



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR HEALTH AND FOOD SAFETY

Health and food audits and analysis

DG(SANTE) 2016-8765 - MR

FINAL REPORT OF AN AUDIT
CARRIED OUT IN
AUSTRIA
FROM 07 NOVEMBER 2016 TO 11 NOVEMBER 2016
IN ORDER TO
EVALUATE THE MEASURES TO ENSURE THE WELFARE OF CATTLE ON DAIRY
FARMS

In response to information provided by the competent authority, any factual error noted in the draft report has been corrected; any clarification appears in the form of a footnote.

Executive Summary

The report describes the outcome of an audit in Austria from 7 to 11 November 2016 as part of the published Directorate General Health and Food Safety audit programme.

The objective of the audit was to evaluate the suitability and effectiveness of the measures in place to ensure that cattle on dairy farms are not caused any unnecessary pain, suffering or injury.

The report concludes that the official controls that are in place provide assurances of compliance with animal welfare requirements for cattle in dairy farms. These controls are strengthened by the access that authorities have to information collected by other actors and managed by the Animal Health Service.

The authorities use European Union's funding to promote the change from tethering systems to loose-housing. This should help reducing the number of non-compliances related to tethering.

The most relevant actors use not only resource-based indicators but also animal-based indicators to evaluate and assist farmers in ensuring animal welfare on dairy farms.

This report makes no recommendations to the Austrian authorities.

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ABBREVIATIONS AND DEFINITIONS USED IN THIS REPORT

Abbreviation	Explanation
CCA	Central Competent Authority
DG	Directorate General
EU	European Union
SCC	Somatic Cell Count
TGD	Austrian Animal Health Service (<i>Österreichischer Tiergesundheitsdienst</i>)
The Recommendation	Council of Europe recommendation concerning cattle of 21 October 1988

1 INTRODUCTION

This audit took place in Austria from 7 to 11 November 2016 as part of the planned audit programme of Directorate General (DG) Health and Food Safety. An opening meeting was held with the competent authorities on 7 November 2016. At this meeting, the objectives of, and itinerary for, the audit were confirmed by the audit team and additional information required for the satisfactory completion of the audit was requested.

The audit team comprised two auditors from DG Health and Food Safety and a national expert from Germany and were accompanied throughout the audit by two representatives from the central competent authority (CCA), the Federal Ministry of Health and Women (*Bundesministerium für Gesundheit und Frauen*).

2 OBJECTIVES AND SCOPE

The objective of the audit was to evaluate the suitability and effectiveness of the measures in place to ensure that cattle on dairy farms are not caused any unnecessary pain, suffering or injury.

In particular the audit tried to identify what factors influence the steps¹ taken by dairy farmers to minimise the occurrence of mastitis, lameness, injuries, reproductive and metabolic diseases and disease in calves.

The scope of the audit includes:

- Welfare conditions of dairy cows and calves; calves are included in relation to the prevention and treatment of disease and any mutilations which are carried out. For dairy cows the audit will focus on the factors which contribute to prevention and treatment of mastitis, lameness, reproductive and metabolic diseases. These factors might include:
- Buildings, equipment, land, biosecurity, health management, etc.;
- National policy on animal welfare on dairy farms;
- National legislation and measures such as cross-compliance;
- Official controls on dairy farms and their outcomes;
- Other measurements of animal welfare outcomes (e.g. lameness scores, body condition scores, somatic cell count, longevity);
- Dissemination of information on husbandry systems and information on the impact of change from applied research, economic studies;
- The ability, knowledge and competence of dairy farmers, and measures that influence their husbandry practices;
- Mechanisms for supporting change to husbandry systems (e.g. funding, communication, training and education);

¹ In order to interpret that owners or keepers of cattle on dairy farms take “all reasonable steps”, specific articles from Council of Europe recommendation concerning cattle are included in the criteria for the audit.

- Involvement of the dairy industry in the above issues (e.g. dairy processors, milk purchasers or farmer co-operatives);
- Market led initiatives which promote animal welfare (voluntary schemes);
- Involvement of advisory services such as farm advisory or private veterinary groups.
- The audit will concentrate in the period 2013 – date of the audit. Data from 2012 may be requested.

In addition to the scope, information was collected on the prudent use of antimicrobials in dairy farms (see Annex 2).

