accepted practices are allowed for farm animals under prevention of cruelty to animals legislation.

¹⁰¹ <http://www.maf.govt.nz/sff/about-projects/search/L05-010/farmer-toolkit-booklet.pdf>

New Zealand

No loopholes mentioned.

USA

Currently there is no government-mandated regulation at the federal level for protecting animal welfare on the farm. State protections vary, but in many cases are limited to preventing cruelty, rather than promoting good welfare.

For organics, exceptions to certain requirements (such as outdoor access) are granted by certifiers. For humane slaughter, birds, exotic animals and ritual/religious slaughter are not covered by the law.

According to USDA the question is who is profiting. Despite the absence of on-farm federal and state animal production regulatory structures, voluntary animal welfare assurance schemes, while not perfect, are doing a good job of ensuring farm animals are protected. Cruelty and neglect are addressed by state statutes. For organics, large/industrial operations profit while small, family farmers are placed at a disadvantage in the marketplace. For slaughter, kosher and halal food companies profit.

The US Animal Welfare Institute disagrees with USDA Statement. They argue that cruelty and neglect of farm animals are NOT covered by all states. In their opinion, more than half of the 50 state anti-cruelty statutes exempt agricultural practices to some degree. They also argue that there is no empirical evidence that voluntary industry guidelines are doing a good job of ensuring farm animal welfare is protected.

e) Are the officials using any animal based indicators for measuring animal welfare and what are they?

Only few of the third countries (CH, AR, CA, NZ) have reported some experiences with the introduction of more animal based indicators in national legislation or codes of practices.

Switzerland

The use of more animal based indicators will be more considered, e.g. for animal behaviour, animal cleanliness and animal health, based on scientific studies and experiences in practice.

Argentina

Yes the process is starting, however the indicators are still considered as subjective. Indicators are found in the "Manual de procedimientos Bienestar Animal".

Australia

Australia's states and territories have agreed to review their legislation and focus on delivery of a duty of care. This will allow intervention before there is a poor animal welfare outcome so the use of animal-based indicators is largely during research, when effective measures to prevent poor outcomes are being assessed (validation), and during verification audits.

Behavioural indices are applied at lairage in abattoirs as well during the processes up to and including slaughter. There is also a pilot project under the Australian Animal Welfare Strategy looking at animal based indicators for application where animals are used for research purposes - no results are yet available.

Australia's pig industry has developed APIQ™, an on farm quality assurance system based on managing farm risks by following Good Agricultural Practices (GAP) and applying the principles of Hazard Analysis and managing Critical Control Points (HACCP). APIQ™ provides Australian pig producers with the framework to meet and exceed delivery of health, wholesomeness and animal welfare outcomes required by law.

Under APIQ™ a producer's Piggery Management Manual includes a "Model Code Compliance Plan" which outlines the certified producers plans and actions to comply with the revised Model Code of Practice for the Welfare of Animals – Pigs (2007).

Compliance is verified through an independent external compliance audit. The audit includes Animal Welfare indices that objectively measure the health, well being and disposition of pigs

by observing hunger and thirst, interaction with physical environment, health, injury and disease status. The check is completed for each class of pig and type of production system. At this time (2010) industry information is that around 84% of Australia's pig production is performed under this program.

Brazil, China

No answer.

Canada

The process is beginning due to scientific involvement in the Code process. However, Canada has a long way to go. Organic regulation generally also had also not take animal based indicators into account.

However the Animal Welfare Task Force set up by the Organic Agriculture Centre of Canada have published information about animal welfare with a stronger focus on animal well-being¹⁰² and had also provided guidance documents in the context of the standards, helping farmers to assess better the welfare of animals. These are found under the livestock types with the titles "Guidance for the optimal welfare of in organic production" (e.g. for pigs). See link below.¹⁰³

New Zealand

MAF commissions operational research each year to promote research in specific areas where gaps in knowledge have been identified. A number of the MAF funded research projects in recent years have involved an examination of animal based indicators to measure animal welfare. Detailed summaries of funded operational research programmes can be found in the annual reports of NAWAC: link see below¹⁰⁴ and are summarised on page 11 of the document 'Animal Welfare in New Zealand': link see below¹⁰⁵. The performance of this research provides additional information which is used to determine the final standards that are included in the Codes of Welfare. Copies of research can be requested by anyone: link see below¹⁰⁶.

USA

None are being used for government programs (organics, humane slaughter), but U.S. animal agriculture industry (American Meat Institute) uses indicators for measuring welfare in transport and slaughter. Assurance schemes use a variety of animal-based indicators for measuring animal welfare, including body condition scoring, morbidity and mortality rates, presence/absence of normal/abnormal behaviours, etc. Additionally, the voluntary producer guidelines also use animal based indicators for measuring animal welfare which are described in each of the previously noted programs found at provided links.

f) Overall, how would you assess animal welfare legislation with regard to...?

The expert judgments on the success of the animal welfare legislation were quite differing. They mirrored somehow the different development of animal welfare in the countries but as well the function and the personal views of the experts. Generally experts in CH, AR, BR and CN judged the success of animal welfare legislation more positive than experts from CA and US.

¹⁰² http://www.organicagcentre.ca/AnimalWelfare/aw_welcome.asp

¹⁰³ http://www.organicagcentre.ca/AnimalWelfare/aw_swine.asp

¹⁰⁴ <http://www.biosecurity.govt.nz/regs/animal-welfare/pubs/nawac>

¹⁰⁵ <http://www.biosecurity.govt.nz/regs/animal-welfare/pubs>

¹⁰⁶ animalwelfare@maf.govt.nz

Table 7.3.5 Assessment of success of animal welfare legislation

	EU	CH	AR	AU	BR	CA	CN	NZ	US
Improving the welfare of the animals involved	nA	1	1	nA	1/-1*	-1	0	1	1/0*
Creating awareness among citizens	nA	0	1	nA	0/-2*	-2	1	1	-1
Generating a demand among consumers	nA	0	1	nA	0/-2*	-2	1	1	-1/0*
Inspiring others to develop new animal-friendly initiatives	nA	0	1	nA	0/-2*	-2	1	1	0

- 2 = very big failure -1 = somehow failure 0 = intermediate 1 = somehow success

2 = very big success nA = no answer

* different views: first governmental expert view /second AW/ NGO view

Switzerland, Argentina, Brazil, Canada, China, New Zealand

No specific comments.

Australia

While there are varying views from different commentators on the effectiveness of animal welfare legislation within Australia, many academic studies have found that legislation as a driver for change is a very blunt and ineffective tool for improvement of outcomes across a society, and needs to be accompanied by enormous regulatory effort. Social processes that educate the people in charge of animals and provide extension services are viewed by most as more effective and less financially onerous. The review of this area commissioned under the Australian Animal Welfare Strategy is available as a report, *Regulating animal welfare to promote and protect improved animal welfare outcomes under the Australian Animal Welfare Strategy* – by Geoffrey Bloom¹⁰⁷ which goes into detail about these matters.

USA

Most citizens are unaware of animal protection laws unless specifically brought to their attention.

g) Do you know any socio-economic studies on the impact of farm animal welfare legislation (impact assessments)?

Only few socio-economic studies on the impact of farm animal welfare legislation were mentioned by the EU third countries experts.

Argentina

There are many works about this topic. For instance a report on cattle production (visit website)¹⁰⁸: or the following report: REPORTE DE ARGENTINA-"GANADERIA Y BIENESTAR ANIMAL". Authors: Sra. Ivana Pages, Presidenta de FABA de. Miguel A, Duran, MV, Asesor. See website.¹⁰⁹

Switzerland, Brazil, Canada, China

No specific comments.

Australia

For every new national standard or regulation in Australia there needs to be a formal assessment of the impact - financial and other. A document proposing various options for regulation, together with arguments for and against is put up online for a public consultation

¹⁰⁷ See: http://www.daff.gov.au/animal-plant-health/welfare/reports/regulating_animal_welfare

¹⁰⁸ http://www.produccionbovina.com/etologia_y_bienestar/00-eologia_y_bienestar.htm

¹⁰⁹ <http://www.fabaonline.com/>

in advance of final determination of the new regulation. A report on the outcomes of that process is prepared and a final decision on the form of the new regulation is made by PIMC (Primary Industry Ministerial Council) as previously mentioned. This forms part of the process and these studies are not publications in and of themselves.

New Zealand

Several studies:

- Bagshaw, C.S., Matthews, L.R. and Loveridge, A. (2006). Social and Cultural Influences on Farm Animal Welfare in New Zealand. MAF Report, MAF Biosecurity, Wellington
- Matthews, L.R., Loveridge, A., Guerin, B. (1994). Animal Welfare Issues and Attitudes in New Zealand. Animal Behaviour and Welfare Research Council
- Stafford, K.J. and Mellor, D.J. (2005). The Economic Cost of Improving Animal Welfare on Farms. MAF Report, MAF Biosecurity, Wellington
- Stafford, K.J. and Mellor, D.J. (2005). The cost of Improving Welfare, Surveillance, Vol 32 (3)

USA

Not aware of any general assessment; there have been limited assessments of anticipated impacts of various animal welfare-related proposals (e.g., moving to non-cage systems for layers) on different industries.

7.5 Animal welfare legislation – strengths and weaknesses

a) What are the main strengths and weaknesses, opportunities and threats of animal welfare legislation?

The strengths and weaknesses and the opportunities depend very much on the national context and the awareness of animal welfare issues in a country. Below the SWOT-Analysis of the EU third country experts is reported.

Switzerland

<i>Main strengths</i>	<i>Main weaknesses</i>
<ul style="list-style-type: none"> - Detailed regulations for all relevant farm animal species; - high AW standards compared to other countries (including surgical practices, transport and slaughter); - regular on-farm controls (min. 25% of all farms per year); - obligatory pre-testing of farm animal housing systems. 	<ul style="list-style-type: none"> - Traditional forms of housing are still allowed (e.g. tethering of cattle or goats); - no specific limits regarding breeding of farm animal species; - mainly a system based on minimum requirements but no clear goals, except in the special direct payments system for animal-friendly systems (outdoor access and free-stable systems).
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> - Mandatory education/training of people interacting with farm animals (farmers, transport, slaughter) will further improve AW; - further development of AW regulations possible based on the results of research funded by the government; - animal dignity is addressed in the animal protection law. 	<ul style="list-style-type: none"> - Economic pressure to set lower AW standards (e.g. with regard to changes in the WTO negotiations or free trade agreements between CH and EU).

Argentina

<i>Main strengths</i>	<i>Main weaknesses</i>
<p>Animal Welfare is a Government responsibility through "Coordination de Bienestar Animal (Animal Welfare Coordination).</p> <ul style="list-style-type: none"> - There is a manual in Argentina called: "Procedimiento en Bienestar Animal (Animal Welfare Methods)" - According with livestock features (outdoor systems on the most of livestock species) is easier establish regulations. - Confinement livestock systems are looking for animal welfare opportunities. - Many of the most important livestock companies are working about: "Good G11 practices" from farm to plate and chain certificated by regulation ISO 9001:2000. 	<ul style="list-style-type: none"> - The most important main weakness is control in the application of law. - There is not enough binding legislation into first level. Legislation is based on voluntary codes. Actually many farmers know the relationship between animal welfare, productivity and products quality, but not as a general fact. Farmers have not information in many of cases.
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> - Cattle and pig production in our country have outdoor and pasture conditions in all productive cycles with or without feed supplements. This fact is an advantage as for other countries. - Cattle and pig's life conditions are according with good animal welfare standards, they are near to wild conditions. - Moreover, intensive pig and poultry livestock systems are assimilating animal welfare concept. 	<ul style="list-style-type: none"> - Threats are associated with import countries demands

Australia

No answer.

Brazil

In Brazil, the Ministry of Agriculture has been promoting studies and workshops and making partnerships with governmental and nongovernmental organizations to develop the subject. On April 2009 was launched the National Humanitarian Slaughter - STEPS result of a partnership between the Ministry of Agriculture and the WSPA. The program will train over 2,000 technicians and aims to improve the treatment of farm animals at all stages of pre-slaughter handling and slaughter. This is a project that has been developed for over two years and was fully sponsored by WSPA (World Society for the Protection of Animals).

Canada

<i>Main strengths</i>	<i>Main weaknesses</i>
<ul style="list-style-type: none"> - Codes and animal care assurance programs can be changed more quickly than legislation. 	<ul style="list-style-type: none"> - Lack of third party verification. - Lack of uptake of improved animal welfare practices. - Lack of government interest in animal welfare. Does not receive funding, does not receive commitment at the policy level.
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> - Outside parties – retailers, private companies. - Animal welfare certification programs. - Consumer awareness. 	<ul style="list-style-type: none"> - Push back from industry. - Government apathy. - Serious lack of resources to animal welfare.

China

<i>Main strengths</i>	<i>Main weaknesses</i>
<ul style="list-style-type: none"> - Huge product market. 	<ul style="list-style-type: none"> - Lack of useful guidance.
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> - Improve the environmental conditions for animals will benefit for animals' health. 	<ul style="list-style-type: none"> - Prevalence of diseases.

New Zealand

<i>Main strengths</i>	<i>Main weaknesses</i>
Single piece of legislation covering all animal use situations including in research, testing and teaching, with strong core policy-guiding principles and standards of duty of care, five freedoms and the Three Rs (particularly sections 10 and 11). Use of codes of welfare to enable responsiveness to new science, new technology, new farming practices and changing societal attitudes. Requirement for Animal Welfare Export Certification. Legislative provisions in respect of great apes and certain invertebrates. Legislative provision for NAWAC and NAEAC to provide independent advice to government. Legislative provision for approved organisation to play an official role in compliance and enforcement and to enable the appointment of RNZSPCA staff as Animal Welfare Inspectors under the Act, trained in accordance with a Government-agreed standard. Act encourages and provides for working closely with stakeholders to develop appropriate legislation.	Codes of welfare are not regulations for which a breach can be enforced. The Act can be interpreted so that codes of welfare are expected to perform multiple roles that are not necessarily complementary. Advisory committees are unduly open to the provisions of freedom of information legislation. Some gaps in wild animal provisions of Act. Ability to assess welfare implications of new technology, including devices used on animals. Debate arising from section 73 exceptional circumstances provision.
<i>Opportunities</i>	<i>Threats</i>
Greater use of infringement notices to encourage compliance. Codes of welfare as an education tool and/or a valuable enforcement tool. Government can have a role in the development of private standards.	Resource requirements of consultation. Legislation needs to be kept current.

USA

<i>Main strengths</i>	<i>Main weaknesses</i>
<ul style="list-style-type: none"> - American public is supportive of legal protections for farm animals. - U.S. animal advocacy groups are well organized, well funded and experienced in executing political campaigns. - The state citizen initiative (referendum) process provides a means of passing legislation that may be too ambitious for passage by the traditional legislative route. - Consistency in application/ enforcement; - Provides a recognized mechanism for eliminating “bad actors”. 	<ul style="list-style-type: none"> - Large-scale political campaigns are very expensive to run in the U.S. - The U.S. animal agriculture industry is politically powerful and has the means to stop the passage of legislation, particularly at the federal level. - The existence of 50 state legislatures makes addressing farm animal welfare through passing laws at the state level a somewhat impractical approach. - Limited resources; - Slow Implementation – Slows implementation of advancements/ improvements determined through research because of regulatory process. <p><i>View of USDA:</i></p> <ul style="list-style-type: none"> - The vast number of farms in the USA would make inspections challenging. (For example the beef cattle industry alone has nearly 800,000 producers); - Difficulty in adapting to a variety of systems, e.g. criteria tend to be overly-resource and not animal based (View of US Animal Welfare Institute: this can also be seen as opportunity).
<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> - Raise public awareness of farm animal welfare concerns. - Promote humane food labeling programs and thereby increase the number of animals raised under high welfare conditions. - Potential to stimulate research on issues of interest; - Incremental improvement. - Harmonize standards among a variety of industry and non-governmental animal welfare programs. 	<ul style="list-style-type: none"> - Industry may pass laws to undermine or circumvent farm animal protection legislation. Even though laws are passed, enforcement by the government may be minimal or non-existent. - Increased costs (may make implementation impractical and drive food production to other countries);

The SWOT analysis gave quite varying pictures of the situation in the different EU third countries. As weaknesses were mentioned: no clear goals (CH), not enough control (AR), only voluntary codes (AR, NZ), lack of third party verification (CA), agricultural industry lobbying against national legislation (US); slow implementation (US). As strengths were mentioned: regular on farm control (CH), interest of companies (AR), natural conditions for pasture and outdoor of a country (AR), Codes can be changed more quickly (CA, NZ)), market opportunity (CN), public supportive for better animal protection (US), consistency in application and enforcement and elimination of “bad actors” (US). Threats were seen in: economic and industry pressure to set lower AW standards (CH, CA, US), government apathy (CA), lack of resources (CA, NZ). Opportunities are seen in: education and training (CH, NZ, US), more research (CH, NZ, US), better animal environment will benefit animal health (CN), Role of government in development of private standards (NZ), Codes of welfare as education and enforcement tool (NZ)

b) What do you think will be done officially for farm animal welfare in the future?

Some of the experts of the EU third countries are optimistic that animal welfare will be improved (CH, NZ, CN), whereas others see the development process rather slow (CA, US).

European Union

The European Commission wants to promote animal related products elaborated under high welfare standards. One of the main areas of action described in the Community Action Plan for Animal Welfare 2006-2010¹¹⁰ is to involve the general public and enable consumers to make more informed purchasing decisions.

The European Commission has adopted a report in which it outlines a series of options for animal welfare labelling. The overall goal of policy in this area is to make it easier for consumers to identify and choose welfare-friendly products, and thereby give an economic incentive to producers to improve the welfare of animals. The report also presents options for the possible establishment of a European Network of Reference Centers for the protection and welfare of animals.¹¹¹

Switzerland

For several provisions, the current CH AW legislation sets transitional periods to allow farmers to adapt their housing systems (e.g. ban of fully slatted pig housing systems in 2018). These changes in housing conditions will be advertised to the farmers by the government and controlled by the local authorities. Animal dignity is a new issue of the CH AW legislation. In the future, animal welfare concerns will not only consider animal suffering but also animal dignity.

