



CROSS-COMPLIANCE ASSESSMENT TOOL

**Policy-oriented research:
Scientific support to policies SSP**

Specific Targeted Research Project (STREP)

**Deliverable(s): 3.8/3.9:
Synthesis report on the main outcomes of the case study reports**



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1. Introduction

According to the original CCAT description of work (DOW) the needs and reasons of case studies are the following:

- Gather information on CC effects on farm income, the environment and especially animal and public health;
- Serve as test cases for assessing plausibility (validation) of assessed results;
- Gather input data for detailed assessments in WP4 if required and available.

Since implementation of the project a new view on data needs and gaps in the project has become apparent. This leads to a small alteration in the strategies for the case study focus. The information most strongly lacking for making reliable assessments of effects of CC is clearly related to compliance levels with the separate SMR and GAEC obligations in the different EU regions. This lack of information is especially relevant when assessing the impacts of CC since its implementation in 2005 in the old MS and in 2009 in the new MS.

The other type of information most strongly missing is related to implementation of CC obligations in the field of animal and public health. Both information on the way farmers respond to these most recently introduced SMR obligations and the potential effects on animal and public health is very limited.

Given this further developed understanding of data and information gaps, the emphasis in the case studies was on the gathering of additional information on regional compliance levels per SMR and GAEC (sub) obligation and on implementation and farmers response to SMR obligations most recently introduced in the field of animal and public health.

1.1. Case study selection and approach

According to the DOW, it was planned that the selection of case studies should reflect as much as possible the wide range of CC implementation families and different natural conditions in Europe and to cover the range of agricultural systems and agri-environmental issues. Also good representation of old and new MS, east-west and north-south regions of the EU should be important considerations in the selection. At the same time it should also be realised that given time and budget constraints within the project, obtaining representative information from case studies for the whole EU situation is not feasible.

Taking into account the available information collected earlier in WP3 and data and information requirements from WP 4 and 5, it was proposed, that case studies would mainly concentrate on collection of detailed information on degree of compliance and specific information about farmers response to and related effects from SMRs in the field of animal and public health.

Case studies included the following activities:

1. Collection of detailed information on degree of compliance for selected EU-countries/regions taking into account as much as possible the regional variation in the EU;

2. Collection of in depth information on animal welfare and health issues.

The existing information about the degree of compliance (e.g. number of detected infringements of SMRs and GAECs in general in 2005, the level of compliance per SMR and GAEC standard in 2005, selection criteria for CC controls in general and per GAEC/SMR etc.) was already derived from the evaluation project by the Alliance Environment executed for DG-Agriculture (*Evaluation of the application of cross compliance as foreseen under regulation 1782/2003, 2007*). The data resulting from this study were a good basis, but still insufficient to fit the requirements of the CCAT project (see Deliverable 2.8, Final report of CCAT project results). Firstly, they only provide information on national average levels of compliance with a selection of SMRs and GAECs. They only refer to the SMRs which are focussed on environmental and animal registration issues (SMR 1-8a), and the rest of the SMRs (SMR 9-19) are not included¹. Also the compliance level information for GAECs is very limited often given one estimate for level of compliance with a combination of GAECs. Information on compliance levels with SMRs in new MS is still missing in the Alliance study since in 2006 (when the study was executed) in these MS the SMRs were not part of CC yet. For the CCAT study there is an urgent need for compliance levels information that goes beyond what is already provided by the Alliance study.

This is why for the case study data collection the aim was collecting information on levels of compliance at the level of regions (NUTS 2), covering as many SMR and GAEC sub-obligations as possible. Preferably the collected data should also provide an understanding of the relation between levels of compliance and general characteristics of the farms in relation to sectors, farm sizes, type of land use and livestock patterns. Hence, ambitions to collect detailed information were high, especially given the fact that it is generally known that paying agencies are often not able (and not willing) to provide this type of detailed information.

Information available in the fields of animal welfare and public health in relation to CC compliance levels and potential effects was currently practically absent. This therefore requires in-depth case study analysis. Since the implementation of the SMRs in this field is still very recent (2007) and the impacts on animal welfare and public health are very complicated to assess the case study will require a very detailed and time consuming approach. It was therefore decided to not aim for obtaining a good EU wide overview, as this was not feasible at all, but to get a more profound understanding of the implementation and mechanisms at work determining the farmer's response and the potential effects. For this field only one in-depth case study was therefore executed in Austria in the Styria region. Main reasons for choosing Austria as case study area were:

¹ SMRs included are: DIR01 – Conservation of wild birds, DIR02 - Protection of groundwater against pollution, DIR03 - Use of sewage sludge in agriculture, DIR04- Nitrate Directive, DIR05 - Conservation of flora and fauna, DIR06 - Identification and registration of animals, DIR07 - Framework for the identification and registration of animals, DIR08 - Identification and registration of bovine animals regarding the labelling of beef & beef products, DIR08a - Animal identification and registration - sheep and goats.

- practical, collaboration was already established with an Austrian research group that have already conducted relevant data gathering and analysis in the field of animal welfare,
- the already high standard of animal welfare in this country,
- the mixture of different farming systems (e.g. intensive and extensive farming practices) within a relatively small space,
- data availability,
- known relatively high willingness among farmers to collaborate and
- no-language barrier for the CCAT expert responsible for assessing this field of impact of CC (see more details in section 1.2).

As for the selection of case studies for collection of additional information on levels of compliance at the level of regions the following considerations were taken into account. On the one hand case studies should reflect different natural and agricultural conditions in Europe and have representation of old and new MS, east-west and north-south, but on the other hand there are limited resources (time, finances) available. Originally the following countries/regions were therefore proposed for case studies:

- Austria (in combination with case study on animal welfare and public health, responsible partner UBonn);
- Estonia (CEET);
- (Finland (CEET), if possible)
- Germany, some Länder (IfLS);
- Italy, some region (JRC);
- Netherlands (Alterra/LEI);
- Belgium: Flanders (Alterra, if possible)
- Czech Republic (sub-contract IfLS)
- Spain, Galicia (UAM);

Because of time limitations and altered priorities in course of the project, detailed data collection was only performed in Austria, Estonia, Germany (Brandenburg - BB, Rhineland-Palatinate - RLP, North Rhine-Westphalia - NRW), Czech Republic and Spain (Andalucia - AND, Pais Vasco - PV, Murcia - MUR, Castilla-La Mancha - CLM).

For collection of information on degree of compliance, detailed data provision by national/regional paying agencies was needed. It was foreseen, that data would be collected using a questionnaire (see Annex 1). All data were collected for 2005 and 2007 in order to check the possible changes in time. Additionally, some background information was collected through interviews.

Data collected from paying agencies were planned to include (based on experience with data already collected in Estonia) general data, data on inspected farms, data on non-compliance cases (violations), see Annex 1.

Main aim of the data collection was to have reliable information at least at NUTS 2 level about the degree of compliance in relation to areas, farm sizes, sectoral farm types affected by CC in order to assess the impacts of CC in more reliable way.

Beside above mentioned information, some additional questions were asked from the paying agency officials through interviews. Aim of these questions was to:

- Assess, whether in their opinion the real situation on compliance differs from information gathered through inspection information as farms selected for inspection are in most cases (in average 75-80%) selected by risk analyse;
- Check if paying agency has changed control criteria and procedures in 2007 compared to 2005, and if yes, then why.

Interviews with extension services

It was planned that in the case information collection from paying agencies does not give desired results, additional detailed information on degree of compliance will be collected through expert estimates from extension services.

Since there is (from 2007) an obligation to give CC advice, it can be expected that advisers should be quite familiar with the CC compliance situation. However, in most of the new member states advisory systems on CC started to work only from 2009 onwards and first feedback from advisers in new MS was expected to be by the end of the year 2009. Taking into account, that collection of information from extension services is very time intensive, it was planned to do it only in a limited number of MS (the Netherlands, Spain (1-2 regions), Germany (1-2 Länder), Estonia and Czech Republic). For collecting expert estimates from extension services, a questionnaire was made (see Annex 2).

Use of results:

The information collected in the case studies was planned to be used to up-date and extend the EU-wide regional compliance level estimates for the baseline compliance situation used in the (modeling) assessment of effects in the final CCAT tool. For further information on how this information was used and what the requirements were for this information see Deliverable 2.8 'Final report of CCAT project results' (Chapters 1 and 3).

1.2. Approach to special case study on animal welfare

To get sufficient reliable information about the farmer's behaviour in the fields of animal welfare a desk study and an in-depth case study were conducted. The desk study was focussed at surveying the existing publications in this field. It included both officially published and grey literature. Based on this a general and systematic picture of the state of play was made. This literature review provided further insight into the available data, as well as the existing heterogeneity between member states. The latter was useful for interpreting and generalizing the collected data from the case study.

Whereas the desk study provided existing literature and studies at member state level, the in-depth case study conducted in Austria delivered a much wider range of

information. It was collected in different ways. The general objectives of the Austrian case study can be distinguished into:

1. The collection of information on compliance levels with legislative animal welfare standards.
2. The gathering of information on costs related to compliance with animal welfare standards needed as input for the CAPRI model.
3. Develop a methodology in order to up-scale results on compliance levels in the Austrian case study to the rest of the EU member states.
4. Comparison of the on-farm assessed compliance levels with calculated minimum compliance levels based on legislative standards.
5. Use results of 1, 2, 3 and 4 as input to CAPRI model in order to assess the economic impacts of these standards.

To achieve these goals the methodology of the field study had to be formulated. The working steps of the case study conducted in Austria are described in the following Table 1.1:

Table 1.1: Stages of the field study

Stages of the field study	Working steps of the field study
1. Planning of the field study	a. Description of the required data
	b. Description of the analysis approach
	c. Recruiting of sub-contractors and staff for on-farm assessments
2. Conduction of the field study	a. Organisation of the on-farm assessments
	b. Development of the assessment forms
	c. Development of the questionnaire
	d. Conduction of the on-farm assessments and interviews
3. Analysis of the field study results	a. Linkage of the resulting data with CAPRI model
	b. Development of compliance scenarios
	c. Comparison of the field study results with the outcomes of the desk research
4. Implementation of the results in the final analytical tool (CAPRI module)	a. Application of the different scenarios in the final tool

Source: Own compilation.

The general procedure applied in the case study was based on the determination of the required data. In the field of animal welfare there is very limited EU wide data available on which basis reliable assessments can be done on the status let alone the impacts of CC standards. Therefore, the decision was made to conduct a field study in Austria to survey the relevant indicators on-farm. Additional to the assessment of farm indicators, the field study provides important insights into the farmer's perspective of implementation of specific SMR standards in the field of animal welfare and his/her motivations to (not) comply.

In the field study interviews and direct observations were used to fill-out CC check lists and collect information. In total 65 farms in different parts of Austria were

visited². The key index that was specified with the collected data was the Austrian “Animal Needs Index (ANI) 35L” (Bartussek, 1990).

The ANI, which has been tested for long in practice³, has proven to be suitable for the assessment of housing conditions of different farm types (see e.g. Hörning, 2000), and allows a high repeatability of the overall ANI scores in case of multiple assessments by different investigators (Amon et al., 2001).

The ANI principally uses a graded point system that assesses five animal welfare aspects of livestock housing systems:

1. The possibility of movement (locomotion);
2. Social interaction;
3. Condition of flooring for lying, standing and walking (condition of flooring);
4. Climatisation (light, air, noise); and
5. The quality of human care (stockmanship).

These ANI categories contain several species-specific assessment scales which are graded by points. Housing conditions considered to improve the farm animal welfare or offer more appropriate chances of satisfying the animal’s behavioural needs are awarded more ANI points. The overall sum of the reached ANI points gives the final ANI score. Poor conditions in one category can be compensated by better conditions in another field. Different ANI versions were designed for adult cattle, calves, laying hens, fattening pigs and breeding sows (Bartussek, 2000).

The latest version of the Austrian ANI, the “ANI 35L” (Bartussek 1995a, 1995b, 2000), shows significant overlap with official farm monitoring and certification indicators.⁴ The following Table 1.2 describes the estimated overlap between the ANI indicator scales and the respective CC indicator sets in the field of farm animal welfare, illustrated by means of numbers of overlapping categorical ANI indicator scales and their share in the final ANI score.

Table 1.2: Overlap of the ANI indicator set with CC monitoring indicators

Legal acts	Calves Directive			Pigs Directive			Animal Protection Directive ²		
	Short description of CC obligation	A ¹	B ¹ [%]	Short description of CC obligation	A ¹	B ¹ [%]	Short description of CC obligation	A ¹	B ¹ [%]
Obligation values	Min. space for group & individual housing	8	36.0	Min. space for group & individual housing	7	25.8	Freedom of movement	7	25.8
	Perforated walls for contact	1	5.6	Requirements for mixing groups of pigs	1 ³	2.2 ³	Accommod. for sick or injured animals	0	0.0
	Innoc. accommod. mat. & construction	3	11.2	Innoc. accommod. mat. & construction	4	15.1	Innoc. accommod. mat. & construction	4	15.1
	Adequate electrical circuits & equipment	1	3.4	Means to minimise aggression	1	4.3	Keeping of animals for farming purposes	0	0.0
	Air circul., temp. etc.	2	7.9	Air circul., temp. etc.	2	7.5	Air circul., temp. etc.	2	7.5
	Suitable lightning	2	9.0	Suitable lightning	2	7.5	Suitable lightning	2	7.5
	Condition of flooring	5	21.3	Condition of flooring	6	22.6	Record keeping	1	2.2
	Inspections of	1	3.4	Requirements for	1	3.2	Inspections of	1	3.2

² A more detailed description of the case study sample is given under section 1.1.4 of this report

³ Since 1995 the ANI is used as official evaluation system for the assessment of housing conditions of organic cattle farms in Austria.

⁴ From now on, the term ANI always refers to the most recent version of the indicator framework, i.e. the ANI 35L.

	technical equipment			noise control			technical equipment		
	Sanitary standards	2	6.7	Weaning conditions	0	0.0	Qualif. & suff. staff	0	0.0
	Inspections of calves	3	10.1	Qualif. & suff. staff	0	0.0	Inspect. of animals	3	10.8
	Restrictions for tethering, chains, etc.	3	22.5	Restrictions for tethering	4	23.7	Prohib. to administer harmful substances	1	4.3
	Feeding intervals	0	0.0	Feeding intervals	1	5.4	Feeding intervals	1	5.4
	Feed & water access	1	3.4	Feed & water access	2	8.6	Feed & water access	2	8.6
	Animal care in case of illness & injury	3	12.4	Adequate conditions of farrowing	1	4.3	Animal care in case of illness and injury	4	17.2
	Appropriate bedding	3	13.5	Suitable bedding & playing material	5	18.3	Prot. for animals not kept in buildings	1	4.3
	Colostrums after birth	0	0.0	Prot. of piglets	0	0.0	Breeding procedures	0	0.0
	-	-	-	Cond. of mutilation	0	0.0	Cond. of mutilation	0	0.0

Legend: Accommod.: Accommodation; CC: Cross Compliance; circul.: circulation; Cond.: Conditions; mat.: material; mech.: mechanical; Innoc.: Innocuous; Inspect.: Inspection; Prohib.: Prohibition; Prot.: Protection; Qualif.: Qualified; temp.: temperature; suff.: sufficient

A: Number of overlapping Animal Needs Index scales; B: Share of overlapping points in the final Animal Needs Index score

Source: Own compilation

¹: The ANI indicators, which are allocated to the specific legislative standards, partly overlap among themselves.

²: By means of the ANI of fattening pigs.

³: In case of breeding sows.

As illustrated in Table 1.2 the large majority of the CC relevant animal welfare obligations are addressed by ANI indicator scales. Especially restrictions for tethering as well as minimum requirements for floor condition and space allowance reach high shares of overlapping ANI points. In regard to Table 1.2 it has to be mentioned that the ANI indicators which are allocated to the specific legislative standards partly overlap among themselves. The CC obligations are linked to estimated point shares that show in total more than 100% overlap in the final ANI index score. For the final ANI assessments the point shares given in Table 1.2 will not be considered. The indicators of official CC controls overlap to a very large extend with those used for the monitoring of organic farms.

Calculation of minimum compliance levels based on legislative standards

Principally farms can be divided into two groups: farms that comply with the CC obligations and those that do not. For the shares of farms that comply, potential *minimum* Animal Needs Indexes (ANIs) were calculated depending on their level of certification and the production conditions the farmer has to comply with. Whereas organic farmers e.g. have to comply with special housing system requirements, conventional non-certified farmers only have to comply with the national regulations that in most cases include all CC standards in the field of animal welfare. We assume that all minimum requirements were applied and from that we calculated *minimum* ANI scores on the specific production obligations of the EU organic standards or in case of non-certified farms on the national CC standards. One has to keep in mind that these are only *minimum* animal welfare conditions assessed in accordance to the respective legislative formulations and that the actual implementation may differ to the better or worse, if the obligations are voluntarily exceeded by the farmers or non-compliance occurs.

As illustrated in Table 1.2 of this report the nearly all CC obligations can be assessed by one or more ANI scales addressing to characteristic indicator values.

To calculate *minimum* ANIs on the basis of “full compliance” with legislative standards for all observed EU27 member states, the national interpretations and

specifications of the CC Statutory Management Requirements (SMRs) and the EU organic standard were investigated⁵. In this regard member states were identified that prescribe in dependence on the applied livestock type slightly stricter CC obligations than others which leads to higher ANI scores.

As one can assume that the compliance levels diverge also among different farm types, the on-farm assessments of the case study cover a broad spectrum of farm constellations. Since the minimum ANI scores for conventional non-certified farms and those certified under the EU organic standard show in dependence on the animal type and weight, in case of pigs the group size and in case of cattle the type of housing system (tie stalls or loose housings) significantly diverging values, the evaluations were based on farm constellations involving 5 different livestock types, 2 farm certification grades, 2 housing systems (for adult cattle) and 3 group sizes for pigs. By diversifying these determinants the farm constellations were defined and the underlying legislative standards were assessed by means of the ANI. The applied farm constellations for the animal welfare assessments in the CCAT Tool are given in the Table 1.3. They have to be distinguished from the farm constellations of the case study conducted in Austria that were applied for the on-farm assessments (given in Table 1.5).

Table 1.3: Considered farm constellations for the animal welfare assessments

Determinants of the farm constellations	Characteristic values of the determinants	Farm constellations for animal welfare assessments in CCAT											
Livestock type	Calves	X	X										
	Suckler cows			X	X								
	(Remaining) adult cattle					X	X	X					
	Fattening pigs								X	X			
	Breeding sows										X	X	X
Farm certification grade	Conv. non-certified (CC)	X		X		X	X		X		X	X	
	EU organic		X		X			X		X			X
Housing system (only for adult cattle)	Loose Housing			X	X		X	X					
	Tie-stall					X							
Livestock group size (only for fattening pigs and breeding sows)	3 to 10 (breed. sows)										X		X
	1 or >100 (breed. sows)											X	X
	> 30 (male fatt. Pigs)								X	X			
Total number of considered farm constellations: 13													

Legend: CC: Cross Compliance; CCAT: Cross Compliance Assessment Tool; Conv.: Conventional; EU: European Union.

