

PVS Evaluation Report

ICELAND

Human, Physical
and Financial
Resources



Technical Authority
and Capability



Interaction with
Interested Parties



Access to Markets



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OIE PVS EVALUATION

REPORT OF THE

VETERINARY SERVICES OF

ICELAND

(19th September to 3 October 2015)

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List of acronyms, abbreviations and/or special terms

ABP	Animal by products
AH	Animal Health
AW	Animal Welfare
BO	Business Operator
BTSF	EU Better Training For Safer Food
CA	Competent Authority
CC	Critical Competency
CE	Continuous Education
CVL	Central Veterinary Laboratory
CVO	Chief Veterinary Officer
DFAR	Department of food, agriculture and rural affairs
DG	Director General
DVO	District Veterinary Office
EC	European Council
EEA	European Economic Area
EFTA	European Free Trade Association ¹
ESA	EFTA Surveillance Authority
EU	European Union
FBO	Food Business Operator
FMD	Foot and Mouth Disease
FVO	Food and Veterinary Office of the EU
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis Critical Control Points
HPAI	Highly Pathogenic Avian influenza
ISK	Icelandic Kroner
IMA	The Icelandic Medicines Agency
JC	Joint Committee on Health Security and Communicable Disease Control
LFA	Local Farmers Associations
LCA	Municipal Environmental and Public Health Offices
MAST	Icelandic Food and Veterinary Authority
MBM	Meat and bone meal
Mm	Millimetres
MoE	Ministry for the Environment and Natural Resources
MoF	Ministry of Fisheries
MoH	Ministry of Health
MoI	Ministry of Industry and Innovation
MoWF	Ministry of Welfare
NFA	National Farmers Association
N/K	Not known
NRL	National Reference Laboratory
NRMP	National Residue Monitoring Programme
OIE	World Organisation for Animal Health
OIE PVS	OIE Performance of Veterinary Services
OV	Official Veterinarian
POAO	Products Of Animal Origin
PVP	Private Veterinary Practitioner
QC	Quality Control
SCC	Somatic Cell Count

¹ European Free Trade Association (EFTA) is an intergovernmental organisation set up for the promotion of free trade and economic integration to the benefit of its four Member States: [Iceland](#), [Liechtenstein](#), [Norway](#) and [Switzerland](#).

TAIEX	Technical Assistance and Information Exchange (instrument of the European Commission)
TCP	Total Bacterial Count
UST	Environment Agency
VO	Veterinary Officials
VS	Veterinary Service(s)
VPH	Veterinary Public Health
VSB	Veterinary Statutory Body (see OIE Code definition)

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PART I: EXECUTIVE SUMMARY

I.1 Introduction

Following a request to the OIE from the Government of Iceland an evaluation of the Veterinary Services based on the *OIE PVS (Performance of Veterinary Services)* methodology was conducted between 19th September and 3rd October 2015 by a team of three independent OIE certified PVS evaluators. This PVS mission only concerned the OIE Terrestrial Animal Health Code (although at the request of the CVO one fish farm was visited).

The evaluation began with meetings in the headquarters of the Icelandic Food and Veterinary Authority (MAST) with the Chief Veterinary Officer, the Director General and senior staff. The team had the privilege to meet with the Minister of Fisheries and Agriculture on the second day at the Moll.

The OIE PVS Team visited sites and institutions (public and private sector) in the cities and rural areas of Iceland and discussed relevant matters with government officials, public and private sector veterinarians, livestock producers, traders, consumers and other stakeholders.

The mission concluded in the Ministry of Industry and Innovation (Moll) Department of Fisheries and Agriculture, with a closing meeting involving representatives from Moll and MAST at which the overall findings of the evaluation were discussed.

I.2 Key findings of the evaluation

I.2.A *Human, physical and financial resources*

Iceland has in general good physical resources but insufficient operational funding and management of some personnel could be improved. There are a few weak points in physical resources include inadequate premises for veterinary officials working in slaughterhouses and airports and lack of logistic rooms (for small equipment, working clothes etc.) in district veterinary offices. The operational funding of MAST increases on a yearly basis and is clearly defined per each of MAST's mission. The CVO has limited power to decide on how the budget is allocated but the CVO heads one of the offices of MAST and gives input into the budget of the authority. Difficulties in sourcing budget to pay for sampling and laboratory analysis exist as a result of insufficient funding from the State.

It is important to note that the control of the production of all animal products is under MAST. MAST is planning internal audits of the performance of the LCAs as required by the legislation for the food chain tasks they have responsibility for.

One of the main problems is that there are few qualified Icelandic veterinarians and the salaries although apparently high for Icelandic standards are not enough to attract Icelandic veterinarians who have to graduate abroad as there is no veterinary faculty in Iceland. Many staff mentioned that this lack is not taken into account and that loans given by the state for their studies abroad takes a very long time to repay with interest being added annually. This means that is difficult to attract Icelandic veterinarians, who can earn more money abroad in private practice, and due to this and probably other factors such as taxes, cost of living etc., some overseas veterinarians are employed. Some of these cannot read or write Icelandic and therefore write their reports in English. Some Business Operators have complained and this is against

Icelandic legislation. There is also a lack of specialised veterinarians and when they are specialised there is no way to recognise this.

The difficulties for VS to fill the veterinary positions with Icelandic veterinarians are still increasing. The ratio of foreign veterinarians out of the total number of veterinarians employed in VS is increasing and if this is not rapidly addressed, this ratio will continue to increase over the coming years. This will be even more the case if, as it is recommended by OIE during this PVS Evaluation mission, the number of veterinary positions is increased. This ratio represents a major issue for VS to be in compliance with OIE standards since foreign veterinarians are little or not able to communicate in Icelandic language (the only official language).

A few options may be available to contribute to limiting this ratio: employ paraprofessionals to conduct official tasks that may not need to be directly operated by veterinarians but that veterinarians can supervise. Examples include: meat inspection; taking samples; etc. For this, MAST should engage into discussions with the Agriculture University, the Food Science Faculty etc. to study the feasibility of starting courses to train paraprofessionals. The time of the veterinarians would therefore be (1) reduced, (2) better valued;

Contract PVP to conduct on part-time basis some official activities (slaughterhouse inspection for example). Some PVPs may be interested as long as the payment per hour worked is increased; increase the number of administrative positions so these personnel can take over some administrative tasks that are currently being done by veterinarians (e.g. human resource management, secretary work, etc.). In addition it may be possible to improve the conditions for veterinarians to attract back Icelandic graduates. This could be by offering other incentives than just increasing the salaries, e.g. use of bursaries or scholarships for undergraduates studying veterinary medicine on the provision that they return to work in Iceland for at least 5 years, providing free accommodation, provision of car etc.

There is little organised initial and continuous training for official veterinarians. There is a lack of technical staff e.g. meat inspectors. Temporary veterinarians are also employed for meat inspection during the seasonal slaughtering of sheep. Most of these do not speak Icelandic. It should be evaluated to introduce officially trained meat inspectors in all slaughterhouses, which will relieve the VOs who can then do more necessary and indeed satisfying work. It was noted there were, in some instances, no job descriptions available and annual performance assessments had not been carried out.

MAST is a rather complex organisation and the current organogram is not transparent on its own as there are no management lines included; the chain of command can in certain cases be unclear, with reporting to 2 or 3 persons and in some cases insufficient support from HQ to field staff. However there is a document in support of the organogram defining the chain of command and describing the responsibilities of all offices. It covers the CVO, the responsibilities for the office of AH & AW and the chain of command regarding tasks carried out by the DVOs and the import and export office. The chain of command in particular for the CVO should be strengthened and the organogram clarified further.

There is internal co-ordination but this needs to be improved. External co-ordination is generally good with LCAs, the DoH and customs but needs to be improved with the IMA, and KELDUR (NRL) who feel isolated from MAST.

It is important to highlight that there is an overall lack of sufficient staff to carry out all the necessary functions required of MAST. The increasing and diverse workload has necessitated prioritisation of work and therefore not all areas of the veterinary domain are being adequately covered.

1.2.B Technical authority and capability

Iceland has 2 main laboratories for veterinary laboratory diagnosis but with limited diagnostic laboratory capability and limited specialised staff. The animal health national reference laboratory (Keldur) is rather isolated from MAST and is under a different ministry. The other one, Matís (Ministry of Industries and Innovation) laboratory, is mainly for food and feed. There are very few private laboratories and a lot of samples are sent abroad for testing. There is quite good preparedness for official referrals of exotic diseases to foreign laboratories with agreements in place however only one written agreement. Sample packaging is good and IATA certification is used. Private referrals to foreign laboratories are hardly ever coordinated and results are not availability. At the NRL, the influence of MAST over the laboratory is not so clear e.g. diagnosis of Streptococcus infection in horses with a delay in sending of samples to another laboratory. The staff from Keldur also feel isolated from MAST thus co-ordination and communication need to be improved and use of the NRLs for training in particular initially for VOs would be useful.

Concerning risk analysis, quarantine and border security there are in general good import/export controls. Animal imports are very restricted, limited to pets, hatching eggs and some semen which helps to maintain the country's good health status. In general there are effective controls of entry of animals and animal products at place of entry but some weak points e.g. reception procedures at airport for pets inadequate and lack of awareness for passengers of prohibited items e.g. meat and riding equipment. In addition a ferry port in the east of the country is not covered by VS and it is not deemed a border inspection post and is consequently under the responsibility of the Customs although because of the high import restrictions e.g. requirement for meat to be frozen prior to entry and for pets to be quarantined there may be a risk and some veterinary assessment is advised, It must be highlighted that there has been a significant increase in tourist and a concomitant increase in imports over the past few years; however this is not consequently addressed. This means that the risk of introduction of exotic disease has increased and should be taken into account in the control systems especially at the borders.

Although there are processes in place to manage new imports, risk management is not always based on scientific risk assessment. One person at MAST has limited training in epidemiology and risk assessment. Risk based categorisation of the BOs is good but needs to be extended.

There is good cooperation in risk assessment with the Chief (Medical) Epidemiologist. Active surveillance programmes cover a wide range of diseases but have limited number of samples in some cases. There are a number of control and eradication programmes e.g. scrapie and paratuberculosis in sheep and control programmes for Salmonella in poultry and pigs and also for campylobacter in poultry. The eradication programmes are not scientifically reviewed regularly for their efficiency and efficacy.

There are not many reports of suspicion of disease from farmers, slaughterhouses and veterinarians. In general awareness of important notifiable diseases is lacking both by farmers and the veterinarians, highlighted in recent cases of high mortality in sheep, the VS only found out from the media, and with an outbreak of coughing in horses which resulted in loss of exports of horses and damage to the industry. Animal disease awareness needs to be increased and more emergency disease exercises carried out.

An emergency fund is readily available which is limited to major disease but Salmonellosis for which there is a killing out policy is not included in compensation scheme.

There is a general disease contingency plan and only disease specific ones for horses nearly finalised. This is not a high priority and there has been only one disease simulation exercise 4 years ago for African swine fever. Another one is planned for aquaculture at the end of this year but none for livestock.

Food safety legislation follows directly EU legislation with MAST responsible down to the retail level and then the LCAs are responsible however there are some grey areas but no serious problems were seen. In general the structures of the premises and hygiene controls are very good.

The national residue monitoring programme is in line with that carried out in EU but the risk basis is questionable. There are regular audits carried out by ESA and a number of Third Countries importing from Iceland; this takes up a lot of resources.

There are no trained meat inspectors and in the main veterinarians carry this out. In the poultry plants FBO staff carries this out and there is far too little OV supervision. There is a lack of formal training and language problems with outsourced non-Icelandic veterinarians. No regular central collection, analysis and use of meat inspection data for animal health purposes.

There is very limited use of VMPs including vaccination and e.g. in poultry Coccidiostats are only used in Broilers and Turkeys; this must be linked to the good animal health status. Veterinarians raised problems with supply of VMPs however the IMA have increased the rate of authorisations and some supply problems relate to lack of imported products.

MAST and IMA are responsible for inspections of private veterinarians. There is a lack of internal co-ordination between the two agencies and also with the private veterinarians; inspection of veterinary pharmacies is very limited.

The results of farm controls (non-compliance) are not available from the database and no analysis can be carried out automatically. Similarly, there is limited analysis of other databases e.g. HEILSA & IMA. During the visit to one private veterinarian overly bureaucratic requirements were noted firstly regarding record keeping of VMP use which was solved as it was a misunderstanding and the other concerned MAST requirements for ordering of one dose of rabies vaccine at a time for administering to a pet being exported. The vaccines come in packs of ten and there was no scientific reason for this rabies vaccine order policy of splitting packs up.

There were inadequate solutions for isolated farms in winter for owners to use VMP given that a veterinarian may not be able to reach some farms because of blocked roads. This is also an issue with regard to possible animal welfare problems.

Concerning animal feed safety there are risk based controls but with insufficient follow up after Salmonella isolations i.e. no link between the risk analysis and the actual evaluation. There is now only one feed mill producing poultry feed (because of continued Salmonella contamination in the other one). This feed mill has about 2-3 days stock and there is no emergency plan in case of a problem there.

In general there are very good animal (including aquatic) identification and traceability systems including databases; cattle double ear tags, sheep and goats single ear tag and horses micro-chipped. However no bar code is used so there is no possibility to read tags electronically. Farmers are responsible for buying their own tags although manufactures are authorised by MAST.

There are around 500 persons authorised to microchip horses which is rather excessive.

There are movement controls including zoning and different coloured ear tags for different zones for sheep to prevent spread of disease e.g. scrapie and

paratuberculosis but there are some movement restrictions that are not very scientific and sheep from different zones can mix during summer pasturing.

There are mechanisms in place to trace back meat and even down to the retail level for poultry meat but not really for meat products and other products of animal origin.

A new welfare law was adopted last year, came into force 1 January 2015 and new Regulations made under this new welfare Act for each species are now in force except the one for pets which is still being drafted. There are a number of important new requirements concerning inter alia improving conditions for sows and cattle, e.g. banning use of pig stalls, sow crates, tethering of cattle and increasing size of battery cages. It also introduced regular animal welfare farm visits for all species.

It must be highlighted that the NFA, LFAs and farmers are supportive of higher standards but want the government to provide funds for the necessary structural investment. At the moment there is no linkage of welfare standards to provision of farm subsidies.

1.2.C Interaction with interested parties

In general there is good consultation of stakeholders with staff at MAST HQ but in one instance this seemed insufficient as indicated by the NFA who complained they had been asking since November 2014 for a specific meeting with the relevant MAST officials. However there is a formal cooperation committee with 2 representatives from either side that meet on a case by case basis. In addition there is regular cooperation on different issues. There is less formal consultations on the ground e.g. met LFA who had not understood the veterinary emergency cover situation; they were under the impression that this had been cut when in fact it had been altered but in effect had stayed the same. There is not sufficient time for the DVOs to engage in these meetings.

The MAST web site is not fully up to date and there is a lack of disease awareness campaigns.

There are a number of focal points for OIE, for Codex; however, by contrast, for WTO/SPS specific person has yet been officially nominated only MAST in general.

There is no veterinary faculty in Iceland so all veterinarians have to be trained abroad with possible extra cost. There is a loan system but this is subject to annual interest being added. It should be considered setting up a veterinary faculty offering the first 1 or 2 years of veterinary studies.

There is no VSB but there is a Veterinary Association. The functions of the VSB are in practice carried out by the CVO. However the CVO only recommends licencing of veterinarians while the Moll issues the licence to the veterinarian for life. There is no formal CE training requirement to retain the licence to practice veterinary medicine, which should be introduced. It should be considered setting up a VSB. There are extremely limited delegations to private veterinarians. All the veterinarians met were well trained and conscientious but some DVOs informed the team that they were quite frustrated with their conditions and sometimes inadequate support from HQ. A few private veterinary practitioners informed the team they felt sometimes a lack of support and experienced some difficulties with timely payments from MAST. The communication and consultation with them should be improved and to ensure the current high health status in Iceland there is a need for awareness campaigns for both farmers and veterinarians of serious exotic disease which they have fortunately never experienced.

1.2.D Access to markets

There is good primary legislation for the veterinary domain; for Food and Feed EU legislation is used directly but for animal health and welfare this is purely Icelandic legislation. There may be some gaps and a need for update in primary and secondary legislation in particular for animal health. Due to limited staff resources legislation is not always fully implemented and there are some areas of non-compliance. There is a need to review and update legislation to address scope and alignment with international standards. The VS can't initiate legislation only the Moll has this responsibility. MAST should be able to propose legislation amendments and new Regulations based on their experiences.

The VS generally fully meets its International certification obligations under the relevant legislation. It was noted that some import certificate wording e.g. for Salmonella a veterinarian should not be able to sign without guidance on the interpretation of this wording as the veterinary certificate just mentions "freedom from Salmonella" instead of saying "based on a number of samples taken with negative results": the legislation should be amended accordingly.

There are some OIE focal points still to be nominated and these should be filled as soon as possible.