The main legal requirements are included in:

- Council Directive 98/58/EC concerning the protection of animals kept for farming purposes;
- Commission Decision 2006/778/EC concerning minimum requirements for the collection of information during the inspections of production sites on which certain animals are kept for farming purposes;
- Council of Europe recommendation concerning cattle of 21 October 1988² ("the Recommendation"), and in particular those provisions which relate to:
 - a. Inspection of animals for good health and where there are signs of ill health the taking of steps to establish the cause and take remedial actions (Article 3 and 4 of the Recommendation);
 - b. Maintenance of good conditions of hygiene, limiting the risk of disease or traumatic injuries, and provision of accommodation which allows animals room to lie down, to rest and to rise (Article 6 and Appendix B of the Recommendation);
 - c. Seeking advice on welfare aspects when new buildings are to be constructed or existing buildings modified (Article 7 of the Recommendation); and
 - d. Following of certain procedures when mutilations are carried out (Article 17 of the Recommendation).
- Council Directive 2008/119/EC lays down minimum standards for the protection of calves. However, the scope of this audit will be limited to the provisions laid down in paragraphs 6 and 15 of Annex I to the Directive regarding:
 - a. inspections of calves;
 - b. treatment where a calf appears to be ill or injured;
 - c. obtaining veterinary advice for any calf which is not responding to the stock-keeper's care; and
 - d. providing bovine colostrum to each calf as soon as possible after it is born.
- Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

² http://www.coe.int/t/e/legal_affairs/legal_co-operation/biological_safety_and_use_of_animals/farming/Rec%20cattle%20E.asp

In pursuit of the objectives, the following meetings were held:

Meetings/visits		No.	Comments
Competent authority	Central	2	Opening and closing meetings with representatives from the CCA, the Federal Ministry for Agriculture, Forestry, Environment and Water Management (<i>Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft</i>), the Chamber of Agriculture and the Austrian Animal Health Service
	Other	2	Meeting with representatives of the Regional Veterinary Offices of Tirol and Salzburg.
Dairy farms		2	Visits to two dairy farms in the regions of Tirol and Salzburg.
Meetings with representatives of bodies contributing to the welfare of cattle in dairy farms		6	Meetings with representatives from: <ul style="list-style-type: none"> • Austrian Animal Health Service; • Dairy farmers; • Cross Compliance; • Dairy processors; • Quality Assurance Schemes; • Farmers' associations; • Private veterinary practitioners; • Research institutions; • Specialist department for animal husbandry and welfare.

3 LEGAL BASIS

The audit was carried out under the general provisions of European Union (EU) legislation and, in particular Article 45 of Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules.

EU legal acts quoted in this report are provided in Annex I and refer, where applicable, to the last amended version.

4 BACKGROUND

EU animal welfare rules for dairy cattle stem from Council Directive 98/58/EC which provides general requirements for animal welfare in all farmed species. These rules are based on the 1978 European Convention for the Protection of Animals kept for Farming Purposes drawn up within the Council of Europe³. Pursuant to Article 9 of the European Convention, in 1988 the Council of Europe adopted a Recommendation Concerning Cattle which has subsequently become part of EU law. Furthermore since 2003, the reform of the Common Agriculture Policy has introduced the

³ The EU approved this Convention by Decision 78/923/EEC (OJ L 323, 17.11.1978, p. 12)

concept of cross-compliance. In this framework direct payments to farmers will be granted only if farmers comply with certain animal welfare rules⁴.

In April 2015 – 30 years after they were established – the EU removed quotas for milk production. The EU milk quota system was set up in 1985 after subsidised European milk production persistently outstripped consumer demand. Under the milk quota system Member States were penalised if they produced too much milk. Different studies indicated that the ending of the milk quota system would lead to an increased concentration of milk production in Northern European countries.

The abolition of quotas was also expected to trigger further changes in the sector, including the attitude of farmers to size of farms, land intensification and/or size of herds.

One of the aims of the abolition of quotas is to increase efficiency through economies of scale in milk production. This could, amongst other possibilities, be through structural changes such as increased herd size, intensified land use and the entrance of new producers into the sector. This could have either a negative or positive impact on the implementation of animal welfare rules – depending on how this transition is managed.

On this last point, DG Health and Food Safety planned for its 2016 programme, a series of audits aimed at identifying activities that are suitable and effective in ensuring that cattle on dairy farms are not caused any unnecessary pain, suffering or injury. In this regard competent authorities were invited to identify other parties, both public and private, whose activities contribute to the audit objective, for inclusion in these audits. This series also attempts to identify any good or best practices for prevention, treatment and control of diseases. The audits will also be used to collect information on the prudent use of antibiotics, particularly in relation to the relevant points from the guidelines for the prudent use of antimicrobials in veterinary medicine (2015/C 299/04)⁵.