Source: Own compilation.

To calculate ANI scores based on “full compliance” with legislative obligations, certain assumptions had to be formulated. As the ANI aligns point-referenced space allowance levels to e.g. weight classes of calves, fattening pigs and breeding sows or the availability of an outside run we had to define certain preconditions prior to the calculations⁶. The specific assumptions for the ANI calculations are given in the Table 1.4. As the animal numbers recorded in the CAPRI database are not

⁵ The investigation of the member states’ CC SMR interpretations and national standards was part of the desk study.

⁶ See the ANI assessment forms for different livestock types given in the Annexes 3, 4 and 5 of this report.

distinguished into weight classes, group sizes, herd structures etc. the assumptions apply to all animals of the respective livestock type.

Table 1.4: Specific assumptions concerning the ANI evaluations

Animal type	Assumptions for ANI calculations
Calves	Weight: 150-180 kg
	No tie stalls allowed
	In case of conventional non-certified farm no outside run available
Fattening pigs	Weight: 60-110 kg
	In case of conventional non-certified farm no outside run available
	Group size: >30 (♂)
Breeding sows	Weight: 220-260kg
	In case of conventional non-certified farm no outside run available
	Group size: 3-10; 1 or >100
Adult cattle	Horned cows
	In case of conventional non-certified farm no outside run available
	Herd structure for suckler cows: herd without bull

Source: Own representation.

The ANI assessment scales allocate the compliance levels formulated by the obligations of the considered legislative standards⁷ to resulting ANI points per category. The resulting points per category are summarized to the final ANI scores. These represent the animal welfare level of the livestock housing conditions on a specific farm that belongs to the CC or EU organic standard.

Accordingly, the livestock housing conditions can then be classified as described in Table 1.5. The coloured categories with respect to welfare are used as legends in the mapped results which are accessible through the CCAT Tool, but are also presented in Chapter 2 of this report.

Table 1.5: Rating of animal welfare levels according to the ANI framework

Sum of ANI points	Naming of categories with respect to welfare	Expressed in percentage of ANI points	Colour of legend
< 11	Not suitable	0 – 15	Red
11 - < 16	Scarcely suitable	16 – 30	Orange
16 - < 21	Somewhat suitable	31 – 50	Yellow
21 – 24	Fairly suitable	51 – 60	Green
>24 – 28	Suitable	61 – 75	Dark Green
> 28	Very suitable	> 75	Black

Legend: ANI: Animal Needs Index.

Source: Own representation based on Bartussek, 2001.

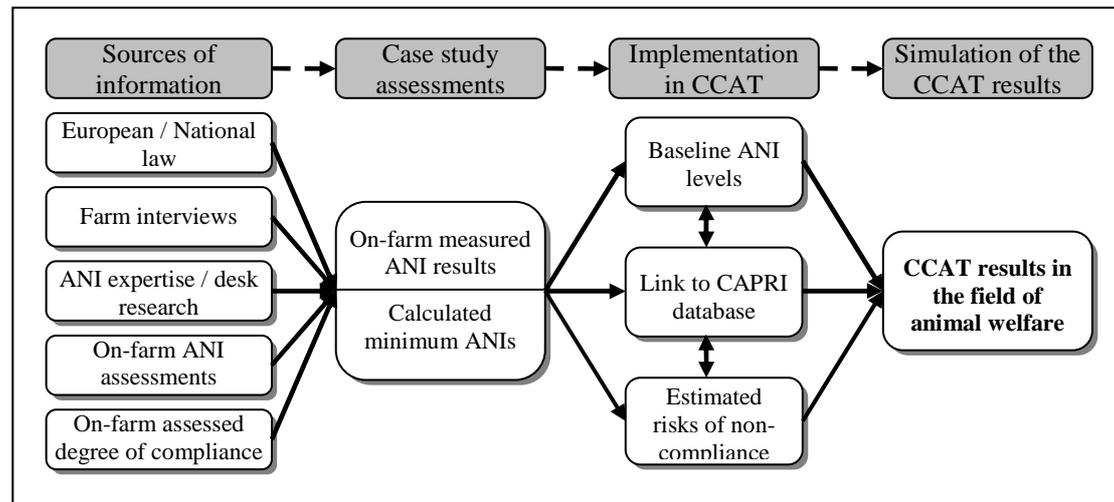
The minimum ANIs that were calculated on the basis of “full compliance” with legislative standards were compared with the arithmetic averages of on-farm measured ANI results of the Austrian field study. Based on this comparison estimations of the risks of non-compliance with the individual CC obligations could be derived.

The minimum ANIs could then be applied to similar farm-type animal group combinations in other EU countries. This extrapolation to other EU countries not only took account of the farm types distinguished in the Austrian case, but also of the

⁷ The EU organic standard is based on regulation (EC) No. 889/2008.

specific national interpretations of CC standards, as well as shares of organic livestock farming. It resulted in estimations of minimum ANIs and compliance levels at Nuts 0 level. These levels were used as the levels for the baseline compliance scenario and the related ANI score. From this baseline level situation and the related arithmetic average of the on-farm ANI score, the ANI scores in the alternative compliance scenarios (0%, 25%, 50%, 75%, 100%) could also be derived. In the following Figure 1.1 an overview of the applied methodology is given:

Figure 1.1: Overview of the methodology of the case study approach



Legend: ANI: Animal Needs Index; CCAT: Cross Compliance Assessment Tool.

Source: Own representation.

Calculation of compliance levels based on on-farm assessments

1.2.1. Selection of Austria as case region

The choice of the EU member state in which the in-depth case study is executed is an essential point of our case study design. As the case study in the field of animal welfare is only limited to one EU member state this question gains increased importance. The selection of Austria was mainly based on the following considerations:

- **Spectrum of farm types:** In order to produce comparable results the involvement of a broad spectrum of different farm types is necessary. Austria meets this demand. On the one hand Austria offers with 11.9 % of the farms the highest share of organic farming in Europe. On the other hand it shows a great variety of regions with intensive and extensive farming practices (Austrian Ministry of Agriculture, 2008). The high shares in organic farming are reflected by a comparably high number of organic certification schemes. But also animal welfare referenced conventional farm certification schemes were identified in Austria. In consideration of these conditions the travel distances and costs could be minimised during the field study.
- **Assessment quality:** To ensure a high precision of the on-farm evaluations practical experience in ANI assessments is essential. A cooperation with the Austrian Agricultural Research Center Raumberg-Gumpenstein, the

developers of the ANI, provides theoretical and practical insights into the on-farm assessment of animal welfare.

- **No language barriers:** The field study was conducted by members of the University of Bonn.

1.2.2. Procedure and collected data

In contrast to the *minimum* ANI assessments that were based on “full compliance” with legislative obligations and used as the levels for the baseline compliance scenario, the ANI on-farm assessments in Austria were focussed on reproducing the farmer’s actual compliance with legislative standards. The results of the on-farm ANI assessments were on the one hand used to refine the calculated *minimum* ANI assessments prior to their implementation in the final analytical tool and on the other hand implemented in the CCATool. In addition to this, divergences between the outcomes of the *minimum* ANI assessments and the ANI on-farm measurements were used to estimate the risk of non-compliance for every CC obligation⁸.

The case study in the field of animal welfare was based on the following sources and types of information:

- **Country-specific and problem-based information (desk research):** Investigation of the Austrian interpretations and definitions of the CC statutory management requirements (SMRs) and the organic legislative standard.
- **Interviews:** For this case study targeted and standardised interviews were conducted. By focussing on different topical priorities they provide a differentiated view of the topic. The interviews were based on tailor-made questionnaires which refer to the different points of view and the specific knowledge of the farmers. Information about the farmer’s membership in certification schemes as well as the applied livestock housing system gives relevant and detailed information about the quality of animal welfare. This is an important criterion for the creation of the different farm constellations given in Table 1.3.
- **Direct observations:** The investigators made on-farm visits to assess the ANI and the farmer’s compliance with CC obligations. In order to make as reliable observations as possible, at least two observers visited the farm. Furthermore, an expert in ANI assessments from the Austrian Research Center Raumberg-Gumpenstein assisted the assessments.

1.2.3. Assessment specifications

For the on-farm assessments the following documents were used:

- **Checklists for CC animal welfare obligations in pig and cattle farming:** The checklists match with self evaluation checklists for pig and cattle farms that are used for official CC controls in Austria and serve as a preparation for the farmers. They contain all CC-relevant animal welfare obligations for

⁸ The outcomes of this procedure are given in Annex 6 of this report.

Austria and will be applied to assess the farmer's level of compliance. The checklists contain reduction rates that can be assigned to every single item on the checklist and which lead to an official direct payment reduction rate. The direct payment reduction rates were used as an indicator for the severity of the respective breaches in the area of farm animal welfare. The checklists to assess the adherence to CC animal welfare obligations for pig and cattle farming are given in the Annexes 5 and 6 of this report.

- **Animal Needs Index assessment forms:** The assessment forms (given in Annex 7, 8 and 9 for adult cattle, calves and fattening pigs) were used for the integrated on-farm assessments of the ANI for pigs, cattle and calves.
- **Farm questionnaire:** A questionnaire was used to survey the remaining type of information to develop the farm scenarios.

1.2.4. Selection of farms

The on-farm assessments were conducted from February to March 2009 on 25 pig fattening and 40 cattle farms distributed over Austria and associated to various certification grades. The contact details of the farmers were distributed by the Research Center Raumberg-Gumpenstein, the Agricultural Chamber of Styria, an anonymized Austrian conventional certification scheme and other farmers. A detailed description of the case study sample is given in the following Table 1.6.

Table 1.6: Overview of farm types involved in the field study

Response	Contact details provided by				Σ
	RRG	ACS	Label ¹	Farmers	
No. of farmers contacted	86	-	-	-	86
Non-response	48	-	-	-	48
Participation	38	-	-	-	38
No. of participants provided	7	9	10	1	27
Σ of participants	45	9	10	1	65

Legend: ACS: Agricultural Chamber of Styria; No.: Number; RRG: Austrian Research Center Raumberg-Gumpenstein.

¹: Contact details distributed by an anonymized Austrian conventional certification scheme.

Source: Own compilation.

To allow an assessment of a broad spectrum of different farms, farm types and numbers given in the following Table 1.7 were involved in the Austrian case study.

Table 1.7: Overview of farm types involved in the field study

Farm type	Certification grade		Standard		Livestock type			Housing system		Farm no.
	Cert.	Non-cert.	Priv.	Legisl.	Dairy cows	Suckl. cows	Fatt. pigs	LH	TS	
Organic	X		X	X	X			X		10
	X		X	X	X				X	4
	X		X	X	X	X		X		4
	X			X	X			X		1
	X		X	X		X		X		10
	X		X	X			X			6
	X			X				X		2
Conv.	X		X	X	X			X		1
	X		X	X	X	X		X		1
	X		X	X		X		X		1
	X		X	X			X			1
		X		X	X			X		3
		X		X	X				X	2
		X		X	X	X		X		1
		X		X	X	X			X	2
	X		X			X			16	
Σ									65	

Legend: Cert.: Certified; Conv.: Conventional; Fatt.: Fattening; Legisl.: Legislative; LH: Loose housing; no.: number; Priv.: Private; Suckl.: Suckler; TS: Tie stalls.

Source: Own representation.

Whereas the majority of the pig fattening farms is associated to conventional non-certified farming practices, most of the selected cattle farms are certified as organic. As the keeping of cattle in tie stalls is for most Austrian organic certification schemes (as it is also stated in EU level legislation) only allowed until 2013 (for farms with over 35 livestock units), the majority of the selected farms are fitted with loose housings (Bio-Austria Vorarlberg, 2009).

The columns N and A of Table 1.8 describe the geographical distribution of the farm types that were involved in the Austrian case study. Compared to this the actual shares of farm types are mentioned in column B of the Table 1.8.

Table 1.8: Localisation of selected farm types

Federal states of Austria	N	Shares of farm types [%]								Contact details distributed by		
		Org. cattle		Conv. cattle		Org. pigs		Conv. pigs		RRG	ACS	Label ²
		A	B ¹	A	B ¹	A	B ¹	A	B ¹			
Styria	35	50	16.8	50	83.2	11.8	8.5	89.2	91.5	X	X	X
Lower Austria	12	87.5	15.3	12.5	84.7	100	10.6	0	89.4	X		
Salzburg	8	100	47.4	0	52.6	0	48.7	0	51.3	X		
Upper Austria	4	100	14.3	0	85.7	100	10.3	0	89.7	X		
Tyrol	4	50	22.6	50	77.4	0	18.2	0	81.8	X		
Carinthia	2	100	12	0	88	0	7	0	93	X		
Σ / Ø	65	81.3	21.4	18.8	78.6	35.3	17.2	14.9	82.8	X	X	X

Legend: A: Shares of farm types involved in the case study; B: Actual shares of farm types; ACS: Agricultural Chamber of Styria; Conv.: Conventional; N: Sample size No.: Number; Org.: Organic; RRG: Austrian Research Center Raumberg-Gumpenstein.

¹: Data based on Austrian Ministry of Agriculture, 2009.

²: Contact details distributed by an anonymized Austrian conventional certification scheme.

Source: Own representation.

As illustrated in Table 1.8 most of the selected farms are located in Styria in order to minimize travel distances and costs. The contact details of the farms were provided by the Research Center Raumberg-Gumpenstein, the Agricultural Chamber of Styria as well as a private conventional animal welfare referenced farm certification scheme.

1.3. Summary of conducted case studies with paying agencies and extension services

Data from *paying agencies* were collected from four countries (Czech Republic, Estonia, Spain (Andalucia, Pais Vasco) and Germany (Brandenburg, Rhineland-Palatinate, North Rine-Westphalia)). Data were not available from Belgium, Italy and Netherlands.

Data received from paying agencies were in almost all cases incomplete:

- there were no countries, where *all* the requested information was fully completed. Most comprehensive data were available from Estonia and Czech Republic;
- information at sectoral farm type level is basically missing in all countries (only some general data per class were available e.g. Andalucia (number of farms and breaches but not area and animals); Brandenburg (only number of inspections and breaches, but not per GAEC/SMR and area/animals etc.);
- information on areas (e.g. area of farms with breaches) and animals (e.g. number of animals in farms with breaches) was very incomplete.

Therefore data on compliance at obligation level by farm types and size classes were not obtained, with the exception of Estonia and Czech Republic where limited information was derived.

Full information needed from *extension services* was only received from EE, CZ and ES, as from Germany only general information was available.

Despite large time and effort investment only very limited data were yielded in the case studies. There are several reasons for this limited success:

- paying agencies are not able (and sometimes not willing) to provide detailed information on this rather sensitive topic of compliance and breaches. Only general compliance data are available in most of the countries (number of inspections in general, number of violations in general etc.), information on directive/issue (standard) level is sometimes and information on obligation level often not available;
- employees of extension services are often specialised only in few SMRs or SMRs grouped in either 'environment', 'animal health' or some other issues, and therefore they don't have an overall picture of farmers' problems/breaches related to all SMRs. This was the reason why information collected by interviews did not give answer to all questions in the questionnaire.

The following tables summarise the approaches of data collection followed in the case studies (Table 1.9) and data availability (Table 1.10).

Table 1.9: Case study approaches

Country	Survey with paying agencies – general data	Survey with paying agencies – detailed compliance data	Survey with extension services – general data	Survey with extension services – detailed compliance data
Estonia (EE)	X	X	X	X
Czech Republic (CZ)	X	X*	X	X
Germany (DE) (Brandenburg (BB), Rhineland-Palatinate (RLP), North Rhine-Westphalia (NRW))	X	-	X	-
Spain (ES) (Andalucia (AND), Pais Vasco (PV))	X**	X*	X	X

* Incomplete

** Andalucia, Pais Vasco, Murcia (MUR), Castilla-La Mancha (CLM), FEAGA (Spanish National Coordination Unit)

Table 1.10. Data availability

General data	CZ	EE	ES	DE
Number of farms applied for SPS/SAPS	2005/2007	2005/2007	AND 2007 PV 2005/2007	RLP, NRW, BB 2005/2007
Share of farms that applied for SPS/SAPS having animals	no	2005/2007	AND 2007 PV 2007	no
Area and number of livestock of farms that applied for SPS/SAPS	Area 2005/2007 Livestock: no	2005/2007	Area AND 2007 Animals PV 2007	2005/2007 (except area BB)
Division of farms that applied for SPS/SAPS by size classes	2005/2007	2005/2007	AND 2007 PV 2005/2007	2005/2007
Division of farms that applied for SPS/SAPS by sectoral types	no	no	no	BB 2005/2007

Inspections	CZ	EE	ES	DE
Number/area of farms inspected per GAEC/SMR	2005/2007	2005/2007	AND number 2005/2007, area 2007 PV number 2005/2007, area: no	Only total number, not per GAEC/SMR
Number of inspected farms having animals/number of animals per GAEC/SMR	no	2005/2007	no	Number of farms: no Number of animals: only total, not by SMR/GAEC
Number of farms inspected by size classes per GAEC/SMR	2005/2007	2005/2007	GAEC: no SMR: AND 2007	2005/2007
Number/area of farms inspected by sectoral types per GAEC/SMR	no	no	AND number 2007, area: no	BB number 2005/2007, area: no
Non-compliance	CZ	EE	ES	DE
Number/area of non-compliant farms per GAEC/SMR	Number 2005/2007, area not by GAEC	2005/2007	AND: GAEC number/area 2007, SMR: number 2005/2007, area: no PV: GAEC/SMR: number 2005/2007, area: no	2005/2007, not per GAEC/SMR
Number of non-compliant farms having animals/number of animals per GAEC/SMR	no	2005/2007	no	only RLP: number of animals, but not per SMR/GAEC
Number of non-compliant farms by size classes	2005/2007	2005/2007	only AND 2007	2005/2007, but not per GAEC/SMR



per GAEC/SMR				
Number/area of non-compliant farms by sectoral types per GAEC/SMR	no	no	only AND 2007	BB number 2005/2007, area: no

2. Case study data collection results

2.1. Case study paying agencies⁹

As mentioned above, data received from the paying agencies did not provide too many details on compliance by farm types, also regional details were often missing. Therefore, most of the information presented below is a summary of the answers to more general questions (questions 1-2, see Annex 1) in the questionnaire. In addition to the information gathered from paying agencies, some relevant results of the project Evaluation of the application of cross compliance as foreseen under regulation 1782/2003 (IEEP 2007) are also presented (in italic, data from 2005). Most of the data collected by case studies are from 2005, limited data are from 2007 and few from 2009.

The summary of results presented below is structured based on questions of the questionnaire used.

Data sources used for drawing up a sample of farms for inspection

Sample of farms for inspection is drawn from (application) databases consisting of farms that have applied for SPS/SAPS or other subsidies in current year. Also inspection results of previous years are used, this is specifically mentioned in PV and EE. In some countries databases with specific information are used (NVZ areas, Natura 2000 areas, etc).