Table 1: Summary of OIE PVS evaluation results

PVS summary results of Iceland (ranked 1 to 5 with being the highest)	Result
I. HUMAN, PHYSICAL AND FINANCIAL RESOURCES	
I.1.A. Staffing: Veterinarians and other professionals	3
I.1.B. Staffing: Veterinary paraprofessionals and other	3
I.2.A. Professional competencies of veterinarians	3
I.2.B. Competencies of veterinary paraprofessionals	3
I-3. Continuing education	2
I-4. Technical independence	3
I-5. Stability of structures and sustainability of policies	3
I-6.A. Internal coordination (chain of command)	3
I-6.B. External coordination	3
I-7. Physical resources	4
I-8. Operational funding	3
I-9. Emergency funding	3
I-10. Capital investment	3
I-11. Management of resources and operations	3
II. TECHNICAL AUTHORITY AND CAPABILITY	
II-1.A. Access to veterinary laboratory diagnosis	4
II-1.B. Suitability of national laboratory infrastructures	3
II-2. Laboratory quality assurance	4
II-3. Risk analysis	2
II-4. Quarantine and border security	3
II-5.A. Passive epidemiological surveillance	3
II-5.B. Active epidemiological surveillance	4
II-6. Emergency response	3
II-7. Disease prevention, control and eradication	3
II-8.A. Regulation, authorisation and inspection of establishments	5
II-8.B. Ante and post mortem inspection	3
II-8.C. Inspection of collection, processing and distribution	4
II-9. Veterinary medicines and biologicals	3
II-10. Residue testing	4
II-11. Animal feed safety	3
II-12.A. Animal identification and movement control	3
II-12.B. Identification and traceability of animal products	3
II-13. Animal welfare	3
III. INTERACTION WITH INTERESTED PARTIES	
III-1. Communications	3
III-2. Consultation with interested parties	4
III-3. Official representation	3
III-4. Accreditation/authorisation/delegation	3
III-5.A. Veterinary Statutory Body Authority	1
III-5.B. Veterinary Statutory Body Capacity	1
III-6. Participation of producers and other interested parties in joint programmes	2
IV. ACCESS TO MARKETS	
IV-1. Preparation of legislation and regulations	3
IV-2. Implementation of legislation and regulations and compliance thereof	4
IV-3. International harmonisation	3
IV-4. International certification	5
IV-5. Equivalence and other types of sanitary agreements	5
IV-6. Transparency	3
IV-7. Zoning	3
IV-8. Compartmentalisation NB N/A* = Not applicable	N/A*

I.3 Key recommendations

NB The recommendations with a higher priority have been highlighted in bold.

I.3.A Human, physical and financial resources

It is necessary to increase the number of veterinary positions in the VS to ensure all aspects of work can be adequately covered. It is also necessary to improve the conditions of service to attract more Icelandic veterinarians to work in Iceland.

As there is no veterinary faculty in Iceland review the possibility of introducing a 1 or 2 year course for veterinarians in conjunction with medical faculty prior to going to an overseas university and liaise with the EU veterinary faculties to improve the knowledge about Icelanders taking veterinary degree courses. Lay down standard procedures for recognition of foreign veterinary degree courses. Introduce a system to formally recognise equivalent veterinary courses and establish a list of overseas veterinary faculties that have been assessed to ensure competency of qualified veterinarians such as those approved by EU countries. Introduce a system to recognise veterinary specialisations. The CVO should issue directly the licence for veterinarians to practice in the absence of a VSB.

Ensure all VOs and DVOs undertake an introductory course before taking up their official duties. Ensure an annual evaluation for all staff is carried out; ensure that senior management of MAST has enough time and is well supported by the Human Resource's team of Moll to run such appraisals of staff;

Provide on-going awareness programmes and information packs to heighten knowledge and ability of all veterinarians to quickly suspect clinical and post mortem signs of serious notifiable diseases;

Introduce licencing of those persons who need to be licenced under Icelandic legislation; and for animal transport vehicles.

Introduce courses and training for meat inspection and introduce a regulation concerning registration of nurses. Ensure initial training for livestock inspectors prior to taking up their official duties, Establish an adequate budget line for CE, ensure staff undergoes adequate CE, and ensure proper records of attendance to training course are kept. Ensure that senior management of MAST has enough time and is well supported by the Human Resources team to run annual appraisals of staff and will input into training;

Review the organisational structure to improve the chain of command in particular for the CVO, assess the possibility that the the CVO has overall authority over more aspects of the veterinary domain, including in particular topics related to animal health (e.g. slaughterhouses, import);

Hire one consultant team to facilitate the process for the drafting of a pluri-annual strategic plan for the Veterinary Services;

Review the responsibilities for the transport of killed animals from for disease control purposes;

The design, implementation and evaluation of some specific contingency plans and simulation exercises in domains that involve other agencies would provide significant information that would enable review of the inter-agency procedures and addressing issues. Examples of simulation exercises, which could be carried out, include: human food poisoning event with each district LCA taking part; suspicion of contagious diseases in an imported dog;

Introduce specific rules for allocation of additional funds in cases of emergency;

Although the LCAs are under a local public health committee appointed by the municipalities and under their responsibility, MAST, having limited powers to ensure that food control is carried out in a harmonised way in the 10 LCAs, must have sufficient manpower at MAST headquarters to carry out its necessary LCA audits.

Coordination between MAST and IMA needs to be addressed in practical terms both to ease the operations of PVP (cf. regulations to request and obtain import permits that are not registered in Iceland) and to monitor the administration of VMP in food-producing animals;

Better coordination between MAST and the Customs is another priority. Communication materials produced by MAST are not adequately positioned in airports and ports to inform passengers about what they have to do to comply with import regulations for both live animals and food products;

In collaboration with the airport authority, MAST should assess the options to improve the premises for pets at Keflavik airport: either by transforming the existing 2 rooms, building new premises or using an adapted vehicle that would be used for both examination of pets and transfer to the quarantine facilities; The quarantine facilities for pets near Keflavik airport may not be big enough in the coming years. MAST should prepare for this;

Facilities at district offices should be upgraded to improve the possibility for storage of equipment, samples and biosecurity for staff;

Ensure that the preparation of the annual budget takes into account the possibility to recruit short-term consultants to assist the permanent staff when work (whether planned or unexpected) is increasing compared to the previous year;

MAST, as well as other agencies involved in VS, must actively prepare a detailed proposal for future annual budgets, making it clear to the Ministries that the absence of funding for some activities have a consequence over the quality or quantity of the work to be conducted;

Conduct a study to compare the current situation with the option to use less vet time for some activities (e.g. meat inspection; sample taking etc.) that could be conducted by well-trained technicians to be supervised by veterinarians. The financial assessment of that option should include the cost for the development and implementation of training courses for technicians etc.;

Identify the exceptional work (not routine) that will need to be done over the coming years. Make a proposal for the Ministry to allocate a special investment budget to fund this, in addition to the annual operational budget that is only supposed to fund routine work;

Further develop the software to enable proper compilation of data country-wide and proper analyses of the data.

1.3.B Technical authority and capability

The coordination and responsibilities of MAST and Keldur should be clarified by a written agreement. The contacts with the laboratories should be improved and the laboratories involved in training of MAST veterinarians. National reference laboratories for all notifiable diseases and for control of food safety and monitoring of residues, zoonoses and antimicrobial resistance should be designated. All access to foreign laboratories should be ensured by written contracts. In addition, the system of direct sending samples abroad should be re-evaluated.

For postgraduate training in epidemiology possibilities together with the human medicine and also for risk analysis should be evaluated. Management decisions should be reviewed for the scientific basis and especially the risk management concerning animal health and food safety by taking into account the increasing risks through increased imports and tourists should be reassessed.

At the ferry port, if it is not possible to install a OVS or technician permanently, carry out regular audits of the customs activities. At the airport, the biosecurity and holding arrangements of the holding/reception centre for pets should be improved and ensured that all incoming pets are housed properly. It should be considered whether it would be more practical to transfer pets directly to the quarantine facility. It should be ensured, that the website is up to date and easy for passengers to see what items are prohibited from entry into Iceland and that posters and information leaflets are available to passengers. Review the possibility of introducing sniffer dogs at the BIPs.

Suspicious of disease should be clearly recorded including the result and action taken and add to the annual report. The evaluation of the surveillance programmes and analysis of meat inspection results should be improved. The possibility for a need to compensate for Salmonellosis outbreaks should be reviewed. More disease specific contingency plans should be introduced and much more regular emergency disease exercises carried out. The current programmes should be reviewed to assess progress, usefulness, effectiveness and to set objectives.

Review the need for so many separate databases and amalgamate if possible; and update and ensure databases are able to provide adequate and easily available analyses of the information stored in them. In addition, a database to record sample results should be introduced and the control databases developed.

The co-ordination of IMA and MAST should be improved and the combined controls of veterinarians should be started again. The DVOs should have access in HEILSA to the prescribing veterinarian; pig treatments should be included in HEILSA. For all isolated farms in winter for VMPs solutions should be developed.

VO supervision in the poultry slaughterhouses should be increased and made more random. It should be ensured that the results of meat inspection are more regularly and widely available, in particular to the CVO. External training courses for meat inspection should be introduced or utilised and qualified meat inspectors to carry out post mortem inspections at slaughterhouses employed. CE for the personnel working in the slaughterhouses should be ensured.

Concerning feed mills, Include non-compliance (i.e. salmonella positive) in increasing basic number of yearly inspection hours and develop an emergency plan in case of a problem in the only feed mill producing poultry feed.

The excessive numbers of authorisations for micro-chipping should be reviewed and the exceptions for sheep movement evaluated.

Finalise the missing welfare regulations and increase the welfare awareness campaigns concerning the new raft of animal welfare legislation both to the public, farmers and PVP. Introduce licencing/registration requirements for animal transport vehicles to ensure welfare of animals being transported and nominate an OIE animal welfare focal point.

1.3.C Interaction with stakeholders

Consider giving financial support to farmers to speed up the introduction of the new welfare requirements in particular concerning the change in sow stalls, cattle – increased space allowances and increased cage sizes for layers and to introduce “cross compliance” system to link non-compliances in holdings to the subsidy payment system.

The website must be better maintained and updated with the inclusion of more English information on the website where necessary. Agreements need to be developed on what and who to communicate to.

Participation of producers and PVP in early detection of diseases should be improved and therefore awareness campaigns must be increased together with the development of leaflets for serious notifiable disease both for farmers and veterinarians;

Review the possibility to expand the delegation of some official tasks to PVPs;

Allocate more time and travel budget to the CVO and colleagues to attend international meetings of OIE, CODEX, WTO/SPS etc. and ensure the nomination of all 8 OIE focal points;

Evaluate the possibilities to establish a VSB or evaluate how to introduce some objectives of a VSB. In the meantime strengthen the powers of the Committee on ethics in the Veterinary Association and introduce a code of conduct. Introduce Continuing Education for all veterinarians.

1.3.D Access to markets

Review if its legally possible for MAST to propose draft legislation to the Moll in particular concerning updating old legislation and for necessary regulations. When drafting legislation internal and external quality should be improved and explanations to stakeholders concerning reasons for changes after consultations should be given;

Introduce routine inspections for approvals of sheep and horse farms on a similar basis as is done for other species by amending the relevant legislation accordingly;

Ensure adequate numbers of staff to properly cover all functions and rectify the instances noted where MAST is not fully implementing the legislation.

Introduce or rather implement the possibility to give fines for non-compliances of the legislation;

Improve the link between risk analysis and risk evaluations from inspection visits to better address the problems noted. Improve outputs from databases so proper analysis and evaluation of results in particular for non-compliances can be made;

Nominate a Risk Assessment Committee according to the Food Act to assist MAST;

Be more active in reviewing and commenting on draft International standards. Ensure participation in EU OIE and Codex co-ordination meetings; Improve notifications to

international bodies and other interested parties and ensure all unusual animal disease events notified promptly to the OIE;

Ensure adequate budget and proper maintenance of fences separating zones and review programmes in particular concerning movement controls and numbers of zones.

NB All the general and detailed recommendations may be found in PART III under each of the Critical Competency chapters.

PART II: CONDUCT OF THE EVALUATION

At the request of the Government of Iceland, the Director General of the OIE appointed an independent OIE PVS team consisting of Dr Howard Batho (Team Leader), Dr Patrice Gautier and Dr Dagmar Heim (Technical experts) to undertake an evaluation of the Veterinary Services of Iceland. The evaluation was carried out between 19th September and 3rd October 2015.

The evaluation was carried out with close reference to the OIE standards contained in Chapters 3.1., 3.2., 3.3. and 3.4. of the OIE *Terrestrial Animal Health Code* (the Terrestrial Code), using the OIE *PVS Tool* (6th edition, 2013) to guide the procedures. Relevant Terrestrial Code references are quoted for each critical competency in appendix 1.

This report identifies the strengths and weaknesses of the Veterinary Services of Iceland as compared to the OIE standards. The report also makes some general recommendations for actions to improve performance.

II.1 OIE PVS Tool: method, objectives and scope of the evaluation

To assist countries to establish their current level of performance, form a shared vision, establish priorities and carry out strategic initiatives, the OIE has developed an evaluation tool called the OIE Tool for the Evaluation of Performance of Veterinary Services (OIE PVS Tool²) which comprises four fundamental components:

- Human, physical and financial resources
- Technical authority and capability
- Interaction with interested parties
- Access to markets.

These four fundamental components encompass 47 critical competencies, for each of which five qualitative levels of advancement are described. For each critical competency, a list of suggested indicators was used by the OIE PVS Team to help determine the level of advancement.

A glossary of terms is provided in Appendix 2.

The report follows the structure of the OIE PVS Tool and the reader is encouraged to consult that document to obtain a good understanding of the context in which the evaluation was conducted.

The objective and scope of this OIE PVS Evaluation includes all aspects relevant to the OIE Terrestrial Animal Health Code and the quality of Veterinary Services however it is highlighted that the aquatic sector which is of significant importance to Iceland has not been assessed in relation to OIE Aquatic Animal Health Code during this mission and a PVS covering this should be the object of a specific distinct evaluation.

² Available at http://www.oie.int/eng/oie/organisation/en_vet_eval_tool.htm?e1d2

II.2 Country information (geography, administration, agriculture and livestock)

Background information on Iceland

Iceland lies between the North Atlantic and the Arctic Ocean. It has a population of 329,100 and an area of 103,000 km² (40,000 square miles), making it the most sparsely populated country in Europe. The capital and largest city is Reykjavík. Reykjavík and the surrounding areas in the southwest of the country are home to over two-thirds of the population. Iceland is volcanically and geologically active. The interior consists of a plateau characterised by sand and lava fields, mountains and glaciers, while many glacial rivers flow to the sea through the lowlands. Iceland is warmed by the Gulf Stream and has a temperate climate, despite a high latitude just outside the Arctic Circle.

Figure 1: Map of country

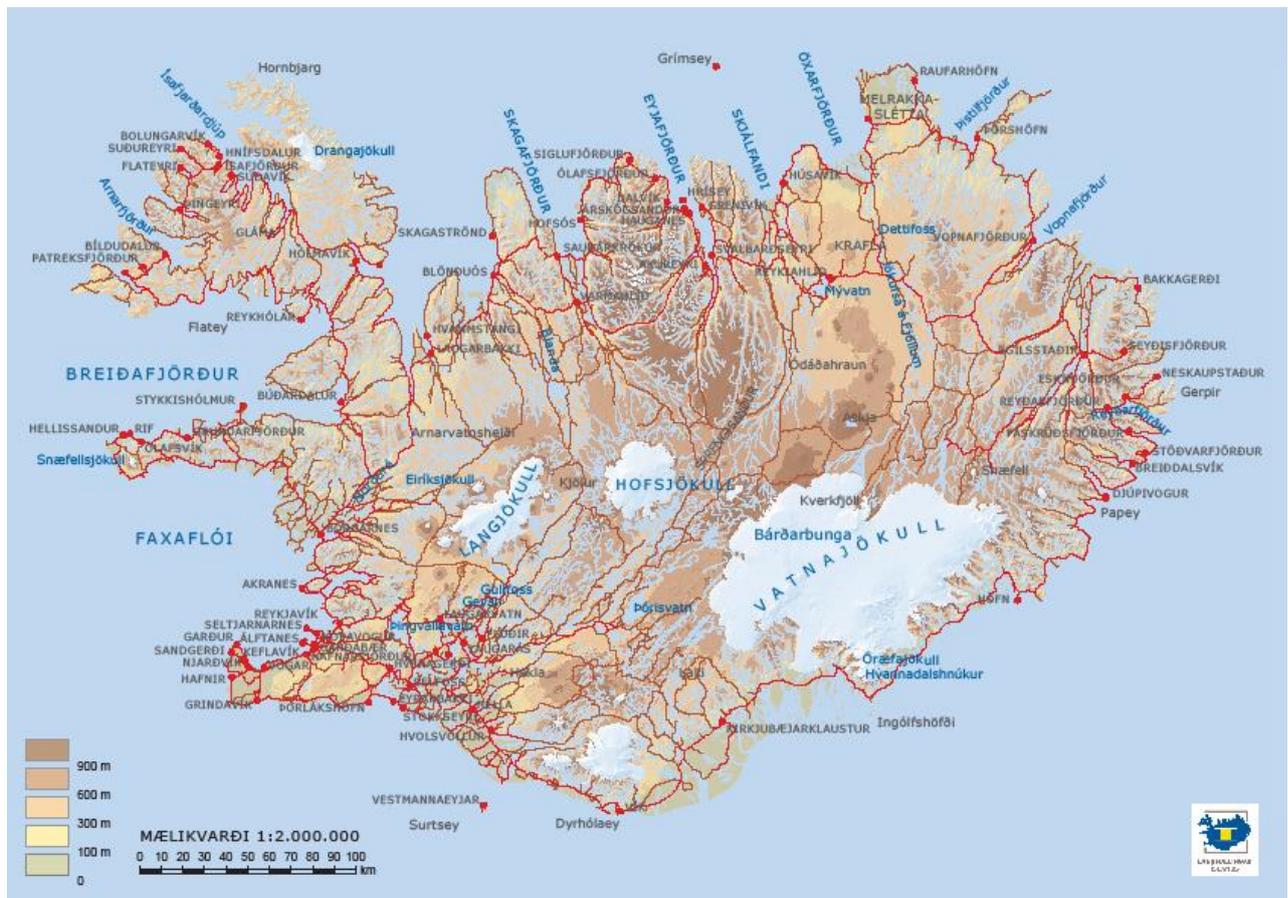


Table 2: Data summary for geography, agriculture and livestock**Geographic features**

Climatic and/or agro-ecological zones	Rainfall (mm/year)
Total area	1017

Topography	Km ²	%
Total area	103,022	
Wetlands	8,711	8.5
Moss	10,326	10
Grass & cultivated	27,000	26.1
Wasteland	42,476	41.2
Lakes and rivers	2,353	2.2
Glaciers	11,179	10.9
Forest/shrub	1,165	1.1

Demographic data

Human population		Livestock households/farms	
Total number	329,100	Total number	4400
Average density / km2	0.35/Km2	% intensive	N/K
% of urban (2011)	93.7%	% agro-pastoral (mixed)	N/K
% of rural (2011)	6.3%	% extensive	N/K

Current livestock census data (2014)

Animals species	Total Number	Number of farms	Intensive production system (% or no.)	Mixed production system (% or no.)	Extensive production system (% or no.)
Cattle	74,444	850		100%	
Dairy cows	25,661	727		100%	
Beef cattle	1,800	125		100%	
Sheep	486,014	2,642		100%	
Goat	987	N/K		100%	
Pig	2,995	16	100%		
Poultry	1,205,212	32	100%		
Broilers parent stock	61,800	5	100%		
Layers	226,300	13	100%		
Equidae	78,277	N/K			100%
Other	0	0	0	0	0

For equidae the situation is a split 50/50 farmers and riders. Riders:- 100% own their horses, in winter kept in horse stables (like small “horse villages” by towns, 100 – 5000 horses in each “village”) and then on pasture in summer by farmers or privately owned land.