The higher requirements set out for the direct payments system for animal-friendly livestock (outdoor access and animal-friendly indoor housing) will become the standard in the future, whereas in the legislation there will be not major changes in the next 10 years.

Argentina

Regulation modifications about other countries demands. In the future, increase of binding regulations.

Australia

Australia will continue to harmonise the legislative framework, develop and implement the new standards. Animal industries or third parties are able to introduce QA programs for members who wish to avail themselves of market opportunities that may be present where welfare standards over and above those required by legislation are invoked.

Internationally Australia will continue its work with OIE to assist and promote the aspirational animal welfare approach of OIE as per the current chapters on animal welfare in the Terrestrial Code. In addition, Australia is reviewing its Code that has been used to inform control of animals used in research and for teaching and will report on progress as appropriate. That Code focuses very heavily on providing an ethical framework for decision making on whether animals should be used in particular research, and if so, under what conditions.

Brazil

No answer.

Canada

Very little at the government level. Until this issue reaches more momentum, it will not receive the attention it deserves and needs.

China

Animal welfare will be a developmental trend in future.

¹¹⁰ http://ec.europa.eu/food/animal/welfare/actionplan/actionplan_en.htm

¹¹¹ http://ec.europa.eu/food/animal/welfare/farm/docs/options_animal_welfare_labelling_report_en.pdf

New Zealand

New Zealand is continually working to increase the welfare of its production animals whilst maintaining a balance between the welfare needs of these animals, the economics of production and ethical considerations. New Zealand wishes to ensure that all farm animals in New Zealand live in conditions that are suitable for their age, species and sex. MAF is also currently progressing a compliance strategy which aims to encourage further compliance with Codes of Welfare via the involvement of industry stakeholders.

USA

Appear to be moving in the direction of increased regulation. The various industry groups are working with USDA to ensure they meet the international guidelines recommended by the OIE in order to avoid possible trade restrictions.

Amendments to the federal transport and humane slaughter laws are possible, although not likely in the near future. State-level legislation addressing specific practices is more likely. Expectation that animal welfare requirements of organic program will be improved.

c) Do you know any piece of legislation on farm animal welfare that will be enacted in future?

European Union

See discussion about labelling schemes in subchapter before.

Switzerland

Yes, detailed regulations for slaughter. All other AW regulations have been recently revised (2008).

Argentina, Brazil, China

No, in the near future there will be no legislation on animal welfare enacted.

Australia

The state of Victoria has recently (2010) introduced a new Livestock Management Act which will become the primary piece of legislation in that state under which the new standards are applied, as well as those standards in the national *Model Code of Practice for the Welfare of Animals: Pigs* (the Pig Code). It is separate to the Animal Welfare Act, but the two will co-exist. The process of adopting standards that were developed in the Pig Code is underway in all states and territories and a number of states have already adopted them under their animal welfare legislation.

There are other documents under development that are relevant to answering this question. Australia's development of *Standards and Guidelines for the Welfare of Animals* has already produced the *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock*, which has been endorsed for adoption in all states and territories by PIMC as mentioned previously. The production of two further sets of Standards and Guidelines is underway - covering on-farm requirements for sheep and cattle. Further Standards and Guidelines are to be produced to replace the corresponding national Model Codes over time.

Canada

The hope is to pass new transportation legislation; however, at this time the process has stalled.

New Zealand

Codes of Welfare are gradually replacing the previous Codes of Recommendations and Minimum Standards according to the Animal Welfare Act. Codes of Welfare are prepared and reviewed, in concert with NAWAC, according to a 3-10 year priority schedule of code

development which is considered in each calendar year and reviewed quarterly. Once gazetted, Codes of Welfare become regulations under the Animal Welfare Act.

USA

Several U.S. states are currently considering legislation to ban intensive confinement practices (veal crates, sow gestation crates, battery cages).

According to the view of USDA there are various state-level proposals that are scheduled to be implemented during the next 5-10 years.

d) Do you know any reports comparing the legal animal welfare standards with animal welfare standards of the European Union?

Switzerland, Brazil, China

No.

Argentina

Consult work in Med. Vet. Rafael Lopez Saubidet: link see below¹¹².

Manual de Procedimiento Bienestar Animal: links see below^{113 114}.

Australia

Alliance Resource Economics (2006) World Livestock Export Standards - A comparison of development processes, systems and outcomes achieved Meat and Livestock Australia: link see below¹¹⁵.

Canada

CFHS report titled: Canadian Funding Policy for Farm Animal Welfare: A Step Behind the World.

New Zealand

There are several publications:

- Commission of the European Communities (2002). Communication from the Commission to the Council and the European Parliament on Animal Welfare Legislation on farmed animals in Third Countries and the Implications in the EU: link see below¹¹⁶.
- The following reports provide a comparison between the legislation used to regulate Research, Testing and Teaching in New Zealand and the EU. These documents have been produced by MAF with the aim of facilitating accurate collection and interpretation of data pertaining to animal usage in this area.
- Bayvel, A.C.D., Carsons, L.A. and Littin, K.E. (2008). Severity assessment – the New Zealand experience and perspective. Proceedings of the 6th World Congress on alternatives and animal use in the life sciences. AATEX 14 (Special Issue), Tokyo, Japan
- Burton, N. (2003). United Kingdom perspective on animals, ethics and statistics. In: Lifting the veil: finding common ground. Proceedings of the ANZCCART Conference held in Christchurch, New Zealand, 18-19 August
- Cross, N., Carsons, L.A. and Bayvel, A.C.D. (2009). Regulation of Animal Use in Research, Testing and Teaching – Comparison of New Zealand and European Legislation. Submitted for publication as a NAEAC occasional paper.

¹¹² <http://www.agroceo.com.ar/BienAnimal.htm>

¹¹³ <http://www.senasa.gov.ar/contenido.php?to=n&in=856&io=3252>

¹¹⁴ http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/06-manual_procedimientos_bienestar_animal.pdf

¹¹⁵ <http://www.mla.com.au/NR/rdonlyres/64655F7E-E379-44F0-A41B-F0D67944D94B/0/FinalReportWorldLivestockExportStandardsMarch2006.pdf>

¹¹⁶ http://ec.europa.eu/food/animal/welfare/international/2002_0626_en.pdf

- Williams, V.M., Mellor, D.J. and Marbrook, J. (2006). Revision of a scale for assessing the severity of live animal manipulations. Proceedings 5th World Congress, ALTEX 23, Special Issue. 130-136

USA

Outlawed in Europe: How America is falling behind Europe in Farm Animal Welfare, by C Druce & P Lymbery, 2002 (information now outdated).

e) Do you know any reports comparing legal animal welfare standards and the requirements of private animal welfare initiatives?

Argentina

Yes, some contracts with European market chains demand EUREGAP (and now GLOBALG.A.P) certification, it demand additional animal welfare standards. In some cases farmers include additional animal welfare standards as a "common sense" step. For instance, Mc Donald's animal welfare standards in Argentina are the same as in other countries, and AB&P (Assured British Pigs) demand animal welfare standards from farm to fridge: link see below¹¹⁷.

Switzerland, Australia, Brazil, Canada, China, New Zealand, USA

No reports indicated.

f) Please indicate links to different private animal welfare initiatives (like campaigns, education, research, producer's schemes, industry initiatives)

Switzerland

Standards in Swiss label production:

There are special linkd informing about animal welfare standards. Links see below.¹¹⁸

Private animal welfare organisations:

Main animal Swiss animal welfare organisation: Schweizer Tierschutz STS.¹¹⁹

High level animal organisation: KAGfreiland.¹²⁰

Argentina, China

No links.

Australia

APIQ®: the on-farm QA program developed by the peak industry body, Australian Pork Limited.¹²¹ The APIQ content is currently under review but is anticipated to be available in the second half of 2010.

ECA®: the on-farm QA program developed by the peak industry body, Australian Egg Corporation Limited.¹²²

AMIC ANIMAL WELFARE STANDARDS: the Australian Meat Industry Council (AMIC) is the Peak Council for meat processors, retailers and smallgoods manufacturers in Australia. Australia's meat processing industry has recently developed a standard for animal welfare for

¹¹⁷http://www.produccionbovina.com.ar/etologia_y_bienestar/bienestar_en_general/89-bienestar_nos_debe_importar.htm

¹¹⁸<http://www.umweltschutz.ch/index.php?pid=407&groups=36&product=49&submit=Suchen>
<http://www.umweltschutz.ch/index.php?pid=407&groups=36&product=55&submit=Suchen>
<http://www.umweltschutz.ch/index.php?pid=407&groups=36&product=47&submit=Suchen>

¹¹⁹ <http://www.schweizer-tierschutz-sts.ch/>;

¹²⁰ <http://www.kagfreiland.ch/>

¹²¹ <http://www.australianpork.com.au/pages/page176.asp>

¹²² <http://www.aecl.org.au/egg-corp-assured>

application by its members, the *AMIC National Animal Welfare Standards at Livestock processing Establishments* (the AMIC Standards).¹²³

The AMIC Standards draw on the *Model Code of Practice for the Welfare of Animals: Livestock at Slaughtering Establishments* and are accompanied by a manual for auditing purposes.¹²⁴

Brazil

Active animal welfare organisations: WPSPA Brazil¹²⁵ and ARCA.¹²⁶

Canada

- AW animal welfare organisation: SPCA Certified.¹²⁷
- Animal welfare research – at government and university level
- Chicken out campaign.¹²⁸
- Retailer initiatives (e.g. Whole Foods).
- Several private organic farming initiatives.

New Zealand

- Several links: DairyNZ.¹²⁹
- Deer Industry New Zealand.¹³⁰
- Freedom Farms.¹³¹
- Royal New Zealand Society for the Prevention of Cruelty to Animals.¹³²
- Egg Producers Federation of New Zealand.¹³³
- New Zealand Pork.¹³⁴

USA

There are several active animal welfare organisations.

Animal welfare approved; Certified Humane, The Humane Touch, Foodalliance, Humane Society, Animals Angels. See links below.¹³⁵

g) Please indicate contact details of another expert on animal welfare legislation if you have been unable or unwilling to answer certain questions

Canada

Additional expert: Dr. Gord Doonan, Canadian Food Inspection Agency, Senior Staff Veterinarian, Tel. 613-221-4620, gordon.doonan@inspection.gc.ca

¹²³ <http://www.amic.org.au/SiteMedia/w3svc116/Uploads/Documents/829d68cf-f177-4602-aeeb-cf23db0e54a2.pdf>

¹²⁴ <http://www.amic.org.au/SiteMedia/w3svc116/Uploads/Documents/ed92dbf3-80a2-42fc-a716-127e513f9558.pdf>

¹²⁵ www.wspabrasil.org

¹²⁶ www.arcabrasil.org.br

¹²⁷ www.sPCA.bc.ca/farm

¹²⁸ www.chickenout.ca

¹²⁹ www.dairynz.co.nz

¹³⁰ www.deernz.co.nz

¹³¹ <http://www.freedomfarms.co.nz>

¹³² <http://rnzspca.org.nz/approved-eggs-home>

¹³³ <http://www.eggfarmers.co.nz>

¹³⁴ <http://www.nzpork.co.nz>

¹³⁵ <http://www.animalwelfareapproved.org>;

<http://www.certifiedhumane.org>;

<http://www.thehumanetouch.org>;

<http://www.foodalliance.org>

<http://www.humanesociety.org>

<http://www.animals-angels.org/>

New Zealand

This response has been developed in consultation with appropriate New Zealand experts including Professor David Mellor and Dr Lindsey Matthews who also received this questionnaire directly.

h) Please indicate additional literature reviewed to answer the questions**Argentina**

Name of document	Links
Campaña World Farmwatch. Reporte de Argentina. Ganadería y Bienestar Animal.	www.fabaonline.com
Manual de Procedimiento Bienestar Animal	http://www.senasa.gov.ar/contenido.php?to=n&in=856&io=3252 http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/06-manual_procedimientos_bienestar_animal.pdf
Resolución 97/99 Creación del Registro Nacional de Medios de Transporte. Procedimiento en el transporte de animales (3ª versión corregida – octubre 2005)	www.senasa.gov.ar www.fabaonline.com http://www.produccion-animal.com.ar/legales/19-manual_transporte.pdf
Ley 18.819/70 Técnica de insensibilización en faena de animales. Campaña World Farmwatch. Reporte de Argentina. Ganadería y Bienestar Animal	www.senasa.gov.ar www.fabaonline.com
Marco regulatorio del Bienestar Animal en Argentina Bienestar animal: nuevos horizontes para el siglo XXI. Una perspectiva Internacional y Regional. 24/25 Abril 2007. Montevideo – Uruguay	http://www.fao.org/fileadmin/user_upload/animalwelfare/ba_22.pdf
<i>Organic production:</i> Decreto 206/2001: Programa Nacional de Producción Orgánica. Condiciones ambientales y prácticas de manejo referidos a bienestar animal.	http://www.senasa.gov.ar/contenido.php?to=n&in=1142&io=5960
<i>Society view:</i> Campaña World Farmwatch. Reporte de Argentina. Ganadería y Bienestar Animal. El bienestar animal, ¿nos debe importar?	www.fabaonline.com http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/
Manual de Procedimiento Bienestar Animal. Campaña World Farmwatch. Reporte de Argentina. Ganadería y Bienestar Animal. Ley 14.346 del 27 de setiembre de 1954 de protección de malos tratos y actos crueles en todas las especies. Bienestar animal. Una clara responsabilidad. Producción orgánica Programa nacional de producción orgánica Decreto 206/2001 – Artículo 16. Centro de empresas procesadoras avícolas. Normativas.	http://www.senasa.gov.ar/contenido.php?to=n&in=856&io=3252 http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/06-manual_procedimientos_bienestar_animal.pdf www.fabaonline.com http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/ http://www.senasa.gov.ar/contenido.php?to=n&in=1142&io=5960 http://www.aviculturaargentina.com.ar/normativa.htm
<i>Transportation:</i> Resolucion 97/99 Creacion del Registro Nacional de Medios de Transporte. Procedimiento en el transporte de animales (3a version corregida-octubre 2005)	www.senasa.gov.ar ; www.fabaonline.com ; http://www.produccion-animal.com.ar/legales/19-manual_transporte.pdf

Argentina (continued)

Name of document	Links
Slaughter: <i>Ley 18.819/70 Técnica de insensibilización en faena de animales. Campana World Farmwatch. Reporte de Argentina. Ganadería y Bienestar Animal</i>	www.senasa.gov.ar www.fabaonline.com
Cattle: <i>Manual de Procedimiento Bienestar Animal.</i>	
Pigs: Campana World Farmwatch. Reporte de Argentina. Ganadería y Bienestar Animal. Ley 14.346 del 27 de setiembre de 1954 de protección de malos tratos y actos crueles en todas las especies.	
Poultry: Bienestar animal. Una clara responsabilidad. Producción orgánica programa nacional de producción orgánica Decreto 206/2001- Artículo 16. Centro de empresas procesadoras avícolas.	Normativas. http://www.senasa.gov.ar/contenido.php?to=n&in=856&io=3252 http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/06-manual_procedimientos_bienestar_animal.pdf www.fabaonline.com http://www.produccionbovina.com/etologia_y_bienestar/bienestar_en_general/ http://www.senasa.gov.ar/contenido.php?to=n&in=1142&io=5960 http://www.aviculturaargentina.com.ar/normativa.htm

Australia, Canada, China, USA

No specific literature indicated.

Brazil

Name of document	Links
Constituição da República Federativa do Brasil de 1988.	http://www.planalto.gov.br/ccivil_03/constituicao/constituicao3%7Aao.htm
JORGE, A. M. Métodos de Insensibilização e Abate em Ruminantes. Trabalho acadêmico. Universidade Estadual Paulista. Faculdade de Medicina Veterinária e Zootecnia. (Programa de Pós-graduação em Zootecnia) Campus de Botucatu-SP. 2007.	
Regulamento da Inspeção Industrial e Sanitária de produtos de origem Animal (RIISPOA).	
Lei 10,831 de 23 de dezembro de 2003	http://extranet.agricultura.gov.br/sislegis-consulta/consultarLegislacao.do?operacao=visualizar&id=5114
Instrução Normativa no. 56 de 2008.	http://www.agricultura.gov.br/pls/porta1/docs/PAGE/MAPA/LEGISLCAO/PUBLICACOES_DOU_2008/PUBLICACOES_DOU_NOVEMBRO_2008/DO1_2008_11_07-MAPA_0.PDF
Avicultura. Lana, G. R. Recife, UFRPE	
Suinocultura Intensiva: produção manejo e saúde do rebanho. Sobetiansky, J. et al. Embrapa _ CNPSA	

New Zealand

Name of document	Links
Animal Welfare Profile, Biosecurity New Zealand.	http://www.biosecurity.govt.nz/regs/animal-welfare/pubs
Mellor, D.J. and Bayvel., A.C.D. (2008). New Zealand's inclusive science-based system for setting animal welfare standards. <i>Applied Animal Behaviour Science</i> 113, 313-329	
O'Hara, P. and O'Connor, C. (2007). Challenge of developing regulations for production animals that produce the welfare outcomes we want. <i>Journal of Veterinary Behavior</i> 2, 205-212	
Tuckwell, J. (2009). Animal Welfare Act: codes of welfare. <i>New Zealand Law Journal</i> , Aug 2009	
New Zealand Ministry of Agriculture and Fisheries (MAF) (1991). MAF Policy Paper 112, Tentative proposals for an animal welfare bill, ISSN 1170-4896 (copy available on request)	
New Zealand Ministry of Agriculture and Fisheries (MAF), MAF Policy Paper 103. A review of the Animals Protection Act 1960, ISSN 1170-4896 (copy available on request)	

i) Is there anything else in relation to animal welfare legislation that you would like to share with the project and is not covered by the questionnaire?

