Safety and Quality Investment in Livestock:

Comparative Study on the Present Georgian Beef Sector Safety and Quality Standards and Regulations

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Comparative Study on the Present Georgian Beef Sector Safety and Quality Standards and Regulations

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Contents

ABBREVIATIONS AND ACRONYMS

AA	Association Agreement
BSE	Bovine spongiform encephalopathy
CFR	Code of Federal Regulations
DCFTA	The deep and comprehensive free trade areas
EC	European Commission
EU	European Union
FMD	Food and mouth diseases
FMIA	The Federal meat Inspection act
FSIS	Food Safety and Inspection Service
GEL	Georgian Lari
GoG	Government of Georgia
HACCP	Hazard Analysis and critical Control point
NFA	National food agency
NGO	Non-government organization
OFPA	Organic Food Production Act
SEUROP	The SEUROP system is currently in use for carcass classification in Europe
SO	Slaughterhouse operators
SPS	Sanitary and Phytosanitary Measures
TOC	Table of concordances
USDA	United states department of agriculture

1. Summary

The note provides comparative review of legislation governing beef sector in Georgia, the EU and the United States focusing on legislation on veterinary medicines, organic beef production, animal welfare, contagious diseases, animal movement and trade, and inspections. Georgia's SPS legislation pertaining to the beef sector closely resembles the equivalent legislation in the EU. Therefore, there are no major gaps and shortcomings in the content of Georgia's legislation in comparison with the EU and the United States respective enactments. The major gap is in the implementation stage of regulations. This was corroborated by interviewed stakeholders and the results of slaughterhouse operator survey. Factors that underlay Georgia's limited implementation capacity of current legislation include shortage of adequately trained veterinary professionals, limited laboratory capacity, and a limited public fund availability for implementation of different regulatory measures. Survey of slaughterhouse operators revealed existence of illegal slaughtering practices in the regions; majority of slaughterhouse operators perceived illegal slaughtering as an impediment for their operations. Currently, in Georgia there are no beef relevant formal standards. Pricing of beef along with different supply and demand factors has been based on the type of primal cuts, and subjective appraisal of sellers. The review did not find any associations and/ or companies with experience or the capacity to work with the Government on further development of the legislation and policies pertaining to the beef sector.

2. Objective

Objective of the research was to identify major gaps in Georgia's legislation pertaining to the beef sector. For this purpose, the research included interviews of relevant stakeholders, slaughterhouses operator survey, and the comparative review of the legislations in Georgia, United States and the EU. Stakeholder interviews focused on the legislation governing beef sector, veterinary activities at the slaughterhouses, gaps along the beef supply chain, challenges at slaughterhouses from public officials, consumers, and entrepreneur perspectives, whereas the slaughterhouse operators (SO) survey cantered on followed practices, food safety and quality systems, state supervision of slaughterhouse operations, and an impact of current legislation on slaughterhouse operations.

3. Methodology

Employed methodology comprised interviews with knowledgeable stakeholders, survey of slaughterhouses, and desk research of the legislation in Georgia, EU, and the United States. Interviewed stakeholders represented executive and legislative branches of the Government, and representatives of NGOs (Annex 1). Interviews were conducted based on priori developed open-ended questionnaires (Annex 2). The sample size of slaughterhouses was 29 (Annex 3). Selection of slaughterhouses was based on their geographic location and the reported slaughtering capacity. During the survey it was not possible to interview about 40% of slaughterhouse operators from the initial sample (either it was not possible to reach, or respondents did not discern interest to be

interviewed), and they were substituted by operators of slaughterhouses who cooperated with interviewers. The questionnaires, including both open- and close-ended questions, were developed to collect information from SOs about safety and quality systems in place, equipment and technical capacity, and operations (Annex 4).

4. Findings

4.1. Stakeholder Interviews

Respondents identified different Georgian legislation relevant to the beef sector and veterinary activities at the slaughterhouses (Box 1).

Box 1. List of relevant legislations based on interviewed stakeholder feedback

- GoG Resolution #581 on the Approval of Technical Regulations for the Food Microbiological Criteria
- GoG Resolution #764 on the Approval of Regulation Relating to the Identification and Registration of Bovine Animals and Registration of their Holdings/Temporary Holdings
- GoG Resolution #348 on the Approval of Rule Regarding Preventive-Quarantine Measures Against the Dangerous Contagious Diseases
- GoG Resolution # 444 – Technical Regulations on Approval of the Rules of Veterinary Examination of the Slaughter Animals and Veterinary-Sanitary Expertise of Meat and Meat Products
- GoG Resolution # 577 on General Principles and Requirements to Traceability in the Sphere of Food / Animal Food Safety, Veterinary and Plants Protection etc.
- GoG Resolution # 55 on Special State Control Rules of Animal Origin Food
- GoG Resolution # 90 on Special Hygienic Rules for Animal Origin Food
- GoG Resolution # 587 on the Rules governing animal health protection in regard to the production, processing, distribution and import of animal origin food

Georgia has been in the process of approximation of legislation including of those relevant to the beef sector with EU equivalent legislation in the frame of the DCFTA. Therefore, interviewed stakeholders assessed already approximated and adopted legislation, overall, as acceptable.

According to the stakeholders, the major challenge has been implementation/enforcement of already adopted legislation. Stakeholders have listed number of factors hindering proper enforcement of adopted legislation, including:

- Shortage in adequately trained veterinarians
- Limited financial resources
    - Based on some estimates, implementation of only two GoG Resolutions # 499 on Approval of the Rules on Sampling and Interpretation of Laboratory Analysis Results of Certain Substances and their Residue in Animals and Animal Origin Food Products, and # 600 on Prevention, Control and Elimination of Transmissible

Spongiform Encephalopathy, require at least GEL 8.1 million from the public budget for sampling, testing, and for compensation of farmers

- Limited laboratory capacity
    - For implementation of certain legislation, there is a need to develop laboratory capacity in terms of methods and employee knowledge and skills; for instance, laboratory capacity to carry out tests on certain micro-biological indicators (E.coli 026, 0111, 0103, 0104:h4) as provided by GoG Resolution # 581, residue analysis of substances "a" and "b" and other indicators, (GoG Resolutions #639, # 499), substances having hormonal or thyrostatic Action and of Beta-Agonists, etc.
- Limited knowledge and experience of slaughterhouse operators
    - Limited adherence to the adequate practices of animal welfare, good hygienic practices and poor waste management at the slaughterhouse.

Stakeholders thought that the support should be provided in the areas listed above in order to ensure proper implementation of approximated legislation.

4.2. Slaughterhouse Operator Survey

Surveyed slaughterhouses had diverse slaughtering capacity and pursued different activities. Majority of slaughterhouse operators did not have extensive experience in the business and the majority of slaughterhouses had very basic equipment. All of the slaughterhouses had National Food Agency (NFA) approved HACCP system in place, and all the processes were conducted under the supervision of the State authorized veterinarians. Slaughterhouse operators did not elaborate much on technical aspects of their operations, and the impact of relevant legislation on their operations. All slaughterhouses received capacity strengthening trainings from the NFA on a regular basis. Every slaughterhouse had at least one designated employee responsible on safety and quality issues. Most of the slaughterhouses operated substantially below full capacity due to reported reduced availability of live cattle. Majority of slaughterhouses did not have established relations upstream and downstream the supply chain. Remuneration scheme (ceiling) of authorized veterinarians, examination and inspection practices during night-time, and the practice of sampling on their own by slaughterhouse operators for micro-biological analysis require follow up careful examination with the objective of fairness and transparency.

The survey included 29 slaughterhouses form the total 96 recognized slaughterhouses in 8 regions of the Country involved in bovine animal slaughtering (Table 1).

Figure 1Geographic location of surveyed slaughterhouses

Region	District	District	Region
Guria	Chokhatauri	1	1
Imereti	Khoni	1	3
	Kutaisi	2	
Kakheti	Sagarejo	2	3
	Telavi	1	
Kvemo Kartli	Gardabani	4	5
	Tetritskaro	1	

Mtskheta- Mtianeti	Mtskheta	2	2
Samegrelo	Martvili	1	3
	Senaki	2	
Samtskhe-Javakheti	Akhlatsikhe	2	3
	Aspindza	1	
Shida Kartli	Kaspi	1	4
	Khashuri	3	
Tbilisi	Tbilisi	5	5
Total		29	29

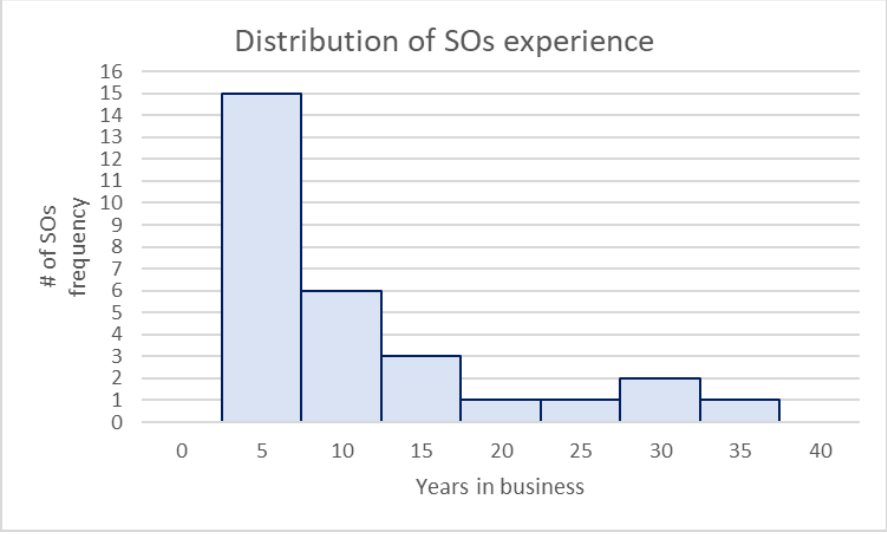
Source: 2019 Slaughterhouse Survey

All slaughterhouses were operational except for one, which was temporarily closed for the time of interview.