Animal and animal product trade data (2014)

Animals and animal products	Average annual import		Average annual export	
	Quantity	Value	Quantity	Value
Horses	0	0	1,269	835.9 m ISK
Meat and meat preparations		2,148.2 m ISK		4349.8 m ISK
Milk and eggs		616.8 m ISK		37 m ISK
Concentrates	80,000 tonnes		0	
Bait (from third countries)	4,400 tonnes		0	
Samples of animal products (for reseach/exhibition)	0,850 tonnes		0	
TOTAL import animal products	25,500 Tonnes			

Economic data (2015)

National GDP	1,853 billion ISK (USD 14.488 billion) (2015 estimate)
National budget	650 billion
Livestock GDP	20 billion ISK (Agri, Forestry Fishing and Hunting)
Gross National Income per head	6.25 million ISK (USD 48,000)
Economic value of livestock population	
Annual public sector contribution to agriculture	959,3 million ISK
Annual budget of the Veterinary Services	1,44 billion ISK

Summary Tables of the latest available livestock populations:

1. A summary of the livestock population per federal state/ region in 2014 (2012 for Equidae)

Name of State / Region*	Cattle	Sheep**	Goat**	Pig**	Poultry	Equidae
SW - region	1294	3787	55	816	481231	8817
W - region	9170	122488	341	573	198223	9893
Wfj. - region	2254	47386	0	0	0	1018
NW- region	11066	120210	202	31	42760	19315
NE- region	16842	76597	176	495	77903	7658
E - region	4484	79706	102	11	5330	3417
S - region	29334	83226	111	1069	399765	28159
TOTAL	74.444	486.014	987	2995	1.205.212	78.277

* SW: South-West, W: West, Wfj: West-fjords, NW: North-West, NE: North-East, E: East, S: South.

** Adult population

2. Cattle population per type of production and per region for 2014

Name of State / Region	Dairy production	Beef production		Other (stud farming etc)
		Total numbers	Total slaughtered dairy and beef	
SW - region	301	213	0	
W - region	3328	200	0	
Wfj. - region	774	44	0	
NW- region	3754	410	2044	
NE- region	6443	237	2575	

E - region	1500	29	134	
S - region	10059	711	4703	
TOTAL	26159	1844	9456	

NB There are no cattle slaughterhouses in the SW, W and Wfj., so in these regions the animals are transported to other regions to be slaughtered

3. Sheep population per type of production and per region for 2014

Name of State / Region	Total number of dairy sheep	Total number of breeding sheep	Total number of sheep for mutton	Number of sheep (lambs and adult) slaughtered
SW - region	0	3787	3787	0
W - region	0	83104	83104	0
Wfj. - region	0	47386	47386	0
NW- region	0	120208	120208	305360
NE- region	0	76597	76597	108846
E - region	0	79706	79706	67838
S - region	0	83226	83226	111681
TOTAL		486014	486014	593725

NB There are no sheep slaughterhouses in the SW, W and Wfj., so in these regions the animals are transported to other regions to be slaughtered

4. Goat population per type of production and per region for 2014

Name of State / Region	Total number of dairy goats	Total number of breeding goats	Total number of goats for meat production	Number of goats slaughtered
SW - region	0	N/a	N/a	N/a
W - region	0	N/a	N/a	N/a
Wfj. - region	0	N/a	N/a	N/a
NW- region	0	N/a	N/a	Na
NE- region	0	N/a	N/a	Na
E - region	0	N/a	N/a	Na
S - region	0	N/a	Na/	Na

5. Pig population per type of production and per region for 2014

Name of State / Region	Total number of breeding pigs	Total number of pigs for pork production	Total number of pigs slaughtered
SW - region	816	8396	49039
W - region	573	9941	0
Wfj. - region	0	0	0
NW- region	31	1046	0
NE- region	495	4841	20699
E - region	11	92	0
S - region	1069	5678	6975
TOTAL	2995	29994	76713

NB There are no pig slaughterhouses in the W, Wfj. NW and E, so in these regions the animals are transported to other regions to be slaughtered

6. Poultry population per type of production and per region for 2014

Name of State / Region	Total number of poultry	Total number slaughtered	Total number egg production
SW - region	481231	2872011	142885
W - region	198223	0	17809
Wfj. - region	0	0	174
NW- region	42760	0	3472
NE- region	77903	0	12288
E - region	5330	0	828
S - region	399765	1967766	41707
TOTAL	1205212 *	4839777	219163

➤ Number of production capacity, i.e. number of chicken per cycle in the meat production

NB Poultry slaughterhouses are only in SW and S region.

Farmed game / Rabbits / others and annual slaughter in 2014

Name of State / Region	Number of farmed (name species)	Number of farmed (name species)	Number of farmed (name species)	Number of farmed game animals slaughtered (indicate species)
SV - region	Na	Na	Na	Na
V - region	Na	Na	Na	Na
Vf. - region	Na	Na	Na	Na
NV- region	Na	Na	Na	Na
NA- region	Na	Na	Na	Na
A - region	Na	Na	Na	Na
S - region	Na	Na	Na	Na

NB The only farmed animals are mink for their fur.

In total there are 28 farms with 51.000 animals (43.000 females + 8.000 mails).

II.3 Context of the evaluation

II.3.A Availability of data relevant to the evaluation

A list of documents received by the OIE PVS Team before and during the PVS Evaluation mission is provided in appendix 6. All documents and pictures listed in appendix 6 are referenced to relevant critical competencies to demonstrate the levels of advancement and related findings.

The following table provides an overview of the availability of the main categories of documents or data needed for the evaluation, taking into account the information requirements set out in the OIE Terrestrial Code.

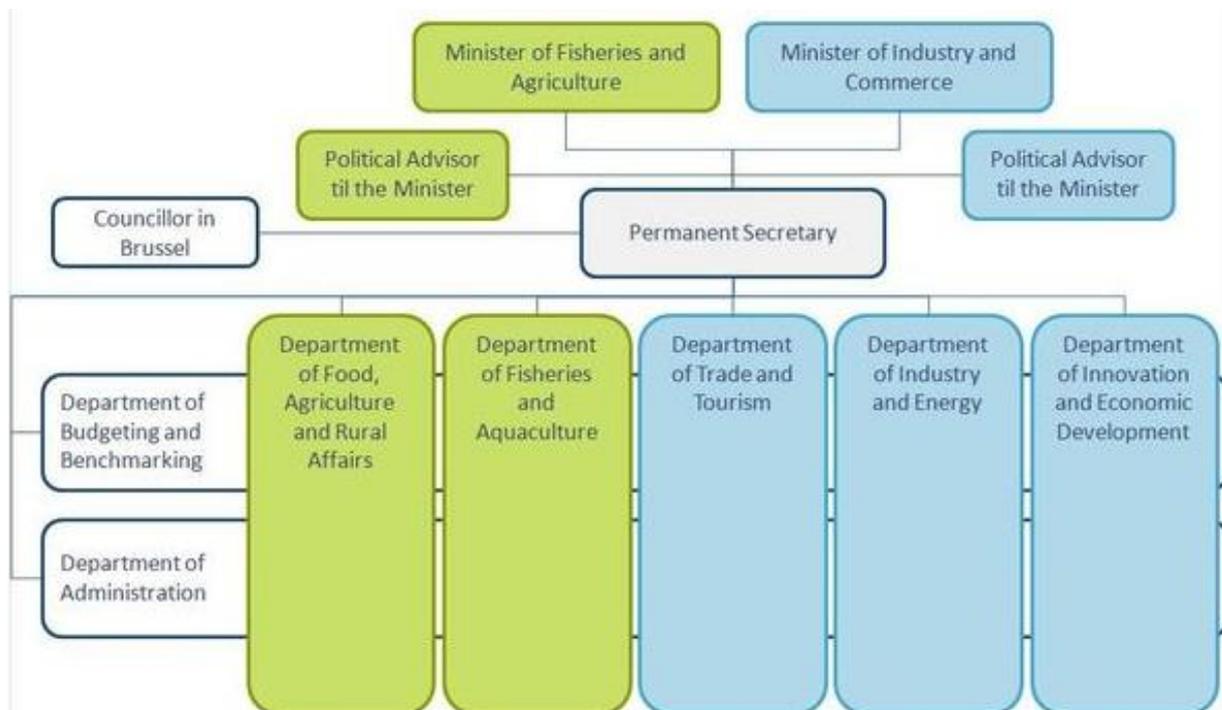
Table 3: Summary of data available for evaluation

Main document categories	Data available in the public domain	Data accessible only on site or on request	Data not available
→ Animal census:			
○ at 1st administrative level	✓		
○ at 2 nd administrative level	✓		
○ at 3rd administrative level	✓		
○ per animal species	✓		
○ per production systems	✓		
→ Organisations charts			
○ Central level of the VS	✓		
○ 2 nd level of the VS	✓		
○ 3 rd level of the VS	✓		
→ Job descriptions in the VS			
○ Central levels of the VS		✓	
○ 2 nd level of the VS		✓	
○ 3 rd level of the VS		✓	
→ Legislations, regulations, decrees ...			
○ Animal health and public health	✓		
○ Veterinary practice	✓		
○ Veterinary statutory body			✓
○ Veterinary medicines and biologicals	✓		
○ Official delegation	✓		
→ Veterinary census			
○ Global (public, private, veterinary, para-professional)		✓	
○ Per level		✓	
○ Per function		✓	
→ Census of logistics and infrastructures		✓	
→ Import/Export	✓		
→ Activity reports		✓	
→ Financial reports		✓	
→ Animal health status reports	✓		
→ Evaluation reports	✓		
→ Procedures, registers, records, letters ...		✓	

II.3.B General organisation of the Veterinary Services

a) Ministry of Industries and Innovation (Moll)

Figure 2: Ministry of Industries and Innovation (Moll) (organogram)



NB There is a new Organogram approved 1 May 2014 which simply amalgamates the 2 administrative divisions into one called Department of Administration and Finance.

The Ministry of Industries and Innovation (Moll) is the lead Ministry for policy coordination and transposition of legislation concerning issues related to food and feed safety, animal health and animal welfare. Within the Ministry, under the Minister of Fisheries and Agriculture, the Department of food, agriculture and rural affairs (DFAR) is responsible for policy development/co-ordination and legislation (including the transposition of the EU legislation). The Ministry was formed with a merger of the former Ministry of Fisheries and Agriculture, the Ministry of Industry, Energy and Tourism and part of the Ministry of Economic Affairs and opened 1 September 2012.

The Moll is responsible for issues related to:

Fisheries and agriculture;

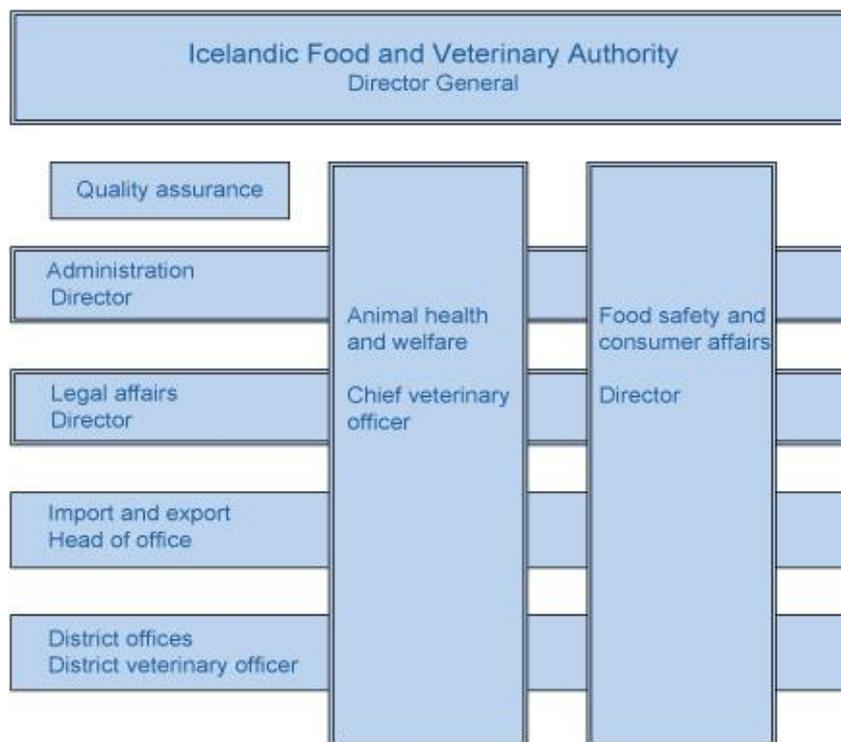
Control of production and import of food and feed products;

Culture of aquatic and marine species;

- Food and feed safety related issues;
- Animal welfare;
- Research and management of marine resources.

b) Icelandic Food and Veterinary Authority (MAST)

Figure 3: Icelandic Food and Veterinary Authority (MAST) (organogram)



Since January 1 2008, MAST is the competent authority for food and feed safety, animal health and animal welfare ('Veterinary Authority') and operates under the auspice of Moll. The organisation and structure of MAST is based on provisions of Act No 80/2005. MAST operates six district offices and is responsible for operation of several Border Inspection Posts (BIPs) for control of import of foods from third countries (non EEA States).

NB MAST in Icelandic means Food Authority but in addition in English the Food and Veterinary Authority is the other logo thus there is a significant difference between the meaning of the two logos used in practice.

MAST's primary roles are:

- Food safety; control of all primary production, production of foodstuffs of animal origin and import and export control of all foodstuffs;
- Controls regarding animal health (including aquaculture) and animal welfare;
- Plant protection services;
- Feed (including fish meal), seed and fertiliser services;
- Meat classification services;
- Administration of organic production of agricultural products;
- Disease control and prevention (zoonoses and contingency plans);
- Consumer affairs and education;
- Supervision of domestic food control by the Independent Municipal Environmental and Public Health Offices (Local Competent Authorities (LCAs)); the coordination of official control to ensure that they are implemented in the same manner. MAST may in this regard issue guidelines that the LCAs are supposed to follow.

MAST will soon be responsible for Control of Fish farming and from 1st January 2016 the Authority will also be responsible for Agricultural Affairs (including payments of subsidies to farmers which is now done by the NFA).

It is noted that MAST under Act No. 93/1995 on foodstuffs, requires all FBOs (food of animal and non-animal origin) to be approved following a visit, except for sheep and horse farms and vegetable growers (which need to be registered). Freezer and factory vessels are also similarly approved, other fishing vessels need to be registered. This Act basically implements the EU hygiene package, including 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. Approval is given by MAST for FBOs producing animal products, while the LCAs are responsible for non-animal products, including products where ingredients of animal products are only a small part of the FBO's business. Only those FBOs that fall under the scope of Regulation (EC) No 853/2004 are given approval numbers.

Chain of Command:

The Director General (DG) is appointed by the Minister and has overall general responsibility in MAST.

The CVO (also the OIE Delegate) is appointed by the Minister and is responsible for AH & AW, primary production and AW for killing, for disease control and for job descriptions and staff annual appraisals for MAST staff in the office of AH and AW.

The Director of Food Safety and Consumer Affairs is employed by the DG and is responsible for slaughter, meat plants and dairy plants. The post covers in addition official control of fish and fish products, feed and fertilizers and several other food safety and consumer protection issues. There is no requirement in the legislation for a veterinary education for this post although at present the incumbent is a veterinarian.

In order to give good overview some information on the developments in this regard are given as follows:

Before 2006

Appointed by the minister of agriculture the CVO was the head of the Veterinary Authority, with 41 employees (thereof 37 vets). The CVO was responsible for the main veterinary matters (AH, AW, import/export of animals and products of animal origin (mammals), slaughterhouses, cutting plants/meat processing plants within slaughterhouses, export of dairy products, veterinarians etc) and the official control related to those subjects. The CVO had the total command and reported directly to the Minister.

After 2006

Following a change in the legislation the Veterinary Authority merged into the former MAST in 2006 which took over all the responsibilities of the Veterinary Authority. MAST is also responsible for everything related to the EU Food and feed legislation based on EU regulations No 178/2002, 882/2004, 852/2004, 853/2004, 854/2004 etc.) as well as the relevant official controls. Appointed by the Minister of Agriculture and Fisheries (Moll) the Director General (DG) of MAST has the total command and reports directly to the Minister.

The CVO is appointed by the Minister of Agriculture and Fisheries (Moll) and according to the legislation the CVO is the Director of the office within MAST responsible for AH and AW. The CVO is responsible for his employees' job descriptions and appraisals, has the command of his office and reports directly to the DG, not to the Minister as before. The DG answers for the CVO's decisions and has

the power to change them, but the DG has not the authority to dismiss the CVO, whereas that is in the hands of the Minister of Agriculture and Fisheries.