Switzerland

No additional comments.

Argentina

Livestock in Argentina in most of cases is based on outdoor and pasture systems. This situation is according to animal welfare standards, at least about environment, although there are some critical points to study.

The Direccion Nacional de Sanidad Animal through Resolucion SENASA num. 259/04 created the Coordinacion Nacional de Bienestar Animal, which convokes the Comision Nacional de Bienestar Animal. This organization is composed by rural farmers, "consignatarios", chain members, rural and meat workers, universities, Veterinary Society, "Camara de engordadores de Hacienda", consumers and animal protection and welfare ONGs. The priority of this organization is to work on animal welfare standards according to animal welfare principles, media spreading and farmer's education. Many organizations are working on different levels (farms, chain, marketing, transport) taking into account OIE recommendations. SENASA had decided to apply scientific knowledge for the new animal welfare legislation.

In 2004 SENASA made a manual "Manual de Procedimientos de Bienestar Animal". it include all animal species in farms, transport and chain..

Moreover, companies related with this activity, have taken attention to animal welfare and they are improving production quantity and quality in this way.

Also in handling methods, workers are changing electric lances by flags. In this way workers prevent unnecessary agressions. Animals must be treated in calm and their behaviour must be studied.

Organizations like universities, farmer associations and others, have started with education courses about animal welfare for farm workers.

According to experts from private organic farming organisations in Argentina (ARGENCERT) the analysis in this report should give more value to the implicit goodness – in terms of animal welfare – of the free range pasturage, extending the feedlot conditions, which is typical for Argentina, to free range organic animal production.

Australia

The situation in Australia cannot be accurately presented using this approach as the Australian government has no authority to make laws covering animal welfare within Australia because of the arrangements that were put in place at federation, in 1901 (this is further discussed under 7.1.1 a)). The animal welfare laws of Australia's states and territories nevertheless cover animal welfare in all places, including those that are owned by the Commonwealth. These laws historically have been focused on animal protection. In more recent time subsidiary regulations apply the details of what is required to deliver nationally acceptable animal welfare outcomes from a series of national Model Codes of Practice that were inclusively developed under the auspices of a council of Australia's Ministers for Agriculture. That council, the Primary Industries Ministerial Council, includes all Ministers for Agriculture from the eight states and territories and is chaired by the Australian Minister for Agriculture. Its purpose is to facilitate the implementation, nationally, of plans and proposals that would not otherwise be possible because of the limitations imposed by the division of constitutional powers between Commonwealth, State and Territory governments¹³⁶. Compliance with the Model Codes provides in most instances a defense against charges of cruelty to animals under the laws of the states and territories.

Australia's government believes that describing the qualities of any particular system as 'animal welfare friendly' by comparison to other systems without reference to specific animal welfare indices is likely to be misleading. Industries or other groups with commercial interests are free to develop and register logos for products that are prepared in particular ways as long as the information is accurate and not presented in a way that is likely to mislead consumers. A number of Australian animal industries have made commercial decisions to develop their own method of production labelling (e.g. for barn laid eggs, born-free pork) and consumers are free to make their own decisions about purchasing products that are positioned in the market on that basis.

Australia's government would make the comment that equivalence of outcomes is the key to this in the international arena rather than harmonisation of regulation. For example, as has been explained, Australia cannot develop a single overarching piece of legislation covering animal welfare therefore could not 'harmonise' with the EU despite the outcomes being arguably equivalent. The OIE Terrestrial Animal Code states in Article 7.1.2. point 8. that "equivalent outcomes based on performance criteria, rather than identical systems based on design criteria, be the basis for comparison of animal welfare standards and recommendations".

Brazil, Canada, China

No additional comments received.

New Zealand

Within the framework for animal welfare in New Zealand there is a highly cohesive structure for the promotion of animal welfare policy and practice, with industry, research, professional and voluntary organisations providing input into areas such as education and training, technical standards, research and development of quality systems. Primary industry organisations make a large contribution to the development of operating practices policy and standards for animal welfare in New Zealand and these organisations perform a considerable amount of research and development, training and educational work within their own industries to enhance animal welfare standards.

¹³⁶ The details of this are described at http://www.mincos.gov.au/about_pimc

As far as possible, New Zealand Codes of Welfare are developed as outcome-based (or animal-based) standards rather than prescriptions of facilities or management practices. This enables each Code to move with the times. As required under the Animal Welfare Act, the Codes of Welfare are supported by scientific knowledge. NAWAC and NAEAC use their combined expertise and knowledge in a broad range of animal welfare related disciplines to advise the Minister of Agriculture on animal welfare issues and play a key role in developing Codes of Welfare and providing recommendations for future research.

New Zealand monitors developments in animal welfare legislation around the world and has particularly strong links with the EU via the EC/NZ Animal Welfare Co-Operation Forum. Similar NZ cooperation with the UK and the Netherlands involves annual bilateral liaison meetings. These provide opportunities to discuss and share opportunities relating to the ongoing development of animal welfare legislation.

New Zealand also has strong links with the OIE and has been involved with the Animal Welfare Working Group of the OIE since its inception in 2001. New Zealand places considerable emphasis on funding relevant animal welfare research to support policy regulation and standards development. In 2007 the OIE also formally recognised the Massey University Animal Welfare Science and Bioethics Centre as an OIE Collaborating Centre for Animal Welfare Science and Bioethical Analysis, thus facilitating increased communication and sharing of information between New Zealand and Australia and the OIE. In 2009 this centre was expanded to include four other institutions and recognised centers of excellence in New Zealand and Australia. This development will further strengthen the capability to provide scientific support for animal welfare legislative development and refinement.

USA

According to the USDA the USA it is important to re-emphasize that lack of federal regulation in some areas does not reflect lack of commitment to improving the lives of animals.

According to the US Animal Welfare Institute for the most part in the U.S. laws follow change in industry practices, they don't proceed it. Legislation is important to codify standards but working with retailers may be more effective means of continuing to gain improvements in farm welfare in U.S.

7.6 Most important animal welfare documents of EU and third countries

European Union

Nr	Type of document	Name of the document	Document reference or internet link	En-acted	Version of doc.
1	Commission legislation	Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes Official Journal L 221 , 08/08/1998 p. 0023 - 0027	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31998L0058:EN:NOT	1998	
2	Commission legislation	Council Directive 2008/119/EC of 18 December 2008, Official Journal L 010 , 15/01/2009 P. 0007 - 0013 laying down minimum standards for the protection of calves	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0119:EN:NOT	2008	
3	Commission legislation	Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs. OJ L 47, 18.02.2009 p. 5	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32008L0120:EN:NO	2008	
4	Commission legislation	Council Directive 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens. Official Journal L 203 , 03/08/1999 p. 0053 - 0057	http://eur-lex.europa.eu/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=en&model=guicheti&numdoc=31999L0074	1999	
5	Commission legislation	Council Directive 2007/43 of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production (OJ L 182, 12.7.2007 p. 0019-0028)	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:182:0019:0028:EN:PDF	2007	
6	Commission legislation	Council Regulation (EC) No 1/2005 of 22 December 2004, on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97	http://eur-lex.europa.eu/LexUriServ/site/en/oj/2005/l_003/l_00320050105en00010044.pdf	2005	
Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
7	Commission legislation	Council Directive 93/119/EC of 22 December 1993 on the protection of animals at the time of slaughter or killing Official Journal L 340 , 31/12/1993 p. 0021 - 0034	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31993L0119:EN:NOT	1993	
8	Commission legislation	Commission Regulation (EC) No 889/2008 of September 2008, laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control.	http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:250:0001:0084:EN:PDF	2008	

Switzerland

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Animal protection law	Tierschutzgesetz TschG	http://www.admin.ch/ch/d/sr/c455.html	1.9.08	1.9.08
2	Farm animal regulation	Tierschutzverordnung (TSchV)	http://www.admin.ch/ch/d/sr/c455_1.html	1.9.08	1.3.09
3	Regulation on Education	Verordnung des EVD über Ausbildung in Tierhaltung und Umgang mit Tieren	http://www.admin.ch/ch/d/sr/c455_109_1.html	10.08	10.08
4	Regulation on Husbandry	Verordnung des BVET über Haltung von Nutztieren und Haustieren	http://www.admin.ch/ch/d/sr/c455_110_1.html	1.10.08	1.10.08
5	Regulation on ethological programmes	Ethoprogrammverordnung	http://www.admin.ch/ch/d/sr/910_132_4/index.html	1.10.08	1.10.08
6	Organic legislation	Bioverordnung	http://www.admin.ch/ch/d/sr/c910_18.html	1.1.98	1.1.09
7		Several European agreements e.g. with regard to Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes, OJ L 221, 08.08.1998 p. 23		-	-
	Level	Specific to	Applies to	Language	Organic
1	National	Switzerland	All animals	de, fr, it	no
2	National	Switzerland	All animals	de, fr, it	no
3	National	Switzerland	Farm animals	de, fr, it	no
4	National	Switzerland	Farm animals	de, fr, it	no
5	National	Switzerland	Farm animals	de, fr, it	no
6	National	Switzerland	Farm animals	de, fr, it	yes
7		Several European Agreements			

Argentina

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Ley de Protección de malos tratos y actos crueles en todas las especies.	Ley 14346/54:	http://www1.hcdn.gov.ar/proyxml/expediente.asp?fundamentos=si&numexp=4314-D-2007	27.09.54	
2	Técnicas de insensibilización en faena de animales. Prohibición del uso de maza.	Ley 18.819/70	http://www.senasa.gov.ar/indexhtml.php	1970	
3	Reglamentación de producción y elaboración de alimentos orgánicos: condiciones ambientales y prácticas de manejo referidos a bienestar animal.	Res. 1286/93 SENASA	http://canales.ideal.es/canalagro/datos/agricultura_ecologica/ecologia_argentina/normas/normas-8-1.htm	12.11.93	
4	Producción orgánica Programa nacional de producción orgánica	Decreto 206/2001	http://www.senasa.gov.ar/contenido.php?to=n&in=1142&io=5960	16.02.01	
5	Prohibición de alimentación forzada de patos y gansos.	Resolución 413/2003	http://www.senasa.gov.ar/contenido.php?to=n&in=1142&io=5960	20.08.03	
6	Creación de la Coordinación de Bienestar Animal	Resolución 259/2004	http://www.imperiorural.com.ar/imperio/estructura/senasa/pdf/resol_259_04.pdf	01.04.04	

Australia

Animal Welfare legislation resides with the Australian States and Territories:

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	States legislation QLD	Animal Care and Protection Act 2001; Animal Care and Protection Regulation 2002;	http://www.legislation.qld.gov.au/Acts_SLs/Acts_SL_A.htm	2002	
2	States legislation NSW	- Prevention of Cruelty to Animals Act 1979 Prevention of Cruelty to Animals (General), later updated - Regulation 2006 - Exhibited Animals - Protection Regulation 2005	http://www.legislation.nsw.gov.au/viewtop/inforce/act+200+1979+FIRST+0+N/?fullquery=(((%22prevention%20of%20cruelty%22))) www.legislation.nsw.gov.au	1979 2006 2005	
3	States legislation VIC	Prevention of Cruelty to Animals Act 1986	http://www.austlii.edu.au/au/legis/vic/consol_act/poacta1986360/	1996	
4	States legislation TAS	Animal Welfare Act 1993 amended 2008	http://www.austlii.edu.au/au/legis/tas/consol_act/awa1993128/	2003	
5	States legislation ACT	Animal Welfare (Amendment) Act 1997	http://www.legislation.act.gov.au/a/1992-45/default.asp	1997	
6	States legislation SA	Animal Welfare Act 1985	http://www.legislation.sa.gov.au/LZ/C/A/Animal%20Welfare%20Act%201985.aspx	1985	
7	States legislation WA	Animal Welfare Act 2002	http://www.dlgrd.wa.gov.au/Legislation/AnimalWelfare/Default.asp	2002	
8	States legislation NT	Animal Welfare Act 2007	http://notes.nt.gov.au/dcm/legislat/legislat.nsf/d989974724db65b1482561cf0017cbd2/d85e416a04509d0c692572a300029e84?OpenDocument	2007	

Some of these Acts are being revised in 2010 - for example the ACT *Animal Welfare Act 1992 as amended* is to be amended by the ACT *Animal Welfare Amendment Act 2010* - and their availability and currency via these links might change

Codes of practice, Standards and Standards and Guidelines:

A comprehensive series of national *Model Codes of Practice for the Welfare of Animals*¹³⁷ has been developed over time to be applied under the primary and secondary animal welfare legislation of Australia's states and territories¹³⁸. They cover all major livestock species as

¹³⁷ All of these can be freely downloaded from <http://www.publish.csiro.au/nid/22/sid/11.htm>

¹³⁸ For example, those referenced directly under the South Australian Act are listed at <http://www.environment.sa.gov.au/animalwelfare/index.html> and those under the legislation of the Australian Capital Territory at <http://www.tams.act.gov.au/live/pets/animalwelfare/animalwelfarestandards-codesofpractice>. For details in each state or territory it is advised to search the specific website provided.

well as a number of species that are of less economic significance. There are also *Australian Standards* which are legally required for commercial processing of livestock and poultry¹³⁹

National standards for animal welfare are being developed to be directly implemented in every jurisdiction¹⁴⁰. The first in this series of documents has recently (May 2009) been endorsed by Ministers with responsibility for subsequent implementation. A web-based version of that document, Australia's *Australian Standards and Guidelines for the Welfare of Animals - Land Transport of Livestock*, will be available online as soon as possible and that information will be provided to Unit 5, DG SANCO. As has been mentioned, others in that series are already under development to cover on-farm aspects of cattle and sheep production.

Australia also notes that the Victorian government is soon to adopt its *Livestock Management Act* (Vic) under which all new standards for livestock will be directly implemented. There is also a substantive amendment to the Australian Capital Territory's *Animal Welfare Act* 1992 that is scheduled for implementation later in 2010.

Brazil

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Federal legislation for animals	Constituição da República Federativa do Brasil (Federal Republic of Brazil Constitution) from 1988	http://www.planalto.gov.br/ccivil_03/constituicao/constitui%C3%A7ao.htm	10.10.88	10.10.88
2	Federal legislation for animals	Capítulo VI do Título VIII, Art. 225, 1. Inc. VII, da Constituição da República Federativa do Brasil from 1988	http://www.unimep.br/cavil/documents/1_constituicao_republica_federativa_brasil.pdf	10.10.88	19.12.03
3	Instrucción Normativa	IN 56 de 06/11/2008	www.agricultura.gov.br/sislegis-consulta	06/11/2008	
3	Instrucción Normativa	IN 64 de 18/diciembre/2008	http://www.prefiraorganicos.com.br/agrorganica/legislacaonacional	18/12/2008	18/12/08
3	Instrucción Normativa	IN 44 de 02/10/2007	www.agricultura.gov.br/sislegis-consulta	02/10/2007	
3	Instrucción Normativa	IN 3, DE 17/01/2000	www.agricultura.gov.br/sislegis-consulta	03/01/2000	
	Level	Specific to	Applies to	Language	Organic
1-4	National	Brazil	All animals	Portuguese	no

¹³⁹ The Standard for poultry can be downloaded without charge from <http://www.publish.csiro.au/nid/18/pid/5203.htm> and that for livestock from <http://www.publish.csiro.au/pid/5553.htm>

¹⁴⁰ This is described at http://www.daff.gov.au/animal-plant-health/welfare/model_code_of_practice_for_the_welfare_of_animals#transport

Canada

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Federal legislation	Canada does not have a national act dedicated to protecting animals but Sections of the (national) Criminal Code do pertain to animals see sections 444-447	http://www.efc.ca/pages/law/cc/cc.html	No information	No information
2	Provincial legislation for animals	Most provinces then have provincial legislation under a Prevention of Cruelty to Animals Act.	http://www.bclaws.ca/Rec on/document/freeside/--%20P%20--/Prevention%20of%20Cr uelty%20to%20Animals%20Act%20%20RSBC%201996%20%20c.%20372/00_96372_01.xml		
3	Federal legislation for animals	National laws pertaining to the transport of farm animals listed under the Health of Animals Regulations see section XII	http://laws.justice.gc.ca/en/showtdm/cr/C.R.C.-c.296//?showtoc=&instrumentnumber=C.R.C.-c.296		
3	Federal legislation for animals	National laws pertaining to ante mortem and slaughter practices listed under the Meat Inspection Regulations, Part III section 61 to 80	http://laws.justice.gc.ca/en/showdoc/cr/SOR-90-288/bo-ga:l_III/20090805/en#anc horbo-ga:l_III		

The Canadian laws and codes listed (see Annex) all have the potential to improve welfare but until they are routinely enforced and revised based on scientific evidence; none of them are improving the conditions for farm animals. The BC SPCA standards as well as the organic standards are a significant improvement, but this applies only to member farms and BC SPCA standards in particular have not been adopted by a significant number of farms. Further information provided by the Canadian Food Inspection Agency (CFIA) regarding animal welfare legislation, at the national and provincial level can be found here: <http://www.inspection.gc.ca/english/anima/trans/infrae.shtml>

China

N r	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Legislation	Animal Husbandry Law of the People's Republic of China	http://www.gov.ch/zilao/flfg/2005-12/29/content_141833.htm	12.05.2009	7.01.2006
2	Code of Practice	GB/T 22569-2008 Technical criterion of pig humane slaughter	http://www.gov.ch/zilao/flfg/2005-12/29/content_141833.htm	2008	2008
3	Legislation	GB/T 19630.1-2005 National Standards of the People's Republic of China for organic products	http://www.unctad.org/trade_env/ITF-organic/meetings/misc/Chinaorganicstandard.pdf Chinese version: http://www.cnca.gov.cn/cait/cprz/zyxcp/9642.shtml	1. April 2005	
	Level	Specific to	Applies to	Language	organic
1	National	National	All animals	cn	no
2	National	National	pigs	cn	no
3	National	National	All animals	cn	yes