About 62% of SOs handled only large ruminants. The rest in addition to the large ruminants were involved in slaughtering of small ruminants, swine, lagomorphs and poultry; one surveyed SO was involved solely in slaughtering of lagomorphs.

Majority of surveyed SOs have had up to 15 years of professional experience in the business, and about half of surveyed SOs have had only up to 5 years of professional experience in the business (Figure 1).

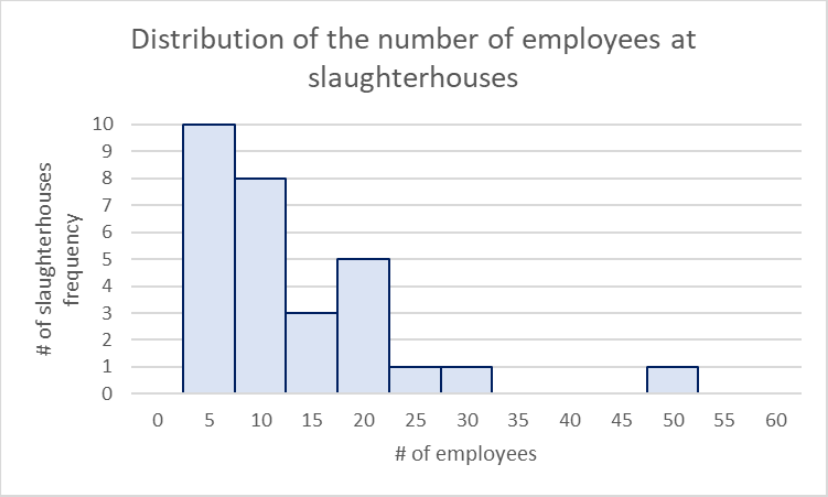
Figure 2 -Frequency distribution of SO experience



Source: SO survey, estimates

Majority of surveyed slaughterhouses employed up to 10 persons (Figure 2).

Figure 3-Frequency distribution of the number of employees at the slaughterhouses



Source: SO survey, estimates

All surveyed SOs reported having HACCP approved by the NFA. Reportedly, at least the management in all slaughterhouses were trained in HACCP principles. Responsible person on food safety and quality systems either was slaughterhouse director/ owner, veterinarian, or a director and a veterinarian shared responsibility. According to the SOs, specialists from the NFA have been on regular basis providing trainings in HACCP principles and other topics to the SOs and the slaughterhouse relevant personnel. None of the SOs has provided specific information on the topics of trainings. Reportedly, all slaughterhouse kept records for traceability purposes. All the slaughterhouses have reported carrying out ante- and post-mortem inspections.

In all slaughterhouses, activities were carried out under the supervision of authorized veterinarians. State veterinarian's remuneration is based on base salary and the number of animals handled under his/ her supervision. Base salary of authorized veterinarian is GEL 350 per month (gross), and it is paid from the NFA budget. Additional income indirectly comes from SOs; the State issues Form 2 for every handled animal, and the SO fee for this form is GEL 5. 40% of GEL 5 (GEL 2 per slaughtered cattle) goes to the salary fund of authorized veterinarians in addition to the base salary; however, there is ceiling, and monthly remuneration of authorized veterinarian cannot exceed 900 GEL (gross), no matter how many animals are slaughtered under his/her supervision.

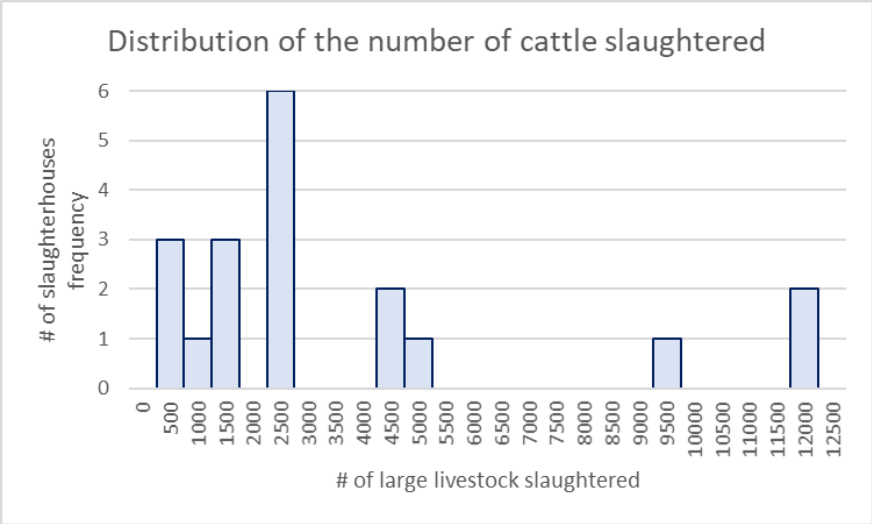
In the EU, service fee is minimum EUR 5 per head for adult bovine animals, and EUR 2 per head for young bovine animals, and the charged fee should not exceed service cost. These fee rates are revised every two years. This fee includes (a) the salaries of the staff involved in the official controls, (b) the costs for the staff involved in the official controls, including facilities, tools, equipment, training, travel and associated costs, and (c) the laboratory analysis and sampling costs. Also, in the EU there are special provisions for overtime work.[1]

[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

In the United States, payments are made on hourly basis; there are different rates for base time, overtime, holidays, etc. totaling 59.96 $US/hr, 74.76 $US/hr, and 89.56 $US/hr, accordingly.[2] Moreover, in the United States the authorization from the Secretary of Agriculture is needed for service provision overtime and during holidays.

About 68% of surveyed slaughterhouses (13 slaughterhouses), who have provided information on the slaughtering volume, reported handling of up to 2,500 heads of cattle on annual basis. Only 2 slaughterhouses reported slaughtering of more than 10 thousand heads of cattle (Figure 3).

Figure 4-Frequency distribution of the number of large livestock slaughtered on annual basis



Source: SO survey, estimates

Only two SOs reported operation at full capacity. The other slaughterhouses reported operations below the full capacity, from 25% to 50% of the capacity. Operations below capacity were mainly attributed to the reduced availability of live cattle. In general, SOs in west Georgia complained about traders from eastern parts of the country (Shida Kartli and Kakheti) to be buying cattle at a higher than prevailing market prices locally (i.e. GEL 13 per live weight compared to GEL 10 per live weight), and also buying un-identified livestock. Overall, majority of SOs related reduced availability of live cattle for local slaughtering to an increased export of live cattle to Azerbaijan and Iraq.

For the slaughterhouses operating in proximity to summer holiday resorts, the busiest periods of their operations were summer months. In general, the busiest months were Fall and Easter periods, and the least busy - end of winter, and an early Spring.

According to SOs, they have maintained stringent hygienic practices at their facilities; premise and equipment/ tools were sanitized routinely, after every slaughtering shift.

[2]Federal Register / Vol. 83, No. 244 / Thursday, December 20, 2018 / Notices

In general slaughterhouses were flexible in terms of the time of the day for slaughtering service provision; however, mainly slaughtering took place during evening hours. In the Unites States, supervision during night hours requires special authorization from the Secretary of Agriculture; moreover, state inspectors are paid for an overtime (provided above). In the EU member states there is no need for authorization for service provision overtime and holidays, but there are provisions for different fee rates from those applied during regular working time.

Majority of slaughterhouses have had their own facilities to dispose waste and residue. Several SOs used services of local waste management companies. Georgian legislation requires employment of incineration; however, the same legislation allows flexibility for the third category animal products (under which slaughtered animal waste falls) and allows waste disposal in specified locations.

Majority of slaughterhouses have had both manual and electric hoists for lifting carcasses. In the majority of slaughterhouse separate premises were for stunning, cutting/processing, refrigeration, and storage. Only two surveyed slaughterhouses additionally have had hide and skin, and intestine handling facilities.