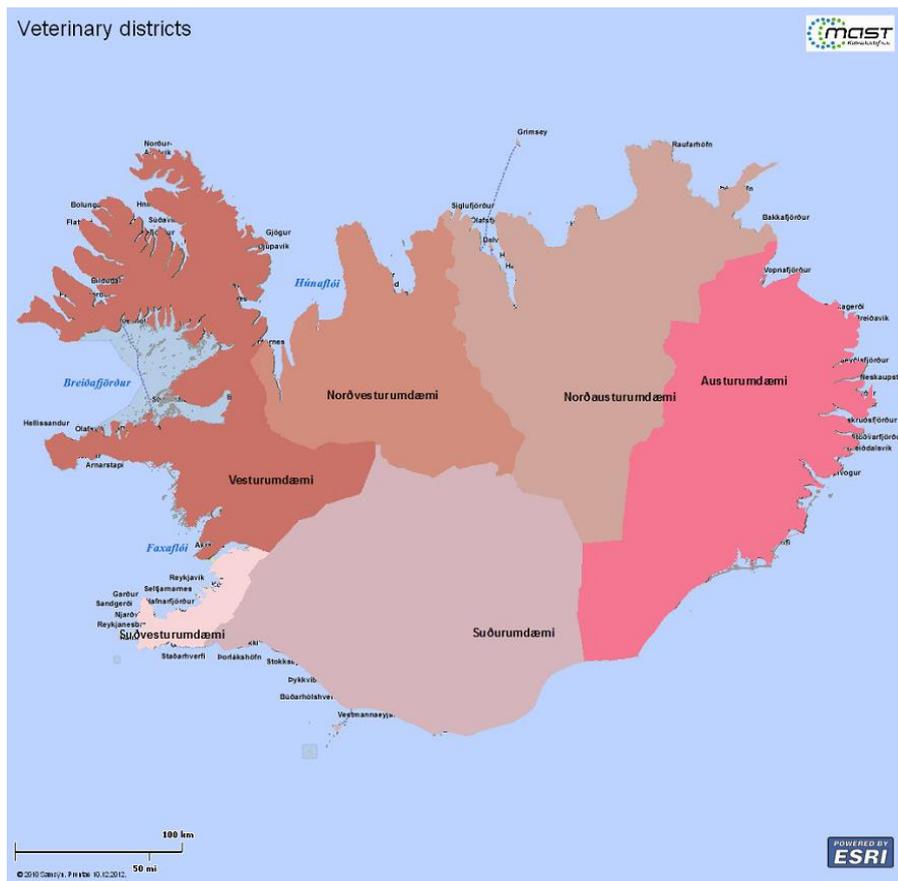
There are two other directors at MAST (both vets in 2015) who are responsible for parts of the former Veterinary Authority, in addition to other responsibilities. Those are the director of Food Safety and Consumer Affairs (responsible for slaughterhouses, cutting/meat processing, dairies and egg productions) and the head of Office for Import and Export. The DVOs together with OV, are responsible for control and action taken regarding AH, AW, slaughterhouses, cutting/meat processing plants and dairies). All directors, heads of offices and DVOs report directly to the DG, who is responsible for their job descriptions and appraisals. Supplementary to the organogram of MAST, is a document (issued in the quality manual) where the responsibilities, tasks and duties, are defined, including the cooperation between the two offices on one hand and the DVOs and the import/export office on the other hand. In general, DVOs and the head of office for import/export are responsible for case handling on daily basis, but if difficult cases arise, the CVO or the director of Food Safety and Consumer Affairs, are consulted.

Since the PVS mission in 2015, there have been some changes at MAST and a new organogram was issued in September 2016. The main changes regarding VS are that the DVOs now report directly to the CVO regarding most of their tasks. The tasks of the DVOs/OVs at slaughterhouses were divided up with daily OV work (ante and post mortem inspections) being under the responsibility of the CVO while regular risk based control of slaughterhouses, cutting and meat production plants, dairies and egg production establishments stays under the responsibility of the Director of food safety and consumer affairs. The director of that office is not required to be a veterinarian, but inspections are carried out by an inspection team, including an OV and supported by Ovs at the District offices in certain tasks, e.g. in risk based controls of slaughterhouses. The responsibility for feed and fertilizers was also moved to the CVO. The control at farm level is now also fully the responsibility of the CVO, i.e. AH, AW, VMP, feed and products of animal origin (milk, eggs etc). No changes were made regarding the import/export, the head of office is still the same and he consults the CVO when needed.

Changes in the Veterinary Service - the last 2 decades:

- Changes in Veterinary Service for animal owners (Private Veterinary Practice, (PVP)).
 - Before 1999: All 31 districts (27 DVOs) included both official control and PVP;
 - 1999 – 2011: Mixed system in total 14 districts with 15 DVOs, of these 11 districts (12 DVOs) were responsible for official control and PVP, only 3 districts (3 DVOs) were pure official control districts;
 - After 2011: All districts are pure official control, (6 DVOs) and in addition there are various Private Clinics and Veterinarians offering service to animal owners.

Figure 4: Veterinary Districts



Veterinary Service - PVP.

In the past two decades there have been enormous changes in the PVP in Iceland. In the late 80s veterinarians started to run their own clinics in towns and villages, without any subsidies from the government. The clinics served mainly pets and horses, but later on they also served cows, pigs and sheep in more populated areas. This was considered as a normal development in our society due to an increase in the number of graduated veterinarians, free competition, less intervention by the government and also to prevent possible conflict of interest for official vets. By changing the act in 1998 the first step was taken to open for competition among veterinarians in more populated areas.

The table below shows veterinary posts in PVP paid by the government. The figures for 2011-2015 are exact, but the posts until 2011 are calculated by estimating the PVP part as 0.66 of the mixed DVOs.

	VS (PVP) paid by government					
	Before 1999		1999-2011		2011-2015	
		Post in PVP		Post in PVP		Post in PVP
DVOs	27	18	15	8		
Rural vets					10	10
Total	27	18	15	8	10	10

Before 1999:

Before the amendment of the Veterinary legislation in 1998, the country was split into 31 veterinary districts, but only 27 districts were active, cf. Act no. 77/1981. Each DVO controlled animal health, animal welfare and food safety at primary level and in slaughterhouses, but he also served in PVP. Those 27 DVOs also had a 24hour duty in their district. It resulted in a much shorter travel and response time to provide the service.

1999 – 2011:

In 1999 a new legislation, Act no. 66/1998, came into force. The number of districts was decreased down to 14 and 3 of them were to be covered by two veterinarians, in total 17 posts for vets in 14 districts. In 2008 these were decreased to 16 posts, one post was never active (Vestfjords), so in the end there were 15 DVOs in 14 districts.

Three out of the 14 districts were only official veterinary districts, in the South, South-West and in the North-East because there were enough private veterinary practitioners in these areas to provide animal health services. In 11 districts the 12 DVOs continued with both official control and in PVP.

After 2011:

By implementation of the EU Food legislation, the Icelandic veterinary legislation was amended (Act no.143/2009) entering into force in November 2011, fully dividing the official veterinary control and PVP and decreasing the number of districts to 6, with all of them restricted to official control.

To secure veterinary services in the rural areas, the legislation created 9 “veterinary service areas“. This means that the government pays vets to live in the area and serve animal owners with one vet post for each area. In 2015 the number of „veterinary service areas“ was increased to 10.

Night and weekend duty (emergency shifts)

	Veterinary night and weekend duty (PVP) paid by government					
	Before 1999		1999-2011		2011-2015	
Vets on duty	27	DVOs	15	DVOs/PVPs	13	PVPs
Total	27	18	15		13	

According to the veterinary Act No 66/1998, the government pays a veterinarian to stay on duty and serve all animal owners in certain areas on night/weekend duty. Before 1999 these areas were 27, from 1999 to 2011 they were 15 and after 2011 they were 13. This has led to a longer „response time“ for the vets to serve the animal owners and is an animal welfare issue. Some of those areas are very large, with rough roads and/or heavy mountain-roads, which especially are an obstacle in winter time. A vet can have a case where he has to drive up to 250 km to a farmer, help the animal and drive back, 500 km for one visit in total.

Summary regarding the PVP:

There is a long tradition for governmental support to provide veterinary service for farm animals. This support has decreased through the last two decades. Looking at the day duty work, the governmental support in the years before 1999 is calculated as 18 vet posts, but in 2015 the support was 10 posts. Regarding the night and weekend duty, the governmental support in the years before 1999 were for 27 vets but in 2015 13 vets. However, during this same period there has been an increase in the number of private veterinary clinics serving animal owners.

Veterinary Service in official work:

	Official veterinary work					
	Before 1999		1999-2011		2011-2015	
	Total	Official posts	Total	Official posts	Total	Official posts
CVO	1	1	1	1	1	1
Directors			2	2	2	2
DVOs	27	9	15	7	6	6
VOs	9	9	9	9	9	9
OVs			10	10	17	17
Temp OVs					15	3
Total	37	19	17	29	50	38

With amendments of Act 66/1998, 3 districts were made exclusively official control districts with a DVO and OVs in each of them. Through the change implemented in 2011, the PVP and the official control were totally split up and most of the OVs were then in full time posts.

By estimating the official part as 0.33 by the mixed DVOs before 1999 it would amount to **9** (27 x 0.33) before 1999 compared to **7** ((12 x 0.33) + 3) during 1999-2011 in full time official vet posts. In the same period the number of OVs, including temporary posts, has increased substantially.

Summary regarding the VS in official work

Iceland implemented the EEA agreement in 1994. In the following years, imports increased of live pets, animal products and equipment that can carry contagious animal disease agents. There was also an increase in export of animal products and live animals. Iceland implemented the EU Food hygiene legislation package (178/2002) which came fully into force 2011 and lead to reconstruction of the VS system in Iceland. New and broader tasks came into force i.e. zoonoses, ABP, VMP and AMR and other tasks introduced with Regulations 882/2004, 852/2004, 853/2004 and 854/2004 as well as other relevant EU acts. The EU legislation also demanded increased paperwork and reporting.

Through the last two decades this has led to an expansion of official Veterinary Services. The increase is mainly due to official controls. Before 1999, there were no OVs but in 2015 they are 17 and amounting to 20 posts if temporary posts are included. It is known that the DVOs in the old system were not able to be constantly present in a slaughterhouse, but today the OVs are at the slaughter line as required.

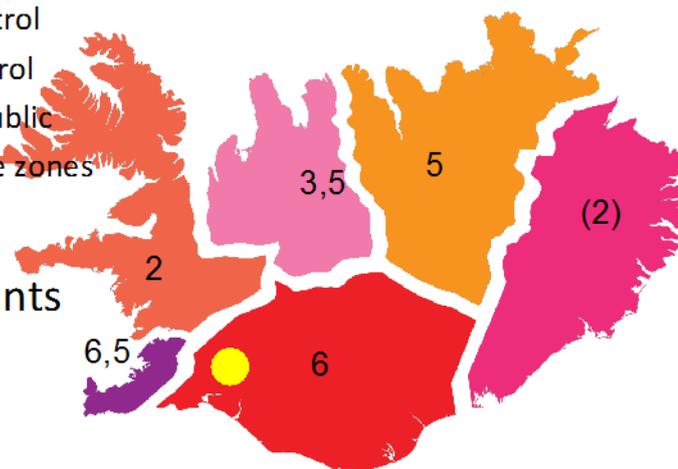
Table 6: Total numbers of staff in all relevant organisations

Acronym	Organisation	Number of Staff
MAST	The Food and Veterinary Authority	85
	Administration	10
	Quality Manager	1
	Office of animal health and welfare	11
	Office of food safety and consumer affairs	18
	Office of legal affairs	10
	Office of import and export	9
	District offices (DVOs and OV's)	26
Acronym	Organisation	Number of Staff
UST	Environmental Agency	73
IMA	Icelandic Medicines Agency	59
DoC	Directorate of Customs	250
Keldur	The Institute for Experimental Pathology of the University of Iceland	60
DoH	Directorate of Health / Centre for Health Security and Communicable Diseases	63 / 7
LCAs	Local Competent Authorities (10 districts)	30 (food control)
Total		706

Figure 5: District human resources

Districts – human resources

- MAST runs 6 district offices – 25 employees
- AH & AW
 - Primary Production control
 - Sampling – disease control
 - AW Notification form public
 - Movements – protective zones
- Slaughter
- Meat processing plants
- Dairy
- Contingency Plan
 - DVO's responsible for actions taken
 - No emergency phone at Mast



NB One veterinary vacancy at district level

Duties of Animal Health and Welfare Department

Legislation:

- Review acts and regulations/Amendments/Risk assessment - work for Ministry;
- Back up for DVO's.

Pre-mission questionnaires

- ESA;
- 3rd countries (e.g. Russia, China, Chile);
- OIE.

Animal Welfare control

- Planning of inspections – Risk based, documented procedures “handbooks”;
- Results of inspections – communication;
- Penalty system – fines;
- Laboratory animals – permission for animal experiments.

Disease control

- Planning samples – results/actions – communication;
- Back up for DVOs and Veterinarians in practice;
- Reports to ESA, EFSA, OIE;

Disease contingency plan – exercises.

MAST has developed or has been involved in the development of a number of databases.

Table 7: Number of practising veterinarians, horses, ewes and dairy cows according to veterinary districts

Veterinary district	Veterinarians 2015	Ewes 2011	Sheep farms 2011	Dairy-cows 2011	Dairy-farms 2011	Horses 2011
South (Suðurumdæmi)	16	62.674	621	9.636	251	28.159
East (Austurumdæmi)	6	62.890	322	1.554	50	3.417
North-East (Norðausturumdæmi)	8	59.529	480	6.211	164	7.658
North-West (Norðvesturumdæmi)	5	92.240	472	3.794	116	19.523
West (Vesturumdæmi)	6	92.843	645	4.148	135	10.703
South-West (Suðvesturumdæmi)	29	3.427	102	318	11	8.817
Total	70	373.603	2.642	25.661	727	78.277

Table 8: List of laboratories used for official controls by MAST

Field of analysis	Laboratories in Iceland	Laboratories in EEA
Salmonella	Matis Keldur, Syni, Promat	
Phytoplankton / algae in seawater	Marine Research Institute Iceland	
Monitoring of biotoxins		Marine Institute (Ireland)
Monitoring the viral and bacteriological contamination of bivalves molluscs	Matis	
<i>Listeria monocytogenes</i>	Keldur,	

Field of analysis	Laboratories in Iceland	Laboratories in EEA
	Matis Syni	
Coagulase positive Staphylococci, including <i>Staphylococcus aureus</i>	Matis	
<i>Escherichia coli</i> , including Verotoxigenic E. coli (VTEC)	Matis Keldur, Syni	
<i>Campylobacter</i>	Matis Keldur, Syni	
<i>Trichinella</i>	Keldur, Promat.	
Veterinary medicines and contaminants in food of animal origin.	Keldur, Matis	Livsmedelsverket Sweden, SVA Sweden, Norges Veterinærhøgskole, Födevarestyrelsen Danmark, Eurofins Food&Agro, Sweden
TSE	Keldur	Norwegian Veterinary Institute and UK Veterinary Laboratories Agency – for verification of results from Keldur
Residues of pesticides (a-d)	Matis	
Heavy metals in feed and food	Matis	
Mycotoxins		SVA Sweden, Eurofins Hamburg, Eurofins Food&Agro, Sweden
Dioxins and PCBs in feed and food		Födevarestyrelsen Danmark, Eurofins Hamburg
Fish from Aquaculture		Födevarestyrelsen Danmark
Feed		LUFA Nord-West, Germany

Directorate of Fisheries (DoF)

The Directorate operates under the auspice of Moll and is responsible for implementing government policy on fisheries management. The Directorate enforces laws and regulations regarding fisheries management, monitoring of fishing activities and imposition of penalties for illegal catches. The Directorate co-operates with MAST.

Ministry for the Environment and Natural Resources (MoE)

Ministry for the Environment and Natural Resources formulates and enforces government policy for environmental affairs. The Ministry formulates and enforces the Icelandic government policy for issues such as environmental affairs, nature conservation, wildlife management, pollution and waste management, environmental monitoring and surveillance. Meeting was held with staff from this Ministry concerning the disposal of dead animals, animal by-products and their waste etc.

Environment Agency (UST)

The Environment Agency operates under the auspice of MoE and its organisation and structure is based on provisions of Act No 90/2002. UST has the role of promoting environmental protection and sustainable use of Iceland's natural resources, as well as public welfare, by ensuring a healthy environment, safe consumer goods and enhancing hygiene and safety in public facilities. UST manages

eco-labelling, labelling and handling of toxic and other hazardous substances. It conducts the evaluation of environmental impact assessment and development plans. It is responsible for the management and supervision of designated protected areas, assessment of conservation effects and registration of unique nature sites. UST has a wide-reaching administrative role, for instance concerning pollution issues (water, waste, air, soil), health and safety, nature and wild animal protection, wildlife conservation and management, monitoring of environmental quality, hunting management, biological diversity, the registration and marketing of pesticides and genetically modified foods. The agency provides information and gives advice for the public, businesses and regulatory authorities. UST supervises and coordinates the work of LCAs (see below). Generally the supervision and the coordination is mostly based on organised communication, formal requests, meetings for coordinating actions, organisation of country wide control actions, and issuing of guidelines. The UST meets with LCAs regularly twice a year. Furthermore there are specialised working groups in different categories where the specialised staff of both UST and LCAs meets regularly to discuss ways to improve controls and the implementation of the requirements of legislation. Also UST has published guidelines for implementation in specific fields.

LCAs can send formal requests asking UST for review, information, interpretation and opinion on certain matters arising or according to formal procedures laid out in relevant legislation.

Unfortunately a scheduled visit to a landfill site had to be deleted as a result of bad weather.

Municipal Environmental and Public Health Offices (LCA)

Iceland is divided into 10 LCA districts, each comprising between one and fifteen municipalities. Each LCA district staff operate under the jurisdiction of a local public health committee, comprising control district staff, several politically appointed members and one member representing the confederation of Icelandic Employers. Each LCA has control duties within its districts related to food safety, environmental protection and general hygiene. The organisation and structure of the LCAs is based on provisions of Act No 7/1998 on Hygiene and Pollution control. The district chief epidemiologist attends in general the meetings of the local public health committees. One LCA headed by a veterinarian was visited.