Proportion of the sample selected at random and at risk-based

20-25% of the sample in studied regions is selected randomly and 75-80% is risk-based. In 2005 in AND whole sample was based on risk criteria, the same apply to CLM until the year 2007. From 2007, in all studied regions risk-based selection was not higher than 80%.

IEEP Study from shows that many Member States selected in 2005 the control sample using both a random and risk-based approach. Exceptions are EL, ES (some regions), FR, MT, PT, SE and SI which only use a risk-based approach. Where part of the sample is selected randomly, the proportion varies from 16 – 25% (IEEP 2007).

Risk-based selection

Risk assessment includes several risk factors and is quite variable in different regions. However, two main groups of factors can be identified:

- 1) factors related to farming, e.g.
 - a) farm size,
 - b) existence of livestock,

⁹ Abbreviations used: EE – Estonia; CZ – Czech Republic; DE – Germany (Brandenburg - BB, Rhineland-Palatinate - RLP, North Rhine-Westphalia - NRW); ES – Spain (Andalucia - AND, Pais Vasco - PV, Murcia - MUR, Castilla-La Mancha – CLM).

- c) animal type and number of animals,
 - d) previous non-compliance
- 2) factors related to environment, e.g.
- a) location in Natura 2000 Network,
 - b) location in NVZ,
 - c) location near to water bodies,
 - d) location in areas with high risk of erosion,
 - e) use of sewage sludge

Detailed overview of risk factors used per region is given in Annex 4. Each risk factor has certain weight depending on the relative importance of each defined risk factor. Higher weight is given for example to: previous non-compliance, holdings with livestock, location in NVZ area, Natura 2000 area and in other environmentally sensitive areas. Applications are assessed by giving points per risk factors. The sample will then be drawn based on this assessment (given points).

In MUR the risk assessment is used, but the sample is not made only from the farms with high risk for violations but includes share of lower risk farms as well (risk-based sample consists of 60% farmers with punctuation >25 , 30% with punctuation $\geq 15 \leq 25$ and 10% with punctuation <15).

Risk assessment does not focus on particular GAECs/SMRs in general, however, for example in CZ some of the environmental factors are those linked directly to certain GAECs (Ban of row crops on slopes above 12°).

IEEP Study from 2007 shows that various approaches can be noted in relation to risk criteria and whether Member States weight these criteria. In BE (F), for example, ten risk factors are considered; five factors focus on particular SMR farmers' obligation and five on GAEC farmers' obligation. All ten risk factors are given a different weight. In ES, a range of risk-factors are used in the sampling e.g. holdings receiving payments above certain levels, farm in Natura 2000 area. The Regional Governments may also take account of information from other sources. In FI, in 2006, prior breaches, location in NATURA area or in groundwater area or the use of sewage sludge were regarded as risk factors. The risk assessment is more focused on SMRs than on GAEC farmers' obligation, for which the prior breaches dominate as a risk factor. The approach of weighting prior breaches as a higher risk in the assessment is noted in a number of Member States. Some Member States appear to weight risk criteria (BE (F), EE, CZ, DE, HU, IE, IT, LU, NL and PL) while others do not (FI, SE). The situation regarding weighting in other Member States is not clear (IEEP 2007).

Change of control criteria and procedures in 2007 compared to 2005

Paying agencies have changed the control criteria and procedures in 2007 compared to 2005 in all regions under study. Control criteria and procedures are adapted on the basis of the previous inspection results and therefore have been changed every year. The reasons of the changes are related on the one hand to the changes in CC obligations and on the other hand to the experiences of inspection results.

Most often violated obligations of SMRs/GAECs

SMR

Most often reported breaches were related to identification and registration of animals (SMR 6-8a – only DE and ES, as these SMRs were in year 2005/2007 not implemented yet in EE and CZ).

Note: By the data of 2009 the most common breaches in Estonia were related to the animal identification and registration (SMR 6-8a). Very few breaches (7 out of 200 inspections) were reported related to the “environmental” SMRs (1 to 5).

Note: There have not been found any “serious” SMR violations in CZ in 2009, only 9 “medium”, 19 “small” and 43 “moderate” violations out of 1243 controls, 94% of inspected farms did not have any violations at all.

GAEC

The most common type of GAEC breaches were related to the farmers` obligation related to mowing of grassland followed by the obligation to keep the field register, both under issue “minimum level of maintenance”.

IEEP Study shows that the most common SMR breaches in 2005 were related to the animal identification and registration SMRs (6, 7, 8 & 8a). This was the case in 14 of the Member States where SMR farmers` obligations have been developed (AT, BE, DE, DK, EL, ES, FI, IE, LU, MT, NL, PT, SE, UK). In these Member States, breaches for the animal identification and registration SMRs were the most common both as a proportion of inspections relative to other SMRs and in terms of the number of breaches per SMR. In most cases the number of breaches for these SMRs far exceeded the number of breaches of other SMRs. Breaches of SMRs for bovine livestock (7 & 8) were the most common (BE (F), DE, DK, ES, IE, NL, SE, UK (E, W)), followed by SMR 8a for sheep and goats (AT, BE (W), EL) followed by SMR 6 (LU, UK (NI)). In some Member States no distinction has been made between the SMRs for animal identification and registration (FI, MT, PT, UK (S)).

In addition, breaches were reported for the wild birds and/or habitats Directives (SMRs 1 & 5) in 8 Member States (AT, BE, DE, ES, IT, MT, NL, UK (NI)), for the groundwater Directive in 7 Member States (AT, BE (W), DE, FI, IE, IT, UK), and for the sewage sludge Directive in 4 Member States (AT, DE, PT, UK (NI)).

In the Member States where data have been made available, in most cases it is possible to identify which GAEC issues (soil erosion, soil organic matter, soil structure, minimum level of maintenance) have led to breaches. 14 Member States identified breaches for minimum level of maintenance farmers` obligation and in many cases these were the most common type of GAEC breaches (AT, BE (W), CY, CZ, EE, EL, ES, HU, IT, LU, MT, NL, SE, UK). 8 Member States identified breaches for soil erosion farmers` obligation (BE (W), CY, EL, ES, HU, IT, NL, UK (E, NI, W)). 6 Member States identified breaches for soil organic matter farmers` obligation (BE (W), CY, EL, ES, IT, MT). 3 Member States identified breaches for soil structure farmers` obligation (CY, ES, IT) (IEEP 2007).

Overview of obligations of SMRs/GAECs to which most breaches are related to is presented below. It is based on data from 2005/2007 (partly also 2006-2008). Mostly only qualitative information was available.

▪ **Estonia**

Level of GAEC breaches (breaches as % of inspected farmers) in Estonia was quite high. In 2005 total level of GAEC breaches was by the data of Estonian Paying Agency 29% and 36% in 2007.

Most of the breaches (in both years) were related to minimum level of maintenance (GAEC 4) - mowing (incl. collecting or chopping) of grasslands by July 31.

▪ **Czech Republic**

Quantified data were not provided.

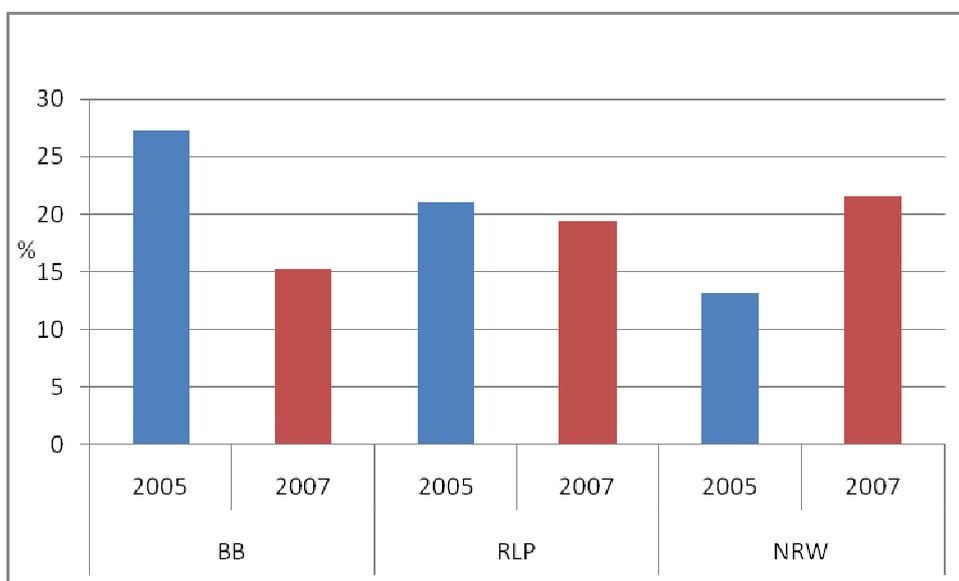
Most breaches were connected to minimum level of maintenance (GAEC 4) and ploughing of permanent grassland.

▪ **Germany**

Figure 2.1.1 presents total number of CC breaches (breaches as % of inspected farmers) in Germany (BB, RLP, NRW 2005/2007). Table describes summarised breaches of all GAECs and SMRs inspected. More detailed quantified data were not available.

Level of breaches remains in all regions below 30%, however it differs quite remarkable in years 2005 and 2007 in BB and NRW, while in RLP it is around 20% in both years.

Figure 2.1.1. Number of breaches (breaches as % of inspected farmers) in Germany (2005/2007)



Source: Paying Agencies of BB, RLP and NRW; own compilation

Qualitative data provided by paying agencies is presented below.

SMR breaches

Most common SMR breaches in RLP were related to the identification and registration of animals (SMR 6-8a) – keeping the records, register and data bank up-

to-date followed by feed and foodstuff - lack of documentation (SMR 10-11), and nitrate and sewage sludge control (SMR 3-4) - lack of or incorrect nutrient balances. Few breaches were reported regarding the use of plant protection products (SMR 9) - lack of the user's qualification or equipment for spraying not approved).

In NRW most common SMR breaches were also related to the identification and registration of animals (SMR 6-8a), especially in cattle and sheep/goat farms followed by nitrate and plant protection (SMR 4 & 9). In 2005 the share of breaches in NRW was as follows: cattle registration (81,1%), Nitrate directive (11,2%), registration of pigs (4,2%) and sheep/goats (3,3%), FFH, Birds, Groundwater and sewage sludge (0,2%).

Most breaches are related to the veterinary law (incorrect and incomplete registration, faulty animal passports, the loss of eartags) as well as to fertilizer law.

In NRW breaches in inspected farms related to 'environmental' SMRs were below 1% in 2005.

In BB also the most common violations were related to the identification and registration of animals (SMR 6-8a) followed by the requirements for the protection of groundwater (SMR 2, leak-tightness of tanks, deposits of manure) and the comparison of nutrients (SMR 4).

GAEC breaches

Most commonly violated GAEC requirement was related to minimum level of maintenance (GAEC 4) - management of land out of production (reported in RLP) followed by soil organic matter (GAEC 2) - drawing up of humus balances (reported in BB).

▪ **Spain**

Information collected in Spain is based on data from 2005-2007, partly also from 2008.

SMR breaches

Most common SMR breaches in AND were related to the water protection against contamination (SMR 4, in 2006 and 2007) followed by the identification and registration of animals (cattle, SMR 7-8a) in 2006 and marketing of plant protection products (SMR 9) in 2007. In 2007, level of breaches of SMR4 for example was by the data of paying agency 12%.

In PV most common SMR breaches were related also to the identification and registration of animals (cattle, SMR 7-8a) and to the registers and sizing of manure deposits – in livestock holdings (SMR 4). For example in 2007 level of breaches of SMR 8 was 4,9%.

In Murcia data from 2005 to 2008 were available. Most of the breaches reported were again related to the identification and registration of animals (SMR 6-8a) in 2005, 2006 and 2007. In 2008 this was not reported. Breaches related to the water protection against contamination by nitrates (SMR 4) were reported as common in

2007 and 2008. Breaches for SMRs 9, 11 and 16-18 were also reported, but were less common.

In CLM most of the violations were related with updating and holding different registers such as fertilizing registers in NVZ (SMR 4), plant protection products registers (SMR 9).

Also it has been shown that there is a lack of control systems for water consumption, possibly due to the little pressure exerted by the Hydrographical Confederations to consolidate this exigency.

The obligation of having deposits with sufficient capacity and impermeable dung yards in livestock holdings with permanent or semi-permanent stabling is also one of the obligations with more violations, which has positively evolved since 2005.

GAEC breaches

The most common type of GAEC breach in AND in 2005 was related to avoiding habitats deterioration (other issue) and in 2006 to soil erosion (GAEC 1). In PV soil maintenance (GAEC 1-3) was a main breach. In Murcia GAEC breaches reported as most common were quite different in different years – in 2005 most common breach was related to soil organic matter (GAEC 2), whilst in 2006 to soil structure (GAEC 3), in 2007 to soil erosion and soil organic matter (GAEC 1&2), and in 2008 to soil erosion and minimum level of maintenance (GAEC 1&4).

By the information of FEGA (Spanish National Coordination Unit, Spanish Paying Agency) most of the breaches are related to:

- 1) SMR 4, (water protection against contamination by nitrates);
- 2) SMR 6 and 7 (identification and registration of animals);
- 3) SMR 9 (marketing of plant protection products);
- 4) SMR 11 (food safety);
- 5) SMR 17 (animal welfare: protection of pigs);
- 6) GAEC 5 (other): avoidance of habitat deterioration.

Situation on compliance compared to information gathered by inspections

Judgements on whether the average situation on compliance differs from information gathered by inspections (e.g. because inspection is risk-based) varied per case region. In all three of the regions under survey in Germany it was reported, that most probably the average situation on compliance differs since 80% of the inspected farms are selected on a risk basis and therefore the compliance level of the inspected farms is *lower* than the average compliance level.

By the opinion of representatives of the Estonian paying agency most probably the average situation on compliance is not too much different from the real CC compliance levels. The representative of the Czech paying agency did not give any judgement.

In Spain (AND, CLM), it was mentioned, that compliance levels detected in the controls are near to the real CC compliance levels as inspections are based on a representative sample.

Note: As the control sample drawn is mostly risk-based, the average situation of compliance should be most probably better (e.g. average compliance rate should be higher than for those farms in sample), otherwise there will raise a question whether risk criteria are suitable.

Note: From the year 2010 control of few obligations of the identification and registration of animals (SMR 6-8a) in Estonia will be fully administrative. This means that 100% of farms with animals are inspected administratively (based on registers). Therefore a lot of breaches will be found also from outside of mandatory 1% control sample. This approach is also most likely to be introduced in some other Member States.

Farm types/size classes etc. mostly violating CC rules

Detailed quantified information about farm types/size classes etc. mostly violating CC rules was principally not available, therefore only qualitative information is provided with some quantified examples, where possible.

By the opinions of interviewed representatives of the paying agencies, it can be summarised, that 1) *smaller farms* (e.g. in the case of Czech Republic farms up to 10 hectares, in Estonia farms up to 50 hectares) are violating more CC rules than bigger farms, whereas bigger farms are more 'professional' and fulfil given standards and 2) *farms with animals* are violating more CC rules, mainly just due to the higher number of obligations and thus controls. In the case of farms with animals, especially those with sheep and goats, there are relatively more violations (e.g. in Estonia high percentage of ear tag losses which is due to the semi-extensive production system these animals are generally held in).

In AND it was reported, that farms located in NVZ are violating more CC rules. This seems logical, since this is where the stricter manure management legislation is applicable.

Table 2.1.1 presents examples of division of GAEC breaches by size classes (%) in Estonia (2007) based on the data of the Estonian Paying Agency. Linkage of breaches and farm size differs between different obligations, some obligations seem to have this linkage, e.g. smaller farms (1-30 ha) violate more often GAEC 4-3 (farm has to keep field records) than larger farms. In the case of GAEC 4-3 average non-compliance was 12,8%, non-compliance of farms with animals 9,5%.

In the case of other GAEC obligations not so clear linkages were found.

Table 2.1.1. Example of division of breaches by size classes (%) in Estonia (2007)

ha	GAEC 4-1 ¹⁰	GAEC 4-2	GAEC-4-3
1-10	0,0	10,1	25,3
10-30	0,2	12,5	13,4
30-50	0,0	8,9	7,5
50-100	0,6	13,1	2,3
100-300	0,7	8,5	0,7
>300	0,0	2,6	0,0
Total	0,2	10,5	12,8

Source: Estonian Agricultural Registers and Information Board; own compilation

Table 2.1.2 provides an example of division of CC (all SMRs and GAECs) breaches by farm types (%) in BB (2005/2007) based on the data of the paying agency of BB. However, as breaches are not divided per SMR/GAEC nor obligations and for some types very small number of farms were inspected (e.g. in the case of permanent crops only 4 farms), these data remain only general and it is not possible to draw out any extensive conclusion.

Table 2.1.2. Example of division of breaches by farm types (%) in BB (2005/2007)

	2005	2007
Specialist field crops (arable)	25,0	17,7
Specialist horticulture	0,0	18,2
Permanent Crops	n.a	75,0
Specialist grazing livestock	16,1	10,3
Specialist granivours-pigs	25,0	16,7
Specialist granivours-poultry	n.a	n.a
Mixed livestock holdings	n.a	n.a
Mixed holdings	30,5	14,5
Mixed crops and livestock	n.a	n.a
Sheep farming	25,0	6,3
Total	27,6	15,0

Source: Paying Agency of BB; own compilation

¹⁰ GAEC 4-1: On the land temporarily out of productive agricultural use crops must be sown or established by July 1 or land must be kept under black fallow or mechanical weed treatment must be carried out by July 31; GAEC 4-2: The grassland has to be mown or grazed by July 31. Hay has to be collected or chopped by July 31; GAEC 4-3: Farmer has to keep field records.

2.2. Case study extension services

The summary of results is structured based on questions of the questionnaire used.

Main changes in farm practices resulting from implementation of cross compliance

According to the information derived from the interviewed representatives of extension services, the requirements and standards of CC do not require significant changes in farm practices. In general most farmers already fulfil the obligations. SMR related obligations are based directly on implemented of national legislation and should be therefore known for farmers.

In Czech Republic, the only significant change in farm practice reported by advisors was related to manure management. Storage facilities are missing or are in bad order and in order to fulfil the obligations farmers have to build/renew storage facilities.

In Estonia, advisors interviewed pointed out, that farmers pay much more attention to fulfilling requirements of identification and registration of animals. This was also mentioned in PV. In PV, it was also pointed out, that data collection in the farm notebook needs more effort after introduction of CC. In AN several aspects were pointed out as regards to the changes in farm practices:

- 1) Slow but progressive introduction of plant coverage in olive groves;
- 2) Improvement of the rational use of pesticides;
- 3) Better control of the plant protection products packaging collection;
- 4) Better compliance with the measures related to identification of animal.