Based on SOs, current legislation in force has not had any impact on the slaughtering volume. Only one SO complained about the Form 2 and evaluated it as an outdated practice. Also, one SO indicated that livestock owners in mountainous regions have been reluctant to identify and register their cattle with the fear to loss social assistance.

Only 6 (21%) of surveyed SOs have had future growth/ expansion plans including

- Diversification into swine, piglet, sheep and poultry slaughtering
- Addition of intestines handling facility
- Increase existing slaughtering capacity.

Activities of 18 SOs (62%) included provision of only slaughtering services. The others in addition to slaughtering services were involved in buying and fatting of cattle for further sales.

24 SOs (84%) assessed the sector to be competitive. Main suppliers of live cattle to slaughterhouses were farmers having cattle operations in the proximity. Also, local butchers and traders were involved in the supply of slaughterhouses with live cattle. Markets included nearby urban centres. In general, slaughterhouses have not had long-term established relations with suppliers; only 8 SOs (28%) have reported having long-term relations with suppliers. 6 SOs (21%) have had long-term relations with buyers; in all cases, buyers were represented by trade partners in export markets and retail chains in Tbilisi.

All of the slaughterhouses reported conducting micro-biological analysis. The sampling frequency depended on the slaughtering volume of slaughterhouses. Samples have been taken by SOs. The similar approach is in the European Union. In the United States, in order to enforce the provisions for microorganism detection, USDA Food Safety and Inspection Service (FSIS) is authorized to sample raw meat products in an individual establishment on an unannounced basis.

For more than half of surveyed SOs unauthorized slaughtering represented a challenge. Reportedly, service fees for unauthorized slaughtering have been about 50% of formally charged fee of GEL 30-35 per slaughtered animal. Established SOs seemed to be less concerned with unauthorized slaughtering practices; also, some SOs stated about absence/ very limited presence of unauthorized operations due to State control.

Surveyed SOs identified number of areas where they thought more State support including in order of importance

- Stricter control of unauthorized slaughtering
- Support in infrastructure and laboratory capacity development
- Capacity strengthening and rotation of authorized veterinarians
- Better availability of general information about cattle (diseases, vaccinations, etc.)
- Trainings in different technical and management areas

4.3. Comparative review of legislation

Association Agreement (AA) between the European Union (EU) and Georgia,as the current legal framework of relations between Georgia and the EU is the document on which the implementation of the SPS legislation approximation process is based. There are total 75 legislative documents in the veterinary and food safety areas to be approximated pertaining to the beef sector. As of the end of 2018, Georgia has already approximated 45 legal documents, and by 2026 Georgia has to approximate additional 23 legal documents in veterinary area, and 7 legal documents in food safety area (Annex 5, Tables 1.1-2.2).For the approximated legislation Georgia on annual basis prepares tables of concordances (TOC) between EU legal documents and equivalent Georgian legislation. In the beginning of 2019, Georgia submitted to the European Union TOCs of already approximated legislation during 2015-2018 and is expected to receive formal confirmation about the status of approximation.

4.3.1 Veterinary Medicine

Georgian legislation on veterinary medicine closely resembles respective legislation in EU (GoG Decree #10 on Approving the Rules for the Prohibition of the Use of Certain Hormonal and Thyrostatic Substances and Beta-Agonists in Livestock). One marked difference between Georgia/ EU, and the United States regulations is that the latter permits administration of growth hormones to cattle intended for use as human food, whereas Georgia/ EU have banned such practices. For instance, in relevant United States legislation it is explicitly indicated hormones and growth promoters that are federally approved and specifies permissible uses and dosages of the approved medicines. The laws are specific in many respects as well. They indicate whether the medicines are to be administered as injections or implants. Express details provide that certain medicines are only to be administered to certain types of cattle.

Georgia/ EU enactments also expressly state banning of the use of growth hormones, and the specific methods of administration where the utilization of hormones is permitted for therapeutic purposes.

For example, Georgia and the EU may authorize the therapeutic administration to livestock of testosterone, progesterone, and their derivatives that readily yield the parent compound on hydrolysis after absorption. The legislations also clarify that hormonal, thyrostatic, and beta-agonists are all prohibited for use as growth enhancing medicines. The rules leave little room to argue that certain medicines that are used illegally to increase weight gain were not clearly prohibited as they were not hormones per se.

With respect to likelihood of implementation, all three systems contain loopholes that may allow for abuse of the prohibitions and ineffective implementation of the rules. However, Georgia/ EU laws are more likely to achieve the desired prohibitions, because farmers are not authorized to possess or administer hormonal drugs that are only allowed for therapeutic uses but that can also be administered for growth promotion. Only official veterinarians, their supervisees, and other authorized persons can administer such drugs for therapeutic purposes, and farmers are prohibited from holding beta-agonists. Moreover, veterinary medicinal products banned for use as growth promoters cannot be administered by implant but must be administered by injection or for the treatment of ovarian dysfunction in the form of vaginal spirals.

It is important to note that the growth enhancing drugs have permissible uses in all three systems, hence they are available on the market and can be purchased legally in some circumstances. Thus, the possibility of them being used illegally in incorrect dosages, for unintended uses, and by unauthorized persons exists in both places as well. However, Georgia/ EU enactments contain more detailed monitoring provisions that mandate surprise inspections animals, their excrements, bodily fluids, drinking water, and stables in order to test for residues of prohibited drugs and substances. This provides more incentive for livestock producers to implement the rules.

In addition, the laws can be compared according to their effectiveness in consumer protection. The United States laws prohibit the administration of certain growth hormones in unsafe ways. Georgia/ EU operate under the premise that growth promoting hormones are dangerous to human health, and thus there are no tolerable daily intakes for many of them. In order to prevent treatment of cattle intended for human consumption, Georgia/ EU legal documents enumerate the hormones and their derivatives that are banned and prohibit the importation of beef and beef food products treated with such drugs. Georgia and the EU have drawn up such provisions with the aim of ensuring that the beef supply to their markets is safe for human food.

The laws on animal medicines are compulsory in all three systems, and penalties apply to violators. Moreover, Georgia/ EU have provisions for record keeping. The official veterinarian is required to maintain records of animals treated by hormonal substances for therapeutic purposes; however, in Georgia these requirements are not implemented due to the underdevelopment of the beef sector. Farm animals undergoing such treatment must be clearly identified, and such treatment must be registered by the responsible veterinarian. The United States' rules do not contain such provisions.

4.3.2. Organic Livestock Production

The second area of comparative review is the organic livestock production regulations. In Georgia organic production is regulated by the GoG Resolution #198. With respect to the quality of legislative drafting, Georgian legislation is superficial, and the EU and the United States systems are similarly adequate; moreover, the EU regulations surpass the United States regulations in terms of depth and detail.

The United States Organic Foods Production Act (OFPA)[3] lacks provisions on free range and open-air exercise, prohibitions on overstocking of cattle in pastures, and advisory statements on the use of husbandry practices that encourage resistance to certain diseases and infections. Respective regulations both in Georgia and the EU addresses all of these issues.

Furthermore, the likelihood of implementation of these rules is fair in all three systems, because all of three have implemented enough monitoring mechanisms in order to increase the certainty of implementation and to detect residues of prohibited substances and medicines. The OFPA and the GoG Decree #198 may be slightly more explicit with respect to monitoring provisions, because the provisions are included; whereas, the European Union has separate pieces of legislation, apart from Regulation #1804/1999[4], that provides for inspection of production and handling establishments and substance residue testing.

For example, in the United States producers and handlers of organic livestock must create an organic plan. They must also certify to the Secretary, the State official, and the certifying agent on an annual basis that all agricultural products have been produced organically. Moreover, the OFPA provides for annual on-site inspections by the certifying agent of each farm and handling operation, and the rules require periodic residue testing by certifying agents of agricultural products produced on certified organic farms and in handling operations to determine whether they contain any pesticide or other nonorganic residue. Further, the OFPA requires that public access to certifying documents is granted. All these procedures increase the likelihood that the regulation will be implemented and followed by producers. All these issues are also addressed by the relevant Georgian legislation.

It is important to note that Georgia/ EU regulations for organic livestock production are less airtight than the OFPA, because they allow conversion of non-organically produced cattle associated with organic livestock. This provision opens the door to abuse, because there is a possibility that producers will market cattle as organically produced that have not been held in conversion for required twelve-month period. Otherwise, there are significant measures in place to bolster the likelihood of implementation of the organic requirements.

[3] https://www.ams.usda.gov/sites/default/files/media/Organic%20Foods%20Production%20Act%20of%201990%20(OFPA).pdf

[4] https://publications.europa.eu/en/publication-detail/-/publication/d839b766-276a-4a46-b26d-7feca84b1876/language-en

The OFPA is not compulsory in either system in the sense that producers may elect to produce non-organic livestock, but once they seek organic certification the rules become compulsory. Both systems require record retention that is subject to inspection by the certifying agent as well. For example, in the EU and Georgia, records must be kept on all animals that are treated with veterinary medicinal products. Likewise, in the United States organic cattle farmers must keep records on all animals treated with medicines, on all feeds fed to the livestock, and on all animals so that they can be traced back to a specific farm.