Ministry of Welfare (MoWF)

The Ministry of Welfare is responsible for administration and policy for health and health insurance issues in Iceland, as prescribed by law, regulations and directives, including:

- Public health;
- Patient rights;
- Operation of hospitals, health centres and other providers of health services;
- Promotion of information technology in the health services in Iceland;
- Pharmaceutical affairs (including veterinary medicines);
- Health Insurances;

Under the Ministry of Welfare there is a Department of Immunology laboratory at the University hospital that is used by MAST and LCAs for the identification/confirmation of zoonotic agents such as Salmonella serotypes. The CAs, regarding disease control and prevention, in both animals and humans, may also consult staff at this laboratory.

The Directorate of Health (DoH)

The Directorate of Health operates under the auspice of the MoWF. The Chief Epidemiologist at the Directorate of Health is responsible for health security and general and public measures on communicable diseases and other threats to health. The Chief Epidemiologist is also the chairperson of the Joint Committee on Health Security and Communicable Disease Control (JC), a supervisory body appointed under the MoWF. The OIE team had a very useful meeting with the Chief Epidemiologist.

The Icelandic Medicines Agency (IMA)

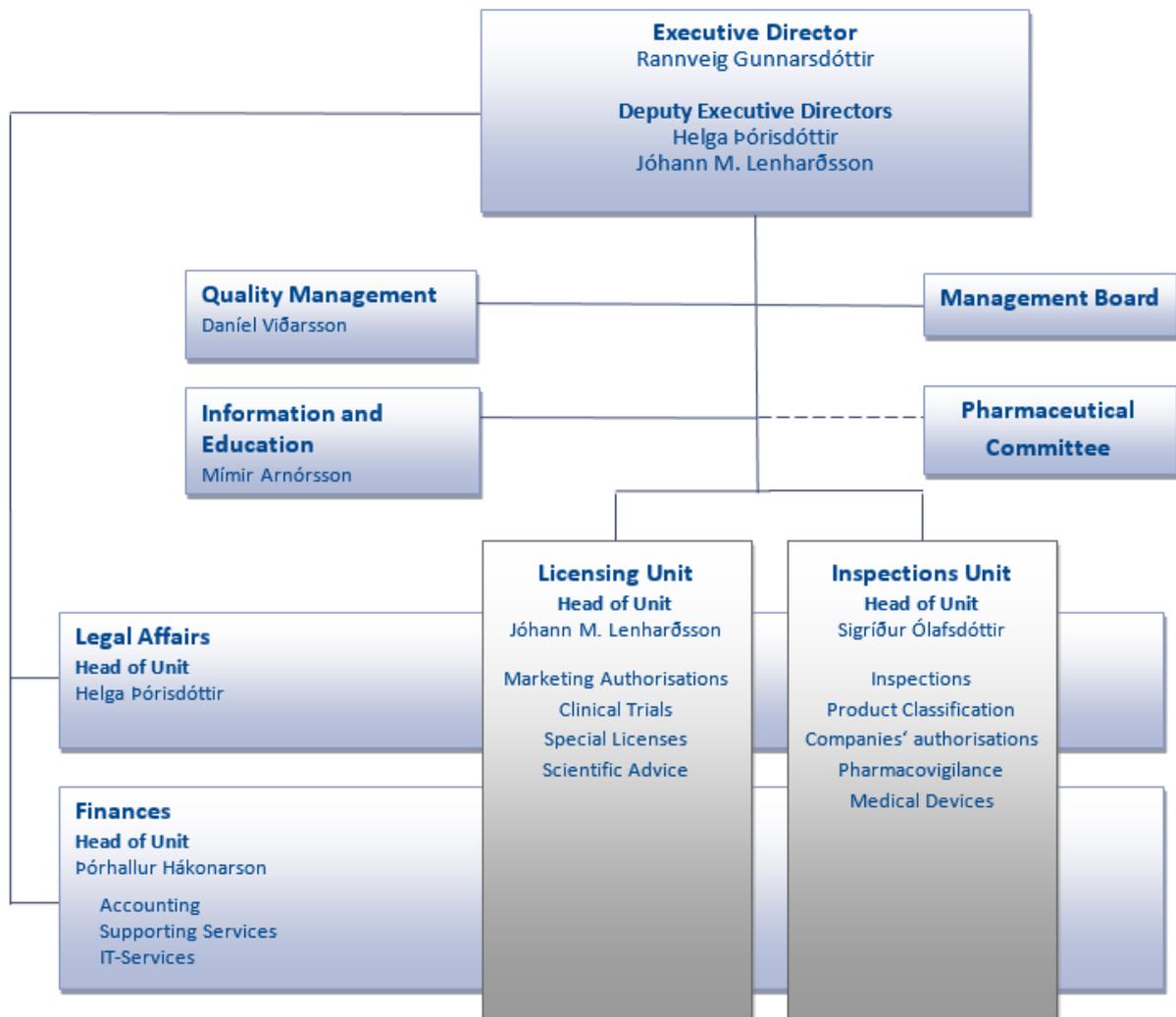
The Minister of Welfare is responsible for the implementation of legislation on VMPs. Controls on the production; distribution and use of VMPs are divided between the Icelandic Medicines Agency (IMA) and MAST. IMA is responsible for licensing of, and official controls on, manufacture and distribution of VMP to pharmacy level, while MAST is responsible for the control of VMP use by veterinary practitioners and on farms. The Icelandic Medicines Agency, IMA, is a governmental Agency under the Ministry of Welfare. The majority of IMA's staff has a University degree and / or an expert knowledge of IMA's responsibilities. IMA requests total impartiality in the work of employees. It receives limited funding from the state budget and relies on cost recovery to survive.

IMA's responsibilities are e.g.:

- Assessing quality and safety of medicinal products;
- Medical devices;
- Inspections to confirm regulatory requirements are fulfilled;
- A source of information for health professionals and the public;
- Consumer protection.

IMA aims at employing well-educated and ambitious staff and offers good facilities and possibilities for professional development.

Figure 6: Organogram of IMA



The team had a meeting with the head and some staff members of the Agency. Joint inspections with MAST staff to private veterinary practitioners (PVP) were carried out in the past. But this is not happening now and inspections are quite infrequent. It was extremely useful that an inspector from the IMA visited with the OIE team a PVP.

Ministry of Education (MoE)

The Ministry of Education, Science and Culture includes Keldur, the Institute for Experimental Pathology of the University of Iceland, which undertakes some animal health diagnostic work in relation to official controls. Keldur is the National Reference laboratory (NRL) for *Campylobacter*, parasites (in particular *Trichinella*, *Echinococcus* and *Anisakis*), transmissible spongiform encephalopathies (TSEs), fish diseases, bivalve mollusc diseases and crustacean diseases. There is no veterinary faculty in Iceland although there have been some discussions on opening part of one covering the first 2 years perhaps in conjunction with the Medical Faculty.

Ministry of Finance (MoF)

The Ministry of Finance oversees State finances. The Ministry provides advice to the government on its policy areas, and provides services and information to the general public. Its responsibilities include customs issues (see directorate of customs below) and international co-operation. The Directorate of Customs (DoC) was established in 1929. Its main role is to control import, transit and export and collect duties, taxes and other state revenues. MAST co-operates with the Directorate of Customs on export and import control including controls at BIPs and follow up of RASFF notifications. Customs carry out the control duties on behalf of MAST at the BIP at the ferry terminal on the East coast as there is no VO posted there.

Other institutions:

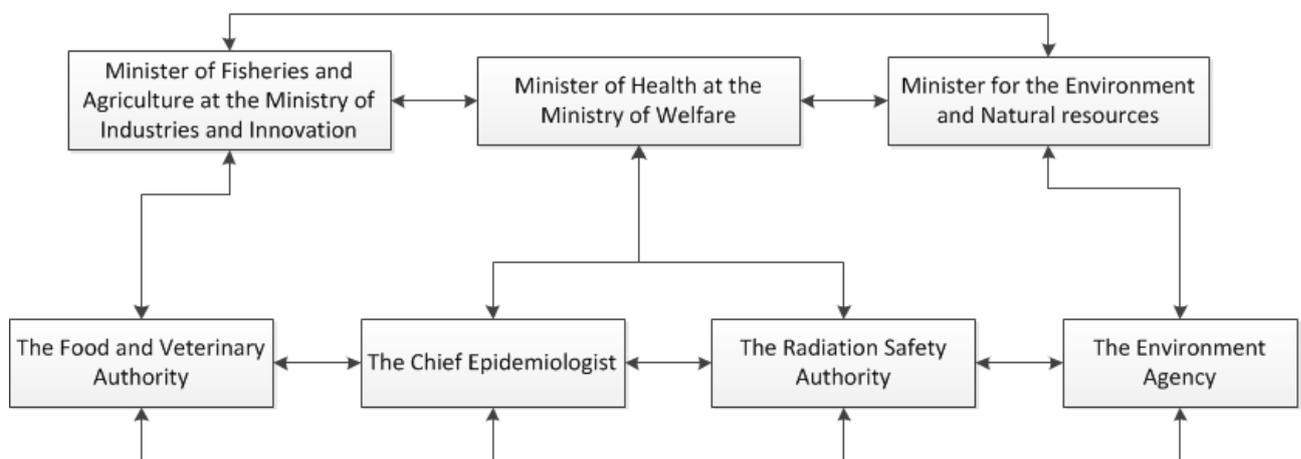
Veterinary Council

Under the Act on Veterinarians and Animal Health service No 66/1998 the Veterinary Council is involved with national issues such as live animal imports and giving an opinion on suitability of foreign veterinary graduates vis-a-vis the quality of their veterinary faculty.

Joint Committee on Health Security and Communicable Disease Control

The Joint Committee on Health Security and Communicable Disease Control (JC) is a supervisory body appointed by the MoWF to ensure that relevant information is obtained, an assessment made and appropriate measures taken, to control and eliminate the spread of infectious diseases. The Chief Epidemiologist of the Directorate of Health is chairperson of the JC. MAST has two representatives, a specialist on food safety and another on animal diseases. An environment specialist and a radiation specialist are also appointed to the Committee.

Figure 7: Structure of Joint Committee:



Additional information:

The following list provides the main relevant authorities with responsibility for feed and food safety, animal health and animal welfare in Iceland. Where available, links to internet web pages are also given:

Centrally:

- Moll Ministry of Industries and Innovation <http://www.atvinnuvegaraduneyti.is>
- MoE Ministry for the Environment and Natural Resources <http://www.umhverfisraduneyti.is>
- MoWF Ministry of Welfare www.velferdarraduneyti.is

- MAST Icelandic Food and Veterinary Authority www.mast.is
- UST The Environment Agency www.ust.is
- DoH Directorate of Health www.landlaeknir.is
- IMA Icelandic Medicines Agency www.lyfjastofnun.is
- DoF Directorate of Fisheries www.fiskistofa.is
- DoC Directorate of Customs www.tollur.is

Municipal Environmental and Public Health Offices (LCAs):

- HKK LCA for Hafnarfjörður and Kopavogurarea www.heilbrigdiseftirlit.is/
- HER LCA for the City of Reykjavík
www.reykjavik.is/desktopdefault.aspx/tabid-3822/6631_view-2807/
- HKJ LCA for the Kjos area www.eftirlit.is/
- HVL LCA for the Vesturland area (Not known)
- HVF LCA for the Vestfjörður area
www.isafjordur.is/thjonusta/adrar_stofnanir/Heilbrigdiseftirlit_Vestfjarda/
- HNV LCA for Nordurland west area www.hnv.is/
- HNE LCA for Nordurland east area www.akureyri.is/hne/
- HAUST LCA for Austurland area www.haust.is/
- HSL LCA for Sudurland area www.heilbrigdiseftirlitid.is
- HSN LCA for Sudurnes area
www.hes.is/Heilbrigdiseftirlit_Sudurnesja/HES.html

II.3.C Animal disease occurrence

Information on animal disease occurrence from the OIE website (see table 9)

The only important disease to have occurred in 2015 was scrapie – 3 cases (absent since 2011 and no exceptional epidemiological event have been officially notified over the past years. For 2014 the following diseases were reported as absent via the annual report:

Table 9: Disease status of the country (as reported to the OIE in 2014):

Disease	Notifiable	Status	Notifiable	Status	
Infectious salmon anaemia virus (HPR-deleted or HPR0 genotypes) (Infection with)		Infection/infestation		Absent (since Unknown)	N
Infectious salmon anaemia virus (HPR-deleted or HPR0 genotypes) (Infection with)		Infection/infestation		Absent (since Unknown)	N
Paratuberculosis		Disease limited to one or more zones		Absent (since Unknown)	
Scrapie		Infection/infestation		Absent (since Unknown)	

An exceptional epidemiological event was officially notified in 2012 which was the only one reported in the last 5 years:

Country	Date of Notification	Disease	Reason for notification	Disease manifestation	Outbreaks	Date resolved
Iceland	10/10/2012	Inf.bov.rhinotracheit. (IBR/IPV)	First occurrence	Sub-clinical infection	2	7/10/13

The animal health situation in Iceland is very favourable due to its geographic isolation, very strict and long standing import control legislation on live animals and animal products, and a rigorous, centuries-old policy of stamping out animal diseases. Eradication programmes are in place for scrapie and paratuberculosis. *Trichinella* has never been found in pigs or in horses but occurs in polar bears sporadically stranded in Iceland. At present, no systematic tests are carried out nationwide for tuberculosis or brucellosis. There is an extensive list of animal diseases that are notifiable or reportable to the CA and a list of reportable diseases present in Iceland (see Regulation 52/2014).

The incidence of scrapie has been very low for the past ten years,

In the autumn 2012 IBR was detected in one farm and subsequently in one cow on another. The disease did not spread to other farms and was considered eradicated one year later.

See attached reports on:

http://www.OIE.int/wahis_2/public/wahid.php/Reviewreport/Review/viewsummary?fupser=&dothis=&reportid=12422

Paratuberculosis was detected in a sheep flock in a region in Northeast Iceland in 2013. Subsequently a compulsory vaccination was started in the region and on voluntary basis in the relevant restriction zone.

Strongyloides stercoralis was detected in a dog in the quarantine for imported pets in 2009, the dog was treated and samples were taken a few times over a six months period and the worm was not found again. In 2012 the worm was detected in a few dogs for the first time outside the quarantine and has been found occasionally since then.

The prevalence of lung diseases in sheep is increasing, both *Mycoplasma pneumoniae* and *Pasteurella* are involved.

An epidemic of equine respiratory disease characterized by coughing and nasal discharge but normal temperature with the first cases reported in early April 2010 by a private veterinary practitioner (PVP). It was probably introduced in January 2009. The disease was eventually found to be caused by *Streptococcus zooepidemicus* strain ST209 following testing of samples being sent to the Newmarket laboratory in the UK. It must be noted that there was a considerable delay in sending samples from the NRL to the UK and there was no report of this as an exceptional event to the OIE.

Table 10: List of reportable diseases present in the country:

Cattle	Sheep	Horses	Pigs	Dogs, cats and fur animals	Birds	Fish
Paratuberculosis – sporadic	Scrapie – endemic	Listeriosis – sporadic	Pleuropneumonia – endemic (voluntary vaccination)	Ear mites – endemic	Fowl cholera – sporadic	Cold water vibriosis – sporadic
Malignant catarrhal fever – sporadic	Paratuberculosis – endemic (compulsory vaccination in some areas)	Intestinal Salmonella infections – sporadic	Pleuropneumonia – endemic (voluntary vaccination)	Canine parvovirus – endemic (voluntary vaccination)	Marek's disease – sporadic	Bacterial kidney disease – sporadic
Intestinal Salmonella infections - sporadic	Campylobacter fetus fetus – sporadic	Equine herpesvirus 2 (EHV-2) – endemic	Swine influenza – endemic	Hepatitis contagiosa canis – endemic (voluntary vaccination)	Avian chlamydiosis – Psittacosis – sporadic	Enteric red mouth - endemic
Viral diarrhoea – endemic	Intestinal Salmonella infections – sporadic	Trichophyton equinum/ T. mentagrophytes – endemic	Swine erysipelas – endemic (voluntary vaccination)		Chicken infectious anaemia – endemic (voluntary vaccination)	Ulcer disease – endemic
	Toxoplasmosis – sporadic	Botulism – sporadic	Porcine parvovirus – endemic (voluntary vaccination)		Coccidiosis – endemic (voluntary preventive treatment)	Winter ulcers – endemic
	Botulism – sporadic		Atropic rhinitis – endemic (voluntary vaccination)			Vibriosis – endemic
	Clostridium spp – endemic (voluntary vaccination)		Endemic pneumonia – endemic (voluntary vaccination)			
	Coccidiosis – endemic (voluntary preventive treatment)		Edema disease – endemic (voluntary vaccination)			
	Listeriosis – endemic		Porcine intestinal adenomatosis – sporadic (voluntary vaccination)			
	Pasteurella multocida/ P. haemolytica – endemic					
	Orf – Contagious ecthyma – endemic					
	Broken mouth – endemic					

II.4 Organisation of the evaluation

II.4.A Timetable of the mission

Appendix 3 provides a list of persons met; Appendix 4 provides the timetable of the mission and details of the facilities and locations visited by the OIE PVS Team and Appendix 5 provides the international air travel itinerary of team members.

II.4.B Categories of sites and sampling for the evaluation

Table 5 lists the categories of site relevant to the evaluation and the number of each category of site in the country. It indicates how many of the sites were visited, in comparison with the suggested sampling framework (“ideal” sampling) recommended in OIE PVS Manual.

Appendix 4 provides a detailed list of sites visited and meetings conducted.