GAEC and SMR obligations most difficult for farmers to implement

SMR and GAEC obligations which are most difficult for farmers to implement are by the opinion of the representatives of the extension services (from the most to least demanding) as follows:

SMR:

- 1) SMRs 6-8a (identification and registration of animals);
- 2) SMR 4 (water protection against contamination by nitrates);
- 3) SMR 2 (protection of ground water);
- 4) SMR 9 (marketing of plant protection products).

GAEC:

- 1) GAEC 2 (soil organic matter: arable stubble management) and GAEC 4 (minimum level of maintenance);
- 2) GAEC 1 (soil erosion, especially use of plant coverage in olive groves)

Farm types/size classes etc. mostly violating CC rules

By the opinion of extension services, 1) small (to medium) size farms are violating CC rules more often and 2) farms with animals have more problems with fulfilling requirements – at the same opinion were also representatives of the paying agencies.

In AND, however, one of the interviewees mentioned, that violation of CC rules is mostly related to the modernization level of the farm, regardless of the farm size. In AND it was also pointed out, that sheep holdings (from 500 to 2000 heads), and goat holdings (from 200 to 1000 heads) are mostly violating CC rules, but also farms smaller than 20 ha.

SMRs/GAECs impact on production costs/farm income

No quantified data were provided. One can conclude based on the interviews that the most significant costs are made 1) to building of storage facilities for manure management and 2) to invest additional time in (better) planning and record keeping.

Level of farmers' awareness about cross compliance

Representatives of extension services were asked to assess the level of farmers' awareness about cross compliance, choosing between four options:

- 1) mostly not familiar with cross compliance
- 2) only general knowledge about cross compliance
- 3) general knowledge and more familiar with some of the GAECs/SMRs
- 4) familiar with most of obligations of GAECs/SMRs

From the interviews it became clear that farmers' awareness about cross compliance is in average rather general and details of requirements are sometimes unclear. Also farmers may not differentiate between CC obligations and obligations coming from other (relevant) legislation. Assessments by regions are given below:

- Estonia: general knowledge about cross compliance, more familiar with GAEC obligations which were implemented in similar way before the introduction of CC;
- Czech Republic: general knowledge and more familiar with only some of the GAECs/SMRs;
- DE (NRW): familiar with most of the obligations of GAECs/SMRs;
- ES (PV): only general knowledge about cross compliance, AND: only general knowledge about cross compliance and more familiar with some of the GAECs/SMRs. By the opinion of one interviewed advisor farmers are in general not familiar with cross compliance.

In second part of the questionnaire, representatives of the extension services were asked to assess potential risks (in scale no risk-low risk-medium risk-high risk) for violations (breach) related to the GAEC and SMR obligations (EE, CZ – all GAECs, SMRs 1-8a; ES, DE all GAECs and all SMRs). Unfortunately, from DE this information was not derived.

A summary of the results per country is presented below.

- **Estonia**

GAEC obligations

High risk for breaches was assessed for obligations related to minimum level of maintenance - mowing (incl. collecting or chopping) of grasslands by July 31. Medium risk was also for some obligations related to minimum level of maintenance – keeping of field records, and to soil organic matter – drawing up a crop rotation plan. All other obligations were assessed as low risk. There was no obligation assessed as no risk.

SMR obligations

High (and medium) risk for breaches was assessed for obligations of identification and registration of animals, medium risk for obligations of water protection against contamination by nitrates and low risk for other SMRs, except one obligation of protection of ground water – prohibition of discharge of substances in list I and II into nature, this was assessed as no risk.

- **Czech Republic**

GAEC obligations

Medium risk for breaches was assessed for obligation “Farmers are required not to convert grassland as well as permanent pasture into arable land”. Low risk for obligations related to soil erosion, to soil organic matter and to minimum level of maintenance.

SMR obligations

Medium risk of breaches was assessed for obligations related to identification and registration of animals, low risk for obligations related to protection of groundwater against pollution, and to identification and registration of animals. Other SMRs were assessed as no risk.

- **Spain**

GAEC obligations

In PV medium risk of breaches was assessed for obligations related to minimum level of maintenance, soil organic matter and other issues (conditions to avoid the deterioration of the habitat; storage of livestock manure), soil erosion and soil structure were reported as low or no risk for breaches. Obligations with high risk for breaches were not reported.

SMR obligations

In PV medium risk of breaches was assessed for obligations related to Nitrate Directive and to identification and registration of animals, low to medium risk for obligations related to SMRs 10-17. Obligations with no or high risk for breaches were not reported.

2.3. Case study on animal welfare

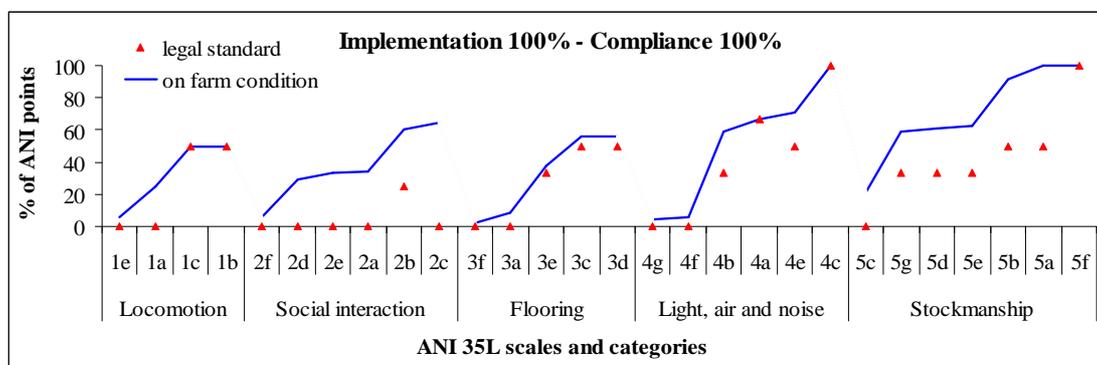
Animal welfare effects

As described under point 1.2 of this report the results of the animal welfare assessments are not only based on the outcomes of a case study conducted in Austria but also of a desk research including reviews of other publications on the farm animal welfare situation in a selection of other EU member states. The results presented in this section do not only include on-farm measured results, but also estimates and extrapolations to other EU member states made on the basis of the collected information.

As specified in the section 1.2 of this report the on-farm measured ANI results have to be distinguished from the outcomes of the *minimum* ANI calculations that are based on a complete adherence to minimum legislative obligations and not measured on-farm. A comparison of the on-farm measured ANI assessments and the calculated *minimum* ANI evaluations was done to detect the farmer’s estimated risk of non-compliance to the specific CC obligations. In cases where the calculated minimum ANI value of the respective ANI scale¹¹ approaches the on-farm measured value we assumed a high risk of non-compliance with the underlying CC obligation.

To illustrate the outcomes of this comparison, the calculated *minimum* ANI scores are plotted against the averages of on-farm measured ANI values. In the following Figure 2.1 the results are exemplarily displayed for fattening pig farms as shares of reached points per ANI scale and category.

Figure 2.1: Fattening pig results for full CC implementation and compliance



Legend: ANI: Animal Needs Index. For further explanation of the ANI categories see the ANI assessment form for fattening pigs given in Annex 9.

Source: Own representation.

When doing ANI on-farm assessments, also violations with the respective legislative requirements can be found. For the EU organic pig fattening standard, these observed violations can be neglected. On conventional non-certified pig fattening farms small violations were detected with regard to the ANI categories “condition of flooring” and “locomotion”, which are reflected in on-farm conditions that nearly approach the calculated minimum standards. Whereas in these fields a high risk of non-compliance with CC relevant legislation can be assumed, the other ANI scales show a higher

¹¹ As illustrated in Table 1.3 nearly all CC obligations are covered by one or more ANI assessment scales.

deviation between calculated minimum and on-farm measured results that suggest for the covered CC obligations only *low to medium*¹² risks of non-compliance.

According to this procedure *medium* risks of non-compliant behaviour on fattening pig farms¹³ were detected concerning the CC obligations minimum housing space (ME1702), the condition of flooring (ME1707), sanitary standards (ME1708), resting place and material for behavioural needs (ME1711), means to minimize aggression (ME1712), animal care in case in case of illness and injury (ME1713), access to feed and clean water (ME1716) and maximum stocking rates for different pig categories (ME1719). Although the CC obligations for tail docking, tooth clipping, nose rings and castration (ME1725) as well as the conditions of farrowing (ME1721) are not covered by ANI assessment scales, the farmer's adherence to these requirements was controlled on-farm. As there were strong violations detected, the risks of non-compliance were assumed as *high*. A more detailed grading of the expected risks of non-compliance per CC obligation involving all other animal types is given in Annex 10 of this report.

As described under point 1.2 of this report the national interpretations and specifications of the CC obligations (SMRs) and the EU organic standard were not only investigated for Austria but for all EU-27 member states. Based on this information *minimum* ANI scores could be calculated for every EU-27 member state.

But CC relevant legislation in the field of animal welfare is in some EU member states exceeded by national law. Due to higher space allowance requirements the legislative standard for conventional pig fattening in the Netherlands¹⁴ and Sweden is significantly higher than in the other EU member states. For conventionally kept breeding sows in Sweden, calves in the UK as well as adult cattle in Austria also stricter national obligations were observed. They are reflected in higher *minimum* ANIs that in some cases reach divergent animal welfare levels in the final CCAT Tool. In accordance to the applied legislative standards Table 2.1 illustrates the diverging animal welfare levels identified for the observed EU member states.

¹² The estimated risks of non-compliance were graded in low, medium and high risks.

¹³ Applies to Austrian farms. As there were only on-farm assessments conducted in Austria the estimated risks of non-compliance were projected on the remaining EU member states.

¹⁴ Higher space allowance for stables built before 01.11.1998 and that have not been rebuilt or altered since 01.11.1998 the minimum requirements for old stables apply. Stables or floors that have been built or rebuilt after 01.11.1998 have to comply with the minimum space requirements for new stables built or rebuilt after 01.11.1998 have to comply with the minimum space requirements for new stables

Table 2.1: Animal welfare levels for EU member states pursuant to ANI 35L

EU Member states	EU CC standard according to ANI				Higher standard according to ANI			
	Calves	Adult cattle	Fatt. pigs	Breed. sows	Calves	Adult cattle	Fatt. pigs	Breed. sows
Austria	X		X	X		X		
Netherlands	X	X		X			X	
Sweden	X	X					X	X
UK		X	X	X	X			
Rest of EU ^{1,2}	X	X	X	X				

Legend: ANI: Animal Needs Index; Breed.: Breeding; CC: Cross Compliance; EU: European Union; Fatt.: Fattening; UK: United Kingdom.

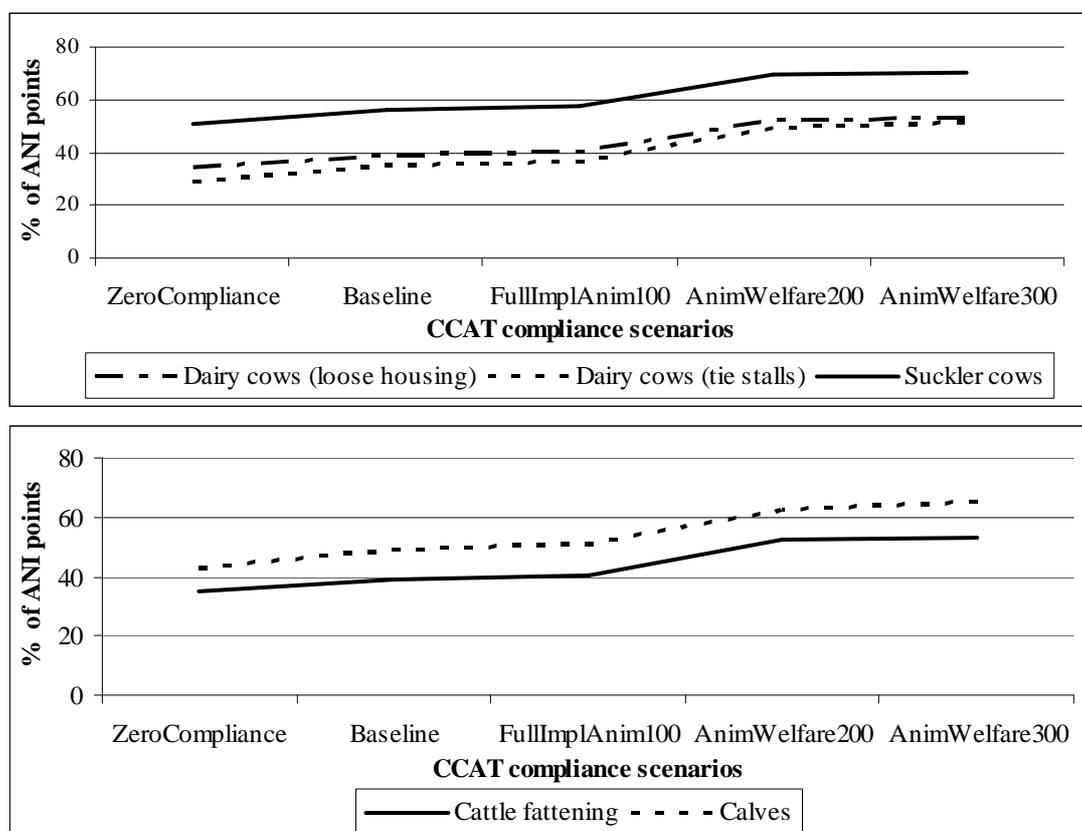
¹: Applies to EU-15 member states including Malta and Slovenia.

²: In cases where specific information about CC exceeding legislative standards is not available, the basic EU CC standard is assumed.

Source: Own representation.

The on-farm assessed and calculated minimum ANIs based on the farmer's adherence to legislative standards were used as the baseline compliance level in the final CCAT Tool. Based on this baseline compliance level impact assessments with variations in implementation situations were simulated by the CCAT Tool. These compliance scenarios can be filled with any compliance rate per selected CC standard that is then used to simulate the impacts. Using the example of bovine animals on conventional non-certified Danish farms, the shares of reached ANI points are illustrated for the applied CC scenarios in the following Figure 2.2.

Figure 2.2: ANI for cattle per compliance scenario on conventional Danish farms



Legend: ANI: Animal Needs Index; CCAT: Cross Compliance Assessment Tool.

Note: ZeroCompliance: Voluntary compliance level and actual implementation.



FullImplAnim100: All SMRs in the field of animal welfare are fully implemented according to the EU regulations.

Baseline: Estimated level in the first year of implementation of a SMR under the CC package which differs per Nuts region and standard.

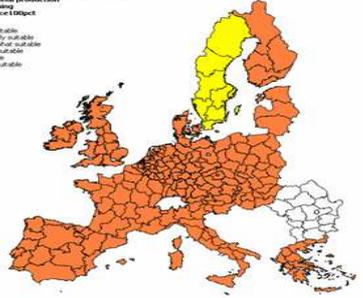
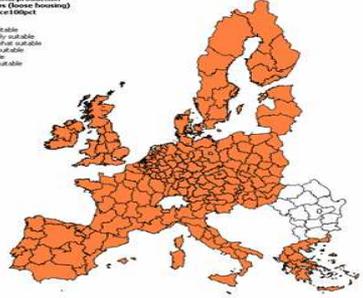
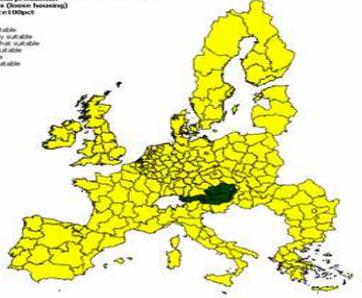
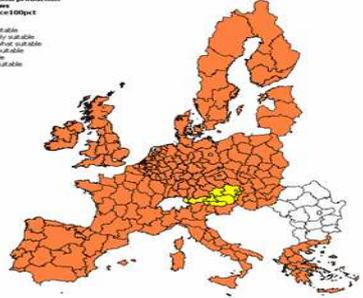
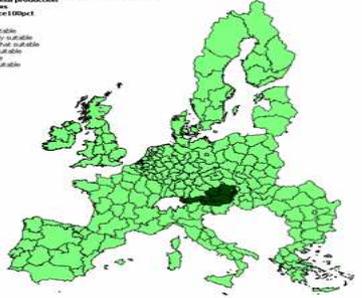
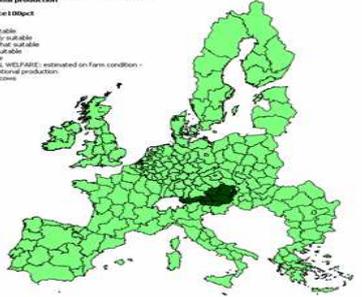
AnimWelfare200/300: In case of increased animal welfare obligations and fully implemented CC SMRs.

Source: Own representation.

As described under point 1.3 of this report the calculated *minimum* ANI scores as well as the on-farm measured ANI scores were aligned to the coloured categories with respect to welfare given in Table 1.6¹⁵. They are in the following used as legends in the resulting CCAT map files. In the Table 2.3 an overview of the final CCAT map files is given for conventional farms. Whereas the welfare categories of the *minimum* ANI scores based on “full compliance” with CC relevant legislation are given in the left column, those of the on-farm measured ANIs are illustrated in the right column of the table. The latter are based on the outcomes of the Austrian field study and projected on the EU-27 member states. But one also has to keep in mind that these are only *minimum* animal welfare conditions assessed according to the respective codes of practice and that the actual implementation may differ to the better or worse, if non-compliance occurs.

¹⁵ Both minimum and on-farm measured ANIs are given for fattening pig farms in Figure 2.1 as point shares per ANI scale.

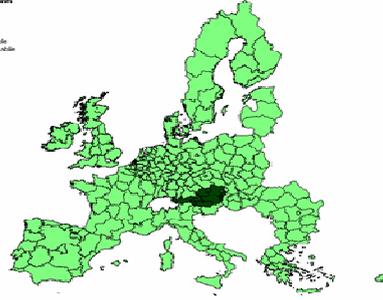
Table 2.3: Animal welfare levels of conventional farms (Denmark)

Animal type	Minimum animal welfare level	Estimated on-farm animal welfare level
Fatt. pigs	<p>ANIMAL WELFARE: legal minimums standard - conventional production - Pig fattening Compliance Impact AN20106</p> 	<p>ANIMAL WELFARE: estimated on farm conditions - conventional production - Pig fattening Compliance Impact AN20106</p> 
Dairy cows	<p>ANIMAL WELFARE: legal minimums standard - conventional production - Dairy cows (Dairy housing) Compliance Impact AN20111</p> 	<p>ANIMAL WELFARE: estimated on farm conditions - conventional production - Dairy cows (Dairy housing) Compliance Impact AN20111</p> 
Suckler cows	<p>ANIMAL WELFARE: legal minimums standard - conventional production - Suckler cows Compliance Impact AN20104</p> 	<p>ANIMAL WELFARE: estimated on farm conditions - conventional production - Suckler cows Compliance Impact AN20104</p> 
Calves	<p>ANIMAL WELFARE: legal minimums standard - conventional production - Calves Compliance Impact AN20105</p> 	<p>ANIMAL WELFARE: estimated on farm conditions - conventional production - Calves Compliance Impact AN20105</p> 

Source: Own representation.