4.3.3 Human Methods of Slaughter

Georgia has not adopted yet regulations governing human methods of slaughter of animals; it is expected to be adopted in 2020. Certain provisions are briefly addressed in the GoG Resolution #55 on the Approval of the Special Rule of Implementation of State Control of Food of Animal Origin.

The regulations on the human methods of slaughter in the United States and the EU are very brief and substantially similar. The quality of the legislative drafting in both is enough, because they each succinctly and clearly state the approved methods of slaughter leaving very little room for variance in interpretation.

The legislation in the United States and the EU require more measures that increase the likelihood of implementation. Express provisions requiring random inspections of slaughterhouses would improve upon this inadequacy. The rules in both systems are compulsory, but they do not contain record keeping provisions.

4.3.4 Contagious Diseases

The fourth topic of comparison is the regulation governing contagious diseases. In Georgia GoG Resolution # 348 governs preventive-quarantine measures against the number of contagious diseases including FMD, Anthrax, Brucellosis, Tuberculosis, and Rabies. Also, there are separate regulations on BSE and Tuberculosis. Most of these regulations closely resemble the respective EU regulations.

Regulations in all three system, are skillfully drafted, and are easy to interpret. In the case of the United States legislation, wide discretion is given to the Secretary to protect the meat supply in the United States. The Cattle Contagious Diseases Act and the BSE control measures clearly state that cattle produced for human consumption must be tested for the presence of communicable diseases, and they provide for the seizure, treatment, and destruction of cattle found to be diseased and unfit for human consumption. Moreover, the measures authorize the Agriculture Secretary to prohibit the importation and exportation of diseased livestock. Interestingly, the United States policies on BSE closely resemble those of the EU and consequently of Georgia.

As regards Georgia/ EU regulations for BSE and other contagious diseases, detailed rules are established for the determination of the status of specific geographic locations, with a five-category system of country classification ranging from free to high incidence. The regulation gives precise information on the measures that must be taken to ensure that BSE and other contagious diseases are timely detected and eradicated. For instance, Georgia/ EU members must carry out a yearly program

for monitoring that involves rapid post-mortem screening. The screening is to be performed on cattle showing signs of any form of disease or neurological disorder, cattle over thirty months of age, cattle that are found dead on the farm or during transport, and all animals slaughtered for human consumption. Further, specified risk materials have been designated under both systems to prevent these animal parts from introducing BSE into the human food supply. These examples illustrate the comprehensiveness of the regulations.

The likelihood of effective implementation is great in the United States and in the EU, because regulations have become more stringent in order to address the seriousness of the communicable diseases that are currently threatening in the cattle population and the beef supply. However, the likelihood of effective implementation of these regulations although they closely resemble respective EU regulations, is less, given shortage of adequately trained veterinarians, limited laboratory capacity, and financial resources.

In the contexts of all three systems, the regulations provide official inspectors and veterinarians with extensive authority to access production plants and slaughterhouses at all times of the day and night for random unannounced checks. Furthermore, specific rules governing sampling and testing during the ante-mortem and post-mortem stages increase the likelihood of effective implementation of the procedures. Surveillance systems for the detection of BSE and other contagious diseases exist in the United States and the EU, and these systems have been created to aid implementation of detection and eradication measures. In Georgia actual implementation of the surveillance is related to the shortage of adequately trained veterinary professionals, limited laboratory capacity, and a limited financial contribution by the State. Moreover, authorized veterinarians seconded to the slaughterhouses need to be remunerated for the provided services in accordance to the provided input. SOs often provide slaughtering services at night, and authorized veterinarians in order not to hinder commercial operations of slaughterhouses do not object service provision during night-time. Authorized veterinarians/ inspectors in the United States and the EU, are paid on hourly and per slaughtered animal basis, accordingly, but there is no ceiling on their monthly payment; moreover, both in the United States and the EU, authorized veterinarians/ inspectors are paid for service provision beyond regular working time.

Increased incentive to implement the measures to detect and destroy cattle and beef food products infected with BSE or other diseases that render the meat dangerous to human health is provided through government indemnity programs in the United States and the EU. Respective Georgian legislation does not have any provisions for indemnity programmes. If farmers, handlers, and producers are indemnified for their losses, they are more likely to destroy cattle and beef that are found to be infected with diseases that cause them to be unfit for human consumption. Georgia/ EU provide for compulsory reporting and examination of all cattle that exhibit clinical signs of BSE and other contagious diseases and all cattle that test positive for the diseases. If farmers are not indemnified for animals that test positive for contagious diseases, there is a high-risk that farmers will not engage pro-actively in the control of the spread of diseases, and infected animals to end up in the market.

The adequacy of consumer protection against BSE and other diseases is decent in all three systems. Strict detection and eradication standards have been implemented in all three systems. It is important to note that none of the measures are absolute guarantees that no infected beef will enter the food supply. Samples are taken since it is economically infeasible to individually test all livestock that are placed on the market. Therefore, not all beef is tested for BSE and other diseases. However, as a general matter, the safety and quality of the beef supply is amply protected by the regulations in all three system systems.

In all three system, regulations require immediate destruction of livestock that test positively for diseases that render meat unfit for human consumption. Both Georgia and the EU must ensure that no parts of the body of animals being screened for TSE are used for human food, animal feed, or fertilizers until the laboratory examination has been concluded with negative results. Identical provisions have been implemented in the United States to protect consumers.

Both Georgia and the EU have also instituted provisions to protect its citizens from BSE and other contagious diseases. For example, national reference laboratories have been designated with the aim of ensuring uniformity and reliability of scientific analysis. However, actual implementation in Georgia could be endangered due to limited laboratory capacity and financing.

The regulations regarding BSE and other infectious diseases are compulsory in all three systems. Interestingly, the EU regulations allow Member States to undertake voluntary surveillance of TSE in higher risk animals, such as those originated from countries with indigenous TSE. This is an exception, because the relevant BSE and infectious disease regulations mentioned in this paper are all compulsory in nature.

The requirements for record retention are equally stringent under the three systems. All detected cases of BSE and other contagious diseases must be recorded and reported to the USDA, European Commission and the National Food Agency.

4.3.5 Animal Movement and Trade

In the EU, Directive 64/432/EEC[5] harmonizes the rules for intra-Union trade in bovine animals and establishes the animal health guarantees needed for the trade in these animals between the Member States. The Directive lays down precise rules (e.g. prohibition of contact with other animals during the travel, cleaning and disinfection of means of transport, etc.) to be respected during the movement of bovine animals from the holding of origin to the final destination (another holding or a slaughterhouse) to try to avoid any possible spread of serious disease in the European Union. These movements may involve the use of approved assembly centers. In addition, there are rules regarding the health status in relation to animal diseases and provisions for tests to detect these diseases to be carried out by official veterinarians. **Traceability** is also a key component of animal health control. Animals must be appropriately identified to ensure that when animals are presented for dispatch to another Member State, they can be subsequently accounted for on arrival at the place of destination.

[5] https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A31964L0432

The Directive provides also for a **harmonized health certificate** in which, **prior to dispatch**, an official veterinarian attests that the animals fulfil all the requirements for intra-Union trade. This accompanies the animal and the movement must be recorded in TRACES. If assembly centres are involved, additional veterinary certification is required.

The European Commission requires consignments of **animals** to be accompanied by **health certificates** or **trade documents**. When such consignments are exported to the EU or traded within the **EU single market**, TRACES manage the official controls and route planning, quickly and efficiently online. At the destination the TRACES tracking system provides an important tool to ensure compliance because it allows the receiving Member State to verify that the consignment arriving at the destination corresponds to that specified in the original health certificate accompanying the animals from the Member State of origin, or from the third countries.

Intra-Community trade in certain live animals and their products is only permitted from establishments that comply with the relevant provisions of Community law and are approved for that purpose by the competent authority of the EU country where they are located. According to Directive 2008/73/EC[6], the EU countries must draw up, keep up-to-date and make the lists of approved establishments in the veterinary and zoo-technical fields available to the other EU countries and to the public.

In the United States interstate regulations provide for quarantine, restriction of movement, maintenance of sanitation, and identification of animals to prevent the spread of animal disease. Accredited veterinarians certify livestock for intrastate and interstate transportation according to the regulations in Title 9 Code of Federal Regulations (9 CFR)[7]. Individual States provide certificates of veterinary inspection that are available from the State animal health official. Interstate transportation of animals (including poultry) and animal products must conform to the requirements in 9 CFR, chapter 1, subchapter C, Parts 70 through 89.[8] Most States have additional animal-entry requirements. Interstate movement of diseased animals is generally prohibited, 9 CFR Part 71.3.[9] For interstate movements, all cattle 2 years of age or over, except steers and spayed heifers, must be individually identified and accompanied by a Certificate of Veterinary Inspection or other document. Exceptions apply to certain movements, such as when there is no change of ownership or movements to certain stockyards or slaughtering establishments.