Table 11: Site sampling

	Terminology or names used in the country	Number of sites	“Ideal” sampling	Actual sampling
GEOGRAPHICAL ZONES OF THE COUNTRY				
Climatic zone				
Topographical zone				
Agro-ecological zone				
ADMINISTRATIVE ORGANISATION OF THE COUNTRY				
1st administrative level	<i>Ministries</i>	4	1	3
2nd administrative level	<i>Local Competent Authorities</i>	10	1	1
3rd administrative level	<i>Municipalities</i>	64		0
Urban entities		0		0
VETERINARY SERVICES ORGANISATION AND STRUCTURE				
Central (Federal/National) VS	Ministry	1	1	1
Internal division of the central VS	MAST Headquarters and Office of Import and Export	2	2	2
1 st level of the VS	Districts offices of MAST	6	3	2
2 nd level of the VS	Disease control areas & fences	25	5	2
DoH – LCAs (for food control)	District	10	2	1
Veterinary organisations (VSB, unions...)	Veterinary Association	1	1	1
	Veterinary Council	1	1	1
Qualified Veterinarians (total)	Total	176	3	3
FIELD ANIMAL HEALTH NETWORK				
Private veterinary sector	Practising veterinarians	70	3	3
Other sites (dip tanks, crush pens....)	Disease control areas Scrapie and paraTB for sheep)	23	2	2
VETERINARY MEDICINES & BIOLOGICALS				
Production sector		0		0
Import and wholesale sector		2		0
Retail sector		?		3
Other partners involved		0		0
VETERINARY LABORATORIES				
National labs	Keldur, Matis	2	1	1
Regional and local labs		0	0	0
Associated, accredited and other labs	Private labs	4	1	1
ANIMAL AND ANIMAL PRODUCTS MOVEMENT CONTROL				
Bordering countries		None		
Airports and ports border posts		7	2	2
Main terrestrial border posts		0	0	0
Minor terrestrial border posts		0	0	0
Quarantine stations for import	For dogs and cats (are 2 now but one is going to close down very shortly)	1	1	0
Internal check points		0	0	0
Live animal markets		0	0	0
Zones, compartments, export quarantines	Disease control zones ³	0	0	0
Hatcheries		3	1	1
PUBLIC HEALTH INSPECTION OF ANIMALS AND ANIMAL PRODUCTS				
Export slaughterhouse	Approved for Russia, (2 for USA)	8	3	3
National market slaughterhouses	All SHs approved for EEA trade and includes above	16 in total	3	3
Local market slaughterhouse		0	0	0

³ Please note that these zones do not meet OIE definitions and criteria of zones.

Slaughter areas/slabs/points		0	0	0
On farm or butcher's slaughtering sites		Not known	0	0
Processing sites (milk, meat, eggs, etc)	Dairies (plus a few small on farm processors)	5	1	1
	Eggs	?	1	1
	Feed mills	3	1	1
	Registered feed businesses (mainly importers)	66	1	0
	Approved on-farm feed producers	81	1	0
Retail outlets (butchers, shops, restaurants)		?	1	0
Incinerator		1	1	0
TRAINING AND RESEARCH ORGANISATIONS				
Veterinary university		0	0	0
Veterinary paraprofessional schools		0	0	0
Veterinary research organisations	Keldur	1	1	1
STAKEHOLDERS' ORGANISATIONS				
Agricultural Chamber / organisation				
Producers Association	National organisations of producers	1	1	0
National livestock farmers organisations	National Farmers Association	1	1	1
Local livestock farmers organisations	Each district has a subsection and each species has its own association	About 15	1	1
Dairy processors association	Dairy Processors Association	1	1	0
Association of Slaughterhouses	Association of Slaughterhouses	1	1	1
Association of aquaculture producers	Association of aquaculture producers	1	0	0
Fish disease committee		1	0	0
Joint committee on health security and communicable disease control		1	0	0
Other stakeholder organisations				
Welfare organisations	Association for animal welfare	1	1	0
	Animal welfare council	1	1	0
Consumer organisations		0	0	0

PART III: RESULTS OF THE EVALUATION & GENERAL RECOMMENDATIONS

This evaluation identifies the strengths and weaknesses of the veterinary services, and makes general recommendations.

FUNDAMENTAL COMPONENTS

1. HUMAN PHYSICAL AND FINANCIAL RESOURCES
2. TECHNICAL AUTHORITY AND CAPABILITY
3. INTERACTION WITH INTERESTED PARTIES
4. ACCESS TO MARKETS

The activities of the Veterinary services are recognised by the international community and by OIE Members as a '**global public good**'. Accordingly, it is essential that each country acknowledges the importance of the role and responsibilities of its Veterinary Services and gives them the human and financial resources needed to fulfil their responsibilities.

This OIE PVS Evaluation examined each critical competency under the 4 fundamental components, listed strengths and weaknesses where applicable, and established a current level of advancement for each critical competency. Evidences supporting this level are listed in appendix 6. General recommendations were provided where relevant.

The current level of advancement for each critical competency is shown in cells shadowed in grey (15%) in the table.

III.1. Fundamental component I: human, physical and financial resources

This component of the evaluation concerns the institutional and financial sustainability of the VS as evidenced by the level of professional/technical and financial resources available and the capacity to mobilize these resources. It comprises fourteen critical competencies:

Critical competencies:

Section I-1	Professional and technical staffing of the Veterinary Services A. Veterinary and other professionals (university qualification) B. Veterinary para-professionals and other technical personnel
Section I-2	Competencies of veterinarians and veterinary para-professionals A. Professional competencies of veterinarians B. Competencies of veterinary para-professionals
Section I-3	Continuing education
Section I-4	Technical independence
Section I-5	Stability of structures and sustainability of policies
Section I-6	Coordination capability of the VS A. Internal coordination (chain of command) B. External coordination
Section I-7	Physical resources
Section I-8	Operational funding
Section I-9	Emergency funding
Section I-10	Capital investment
Section I-11	Management of resources and operations

Terrestrial Code References:

Points 1-7, 9 and 14 of Article 3.1.2. on Fundamental principles of quality: Professional judgement / Independence / Impartiality / Integrity / Objectivity / Veterinary legislation / General organisation / Procedures and standards / Human and financial resources.

Point 4 of Article 3.2.1. on General considerations.

Point 1 of Article 3.2.2. on Scope.

Points 1 and 2 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services.

Point 2 of Article 3.2.4. on Evaluation criteria for quality system: "Where the Veterinary Services undergoing evaluation... than on the resource and infrastructural components of the services".

Article 3.2.5. on Evaluation criteria for human resources.

Points 1-3 of Article 3.2.6. on Evaluation criteria for material resources: Financial / Administrative / Technical.

Points 3 and Sub-point d) of Point 4 of Article 3.2.10. on Performance assessment and audit programmes: Compliance / In-Service training and development programme for staff.

Article 3.2.12. on Evaluation of the veterinary statutory body.

Points 1-5 and 9 of Article 3.2.14. on Organisation and structure of Veterinary Services / National information on human resources / Financial management information / Administration details / Laboratory services / Performance assessment and audit programmes.

I-1 Professional and technical staffing of the Veterinary Services <i>The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.</i> A. Veterinary and other professionals (university qualification)	Levels of advancement
	1. The majority of veterinary and other professional positions are not occupied by appropriately qualified personnel.
	2. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at central and state / provincial levels.
	3. The majority of veterinary and other professional positions are occupied by appropriately qualified personnel at local (field) levels.
	4. There is a systematic approach to defining job descriptions and formal appointment procedures for veterinarians and other professionals.
	5. There are effective management procedures for performance assessment of veterinarians and other professionals.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 32E, 49E, 78E, 97H.

Findings:

There are 116 veterinarians in Iceland including other professionals and 70 PVPs. In addition there are 15 contracted veterinarians employed as meat inspectors for the few weeks of sheep slaughter.

The difficulties for VS to fill the veterinary positions with Icelandic veterinarians are increasing. The ratio of foreign veterinarians out of the total number of veterinarians employed in VS is increasing and if this is not rapidly addressed, this ratio will continue to increase over the coming years. This will be even more the case if, as recommended during this PVS Evaluation mission, the number of veterinary positions is increased. This ratio represents an issue for VS to be in compliance with OIE standards since foreign veterinarians are little or not able to communicate in Icelandic language (the only official language). It is noted that this relates to 8 permanent vets and the temporary staff employed at the sheep slaughterhouse during the season

MAST employs mostly Icelandic veterinarians and some foreign graduates (who in general have no written or spoken Icelandic). There have been some complaints from BOs about receiving reports in English and this is consistent with the legal requirements for civil servants to speak and write Icelandic. It is very difficult to recruit any veterinarian as even with the recent increase in salaries following a strike of some professional workers the salaries remain relatively low compared to other similar countries. However other factors may play a role such as cost of living and taxes as well as a general lack of Icelandic vets. Another aspect is the restricted band range of salaries i.e. a non-graduate would earn around 15% less than a graduate. It also appears that veterinarians, as they have to study abroad, may rack up a large loan from the government, which may take many years to repay. This loan is linked to inflation so may rise every year. The maximum amount of annual/monthly repayments depends on the salary. It is noted that this situation may also be relevant for those Icelanders who study abroad in different fields and the same would apply for citizens of other States taking university degrees.

Apart from vacancies for permanent veterinarians there has been a diminution in the number of district offices which means inter alia that distances travelled has increased. The reduction in the number of district offices was the result of legal requirements separating private veterinary services from official controls. There is a simple generic contingency plan for exotic animal diseases which is included in MAST's quality manual and work is progressing slowly on a few specific ones but work on contingency planning is not a priority due to lack of staff.

According to discussions with some staff at the LCAs not all food establishments and retailers are registered and inspected in conformity with the legislation due to lack of staff.

At MAST there is a lack of personnel to specifically work on important issues like contingency plans; there is insufficient staff for drafting legislation (when the Moll requests MAST to undertake this work) and for carrying out their normal duties and there is no dedicated risk assessment unit in MAST. It is crucial that sufficient manpower is allocated at MAST headquarters to ensure that these important functions can be carried out.

There is scope for employing veterinary paraprofessionals and administrative staff to allow the veterinarians to carry out their veterinary duties and obligations.

There is a lack of about 3-4 persons to take full responsibility for imports and exports including the increased presence of OV's at key border inspection posts.

In addition, due to the new Animal Welfare legislation, more staff are needed to undertake the inspection work previously carried out by the Municipalities. Nearly fifty inspectors (not full time) were employed to do this work and MAST believes that need 12 inspectors to take over their work but only 6 have been budgeted for, meaning one in each District only.

There are specialist veterinary positions for pigs' branch (0.5 post), VMP (0.5 post) and animal by-products (0.5 post) in MAST HQ which are not adequately covered under the present staff complement.

Information from the CVO on staff positions and changes over the last 10 years has been included in Annex VI (Document 179E). There were 7.1 posts for the CVO office before and immediately after MAST was created in 2007/2008. At the time of the mission there were 9.8 posts for the CVO office, thereof 1 non-veterinary post (aquaculture security). At the same time the workload has considerably increased in particular with the new animal welfare legislation and greater focus on zoonoses, antimicrobial resistance VMPs and ABPs notwithstanding the need for other work e.g. on contingency planning which has not been given a priority. As described on pages 22 – 26 in this report the situation prior and post to the creation of MAST in 2005/2006 has seen a change in numbers, duties and command structures. Prior to the creation of MAST there were 41 staff in the CVO office of which 4 were non-veterinarians and at that time there were 15 DVOs of which 12 were also involved in clinical practice. The CVO was responsible for the main veterinary matters (AH, AW, import/export of animals and products of animal origin (mammals), slaughterhouses, cutting plants/meat processing plants within slaughterhouses, export of dairy products, veterinarians etc) and the official control related to those subjects. The CVO had total command and reported directly to the Minister.

Keldur has 3.5 full time equivalent (FTE) veterinarians; the limited specialised staff together with the lack of young veterinarians in the institute can influence the sustainability of the laboratory in future.

The situation with regard to job descriptions seems unclear and this is because of lack of staff to satisfactorily carry this out.

There are a few options may be available to contribute improving the situation:

- Employ paraprofessionals to conduct official tasks that may not need to be directly operated by veterinarians but that veterinarians can supervise. Examples include: meat inspection; taking samples; etc. For this, MAST should engage into discussions with the Agriculture University, the Food Science Faculty etc. to study the feasibility of starting courses to train paraprofessionals. The time of the veterinarians would therefore be (1) reduced, (2) better valued;
- Contract PVP to conduct on part-time basis some official activities (slaughterhouse inspection for example). Some PVPs may be interested as long as the payment per hour worked is increased;
- Increase the number of administrative positions so these personnel can take over some administrative tasks that are currently being done by veterinarians (e.g. human resource management, secretary work, etc.).

Table 12: Veterinarians working at Mast September 2015

	VO	DVO	OV perm	OV temp	Director	Total
	9	5*	17	15	3	49
Icelandic as mother tongue	8	4	7		3	22
Speaking/writing Icelandic sufficient	1	1	2			4
Not speaking/writing Icelandic			8	15		23

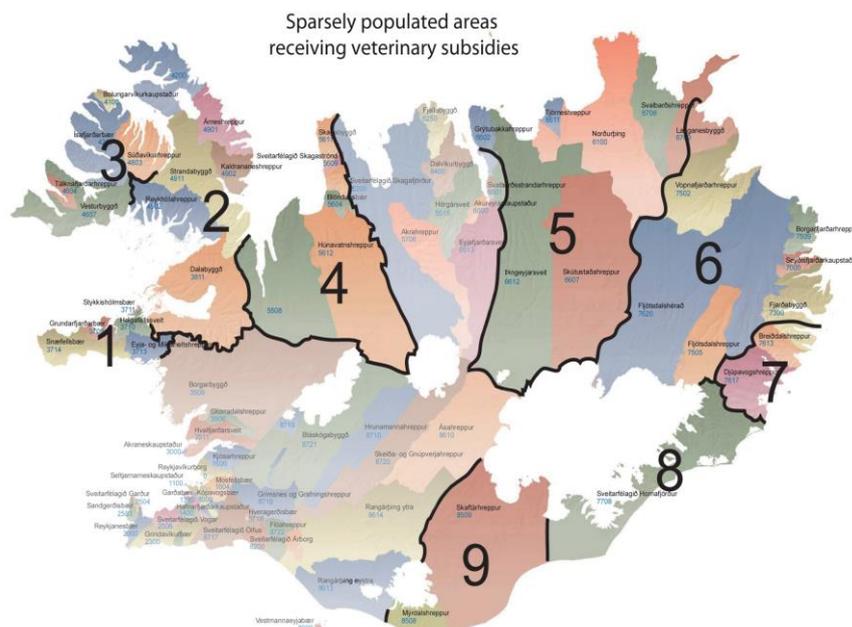
* No veterinarian was in the East-District at the time of the mission

There are no formalised agreements concerning the recognition of veterinary degrees from countries other than the EEA although recognition is based on Icelandic Regulation No 773/2006.

An applicant for a veterinary license in Iceland is interviewed by the CVO (regarding their knowledge of the legislation) who gives an opinion as the suitability of the veterinarian to the Moll who then simply endorse and issue a licence. The Veterinary Council may give some input as to the suitability of the foreign degree if from countries other than the EEA. Mostly veterinarians graduate in Norway, Denmark, Germany and other European countries.

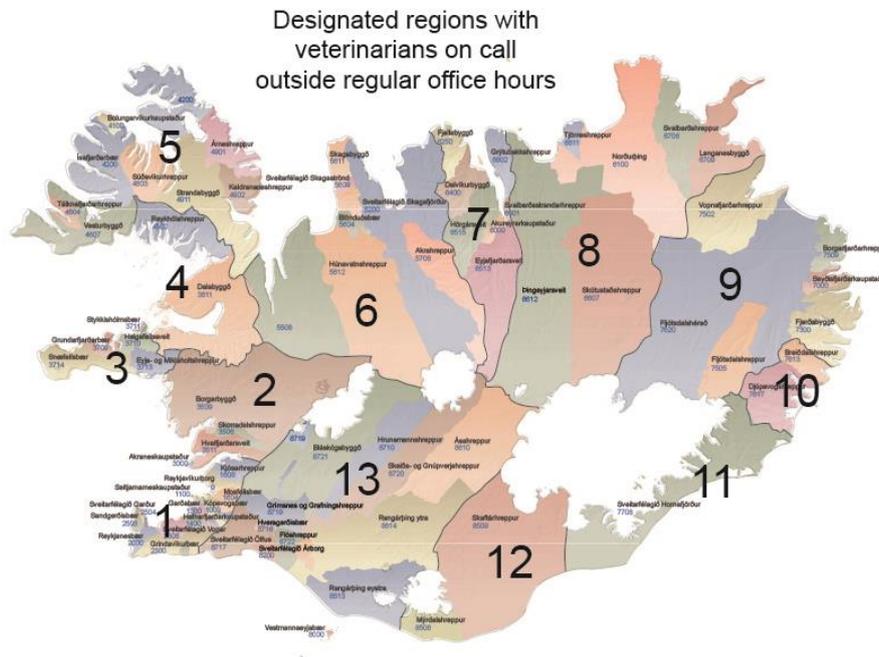
In the light of the difficulties caused by few animals/farms and long distances (harsh conditions) in certain regions and thus low income for work in these areas there is an incentive scheme for certain areas whereby a private veterinarian is contracted by MAST to work as a veterinary practitioner (5-year contract). This is a special contract between MAST & PVPs (9) where their payment takes account of the salary of the veterinarians at MAST. This incentive scheme was implemented and introduced when it was decided by law that district veterinarians were not allowed to work in private veterinary practice.

Figure 8: Sparsely populated areas receiving veterinary subsidies (areas 5 and 6 were planned to be divided into 3 areas making a total of 10, from 1. January 2016)



In addition there is a payment for night and weekend veterinary shifts with a contract between the Ministry of Agriculture (Moll), Ministry of Finance and the Veterinary Association. The rota is agreed between the DVO and the PVPs (who may choose to opt out) with the name and contact details published on the Internet.

Figure 9: Designated regions with veterinarians on call outside regular office hours



There is also a payment for veterinarians driving costs if they travel more than 80 km. when visiting a client; the farmer pays a maximum of 80 km for a PVP visit; the PVP then claims monies back from MAST.

NB because of the financial crises in 2008 - MAST had to cut other costs e.g. animal disease/food control – samples, protection zones as well as database development, foreign cooperation, human resources etc. to be able to maintain key services, including the service of the PVPs as described above.

Strengths:

- Veterinarians appointed to the VS are well trained and motivated;
- CVO recommends approvals of veterinarians (in conjunction with a Veterinary Council in the case of those veterinarians who have a degree from countries outside of the EEA);
- The Veterinary Association does have some information on veterinarians studying abroad from a few of the European veterinary faculties it has contact with.