Between 2005 and 2014 there was approximately the same number of dairy cows in Austria, around half a million, and a reduction of around 25% of dairy farmers, from 54580 to 39100 approximately. In the same period the average herd size, milk production per cow and lactations per cow progressively increased; in 2014 there were 16.9 cows per farm, 6579 litres of milk per cow per year and the number of lactations per cow was 3.77. Approximately 76% of cattle in the dairy herd are Fleckvieh and 12% are Holstein.

The most recent DG Health and Food Safety audit in Austria concerning animal welfare on farms took place from 25 to 29 November 2013. The results of this audit are included in report DG(SANCO) 2013-6805 which is accessible at: http://ec.europa.eu/food/audits-analysis/audit_reports/details.cfm?rep_id=3300. Concerning cattle (both beef and dairy animals) this report concluded that the national legislation on welfare standards for cattle and relevant operating procedures largely implement the recommendations from the European Convention for the Protection of Animals kept for Farming Purposes. Official controls provided assurances on

⁴ Regulation (EC) No 1782/2003 (OJ L 270, 21.10.2003, p. 1).

⁵ Commission guidelines for the prudent use of antimicrobials in veterinary medicine (OJ C 299, 11.9.2015, p.7) <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1450453756494&uri=CELEX:52015XC0911%2801%29>

compliance with the recommendations from the European Convention and national requirements at cattle farms. The current audit has a narrower scope compared to the previous audit; recommendations made in report 2013-6805 were therefore not followed-up.

5 FINDINGS AND CONCLUSIONS

5.1 ACTORS INVOLVED WITH THE WELFARE OF DAIRY CATTLE

Legal requirements

Directive 98/58/EC.

Council of Europe Recommendation Concerning Cattle.

Commission Decision 2006/778/EC.

Council Directive 2008/119/EC.

Regulation (EC) No 882/2004.

Findings

1. The CCA's strategy on animal welfare in dairy farms is a part of the general umbrella of the Animal Welfare Plan 2014-2018. This plan includes extending the work of the Animal Health Service (*Österreichischer Tiergesundheitsdienst – TGD*) to identify practical animal-based indicators for measuring animal welfare.
2. The TGD is composed of representatives of the Chambers of Veterinary Surgeons, of Agriculture, of Commerce, and of Labour, and representatives from the Federal Ministry for Agriculture, Forestry, Environment and Water Management. Its main objective of the TGD is to minimise the use of medicinal products and improve animal health. A TGD representative indicated that concerning dairy farming:
 - 60% of Austrian dairy farms are members of the TGD. Farms that are members must have a contract with a private veterinarian who has to carry out an annual farm evaluation on medicinal use, animal health and welfare;
 - membership to the TGD is a requirement to become a member of the Austrian Agriculture Organisation's (*AgraMarkt Austria*) quality assurance scheme 'QS Cow' (*QS Kuh*). The majority of dairy farmers that are members of the TGD are members of this scheme;
 - members of the TGD have access to free milk testing (including for somatic cell count);
 - information collected from the dairy farms is stored in the TGD database and made available to the competent authority;
 - the TGD organises courses and events together with the Chamber of Agriculture (see also Paragraph 4);
 - the farmers met by the audit team highly valued the activities carried out by the TGD.
3. *AgraMarkt Austria*'s quality assurance scheme 'QS Cow' is 50% EU-funded and 50% funded by the Federal State and the provinces. This assurance scheme includes:

- one control on each farm at least every four years. If the check detects an animal welfare problem the frequency is increased to an annual basis;
 - collection of milk samples from members nine to ten times a year. The scheme sends the results of these samples back to the farmers. They include a comparison of each of their animals' performance against the national average. These results are also communicated to, and stored by, the TGD;
 - an early warning system against mastitis. Farmers are notified when the somatic cell count of a milk sample exceeds 100,000 or is more than twice the count of the previous sample. This enables the farmer to assess the cow and carry out further tests, if necessary, to investigate for the presence of mastitis.
4. All farmers have to be members of the Chamber of Agriculture. Funding for the Chamber of Agriculture originates mainly from membership fees according to farm size. Provincial administrations contribute to the Chamber's funding. The roles of the Chamber of Agriculture include:
- providing information to farmers, including on animal welfare issues. The Chamber of Agriculture publishes and distributes agricultural journals to its members (one national and another different for each province). It also organises courses and seminars. Some of these events are organised with the TGD, e.g. on topics such as fertility, udder health, and interpretation of milk testing reports;
 - an advisory service covering udder health, milk quality, inspection of milking equipment (if high cell counts have been detected), construction of new stalls or modernisation of stalls (in close collaboration with the TGD) and organic production. Some of the advisory activities incur an additional cost.
5. The umbrella organisation for cattle breeding in Austria is the Association of Austrian Cattle Breeders (*Zentrale Arbeitsgemeinschaft österreichischer Rinderzüchter*) which encompasses the Chamber of Agriculture, breeding organisations and artificial insemination centres. A subsidiary of this organisation manages the breed indexes for the main dairy breeds kept in Austria. The estimation of the breeding value is carried out in conjunction with German breeding organisations. The breed indexes include values for: somatic cell count, calving, fertility and longevity.
6. The main focus of dairy farm research carried out in Austria is on the production of food from healthy animals, sustainability and efficiency of resources but also on maintaining competitiveness using high-level technology. There are several research projects with impact on animal welfare, e.g.:
- Advancement of Dairying in Austria (K-Projekt ADDA), supported by the Federal government and the provinces. A consortium (composed of research institutions and companies spanning the whole milk chain, from dairy farms, feed producers, cattle reproduction, pharmaceutical production, dairy processors, consumers and industry organisations, the TGD, and competent authorities) run this project. Areas of this project include: reproduction, milk quality, and udder health and treatment (including strategies to reduce use of antibiotics);
 - OptiGene, funded by the association of Austrian Cattle Breeders. The objective of this project, completed in 2015, was to optimise the breeding of Austrian cattle breeds by

aligning it with the needs and demands of the farming systems in Austria, with special consideration to health and genomic selection;

- Efficient Cow, funded by the Federal government and the provinces. The goal is to increase production efficiency in dairy cows by collecting data on milk production, body condition score and lameness, amongst others;
 - projects on hoof health (recently submitted) – to create an infrastructure on data-collection of animal care of hooves to identify which factors can help to avoid lameness – and for an electronic system to collect on-farm information on welfare indicators.
7. The Specialist Department for Animal Husbandry and Welfare (*Fachstelle für tiergerechte Tierhaltung und Tierschutz*) is an independent body financed by the Federal Ministry of Health on the basis of the Austrian Animal Welfare Act. Its task is to inspect husbandry and housing systems of farm and pet animals and novel products before placing them on the market. Products that pass the inspection by this Department bear an official welfare seal as a guarantee to clients that it will not affect the animals' health and welfare.
8. The regional authorities visited by the audit team identified EU Rural Development Funding as one of the actors helping to manage animal welfare on farms. Such funding is available for the restructuring of farms on the condition that they convert from tethering stalls to a loose-house system. In one of the provinces visited, 13% of the dairy farms (480 out of 3772) got funding under this scheme in the last five years. One of the farms visited by the audit team had converted recently from tethering to loose-house using these funds. According to the owner, this had led to a 40% increase in milk production and a significant improvement in milk quality (genetics remained the same).

5.2 ASSURANCES FROM COMPETENT AUTHORITY ACTIVITIES ON FARMERS' COMPLIANCE WITH LEGAL REQUIREMENTS

Legal requirements

Directive 98/58/EC.

Commission Decision 2006/778/EC.

Articles 3, 4, 6, 7, 17 and Appendix B of the Council of Europe Recommendation Concerning Cattle.

Paragraphs 6 and 15 of Annex I to Directive 2008/119/EC.

Regulation (EC) No 882/2004.

Findings

9. The country profile of Austria describes the structure of the authorities and the organisation of official controls in farms. It is accessible at: http://ec.europa.eu/food/audits-analysis/country_profiles/details.cfm?co_id=AT. Additional information is available in the CCA's website at: <http://bmgf.gv.at>.