In Georgia requirements for animal movement and trade are laid down in GoG Decree #422 on Veterinary and Sanitary Rules during Animal Movement (including to summer and winter pastures), GoG Decree #764 on Bovine Animal Identification and Registration and Registration of Holdings/ Temporary Holdings, GoG Decree # 417 on the Rules Governing Food and Animal Trade at Agricultural and Open Markets, and GoG Decree 325 on the Rules Governing Veterinary Forms and their Issuance in Regard to the Movement of Live Animals and Animal Origin Products on the

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32008L0073
[7] https://www.law.cornell.edu/cfr/text/9
[8] https://www.law.cornell.edu/cfr/text/9/chapter-I/subchapter-C
[9] https://www.law.cornell.edu/cfr/text/9/71.3

Territory of Georgia. Content of these Decrees closely follow content of relevant EU and the United States regulations. These Decrees present rules governing conditions to be adhered during transportation and at the markets, health status of bovine animals, some welfare elements, traceability, etc. Major deviation is that the EU and the United States regulations have detailed requirements on all these aspects, while Georgia's legislation is relatively general. The generality is notable in respect to veterinary and sanitary requirements towards establishments and transport, approval requirements for establishment, and the role and responsibilities of state veterinarians. Also, Georgia is not part of TRACES yet; some preliminary works have already been concluded.

4.3.6 Inspections

The final subject-matter of review is inspection regulations. In Georgia special rules governing inspections are the GoG Resolution #90 on the Special Hygiene Rules on Food of Animal origin, and the GoG Resolution #55 on the Approval of the Special State Control Rules on Food of Animal Origin. These legislative acts closely resemble respective EU enactments.

The rules clearly articulate inspection requirements and leave very little, if any, room for differing interpretations. Additionally, the laws are comprehensive in that they mandate inspections at various stages of the slaughtering and meat production process.

For example, in the United States the Federal Meat Inspection Act (FMIA)[10] requires the following: (1) ante mortem inspections, (2) post-mortem inspections, and (3) pre-packaging inspections. Subsequent inspections are required before beef and beef products that are offered for intrastate and interstate commerce and exportation, and sanitation inspections are required for all slaughtering, canning, packing, and similar establishments. The FMIA expressly states that inspections may be carried out randomly and without prior notice. Similar provisions exist in the Georgia/ EU inspection regulations.

Furthermore, inspections of slaughtering and meat production facilities are to be carried out with an eye toward prescribing appropriate rules and regulations for the establishments.

Concerning the comprehensiveness of the European Union's and Georgia's inspection regulations, Directive 2004/41/EC[11] and Resolutions #55 and #90, respectively, clearly state the requirements for inspection at different stages of the meat production process. For instance, Directive 2004/41/EC mandates ante mortem and post-mortem inspections by the official veterinarian. The drafting of this Directive and these Resolutions are slightly more specific than their American counterpart.

Directive 2004/41/EC and Resolutions #55 and #90 explicitly mandates that meat affected with certain conditions or derived from certain sources must be declared unfit for human consumption. These rules are stated together and more concisely. Specifically, they provide that meat from animals with such diseases as actinobacillosis, blackleg, rabies, tetanus, acute lesions of broncho-pneumonia,

[10] https://www.fsis.usda.gov/wps/portal/fsis/topics/rulemaking/federal-meat-inspection-act
[11] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32004L0041&from=EN

pleurisy, peritonitis, arthritis, pericarditis, enteritis, meningo-encephalo-myelitis must be declared unfit for human consumption. These legal acts also provide that meat must be declared unfit for consumption that is derived from animals that are stillborn, unborn, slaughtered too young, and emaciated, to name a few of the enumerated conditions. The likelihood of implementation of the inspection regulations is fair in all three systems. Moreover, the inspection regulations in all three systems have built-in checks to increase the likelihood of implementation.

In the United States, several provisions of the FMIA are intended to monitor implementation of the inspection regulations. For instance, the requirements for inspections at various stages of the meat production process are built-in checks, which seek to ensure the safety and wholesomeness of the beef supply through repeat inspections before the meat reaches supermarkets. In addition, inspectors must prepare official certificates clearly stating the condition of inspected cattle. Owners must obtain health certificates in order to gain clearance for vessels carrying beef for export from United States ports to foreign countries.

Additional measures are contained in the FMIA to verify implementation of the inspection provisions. The Secretary of Agriculture must grant certification to all countries that import carcasses and beef products into the United States so as to verify that the country employs reliable analytical methods and comparable standards for detecting residues in meat. The review of certification applications necessarily entails the inspection of individual establishments to confirm that inspection programs in foreign countries comply with United States standards.

In the EU Directive 2004/41/EC[12] and Georgia's Resolutions #55 and #90 have built-in checks to improve the likelihood of implementation. For example, carcasses and beef items must be accompanied during transport by accompanying commercial documents. These documents are provided by the dispatching establishment and they must bear the veterinary approval number of slaughtering or processing plant. Also, a health certificate is required for meat from a slaughterhouse in a restricted region and meat that is sent from one Member State to another Member State.

Directive 64/433/EEC and Resolutions #55 and #90 require the presence of an official veterinarian at slaughterhouses, cutting plants, and cold stores. In Georgia and in each Member State, a central agency must collect the results of the official veterinarian's ante mortem and post-mortem inspections for diseases transmissible to humans. In addition, Directive 2004/68/EC[13] authorizes on-the-spot inspections by veterinarians of Member States and the European Commission to verify whether the third countries that import fresh meat into the European Union meet specified standards, and provides that these inspection cost are to be paid by the European Community.

Directive 2004/41/EC and Georgia's resolutions require that fresh minced meat that is to be traded must be transported by an accompanying commercial document from the dispatching establishment, and frozen meat must bear the veterinary approval number of the production. Relevant regulations require conduct of surprise checks to sample for residues and substances that are illegally

[12] https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32004L0041
[13] https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32004L0068

administered to cattle. These checks must be random and unforeseen, and they must be performed at intervals throughout the year to test for substances that are only administered seasonally. These provisions are included to increase the likelihood of implementation of the inspection regulations.

Georgia/ EU and the United States inspection regulations are equally adequate with respect to consumer protection provisions. In both systems, the requirements for inspection at various phases in the meat production process are included in order to ensure that safe and wholesome beef enters the food supply. Moreover, immediate destruction and disposal of animals, carcasses, and meat that is found to be unfit for human consumption is required in all three systems. Animals that have been condemned must be isolated and slaughtered separately in order to avoid contamination of healthy animals intended to be slaughtered for human consumption.

Economic limitations prevent SOs in Georgia to test all animals before they are declared fit for consumption. Considering economic limitations of SOs, the NFA elaborated recommendations on the frequency of sampling for microbiological analysis purposes as follows: annually 1 sample for SOs slaughtering up to 500 heads of cattle, 4 samples annually for slaughterhouses with slaughtering capacity between 500-5,000 heads of cattle, and 6 samples annually for slaughterhouses with slaughtering capacity exceeding 5,000 heads of cattle. Considering the large volume of cattle and beef products that enter and exit meat processing plants in the United States and the European Union, it is impossible for each animal or product to be tested before it is declared fit for consumption. For instance, in the United States the sampling frequency requirement for official slaughtering establishments testing cattle for *Escherichia coli* is 1 test per 300 carcasses, with a minimum requirement of one sample each week. Despite reasonable economic justifications, there is still a small risk that contaminated meat will not be detected under these rules. Also, in Georgia like in the EU, regulations permit SOs to take samples by themselves, while in the United States sampling is done either by authorized inspector or under the supervision of authorized inspector. The key feature of Georgia/ EU regulations is that they are more explicit in making the responsibility to produce safe food lie with the SO based on the implementation of Hazard Analysis and Critical Control Point (HACCP) principles.

One feature of Georgia/ EU regulations that aim to ensure consumer safety are the explicit requirements for freezing and chilling meat in order to avoid contamination with pathogens and microbes that would render the meat dangerous to human health. For example, fresh minced meat must be chilled and cooled to an internal temperature below +2°C in the shortest time possible, and deep-frozen minced meat must be deep frozen and cooled to an internal temperature below -18°C in the shortest time possible. Similar provisions are likely to be present in the state and local inspection regulations in the United States.

The inspection regulations in all three systems are of a compulsory nature. For live cattle, beef, and beef food products to be placed on the market, they must be inspected in order to ensure that they are safe and disease-free. Therefore, mandatory implementation of the rules is needed to protect consumers. All three systems have record-keeping requirements that allow them to trace cattle, from which beef food products are derived, back to the herd in case contagious diseases or other conditions are found upon inspection.

5. Regulation Pertaining to the Beef Sector Missing in Georgia's SPS Approximation Plan - Beef carcass grading

In order to further improve the quality and safety of beef and beef products for local and international markets, it is essential Georgia to adopt legislation governing beef carcass grading. Georgia currently does not have relevant legislation, and beef grading and quality determination is subjective based on the parts of cattle and the colour; moreover, Approximation Plan does not foresee elaboration and adoption of such legislation.