New Zealand

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Act	Animal Welfare Act	http://www.legislation.govt.nz/act/public/1999/0142/latest/DLM49664.html?search=ts_act_animal+welfare_resel&sr=1	Dec 1999	1
2	Code of Welfare	Animal Welfare (Layer Hens)	http://www.biosecurity.govt.nz/animal-welfare/codes/layer-hens/index.htm	1.1.05	1
3	Code of Welfare	Animal Welfare (Pigs)	http://www.biosecurity.govt.nz/animal-welfare/codes/pigs/index.htm	1.1.05	1
4	Code of Welfare	Animal Welfare (Painful Husbandry Procedures)	http://www.biosecurity.govt.nz/animal-welfare/codes/painful-husbandry/index.htm	23.12.05	1
5	Code of Welfare	Animal Welfare (Broiler Chickens: Fully Housed)	http://www.biosecurity.govt.nz/reqs/animal-welfare/req/codes/broiler-chickens	25.7.03	1
6	Code of Recommendations and Minimum Standards	Welfare of Animals at Saleyards	http://www.biosecurity.govt.nz/animal-welfare/codes/saleyards/index.htm	Nov 1995	
7	CoR & Minimum Standard	Welfare of Animals at the Time of Slaughter at Licenced and Approved Premises	http://www.biosecurity.govt.nz/animal-welfare/codes/slaughter/index.htm	July 1994	
8	CoR & Minimum Standard	Welfare of Animals Transported within New Zealand	http://www.biosecurity.govt.nz/animal-welfare/codes/transport/index.htm	Nov 1994	
9	CoR & Minimum Standard	Welfare of Bobby Calves	http://www.biosecurity.govt.nz/animal-welfare/codes/bobby-calves/index.htm	July 1997	
10	CoR & Minimum Standard	Welfare of Dairy Cattle	http://www.biosecurity.govt.nz/animal-welfare/codes/dairy-cattle/index.htm	June 1992	
11	CoR & Minimum Standard	Emergency Slaughter of Farm Livestock	http://www.biosecurity.govt.nz/animal-welfare/codes/emergency-slaughter/index.htm	Dec 1996	
12	Standard	Transport of cattle by sea from New Zealand	http://www.biosecurity.govt.nz/exports/animals/standards/sea-transport-cattle/index.htm	30/07/04	1
13	Government	NZFSa Standards OP 1-3 *	http://www.nzfsa.govt.nz/organisations/documents/index.htm http://www.nzfsa.govt.nz/organisations/documents/technical-rules.pdf	August 2005	Version 2

All legislation listed in the table above is national legislation that is effective throughout New Zealand.

* These standards are not applicable in every case in NZ. They are only applicable to products exported under the OOAP (Official Organic Assurance Programme). There are no mandatory standards for organic production in NZ.

USA

Nr	Type of document	Name of the document	Document reference or internet link	Enacted	Version of doc.
1	Slaughter Legislation	Humane Methods of Slaughter Act	http://awic.nal.usda.gov/nal_display/index.php?info_center=3&tax_level=3&tax_subject=182&topic_id=1118&level3_id=6736&level4_id=0&level5_id=0&placement_default=0	1958, 1978	7USC, 1901-1907; 9CFR 313
2	Transport legislation	Twenty-eight Hour Law	http://awic.nal.usda.gov/nal_display/index.php?info_center=3&tax_level=3&tax_subject=182&topic_id=1118&level3_id=6739&level4_id=0&level5_id=0&placement_default=0	1873;1994	49USC, 80502; 9CFR 89
3	Organic Standards	National Organic Program	http://www.ams.usda.gov/AMSV1.0/NOP	2000	7 USC, Part 205
4	Voluntary program	Food Marketing Institute/National Council of Chain Restaurants Welfare Program	www.fmi.org/animal_welfare/	2000; multiple updates	
5	Voluntary program	Beef Quality Assurance	www.bqa.org	1997	2009
6	Voluntary program	National Dairy FARM Program (FARM: Farmers Assuring Responsible Management) <i>(originally the Milk & Dairy Beef Quality Assurance Program)</i>	www.nationaldairyfarm.com	1992	2009
7	Voluntary program	United Egg Producers Certified	www.uepcertified.com/media/pdf/UEP-Animal-Welfare-Guidelines.pdf	1990s	2010
8	Voluntary program	National Chicken Council Animal Welfare Guidelines and Audit Checklist	www.nationalchickencouncil.com/files/AnimalWelfare2005.pdf	1999	2005, New ones in 2010
9	Voluntary program	National Turkey Federation Animal Care Best Management Practices	www.eatturkey.com/foodsrv/pdf/2009_guidelines.pdf	Late 1980s	2009
10	Voluntary	Pork Quality Assurance Plus (PQA Plus)	www.pork.org/Producers/PQA/PQAPlusEdBook.pdf	1989—various editions since that time	
11	Voluntary program	Pork Transport Quality Assurance (TQA)	http://www.pork.org/Producers/docs/TQA_08.pdf	2002	2008
12	Voluntary program	Veal Quality Assurance	www.vealfarm.com	1990	2007
13	Voluntary program	Animal Care & Handling Guidelines	www.animalhandling.org	1991	2003, re-viewed annually

8 Synthesis and conclusions

8.1 Ranges of issues and main topics covered by the initiatives

The analysis of a large number of initiatives showed quite a range of differences regarding involved actors, goals and instruments, which are described in the EconWelfare Report D1.1 (Kilchsperger et al., 2010). This is often much influenced by the national context, in particular the stage of development of the consciousness of consumers, farmers and other and chain actors but also researchers about animal welfare. Another important factor is the perception of the citizens in a country (or even region) against initiatives coming from government side or/and from private side.

8.2 Differences regarding legislation and private standards

The summarising tables below show the most relevant aspects for the major farm animal species as regulated in legislation and private standards within the EU and within selected third countries:

The summary mentions only those major points found in three and more legislation and/or private standards (marked with xx) and minor points found in at least two legislation and/or private standards (marked with x). Details are reported in the text in chapters 5-7.

Cattle

Many aspects relevant for animal welfare of cattle are often found in both organic and non-organic legislation and private standards in EU and Non-EU countries, which are beyond EU rules: tethering, space and light requirements, slatted floors, bedding, outdoor access, feeding requirements, weaning and calving, castration and other surgical practices (see Table 8.1)

Table 8.1 Summary of the most relevant and often found aspects for cattle in legislation and standards in EU and Non-EU third countries

Chapter	Relevant aspects (most often mentioned)	National Legis- lation EU count- ries	Private high level non- organic stan- dards	Organic stan- dards EU Regula- tion and private stan- dards	Legis- lation third count- ries	Orga- nic Legis- lation third count- ries
CATTLE						
Stable systems	Tethering		xx	xx		x
	Space requirements in different systems *		xx	xx	x	x
Barn environment	Light requirements, in particular for calves		xx	xx		xx
	Slatted floors		xx	xx		x
	Bedding in lying area	x	xx	xx	x	
Outdoor access	Duration and frequency, pasture		xx	xx		xx
Feeding	Feeding composition	xx	xx	xx		
	Roughage, fiber *	x	xx	xx		xx
	Iron for calves		xx			
	Weaning for calves			xx		xx
Drinking	Access to fresh water *, drinking spots etc.		x	xx	x	
Calving	Provision of calving pens	x	x	xx	x	x
Health care	Hormonal treatments, etc.					xx
Breeding	Prohibited methods		x	xx		
Mutilations	Castration	x	xx	xx	x	
	Other surgical practices, e.g. tail trimming	x	xx	xx	x	xx
Handling	Electric stimulation, cow trainer		x	xx		

* Important aspect for EconWelfare experts

xx = rules beyond EU found in 3 and more legislations and private standards
 x = rules beyond EU found in at least 2 national legislation or private standards

Pigs

Many aspects relevant for animal welfare of pigs are often found in both organic and non-organic legislation and private standards in EU and Non-EU countries, which are beyond EU rules: availability of litter, slatted floors, possibilities of investigation and manipulating activities, roughage, no hormonal treatments, castration and other surgical practices as well as space allowance (see Table 8.2).

Table 8.2 Summary of the most relevant and often found aspects for pigs in general in legislation and standards in EU and Non-EU third countries

Chapter	Relevant aspects (most often mentioned)	National Legis- lation EU count- ries	Private high level non- organic stan- dards	Organic stan- dards EU Regula- tion and private stan- dards	Legis- lation third count- ries	Orga- nic Legis- lation third count- ries
PIGS						
Stable systems	Outdoor access		xx	xx		
Barn environ- ment	Temperature	x		x		
	Light requirements		xx	xx		
Accommo- dation	Availability of litter in lying area		x	xx		xx
	Restriction or exclusion of slatted floors *	x	xx	xx		xx
	Space requirements *		xx	xx		x
Environ- mental enrichment	Possibility for investigation and manipulation activities		xx	xx		x
Group keeping	Group keeping / isolation *		x	x		x
Feeding	Roughage		x	xx		x
Drinking	Drinking facilities		xx			
Health care	Hormonal treatments, growth promoters		xx	xx	x	xx
Breeding	Recommended methods	xx	xx			
Aggressive behaviour	Segregation mandatory. pens	x	xx			
Mutilations	Castration	xx	xx	xx	x	
	Other surgical practices like tail docking and tooth dipping	xx	xx	xx	x	xx

* Important aspect for EconWelfare experts
private standards

xx = rules beyond EU found in 3 and more legislations and
x = rules beyond EU found in at least 2 national legislation or private standards

Poultry

There are several areas regarding poultry, where mainly private standards but also the organic legislation in EU and Non-EU third countries have requirements beyond the EU legislation: light requirements, perches and nests, dust baths, outdoor run and pasture, indoor and outdoor stocking densities, access to fresh water, breeding (mainly broilers) as well as frequency of regular visits (see Table 8.3).

Table 8.3 Summary of the most relevant and often found aspects for poultry in general in legislation and standards in EU and Non-EU third countries

Chapter	Relevant aspects (most often mentioned)	National Legis- lation EU count- ries	Private high level non- organic stan- dards	Organic stan- dards EU Regu- lation and private stan- dards	Legis- lation third count- ries	Orga- nic Legis- lation third count- ries
POULTRY						
Accommodation	Light requirements		xx	xx	x	
	Perches *		x	xx		x
	Nests	x	xx	xx		x
	Litter			x		x
	Dust baths, sand *		xx	xx		
Barn environment	Indoor stocking rate		xx	xx		xx
Outdoor access	Outdoor run and pasture,		xx	xx		xx
	Outdoor stocking rate*		xx	xx		xx
Feeding	Feed composition			xx		
	Feed additives			xx		
	Feeding facilities		xx			
Drinking	Permanent access to fresh water		xx	xx	x	
Mutilations	Beak trimming *		x	xx		xx
	Other mutilations		x	x		xx
Breeding	Mainly for broilers		xx	xx		x
Regular visits	Frequency of regular visits *		xx	xx		x

* Important aspect for EconWelfare experts xx = rules beyond EU found in 3 and more legislations and private standards
 x = rules beyond EU found in at least 2 national legislation or private standards

Transport

Main aspects related to transport of animals are found mainly in several private standards in EU Countries and partly in legislation for organic farming which are beyond or additional to EU legislation were: the interdiction of sedatives/tranquilisers, bedding material for the youngest in transport vehicles, drinking, resting and feeding possibilities before transport, the pathway/ramps design, the separation of unfamiliar groups, the length of journey. In several third countries the length of journey is limited and in organic legislation the use of sedatives and electric shocks is forbidden (see Table 8.4).

Table 8.4 Summary of the most relevant and often found aspects for transport in legislation and standards in EU and Non-EU third countries

Chapter	Relevant aspects (most often mentioned)	National Legis- lation EU count- ries	Private high level non- organic stan- dards	Organic stan- dards EU Regu- lation and private stan- dards	Legis- lation third count- ries	Orga- nic Legis- lation third count- ries
TRANSPORT						
Animal fitness for transport	Illness during transport		xx			
	Use of sedatives / tranquillisers			xx	x	xx
Means of transport	Transport features, Space and ventilation		X			
	Bedding material for the youngest	x	xx			
Training	Additional requirements staff		x			
Before loading	Drinking, resting and feeding		xx			
Loading, unloading and handling	Inclination of ramps, pathway design		x	x		
	Electric shocks		xx	xx	x	xx
	Mixing / separation of unfamiliar groups		xx	xx		
	Loading		xx			
During transport	Headroom, ventilation		x			
Journey times cattle and pigs	Length of journey		xx	x	xx	
	Prolongation of journey		xx	xx		

* Important aspect for EconWelfare experts xx = rules beyond EU found in 3 and more legislations and private standards
 x = rules beyond EU found in at least 2 national legislation or private standards

Slaughter

The main differences regarding slaughter of animals found in several private standards compared to EU legislation were: lairage requirements (start of lairage, space, lighting, floors etc.), the avoidance of group mixing, the non-use of electric stimulation, the time between stunning and bleeding as well as further processing, the education of the staff). Several non-EU countries have legislation for slaughter, comparable with the EU framework (see Table 8.5)

Table 8.5 Summary of the most relevant and often found aspects for slaughter in legislation and standards in EU and Non-EU third countries

Chapter	Relevant aspects (most often mentioned)	National Legis- lation EU count- ries	Private high level non- organic stan- dards	Organic stan- dards EU Regu- lation and private stan- dards	Legis- lation third count- ries	Organi c Legis- lation third count- ries
SLAUGHTER						
Unloading to slaughter	Duration, time	x	xx			
Lairage, accommodati on	General requirements / start of lairage		xx	x		
	Lying area, floor, space, r		xx			
Lairage environment	Lighting		xx			
Grouping	Group mixing			x	x	
Treatment	Electric shocks / stimulation		xx	xx		xx
Restraining	Restraining before stunning				x	
Methods allowed for stunning/killi ng	Methods listed / restricted	x			x	
Stunning and killing	Electronarcosis efficiency *	x	xx			
	Gas stunning efficiency *	x				
Bleeding	Instruments for bleeding		xx	x		
	Time between stunning - bleeding - stunning	x	xx			
Competence staff	Education		xx		x	
Kosher / halal slaughtering	Allowance	xx			x	

* Important aspect for EconWelfare experts

xx = rules beyond EU found in 3 and more legislations and private standards

x = rules beyond EU found in at least 2 national legislation or private standards

Linking current animal welfare legislation and standards to Welfare Quality® principles and criteria

A key issue of the EconWelfare project is to link the relevant requirements in legislations and standards, which are often more focusing on the animal husbandry systems, to more animal focused principles and criteria, which for example have been developed in the EU-funded Welfare Quality project. Together with external animal welfare specialists several of the distinguishing aspects of considered animal welfare standards in this report were linked to *Welfare Quality®* principles and criteria. Some of the aspects have been judged of higher importance for improving animal welfare (written in bold) by a group of external animal welfare experts, which participated in an EconWelfare workshop in September 2009 in Spain (WP2). In the tables 8.1 -8.5, the important aspects as pointed out by the EconWelfare experts are marked blue and with *. In table 8.6 and example of how these principles and criteria are linked with the more “classical” standards requirements is shown for dairy cows.

Table 8.6 List of the most distinguishing and important aspects for dairy cows of EU welfare standards considered by EconWelfare experts.

Welfare Quality® PRINCIPLES	Welfare Quality® CRITERIA	Distinguishing aspects of considered welfare standards
Good feeding	Absence of prolonged hunger	Allowance of roughage on farm
		Facilities to avoid competition for feed on farm (trough width/heads)
		Feeding before loading on vehicles for transport
	Absence of prolonged thirst	Facilities to avoid competition for water on farm (heads/drinking spots) Drinking before loading on vehicles for transport
Good housing	Comfort around resting	Bedding materials in laying area on farm
		Allowance of calving pens on farm
		Bedding materials on vehicles
	Thermal comfort	Prevention of cold/heat stress on farm
		Air quality on farm (toxic gases, dust)
		Lightening on farm (intensity, natural light, photoperiod)
	Ease of movement	Avoidance of tethering and/or individual housing on farm
		Space allowance on farm
		Access to outdoor run on farm
		Access to pasture
Good health	Absence of injuries	Avoidance or limitation of slatted floors
	Absence of disease	No hormones or antibiotic growth promoters
	Absence of pain induced by management procedures	Avoidance of electric prods
		Avoidance of dehorning
		Length of journey
		Avoidance of sedatives during transport
Appropriate behaviour		Stunning efficiency
		No aspect

More details how the results of the standards analysis of this report were linked with animal welfare principles and criteria are reported in the EconWelfare Report D2.3 (Ferrari et al. 2010). The detailed analysis of the legislation and standards in EU and Non-EU countries has shown that much more aspects beyond the EU rules were found in legislation and private standards than listed above. Not all aspects are found equally important by the EconWelfare experts from an animal point of view. This suggests that a differentiation in major points, minor points and mere recommendations, as is done for instance within the Global GAP initiative, might be an interesting approach.

The results of Table 8.1 – 8.5 in general show the following:

- national legislation of EU countries on farm animal welfare, in particular regarding pigs and the slaughter process, are more often beyond the EU legislation than national legislation in the third countries that are important livestock trade partners of the EU;
- private non-organic standards and organic standards and legislation within the EU countries often go further than organic and non-organic legislation in the selected third countries.

The already existing differences in levels of welfare legislation and standards between EU countries and important trade partners outside the EU (can) affect the competitiveness of the animal productions sectors within the EU. This will have to be taken into account in work package 4 of the EconWelfare project, where the impact of further upgrading of animal welfare standards within the EU will be estimated.

Comparison of organic and non-organic animal welfare legislation in selected EU third countries with EU

The detailed analysis of the different requirements in EU third countries makes it sometimes difficult to get an overall picture. Therefore an overall assessment of the legal framework and national governmental rules of the investigated countries in comparison with the EU legal framework for animal welfare was made.