Following the procedure applied for conventional farms in Table 2.2, an overview of the mapped results is given for farms certified under the EU organic standard. Like the CC obligations, the EU organic standard in the field of animal welfare is in some member states exceeded by national law, which leads in dependence of the EU member state to divergent ANI scores that are possibly aligned to different welfare categories.

Table 2.2: Animal welfare levels of organic farms (Denmark)

Animal type	Minimum animal welfare level (org.)	Estimated on-farm animal welfare level
Fatt. pigs	<p>ANIMAL WELFARE: legal minimum standard - organic production: Pig fattening Full/High Impact ANI(0)C3</p> 	<p>ANIMAL WELFARE: estimated on farm condition - organic production: Pig fattening Full/High Impact ANI(0)C3</p> 
Dairy cows	<p>ANIMAL WELFARE: legal minimum standard - organic production: Dairy cows Full/High Impact ANI(0)C1</p> 	<p>ANIMAL WELFARE: estimated on farm condition - organic production: Dairy cows Full/High Impact ANI(0)C1</p> 
Suckler cows	<p>ANIMAL WELFARE: legal minimum standard - organic production: Suckler cows Full/High Impact ANI(0)C3</p> 	<p>ANIMAL WELFARE: estimated on farm condition - organic production: Suckler cows Full/High Impact ANI(0)C3</p> 
Calves	<p>ANIMAL WELFARE: legal minimum standard - organic production: Calves Full/High Impact ANI(0)C4</p> 	<p>ANIMAL WELFARE: estimated on farm condition - organic production: Calves Full/High Impact ANI(0)C4</p> 

Source: Own representation.

The estimated on-farm animal welfare levels based on on-farm ANI measures deviate from the calculated minimum ANI scores that were based on the legislative requirements. Generally it can be observed that the on-farm assessments show significantly higher ANI point shares that run to a large extent parallel to those related to the ANIs based on calculated minimum obligations. It can be observed that organic farms reach significantly higher animal welfare levels than their conventional counterparts according to the applied ANI assessment procedure.

3. Conclusions

Information collected from paying agencies and extension services

Main aim of the data collection from paying agencies was receiving reliable information at least at NUTS 2 level about the degree of compliance in relation to agricultural area, farm sizes and sectoral farm types in selected countries. Despite large time and effort invested only limited data were finally yielded, e.g. information on sectoral farm type, area of farms with breaches and number of animals in farms with breaches was basically missing in all countries. Also coverage of countries/regions planned was not fully reached and selected data were received only from four countries (Czech Republic, Estonia, Spain (Andalucia, Pais Vasco) and Germany (Brandenburg, Rhineland-Palatinate, North Rine-Westphalia)). The main reason for this was that paying agencies are not able or sometimes not willing to provide so detailed information.

As information collection from paying agencies did not give desired results, additional detailed qualitative information was collected from extension services. Nevertheless, full information needed from extension services was only received from EE, CZ and ES, as from Germany only general information was available. However, also information from extension services was not fully satisfactory as sometimes it was very difficult for interviewee to answer to all questions in the questionnaire. This was because employees of extension services are often specialised and therefore don't have an overall picture on situation with all SMRs.

Given the above mentioned limitations on data availability, it is possible to highlight some conclusions and reflections on main GAEC/SMR breaches based on case study data and information collected from paying agencies and extension services:

- Most breaches reported were related to identification and registration of animals (SMR 6-8a)¹⁶, and to farmers' obligation related to mowing/grazing of grassland and to the obligation to keep the field register (GAEC issue "minimum level of maintenance").

In Spain (AND, PV and CLM) breaches related to the water protection against contamination (SMR 4) were also reported as common. The most common types of GAEC breaches in Spain were rather different - in AND in 2005 they were related to avoiding habitats deterioration (other issues) and in 2006 to soil erosion (GAEC 1). In PV soil maintenance (GAEC 1-3) was a main breach. In Murcia GAEC breaches reported as most common were quite different in different years – in 2005 the most common breach was related to soil organic matter (GAEC 2), whilst in 2006 to soil structure (GAEC 3), in 2007 to soil erosion and to soil organic matter (GAEC 1&2) and in 2008 to soil erosion and minimum level of maintenance (GAEC 1&4).

- By the opinion of the representatives of the paying agencies and also extension services, 1) smaller farms are violating CC rules more often and 2) farms with animals have more problems with fulfilling requirements. The

¹⁶ Only DE and ES as these SMRs were in year 2005/2007 not implemented yet in EE and CZ.

main reason behind this pattern is most probably related to the fact that bigger farms are often more “professional” and implementation of given standards is responsibility of certain employee of the farm or enterprise. Farms with animals are violating more CC rules mainly just due to the higher number of obligations (especially SMR 6-8a) related to these farms.

In AND it was reported, that farms located in NVZ are violating more CC rules.

- Judgements on whether the average situation on compliance differs from information gathered by inspections (e.g. because inspection is risk-based) were various per case regions (judgement was given only by representatives of the paying agency of DE, EE and ES).

In Germany it was reported by the representative of the paying agency, that most probably compliance level of the inspected farms is lower than the average compliance level, since 80% of the inspected farms are selected on a risk basis. In Estonia the real situation on compliance is not expected to be too much different from the CC compliance levels in inspected farms. In Spain (AND, CLM) the compliance levels detected in the controls are near to the real CC compliance levels as inspections are based on a representative sample.

- As the control sample drawn is mostly risk-based, the average compliance rate should in general be higher than for those farms in sample selection.
- Potential risk for violations (breach) related to the GAEC and SMR obligations were assessed by representatives of the extension services (in scale no risk-low risk-medium risk-high risk) quite variously per country and GAEC/SMR obligations. As for SMRs highest risk for violations was assessed for obligations related to identification and registration of animals (SMR 6-8a) and water protection against pollution (SMR 4). As for GAECs highest risk for violations was assessed for obligations related to minimum level of maintenance (GAEC 4).
- Farmers’ awareness about cross compliance is rather general and details of requirements are sometimes unclear. Farmers may often not differentiate between CC obligations and obligations coming from other (relevant) legislation.

Case study on animal welfare

Generally it can be noticed that the overall share of SMR breaches detected in the on-farm assessments of the Austrian case study is considerably low. The vast majority of the animal welfare standards set by the CC system are for most conventional livestock farms easily to be met, as they practice due to economical considerations already higher animal welfare standard.

- However, the highest risks of non-compliant behaviour on conventional pig fattening farms were detected for CC obligations with focus on animal interventions (e.g. tail docking, tooth clipping and castration of pigs), conditions of farrowing and in regard to rather cost intensive investments such as the condition of flooring in the stables, the feeding and drinking installations as well as the minimum housing space.

- For cattle farms the highest risks of non-compliance were e.g. detected in regard to animal interventions (docking, castrating, dehorning), space allowance obligations, the condition of flooring as well as light and climate in the stables.¹⁷
- On organic livestock farms only a negligible number of violations against CC obligations were detected. This can be to some extent ascribed to an increased control frequency of organic farms in Austria¹⁸. Moreover, in contrast to the animal welfare standard of conventional farms, the organic standard defined by the EU, obliges in regard to most of the ANI scales significantly higher animal welfare requirements and therefore leads to higher ANI scores and resulting animal welfare levels. Within the ANI indicator framework the adherence to defined free range and pasture conditions plays a crucial role for the final ANI scores. For fattening pigs e.g. a share of approximately 25 % of the maximum sum of reachable points can be ascribed to adherence to free range and pasture obligations¹⁹.
- The ANI point shares related to the on-farm assessment of organic and conventional non-certified farms exceed in the majority of the scales the calculated *minimum* ANI point shares. For fattening pig farms this was in particular the case for the ANI categories “social interaction” and “stockmanship”. This indicates that the farmers may have incentives to voluntarily exceed the minimum requirements given by the CC system in order to achieve better economic results.
- Only slight divergences between the legislative standards of the observed EU-27 member states could be noticed. Deviant national interpretations of the basic CC SMRs as well as exceeding national law were merely identified for 4 member states.

For the impact assessments by means of the CCAT tool no hard data on present levels of compliance was used²⁰. Only more qualitative observations on higher and lower risk for violations per SMR were conducted. Specifications on compliance levels/breaches at sectoral farm level or regional level were not made. Whereas the overall national compliance is mostly estimated at a high level of 80 to 100%, the CCAT tool enables limited distinctions per member state on SMRs with high and low risk for violation.

The collected data show however that the risk of non-compliance per farm group and region is strongly related to specific features at farm level and farming composition at regional level (e.g. livestock type, size of farms, modernisation level of farming). This means that with this information rules for allocating (disaggregating) average compliance levels at national level to regional levels can be formulated. These rules can be linked to specific farm structural and area characteristics per region derived from statistical and spatial data sources. (See deliverables 3.2.3 (Estimating compliance levels and costs of compliance) and 2.8 (Final project results).

¹⁷ A more detailed overview of the estimated risks of non-compliance is given in Annex 10 of this report.

¹⁸ The controls are conducted by independent control bodies for organic agriculture.

¹⁹ See the ANI assessment forms for different livestock types given in the Annexes 5, 6 and 7 of this report.

²⁰ Including the baseline year.

References

- Amon, T., Amon, B., Ofner, E., Boxberger, J., 2001. Precision of assessment of animal welfare by the “TGI 35 L” Austrian needs index. *Acta Agric. Scand. A: Anim. Sci. Suppl.* 30, 114-117.
- Austrian Ministry of Agriculture, 2008. 49. Grüner Bericht gemäß § 9 des Landwirtschaftsgesetzes BGBl. Nr. 375/1992. Wien, 2008.
- Bartussek, H., 1990. Der Tiergerechtheitsindex. In: Bartussek, H., Eisenhut, M., Haiger, A., Storhas, R. (Eds.), *Naturnähe in der Veredelungswirtschaft – ein Definitionskonzept, Bericht über die 8. IGN-Tagung vom 22. – 24. 2. 1990 an der LFS Schlierbach, BAL Gumpenstein, Irdning*, 34 – 46.
- Bartussek, H., 1995a. Tiergerechtheitsindex für Mastschweine und leere und tragende Zuchtsauen. TGI 35 L/1995 Mastschweine, TGI 35 L/1999 Zuchtsauen. <http://www.bartussek.at/pdf/tgischweine.pdf>, accessed 18 March 2010.
- Bartussek, H., 1995b. Tiergerechtheitsindex für Legehennen. TGI 35 L/1995 Legehennen. <http://www.bartussek.at/pdf/tgilegehennen.pdf>, accessed 18 March 2010.
- Bartussek, H., Leeb, C.H., Held, S., 2000. Animal Needs Index for cattle. ANI 35 L/2000-cattle. Federal Research Institute for Agriculture in Alpine Regions BAL Gumpenstein, Irdning. <http://www.bartussek.at/pdf/anicattle.pdf>, accessed 18 March 2010.
- Bio-Austria Vorarlberg, 2009. Was gibt es Neues ab 1. Jänner 2009. http://www.bio-austria.at/bundeslaender/vorarlberg/biobauern_partner/aktuell/vorarlberg__13, accessed 14 May 2010.
- Hörning, B., 2000. Vergleich der Tiergerechtheit von Milchviehlaufställen auf konventionellen und ökologischen Betrieben. *Lebendige Erde* 6:51, 38-39.
- Kasperczyk, N. 2009. Case study data collection from Germany. Written information.
- Martínez Alonso, P. 2009. Case study data collection from Spain. Written information.
- Prazan, J. 2009. Case study data collection from Czech Republic. Written information.
- Peepson, A., Mikk, M. Case study data collection from Estonia. Written information.
- Peepson, A., Mikk, M., Elbersen, B., Annen, D. 2009. CCAT Deliverable 3.5: Selection and characterisation of case study areas and data and information collection plan.

Annexes

Annex 1. Case study questionnaire for paying agencies

Interview Record

Name:

Institution:

Address and telephone number:

Email:

Job Title:

Date of interview:

1. Sample selection

- 1.1. From what data source is the sample of farms for inspection drawn?
- 1.2. What proportion of the sample is selected at random and what proportion is risk-based? Please specify as a %-age.
- 1.3. Risk-based selection
 - 1.3.1. What are the risk factors considered? (e.g. previous non-compliance with a particular Directive, location of farm in a NVZ, size of farm)
 - 1.3.2. What weight is given to these risk factors?
 - 1.3.3. Does risk assessment focus on particular to SMRs or GAECs? If so, please provide details.
- 1.4. Has paying agency changed control criteria and procedures in 2007 compared to 2005? If yes, please specify *why* and *how*.

2. Control procedures and degree of compliance

- 2.1. Are all SMRs and GAEC standards checked in all inspected farms? If no, please specify which SMRs/GAECs are checked in which farms?
- 2.2. To which obligations of SMRs or GAECs are most of the breaches related to? Could you specify the main reasons for these breaches?
- 2.3. Could you give your judgement whether the average situation on compliance differs from information gathered by inspections (e.g. because inspection is risk-based)? If yes, in what respect?
- 2.4. Which farm types/size classes etc. are mostly violating CC rules and why?

3. Please provide following detailed information on degree of compliance:

General data (2005 and 2007) per region (NUTS 2):

- Number of farms that applied for Single Payment Scheme (SPS)/Single Area Payment Scheme (SAPS);
- Share of farms that applied for SPS/SAPS having animals (by animal species – pigs, cattle, sheep).
- Area and number of livestock (by animal species – pigs, cattle, sheep) of farms that applied for SPS/SAPS;
- Division of farms that applied for SPS/SAPS by:
 - Size classes: 1-10 ha; >10-30 ha; >30-50 ha; >50-100 ha; >100-300 ha; > 300 ha;
 - Sectoral types:
 - Specialist field crops (arable);
 - Specialist horticulture;
 - Specialist permanent crops;
 - Specialist grazing livestock;
 - Specialist granivours-pigs;
 - Specialist granivours-poultry;
 - Mixed livestock holdings;
 - Mixed crops and livestock.

Data on inspected farms (2005 and 2007) per region (NUTS 2):

- Number of farms inspected per GAEC/SMR (sub) requirement, total area and total livestock (by animal species – pigs, cattle, sheep) of these farms;
- Farms inspected per GAEC/SMR (sub) requirement by size classes:
 - 1-10 ha; >10-30 ha; >30-50 ha; >50-100 ha; >100-300 ha; > 300 ha;
- Share of inspected farms having animals (by animal species – pigs, cattle, sheep) per GAEC/SMR (sub) requirement;
- Number of inspected farms, total area and total livestock (e.g. in heads, LU or %) per GAEC/SMR (sub) requirement by sectoral farm class e.g.:
 - Specialist field crops (arable);
 - Specialist horticulture;
 - Specialist permanent crops;
 - Specialist grazing livestock;
 - Specialist granivours-pigs;

- Specialist granivours-poultry;
- Mixed livestock holdings;
- Mixed crops and livestock.

Data on non-compliance (violations) cases (2005 and 2007) per region (NUTS 2):

- Number of non-compliant farms, total area and total livestock (by animal species – pigs, cattle, sheep) per GAEC/SMR (sub) requirement
- Division of non-compliant farms by size classes per GAEC/SMR (sub) requirement:
 - 1-10 ha; >10-30 ha; >30-50 ha; >50-100 ha; >100-300 ha; > 300 ha;
- Number of farms, total area and total livestock (e.g. in heads, LU or %) non-compliant per GAEC/SMR (sub) requirement by sectoral farm class e.g.:
 - Specialist field crops (arable);
 - Specialist horticulture;
 - Specialist permanent crops;
 - Specialist grazing livestock;
 - Specialist granivours-pigs;
 - Specialist granivours-poultry;
 - Mixed livestock holdings;
 - Mixed crops and livestock.
- Share of non-compliant farms having animals (by animal species – pigs, cattle, sheep) per GAEC/SMR (sub) requirement.

Annex 2. Case study questionnaire for extension services

1. Please identify main changes in farm practices resulting from implementation of cross compliance (GAEC/SMR).
2. Please identify GAEC and SMR obligations which are most difficult for farmers to implement.
3. Which farm types/size classes etc. are mostly violating CC rules and why?
4. Have the SMRs/GAECs had an impact on production costs/farm income? If so, please identify which obligations have had an impact on production costs and assess the extent of impact(s).
5. Please assess the level of farmers' awareness about cross compliance:

- | | |
|--------------------------|---|
| <input type="checkbox"/> | mostly not familiar with cross compliance |
| <input type="checkbox"/> | only general knowledge about cross compliance |
| <input type="checkbox"/> | general knowledge and more familiar with some of the GAECs/SMRs |
| <input type="checkbox"/> | familiar with most of obligations of GAECs/SMRs |

6. Please assess (mark with "X") potential risk for violations (breach) related to the GAEC and SMR obligations (EE, CZ – all GAECs, SMRs 1-8a; ES, GER all GAECs and all SMRs):

GAEC obligations	no risk for violations	low risk for violations	medium risk for violations	high risk for violations
GAEC1				
GAEC2				
GAEC3				
...				

SMR obligations	no risk for violations	low risk for violations	medium risk for violations	high risk for violations
SMR1				
Obligation1				
Obligation2				
...				
SMR2				
Obligation1				

Obligation2				
...				
SMR3				
Obligation1				
Obligation2				
...				
...				

Annex 3. Case study data collection format



case_study_needed
_data_072009.xls

Annex 4. Overview of risk factors used for sample selection for inspections

Germany

RLP: Risk factors to be considered are: farm size, livestock (depending on standard), water protection areas, previous non-compliance with directives, Natura 2000 areas, landscape elements, output of sewage sludge, field crops, land taken out of production.

The weight given to these risk factors depends on the corresponding SMR.

NRW: In NRW two separate risk assessments are carried out by two control authorities, each responsible for a group of the SMRs. In order to determine the potential risk of a farm, NRW has developed a risk point system which is calculated on the basis of the application data of each farmer applying for SPS/SAPS (in NRW 50.000). Parameters which are included in this point system are for the 'veterinary field': livestock, animal type, number of animals, animal feed registration, farm size, previous non-compliance etc. For the 'environmental field' and GAEC IV are the parameters: area of farm, existing landscape elements, livestock, risk premium for sheep and goats, sewage sludge application, farm class, application for the first time, previous non-compliance, area in Natura 2000, area in water protection area, pesticides storage, uptake of farm fertilizer etc.

NRW has developed a 'proportional selection procedure'. All risk points of all applicants are added and a 'setpoint' is defined (for example 500 points). The total sum of points will be divided by the setpoint and a computer selects 400 farms out of the total sample. 10 % of the sample for inspection are farms with previous non-compliance. (Their chance to be selected is ten times higher than those of the other farms.) Problem: farms with a small basic unit 'suffer' from this statistical procedure. 1 Farm with breaches out of a total of 5 farms corresponds to a 20% rate.