The meat sectors in the United States and Europe have long used marketing standards to encourage producers to improve their products. The marketing standards have been main means by which producers have been persuaded to improve the quality and safety of their products, and the information that is provided to consumers. In the EU main aims of marketing standards are to establish minimum harmonized standards to facilitate trade (both internal and external), and to ensure EU consumers are provided with good quality fresh and frozen meat produced to a common, high standard. Both in the EU and the United States it is compulsory for slaughterhouses to have in-house beef carcass grading systems.

Beef carcass grading systems predict the economic value of a beef carcass through differences observed in carcass traits that influence retail yield and palatability. Most beef grading systems used today evaluate carcasses or primal cuts using the visual evaluation of parameters easily measured on a moving slaughtering chain. Beef quality grading systems, such as the USDA take into account factors both related to beef quality palatability, such as the degree of marbling, skeletal maturity, and lean colour, and carcass yield, such as dorsal fat thickness, amount of pelvic, kidney and hearth fat, longissimus dorsi area, and carcass weight.[14] The European Beef Carcass Grading system takes into account carcass conformation and fatness, although these factors are probably more related to carcass cutability than palatability. In the European grading system, Conformation has six grades which form the word SEUROP; S being those carcasses with "superior" conformation to P = "poor". [15]

More detailed information on USDA Beef quality grades can be found at https://meat.tamu.edu/beefgrading/; similar information on EU beef quality system can be accessed at https://ec.europa.eu/agriculture/sites/agriculture/files/market-observatory/meat/beef/doc/methodology-carcase-remainders_en.pdf

[14] https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&mc=true&r=PART&n=pt7.6.54#sp7.3.54.a
[15] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1308
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From the Farm to the Factory: An Overview of the American and European Approaches to Regulation of the Beef Industry; Crisarla S. Houston

Identification and Traceability of Cattle in Selected Countries Outside of North America; Dustin L. Pendell, Yeongpil Yoon, Keith E Belk

Annex 1. List of respondents

#	Name	Affiliation
1	Giorgi Mikadze	Head of Food Safety Department, NFA
2	Davit Bedoshvili	General Director, Bio Caucascet
3	Demna Khelaia	Head of Veterinary Department, NFA
4	Dimitri Kvirikashvili	Caucasus Genetics, Manager
5	Ioseb Menteshashvili	Deputy Head of Veterinary Department, NFA
6	Mikheil Sokhadze	Head of NAITS Project, UN FAO
7	Paata Kurdadze	Deputy Head of Food Safety Department, NFA
8	Iveri Akhalbedashvili	Head of the Parliament Agricultural Issues Committee Apparatus

Annex 2. List of stakeholder questions

1. What are the beef sector governing legislative acts adopted in the frame of the DCFTA?
    a. What are the main topics addressed by these legislative acts?
    b. What are the flexibilities allowed compared to the equivalent EU regulations?
    c. What are the underlying reasons of allowed flexibilities, if any?
    d. In your opinion and based on industry feedback what are the main challenges related to the implementation of these legislative acts?
2. What are the beef sector governing legislative acts to be adopted in the frame of the DCFTA?
    a. What are the main topics addressed by these legislative acts?
    b. What are the flexibilities allowed compared to the equivalent EU regulations?
    c. What would be underlying reasons of allowed flexibilities, if any?
    d. In your opinion and based on industry feedback what would be challenges in regard to the implementation of these legislative acts?

3. What are the important legislative acts governing beef sectors that are enforced in EU and have not been included in the DCFTA approximation plan?
    a. Underlying reason for exclusion of these legislative acts from the DCFTA agreed approximation plan?
    b. What are the main topics addressed by these legislative acts?
4. Which regulations govern veterinarian activities at the slaughterhouses?
    a. Are there any challenges related to the implementation (please, provide list and underlying reasons)?
5. What are the official beef standards? Voluntary beef standards applied by the private sector?
    a. If there are none, what is the underlying reason?
6. What are the major shortcomings and concerns of the current system of state veterinarian secondment to the slaughterhouses?
    a. What should be done to address identified shortcomings?
7. What are the main gaps and concerns in the current system of the beef sector along the supply chain?
8. From public official perspective what are the main challenges faced by slaughterhouse operators?
9. From consumer perspective what are the main challenges faced by slaughterhouse operators?
10. From entrepreneur perspective what are the main challenges faced by slaughterhouse operators?

Annex 3. Surveyed Slaughterhouses

#	Company	District
1	Akhaltsikhe Agrofood	Akhaltsikhe
2	Kusha 2011	Akhaltsikhe
3	Meskheti Products	Aspindza
4	Ertoba	Chokhatauri
5	Pavoriti	Gardabani
6	Chemi Rancho	Gardabani
7	Ivane Kharatishvili	Gardabani
8	Angeli	Gardabani
9	GiviGelakhuri	Kaspi
10	Aisi 2005	Khashuri
11	Meat Combinat 2016	Khashuri
12	Veliani	Khashuri
13	Giorgi Nadaraia	Khoni
14	Nikora 2015	kutaisi
15	Kutaturi	kutaisi
16	Gocha injia	Martvili
17	Arli group	Mtskheta
18	ZT Village Mukhrani	Mtskheta
19	Mitera	Sagarejo

20	Matadori	Sagarejo
21	Tengiz Khocholava Chela	Senaki
22	KlimentiChochua	Senaki
23	Iori	Tbilisi
24	Meat Products	Tbilisi
25	Maolta	Tbilisi
26	Loma	Tbilisi
27	MDM group	Tbilsi
28	Georgian Meat Product	Telavi
29	Animal Slaughter Enterprise	Tetritskaro

Annex 4. Questionnaire for Slaughterhouse Operators

1. Number of years in the business
2. When was the Plant constructed?
3. When was the Plant last time renovated?
4. How many sections does the Plant have and what are the sections (i.e. hide and skin curing, etc.)?
5. Does the Plant have a certified HACCP system?
6. How many employees do you have?
7. Is there seconded state veterinarian responsible for the state sanitary-veterinary supervision of slaughtering process?
8. What are the benefits/ advantages and shortcomings of the current system of secondment?
9. How should state supervision function in ideal situation?
10. Does somebody provide third party independent audit?
11. Has the Plant management taken training in HACCP, and in any other specific topics (i.e. detection and control of pathogens, process controls, labelling, etc.)?
12. How many employees of the Plant have taken trainings in HACCP, and in any other specific topics (i.e. detection and control of pathogens, process controls, labelling, etc.)?
13. Does the Plant have in place or secure continued education/ training in food safety for its personnel?
14. Does the Plant have designated employee responsible on food safety issues?
    - What proportion of his/her time designee devotes to the food safety issues?
15. Does the Plant have designed employee responsible for quality management?
    - What proportion of his/her time designee devotes to ensure quality?
16. Approximately how many heads of cattle does the Plant slaughter per year?
17. Which months are the busiest months in the operation of the Plant?
18. Which months are the slowest months in the operation of the Plant?
19. What is the maximum capacity of the Plant in relation to what it is currently slaughtering?
20. What is the total area of the production space?
21. How many slaughter shifts does the plant operate daily?
22. How many clean-up shifts does the plant operate daily?

23. What is the routine frequency used by the Plant for sanitizing hands or gloves that contact raw product in the slaughter area of the plant?
24. What types of technologies does the Plant apply (i.e. own microbiological testing, stem vacuum units, etc.)
25. What types of practices does the Plant apply in its operations (i.e.
26. How does the Plant determine the age of cattle?
27. How does the Plant dehair carcasses?
28. How does the Plant de-hide carcasses?
29. Does the Plant have either manual or electric hoists for lifting the carcass?
30. Does the Plant have procedures in place to prevent cross contamination (please, explain)?
31. Does the Plant have cutting and processing, hide and skin curing, and intestines and by-products, and cooling and laboratory premises
32. Do the current regulations have an impact on the number of animals that the Plant slaughters?
    - Please, provide positive and negative consequences by specific regulations, and underlying reasons
33. Does the Plant have any plans to expand its facility in near future (one-yeartime-frame)?
34. Who are the main suppliers of cattle?
35. From which geographic locations does the supplies of the Plant originate?
36. Does the Plant have long terms relations with suppliers?
    - What are the basis of established relations?
37. Does the Plant provide only slaughter services to suppliers or also buys cattle for further slaughter and sales?
38. What are the main markets?
39. Is there competition among slaughterhouses?
40. Based on maintained records is it possible for the Plant to trace back slaughtered animal?
41. Is illegal slaughtering a challenge for the Plant?
42. What are the factors that provide suitable environment for illegal slaughtering?
43. Does the Plant have own laboratory to conduct microbiological testing or does it use services of private/ public labs?
44. Which methods of microbiological testing are used (either in its own lab, or by a service provider) to test prior to slaughter?
45. For which organisms and at what frequency does the Plant carry microbiological testing?
46. Does the Plant test environmental samples, and which methods are used to test environmental samples and what is the frequency of testing of specific environmental samples?