In order to group the animal welfare status of EU third countries with regard to the main animal categories as well as to transport and slaughter four main categories were made:

- Group A: + beyond EU legislation: more than 4 main aspects clearly beyond EU rules => Switzerland;
- Group B: = comparable to EU legislation in main points (deviations on minor points) => Argentina and New Zealand;
- Group C: - slightly below EU legislation (in more than 4 main aspects deviations) => Australia, Canada and Brazil;
- Group D: -- clearly below EU rules (many main aspects not regulated by national legislation) => China and USA.

The authors are aware, that such a comparison has to take the different national contexts and systems into account, like the strong emphasis on voluntary Codes of Practice approaches and private industry approaches in Australia, Canada, New Zealand and USA. This information, which is taken from Chapter 7.1, is integrated in the comparative tables.

Tab. 8.7 Comparison of governmental non-organic animal welfare legislation related to different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Overall legal framework	Leg	+/= Leg	=/- Leg	- nMCoP-Leg	-- Leg	-/= VCoP Leg in provinces	-- Leg	=/- Leg	--- VCoP
CATTLE	Leg	+/= Leg	=/- Leg	- nMCoP-Leg	-- Leg	-/- VCoP	-- VCoP	=/- MCoR Dairy cattle / calves	-- VCoP
PIGS	Leg	+/= Leg	=/- Leg	- nMCoP-Leg	-- Leg	- VCoP	-- VCoP	=/- MCoR pigs	-- VCoP
LAYING HENS	Leg	+/= Leg	- Leg	- nMCoP-Leg	-- Leg	- VCoP	-- VCoP	=/- MCoR	-- VCoP
BROILERS	Leg	+/= Leg	- Leg	- nMCoP-Leg	- Leg	- VCoP	-- VCoP	=/- MCoR broilers	-- VCoP

Leg = Legislation VCoP = Voluntary Code of Practice MCoR = Mandatory Codes of Recommendations,
 nMCoP-Leg = national Model Code of Practice under equivalent State and Territory Legislation in Australia

Overall assessment: + = beyond EU legislation = comparable to EU legislation in main points
 - slightly below EU legislation (in several main aspects)
 -- clearly below EU rules (many main aspects not regulated by national legislation)

The overall assessment of the animal welfare requirements of the main animal groups in table 8.6 shows significant differences with regard to animal husbandry: CH is in several aspects beyond EU rules, AR and NZ have many comparable rules, AU, CA are in several aspects slightly below the EU and China and USA have many main aspects not regulated in their national legislation.

In Table 8.7 an overall assessment of the legal requirements for organic animal welfare legislation was made, taking the EU regulations EC 834/2007 and EC 889/2008 as reference. It shows that for CH, AR, AU, BR, CA and NZ the rules are comparable, whereas the rules of China and USA are on some points slightly below the EU rules for organic animal production.

Tab. 8.7 Comparison of governmental ORGANIC animal welfare legislation related to different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU**	BR	CA	CN	NZ	USA
Overall legal framework	Organic Leg	+/=	=	=	=	=	=/-	=	- NOP-LEG
		Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	
CATTLE	Organic Leg	+/=	=	=	=	=	=/-	=	=/- NOP-LEG
		Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
PIGS	Organic Leg	+/=	+/=	=	=	=	=/-	=	=/- NOP-LEG
		Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
LAYING HENS	Organic Leg	+/=	+/=	=	=	=	=/-	=	- NOP-LEG
		Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg
BROILERS	Organic Leg	+/=	=	=	=	=	=/-	=	- NOP-LEG
		Leg	Leg	Leg	Leg	Leg	Leg	OOAP*	Leg

Leg = Legislation NOP = National Organic Program

* Official Organic Assurance Programme (OOAP) which provides government to government assurances of organic production from New Zealand to the markets covered by this programme. The OAAP is not covered by legislation.

** Export legislation requires that all exported products claiming to be 'organic' must be certified as complying with the requirements of Australia's *National Standard for Organic and Bio-dynamic Produce* by a body approved by the national competent authority, the Australian Quarantine and Inspection Service (AQIS).

Overall assessment: + beyond EU organic legislation

= comparable to EU organic legislation in main points

- slightly below EU organic legislation (in several main aspects)

In Table 8.8 an overall assessment of animal transport legal requirements was made. CH and AR have the same requirements for animal transport as the EU and in some points are even beyond the EU rules. NZ has comparable rules for cattle and chicken and a bit below EU rules for pigs. AU, BR, CA, CN and USA have in several main aspects rules below EU legislation or in some cases even miss requirements.

Tab. 8.8 Comparison of governmental non-organic animal welfare legislation related to transport of different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Transportation non-organic cattle	Leg	+/= Leg	=/+ Leg	- nMCoP-Leg	- Leg	- Leg / VCoP	- no Leg / VCoP	- Leg / VCoP	- Leg / VCoP
Transportation non-organic pigs	Leg	+/= Leg	=/+ Leg	- nMCoP-Leg	- Leg	- Leg / VCoP	-- no Leg / VCoP	- Leg / VCoP	- Leg / VCoP
Transportation non-organic chicken	Leg	+/= Leg	=/+ Leg	- nMCoP-Leg	- Leg	- Leg / VCoP	-- no Leg / VCoP	- Leg / VCoP	-- No Leg / VCoP

Leg = Legislation VCoP = Voluntary Code of Practice nMCoP-Leg = national Model Code of Practice under equivalent State and Territory Legislation.

Overall assessment: + beyond EU legislation = comparable to EU legislation in main points

- slightly below EU legislation (in several main aspects)

-- clearly below EU rules (many main aspects not regulated by national legislation)

Table 8.9 shows a bit a more differentiated picture compared with transport, as here beside CH and AR also BR has some rules beyond the EU rules. Here it must be recognized that in the China and the USA for some animal rules a special regulation has been amended for animal slaughter.

Tab. 8.9 Comparison of governmental non-organic animal welfare legislation related to slaughtering of different animal groups in selected third countries & trading partners with EU

	EU	CH	AR	AU	BR	CA	CN	NZ	USA
Slaughtering cattle	Leg	+ Leg	+/= Leg	=/- Leg / AS / nMCoP / NAWS	+/= Leg	=/- Leg / VCoP	-- no Leg / VCoP	- Leg / VCoP	- Leg / VCoP
Slaughtering pigs	Leg	+ Leg	+/= Leg	=/- Leg / AS / nMCoP / NAWS	+/= Leg	=/- Leg / VCoP	=/- Leg / (Criterion)	=/- Leg / VCoP	- Leg / VCoP
Slaughtering chicken	Leg	+ Leg	+/= Leg	=/- Leg / AS / nMCoP	+/= Leg	- Leg / VCoP	-- no Leg / VCoP	=/- Leg / VCoP	-- no Leg / VCoP

Leg = Legislation VCoP = Voluntary Code of Practice AS = Australian Standard under Legislation nMCoP = national Model Code of Practice NAWS = AMIC National Animal Welfare Standards at Livestock processing Establishments (for exporting establishments under direct AQIS supervision)

Overall assessment: + beyond EU legislation = comparable to EU legislation in main points

- slightly below EU legislation (in several main aspects)

-- clearly below EU rules (many main aspects not regulated by national legislation)

Harmonisation and equivalence of outcome issues

The third country analysis shows that there are different conceptional approaches concerning regulation of animal welfare within EU member states and third countries. Third countries for instance often make use of Codes of Practice. Several countries like AU, CA and US until now have left the animal welfare legislation to their member states. As the selected third countries are important trading partners of the EU, it is important to find ways to better reconcile these different approaches, e.g. by rather focusing on equivalence of outcomes based on performance criteria rather than harmonisation of regulations (as mentioned by the Australian experts).

In the mainstream agriculture it is important that the private initiatives intensify their collaboration and exchange of experiences. An interesting harmonisation approach is the development of the world-wide GLOBALG.A.P as business to business retailer standard.

To harmonise legislation for organic production, there are already institutions in place, like the Codex Alimentarius Guidelines for organically produced and in the private sector the International Federation of Organic Agriculture Movements (IFOAM) with their basic standards and their accreditation programme. This could facilitate a further development of organic standards towards a more animal-oriented approach. Beside the level of legislation, several organic standard-setting organisations started already to develop more animal-oriented assessment tools and complimentary instruments to standards (like Bioland in Germany, FiBL in Switzerland or the Organic Agriculture Centre of Canada).

Four development lines toward improved and higher animal welfare in Europe

The analysis of welfare initiatives and standards indicates that basically four development lines towards improved animal welfare can be observed, beside EU and/or national legislation development:

a. Further development and implementation of high level animal welfare standards:

This approach is followed by some initiatives, which are very ambitious in reaching a high level of farm animal welfare and have developed very detailed standards with independent inspection and certification (like Neuland Germany and Freedom Food in the UK).

+ These initiatives can be considered as niche drivers and pioneers beside organic farming, which can experience new ways like the introduction of more animal-based indicator systems. They have a high potential for cooperation with much broader actor network (including supply chain and research institutions).

- However these initiatives are still remaining rather in a niche market and are limited by the number of farmers. Generally the production costs are higher but less high than for products from organic farming due to less sustainability requirements; an extension depends on the consumer willingness to pay a higher price.

b. An overall approach with the integration of high animal welfare in the rules for organic farming (or other high level sustainability initiatives):

For organic farming this overall approach to high animal welfare was already implemented in the EU regulations for organic production EC Regulation 834/2007 and EC Regulation 889/2008 (higher level than before). Additional requirements beyond the EU rules for organic production are found in some private organic standards (of which are more animal-focused like Bioland Germany). Currently several organic legislation are in the process of updating their rules (e.g. for poultry in EU, CA, AU and US).

- + *There is an important potential to update and integrate high animal welfare rules in legislation for organic farming combined with high sustainability rules.*
- *However this approach is limited by a still relative small number of organic farmers and by the fact that organic farming standards are already very detailed (development of new models with more animal-focused criteria and complementary tools like dynamic assessment systems needed). Organic livestock generates higher costs, which have to be covered either by a higher consumer price and/or direct payments.*

c. Middle level approach to upgrade animal welfare standards

One approach is done by several large retailers, like the one organised in GLOBALG.A.P, which are integrating in their company standards animal welfare and try to ensure this through a business to business cooperation model.

- + *There is a potential for a strong uptake due to big market power; it is important for harmonisation on international level and puts pressure on governments and actors.*
- *Often this is rather a top-down approach with little farmer involvement, generally no financial incentives for farmers and strong dependency from supermarkets.*

Another middle level approach for animal welfare is followed by some mostly local or regional initiatives, where AW is integrated in their requirements as part of a social corporate responsibility and sustainability policy (e.g. in some local or territorial marketing initiatives or in community supported agriculture systems).

- + *This pathway indicates a potential for an uptake of a few sensitive animal welfare issues (like reduction of animal transports, more consumer-accessible and animal-friendly stable systems).*
- *However until now this approach is often limited to selected animal welfare requirements, which are taken up by generally a limited number of farmers in a region.*

d. Modest improvement of basic animal welfare:

This is often done through better implementation of the legislation and complementary Codes of Practice as well as general assurance schemes, often linked to food safety and quality assurance systems:

- + *This approach allows a large number of farms to participate as important starting point to raise awareness.*
- *However, this approach is mostly still on a low animal welfare level and often too much a top-down approach.*

8.3 Progressive aspects of some private initiatives

The detailed analysis of over 80 animal welfare initiatives showed a great variety of approaches, which can be very complementary for a further development of animal welfare.

Several of these examples can inspire consumers, farmers and other actors in giving more emphasis to animal welfare. They indicate possible instruments, which might be considered in the further work in the EconWelfare project.

A few interesting examples are shortly described.

Interesting private standards schemes with strong link to major retailers:

- **IT-Naturama** (Esselunga wholesaler, strong brand, eggs, broilers, beef, high market share);
- **IT-Good Egg Awards** (AW NGO, several large companies, price for higher AW);
- **NL- Volwaardkip** (Cooperation of farmers, AW NGO and industry, robust broilers with outdoor run, niche);
- **UK-Marks & Spencer**. (own farm assurance scheme with high AW standards including imports);
- **UK-Elmwood Range** (improved AW standards, own standards + Freedom Food standards, market power);
- **UK-Soil Association** (organic standard above EU Organic regulation, partly also with supermarkets).

Interesting private standards schemes with strong link to specialist retailers

- all German organic standards: **Bioland, Naturland, Demeter** (all animal products, farmers lead);
- **DE-Neuland** (highest AW standard in DE, short chains);
- **IT-Carnesi** (organic, private company, meat);
- **NL-Milieukeur Varkens** (Food industry +AW NGO, pork, standards with point/bonus system, short chain);

Assurance schemes with main farmers organisations based on national legislation

- **ES- Carnes Valles del Esla** (farmers group, chain development, niche market);
- **ES-Livestock markets** (lead by LM-Association, good practice guide).
- **PL-System Quality Meat Program** (new Quality assurance with improved AW, beef producers & chain);
- **SE-Arlagården** (milk producers, assurance scheme based on SE AW legislation, active follow up);
- **SE-Broiler Welfare Program** and **SE-Laying hen welfare Programme** (in collaboration with producer organisations);

Education and training:

- **ES-Training for Farmers & Transporters** (national wide, public-private partnership, courses);
- **PL-Farmer Training** (AW Issues, implementation EU rules);
- **UK-Codes of good agricultural practice**;
- **SE-REDE** (2 AW-NGOs, school AW education);
- Several others with education and training but less predominant.

Information and campaigns:

- **DE-PROVIEH** (AW NGO);
- **NL-Free Laying Hens from Battery** (AW-NGO);
- **NL-Green Knowledge Cooperation**;
- **NL-Adopt a chicken** (organic platform);
- **PL-Klub Gaja** (AW NGO);
- **Do you know what you eat?** (AW NGO, poultry).

Other initiatives – financial incentives, etc.

- **GAK Rural Development** (few regions/“Länder” in Germany, direct payments for AW measures);
- **IT-Measure 215** (Emilia Romagna, direct payments to farmers for AW measures);
- **CH-AW direct payments** (2 systems: outdoor access, free stable systems);
- **DE-Tierschutz-TUeV** (Approval system for husbandry equipment, NGOs, government recognition);
- **NL-Pigs in ComfortClass** (assessment system);

More information can be found in the EconWelfare report D1.1 (Kilchsperger et al. 2010) and in Annex II of this report.

It is important that also non-regulatory initiatives can get financial support for their information and education activities.

8.4 The role of governance

The challenge of the project is to come to more dynamic governance models, fit for the specific context in which the governance should be applied. This could mean that both the public and private sectors focus on the common multiple goals necessary for Animal Welfare to be successful. Reflections have to be made in which way the different policy instrument could be used and combined in the best way for achieving the multiple goals. Then it must be decided which partners (old and new ones) are needed and which actor networks have to be established or enlarged.

This process can lead to the formation of new and/or more dynamic governance structures, where an optimised mix of policy instruments (or even a national action plan), appropriate for the country and regional context, will be the outcome.

The role of the public bodies in a more dynamic governance model would be:

- to interact in a participatory process with the private actors;
- to design better framework conditions to translate multiple goals with the best effectiveness and efficiency;
- to facilitate the formation of multiple acting and learning networks; and
- to develop and offer appropriate instruments – possibly with little bureaucracy and costs – which allow a good implementation of better animal welfare.

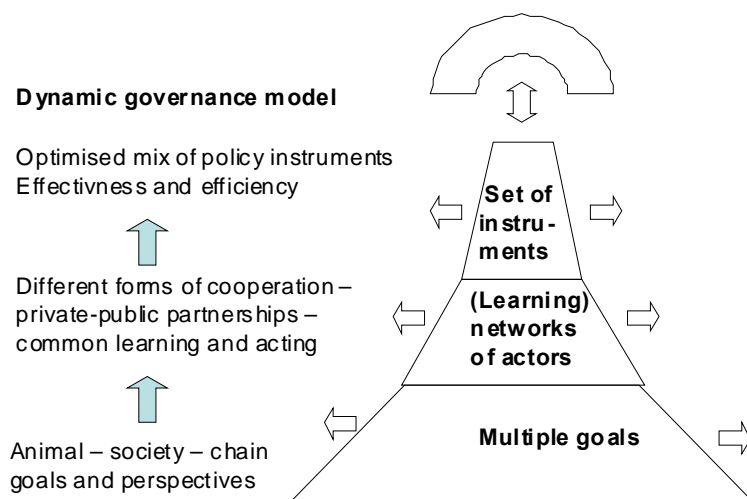


Fig. 8.1 Dynamic governance model for promoting animal welfare

Such a dynamic governance model should facilitate the transition to better Animal Welfare, stimulating and facilitating private initiatives, supporting public-private partnership and where market mechanisms fail - setting regulatory, labelling or other framework conditions like financial incentives for farmers and other actors.

If we look at the conditions in the different countries regarding how Animal Welfare can be promoted, we see still quite some important differences related to the national and regional context, e.g. the level of animal welfare, culture, public awareness and farmers' skills in a certain EU country. Roughly, regarding awareness and actual welfare levels, among the partner countries three main groups can be distinguished: a) countries with high consumer welfare awareness (like Sweden, The Netherlands, Germany and United Kingdom), b) countries with a relatively low development of citizens and consumer awareness (like Italy and Spain) and c) relatively new member states and candidate member states with an upward pressure to meet EU minimum requirements (like Poland and Macedonia). Because of these differences, it is important that an optimised dynamic governance model (e.g. an optimised mix of policy instruments) should be tailor-made for the context of a country (and region). There is a certain hierarchy in levels of animal welfare, awareness and skills, which differ from country to country. Furthermore there is also more or less a hierarchy in policy instruments itself to achieve these higher AW levels, ranging from full and only legislation to completely free market (although this is unfortunately not always a linear relationship with AW levels of course).