BB: Risk parameters and weights:

Risk parameters	Groundwater	Nitrate	Plant protection	sewage sludge	SPA	GAEC IV	FFH	sheep/goats	pigs	food/feeding stuff	TSE	Animal welfare calves	Animal welfare pigs	AW-animals kept for farming
selection percentage (%)	1	1	1	1	1	1	1	3	1	1	1	1	1	1
random	0,2	0,2	0,2	0,2	0,2	0,2	0,2	0,75	0,2	0,2	0,2	0,2	0,2	0,2
non-compliance in previous years	0,2	0,2	0,2	0,2	0,2	0,2	0,2	1,35	0,2	0,2		0	0,2	0
area of application	0,2	0,2	0,3	0,6	0,2	0,2	0,6			0,3	0,4			

area taken out of production					0,4	0,4								
horticulture	0,2	0,2	0,3											
livestock husbandry	0,2	0,2												
size of livestock							0,45	0,6	0,3		0,8	0,6	0,8	
ruminants / non-ruminants										0,4				
change of livestock							0,45							

Spain

AND: A risk analysis is applied to the whole proceedings. A potential risk value is assigned to each proceeding depending on:

2005

- Number of SMRs and GAECs that the farmer should comply with.
- Complaints properly documented and presented before the sample selection.

2006

- Number of SMRs and GAECs that the farmer should comply with.
- Complaints properly documented and presented before the sample selection
- Proceedings corresponding to subsidies applications presented in 2005, in which cross compliance violations have been proved.
- Farms located in Natura 2000 Network.

2007

- Number of SMRs and GAECs that the farmer should comply with.
- Complaints properly documented and presented before the sample selection
- Proceedings corresponding to subsidies applications presented in 2005, in which cross compliance violations have been proved.
- Farms located in Natura 2000 Network.
- Applicants with livestock holdings registered in the SIGGAN database: pigs, cattle, sheep and goats.
- Farms located in NVZ.

In AND in 2006 value 1 for each SMR/GAEC was given. Weight of risk factors used in 2007:

Risk factors	Value
Livestock holdings (pigs)	1
Farms located in NVZ	1
Farms located in Natura 2000 Network	3

Proceedings with CC violations in 2006	5
Proceedings with CC violations in 2005	5
Complaints	5
All farms	6
Farms with UAA	3
Livestock holdings	5
Livestock holdings of cattle	1
Livestock holdings of sheep/goats.	1

PV: Risk factors are basically the same in Álava, Guipuzcoa and Bizcaia, although each of them decides the weight and the punctuation gift to each factor, depending on the specific characteristics of each region.

The risk factors are the following:

- CC controls results of the previous year.
- Farm size
- Farms located in Natura 2000 network area
- Farms located in a NVZ
- Farms with plots with high slope
- Farms near to water bodies
- Farms with livestock
- Any factor that in a specific year is considered interesting for a region

CLM: Regional Plans of Cross Compliance Controls of 2005 and 2007 are attached, where the criteria and their weights in the selection procedure are explained.

Information about Risk-based selection in the Regional Plans of Cross Compliance Controls:

2005:

SMR and GAECs: value 1 except:

Those related to slope conditions → 1.5

Those related to over-exploited aquifers → 2

Those related to NVZ → 1.5

Farms located in protected areas → 1.5

Farms with permanent pastures without livestock → 1.5

Farms with stock density > 1.7 LU/ha → 2

Farms with submitted complaints → 3

2007:

Farms located in Special Protection Areas for Birds → 2

Farms located in other protected area → 2

Farms located in NVZ → 2

Farms located in areas with high risk of erosion → 3

Farms located in areas with over-exploited aquifers → 3

- Farms with complaints submitted → 4
- Farms with CC violations in 2005 and 2006 → 4
- Farms with recurred CC violations in 2006 → 4
- For livestock holdings:
 - Number of animals in the farm → 0-2
 - Number of movements in relation to the animal census → 0-2
 - Public Health criteria → 0-3

MUR: Risk analysis may ensure that all cross compliance aspects are represented in the controls:

1. Complaints properly documented and presented before the sample selection (10 points)
2. Proceedings with cross compliance violations not rectified in the previous year (10 points)
3. Farmers declaring fewer plots than in the previous year (2 points)
4. Farms located in Natura 2000 Network. (10 points)
5. Farms located in NVZ (10 points)
6. Farms with subsidies greater than 350000 € (2 points)
7. Farms with irrigated plots (2 points)
8. Farm size (2 points)
9. Number of livestock types (2.5 points)
10. Farmers authorized to use sewage sludge. (10 points)
11. Farms near to water bodies. (2 points)
12. Farms with plots with slope above 10%. (10 points)
13. Farms located in areas with high risk of erosion. (10 points)
14. Farms with retain terraces. (10 points)
15. Permanent pastures. (5 points)
16. Farmers receiving different subsidies types and therefore having to be controlled about different issues (0.5 points for each subsidy type with a maximum of 2.5 points)
17. Farmers inspected and sanctioned during 2008 by the National Programme of monitoring the use of plant protection products (5 points)
18. Farmers with proved CC violations in Identification and Registration of animals during 2008. (5 points)
19. Farmers inspected and sanctioned during 2008 by the National Plan of Waste Research, carried out in the Murcia Region. (1 point for suspicious cases and 2 points for proved cases)
20. Farmers inspected and sanctioned during 2008 by the Plan of Fodder Monitoring, carried out in Murcia Region. (5 points)
21. Farmers with disciplinary measures during 2008, as a consequence of a CC violation in prevention, control and eradication of Transmissible Spongiform Encephalopathy, Foot and Mouth Disease and Bluetongue. (5 points)
22. Farmers controlled during 2008 if a CC violation have been detected.
 - Violations without subsidies reduction: 2 points.
 - Violations with 1% of subsidies reduction: 3 points.
 - Violations with 3% of subsidies reduction: 4 points.
 - Violations with a 20% of subsidies reduction: 99 points.
 - Without violations: -99 points
23. Farmers applying also for agri-environmental programmes. (3 points)

24. Farms sanctioned during the last year due to the violation of the following legislation:

- Law 43/2003, of 21 of November, Forest (10 points).
- Law 42/2007, of 13 of December, Natural Heritage and Biodiversity (10 points)
- Law 7/1995, of 21 of April, wild fauna of Murcia region (10 points)
- Law 3/1995, of 23 of March, livestock roads (10 points)

To obtain the sample for CC controls a 20-25% is randomly selected and roughly 80% risk based. The selection will be made from all the farmers receiving direct payments from subsidies regimes listed in Title IV (R 1782/2003).

- 60% Farmers with punctuation >25
- 30% Farmers with punctuation $\geq 15 \leq 25$
- 10% farmers with punctuation <15

Czech Republic

Risk factors and weights used:

Description	Yes/no	Factor weight
Land cover - grass	0 ; 1	0,2
Plot on slope above 12°	0 ; 1	0,3
Arable land on slope above 3°	0 ; 1	0,2
Number of field blocks is 35 and more	0 ; 1	0,1
Non-compliance to GAEC in two years before	0 ; 1	0,2

Estonia

Risk factors and weights:

- Farms sanctioned during previous 3 years
- Farms applied support close to minimum levels of area (1-1,5 ha)
- New applicants
- Changes – applicants have made changes compared to previous years application
- Farms not inspected during last 3 years
- Farms with over-applied fields (applied support for more land than registered)
- Farms with under-applied fields (applied less support than registered)

- Sum applied/weight
 - o 0 – 15 000 EEK 0,9
 - o 15 000,01 – 40 000 EEK 1,0
 - o 40 000,01 – 125 000 EEK 1,1
 - o > 125 000,01 EEK 1,2
- Applied area
 - o 1,0 – 50,0 ha 0,9
 - o 50,01 – 100,0 ha 1,0
 - o 100,01 – 300,0 ha 1,1
 - o > 300,01 1,2
- No of fields
 - o 1 – 5 0,9

○ 6 – 15	1,0	
○ 16 – 30	1,1	
○ > 31	1,2	
- applies certain support	yes	1,1
	no	1,0
- over-applied	yes	1,1
	no	1,0
- previous violations	yes	1,1
	no	1,0
- last years inspection OK	yes	0,8
	no	1,0
- field in Natura 2000	yes	1,1
	no	1,0

Annex 5. Used checklist for animal welfare obligations of pigs

Ergebnisse Auflageneinhaltung (CC) Schwein

Datum der Beurteilung: _____

Betriebsinhaber/Betriebsnummer: _____

Verwendete Skala: [1: Auflagen gerade noch eingehalten; 2: Gute Auflageneinhaltung; 3: Sehr gute Auflageneinhaltung]

	Sauen		Eber		Ferkel		Jungsauen		Mast		Anm.	Kürz.				
	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein						
A ALLGEMEINE HALTUNGSVORSCHRIFTEN FÜR ALLE SCHWEINE																
1												3				
2												3				
3												1				
4												3				
5												3				
6												1				
B BODENBESCHAFFENHEIT – GRUNDLEGENDE ANFORDERUNGEN																
1												3				
2												3				
3												3				
4												3				
C BODENBESCHAFFENHEIT – BESONDERE ANFORDERUNGEN																
	Sauen		Eber		Saugferkel		Absetzferkel		Jungsauen		Zuchtläufer		Mast	Anm.	Kürz.	
	J	N	J	N	J	N	J	N	J	N	J	N				J
1	20		20		10		13		20		18		18		ÜF -/13/20	3
	80		80		50		50		80		80		80			
2														ÜF -/13		
3																
4															ÜF -/13/20	
D BEWEGUNGSFREIHEIT																
	Sauen		Eber		Ferkel		Jungsauen		Mast		Anm.	Kürz.				
	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein						
1												3				
E STALLKLIMA																
1												3				
2												3				
3												3				
4												3				
F LICHT																
1												ÜF 20				
2												1				
G LÄRM																
1												1				
2												1				
H BESCHÄFTIGUNGSMATERIAL																
1												ÜF -/13				
I ERNÄHRUNG																
	Sauen	Eber	Saug-	Absetz-	Jung-	Zucht-	Mast	Anm.	Kürz.							

					ferkel		ferkel		sauen		läufer				
	J	N	J	N	J	N	J	N	J	N	J	N			
1														3	
2														1	
3														3	
4														3	
5														3	
6														3	
7															
8															
9	40		40						40						
	Absetzferkel, Mastschweine und Zuchtläufer														
	-15 kg		-30 kg		-40 kg		-50 kg		-60 kg		-85 kg		-110 kg		
	12		18		21		24		27		30		33		
J BETREUUNG															
	Sauen		Eber		Ferkel		Jungsauen		Mast		Anm.	Kürz.			
	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein					
1											ÜF 08	1			
2												3			
3												3			
4												3			
5												1			
6												1			
7											ÜF -/13	1			
8												3			
K EINGRIFFE															
1													3		
2													3		
3													3		
4													3		
5													3		
6													3		
7													3		
8													3		
9													5		
L GRUPPENHALTUNG															
	Sauen						Jungsauen				Anm.	Kürz.			
	Ja	Nein					Ja	Nein							
1											ÜF -/13	3			
2	2,50						1,85								
	2,25						1,65								
	2,05						1,50								
3	1,30						0,95				ÜF -/13				
4											ÜF -/13				
M EINZELSTANDHALTUNG															
1	65						60				ÜF 13/20	(5)			
	190						170								
N HALTUNG IN ABFERKELBUCHTEN															
	Sauen und Jungsauen										Anm.	Kürz.			
	Saugferkel bis 10 kg					Saugferkel über 10 kg									

	Ja	Nein	Ja	Nein								
1						3						
2						1						
3	4		5		ÜF 13/20							
4					ÜF 13/20							
5						3						
6						3						
O ERNÄHRUNG												
	Sauen		Jungsauen		Anm.	Kürz.						
	Ja	Nein	Ja	Nein								
1						3						
P BETREUUNG												
1						3						
2						1						
3						1						
Q LIEGENEST												
			Saugferkel		Anm.	Kürz.						
			Ja	Nein								
1						1						
2						3						
R ABSETZZEITPUNKT												
1						1						
2						1						
S FERKELKÄFIGE												
	Absetzferkel		Mast		Zuchtläufer		Anm.	Kürz.				
	Ja	Nein	Ja	Nein	Ja	Nein						
1												
T PLATZBEDARF BEI GRUPPENHALTUNG												
1						3						
2	Absetzferkel, Mastschweine und Zuchtläufer											
	bis 20		bis 30		bis 50		bis 85		bis 110		über 110	
	0,20		0,30		0,40		0,55		0,70		1,00	
	J	N	J	N	J	N	J	N	J	N	J	N
U ZUSAMMENSTELLUNG VON GRUPPEN												
1						1						
2						1						
3						3						
V DOKUMENTATION												
1						1						
W EBERHALTUNG												
			Eber		Anm.	Kürz.						
			Ja	Nein								
1												
2						1						
3												

Legende: ÜF 08: ÜF bis 01.01.2008; ÜF 13: ÜF bis 01.01.2013; ÜF 20: ÜF bis 01.01.2020;
 ÜF -/13: Je nach betriebsindividueller Situation keine ÜF oder ÜF bis 01.01.2013; ÜF -
 /13/20: Je nach betriebsindividueller Situation und Bundesland keine ÜF, ÜF bis 01.01.2013
 oder bis 01.01.2020

Annex 6. Used checklist for animal welfare obligations of cattle

Ergebnisse Auflageneinhaltung (CC) Rind

Datum der Beurteilung: _____

Betriebsinhaber/Betriebsnummer: _____

Verwendete Skala: [1: Auflagen gerade noch eingehalten; 2: Gute Auflageneinhaltung; 3: Sehr gute Auflageneinhaltung]

	Milchkühe		Jungvieh		Kälber		Mastvieh		Mutterkühe & Kälber		Zuchtstiere		Anm.	Kürz.
	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein		
A BODENBESCHAFFENHEIT														
1														3
2													ÜF -/12	3
3													ÜF 12/20	
4														1
5														3
6														3
7													ÜF-/12/20	
8													ÜF 12	
9														
10													ÜF 12	
11														
12													ÜF 12	
B BEWEGUNGSMÖGLICHKEIT & SOZIALKONTAKT														
1													ÜF 10/12	
2													ÜF -/12	(5)
3													ÜF 12	
4														
5													ÜF 12	(5)
6													ÜF 12/20	(5)
7													ÜF 12/20	
8														
9													ÜF 12/20	
10													ÜF 12/20	
11													ÜF 12/20	
12														
13														(5)
14														(5)

4																																	
1	X																3																
5																																	
1																	3																
6																																	
1																	1																
7																																	
1																																	
8																																	
1																																	
9																																	
2																																	
0																																	
2																																	
1																																	
C LUFT, LICHT, LÄRM																																	
1																		3 3															
2																		3 3															
3																		3 3															
4																		3 3															
5																	ÜF 20																
6																		1 1															
7																																	
	Milchkühe		Jungvieh		Kälber		Mastvieh		Mutterkühe & Kälber		Zuchtstiere		Anm.	Kürz.																			
	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein	Ja	Nein																					
D TRÄNKE & FÜTTERUNG																																	
1																		ÜF -/20															
2																		3															
3																		1															
4	X																3																
5																																	
6																	ÜF 12																
7																																	
8																	ÜF -/12																
9																																	
1																																	
0																																	
1																	X																3
1																																	
1	3																																
2																																	
1	3																																
3																																	
1	3																																
4																																	
1	3																																
5																																	

E BETREUUNG														
1	Nein											ÜF 08	1	
2	Nein												3	
3														3 (5)
4														
5														
6a														
6b														
7														1
8	Nein												<u>3</u>	
9														<u>3</u>
<u>10</u>	Nein												3 <u>3</u>	
<u>11</u>														3 <u>3</u>
12														3
13	Nein												1	
F EINGRIFFE														
1	Nein												3	
2	Nein												3	
3														3
4														3
5														5
6	Nein												6	
G GANZJÄHRIGE HALTUNG IM FREIEN														
<u>1</u>														<u>1</u>
2														
3														
4														
5														
<u>6</u>	Nein												<u>3</u>	

Legende: ÜF 12: ÜF bis 01.01.2012; ÜF 20: ÜF bis 01.01.2020; ÜF -/12: Je nach betriebsindividueller Situation keine ÜF oder ÜF bis 01.01.2012; ÜF 12/20: Je nach betriebsindividueller Situation und Bundesland ÜF bis 01.01.2012 oder 01.01.2020; ÜF -/12/20: Je nach betriebsindividueller Situation und Bundesland keine ÜF, ÜF bis 01.01.2012 oder 01.01.2020.

Bei unterstrichenen Fragen sind Nicht-Erfüllungen nur für Rinder ab 6 Monaten in das Bewertungsblatt einzutragen (Für Kälber entweder nicht oder bereits unter Punkt 1 geregelt)

Annex 7. ANI assessment form for adult cattle (ANI 35L/1996)

	TGI 35L/1996 Rinder	
CCAT-Erhebung 2009	Betriebsnummer:	

Name _____ des

Betriebes: _____

1) Rasse: Fleckvieh Pinzgauer Schwarzbunte Braunvieh

2) Tierzahl: _____ Stück behornt unbehornt 3) GVE (Ø max.): _____

4) Nutzungsrichtung: Milchkühe Mutterkühe Jungvieh

5) Bewegungsmöglichkeit: Auslauf _____ Tage _____ Std./Tag

Weide _____ Tage _____ Std./Tag Alpung _____ Tage

6) Stallform:

Laufstall

Laufstallsystem: Liegeboxenstall Tretmiststall Tieflaufstall

Liegefläche: Hochbox Tiefbox

Lauffläche: Spaltenboden Planbefestigt

Anbindestall

Anbindesystem: Kurzstand Mittellangstand

Kuhtrainer: ja nein

7) Besonderheiten:

8) Festgestellte Mängel:

9) Gründe für Nichteinhaltung:

Datum: _____ Erhebungsperson: _____

1. Bewegungsmöglichkeit (min. 0; max. 10,5 Punkte)

Spalte	a			b	c	d	e	f
	Laufstallsysteme			Abliegen Aufstehen 2)	Standmaße Standbegrenzung vorne u. hinten 2)	Spiel der Anbindg. in Längs- und Querrichtung (cm) 3)	separater Auslauf Freien	
Punkte	begehbare Gesamtbewegungsfläche [m²/GVE] 1)						bequem	bequem
	Kühe enthornt	Kühe behornt	Jungvieh Mastvieh	≥ 8	≥ 9	≥ 6		
3,0	≥ 8	≥ 9	≥ 6	bequem			≥ 270	
2,5	≥ 7	≥ 8	≥ 5				≥ 230	
2,0	≥ 6	≥ 7	≥ 4	mittel			≥ 180	
1,5	≥ 5	≥ 6	≥ 3				≥ 120	Alpung ≥ 120
1,0			≥ 2,5		bequem	≥ 60/40	≥ 50	≥ 50
0,5				behindert	mittel	≥ 40/30		≥ 30
0	< 5	< 6	< 2,5	sehr behindert	beeengt	< 40/30		

b: Tiefstreu/Tretmist, keine Boxenartige Unterteilung => bequem
 - bei Jung- u. Mastrindern weniger
 - behindert, wenn sich 25% größten Tiere beim Aufstehen/Abliegen schwer tun.
 - dabei auf Verletzungen im Hüftbereich und Nacken achten
 - Boxenlänge beachten
 c: bequem wenn:
 Krippensockel maximal 32 cm hoch
 Standlänge 0,95*diagonale Körperlänge+30cm
 Standbreite 0,9*Widerristhöhe
 Bei einem Verstoß als mittel einzustufen
 d: wenn Kuherzieher, dann 0 Punkte
 f: Auslauftage auf Weide sind Gemäß Spalte e zu zählen und Punkte für Alpung gemäß f dazu zu geben.