Annex 5. Legislation approximation – beef sector

Table 1.1. Approximated legislation in veterinary area

#	EU Regulations	Relevant Legislation in Georgia	Year of Approximation
1	Council Directive 2003/85/EC of 29 September 2003 on Community measures for the control of foot-and-mouth disease repealing Directive 85/511/EEC and Decisions 89/531/EEC and 91/665/EEC and amending Directive 92/46/EEC	GoG Decree # 348 of July, 14 2015 On Approval of the Rules for Implementation of Preventive-Quarantine Measures against Animal Transmissible Diseases	2015
2	Regulation (EC) No 1760/2000 of the European Parliament and of the Council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97.	GoG Decree # 764 of December 31, 2014 on Identification and Registration of Bovine Animals and Registration of Their Holdings / Temporary Holdings	2015
3	Commission Regulation (EC) No 1082/2003 of 23 June 2003 laying down detailed rules for the implementation of Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards the minimum level of controls to be carried out in the framework of the system for the identification and registration of bovine animals	GoG Decree # 764 of December 31, 2014 on Identification and Registration of Bovine Animals and Registration of Their Holdings/ Temporary Holdings	2015
4	Commission Regulation (EC) No 911/2004 of 29 April 2004 implementing Regulation (EC) No 1760/2000 of the European Parliament and of the Council as regards eartags, passports and holding registers	GoG Decree # 764 of December 31, 2014 on Identification and Registration of Bovine Animals and Registration of Their Holdings /Temporary Holdings	2015
5	Commission Regulation (EC) No 494/98 of 27 February 1998 laying down detailed rules for the implementation of Council Regulation (EC) No 820/97 as regards the application of minimum administrative sanctions in the framework of the system for the identification and registration of bovine animals	GoG Decree # 764 of December 31, 2014 on Identification and Registration of Bovine Animals and Registration of Their Holdings / Temporary Holdings	2015
6	Regulation (EC) No 999/2001 of the European Parliament and of the Council of 22 May 2001 laying down rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies	GoG Decree # 600 of December 28, 2016 on Technical Regulation - Prevention of Certain Transmissible Spongiform Encephalopathies, Approval and Elimination Rules	2016
7	Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002	GoG Decree # 605 of December 29, 2017 on Technical Regulations - On Approval of Rules for the Recognition of a Business Operator Related to Non-Food Animal Origin Products (including Animal Waste) and Derived Products Not Intended for Human Consumption	2017

8	Commission Regulation (EU) No 142/2011 of 25 February 2011 implementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive	GoG Decree # 605 of December 29, 2017 on Technical Regulations - On Approval of Rules for the Recognition of a Business Operator Related to Non-Food Products (including Animal Waste) and Secondary Products Not Designed for Human Use	2017
9	Council Directive 92/118/EEC of 17 December 1992 laying down animal health and public health requirements governing trade in and imports into the Community of products not subject to the said requirements laid down in specific Community rules referred to in Annex A (I) to Directive 89/662/EEC and, as regards pathogens, to Directive 90/425/EEC	GoG Decree #595 of December 28, 2017 on Approval of Public and Animal Health Rule on Trade and Importation of Subjects to Special Requirements"	2017
10	Directive 2003/99/EC of the European Parliament and of the Council of 17 November 2003 on the monitoring of zoonoses and zoonotic agents, amending Council Decision 90/424/EEC and repealing Council Directive 92/117/EEC	GoG Decree # 323 of July 5, 2017 on Approval of the Monitoring Procedure for Zoonosis and Zoonotic Agents	2017
11	Council Directive 64/432/EEC of 26 June 1964 on animal health problems affecting intra-Community trade in bovine animals and swine	GoG Decree # 584 of December 28, 2017 Technical Regulation on Animal Health Problems Affecting Trade in Cattle and Swine	2017
12	Regulation (EC) No 998/2003 of the European Parliament and of the Council of 26 May 2003 on the animal health requirements applicable to the non-commercial movement of pet animals and amending Council Directive 92/65/EEC	GoG Decree # 551 of November 16, 2018 on Non-commercial Movement of Pet Animals	2018
13	Commission Regulation (EC) No 1266/2007 of 26 October 2007 on implementing rules for Council Directive 2000/75/EC as regards the control, monitoring, surveillance and restrictions on movements of certain animals of susceptible species in relation to bluetongue.	Decree of Government of Georgia of August 3 2018 N 398 – On approval of the special rule for elimination and control of bluetongue.	2018
14	Council Directive 2000/75/EC of 20 November 2000 laying down specific provisions for the control and eradication of bluetongue	GoG Decree # 398 of August 3, 2018 on Approval of the Special rule for Elimination and Control of Bluetongue.	2018
15	Council Directive 2002/99/EC of 16 December 2002 laying down the animal health rules governing the production, processing, distribution and introduction of products of animal origin for human consumption	GoG Decree # 587 of December 13, 2018 on Approval of the Rules of Animal Health governing the Production, Processing, Distribution, Distribution and Import of Animal Origin Products for Human Consumption	2018

		Enters in force on January 1, 2021	
16	DIRECTIVE 2001/82/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 6 November 2001 on the Community code relating to veterinary medicinal products	GoG Decree # 112 of February 19, 2019 on the Procedure for Registration, Production Authorization and Control of Veterinary Drugs Partially enters in force on January 1, 2023, and fully on January 1, 2027	2018
17	DIRECTIVE 2004/28/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 amending Directive 2001/82/EC on the Community code relating to veterinary medicinal products	GoG Decree # 112 of February 19, 2019 on the Procedure for Registration, Production Authorization and Control of Veterinary Drugs Partially enters in force on January 1, 2023, and fully on January 1, 2027	2018
18	COMMISSION REGULATION (EC) No 1662/95 of 7 July 1995laying down certain detailed arrangements for implementing the Community decision-making procedures in respect of marketing authorizations for products for human or veterinary use	N/A	2018
19	Regulation (EC) No 470/2009 of the European Parliament and of the Council of 6 May 2009 laying down Community procedures for the establishment of residue limits of pharmacologically active substances in foodstuffs of animal origin, repealing Council Regulation (EEC) No 2377/90 and amending Directive 2001/82/EC of the European Parliament and of the Council and Regulation (EC) No 726/2004 of the European Parliament and of the Council	GoG Decree # 112 of February 19, 2019 on the Procedure for Registration, Production Authorization and Control of Veterinary Drugs Partially enters in force on January 1, 2023, and fully on January 1, 2027	2018

Table 1.2. Legislation to be approximated in veterinary area

#	EU Regulations	Year of Approximation
1	Council Directive 2004/68/EC of 26 April 2004 laying down animal health rules for the importation into and transit through the Community of certain live ungulate animals, amending Directives 90/426/EEC and 92/65/EEC and repealing Directive 72/462/EEC	2019
2	COMMISSION DIRECTIVE 2006/130/EC of 11 December 2006implementing Directive 2001/82/EC of the European Parliament and of the Council as regards the establishment of criteria for exempting certain veterinary medicinal products for food-producing animals from the requirement of a veterinary prescription	2019
3	Regulation (EC) No 183/2005 of the European Parliament and of the Council of 12 January 2005 laying down requirements for feed hygiene	2019
4	Commission Regulation (EC) No 141/2007 of 14 February 2007 concerning a requirement for approval in accordance with Regulation (EC) No 183/2005 of the European Parliament and of the Council for feed business establishments manufacturing or placing on the market feed additives of the category coccidiostats and histomonostats	2019

5	Council Directive 92/119/EEC of 17 December 1992 introducing general Community measures for the control of certain animal diseases and specific measures relating to swine vesicular disease	2020
6	Regulation (EC) No 767/2009 of the European Parliament and of the Council of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC	2020
7	Commission Recommendation 2011/25/EU of 14 January 2011 establishing guidelines for the distinction between feed materials, feed additives, biocidal products and veterinary medicinal products	2020
8	Commission Regulation (EU) No 68/2013 of 16 January 2013 on the Catalogue of feed materials	2020
9	Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed	2021
10	Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition	2021
11	Commission Regulation (EC) No 378/2005 of 4 March 2005 on detailed rules for the implementation of Regulation (EC) No 1831/2003 of the European Parliament and of the Council as regards the duties and tasks of the Community Reference Laboratory concerning applications for authorizations of feed additives	2021
12	Commission Regulation (EC) No 429/2008 of 25 April 2008 on detailed rules for the implementation of Regulation (EC) No 1831/2003 of the European Parliament and of the Council as regards the preparation and the presentation of applications and the assessment and the authorization of feed additives	2021
13	Commission Regulation (EC) No 2075/2005 of 5 December 2005 laying down specific rules on official controls for Trichinella in meat	2021
14	Council Directive 98/58/EC concerning the protection of animals kept for farming purposes	2022
15	Commission Decision 2006/778/EC 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	2022
16	Council Directive 2008/119/EC of 18 December 2008 laying down minimum standards for the protection of calves	2022
17	Council Regulation (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of slaughtering	2022
18	Council Regulation (EC) No 1255/97 of 25 June 1997 concerning Community criteria for staging points and amending the route plan referred to in the Annex to Directive 91/628/EEC	2022
19	Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97	2022
20	Commission Regulation (EU) No 101/2013 of 4 February 2013 concerning the use of lactic acid to reduce microbiological surface contamination on bovine carcasses	2023
21	Council Directive 90/167/EEC of 26 March 1990 laying down the conditions governing the preparation, placing on the market and use of medicated feeding stuffs in the Community	2024
22	Directive 2002/32/EC of the European Parliament and the Council of 7 May 2002 on undesirable substances in animal feed	2024
23	Commission Recommendation 2004/704/EC of 11 October 2004 on the monitoring of background levels of dioxins and dioxin-like PCBs in feeding stuffs	2024