10. The CCA indicated that legislation applicable in the country on the protection of cattle in dairy farms, is in the Federal Law Gazette-FLG No 82/1993, as well as in the Austrian Federal Act on the Protection of Animals – *Tierschutzgesetzes*, which prohibits infliction of unnecessary pain, suffering or injury to an animal, or to put it under severe distress, and in the 1st Animal Husbandry Regulation – *1. Tierhaltungsverordnung*.
11. The following official controls cover welfare of cattle at dairy farms:
- regular inspections carried out for the purpose of cross-compliance (Regulation (EC) No 1698/2005⁶). These include compliance checks against all the requirements of Directives 98/58/EC and 2008/119/EC amongst others. *AgraMarkt Austria* is provided with a copy of the inspection report; and
 - ad-hoc checks as a consequence of a complaint, suspicion or notification received from slaughterhouses, rendering plants or checks carried out by other bodies, such as the TGD.
- An official indicated that if the farm is a member of the TGD these controls are also used to audit the private veterinarian's annual farm evaluation (see also Paragraph 2).
12. The Animal Welfare Inspection Ordinance requires that at least 2% of all agricultural holdings are inspected annually (this are the regular inspections). The Agency for Health and Food Safety (*Agentur für Gesundheit und Ernährungssicherheit*) selects the holdings at provincial level:
- It chooses 80% of farms on the basis of identified risks- including those indicated by Article 3 of Regulation (EC) No 882/2004- and 20% of farms randomly;
 - the farms are selected from the list of holdings receiving single farm payments from *AgraMarkt Austria*. The provincial competent authorities indicated that the vast majority of dairy farms get single farm payments and only a very minimal percentage (less than 1%) do not get them.
13. The official veterinarians that check animal welfare at dairy farms have several tools (all readily available electronically) to prepare for the inspections, which they explained and demonstrated to the audit team. These include:
- documented procedures, as required by Article 8(1) of Regulation (EC) No 882/2004, in the form of handbooks which are publicly available. These include checklists and relevant guidelines that focus primarily on resource-based indicators but also include the use of animal-based indicators (e.g. body condition score and lameness) to evaluate some of these parameters. These documents are a comprehensive tool to perform animal welfare checks;
 - Databases kept by the competent authority and *AgraMarkt Austria*. With these, they can access information on the farm regarding past-controls, herd health status and number of animals;
 - information from the TGD database regarding farm production data (e.g. somatic cell count, milk quality, longevity, calving intervals, treatments, animals leaving the herd, including the reason) and the private veterinarian's farm evaluation reports.

⁶ Regulation (EC) No 1698/2005 (OJ L 277, 21.10.2005, p. 1–40)

14. The audit team visited two dairy farms, one farm keeping cattle in a tethered system with past non-compliances (that had already been corrected) due to high stocking density, and another that recently converted from a tethered system to loose-housing using EU Rural Development Funds. The official veterinarians demonstrated how inspections are performed. The controls were thorough and mainly resource-based. The official veterinarians also used animal-based indicators during their evaluation (body condition score for compliance with feeding requirements, hoof condition and presence of visible lesions for compliance with caring for animals and competent staff requirements). The officials performed the checks according to the procedures and documents.
15. The authorities use enforcement actions which include: reporting the non-compliance to *AgraMarkt Austria* (for cross-compliance purposes); written instruction to the farmer to correct the deficiencies- this instruction includes a deadline and it is followed up with a visit after this deadline- and, if a serious welfare infringement is detected, a report for legal proceedings. In the two Provinces visited, the audit team saw examples of enforcement actions in the inspection files reviewed.
16. A review of the reported animal welfare non-compliances for cattle (excluding calves) revealed that the most frequently ones detected in Austria in 2013 and 2014 was related to freedom of movement:
 - A deeper analysis from the detailed checklist indicated that this is generally linked to the requirement for access to pasture for a minimum of 90 days when cattle are kept on tethered farms. According to estimates⁷, 50-55% of dairy cattle farms use loose housing and 45-50% of the farms keep the cows tethered;
 - The authorities of the two provinces visited indicated that this type of non-compliance was not frequent in their territory due to the access to mountain pastures. The most frequent non-compliance in these two provinces was related to the small size of the stalls – they indicated this happens because the national regulation changed after these were built.

Conclusions on assurances from competent authority activities on farmer's compliance with legal requirements

17. The official controls in place provide assurances of compliance with animal welfare requirements for cattle in dairy farms. The various tools provided by both the authorities (documented procedures and own databases) and other actors involved (e.g. access to their databases) support the official veterinarians in keeping up to date with the farms' status and help them to better evaluate the welfare of cattle in dairy farms.

5.3 INDICATORS OF ANIMAL WELFARE

Legal requirements

Directive 98/58/EC.