The challenge of the EconWelfare project is to discover effective policy instruments that are able to help a certain type of country to reach the next higher Animal Welfare level in the hierarchy, as by doing so the aims of the European Community Action Plan on AW can be met. As countries are in different states/levels of welfare development, we will need varying policy instruments to realise improvements. Where appropriate in the following work packages, a further analysis of the AW initiatives can provide clearer insight in (the hierarchy of) policy instruments that are best matching to achieve the specified goals/next higher levels of animal welfare. This way the project aims to connect promising policy instruments to animal welfare development levels of (groups of) countries.

9 References

9.1 General literature

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Ferrari P. et al. (2010): Report on (dis-) advantages of current animal welfare standards for animals, based on the main findings of EU and national research projects. EconWelfare project report D2.3. www.econwelfare.eu

Kilchsperger, R. Schmid, O. Hecht, J. (2010): Animal welfare initiatives in Europe. Technical report on grouping method for animal welfare standards and initiatives. EconWelfare project report D1.1. www.econwelfare.eu

Below the main Community legislative animal welfare references is listed (State End of August 2009):

General framework:

- Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related acts - Protocol annexed to the Treaty on the European Community - Protocol on protection and welfare of animals Official Journal C 340 , 10/11/1997 p. 0110

Regulatory framework for all farm species:

- European Convention for the protection of animals kept for farming purposes Official Journal L 323 , 17/11/1978 p. 0014 - 0022
- 78/923/EEC: Council Decision of 19 June 1978 concerning the conclusion of the European Convention for the protection of animals kept for farming purposes Official Journal L 323 , 17/11/1978 p. 0012 - 0013
- Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes Official Journal L 221 , 08/08/1998 p. 0023 - 0027
- Commission Decision (2006/778/EC) 14 November 2006 amending Decision 2000/50/EC concerning minimum requirements for the collection of information during the inspections of production sites on which certain animals are kept for farming purposes (Text with EEA relevance) (Official Journal L 314, 15.11.2006 p. 0039-0047)

Regulatory framework for calves:

- Council Directive 2008/119/EC of 18 December 2008, Official Journal L 010 , 15/01/2009 P. 0007 - 0013 laying down minimum standards for the protection of calves (codified version)

Regulatory framework for pigs:

- Council Directive 91/630/EEC of 19 November 1991 laying down minimum standards for the protection of pigs Official Journal L 340 , 11/12/1991 p. 0033 - 0038
- Council Directive 2008/120/EC of 18 December 2008 laying down minimum standards for the protection of pigs. OJ L 47, 18.02.2009 p. 5

Regulatory framework for laying hens:

- Council Directive 1999/74/EC of 19 July 1999 laying down minimum standards for the protection of laying hens Official Journal L 203 , 03/08/1999 p. 0053 - 0057
- Council Regulation (EC) no 1028/2006 of 19 June 2006 on marketing standards for eggs (OJ L 186, 7.7.2006 p. 0001-0005)
- Commission Regulation (EC) no 557/2007 laying down detailed rules for implementing Council Regulation (EC) no 1028/2006 23 May 2007 on marketing standards for eggs (OJ L 132 24.5.2007 p. 0005-0020)
- Commission Directive 2002/4/EC of 30 January 2002 on the registration of establishments keeping laying hens, covered by Council Directive 1999/74/EC Official Journal L 30 , 31/01/2002 p. 0044 - 0046

Regulatory framework for chickens kept for meat production:

- Council Directive 2007/43 of 28 June 2007 laying down minimum rules for the protection of chickens kept for meat production (OJ L 182, 12.7.2007 p. 0019-0028)

Regulatory framework for protection of animals at the time of slaughter and killing:

- European Convention for the protection of animals for slaughter Official Journal L 137 , 02/06/1988 p. 0027 - 0038
- 88/306/EEC: Council Decision of 16 May 1988 on the conclusion of the European Convention for the Protection of Animals for Slaughter Official Journal L 137 , 02/06/1988 p. 0025 - 0026
- Council Directive 93/119/EC of 22 December 1993 on the protection of animals at the time of slaughter or killing Official Journal L 340 , 31/12/1993 p. 0021 - 0034
- Commission proposal COM 2008/553 of 18 September, 2008 for a Council Regulation the protection of animals at the time of killing

Regulatory framework for protection during transport:

- Council Regulation (EC) No 1/2005 of 22 December 2004, on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97
- Council Decision (2004/544/EC) of 21 June 2004 on the signing of the European Convention for the protection of animals during international transport
- European Convention for the Protection of Animals during International Transport (revised)
- Commission Regulation (EC) 639/2003 of 9 April 2003 laying down detailed rules pursuant to Council Regulation (EC) 1254/1999 as regards requirements for the granting of export refunds related to the welfare of live bovine animals during transport Official Journal L 093, 10/04/2003 p.0010 - 0017
- Council Regulation (EC) No 1255/97 of 25 June 1997 concerning Community criteria for staging points and amending the route plan referred to in the Annex to Directive 91/628/EEC (OJ L 174, 2.7.1997, p.1)

Regulation for organic production:

- Council Regulation (EC) No 834/2007 of 28 June 2007 on organic products and repealing Regulation (EEC) No 2092/91. Official Journal of the European Union L189, 1–23 (20.7.2007)
- Commission Regulation (EC) No 889/2008 of September 2008, laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control. Official Journal of the European Union L250/1 (18.9.2008)

10 Annex

10.1 List of animal welfare experts in EU third countries and EU trading countries

The great and very useful contribution of all the experts is very much appreciated by the EconWelfare project team.

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Other experts contributing with background information on organic farming legislation and/or animal welfare in non-European countries:

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10.2 Summary of the analysed animal welfare initiatives in Europe

Detailed descriptions are found in the Annex I of report EconWelfare Report D1.1:

Source: Kilchsperger R., Schmid, O., Hecht J. (2010): Animal Welfare Initiatives in Europe. Report D1.1. www.econwelfare.eu

The initiatives described in the Report D1.1 are grouped with regard to their focus, actor networks, goals and instruments and market relevance, grouped in different categories.

a) Non-organic standards Initiatives with an ambitious high animal welfare level

Code	Name of Initiative (year)	AW level/ focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
DE-1	Neuland (1989)	****	all (but no detailed rules for dairy)	NGO with multiple network: AW NGOs, others	High AW, Rural economy, fair prices, transparency	Strong private label, strong standards Premium price	Regionally active, niche, small retailers
UK-2	RSPCA Freedom Food	****	all	AW charity (foundation) with broad network	To implement high AW standards through chain, raise consumer awareness	High level AW standards with "Freedom Food logo, information	Important: >50 % of laying hens, niche for others

b) Regulatory framework for organic farming with high animal welfare level

Code	Name of Initiative (year)	AW level/ focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
EU-1	Regulation for Organic Farming (1991)	***	all	EU-Com, EU Member States, control bodies	Consumer trust, sustainability Competitive market	Legislation, public EU label	Still low, few countries (2-5 % market share)
INT	Codex Alimentarius Organic Guidelines	***	all	Over 500 organisations worldwide in more than 100 countries	To improve AW through integration in world-wide organic farming legislation	international standard as guidance for governments	Indirect on international level as reference for national legislation

c) Private organic farming standards with high animal welfare level

Code	Name of Initiative (year)	AW level/focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
DE-2	Bioland (1971)	****	all	Farmers in cooperation with small or medium chain actors	Promote organic agriculture and improve health and AW, sustainability	Strong private label, strong standards, premium price	Niche market, but for organic high market share
DE-3	Naturland (1982)	***	all	Farmers	Promote organic agriculture and improve health and AW, sustainability	Regional private label, high standards	Regional strong (Bavaria)
DE-4	Demeter (1928)	****	all	Farmers, consumers, researchers	Promote bio-dynamic agriculture and improve health and AW, sustainability	Strong private label, strong standards	Niche market with high profile label
IT-5	Carnesi (1998)	***	all meat products	Private company – collaboration with smaller retailers (mainly to. NATURASI retailer specialised in organic products)	Increase offer of organic meat, rise AW, strengthen organic supply chain	Standards (same as EU Organic) with label, higher farmer price	Little (ca. 1 %), niche market, with strong organic brand
NL-5	SKAL (1985)	***	all	Farmer, chain actors, certification body	Promote organic agriculture (on EU organic level), improve health and AW, sustainability	Strong organic label, strong standards, premium price	Niche market
ES-3	EcoVera Eggs (2007)	***	laying hens	Initiative of few organic farmers	Develop chain and improve AW through organic production	Standards with label & certification, information	Regional market niche
SE-5	KRAV (1985)	***	all	Farmers in cooperation with small or medium chain actors	Promote organic agriculture and improve health and AW, sustainability	Strong private label, strong standards, premium price	Niche market, but for organic high market share
UK-5	Soil Association (1946)	****	all	Environmental charity founded by farmers, researchers and nutritionists	Promote high AW & organic agriculture, improve health & sustainability	Strong standards above EU rules, strong private label, premium price	Still in a niche, but leading in the UK organic market
INT	IFOAM (Int. Federation of Organic Agriculture Movements)	***	all	Over 500 organisations worldwide in more than 100 countries	To improve AW through integration in world-wide organic farming standards	international standard with intern. accreditation of private standards & certification bodies	Indirect on international level as reference for private standards

d) Non-organic standards initiatives aiming at a middle animal welfare level with involvement of retail chains

Code	Name of Initiative (year)	AW level/ focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
IT-3	Il Campese (2002)	**	poultry (free range)	Large poultry supply chain (Amadori Group)	Strong brand and market share for free range chicken, response to consumer demand	Private standards and strong brand, no farmer price incentive	High share for free range broilers,, well known brand, large distribution
NL-1	Milieukeur Varkens (1997/2006)	**	pork	Food industry with main NL-AW NGO	Better AW (e.g. ban of male castration), develop market special segment	Standards (with a point/bonus system)	Niche market with short chains
NL-2	Better Life Hallmark for Veal (2008)	**	calves	AW NGO with retail chains (Van Drie Group, A. Heijn)	Improve AW for calves and during transport, awareness rising	Private standards (3-star system)	Very early stage but potential to grow
NL-3	Volwaardkip (2006)	**	broilers	Cooperation of farmers, AW NGO and industry (feed, slaughtering)	Improve AW of poultry and broilers (robust breeds, outdoor run)	Private standard (not organic)	Still very few farmers, but growing demand
SE-3	Broiler Welfare Program (1987)	**	broilers	Swedish poultry meat association	To improve broiler welfare and health & food safety on a basic level (with higher stocking densities)	Quality assurance/ assessment programme with independent inspection	Important: 99 % of all poultry producers
UK-3	Marks & Spencer	**	cattle, pigs, poultry	Premium supermarket chain	Sell products with higher AW level and ensure compliance through whole chain	Retailer assurance scheme with higher AW standards and own brand	Still small due to small market share but growing
UK-4	Elmwood Range (2007)	** (eggs ***)	cattle, pigs, poultry	Supermarket chain Co-op, collaborating with Freedom Food	Sell products with higher AW level and ensure compliance through whole chain,	Retailer assurance scheme with higher AW standards with certification, strong brand	Important market position (particular eggs)
INT	GLOBAL-G.A.P.	**	all	Large retailers	To improve AW through standards (major/minor points) and a certification system	Business to business international standard with certification	Important on international level

e) Farm assurance and standards schemes with modest upgraded animal welfare level

IT-1	Naturama (1997)	*	(only for laying hens)	eggs, broilers, beef	Large retail chain (Esselunga)	Control supply chain, ensure food safety & minimum AW	Private standards and strong brand	High market share, well known
IT-2	Agriqualità (2002)	*		all	Government of Tuscany	Promote regional integrated farming with improved AW	Regional state label, with minimum standards	Very little, not very known by consumers
IT-4	LAIQ (2000)	*		all	Env. NGO (Legambiente)	Awareness rising, Production of healthy food	Labelling scheme and minimum standards	Very little, in 2008 only raw milk
NL-4	Campina Merkmelk (2006)	*		dairy	Industrial dairy processor	Produce healthier dairy products and increase AW through grazing	Standards for feeding and grazing, strong brand	Still small market share 2008: 500 farmers
NL-12	Cono Cheese (2008)	*		dairy	Cooperation of ca. 500 dairy farmers	Enhance AW and sustainability	Assurance Programme, price premium for participating	Little market share
PL-7	System Quality Meat Program — QMP (2009)	*		beef	PL association of beef producers	Raise awareness of chain actors, education for cattle welfare & meat quality	Quality assurance system with certification	Too early stage to evaluate success on market
ES-1	Carn Nature Beef (1999)	*		cattle & pigs	Farmers group	Stress reduction during transport and chain development	Standards for transport with certification	Small
ES-2	Carnes Valles del Esla (1996)	*		beef, veal, poultry meat	Farmer association in mountain area	Develop chain and improve AW through extensive rearing & breeds	Standards with label and certification, information	Market niche
SE-1	Swedish Seal of Quality (1995)	*		dairy (& beef, pigs, chicken)	Food industry (mainly dairy)	To improve AW, product quality and consumer trust for Swedish animal products	Assurance scheme with certification and direct payments	Important: 40 % of milk producers, little other animals
SE-2	Arlagården (2006)	*		cattle	Cooperative of milk producers in SE & DK	To improve AW, product safety and quality	Quality assurance programme, independent inspection	Certain market share
SE-4	Laying Hens Welfare Program (1988)	*		Laying hens	Swedish Egg and Poultry Association	To improve broiler welfare and health & food safety on a basic level (with higher stocking densities)	Quality assurance programme with independent inspection	Important: 85 % of all egg producers part
UK-1	Assured British Pigs	*		pigs	Farmer group	To improve AW, product safety and assure quality through whole chain	Assurance through standards and certification	Important: 90 % of all pigs in England & Wales
UK-13	Five Star AW labelling Whole Foods (2009)	*		all	Retail chain Whole Foods	To sell products with improved AW	Company standards and labelling system	Too early stage to evaluate success on market

f) Information, education and training for consumers and the public (Information, campaigns)

Code	Name of Initiative (year)	AW level/focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
DE-5	PROVIEH (1973)	(****)	(all)	AW NGO (oldest in Germany)	Awareness raising chain & Society	Media, campaigns, information	Little, better label knowledge
NL-6	Free Laying Hens from Battery (2002)	(**)	(laying hens)	AW NGO (Wakker Dier)	Improve AW of laying hens (by free-range, banning cages), Consumer awareness	Publicity campaigns and actions in front of super-markets & egg processors	Significant indirect impact on super-market image.
NL-7	Green Knowledge Cooperation (2007)	(*)	(all)	Subdivision of Green Knowledge cooperation (NGO)	Information and knowledge transfer on AW issues	Information	None
NL-13	Adopt a chicken (2008)	(***)	(chicken)	Organic platform organisation "Biologica"	Rise of AW awareness through adoption of a chicken	Information campaign	Niche market
NL-14	Political party for animals (2002)	(***)	(all)	Political party	Enhance AW through politics	Policy proposals in parliament & provinces	Indirect
PL-1	Klub Gaja (1988)	(**)	(all)	AW & environmental NGO	Improve AW , Raise awareness of chain actors & society for AW	Campaigns, information and lobbying	Indirect but limited
PL-2	Do you know what you eat? (2006)	(**)	(all with main focus on poultry)	AW interest groups (linked to Klub Gaja)	Raise awareness of society and retailers for AW	Campaign with information	Indirect but limited
PL-4	Agro Web Poland (1999)	(**)	(all)	Network of researchers	Improve and share AW knowledge	Website (elaborated)	None
PL-5	Egg Labeling (2003)	(*)	(laying hens)	Government & private AW NGOs	Better information on egg labelling	Information campaign on EU labelling rules	Indirect
PL-8	FREE BROILERS (2005)	(**)	broilers	Campaign by AW NGO (Klub Gaja and Eurogroup)	Raise awareness of citizens/consumers	Information campaign on broiler systems & alternatives	Indirect
UK-6	Chicken Out!	(**)	(broilers)	Consumer initiative of a celebrity chief & media man, support	To improve AW of broilers (with outdoor access and older age)	Campaigns for free range broilers	Indirect through media
UK-8	Stakeholder animal welfare forums	(*)	(all)	AW stakeholder groups initiated by government & food retailers	Improve AW in whole chain	Discussion platforms	Indirect
UK-11	Good egg awards (2007)	(**)	(laying hens)	NGO "Compassion in world farming"	Awarding companies for higher AW (cage-free hens)	Yearly prizes to large retailers and manufacturers	Indirect through high media attention
UK-15	Buy local	(*)	(all)	Local stakeholder groups	To raise awareness for British products	Campaigns	Indirect but little

g) Information, education and training for consumers and the public (special instruments like awards, school education)

Code	Name of Initiative (year)	AW level/focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
IT-6	Good Egg Awards (2007)	(**)	(eggs)	NGO (Compassion in world farming), linking many food companies	Awareness rising for non-cage systems,	Campaign: awards for companies going for higher AW for laying hens	Indirect by awarding large companies
SE-6	REDE (2005)	(***)	(all)	Two AW NGOs	To improve "Respect, Empathy, Animals and Ethics" in schools	General primary school education & material	Indirect influence
UK-11	Good egg awards (2007)	(**)	(laying hens)	NGO "Compassion in world farming"	Awarding companies for higher AW (cage-free hens)	Yearly prizes to large retailers and manufacturers	Indirect through high media attention
UK-14	Made in Britain Awards	(*)	(all)	Food retailer Waitrose with magazine	To raise awareness for British products through awarding producers	Annual competition, prize for high quality and good AW	Indirect but little

h) Information, education and training more general mainly for farmers & chain actors