2. Sozialkontakt (min. -1,0; max. 10 Punkte)

Spalte	a			b	c	d	e
	Laufstallsysteme begehbare Gesamtbewegungsfläche 1) in m²/GVE oder Anbindehaltung			Herdenstruktur bei Laufställen u. Anbindeställe 3)	Nachzucht 4)	separater Auslauf	
Punkte	Kühe enthornt	Kühe behornt	JV/MV 2)			eig. Nachzucht u. mind. Sichtkontakt zur Herde	Auslauf Tage/Jahr 5)
	3	≥ 8	≥ 8	≥ 6			
2,5	≥ 7	≥ 7	≥ 5			≥ 270	
2	≥ 6	≥ 6	≥ 4	Familienstruktur		≥ 230	
1,5	≥ 5		≥ 3	Herde ohne Stier		≥ 180	Alpung ≥ 120
1			≥ 2,5	stabile Alters- oder Leistungsgruppen	eig. Nachzucht u. mind. Sichtkontakt zur Herde	≥ 120	≥ 50
0,5	Anbindehaltung				eig. Nachzucht in getrenntem Stall	≥ 50	≥ 30
0	< 5	< 6	< 2,5	Anbindehaltung	teilweise Zukauf		
-0,5				häufige Umplazierung i.d. Anbindehalt. häufige Umgruppierung in Laufstallgruppen	häufiger Zukauf u. Nachzucht in getr. Stall, u.od. häufige Integration einzelner Tiere in Laufstallgruppen		

b: Sozialkontakt wie in Mutterkuherde ist optimal. Mutterkühe verschiedenen Alters und Jungvieh mit einem Altbullen
 c: Befindet sich Jungvieh im Sommer auf Alm, im Winter aber im Stall mit Sichtkontakt, so ist dies Sichtkontakt gleichzusetzen.
 d: gilt nur als Bewegungsfläche wenn mind. 5m²/GVE und 30 Tage Nutzung im Jahr oder 3m²/GVE und 24Std pro Tag verfügbar
 6) Bei Weidehaltung oder Alpung werden d und e berücksichtigt

3. Bodenbeschaffenheit (min. -2,5; max. 8 Punkte)

Spalte	a		b	c	d	e	f
	Liegefläche		Sauberkeit	Trittsicherheit	Aktivitätsbereich, Gangflächen, Triebwege (bei Anbindeh.: nur wenn Auslauf) 2) 3)	separater Auslauf 2) 3)	Alm Weide 4)
Punkte	Weichheit	1)					
	2,5	≥ 6 cm Stroh					
2,0	3-6 cm Stroh; ≥ 6 cm Sand o.ä.						
1,5	Gummi weich, < 3 cm Stroh < 6 cm Sand					planbefestigt, sauber, griffig	
1,0	Holz, PVC, Gummi hart, Asphalt	sauber	griffig	griffig, technisch einwandfrei, klauenfreundlich	natürlicher Boden, trocken, fest	Almböden, oder steile Hänge	
0,5	Beton, Kunststoff- oder Metallroste	mittel	mittel	mittel	mittel	ebene oder leicht geneigte Fl.	
0	Betonspalten gemäß ÖNORM L 5290	schmutzig	rutschig	rutschig, technische Mängel, klauenbelastend	rutschig, technische Mängel, klauenbelastend		
-0,5	Betonspalten technisch schlecht	sehr schmutzig	sehr rutschig	sehr rutschig und/oder schmutzig, arge Mängel	sehr rutschig und/oder schmutzig, arge Mängel, Morast		

1) In Mehrflächenbuchten gilt jener Buchtenbereich als Liegefläche, der von den Tieren während der Hauptruhezeit deutlich als Liegeplatz bevorzugt wird
 2) Es gilt der Zustand des schlechtesten Bereichs, der von allen Tieren begangen werden muss.
 3) Mind. 5m²/GVE und 30 Tage pro Jahr begehrbar, oder 3m²/GVE und 24Std pro Tag nutzbar
 4) Bei Weidehaltung oder Alpung werden e und f berücksichtigt

4. Licht, Luft und Lärm (min. -2,0; max. 9,5 Punkte)

Spalte	a	b	c	d	e		f
					separater Auslauf, Weide ⁴⁾	Ø Stunden/Tag ⁵⁾	
Punkte	Tageslicht im Stall	Luftqualität, Luftraten im Stall ¹⁾	Zugluft im Ruhebereich ²⁾	techn. Lärm im Stall ³⁾	Tage/Jahr		
2,0	Offenfrontstall				≥ 230		≥ 8
1,5	sehr licht	Offenfrontstall oder optimale Luftqualität			≥ 180		≥ 6
1,0	licht	gute Luftqualität	ausgeschlossen	kein Lärm	≥ 120		≥ 4
0,5	mittel	ausreichend	gelegentlich	leichter Lärm	≥ 50		≥ 2
0	dunkel	schlecht	häufig	deutlicher Lärm			
- 0,5	sehr dunkel	sehr schlecht	immer	starker Lärm			

3) Lärmbelästigung durch dauernde Geräusche, besonders durch Lüftungsanlage
 5) es gilt der auf 365 Tage bezogene Mittelwert zwischen Auslauftagen im Sommer und im Winter

5. Betreuungsintensität (min. -3,0; max. 8 Punkte)

Spalte	a	b	c	d	e	f	g
Punkte	Sauberkeit: Buchten, Futter- und Tränkeeinrichtungen ¹⁾	Technischer Zustand der Stalleinrichtungen ²⁾	Zustand der Haut ³⁾	Sauberkeit der Tiere	Zustand der Klauen ⁴⁾	Technopathien ⁵⁾	Tiergesundheit ⁶⁾
1,5					tadellos	keine	sehr gut
1,0	sauber	gut	gut		gut	wenig	gut
0,5	mittel	mittel	mittel	sauber	mittel	mittel	mittel
0	unzureichend	Mängel	unzureichend	mittel	unzureichend	häufig	schlecht
- 0,5	schmutzig	schlecht	schlecht	schmutzig	schlecht	sehr häufig	sehr schlecht

1) alle für die Tiergesundheit wichtigen Bereiche einschließlich Futter
 2) Tränken, Buchtbegrenzungen, mechanische Einrichtungen, Lüftung etc
 3) Gesundheitszustand der Haut und des Fells, Ektoparasiten etc.
 4) Klauenlänge, Kronsaumschwellungen und -verletzungen, lose Klauenwand usw.
 5) Vermeidbare haltungsbedingte Schäden und Verletzungen
 6) Erkrankungen die über Haut-, Klauen-, Gelenks-, und Beinschäden hinausgehen. Fruchtbarkeit, Langlebigkeit.
 Wenn dazu keine Unterlagen vorliegen, sollte der Bereich als Mittel bewertet werden

Summenblatt

Einflussbereiche	Spalten							Punktesummen
	a	b	c	d	e	f	g	
I Bewegungsmöglichkeit	Laufstallsystem		Anbindehaltung		Auslauf Tage/Jahr	Weide Alm Tage/J.		
	Gesamt-bew. fläch.	Abliegen Aufstehen	Standmaße	Spiel d. Anbindg.				
II Sozialkontakt	Gesamt-bew. fläch.	Herdenstruktur	Nachzucht	Auslauf Tage/Jahr	Weide Tage/Jahr			
III Bodenbeschaffenheit	Liegefläche			Aktivitätsbereich	Auslauf	Weide Alm		
	Weichheit	Sauberk.	Rutschsicherheit					
IV Licht u. Luft	Licht	Luftqual. Im Stall	Zugluft im Liegebereich	Lärm	Auslauf Tage/Jahr	Auslauf Std./Tag		
V Betreuungsintensität	Sauberkeit im Stall	Zustand der Stalleinrich.	Zustand der Haut	Sauberkeit der Tiere	Zustand der Klauen	Technopathien	Tiergesundheit	
Punktesummen - GESAMT = TGI =								
TGI/V ja <input type="checkbox"/> nein <input type="checkbox"/>								

Annex 8. ANI assessment form for calves (ANI 35L/1996)

	TGI 35L/1996 Kälber	
CCAT-Erhebung 2009	Betriebsnummer:	

Name des Betriebes: _____

1) Rasse: Fleckvieh Pinzgauer Schwarzbunte Braunvieh

2) Tierzahl: _____ Stück es wird enthornt es wird nicht enthornt

3) Nutzungsrichtung: Mast- Mutterkuh- Zuchtkälber

4) Bewegungsmöglichkeit: Auslauf _____ Tage _____ Std./Tag
 Weide _____ Tage _____ Std./Tag
 Alpung _____ Tage

5) Stallform:

Laufstall

Laufstallsystem: Tretmiststall Tieflaufstall Liegeboxenstall

Liegefläche: Hochbox Tiefbox

Lauffläche: Spaltenboden Planbefestigt

Anbindestall !!!

Ausführung (Kurzstand, Mittellangstand, am Gang angebunden, Kuhtrainer,...):

6) Besonderheiten:

7) Festgestellte Mängel:

8) Gründe für die Nichteinhaltung:

Datum: _____ Erhebungsperson: _____

Bewegungsmöglichkeit (min. -0,5; max. 10,5 Punkte)

Spalten	a				b	c	d	e	f
Punkte	Gruppen- und Boxenhaltung ohne Anbindung für die Tiere jederzeit zugängliche Gesamtbodenfläche einschließlich eines ganzjährig jederzeit zugänglichen Auslaufes [m ² /Tier] ¹⁾				Abliegen Aufstehen ²⁾	Anbindehaltg Standmaße, -begrenzungen, Spiel der Anbindung ²⁾	separater Auslauf ins Freie		
	bis 120 kg	bis 150 kg	bis 180 kg	bis 230 kg			Auslaufgröße [m ² /Tier] ⁴⁾	[%] der Tage/Umtrieb (Tage/Jahr) ⁵⁾	Weide [%] der Tage/Umtrieb ⁶⁾
3,0	≥ 1,9	≥ 2,2	≥ 2,5	≥ 2,9	bequem				
2,5	≥ 1,5	≥ 1,8	≥ 2,0	≥ 2,4				≥ 75 % (≥ 270 T)	
2,0	≥ 1,3	≥ 1,5	≥ 1,7	≥ 2,0	mittel	bequem		≥ 63 % (≥ 230 T)	
1,5	≥ 1,2	≥ 1,3	≥ 1,5	≥ 1,8				≥ 50 % (≥ 180 T)	
1,0	≥ 1,1	≥ 1,2	≥ 1,4	≥ 1,6		mittel	≥ 2,0	≥ 33 % (≥ 120 T)	≥ 33 %
0,5	≥ 1,00	≥ 1,15	≥ 1,29	≥ 1,52	behindert		≥ 1,5	≥ 17 % (60 T.)	≥ 17 %
0	≥ 0,94	≥ 1,10	≥ 1,23	≥ 1,45	sehr behind.				
- 0,5	< 0,94	< 1,10	< 1,23	< 1,45	beengt		≥ 1,23		

- 1)
- 2) bequem: Tiefstreu, Tretmist, Systeme ohne boxenartige Unterteilung der Liegeflächen, es sei denn, Bauliche Strukturen behindern Verhalten offensichtlich.
- Behindert: wenn größere Tiere nur schwer aufstehen oder abliegen können.
- Technopathien im Bereich Hüfthöcker und Widerrist. (Boxenbreite weniger als 90% der Widerristhöhe)
- Mittel: in allen anderen Fällen
- 3) je vom Stallbereich separate Fläche (nicht Weide) mindestens 1Std täglich an mind. 35 Tage im Jahr zugänglich für alle Tiere
- 4)
- 5)
- 6) bei Weidehaltung werden Spalten d,e,f berücksichtigt

Sozialkontakt (min. -1,0; max. 9,5 Punkte)

Spalten	a				b	c	d	e
Punkte	Gruppen- und Einzelhaltung für die Tiere jederzeit zugängliche Gesamtbodenfläche einschließlich eines ganzjährig jederzeit zugänglichen Auslaufes [m ² /Tier] bzw. Einzelhaltung ¹⁾				Herdenstruktur bei Laufstall und Anbindehaltung ²⁾	Herkunft und Anlieferung der Kälber ³⁾	separater Auslauf [%] der Tage /Umtrieb (Tage/Jahr) ⁴⁾	Weide [%] der Tage/Umtrieb ⁶⁾
	bis 120 kg	bis 150 kg	bis 180 kg	bis 230 kg				
3,0	≥ 1,9	≥ 2,2	≥ 2,5	≥ 2,9				
2,5	≥ 1,5	≥ 1,8	≥ 2,0	≥ 2,4			≥ 75 % (≥ 270 T.)	
2,0	≥ 1,3	≥ 1,5	≥ 1,7	≥ 2,0	Familienstruktur		≥ 63 % (≥ 230 T.)	
1,5	≥ 1,2	≥ 1,3	≥ 1,5	≥ 1,8	Herde ohne Stier		≥ 50 % (≥ 180 T.)	
1,0	≥ 1,1	≥ 1,2	≥ 1,4	≥ 1,6	stabile Altersgruppen	günstig	≥ 33 % (≥ 120 T.)	≥ 33 %
0,5	Anbinde-/ Einzelhaltung mit Sichtkontakt				Einzelhaltung		≥ 17 % (60 T.)	≥ 17 %
	≥ 1,00	≥ 1,15	≥ 1,29	≥ 1,52	mit Sichtkontakt	mittel		
0	Anbinde-/ Einzelhaltung ohne Sichtkontakt				Einzelhaltung ohne Sichtkontakt	ungünstig		
	≥ 0,94	≥ 1,10	≥ 1,23	≥ 1,45	häufige Umgruppierung			
- 0,5	< 0,94	< 1,10	< 1,23	< 1,45				

- a) bei Einzelhaltung (Boxen oder Iglus) können nur 0,5 bzw. 0 Punkte vergeben werden. 0,5 wenn ständiger Sichtkontakt möglich
- b) Familienstruktur: alle Altersgruppen zusammen bis zum Absetzen mit einem Deckbullen.
- Herde ohne Stier: geschlechtlich gemischter Familienbestand ohne Bullen, auch bei Integration der Kälber in die Zuchtherde nach Trockenstehen der Mütter
- c) günstig: geschlossener Betrieb, 100% eigene Nachzucht
- mittel: teilweiser Kälberzukauf oder Neuzusammenstellung der Gruppen
- ungünstig: Zukauf über Händler aus verschiedenen Betrieben
- 6) bei Weide werden d und e berücksichtigt

Bodenbeschaffenheit (min. -2,5; max. 8 Punkte)

Spalte	a	b	c	d	e	f
Punkte	Liegefläche ¹⁾			Aktivitätsbereich, Gangflächen, Triebwege (bei Anbindeh.: nur wenn Auslauf) ²⁾	separater Auslauf ^{2) 3)}	Weide ⁴⁾
	Weichheit.	Sauberkeit	Trittsicherheit			
2,5	≥ 6 cm Stroh					
2,0	3-6 cm Stroh; ≥ 6 cm Sand o.ä.					
1,5	Gummi weich, < 3 cm Stroh < 6 cm Sand				planbefestigt, sauber, griffig	
1,0	Holz, PVC, Gummi hart, Asphalt	sauber	griffig	griffig, technisch einwandfrei, klauenfreundlich	natürlicher Boden, trocken, fest	Almböden, oder steile Hänge
0,5	Beton, Kunststoff- oder Metallroste	mittel	mittel	mittel	mittel	ebene oder leicht geneigte Fl.
0	Betonspalten gemäß ÖNORM L 5290	schmutzig	rutschig	rutschig, technische Mängel, klauenbelastend	rutschig, technische Mängel, klauenbelastend	
- 0,5	Betonspalten technisch schlecht	sehr schmutzig	sehr rutschig	sehr rutschig und/oder schmutzig, arge Mängel	sehr rutschig und/oder schmutzig, arge Mängel, Morast	

- 1) im Mehrflächenbereich gilt jener Buchtenbereich als Liegefläche, der hauptsächlich als Liegeplatz genutzt wird
- 2) es gilt der schlechteste Bereich, der von Tieren begangen werden muss
- 3) nicht Weide! Muss mindestens 1 Std an 60 Tagen im Jahr zur Verfügung stehen. Ist Auslaufvorplatz überdacht, dann +0,5 Punkte Zuschlag
- 4) bei Weide werden e und f berücksichtigt

Licht, Luft und Lärm (min. -2,5; max. 8,5 Punkte)

Spalte	a	b	c	d	e	f
					Auslauf ⁴⁾ oder Weide	
Punkte	Tageslicht im Stall	Luftqualität im Stall ¹⁾	Zugluft im Ruhebereich	techn. Lärm im Stall ²⁾	Stunden pro Tag	Schattenspender und Windschutz ⁵⁾
2,0	Offenfrontstall					
1,5	sehr licht	Offenfrontstall 1 oder optimale Luftqualität			≥ 9	beides ausreichend
1,0	licht	gute Luftqualität	ausgeschlossen	kein Lärm	≥ 6	eines von beiden ausreichend
0,5	mittel	ausreichend	gelegentlich	leichter Lärm	≥ 3	beides aber zu wenig
0	dunkel	schlecht	häufig	deutlicher Lärm		eines aber zu wenig
- 0,5	sehr dunkel	sehr schlecht	immer	starker Lärm		keine

2) Lärm durch dauernde technische Geräusche, vor allem Lüftung
 4) Auslauf bei Kälberglu auch anzurechnen, wenn dieser mindestens 0,22*G^{0,66} m²/Tier
 5) Ausreichend für Schattenspender und Windschutz: 1,10m²/150kg Kalb im Hochsommer beschattete und gegen Wind gut geschützte Bodenfläche.
 Als Grenzwert für „zu wenig“ gelten 50% der vorgenannten Werte

Betreuungsintensität (min. -3,0; max. 8 Punkte)

Spalte	a	b	c	d	e	f	g
Punkte	Sauberkeit: Buchten, Futter- und Tränkeinrichtungen	Technischer Zustand der Stalleinrichtungen ¹⁾	Durchschnittliche Kälberverluste pro Jahr [%] ²⁾	Sauberkeit der Tiere	Zustand der Klauen und Gelenke, der Haut und Hautanhangsorgane ³⁾	Stallbuchführung	Tiergesundheit ⁴⁾
1,5					sehr gut		sehr gut
1,0	sauber	gut	≤ 2,5	sauber	gut	genau/vollständig	gut
0,5	mittel	mittel	≤ 5,0	mittel	mittel	teilweise	mittel
0	schmutzig	Mängel	≤ 10,0	schmutzig	schlecht	nein	schlecht
- 0,5	sehr schmutzig	sehr schlecht	> 10,0	sehr schmutzig	sehr schlecht		sehr schlecht