⁷ Source: Federal Ministry of Agriculture, Forestry, Environment and Water Management.

Articles 3, 4, 6, 7, 17 and Appendix B of the Council of Europe Recommendation Concerning Cattle.

Paragraphs 6 and 15 of Annex I to Directive 2008/119/EC.

Findings

18. The main animal welfare indicators identified, and how they are used, are listed in Table 1 below:

Table 1: Identified indicators of animal welfare			
	WHO uses them?	HOW are they being used?	Identified TRENDS
Indicators related to MASTITIS SOMATIC CELL COUNT (SCC)	Competent authority. <i>AgraMarkt Austria</i> (QS Cow), TGD. Association of Cattle Breeders, Dairy Processors, Farmers.	Official controls based on notification (SCC above 400000). Milk testing nine to ten times a year. Genetic Selection. Milk premiums (SCC less than 200000). Selective dry cow therapy (initial stage).	National average decreasing over the last few years (currently 189000) Number of cows with SCC over 400000 reducing over the last few years.
Indicators related to LAMENESS LAMENESS SCORING	Competent authority, TGD. Farmers.	Official and TGD controls – trigger at 20% lameness. Treatment of hooves before going to pasture.	Farmers indicated a low incidence of lameness when there is a need to access alpine pasture.
Indicators related to REPRODUCTIVE diseases/issues EASE OF CALVING	Association of Cattle Breeders, Farmers.	Genetic Selection.	
Indicators related to REPRODUCTIVE diseases/issues ISSUES AT FIRST CALVING (linked to Ease of Calving)	TGD, <i>AgraMarkt Austria</i> (QS Cow), Farmers.	Milk fever or retained placenta at birthing has to be recorded. The farmer is notified via an online tool when the cow is at its next calving. Trigger set when 20% of cows have problems at first calving.	
Indicators related to METABOLIC diseases BODY CONDITION SCORE	Competent authority, TGD.	Competent authority and TGD inspectors have specific guidance for ideal Body Condition Score at different stages of the reproduction cycle.	
OTHER Indicators LONGEVITY	Association of Cattle Breeders, Farmers.	Genetic Selection.	Gradually increasing since 2004 (from 3.55 to 3.78).

19. Farmer and dairy processor representatives indicated that there is a high interest in maintaining and promoting cattle health since the general public is highly critical and any negative event has an impact on the sale of dairy products.
20. Mastitis causes pain and suffering in the dairy cow. One indicator of this disease is the increase of somatic cell count in milk. A low cell count therefore indicates better dairy cow welfare. Several actions influence the management of mastitis:
- Dairy processors offer premiums for high quality milk (cell count less than 200,000 and bacterial count less than 50,000). A dairy processor representative indicated that 90% of the cows produce milk that falls within this category. The aim is to obtain high quality milk from all the suppliers;
 - The Chamber of Agriculture provides advice on udder health, milk quality, and inspection of milking equipment when it is notified of high somatic cell counts in a dairy herd (see also Paragraph 4).
 - Milk from all dairy farms that are members of *AgraMarkt Austria*'s quality assurance scheme is regularly tested to collect data for the breeding value indexes and as part of the early warning strategy;
 - The TGD and dairy processors are promoting selective dry cow therapy for cows with cell counts under 100,000.
21. Lameness causes pain and reduced mobility in animals. In the two provinces visited by the audit team, lameness is not a problem as cattle have to be able to access alpine pastures. Farmers met indicated that there is a good hoof care before taking the animals to pasture and that They choose local breeds (Pinzgauer and Fleckvieh) for their strong hooves.

Conclusions on indicators of animal welfare

22. The different actors- in particular the competent authority, the TGD and farmers - use animal-based indicators to evaluate and ensure the welfare of cattle on dairy farms. Most of the activities focus primarily on animal health and breeding, but they have an important positive impact in the welfare of the animals.
23. Most of the indicators in use have also values that trigger actions. The control of somatic cell count in milk - which is widely used by most actors and shows a descending trend - is having important impact in welfare as it helps in the management of mastitis.

6 OVERALL CONCLUSIONS

The official controls that are in place provide assurances of compliance with animal welfare requirements for cattle in dairy farms. These controls are strengthened by the access that authorities have to information collected by other actors and managed by the Animal Health Service.

The authorities use EU's funding to promote the change from tethering systems to loose-housing. This should help reducing the number of non-compliances related to tethering.