ES-4	AW Training for Farmers & Transporters (2008)	(*)	all	Government with local communities & private entities	To train farmers and transporters with certificate	Training courses for AW during transport	Indirect national-wide
ES-5	Guide of Market Practices (2004)	(*)	all	Spanish association of livestock markets	To improve AW conditions on livestock markets	Development of a guide of market practices	Indirect national-wide
MK-1	Western Balkan University Network for AW	EU Leg.	(all)	Governmental research institution	To develop a farm visit and assessment system and to establish dialogue on AW	Information, training and development	Indirect but little
MK-2	Educational Videos for AW	EU Leg.	(all)	German organisations GTZ and a	To rise AW awareness of farmers and consumers	Information, education	Indirect but little
CH-5	Declaration of „bad“ systems	(*)	(all)	Government with private NGOs	To rise awareness of farmers and manufacturers	Information	No influence on market
CH-6	Governmental website good practices	(*)	(all)	Government	To rise knowledge of farmers	Information	No influence on market
DK-1	Mandatory animal health advisory service	(**)	(all)	Government with advisory services	To rise awareness of farmers	Training and advice	No influence on market
DK-2	Aniplan farmers groups	(**)	(all)	Government with advisory services	To rise awareness of farmers	Information, training and advice	No influence on market

i) Research and development

Code	Name of Initiative (year)	AW level/focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
DE-6	Tierschutz-TUeV (2004)	(*)	(all)	Several NGOs Since 2009 government recognition	Reduce AW problems with focus on manufactures	Approval system for husbandry equipment	<i>Little but on equipment</i>
NL-8	Welfare Index for Dairy Cattle (2007)	(**)	(dairy)	NL Farmers organisation with dairy processing industry	Improve health and welfare status of dairy cows, awareness of farmers	Management tool for farmers	<i>Too early stage to evaluate success on market</i>
NL-9	Pigs in ComfortClass (2006)	(**)	(pigs)	AW NGO with farmer organisation and University of Wageningen	Rise AW for rearing pigs based on behavioural and physical needs	Assessment system development (based on 10 basic needs)	<i>Too early stage to evaluate success on market</i>
NL-10	WUR Research Program (2008)	(***)	(all)	Universities, researchers	Improve AW	Research	<i>Indirect but limited</i>
ES-6	Research Subprogram AW Indicators (2004)	(*)	all	Network of research institutions	To develop of AW indicators for of farm AW	Special programme with research projects	<i>None</i>
UK-9	Codes of Good Agricultural Practice (1968)	(*)	(all)	Governmental agencies	Give recommendations to farmers about basic AW requirements	Codes of recommendation for farmers	<i>none</i>
UK-10	Farm Animal Welfare Council (1979)	(*)	(all)	Advisory board (NGO) of UK government	Give advice to government	Reports	<i>Indirect but little</i>
UK-12	Research and education on animal welfare	(***)	(all)	Universities, researchers	Improve AW	Research	<i>Indirect but limited</i>
MK-3	Metabolic Energy Monitoring	EU Leg.	(all)	Governmental research institution	To develop a monitoring system for dairy for AW and animal health	Information, Training and development	<i>None</i>
MK-4	Heating Methods for Piglets	EU Leg.	(pigs)	Governmental research institution	To evaluate behaviour of piglets in different systems	Research	<i>None</i>
MK-5	Alternatives for Mastitis Prevention	EU Leg.	(dairy)	Governmental research institution	To reduce the use of antibiotics in dairy through alternatives	Research	<i>None</i>
CH-1	Mandatory testing of new housing systems	(*)	(all)	Governmental research institutions	To reduce AW problems with focus on manufactures	Approval system for husbandry equipment	<i>Little but on equipment</i>

j) Financial incentives/payment systems

Code	Name of Initiative (year)	AW level/focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
DE-7	GAK Rural Development (2005)	*	all, not in whole DE	Few regional ("Länder") Governments	Improve rural development and AW	Direct payments for AW measures	high
IT-7	Measure 215 (2007)	(*)	(all)	Regional administration Emilia Romagna	X	Direct payments to farmers for AW measures	Indirect
CH-2	AW Cross compliance	(*)	all	Federal government and cantons	To improve AW by integrating in requirements for cross-compliance	Direct payments for farms with basic AW	Little, but sets baseline
CH-3	Free-range payments	(**)	all	Federal government and cantons	To improve AW by integrating in requirements for cross-compliance	Direct payments for improved AW	Relatively important – level for private standards
CH-4	Outdoor access payments	(**)	all	Federal government and cantons	To improve AW by integrating in requirements for cross-compliance	Direct payments for improved AW	Relatively important – level for private standards

k) National legislations

Code	Name of Initiative (year)	AW level/focus	Animal categories	Actor(s) network	Main goals	Main instruments	Market relevance
DE-8	AW Legislation (on-going)	*	all	Government	Improve AW	Legislation	<i>Indirect</i>
IT-8	AW Legislation (on-going)	EU	all	Government	Improve AW	Legislation	<i>Indirect</i>
NL-11	AW Legislation (on-going)	*	all	Government	Improve AW	Legislation	<i>Indirect</i>
PL-6	AW Legislation (on-going)	EU	all	Government	Improve AW	Legislation	<i>Indirect</i>
ES-7	AW Legislation (on-going)	EU	all	Government	Improve AW	Legislation	<i>Indirect</i>
SE-7	AW Legislation	*	all	Government	Improve AW	Legislation	<i>Indirect</i>
UK-7	AW Legislation	*, EU level	all	Government	Improve AW	Legislation	<i>Indirect</i>
MK-6	AW Legislation	EU	all	Government	To improve AW	Legislation	<i>Indirect</i>

Explanation of colours:

- Non-organic standards and national legislation
- Organic farming standards
- Information, education and training
- Research and development
- Financial incentives/payment systems

Animal Welfare (AW) level or main focus:

EU legislation

* = little improved or better implemented

** = middle level

*** = high level

**** = very high level of AW

10.3 Overview on differences between EU legislation, private standards and Non-EU legislation

a) Cattle

	CATTLE - ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK		Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	Better life natimark tot	veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBALG.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
		DE	MK	NL	PL	SE	UK		DE	IT	IT	UK	UK	UK	NL		EU Or	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	GG	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards								Private organic standards						Legislation 3rd countries & int. Standards										Legislation 3rd countries - organic livestock & int. standards											
Conditions that apply to the keeping of cattle																																											
Group keeping	Maximum herd size								n															n			n																
	Mixing of animals								n																																		
Stable systems	Allowance of tethering					n			d	d	p	d	d	d			d	S	S	S	S	S	S	0			0							d	p		d	d	d	d	p		
	Space requirements in different systems *				p	n												n					n										n										
	Use of electric cow trainer					n												n	n	n		n		p					p				p			d	d		p				
	Housing with / without outdoor access								n			n						n	S	S	S	S											n	n	n	n	n	n	n	n	n	n	
Barn environment	Natural daylight					p			n								d	S	S	S	S	S	S	p									d			d		d	d	d	d		
	Duration of light phase									n			p	p									s																				
	Light intensity					d				d		d	d										p							p								p					
	Twilight period												n	n																													
	Ventilation								p	s	s		p	p																													
	Air space												n	n																													
	Gas concentration												p	p																													
	Air humidity												p	p																													
Sound level and noise	n					n				n			n																														

	CATTLE - ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK		Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	Beter nre naammark tot veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBALG.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM
		DE	MK	NL	PL	SE	UK		DE	IT	IT	UK	UK	UK	NL	EU Org	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	GG	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards								Private organic standards						Legislation 3rd countries & int. Standards										Legislation 3rd countries - organic livestock & int. standards									
Freestall barns	Space requirements *							n				n	n			n	S	S	S	S	p	n	n	n		n						n				n			p	p	
	Floor surface											n	n																												
	Slatted floors							n	n				n			n	S	S	S	S	S	S	p					n		m	d			d		d		d	d		
	Structure/elements in barn					n		n																																	
	Space for avoidance					n							n				n																								
	Feeding area					n							n	n			n						n				p	p			M	n									
	Bedding in lying area					n	n	n				n	n	n		n	S	S	S	S	S	S	p	p		p	p														
	Number of lying boxes					n							n	n			n	n																							
	Dimensions of lying boxes					n							n	n			n																								
	Details on lying area													n																											
	Electric wires indoor							n																																	
Outdoor access	Duration of access							n				n				n	S	S	S	S	S	S	n									n	n		n	n					
	Dimensions of open run							n				n																													
Pasture	Frequency of access					n		n				n				n	S	S	S	S	S	p	n										n	n	n	n	n	n	n	n	
	Exception from grazing							n																																	
Feeding	Feed composition							n	s	s		s	s			p	S	n	n	S	S	S																			
	Feeding frequency	p				p		d	s	s		p	p																												
	Feeding facilities							n				n						n	n																						
	Feeding trough width									n		n	n																												
	Roughage*	n				n		n				n	n			n	S	S	S	S	S	S				n						n	n		n	n	n				
	GMO free feed							n	n	n						n	S	S	S	S	S	S																			
Drinking	Feed additives							d	d	s		d	d																												
	Access to fresh water *					p						n	n								p	n	n		n	n		p			s	s	s	s	s	p	s	s			
	Drinking facilities												n																												
	Number of drinking spots					n				n		n	n																												

	CATTLE - ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	Better life hallmark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBALG.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	UK	NL	EU Org	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	GG	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards								Private organic standards					Legislation 3rd countries & int. Standards										Legislation 3rd countries - organic livestock & int. standards									
Calving	Provision of calving pens	n				n						n	n			n		n		n		n	n		n						n				n					
	Size of calving pens					n	n																																	
	Inspection of calving cows and heifers												n																											
	Calving aids					n																																		
Health care	Medicine and methods					n		n				s	s																											
	De-worming							p				n			p	S	S	S	S	S	S	n							M		p	p	p	p	p	p	p	p	p	p
	Hormonal treatments							p																																
	Prophylactic treatments							n	n																															
Regular visits	Veterinary visits											n	n																											
	Frequency of inspection by farmer									n		n																												
Cleaning	Frequency							n				n	n																											
	Keeping cattle clean											n																												
Breeding	Recommended races/breeds							n							p	S	S	S	S	S	S	n									p						p			
	Double-muscled breeds										n		n																											
	Keeping of male sires																	p																						
	Protection of heifers					n																																		
	Conditions for mating					n																																		
	Prohibited Methods											n	n			n	S	S	S	S	S	s																		
Mutilations/ surgical practices	Castration					d		n	n		n	n			n	S	S	S	S	p	p	d		n			p		M		n					d	p			
	Tail trimming					d		n	n							d	S	d				n		n	n	p					n	n	p	n	n			n		
	Dehorning					p		d	d		d	d			p	S	S	d	S	S	S	d		d		d	p				p	p		p	p	p				
	Removal of teaths											n	n																											

	CATTLE - ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK		Neuland **	Agriqualita	LAIQ	Marks and Spencer	RSPCA dairy cattle	RSPCA beef	Better life trademark for veal	EU Bio		Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association		Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBALG.A.P.		Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM
		DE	MK	NL	PL	SE	UK		DE	IT	IT	UK	UK	UK	NL	EU Org		DE	DE	DE	NL	SE	UK		CH	AR	AU	BR	CA	CN	NZ	US	GG		CH	AR	AU	BR	CA	CN	NZ	US	INT	INT
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards							Private organic standards						Legislation 3rd countries & int. Standards										Legislation 3rd countries - organic livestock & int. standards													
Handling	Rules for moving													n																														
	Rushing													n																														
	Sensitive parts													n																														
	Handling unit													n																														
	Use of sticks and electric goads							n						n		n	S	S	S	S	S	S	S																					
Identification	Marks													n																														
Emergency slaughter equipment	Emergency slaughter equipment													n																														
Bull pens	Design													n																														
Additional conditions that apply to the keeping of calves confined for rearing and fattening																																												
Tethering	Allowance							d					d	d		d	S	S	S	S	S	S	S												d	d		d	d		d	d		
Barn environment	Lighting							d					s	s		d	S	S	S	S	S	S	S		s	s					p		m	d			d		d	d	d	d		
	Light intensity and period	d			s	s		s																																				
	Gas concentration	p			s		p	p																	s						p									p				
	Air moisture	p					p																		s					p						s				p				
Accom-modation	Dimensions of group pens			s	s	d	d	d					s	s		d	S	S	S	S	S	S	S																					
	Group/Individual accommodations	o		s	s	o	s	d					o	o		d	S	S	S	S	S	S	S		d							m	d			d		p	d	d	d			
	Number of lying boxes			n																																								
	Litter/bedding material	s		p	s	p	s	d					d	d		p	S	S	S	S	S	S	S		p							m	p	p	p	p	p	p	p	p	p	p		
	Drained floor in lying area	s		s	s	n	s	d					d	d																														
	Calf hutches													n																														

	CATTLE - ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	UK	NL	EU Org	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	GG	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT		
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards							Private organic standards	Legislation 3rd countries & int. Standards						Legislation 3rd countries - organic livestock & int. standards																				
Health care	Availability of sickbay			p	s	s																																				
Feeding	Mother-offspring contact							n					n	n		n	n																									
	Fibre, roughage	d		s	s	d	d	d			d	d	d	d	d	S	S	S	S	S	S	s										d	d	d	d	d	d	d	d	d		
	Iron supply	d		s	s		s				d	d	d	d								s										s										
	Weaning	d	s	s	s	s	s						n		n	S	S	S	S	S	S				n							n	n		n			n		n		
	Colostrum drinking period	n																				s			n	n		p		m	s	s		s	s	p		s	s			
Drinking	Access to fresh water			n								d	d		d							n	n		n	n		p		M	n					p						
Regular visits	Frequency of inspection by farmer											d																														

** Neuland no dairy standards

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

b) Pigs

	PIGS ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	Switzerland	USA	GLOBAL G.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	CH	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards									Private organic standards					Legislation 3rd countries & int. Standards										Legislation 3rd countries - organic livestock & int. Standards											
Conditions that apply to the keeping of pigs																						Conditions that apply to the keeping of pigs																					
Husbandry system	Outdoor access							d			d	d		n		d	S	S	S	S	e	S											d	d	d	d	d	d	d	d	d	d	
Quantity of animals	Maximum herd size					n		n																	n																		
Barn environment	Ventilation							s						n																													
	Temperature													p	p																												
	Prevention of heat stress	n					n							n			p			n	n																						
	Climate alarm system													p																													
	Natural daylight							d				d		d		d	S	S	S	S	S	S	d																				
	Light intensity	d		s	s		s					d	d		s								d																				
	Darkness period												n	n									s							s			s	s	s	s	s	s	s	s	s		
Accommo-dation	Availability of litter on lying area							d					s	n	s	d	S	S	S	S	S	S	s	s						s	M	d		d	d	d	d	d	d	d	d		
	Separate areas for different behaviour	n					n																																				
	Slatted floor area	p		s	s		p	s	d				d	d	s	d	S	S	S	S	S	S	d					p		m	d				d		d		d	d			
	Width of openings in slatted floors							d				d	p	d	s																												
	Wallow / cooling down installation													n							n	n	n	n				p		n			d	d	d			p					
Environmental enrichment	Possibility for investigation and manipulation activities							d					p			d	S	S	S	S	S	S	d	d						M		p	p				p						
Group keeping	Group keeping / Isolation							d						d		d							d					p		m		d				p	p	p		p	p		

	PIGS ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs		EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	Switzerland	USA	GLOBAL G.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM		
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	UK	NL	UK		EU	DE	DE	DE	NL	SE	UK		CH	AR	AU	BR	CA	CN	NZ	CH	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards									Private organic standards							Legislation 3rd countries & int. Standards											Legislation 3rd countries - organic livestock & int. Standards										
Feeding	Feeding system											n		n										n			n																		
	Provision of roughage							d					s		s		d	S	S	S	S	S	S	s										p			p	p	p		p	p			
	Feeding frequency							s					s	d	s																														
	Number of feeding spots					n																																							
	Feeding facilities												n																																
	Feeding trough width					n							n	n																															
	Protection of pig from the back					n								n																															
Drinking	Number of drinking spots												n		n																														
	Drinking trough width																																												
	Flow rate							s					n	n	n							p																							
Health care	Medicine and methods							d				d			s		d	S	S	S	S	S	S																						
	Growth promotors							d			n			n		d	S	S	S	S	S	S																							
	Hormonal treatments							d								d	S	S	S	S	S	S		d		d		d				d	M		d	d	d	d	d	d	d	d	d		
	Prophylactic treatments							d																																					
	Monitoring														n																														
	Parasite treatment							n																																					
	Blood samples													n																															
	Hoof inspection					n																																							
Regular visits	Health plan											n																																	
	Frequency							d				d		s								d																							
	Veterinary visit												n	n																															
Cleaning and disinfection	Frequency							n																																					
	Abrasion facilities												n																																
Breeding	Recommended methods/breeds							n					n			n	S	S	S	S	S	S																							
	Prohibited Methods							n																																					

	PIGS ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	Switzerland	USA	GLOBALG.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM		
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	CH	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT		
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards									Private organic standards						Legislation 3rd countries & int. Standards											Legislation 3rd countries - organic livestock & int. Standards										
Aggressive behaviour	Availability of segregation pens							d					d	d				d																										
	Segregation mandatory	d		s	s	s	d														n																							
	Management plan												n																															
	Sedatives							n																																				
Mutilations and surgical practices	Castration	s	p	d	s	d		d				d	d	d	d	d	S	S	S	S	S	e	d			d			p		M	d						p						
	Tail docking	p				p		d				p	d	d	p		d		d			d	d			d			p		M	d	d	d	d		d	p						
	Tooth clipping	s		d	s	d		d				p	p	p	p		d		d			d	d			d			p		M	d	d	d		d	d	p				d		
	Tooth grinding							p				p	p	p	p				d			d									M			d			d	d	p			d		
	Nose ringing	s	s	s	s	d		d				d	p	d	p		d		d			d	d								M			d			d	d				d		
	Ear notching											n	n																							d		d	d				d	
Additional conditions that apply to the keeping of boars																																												
Accommo-dation	Design of boar pen and intervisibility												p																															
	Space requirements	s		p	s	d	s	d				d	d	s		d	S	S	S	S	S	S	d	s		s			p		M	d	d	d	d	d		d		p	p			
	Lying area												n																															
	Slatted floor area			n										n																														
Additional conditions that apply to the keeping of sows and gilts																																												
Group keeping	Duration of group keeping	s		d	s	o	o	s			d		d	d	p				p	p													ss				s	s	s		s	s		
	Stable groups												n																															
Accommo-dation	Space requirement sow with piglets							d			d		p	d	d	d	S	S	S	S	S	S	d	s		s			p		M	d	d	d	d	d		d		p	p			
	Floor area per sow in group pen	d	o	s	s	s	s	d				d	d	s																														
	Floor area per gilt in group pen	d	o	d	s	s	s									d	S	S	S	S	S	e																						
	Flooring surface					n						d																																
	Protection of piglets/farrowing crate							p				s											d								M													
	Outdoor farrowing														n																													
Environmental enrichment	Manipulable material											s	d	s																														
Farrowing	Nesting material	s	s	s	s	d	s					d		s																														
Feeding	Feeding frequency											d	d																															
	Feeding system							n				n		n																														
Service pen	Own service pen							n																																				
Health care	Cleaning of sow							n																																				
	Body condition													n																														