Weaknesses:

- Not all staff have had regular annual appraisals and some have no job descriptions (mainly higher ranking officers);
- There is a lack of professional personnel so that not all areas of veterinary domain are covered adequately;

- Although salaries have been increased it is difficult to recruit Icelandic speaking veterinarians and especially for slaughterhouses where private veterinarians indicated that the salary for the work is not sufficient;
- There is no veterinary faculty and it is expensive for veterinarians to be trained outside the country, this means that they graduate with a very large loan.
- There is no procedure to know where or when Icelanders have graduated from foreign veterinary faculties. Although this is a popular course it is difficult to attract Icelandic veterinary graduates into the VS and noted that this is also due to the fact that there are a limited number of available Icelandic veterinarians.
- There are some 10 permanent and 15 temporary foreign veterinarians (e.g. Polish, Spanish, Russian, Indonesian and Czech veterinarians employed in the VS but some 8 out of 10 permanent and 15 temporary veterinarians cannot write or speak Icelandic. This is not according to the Iceland legislation and there have been complaints from BOs (meat plants) that have received reports in English;
- Moll issues veterinarians' licence on advice of CVO but has no real input into decision;
- No standard procedures for recognition of veterinary degree courses from veterinary faculties outside the EEA.

Recommendations

- Increase the number of veterinary positions in the VS;
- Improve the conditions of service to attract more Icelandic veterinarians to work in Iceland;
- Lay down standard procedures for recognition of non-EEA veterinary degree courses;
- Examine the possibility to allow CVO at MAST to directly issue the licence for veterinarians to practice in the absence of a VSB.

I-1. Professional and technical staffing of the Veterinary Services <i>The appropriate staffing of the VS to allow for veterinary and technical functions to be undertaken efficiently and effectively.</i> B. Veterinary para-professionals and other technical personnel	Levels of advancement
	1. The majority of technical positions are not occupied by personnel holding appropriate qualifications.
	2. The majority of technical positions at central and state / provincial levels are occupied by personnel holding appropriate qualifications.
	3. The majority of technical positions at local (field) levels are occupied by personnel holding appropriate qualifications.
	4. The majority of technical positions are effectively supervised on a regular basis.
5. There are effective management procedures for formal appointment and performance assessment of veterinary para-professionals.	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 32E, 49E, Appendix 8

Findings:

Under Act no 66/1998 the Veterinarian Act Mast should issue licenses and keep records for para-professionals (but this has not started for all) for the following:

- Animal nurses;
- Artificial insemination technicians;
- Microchips in horses around - 500 persons licenced;
- Pig tail cutting;
- Killing of animals (slaughter & fur animals).

There are only a very few veterinary para-professionals according to the OIE definition employed at MAST such as the livestock officers who have an agricultural university degree. Their task is to visit farms, report on the numbers of livestock and initially inspect for any welfare problems. There are also meat graders but these are only carrying out quality controls at the slaughterhouses so are not directly involved with VS work. There are no specific meat inspectors and veterinarians carry out this function. There are no facilities or courses available in Iceland for meat inspection and for other competencies (except for the livestock officers). If more technical staff were utilised, this should enable the veterinarians to carry out the more professional work, which they are qualified thereby using them more efficiently.

MAST is waiting for the Moll to produce a regulation concerning the education and responsibilities of nurses before they can issue licences.

Strengths:

- There are livestock officers with Agricultural degrees.

Weaknesses:

- There are very few technical staff centrally and locally;
- There are no official meat inspectors apart from veterinarians;
- Meat inspection at poultry plants is carried out by slaughterhouse staff with no formal training (apart from some training by the DVO informally) and no CE;
- Moll has not yet issued a regulation for nurses.

Recommendations:

- Introduce licencing of those persons which need to be licenced under Icelandic legislation;
- Introduce licencing of animal transport vehicles;
- Introduce courses and training for meat inspection;
- Introduce a regulation concerning registration of nurses.

I-2 Competencies of veterinarians and veterinary para-professionals	Levels of advancement
<p><i>The capability of the VS to efficiently carry out their veterinary and technical functions; measured by the qualifications of their personnel in veterinary and technical positions.</i></p> <p>A. Professional competencies of veterinarians including the OIE Day 1 competencies</p>	1. The veterinarians' practices, knowledge and attitudes are of a variable standard that usually allow for elementary clinical and administrative activities of the VS.
	2. The veterinarians' practices, knowledge and attitudes are of a uniform standard that usually allow for accurate and appropriate clinical and administrative activities of the VS.
	3. The veterinarians' practices, knowledge and attitudes usually allow undertaking all professional/technical activities of the VS (e.g. epidemiological surveillance, early warning, public health, etc.).
	4. The veterinarians' practices, knowledge and attitudes usually allow undertaking specialised activities as may be needed by the VS.
	5. The veterinarians' practices, knowledge and attitudes are subject to regular updating, or international harmonisation, or evaluation.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 32E, Appendix 8

Findings:

There is no veterinary faculty in Iceland although it has been discussed to possibly introduce the first 2 years course in conjunction with the medical faculty but no positive decision has been taken yet. There is no determination or planning for the number of future veterinarians needed by the country.

Provisions for a permission to work as a veterinarian in Iceland are laid down in the Act on Veterinarians and Animal Health Services No 66/1998. Only those who have been granted permission by the Ministry have the right to practice veterinary medicine in Iceland. The Ministry issues a letter of permission after having obtained the CVO's opinion. Those are considered to be veterinarians who have completed a university degree at a school of veterinary medicine recognized by the government of Iceland and those who are authorized as veterinarians by their home country in accordance with the rules of the European Economic Area. In case of a degree from a school of veterinary medicine outside the European Economic Area and Switzerland, the council of veterinarians, which is appointed by the Ministry of Industries and Innovation (which has 2 Ministers one for Agriculture and Fisheries and the other for Industry and Commerce), shall be consulted before authorization is granted. A VSB is not established in Iceland but this would be the body, which lays down the requirements for a satisfactory veterinary education and recognition of equivalence for the qualifications from outside the European Economic Area and Switzerland.

Veterinarians who intend to work in Iceland must acquaint themselves with Icelandic acts and regulations on veterinary medicine. When the CVO receives a request for an opinion from the Ministry regarding an application for an authorization as a veterinarian, the CVO summons the applicant for a conversation regarding the legislation and practical issues regarding working as a veterinarian in Iceland, before issuing his opinion on suitability to the Moll.

In addition to the Icelandic license, all veterinarians who are citizens of the European Economic Area and are authorised as veterinarians by their home country have the right to work up to 12 months as vets in Iceland, without having an Icelandic license. After 12 months, they must apply for Icelandic veterinary license by the Moll.

Provisions for a permission to work as a veterinarian in Iceland are laid down in the Act on Veterinarians and Animal Health Services no. 66/1998. Only those who have been granted permission by the Ministry have the right to practice veterinary medicine in Iceland. The Ministry issues a letter of permit after having obtained the CVO's pronouncement. Those are considered to be veterinarians who have completed a university degree at a school of

veterinary medicine recognized by the government of Iceland and those who are authorised as veterinarians by their home country in accordance with the rules of the European Economic Area. In case of a degree from a school of veterinary medicine outside the European Economic Area and Switzerland, the council of veterinarians, which is appointed by the Ministry of Industries and Innovation (which has 2 Ministers one for Agriculture and Fisheries and the other for Industry and Commerce), shall be consulted before authorisation is granted. A VSB is not present in Iceland but this should be the body, which lays down the requirements for a satisfactory veterinary education and recognition of equivalence for the qualifications from outside the European Economic Area and Switzerland.

There is apparently a training programme available for new VOs but during the mission one VO (now a DVO) had received no formal initial training; however, he was extremely competent in carrying out his duties. This lack may have been the result of staff shortages possible due to illness.

All the PVPs met indicated they might not suspect a serious notifiable disease at the first visit. There have been incursions of diseases such as IBR, swine influenza and Streptococcus zooepidemicus strain ST209 which were either picked up very late or only via the routine surveillance sampling and this has decreased the scoring for this critical competency (CC).

Although some veterinarians have undergone specialised training courses these are not formally recognised.

MAST has developed a training programme for employees and staff are supposed to undergo initial training and possible ad-hoc on-going training. Directors of all district offices are requested to prepare plans and requirements for training and continuing education (CE) for their staff. This was not in place. There is no formal system in place for CE and no system in place for assessment of training needs and effectiveness of trainings. There is no formalised training for contracted Private Veterinary Practitioners (PVPs) or meat inspectors. Due to the lack of Icelandic veterinarians foreign veterinarians are employed e.g. from Spain, Poland, Indonesia, Russia, etc. but there is no formal agreement for equivalent recognition of non-EEA veterinary faculties.

If an annual appraisal/evaluation system was fully functioning this would help to identify on-going individual training needs.

Strengths:

- The private veterinary practitioners are experienced and competent;
- The MAST veterinarians are generally experienced, capable and conscientious.

Weaknesses:

- Not all VOs and DVOs have undertaken an introductory course before taking up their official duties;
- There is a lack of recognised veterinary specialisations;
- Private veterinarians and VOs may not be sufficiently aware of clinical signs of serious notifiable disease as these have never been present in Iceland;
- Evaluation system not fully working.

Recommendations:

- Review possibility of introducing a 1 or 2 year course for veterinarians in conjunction with medical faculty prior to going to an overseas university;
- Liaise with the EU veterinary faculties to improve the knowledge about Icelanders taking veterinary degree courses;

-
- Establish a list of overseas veterinary faculties that have been assessed to ensure competency of qualified veterinarians such as those approved by EU countries;
 - Ensure all VOs and DVOs undertake an introductory course before taking up their official duties;
 - Ensure an annual evaluation for all staff is carried out; ensure that senior management of MAST has enough time and is well supported by the Human Resource's team of Moll to run such appraisals of staff;
 - Provide on-going awareness programmes and information packs to heighten knowledge and ability of all veterinarians to quickly suspect clinical and post-mortem signs of serious notifiable diseases;
 - Introduce a system to formally recognise equivalent veterinary courses and to recognise veterinary specialisations.

B. Competencies of veterinary para-professionals	Levels of advancement
	1. The majority of veterinary para-professionals have no formal entry-level training.
	2. The training of veterinary para-professionals is of a variable standard and allows the development of only basic competencies.
	3. The training of veterinary para-professionals is of a uniform standard that allows the development of only basic specific competencies.
	4. The training of veterinary para-professionals is of a uniform standard that allows the development of some advanced competencies (e.g. meat inspection).
	5. The training of veterinary para-professionals is of a uniform standard and is subject to regular evaluation and/or updating.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 32E.

Findings:

There are no facilities in Iceland for the training of veterinary para-professionals.

There are very limited veterinary para-professionals basically just the livestock inspectors in MAST. These livestock inspectors have an agricultural degree and receive an intensive 4-day training prior to full-time working at MAST.

There are also the LCA inspectors who all have a university degree in subjects appropriate to their tasks. Furthermore before being authorised by the Ministry of the Environment as public health inspectors they have to participate in a training course arranged by MAST and undertake practical training at a LCA district office.

Strengths:

- Livestock inspectors have an agricultural degree.

Weaknesses:

- Apart from livestock inspectors there are no veterinary para-professionals.

Recommendations:

- Review the need and possibilities of using more veterinary para-professionals

I-3 Continuing education (CE)⁴ <i>The capability of the VS to maintain and improve the competence of their personnel in terms of relevant information and understanding; measured in terms of the implementation of a relevant training programme.</i>	Levels of advancement
	1. The VS have no access to veterinary, professional or technical CE.
	2. The VS have access to CE (internal and/or external programmes) on an irregular basis but it does not take into account needs, or new information or understanding.
	3. The VS have access to CE that is reviewed annually and updated as necessary, but it is implemented only for some categories of the relevant personnel.
	4. The VS have access to CE that is reviewed annually and updated as necessary, and it is implemented for all categories of the relevant personnel.
	5. The VS have up-to-date CE that is implemented for all relevant personnel and is subject to regular evaluation of effectiveness.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

There is no on-going CE for the staff – nor for veterinarians or veterinary para-professionals in MAST, whether at central or district level, or PVPs and the budget in this respect is very small.

Although the EEA Agreement does not cover animal health and animal welfare there are EU Better Training for Safer Food programmes (BTSF) for Iceland in these areas as well as in other areas since 2008 (e.g. food and feed safety) and there has been extensive participation in these BTSF courses.

There are no limitations on participation of such courses offered to Iceland (see also the attached document ‘overview BTSF training 2008-2015’).

In addition, MAST staff attend various meetings, workshops, training seminars and conferences that add to their knowledge and experience although not part of systematic training programme. For PVPs participation is very limited.

Strengths:

- Training courses have been undertaken on an *ad hoc* basis in particular for BTSF.

Weaknesses:

- There is no on-going CE requirement;
- Only limited internal and external training is carried out for CE;
- There is a lack of budget for training and only courses that are prepaid can be attended.

Recommendations:

- Establish an adequate budget line for CE;
- Ensure staff undergoes adequate CE;
- Ensure proper records of attendance to training course are kept.

⁴ Continuing education includes Continuous Professional Development (CPD) for veterinary, professional and technical personnel.

I-4 Technical independence	Levels of advancement
<i>The capability of the VS to carry out their duties with autonomy and free from commercial, financial, hierarchical and political influences that may affect technical decisions in a manner contrary to the provisions of the OIE (and of the WTO SPS Agreement where applicable).</i>	1. The technical decisions made by the VS are generally not based on scientific considerations.
	2. The technical decisions take into account the scientific evidence, but are routinely modified to conform to non-scientific considerations.
	3. The technical decisions are based on scientific evidence but are subject to review and possible modification based on non-scientific considerations.
	4. The technical decisions are made and implemented in general accordance with the country's OIE obligations (and with the country's WTO SPS Agreement obligations where applicable).
	5. The technical decisions are based only on scientific evidence and are not changed to meet non-scientific considerations

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

6E; 102H, legislation, 2014 report of ESA, interviews.

Findings:

Legislation provides sufficient powers for VS to make decisions based on scientific considerations at least for what concerns food and feed controls. That may be less the case for what concerns animal health where legislation needs to be upgraded.

The new regulations regarding animal welfare will be difficult to fully implement without providing a delay for some farmers to adapt their premises accordingly.

The organisation chart indicates that the CVO is only in charge of animal health and animal welfare and therefore has limited command over import/exports and over food/feed safety. This may represent an issue for these sectors to comply with OIE standards in terms of technical input. However as described in the supporting document for the organisational chart of MAST the CVO should be consulted in difficult and/or complicated cases regarding imports.

It is highlighted that it is not in compliance with the legislation in force in Iceland to give the CVO complete authority over these issues and therefore changing the organisational chart of MAST cannot amend the level of command. It is also noted that the principles applied in the work of the Authority in this area are not least based on the methods applied in the official control of fish and fish products and are very similar to other neighbouring countries.

Many veterinarians report that working conditions (salary etc.) at MAST are not attractive enough. Salaries are reported to be lower than in other Nordic countries and as consequence, graduates may prefer to stay abroad once they have completed their veterinary training and some district positions are not filled because of lack of candidates, which also may reflect the lack of Icelandic vets. This is particularly the case for those who have had to take a loan to fund their studies. It is not an isolated issue in Iceland but something that various sectors are meeting (e.g. medical doctors).

Legal provisions are in place with regard to conflict of interest under various acts – Article 20 of the Government Employees Act No 70/1996 applies to the staff of MAST and Section II of the Administrative Act No 37/1993 applies to the staff of both MAST and LCAs. DVOs work exclusively on official controls.

MAST gives subsidies to private veterinary practitioners (PVPs) to provide veterinary services in remote areas through formal agreements.

The Icelandic Farmers' Association seems quite powerful and has the capacity to put pressure at Ministry level against decisions taken by MAST. However, this is not known to the Authority to be the case. Cooperation between all parties has been improving and is in

general good. The meat industry has taken the Moll to court over the restrictive import policy for meat.

Strengths:

- Veterinary Officers are not or only a little involved in providing services or products to stakeholders whereas a few years ago they were more involved;
- Legislation is in place to avoid conflicts of interest;

Weaknesses:

- The position of the Chief Veterinary Officer only covers part of the mandate of the VS e.g. animal health aspects in relation to import and export are not fully covered;
- The lack of specialised veterinarians in some sectors jeopardise their capacities to be strong enough technically in front of private veterinarians and other stakeholders of the private sectors;

Recommendations:

- Ensure that salary packages for MAST staff evolve adequately to be able to attract Icelandic and non-Icelandic veterinarians;
- Assess the possibility to allow the CVO to have authority over more aspects of the veterinary domain in particular concerning animal health such as more complete coverage of import and export.

I-5 Stability of structures and sustainability of policies	Levels of advancement
<i>The capability of the VS structure and/or leadership to implement and sustain policies over time.</i>	1. Substantial changes to the organisational structure and/or leadership of the public sector of the VS frequently occur (e.g. annually) resulting in lack of sustainability of policies.
	2. Sustainability of policies is affected by changes in the political leadership and/or the structure and leadership of VS
	3. Sustainability of policies is not affected or is slightly affected by changes in the political leadership and/or the structure and leadership of VS.
	4. Policies are sustained over time through national strategic plans and frameworks and are not affected by changes in the political leadership and/or the structure and leadership of VS
	5. Policies are sustained over time and the structure and leadership of the VS are stable. Modifications are based on an evaluation process, with positive effects on the sustainability of policies.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

Two major changes have occurred over the last few years:

- MAST was created in 2008 and the number of district offices was reduced in 2011.
- Veterinarians working for the public sector stopped providing clinical services to farmers and started to conduct only official duties in 2011;

It is in general agreed that the establishment of MAST has been successful. However, it is noted that the constant increase in tasks and responsibilities during the last decade has put some temporary strain on the Authority and its staff.