The most relevant actors use not only resource-based indicators but also animal-based indicators to evaluate and assist farmers in ensuring animal welfare on dairy farms.

7 CLOSING MEETING

A closing meeting was held on 11 November 2016 with representatives of the competent authorities, at which the main findings and preliminary conclusions of the audit were presented by the audit team.

ANNEX 1 – LEGAL REFERENCES

Legal Reference	Official Journal	Title
Reg. 882/2004	OJ L 165, 30.4.2004, p. 1, Corrected and re-published in OJ L 191, 28.5.2004, p. 1	Regulation (EC) No 882/2004 of the European Parliament and of the Council of 29 April 2004 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules
Dir. 98/58/EC	OJ L 221, 8.8.1998, p. 23-27	Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes
Dir. 2008/119/EC	OJ L 10, 15.1.2009, p. 7-13	Council Directive 2008/119/EC of 18 December 2008 laying down minimum standards for the protection of calves
Dec. 2006/778/EC	OJ L 314, 15.11.2006, p. 39-47	2006/778/EC: Commission Decision of 14 November 2006 concerning minimum requirements for the collection of information during the inspections of production sites on which certain animals are kept for farming purposes

ANNEX 2 – PRUDENT USE OF ANTIMICROBIALS

Information was collected on measures which included any of the following points in Section 6.4 of the guidelines for the prudent use of antimicrobials in veterinary medicine (2015/C 299/04):

- Avoid the prophylactic use of antimicrobials in new-born calves (e.g. antimicrobials added to milk replacers) by instead implementing good farming practices (e.g. to ensure high standards of hygiene);
- Develop preventive strategies (e.g. vaccinations and feeding colostrum to calves);
- Avoid the systematic treatment of cows at drying-off, and consider and implement alternative measures on a case-by-case basis.

Actions being taken on the prudent use of antimicrobials are listed in Table 2 below:

ACTORS	TOOLS	DESCRIPTION	UPTAKE
TGD, Farmers and <i>AgraMarkt Austria</i>	Udder Health programme – SCC data	Selective dry cow therapy – Free bacteriological examination	
	Stable card (<i>stallkarte</i>)	At least two litres of colostrum within the first two hours of life and again around two litres after another three hours, at least twice a day for 5-6 days	
	Electronic herd book	Electronic registration of the use of veterinary drugs	Pilot project completed; review of data collected is ongoing

The CCA indicated that in Austria the use of antibiotics in new born calves for prophylaxis is justifiable only in exceptional cases and the use of antimicrobial agents occurs only in case of illness after veterinary diagnosis and prescription.

Education and training on antimicrobial use is provided by many organisations and institutions, via brochures, websites and courses. Any veterinary use must be recorded by the user and can be checked by the CA. Additionally:

- a pilot project on the use of an Electronic Herd Book to record antibiotic treatment was completed in Autumn 2016 and review of the data collected is ongoing;
- private veterinarians provided information on the use of antibiotics over a one-year period as part of a project that aims to increase of protection against infections. Under the current phase of this project veterinary practices prescribing larger quantities of antibiotics will be identified and targeted for surveillance.

In order to avoid the systemic treatment of cows during drying off, there is a current focus on the topic of "Selective Drying". Dairy farmers are being encouraged to use milk SCC values to decide, with the support of their private veterinarians, *AgraMarkt Austria* and dairy processors, on selective dry-cow therapy for mastitis:

- A California mastitis test is performed on milk samples from cows with a SCC less than 100000. If the test results negative and the cow does not have clinical signs of mastitis then the farmer is encouraged to avoid using antimicrobials in the dry cow therapy.
- This procedure was developed in 2015 following the example seen in Germany. It was published on journals of the Chamber of Agriculture and printed on laminated cards and distributed to all dairy farmers.

Concerning colostrum management:

- this is included in the TGD training programme on prevention of calf diseases, stressing its importance for the calf to survive;
- the national legal provision is to administer colostrum as soon as possible and in any case within the 6 hours of life, as required by point 15 of the Annex to Directive 2008/119/EC;
- in addition an information brochure has been created and distributed to all farmers ("Healthy Calves" stable card – *stallkarte*) and is also publicly available. It contains quick-tips on topics such as preparation for birth, body condition score, colostrum, feeding and diarrhoea. Regarding the use of colostrum, this stable card promotes providing at least two litres of colostrum within the first two hours of life, another two litres three hours later, and twice a day for the next 5-6 days.