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	PIGS ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks and Spencer	Elmwood range - pork	Freedom Food RSPCA	Milieukeur Varkens	Assured British Pigs	EU Organic	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	Switzerland	USA	GLOBAL G.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	UK	NL	UK	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	CH	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards									Private organic standards						Legislation 3rd countries & int. Standards										Legislation 3rd countries - organic livestock & int. Standards										
Additional conditions that apply to the keeping of piglets																																											
Accommo-dation	Space requirements												d	d		d	S	S	S	S	S	S	d	s		s			p			M	d	d	d	d	d		d		p	p	
	Floor surface					n		d					p	s	s		n	S	S	S	S	S																					
	Flat decks or piglet cages															n		S	S	S	S	S																					
Barn environment	Temperature in piglets' lying area	n						n					n									n			n	n		p						n						p			
Feeding	Minimum age at weaning	s	s	s	s	d	s	d					s	d	s	d	S	S	S	S	S	S				s						M	p	p	d				d		p	p	
	Drinking & feeding facilities for sow and piglets							n						n																													
	Milk quality																					p																					
	Additional iron supply																		n			n																					
Social behaviour	Contact to other piglets							n																																			
	Activity													n																													
Additional conditions that apply to the keeping of weaners and rearing pigs																																											
Group keeping	Group size							n																																			
	Group mixing conditions	p		d			s																																				
Accommo-dation	Space requirements	d		d	s	d	o	d				d	d	d		d	S	S	S	S	e	S	d	s		s			p			M	d	d	d	d	d		d		p	p	
Feeding	Feed composition							n							s																												
	Feeding frequency							n																																			
	Number of feeding spots and dimensions	n		n				n																																			
	Feeding trough width							n																																			
	Reversible fattening practices															n	S	S	S	S	S	S																					
	Daily weight gain							n																																			
Drinking	Number of drinking spots	n																																									

Legend

	Important aspekt (Questionnaire, 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
P	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

c) Poultry

	Poultry ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBAL G.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards										Private organic standards						Legislation 3rd countries & int. standards										Legislation 3rd countries & int. standards - organic livestock										
Conditions that apply to all systems in which chicken are kept																																												
Accommodation	Lighting, darkness and twilight period							d				d						d	S	S	S	S	S	S	d			d			s		M	s			s			s	s	s		
	Natural daylight					d		d				d							n		n				d			s	r		s			s	s	s	s	s	s	s	s	s	s	
	Climate (cold & heat stress)							p				p									p																							
	Floor surface																		n	S	S	S	S	S	d																			
	Area for collection of droppings																		n	S	S	S	S	S	S																			
Feeding	Feed composition (e.g whole grain)																	p	S	S	n	S	S	S										d										
	Grit							n				n							n	n	n	n	n	n																				
	Feed additives																	d	p	S	n	S	S	p																				
	Feeding frequency																							n																				
	Feeding facilities							d				p																																
Drinking	Distribution feeding facilities							n				n											n																					
	Permanent access to fresh water							d				d						p	d	d	S	S	S	d	p	p		p	p		p		M	s	s	s	s	s	s	s	s	s	s	
	Drinking facilities							d				p																																
Health care	Drinking in outdoor run																			n	n																							
	Medicine and methods							n																																				
Regular visits	Prophylactic treatments							n																																				
	Frequency							d																d																				
Cleaning and disinfection	Emergency killing											n																																
	Agents																	n	S	S	p	S	S	S																				
Mutilations/ surgical practices	General																				d		d	p									m	d	d	d	d		d			d		
	Beak trimming							d											d		d		d	p									m	d	d	d	d		d	p		d		
	Moulting							n				n							n	n																								
Outdoor access	Duration of outdoor access							n																																				
Breeding	Recommended methods / breeds or strains																	n	S	S	S	S	S	S																				
Inspection	New stables																				n																							

	Poultry ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBAL G.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM		
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards										Private organic standards						Legislation 3rd countries & int. standards											Legislation 3rd countries & int. standards - organic livestock										
Additional conditions that apply to the keeping of laying hens in non-cage systems																																													
Quantity of animals	Maximum flock size	n						n				n						n	S	S	S	S	S	d					r																
	Size of husbandry unit	n																																											
	Roosters							n										d	n		n																								
	Maximum stocking density (indoor)							d				p	d					d	S	S	S	S	S	d	d			r			p		m	d		d	d	d		d		p	p		
	Conditions for higher stocking densities																		d																										
Accommodation	Perches *							d				p	s					d	p	p	S	S	S	p	d									d			d			p					
	Nests					d		d				d	s					d	d	S	d	S	S	d	d			s		s				d	d		d			s					
	Arrangement of different levels											n	s						n																										
	Dropping pig							n																																					
	Claw shortening devices											n	n																																
	Ramps											n						p	S	S	S	S	S	d	d																				
	Litter (e.g. straw)							s				p	s					p	S	S	S	S	S	d	d					p		M	p	p			p	p	p		p	p			
	Dust/sand bath					n		n				n							n	n	n		n		d									M											
systems with free range area	Number of pop holes and dimensions of opening							d				d						d	d	S	p	S	S	S																					
	Outdoor area / run							d				d	s					d	d	d	d	S	S	S								m	d	d	d	d	d	d	d	d	d	d	d		
	Pasture							d				d						d	S	S	S	S	S	S										d	d	d	d	d	d						
	Outdoor stocking rate							n				n						n	S	S	S	S	S	S	d									d		d	d		d		p	p			
	Duration of outdoor access																	n	p	S	p	p	p	d																					
	Area and perimeter of range											n																																	
Shelter							s				p	s																																	
Regular visits *	Frequency of regular visits *							d				d																																	
Cleaning and disinfection	Frequency of cleaning and disinfection							n																																					
Moult	Force moulting																		n	n																									

	Poultry ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBAL G.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM		
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT		
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards										Private organic standards						Legislation 3rd countries & int. standards											Legislation 3rd countries & int. standards - organic livestock										
Additional conditions that apply to the keeping of meat chicken (broilers)																																													
Age at slaughter	minimum age													n			n	n	S	S	S	S	S	S				n							n										
	Maximum stocking density							d			d			d	d	d		d	S	S	d	S	S	S	d	a		s						d	a	d	d	s		s		a	a		
Quantity of animals	Environmental conditions / air							d								d																													
	Maximum flock size							n						n			n	n	S	S	d	S	S	d											a	a									
Accommodation	Lighting, darkness and twilight period							d						d	p	p					d																								
	Perches									n				n		n			n	n	n		S	d																					
	Litter *							s										p	S	S	p	S	p	p	d							M	p	p		p	p	p		p	p				
	Free range / Outdoor / Open run							n			d			d		d																			d	d	d	d	d	d	d	d	d		
	Age							n						n		n	n																												
	Environmental enrichment							n						n		n	n																												
	Dust bath							n															n		d								M	n											
systems with free range area	Number of pop holes													n		n	n																			n									
	Dimensions of opening																																												
	Shelter							n		n				n		n																													
	Floor in open run							n									n																												
	Outdoor area (and pasturae)							n										n	S	S	p	S	S	d																					
Feeding	Feed composition (e.g. whole grain)							n		n				n		n																		d											
	Feeding frequency							d		d				d	d	d																													
	Feeding facilities															n							n																						
	Distribution															n																													
	Other							d		d				d	d																														
Drinking	Reversible fattening																n	S	S	S	S	S	S									M	s	s	s	s	s	s	s	s	s	s	s		
	Permanent access to fresh water									d					d									s	s		s																		
	Drinking facilities															n																													
	Distribution																						n																						
	Water storage tank																n																												
Regular visits *	Frequency of regular visits *							d							d																														
	Withholding period							n																																					
Record keeping	Requirements															n																													
Breeding	Breeds							n		n				n	n	n				n	n																								

	Poultry ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Agriqualita	LAIQ	Marks & Spencer	RSPCA laying hens	Free battery hens	EU traditional free range	Elmwood Range	RSPCA broilers	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	GLOBALG.A.P.	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM		
		DE	MK	NL	PL	SE	UK	DE	IT	IT	UK	UK	NL	EU	UK	UK	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	INT	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT		
Chapter	Relevant aspects	Legislation EU-countries						Private non-organic standards										Private organic standards						Legislation 3rd countries & int. standards											Legislation 3rd countries & int. standards - organic livestock										
Requirements for rearing chicks																																													
Quantity of animals, indoor and outdoor keeping	Stocking density indoors	n										n							n	n	n	n		n																					
	Flock size											n									n			n																					
	Stocking density outdoors											n									n			n																					
	Start of outdoor access											n									n	n	n		n																				
	Size of outdoor area											n									n	n			n																				
Feeding and drinking	Feeding											n							n		n			n																					
	Drinking											n									n			n																					
Accommodation	Lighting											n							n					n																					
	Perches											n							n	n																									
	Dust bath											n							n																										
	Litter											n							n	n																									
	Shelter											n							n																										
	Scratching area											n							n	n																									
Learning	Housing system equivalence											n							n		n																								
Hatchery	Hatchery											n											n																						
Additional conditions that apply to the keeping of laying hens in enriched cages																																													
Accommodation	Area of the cage	d				d																																							
	Headroom	d				d																																							
	Closed side walls					n																																							
Feeding	Feeding trough width	p	p																																										

Legend

	Important aspect (Questionnaire. 3rd countries)		Standard does not cover category of species
s	Same as EU general legislation	P	More precise than EU-Bio/Organic
S	Same as EU-Bio/Organic	e	Even stricter than EU-Bio/Organic
p	More precise than EU	n	Topic not regulated by EU-Bio/Organic
d	Stricter than/beyond EU-rule	o	Other approach to same topic
n	Topic not regulated by EU	*	Important aspect for EconWelfare experts

d) Transport

	ANIMAL TRANSPORT ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Marks and Spencer	RSPCA Broilers and laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Assured British Pigs	Volwaard	Better life hallmark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK	DE	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
		Legislation EU-countries					Private non-organic standards										Private organic standards						Legislation 3rd countries & int. standards						Legislation 3rd countries & int. standards - organic livestock												
Transport																																									
Animal fitness for transport	Illness during transport										n	p	n										s	s		s	p														
	Use of sedatives / tranquillisers							d								d	S	S	S	S	S	S	d			d					d	d		d	d		d		d	d	
Means of transport	Transport features									n	s		s																												
	Space and ventilation											s																													
	Partitions													n																											
	Bedding material for the youngest			s	s	d	s				d	d	d								d																				
	Additional provisions for transport in containers							n																																	
Livestock markets	Allowance											n																													
Exports	Live exports											n																													
Training	Additional requirements staff									p	p	p									p		s	s																	
Transport practices																																									
Before loading	Drinking, resting and feeding							n			n	n					n						d																		p
	Catching of hens									n																															
Loading, unloading and handling	Inclination of ramps, pathway design										d	d					p	p			d																				
	Lighting										d						d																								
	Electric shocks							d			d	d	d			d	S	S	S	S	S	S		d		d					d	d		d	d		d	d			
	Tethering for transport																			n																					
	Mixing / separation of unfamiliar groups							d			d						d	d		d	d	s	s		s													d			
	Loading							n				n	n				n																								

	ANIMAL TRANSPORT ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Marks and Spencer	RSPCA Broilers and laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Assured British Pigs	Volwaard	Better life hallmark for veal	EU Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM			
Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK	DE	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT			
		Legislation EU- countries						Private non-organic standards										Private organic standards						Legislation 3rd countries & int. standards										Legislation 3rd countries & int. standards - organic livestock									
During transport	Headroom											n																															
	Ventilation, Temperature									n													S	S	S																		
	Documentation											n																															
Watering and feeding interval, journey times and resting periods																																											
Journey times cattle and pigs	Length of journey							d	o			o	d		d		p	p	p				d	d		d		d		s										d			
	Intervals /resting periods										n																																
	Activities at end of journey										p																																
	Prolongation of journey							d	d	d	d	d		d		d		S	S	S	S	S	S																				
Journey times poultry	Length of journey							d	n	d				d									d	s																d			
	Intervals /resting periods							d	n	d				d																													
	Transport of chicks other requirements																				n																						

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
p	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts

e) Slaughter

	ANIMAL SLAUGHTER ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK	Neuland	Elmwood range	RSPCA broilers	RSPCA laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Better life hallmark for veal	Volwaard	EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK	DE	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT	
		Legislation EU-countries						Private non-organic initiatives									Private organic initiatives						Legislation 3rd countries & int. standards						Legislation 3rd countries & int. standards - organic livestock												
Slaughter																																									
Unloading to slaughter	Time after arrival									s	s	d																													
	Duration							n		n																															
	Inclination of ramps and passageways	p	s	s	s	p	s																																		
Lairage accommodation	Requirement / start of lairage									n		p									d	d	s	s			s		s												
	Space requirements in lairage											n	n																												
	Lying area											n	n																												
	Floors										n		n									p																			
	Feeding											n	s																												
	Cleaning of lairage											n	n																												
	Cooling down																				n																				
	Milking interval	p	s	s	s	p	s																																		
	Lairage environment	Ventilation											p	s																											
Lighting									n	n	p	p																													
Sound level						n						s	s																												
Grouping	Group mixing											d	d									d	d		s	s	d														
	Isolation pens											n	n																												
Climatic conditions	Cooling down							p																																	

	ANIMAL SLAUGHTER ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK		Neuland	Elmwood range	RSPCA broilers	RSPCA laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Better life hallmark for veal	Volwaard		EU-Bio	Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association		Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA		Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM	
Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK	DE	UK	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT				
		Legislation EU-countries						Private non-organic initiatives										Private organic initiatives						Legislation 3rd countries & int. standards								Legislation 3rd countries & int. standards - organic livestock													
Treatment	Tethering																					p																							
	Moving animals												p	p																															
	Electric shocks / stimulation							d				d	d				d	S	S	S	S	S	S	s	s		s	s		s		d	d	d	d	d	d	d	d	d	d	d	d	d	
Restraining	Obligation restraining before stunning																					p	p	d			s	d																	
	Floor dropping													n																															
Methods allowed for stunning/killing	Allowed stunning (and killing) methods								p	p	p	p	p											d	d		d		p	**	s														
Stunning and killing	Checking										s	n							s		p																								
	Electronarcosis, current intensity	d				d		d														p																							
	Specific requirements for electronarcosis through waterbath stunners	p			s	d			p	p												s	p																						
	Waterbath stunning equipment							s																																					
	Gas stunning equipment for pigs			s	s	p	s					p																																	
	CO2 gas concentration for pigs	d				p																																							
	Gas concentration for poultry	n				n				s	s																																		
	Specific requirements for heat-to-back electrical killing of pigs											p																																	

	ANIMAL SLAUGHTER ALL standards EU & non-EU	DE	MK	NL	PL	SE	UK		Neuland	Elmwood range	RSPCA broilers	RSPCA laying hens	RSPCA pigs	RSPCA dairy cattle and beef	Better life hallmark for veal	Volwaard		EU-Bio		Bioland	Naturland	Demeter	SKAL	KRAV	Soil Association		Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA		Switzerland	Argentina	Australia	Brazil	Canada	China	New Zealand	USA	Codex	IFOAM
Chapter	Relevant aspects	DE	MK	NL	PL	SE	UK	DE	UK	UK	UK	UK	UK	UK	NL	NL	EU	DE	DE	DE	NL	SE	UK	CH	AR	AU	BR	CA	CN	NZ	US	CH	AR	AU	BR	CA	CN	NZ	US	INT	INT				
		Legislation EU-countries						Private non-organic initiatives										Private organic initiatives						Legislation 3rd countries & int. standards								Legislation 3rd countries & int. standards - organic livestock													
Bleeding	Instruments for bleeding												n	n								d	p				d																		
	Incising arteries									s	s	s	p																																
	Time between stunning and bleeding	p	s	s	p	p	s	n	n	n	n													p				p	**																
	Time between bleeding and further processing						n		n	n	n	n										n																							
Killing of surplus chicks and embryos in hatchery waste	Permitted methods for killing chicks								d														s	s	s		s																		
Competence of slaughtermen	Education							s	s		n	n											n	n		s	s			s															
	Examination								n																																				
Kosher / halal slaughtering	Allowance of Kosher/Halal slaughtering	s		n	s	d	n																s	d		d	s																		

** only pigs

Legend

	Important aspekt (Questionnaire. 3rd countries)
s	Same as EU general legislation
S	Same as EU-Bio/Organic
p	More precise than EU
d	Stricter than/beyond EU-rule
n	Topic not regulated by EU

	Standard does not cover category of species
p	More precise than EU-Bio/Organic
e	Even stricter than EU-Bio/Organic
n	Topic not regulated by EU-Bio/Organic
o	Other approach to same topic
*	Important aspect for EconWelfare experts