Table 2.1 Approximated legislation in food safety area

#	EU Regulations	Relevant Legislation in Georgia	Year of Approximation
1	Commission Regulation (EU) No 16/2011 of 10 January 2011 laying down implementing measures for the Rapid alert system for food and feed	GoG Decree # N578 of November 10, 2015 on Measures to Ensure Integration into the EU Food and Animal Rapid Alert System (RASFF).	2015
2	Commission Decision 2004/478/EC of 29 April 2004 concerning the adoption of a general plan for food/feed crisis management	GoG Decree # 547 of October 23, 2015on Approval of the General Plan of the Crisis Management in the Food Safety and Animal Feed, and amending GoG Decree #419 of December 29, 2010	2015
3	Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs	GoG Decree # 534 of October 16, 2015 on the General Rules of Hygiene of Foodstuff and Animal Feed of Producers, Distributors and Supervision in the Fields of Food Safety, Veterinary and Plant Protection, and Concerning the Amendment to the GoG Decree # 173 of June 25, 2010 on Monitoring and State Control	2015
4	Regulation (EC) No 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for food of animal origin	GoG Decree # 90 March 7, 2012 on the Special Rules of Hygiene for Food of Animal Origin	2015
5	Commission Regulation (EC) No 2073/2005 of 15 November 2005 on microbiological criteria for foodstuffs	GoG Decree # 581 of November 10, 2015 on Approving the Technical Regulation on Food Microbiological Indicators	2015
6	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	"Code of Food / Animal Feed Safety, Veterinary and Plant Protection", and GoG Decree # 533 of October 16, 2015 on Approving the Procedure for Implementation of State Food Safety Control of Foodstuffs and Feed	2015
7	Regulation (EC) No 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption	GoG Decree # 55 of February 12, 2015 on the Approval of the Special Procedure for the State Control of Foodstuffs of Animal Origin	2015
8	Commission Implementing Regulation (EU) No 931/2011 of 19 September 2011 on the traceability requirements set by Regulation (EC) No 178/2002 of the European Parliament and of the Council	GoG Decree # 577 of November 10, 2015 on Approval of the General Principles and Requirements of Traceability	2015
9	Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC	GoG Decree # 22 of January 18, 2016 on the Approval of the Rules of Procedure for Monitoring of Certain Substances and their Residue in Live Animals and Foods of	2015

	and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC	Animal Origin	
10	Commission Decision 97/747/EC of 27 October 1997 fixing the levels and frequencies of sampling provided for Council Directive 96/23/EC for the monitoring of certain substances and residues thereof in certain animal products	GoG Decree # 22 of January 18, 2016 on the Approval of the Rules of Procedure for Monitoring of Certain Substances and their Residue in Live Animals and Foods of Animal Origin	2015
11	Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stock farming of certain substances having a hormonal or thyrostatic action and of ß-agonists, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC	GoG Decree #10 of January 11, 2016 on Approval of the Procedure for Prohibition of the Use of Certain Hormones and Thyrostatic Substances and Beta-Agonists in Livestock	2015
12	Council Regulation (EEC) No 315/93 of 8 February 1993 laying down Community procedures for contaminants in food	GoG Decree # 567 of November 9, 2015 on Approval of the Technical Regulations on the Maximum Permissible Threshold of Certain Contaminants in Food	2015
13	Regulation (EC) No 1760/2000 of the European Parliament and of the council of 17 July 2000 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products and repealing Council Regulation (EC) No 820/97	GoG Decree # 118 of March 9, 2016 on Approval of the Technical Regulation - Rules on the Labeling of Beef and Beef Products	2015
14	Commission Regulation (EC) No 1881/2006 of 19 December 2006 setting maximum levels for certain contaminants in foodstuffs	GoG Decree # 567 of November 9, 2015 on Approval of the Technical Regulations on the Maximum Permissible Threshold of Certain Contaminants in Food	2015
15	Commission Decision 2002/657/EC of 12 August 2002 implementing Council Directive 96/23/EC concerning the performance of analytical methods and the interpretation of results	GoG Decree # 499 of November 8, 2016 on the Approval of the Procedure for the performance of analytical methods and the interpretation of results	2016
16	Commission Decision 2006/677/EC of 29 September 2006 setting out the guidelines laying down criteria for the conduct of audits under Regulation (EC) No 882/2004 of the European Parliament and of the Council on official controls to verify compliance with feed and food law, animal health and animal welfare rules	It is approximated with the Georgian legislation on auditing.	2016
17	Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC	GoG Decree # 623 of December 23, 2016 on the Approval of the Technical Regulation on the Maximum Level of Pesticide Residues in Foodstuffs and Feed of Plant and Animal Origin	2016

18	Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004 Text with EEA relevance	GoG Decree # 301 of July 1, 2016 on Approving the Technical Regulation - Providing Food Information to Consumers	2016
19	Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods	GoG Decree # 510 of November 17, 2016 on Rules Governing Claims on Nutritional Value and Health	2016
20	COMMISSION REGULATION (EU) No 1047/2012 of 8 November 2012 amending Regulation (EC) No 1924/2006 with regard to the list of nutrition claims	GoG Decree # 510 of November 17, 2016 on Rules Governing Claims on Nutritional Value and Health	2016
21	COMMISSION IMPLEMENTING DECISION 2013/63 of 24 January 2013 adopting guidelines for the implementation of specific conditions for health claims laid down in Article 10 of Regulation (EC) No 1924/2006 of the European Parliament and of the Council	GoG Decree # 510 of November 17, 2016 on Rules Governing Claims on Nutritional Value and Health	2016
22	Commission Regulation (EU) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin	GoG Decree # 639 of December 18, 2015 on Approval of the Technical Regulation on Pharmacologically Active Substances, their Classification and the Maximum Limit of Residue in Food of Animal Origin	2016
23	Regulation 1935/2004/EC of the European Parliament and of the Council of 27 October 2004 on materials and articles intended to come into contact with food	GoG Decree of June 5 2018 on the Requirements for materials and articles intended to come into contact with food Enters in force on January 1, 2024	2018
24	Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labelling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC	GoG Decree # 548 of November 16, 2018 on Traceability and Labelling of Genetically Modified Organisms, Approval of Food / Animal Feed Traceability from Genetically Modified Organisms Enters in force on January 1, 2021	2018
25	Commission Recommendation 2004/787/EC of 4 October 2004 on technical guidance for sampling and detection of genetically modified organisms and material produced from genetically modified organisms as or in	N/A to Georgia	2018

	products in the context of Regulation (EC) No 1830/2003		
26	Regulation (EC) N° 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed.	GoG Decree # 549 of November 16, 2018 on the Requirements for Genetically Modified Food and Animal Feed Effective January 1, 2021.	2018

Table 2.2 Legislation to be approximated in food safety area

#	EU Regulations	Year of Approximation
1	Commission Regulation (EC) No 2023/2006 of 22 December 2006 on good manufacturing practice for materials and articles intended to come into contact with food	2019
2	Commission Regulation (EC) No 641/2004 of 6 April 2004 on detailed rules for the implementation of Regulation (EC) No 1829/2003 as regards the application for the authorization of new genetically modified food and feed, the notification of existing products and adventitious or technically unavoidable presence of genetically modified material which has benefited from a favorable risk evaluation	2019
3	Commission Decision 2005/34/EC of 11 January 2005 laying down harmonized standards for the testing for certain residues in products of animal origin imported from third countries	2023
4	Commission Recommendation 2011/516/EU of 23 August 2011 on the reduction of the presence of dioxins, furans and PCBs in feed and food	2025
5	Commission Implementing Regulation (EU) No 503/2013 of 3 April 2013 on applications for authorization of genetically modified food and feed in accordance with Regulation (EC) No 1829/2003 of the European Parliament and of the Council and amending Commission Regulations (EC) No 641/2004 and (EC) No 1981/2006	2025
6	Directive 1999/2/EC of the European Parliament and of the Council of 22 February 1999 on the approximation of the laws of the Member States concerning foods and food ingredients treated with ionizing radiation	2026
7	Directive 1999/3/EC of the European Parliament and of the Council of 22 February 1999 on the establishment of a Community list of foods and food ingredients treated with ionizing radiation	2026