1) Tränken, Buchtenbegrenzungen, mechanische Einrichtungen, Lüftung etc.
 2) Durchschnitt von 3 Jahren. Beurteilung erfolgt nur in Betrieben mit mehr als 50 Kälbern pro Jahr
 In kleineren Betrieben wird Spalte g entsprechend stärker gewichtet:
 Sehr Gut=2,5
 Gut=2
 Mittel=1
 3) Klauenlänge, Kronsaumschwellungen, Gelenkschwellungen, Lahmheiten, Beschädigungen und Verletzungen an Körperoberfläche, Ektoparasiten
 4) Häufigkeit von Leistungseinbrüchen, Erkrankungen und Behandlungen

Summenblatt

Bereiche	Spalten							Summe
	a	b	c	d	e	f	g	
I Bewegungsmöglichkeit	Begehbare Fläche im Stall	Abliegen Aufstehen	Anbindehaltung	Auslaufgröße	Auslauf-tage pro Jahr (Umtrieb)	Weide-tage		
II Sozialkontakt	Begehbare Fläche im Stall	Herdenstruktur	Herkunft und Anlieferung der Kälber	Auslauf-tage pro Umtrieb	Weide-tage pro Umtrieb			
III Bodenbeschaffenheit	Liegefläche: Weichheit	Liegefläche: Sauberkeit	Liegefläche: Trittsicherheit	Aktivitäts- und Gangflächen	separater Auslauf	Weide		
IV Licht und Luft	Licht im Stall	Luftqualität Luftraten	Zugluft	Lärm	Auslauf-stunden pro Tag	Schattenspender, Windschutz		
V Betreuungsintensität	Sauberkeit im Stall	Zustand Stalleinrichtung	Kälberverluste	Sauberkeit der Kälber	Zustand der Klauen usw.	Stallbuchführung	Tiergesundheit	
				Punktesumme-GESAMT = TGI =				
				TGI/V ja <input type="checkbox"/> nein <input type="checkbox"/>				

Annex 9. ANI assessment form for fattening pigs (ANI 35L/1995)

TGI 35L/1995 Mastschweine		
CCAT-Erhebung 2009	Betriebsnummer:	

Name des Betriebes:

- 1) Tierzahl (gesamt): _____ Stück Endgewicht: _____ kg
- 2) Auslauftage: _____ Std/Tag: _____
- 3) Herkunft Ferkel: eigene
 von Ferkelerzeuger (1 Betrieb)
 vom Ferkelring (mehrere Betriebe)
- 4) Buchtengröße (m²): _____ Tiere pro Bucht: _____ Stück
- 5) Stallform: Vollspalten Teilspalten Eingestreut _____ Andere

- 6) Liegefläche: Stroh Holz Beton Spalten Andere _____
- 7) Anzahl geschlossener Seiten: _____
- 8) Besonderheiten:

9) Festgestellte Mängel:

10) Gründe für Nichteinhaltung:

Datum: _____

Erhebungsperson: _____

1. Bewegungsmöglichkeiten (min. -1,0; max. 9,5 Punkte):

Spalten	a				b	c	d	e	f
	für die Tiere jederzeit zugängliche Gesamtbodenfläche einschließlich eines ganzjährig jederzeit zugänglichen Auslaufes [m ² /Tier] ¹⁾								
Punkte	bis 30 kg	bis 60 kg	bis 110 kg	bis 140 kg	Beschäftigungsmöglichkeit im Stall ²⁾	Scheuermöglichkeiten ³⁾	separater Auslauf ins Freie ⁴⁾		
							Auslaufgröße [m ² /Tier] ⁵⁾	[%] der Tage/Umtrieb (Tage/Jahr) ⁶⁾	Weide [%] der Vegetationsz. (T./J.) ⁷⁾
3,0	≥ 0,66	≥ 1,00	≥ 1,50	≥ 1,80					
2,5	≥ 0,58	≥ 0,87	≥ 1,33	≥ 1,56					
2,0	≥ 0,50	≥ 0,75	≥ 1,15	≥ 1,35	sehr gut				
1,5	≥ 0,45	≥ 0,65	≥ 1,00	≥ 1,18	gut			täglich	
1,0	≥ 0,40	≥ 0,57	≥ 0,87	≥ 1,02	befriedigend	Bürsten, schräge Kanten oder Pfosten	≥ 1,33	≥ 75 % (≥ 270 T)	≥ 75 % (135 T.)
0,5	≥ 0,35	≥ 0,50	≥ 0,75	≥ 0,88	gering	senkrechte Pfosten oder Kanten	≥ 0,87	≥ 50 % (≥ 180 T)	≥ 50 % (90 T.)
0	≥ 0,30	≥ 0,45	≥ 0,65	≥ 0,75	sehr gering		≥ 0,65	≥ 33 % (≥ 120 T)	≥ 33 % (60 T.)
- 0,5	< 0,30	< 0,45	< 0,65	< 0,75	keine				

2) Einstufung nach untenstehender Tabelle
 4) muss mind. 2 Std täglich an mind. 120 Tagen im Jahr begehbar sein

Punkte	Material	Menge pro Tag [kg/ GVE ¹⁾	Struktur	Art der Vorlage	Einbringhäufigkeit
4	Stroh, Heu, Grünfutter, Grassoden, Kompost	≥ 5,0	Langstroh, Langheu, Grass dünne Zweige	in Raufe	täglich frisch
3	Holzstücke, Knochen, tote Erde	≥ 2,5	gehäckseltes Stroh usw., Erde, grobe Holzstücke,	teilweise in Raufe, teilweise am Boden	alle zwei Tage
2	bewegliches Spielzeug aus Gummi o.ä.	≥ 1,0	fein gehäckselte,	am Boden	wöchentlich
1	fix montierte Ketten, o.ä.,	≥ 0,4	gemahlen; Sägespäne	fix montiert	seltener
0	keines	≥ 0,2	nichts	nichts	nichts

Punktesumme aus Tabelle 2	Beurteilung gemäß Blatt 1, Spalte b	Bewertungspunkte in Blatt 1
> 16	sehr gut	2,0
13 - 16	gut	1,5
10 - 12	befriedigend	1,0
7 - 9	gering	0,5
3 - 6	sehr gering	0
0 - 2	keine	- 0,5

2. Sozialkontakt (min. -2,0; max. 10 Punkte):

Spalten	a				b	c	d	e		f		g
	für die Tiere jederzeit zugängliche Gesamtbodenfläche einschließlich eines ganzjährig jederzeit zugänglichen Auslaufes [m ² /Tier] ¹⁾							Herdenstruktur, bzw. Tiere pro Gruppe ⁴⁾		separater Auslauf ins Freie ⁵⁾		
Punkte	bis 30 kg	bis 60 kg	bis 110 kg	bis 140 kg	Verfügbarkeit von Einrichtungen ²⁾	Anlieferung der Jungtiere ²⁾	Anzahl dichter Seiten um die Liegefläche ³⁾	beide Geschl.	nur ein Geschl.	[%] der Tage/Umtrieb (Tage/Jahr) ⁶⁾	Durchgangsbreite z. Auslauf [cm/T] ⁷⁾	
2,0	≥ 0,58	≥ 0,87	≥ 1,33	≥ 1,56	sehr gut							
1,5	≥ 0,45	≥ 0,65	≥ 1,00	≥ 1,18	gut			Familienhalt		täglich		
1,0	≥ 0,40	≥ 0,57	≥ 0,87	≥ 1,02	befriedigend	günstig	≥ 3	≤ 15	≤ 10	≥ 75 % (≥ 270 T)	≥ 5; 6,5; 8	
0,5	≥ 0,35	≥ 0,50	≥ 0,75	≥ 0,88	genügend	mittel	2	≤ 30	≤ 15	≥ 50 % (≥ 180 T)	≥ 4; 5; 6	
0	≥ 0,30	≥ 0,45	≥ 0,65	≥ 0,75	schlecht	ungünstig	1	> 30	≤ 30	≥ 33 % (≥ 120 T)	≥ 3; 4; 5	
- 0,5	< 0,30	< 0,45	< 0,65	< 0,75	sehr schlecht		0	≥ 60	> 30			

2) Tränke- und Futtereinrichtungen: Einstufung Siehe Tabelle zu Blatt 2
 c) Anlieferung der Jungtiere: günstig: geschlossener Betrieb ohne Gruppenvermischung
 mittel: wie oben mit Gruppenvermischung oder Zukauf von einem Betrieb
 ungünstig: andernfalls

3. Bodenbeschaffenheit (min. -2,5; max. 9 Punkte):

Spalte	a	b	c	d	e	f	g	
Punkte	Anzahl unterschiedl. Bodenarten ¹⁾	Liegefläche ²⁾ Verformbar. u. Wärmedämmg.		Sauberkeit	Trittsicherheit	Aktivitäts- und/oder Kotbereich ³⁾	separater Auslauf ⁴⁾	Suhle im Freien ⁵⁾
2,0		planbefestigt, vollflächig eingestreut ≥ 6 cm						
1,5		planbefestigt, vollflächig eingestreut ≥ 3 cm			griffig, trocken	planbefestigt, sauber, eingestreut		
1,0	≥ 3	planbefestigt gedämmt, oder eingestreut < 3 cm	planbefestigt sauber	planbefestigt griffig	griffig und feucht	planbefestigt, griffig, sauber	ja, ausreichend	
0,5	2	planbefestigt, ungedämmt, einstreulos	Vollspaltenboden planbefestigt mittel-sauber		Spaltenboden gut; planbefestigt mittel-griffig naß	Spaltenboden gut; planbefestigt, mittel-griffig, naß	ja, zu wenig	
0	1	Kunststoff- oder Metallroste	schmutzig	rutschig	rutschig und/oder schmutzig	rutschig, schmutzig		
- 0,5		Betonspalten	sehr schmutzig	sehr rutschig	Spaltenboden schlecht; sehr rutschig und/oder sehr schmutzig	Spaltenboden schlecht; tiefer Morast		

1) es zählt die jederzeit begehbbare Fläche mit unterschiedlichen Bodenbereichen. Punktzahl richtet sich nach Anzahl unterschiedlicher Böden
 2) kann zwischen Aktivitäts- und Mistbereich unterschieden werden sind die Flächen getrennt zu bewerten und ein Mittelwert zu bilden
 3) eine vom Stallbereich getrennte Bewegungsfläche, wenn überdacht dann Zuschlag von 0,5 Punkten
 4) ausreichend wenn Hälfte der Tiere gleichzeitig suhlen kann

4. Licht, Luft und Lärm (min. -2,5; max. 9 Punkte):

Spalte	a	b	c	d	e	f	g
						Auslauf ⁴⁾ und Weide Stunden pro Tag	Schattenspende r und/oder Suhle auf der Weide ⁵⁾
Punkte	Tageslicht im Stall	Luftqualität u. Luftraten im Stall ¹⁾	Zugluft im Ruhebereich	Duschen im Stall ²⁾	techn. Lärm im Stall ³⁾		
1,5	sehr licht und gleichmäßig ausgeleuchtet	optimal				≥ 8	Schattenspende r und Suhle ausreichend
1,0	licht und gleichmäßig ausgeleuchtet	gut	geschlossen	ausreichend vorhanden	kein Lärm	≥ 6	Schattenspende r oder Suhle ausreichend
0,5	mittel, ungleichmäßig	ausreichend	gelegentlich	vorhanden zu wenig	leichter Lärm	≥ 4	Schatten und Suhle, zu wenig
0	dunkel, sehr ungleichmäßig	schlecht	häufig		deutlicher Lärm		Schatten oder Suhle, zu wenig
- ,0,5	sehr dunkel	sehr schlecht	immer		starker Lärm		keine

2) Ausreichend: ein Sprühkegel pro 10 Tiere
 Zu wenig: 20 Tiere pro Sprühnippel
 3) Lärm durch dauerhafte technische Geräusche

5. Betreuungsintensität (min. -3,0; max. 9 Punkte):

Spalte	a	b	c	d	e	f	g
Punkte	Sauberkeit: Buchten, Futter- und Tränkeeinrichtungen	Technischer Zustand der Stalleinrichtungen ¹⁾	Verluste [%]	Zustand der Haut und Hautanhangsorgane ²⁾	Zustand der Klauen und Gelenke ³⁾	Stallbuchführung	Tiergesundheit ⁴⁾
1,5			$\leq 0,5$	sehr gut	sehr gut		sehr gut
1,0	sauber	gut	≤ 1	gut	gut	genau/vollständig	gut
0,5	mittel	mittel	$\leq 1,5$	mittel	mittel	teilweise	mittel
0	schmutzig	Mängel	$\leq 2,0$	schlecht	schlecht	nein	schlecht
- 0,5	sehr schmutzig	sehr schlecht	$> 2,0$	sehr schlecht	sehr schlecht		sehr schlecht

1) Tränken, Buchtenbegrenzungen, Lüftung etc
 2) Beschädigungen, Verletzungen der Tiere, Ektoparasiten
 3) Klauenlänge, Kronsaumschwellungen, Verletzungen, Gelenkschwellungen
 4) Häufigkeit von Leistungseinbrüchen, Erkrankungen und Behandlungen die nicht unter 2) und 3) fallen

Summenblatt

Einflussbereiche	a	b	c	d	e	f	g	Punktesumme
I. Bewegungsmöglichkeit	Begehbare Fläche im Stall	Beschäftigungsmaterial	Scheuermöglichkeit.	Auslaufgröße	Auslauf-tage/Jahr	Weidetage		
II. Sozialkontakt	Begehbare Fläche	Verfügbarkeit v. Einrichtungen	Anlieferg. Jungtiere (ZS:Gruppenbildung)	Anzahl dichter Seiten um Nest	Herdenstruktur, Gruppen-größe	Auslauf Tage/Jahr (Umtriebe)	Durchgang zum Auslauf	
III. Bodenbeschaffenheit	Anzahl Bodenarten	Liegefläche: Weichheit, Dämmung	LF: Sauberkeit	LF: Trittsicherheit	Aktivitäts- u. Kotbereich	Auslauf	Suhle	
IV. Licht und Luft	Licht im Stall	Luftqualität Luftraten	Zugluft	Duschen	Lärm	Auslauf Std./Tag	Schattenspender, Suhle	
V. Betreuungsintensität	Sauberkeit im Stall	Zustand Stall-einrichtung	Verluste (gilt nicht für ZS)	Zustand der Haut	Zustand Klauen u. Gelenke	Stallbuch-führung	Tierge-sundheit	
Gesamtpunkte								

Annex 10. Estimated risk of non-compliance with CC obligations

CC relevant legal act	CCAT obligation code	Short description of CC obligation	Expected risk of non-compliance			
			0	1	2	3
Directive 91/629/EC	ME1602	Minimum space for group / individual housing			X	
	ME1603	Requirements for individual housing		X		
	ME1604	Accommodation materials and construction		X		
	ME1605	Electrical circuits and equipment		X		
	ME1606	Adequate air circulation, temperature etc.			X	
	ME1607	Suitable lighting			X	
	ME1608	Condition of flooring			X	
	ME1609	Regular inspections of technical equipment		X		
	ME1610	Sanitary standards (building, feeding and drinking installations etc.)		X		
	ME1611	Requirements for noise control*		X		
	ME1612	Regular inspections of calves (record keeping)		X		
	ME1613	Restrictions for tethering, chains, muzzles, interventions, etc.		X		
	ME1614	Appropriate diet and feeding intervals		X		
	ME1615	Access to feed and clean water		X		
	ME1616	Animal care in case of illness and injury		X		
	ME1617	Bedding and playing material			X	
	ME1618	Provide cow colostrums to calves as soon as possible after birth		X		
	ME1619	Qualified and sufficient staff		X		
ME1620	Minimum age at slaughter		X			
ME1621	Protection for calves not kept in buildings		X			
ME1622	Minimum requirements on stocking rate			X		
Directive 91/630/EC	ME1702	Minimum housing space (possibility to turn around, hear, see and smell other pigs, unobstructed floor)			X	
	ME1703	Accommodation materials and construction		X		
	ME1704	Electrical circuits and equipment*		X		
	ME1705	Adequate air circulation, temperature etc.		X		
	ME1706	Suitable lighting		X		
	ME1707	Condition of flooring			X	
	ME1708	Sanitary standards (building, feeding and drinking installations etc.)*			X	
	ME1709	Regular inspections of automated and mechanical equipment*		X		
	ME1710	Regular inspections of pigs (record keeping)*		X		
	ME1711	Comfortable resting place and suitable material for behavioural needs			X	
	ME1712	Means to minimize aggression and prevent fighting			X	
	ME1713	Animal care in case of illness and injury*			X	
	ME1714	Qualified and sufficient staff		X		
	ME1715	Appropriate diet and feeding intervals		X		
	ME1716	Access to feed and clean water			X	
	ME1717	Restrictions for tethering		X		
	ME1718	Requirements for noise control		X		
	ME1719	Maximum stocking rates for different pig categories*			X	
ME1720	Requirements for minimum slaughter age*		X			
ME1721	Conditions of farrowing				X	

CROSS-COMPLIANCE ASSESSMENT TOOL

EC contract number 44423-CCAT

Deliverable number: 3.8/3.9



	ME1722	Sufficient space to suckle and means to protect piglets (farrowing rails etc.)	X		
	ME1723	Requirements for weaning	X		
	ME1724	Requirements for grouping/mixing pigs	X		
	ME1725	Requirements for tail docking, tooth clipping, nose rings, castration			X
	ME1726	Protection for pigs not kept in buildings	X		
Directive 98/58/EC	ME1802	Qualified and sufficient staff	X		
	ME1803	Regular inspections of animals	X		
	ME1804	Animal care in case of illness and injury		X	
	ME1805	Record keeping (medical treatment, mortalities)	X		
	ME1806	Freedom of movement / sufficient space		X	
	ME1807	Accommodation materials and construction	X		
	ME1808	Adequate air circulation, temperature etc.		X	
	ME1809	Suitable lighting		X	
	ME1810	Separate accommodation for sick or injured animals	X		
	ME1811	Protection for animals not kept in buildings (+ well-drained lying area)	X		
	ME1812	Regular inspection of automatic or mechanical equipment	X		
	ME1813	Appropriate diet and feeding intervals	X		
	ME1814	Access to feed and clean water		X	
	ME1815	Prohibition to administer substances harmful to animals	X		
ME1816	Requirements for breeding procedures	X			
ME1817	Requirements for mutilation and other interventions (dehorning, castrating, docking etc.)			X	
ME1818	Keeping of animals for farming purposes only if accordable to normal breed characteristics	X			

Source: Own representation.

Legend: *: These obligations are not covered by all member states