Some animal health and food safety programmes started several years ago and continue to be budgeted and implemented over the years e.g. scrapie, paratuberculosis, Campylobacter, Salmonella etc. Policies regarding the restrictive import of live animals and of some food of animal origin remain the same.

Strengths:

- Maintaining strict import policy and health status;
- Introduced EU legislation for food and feed;
- Long-term commitment for the control of scrapie disease, the ban on some imports etc.

Weaknesses:

- Absence of a national strategic plan for the overall VS or for MAST;
- Changes occur quite regularly both structurally and functionally not necessarily for the better;
- One strike has occurred due to salary conditions in the last decade;

Recommendations:

- Hire one consultant team to facilitate the process for the drafting of a pluri-annual strategic plan for the Veterinary Services.

I-6 Coordination capability of the Veterinary Services	Levels of advancement
A. Internal coordination (chain of command)	1. There is no formal internal coordination and the chain of command is not clear.
<i>The capability of the VS to coordinate its resources and activities (public and private sectors) with a clear chain of command, from the central level (the Chief Veterinary Officer), to the field level of the VS in order to implement all national activities relevant for the Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes).</i>	2. There are internal coordination mechanisms for some activities but the chain of command is not clear.
	3. There are internal coordination mechanisms and a clear and effective chain of command for some activities.
	4. There are internal coordination mechanisms and a clear and effective chain of command at the national level for most activities.
	5. There are internal coordination mechanisms and a clear and effective chain of command for all activities and these are periodically reviewed/audited and updated.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 17E, 32E, 75H

Findings:

Since January 1 2008, MAST is the central competent authority for food and feed safety, animal health and animal welfare and operates under the auspice of the Ministry of Innovation and Industries (Moll). MAST operates an office for import and export and six district offices and is responsible for operation of the Border Inspection Posts (BIPs) for control of import of foods from third countries (non EEA States).

The MAST organogram is not self-explanatory without indicating management lines or chains of command however there is a written explanation available as a formal document and as such is included in the MAST Quality Manual. The CVO has clear responsibility for part of the veterinary domain (AH and AW). The organisation is rather complex e.g. on the ground the responsibility for controls is not always clear, DVOs and Head of the Office for import and export have 2 or even 3 bosses.

MAST is headed by the Director General and it has two main sections: the Animal Health and Welfare, headed by the CVO and the Food Safety and Consumer Affairs, headed by a director. Cross-sections are an administrative and a legal section, headed by directors; an import and export section, headed by the head of office and the District offices headed by the District Veterinary Officers (DVO).

An intranet has been set up within MAST to facilitate information flow between staff, announce events and report news, training activities and other necessary information.

There are several mechanisms in place to ensure effective coordination within MAST (Weekly meeting of Directors, monthly meetings with the Ministry, monthly meetings with district veterinary officers (DVOs), weekly or monthly staff meetings within each Office, annual general staff meeting and weekly information meetings). However, due to several reasons, the planned meetings with the DVOs did not happen in the last months.

There is a contingency plan for exotic animal diseases which is included in MAST's quality manual and there is an overview of the contingency plan for exotic animal diseases, as regards the measures taken by the Icelandic Food and Veterinary Authority (MAST) "Awareness and Response to Exotic Animal Diseases, July 2015". It contains a brief description of the legal framework, the chain of command and the initial response to a suspicion or confirmation of an exotic animal disease. The contingency plan is a part of MAST's quality manual, which is fully accessible to all employees on the authority's intranet and partly accessible to everyone through MAST's website. In the event of an outbreak of a

serious contagious animal disease, MAST is the main disease control centre and there are the foreseen pathways to communicate and interact with different ministries and bodies.

The responsibility for ensuring implementation of programmes and controls is mainly in the hands of the DVOs. The technical responsibility for measures on the farm level is in the Animal Health and Welfare section, for the official controls in slaughterhouses, cutting plants, FBOs producing food of animal origin, in the Food Safety and Consumer Affairs section. Although all responsibilities are described, for the cross sections (office of import and export) and the DVOs, the responsibilities are not always to be clear. The interviews showed e.g. that although described in the document supporting the organogram of the Authority there are in practice uncertainties who is responsible for job descriptions, annual appraisals etc.

The small number of people working in the Veterinary Services, as well as the relatively small size of the country, allow for direct contact within and between the different levels of the organisation.

On a daily basis, the office for import and export is responsible for case handling in all matters regarding imports. However, principle policy decisions about commodities authorised for import (i.e. bovine semen) are the responsibility of MAST. These decisions are based on demand and risk assessment. The CVO has only a limited involvement in such case handling, but is consulted on decisions in particular when difficult cases arise and as described in the document supporting the organogram of the Authority;

Strengths:

- The structures within MAST and the responsibilities are described;
- Regular information exchange and internal co-ordination meetings;
- Personal contacts facilitate the flow of information within the Veterinary Services;
- There is a defined chain of command in the event of a disease outbreak.

Weaknesses:

- The organisation is rather complex, organogram of MAST is not self-explanatory and does not indicate management lines;
- In the grey zones the responsibility for controls is not always clear, DVOs and Head of the Office for import and export have 2 or even 3 bosses;
- Responsibilities for job descriptions, annual appraisals etc. are in practice not clear enough;
- CVO is only responsible for animal health and animal welfare and e.g. animal health aspects of import, export and ante and post mortem inspections are not fully covered ;
- Slaughterhouses are also an important place for animal health surveillance; however, the CVO has no influence and power on decisions and there is no automatic information flow;
- Concerning import decisions, the involvement of the CVO in daily case handling is limited.

Recommendations:

- Review the organisational structure to try to improve the chains of command;
- Review the power of the CVO in topics related to animal health which are not fully covered (e.g. slaughterhouses, import and export).

B. External coordination	Levels of advancement
<p><i>The capability of the VS to coordinate its resources and activities (public and private sectors) at all levels with other relevant authorities as appropriate, in order to implement all national activities relevant for OIE Codes (i.e. surveillance, disease control and eradication, food safety and early detection and rapid response programmes). Relevant authorities include other ministries and Competent Authorities, national agencies and decentralised institutions.</i></p>	1. There is no external coordination.
	2. There are informal external coordination mechanisms for some activities, but the procedures are not clear and/or external coordination occurs irregularly.
	3. There are formal external coordination mechanisms with clearly described procedures or agreements for some activities and/or sectors.
	4. There are formal external coordination mechanisms with clearly described procedures or agreements at the national level for most activities, and these are uniformly implemented throughout the country.
	5. There are national external coordination mechanisms for all activities and these are periodically reviewed and updated.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Evidence (listed in Appendix 6):

<http://www.mast.is/english/frontpage/about-mast/>

Interviews with LCA Manager of Sudurnes; District Veterinarian of Reykjavik etc.

Country Profile. EFTA. 2014.

Findings:

This competency deals with the coordination between MAST (the headquarters in Selfoss and the 6 District Offices) on one hand and all other public agencies concerned by the veterinary domain, including:

Table 13: Coordination between MAST and other public agencies

Agency Name	Missions related to VS and website
10 Municipal Environment & Public Health offices also referred to as Local Competent Authorities (LCA). They operate under Public Health Committees formed with district staff and elected members of the 74 municipal councils.	Food safety controls at food processing plants and at retailers; control of stray animals.
Icelandic Medicines Agency (IMA) http://www.ima.is Under the Ministry of Welfare (MoWF). http://eng.velferdarraduneyti.is	Registration and control of veterinary medicines & vaccines (excluding feed premixes) Assessing quality and safety of medicines and vaccines, inspections to confirm that relevant regulatory requirements are fulfilled; pharmacovigilance.
Environment Agency (UST). http://www.ust.is Under the Ministry of Environment (MoE).	Pollution issues; nature and wild animal protection; wildlife conservation; hunting management etc.
Directorate of Health (DoH) / Centre for Health Security and Communicable Diseases. http://www.landlaeknir.is Under the Ministry of Welfare (MoWF). http://eng.velferdarraduneyti.is	Health security; public measures on communicable diseases.
Directorate of Customs. https://www.tollur.is Under the Ministry of Finances (MoF).	Control of import, transit and export; collect duties, taxes and other state revenues.
Airport Authority Under MOII	
Port Authorities Under MOII	

The KELDUR Institute for Experimental Pathology. Under the University of Iceland. Ministry of Education, Science and Culture.	Risk assessment for animal diseases; veterinary research; laboratory diagnosis of animal diseases.
MATIS Laboratory	
Department of Microbiology Under the National Hospital / MoWF	
Department of Immunology Under the National Hospital / MoWF	

Coordination between Competent Authorities

MAST and LCAs have been designated as the competent authorities for food safety controls as provided for in article 4.1 of Regulation (EC) No 882/2004. The division of responsibilities between the competent authorities is established in the Icelandic Food Act No 93/1995. The official controls for which MAST is directly responsible are listed in Article 6 of that Act and according to Article 22 the LCAs are responsible for all other official controls, including official controls of Food Business Operators (FBOs) producing food of non-animal origin and all official controls of the retail market.

According to Article 22 of the Food Act MAST shall supervise and coordinate the work of the LCAs; this includes the coordination of official control to ensure that they are implemented in the same manner throughout the country. In order to fulfil these tasks MAST may issue guidelines that the LCAs are supposed to follow. MAST shall ensure cooperation of all those working in this field and shall in that respect make sure that control procedures are cost-efficient and designed to avoid as far as possible the duplication and overlap of efforts. MAST shall cooperate closely with LCAs and provide advice and services in the field of food control within the limits of its capacities and as required by the circumstances.

These provisions do not imply that MAST has the responsibility to carry out control nor to organise the control for the LCAs. The LCAs have to bear these duties themselves, including the organisation of the control and carrying it out and if necessary to apply enforcement measures. If there is an overlap of competencies between MAST and LCAs the division of responsibilities must be agreed upon between the CAs. If the CAs cannot agree as to who is responsible the Ministry will decree where the competencies should lie. MAST may delegate some of its responsibilities to other CAs through contractual agreements. No such contracts are currently in force.

For the control of FBOs producing food of non-animal origin and the retail sector, the local control agencies (LCA) are responsible. Iceland is divided into 10 Municipal Environmental and Public Health Offices (LCA) districts, each comprising between one and fifteen municipalities. Each LCA district staff operates under the jurisdiction of a local public health committee, comprising control district staff, several politically appointed members and one member representing the confederation of Icelandic Employers. Each LCA has control duties within its districts related to food safety, environmental protection and general hygiene.

MAST has the legal powers to audit the performance of the LCAs. A system for audits of official controls is being established and will be approved by MAST and the Moll. MAST has no legal power to control the competence of the LCAs' inspectors. In practice, the LCAs work rather independently from MAST. It was indicated that there are some problems of coordination of the DVOs and LCAs in grey zones (i.e. farmers supplying directly to the consumers). However, in practice no examples of problems were provided to the PVS team. In the past, difficulties in coordination between DVO and LCA arose in the transport of killed animals for disease control purposes.

There are several mechanisms for co-operation between MAST and the LCAs:

- A Food Safety Group meets 5-6 times annually. The group is chaired by MAST and consists of representatives from all LCAs as well as relevant staff from MAST. The main purpose of the group is to exchange information, harmonise the work of LCAs and discuss and carry out other activities. These meetings focus on consumer protection issues and the tasks of the LCAs and are not relevant for the Veterinary system as such.
- Twice a year meetings between MAST and the LCAs are held, in the spring with the Managers of the ten LCAs and in the autumn with all LCA inspectors.

Joint inspections by MAST and LCAs:

- Joint monitoring/inspection projects focusing on certain aspects of food safety are done each year (3-5 annually). The projects are planned and coordinated by the Food Safety Group.
- Working groups are also established as needed with members from both LCAs and MAST to work on certain topics, such as updating the inspection manual and developing risk-based prioritisation of official controls.

Both the District Veterinarians (MAST) and the Managers of the Environment & Public Health Offices who were interviewed by the OIE team did not report overlaps in their respective missions.

MAST is responsible and District staff conduct inspections for primary production and processing of meat, fish, eggs, and milk, while LCA does it for, non-animal products, retailers, restaurants and for processing plants producing food with only a small amount of animal product included.

LCAs have a role in investigating foodborne diseases and most have a role in the control of companion, which include human allergies, disturbance and the deworming of dogs and cats in terms of zoonoses.

The EFTA report on zoonoses in 2012 and in the country profile dated 2014 reported some severe deficiencies in this system, which have not yet been addressed.

In addition to laboratory services, Matis (Icelandic Food Research), an independent research institute under the same ministry, also offers risk assessment regarding food safety.

MAST cooperates informally with the Chief Epidemiologist regarding communicable zoonoses, the Directorate of Customs in its operations concerning import and export, the Environment Agency regarding animal by-products (ABP) and the Icelandic Medicines Agency regarding evaluation and registration of veterinary medical products.

The coordination between MAST & the Icelandic Medicine Agency exists but lacks practical mechanisms.

There is also the Joint Committee on Health Security and Communicable Disease Control which coordinates surveillance, outbreak investigations, risk assessments and prepare contingency plans for zoonosis, antibiotic resistance and foodborne diseases. It is chaired by the Chief (Medical) Epidemiologist in the Ministry of Health under the Ministry of Welfare. There is a good collaboration and meetings are held 3-4 times a year.

Strengths:

- The legislation is quite clear regarding the sharing of responsibilities between the agencies involved;
- No major issue has been observed over the past years;
- The coordination mechanisms are adequate between MAST on one hand and some other agencies on the other hand, e.g. Directorate of Health.

Weaknesses:

- The coordination mechanisms are insufficient between MAST on one hand and some other agencies on the other hand, e.g. IMA, Ministry of Environment (for wildlife) and Customs;
- There is no chain of command from MAST to the LCAs while MAST is supervising and coordinating the work of LCAs.

Recommendations:

- The design, implementation and evaluation of some specific contingency plans and simulation exercises in domains that involve other agencies would provide significant information that would enable review of the inter-agency procedures and addressing issues. Examples include: food poisoning event with each district LCA; suspicion of contagious diseases in an imported dog;
- Although the LCAs are under a local public health committee appointed by the municipalities and under their responsibility, MAST, having limited powers to ensure that food control is carried out in a harmonised way in the 10 LCAs, should have sufficient manpower at MAST headquarters to carry out its necessary LCA audits.
- Coordination between MAST and IMA needs to be addressed in practical terms both to ease the operations of PVP (cf. regulations to request and obtain import permits that are not registered in Iceland) and to monitor the administration of VMP in food-producing animals;
- Better coordination between MAST and the Customs is another priority. Communication materials produced by MAST are not adequately positioned in airports and ports to inform passengers about what they have to do to comply with import regulations for both live animals and food products;
- Review the responsibilities for the transport of killed animals for disease control purposes.

I-7 Physical resources	Levels of advancement
<i>The access of the VS to relevant physical resources including buildings, transport, telecommunications, cold chain, and other relevant equipment (e.g. computers).</i>	1. The VS have no or unsuitable physical resources at almost all levels and maintenance of existing infrastructure is poor or non-existent.
	2. The VS have suitable physical resources at national (central) level and at some regional levels, and maintenance and replacement of obsolete items occurs only occasionally.
	3. The VS have suitable physical resources at national, regional and some local levels and maintenance and replacement of obsolete items occurs only occasionally.
	4. The VS have suitable physical resources at all levels and these are regularly maintained.
	5. The VS have suitable physical resources at all levels (national, sub-national and local levels) and these are regularly maintained and updated as more advanced and sophisticated items become available.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Visit to various premises: MAST headquarters; District Veterinary Offices of Reykjavic and Akureyri; Public Health Offices of Akureyri; rooms provided by other authorities or stakeholders in Keflavik airport, 2 ports, slaughterhouses etc. (see annex with itinerary).

Findings:

MAST is housed in 7 premises (headquarters in Selfoss and 6 district offices).

The offices used by MAST and LCA that were visited are relatively newly built, well maintained and with adequate space. They are also well equipped with information and communication technology equipment. However, the office provided by the SS slaughterhouse in Selfoss is too small compared to the number of veterinarians involved in meat inspection during the lamb-slaughtering season. At Keflavik airport, the premises to receive and keep pets before they are transferred to the quarantine facilities are inadequately equipped to ensure a sufficient level of biosecurity. The MAST district offices lack sufficient space for storage of equipment, samples and changing of clothes.

Strengths:

- Modern buildings for offices;
- ICT equipment.

Weaknesses:

- Inadequate premises provided by Keflavik airport, SS slaughterhouse in Selfoss etc.
- Insufficient rooms for logistics at district offices.

Recommendations:

- In collaboration with the airport authority, MAST should assess the options to improve the premises for pets at Keflavik airport: either by transforming the existing 2 rooms, building new premises or using an adapted vehicle that would be used for both examination of pets and transfer to the quarantine facilities;
- The quarantine facilities for pets near Keflavik airport may not be big enough in the coming years. MAST should prepare for this;
- Facilities at district offices should be upgraded to improve the possibility for storage of equipment, samples and biosecurity for staff.

I-8 Operational funding	Levels of advancement
<i>The ability of the VS to access financial resources adequate for their continued operations, independent of political pressure.</i>	1. Funding for the VS is neither stable nor clearly defined but depends on resources allocated irregularly.
	2. Funding for the VS is clearly defined and regular, but is inadequate for their required base operations (i.e. disease surveillance, early detection and rapid response and veterinary public health).
	3. Funding for the VS is clearly defined and regular, and is adequate for their base operations, but there is no provision for new or expanded operations.
	4. Funding for new or expanded operations is on a case-by-case basis, not always based on risk analysis and/or cost benefit analysis.
	5. Funding for all aspects of VS activities is adequate; all funding is provided under full transparency and allows for full technical independence, based on risk analysis and/or cost benefit analysis.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 31E, 80E, 81E.

Findings:

Regulation IS No. 567/2012 deals with the funding of MAST through inspection fees which contribute to 30% of MAST operational costs. The remaining 70% is financed from the state budget. The level of inspection fees is based on actual cost for each activity. MAST and the 10 LCAs set the level of fees independently. The fees are published in the Icelandic Official Journal.

The annual operational budget is increasing every year for MAST and is generally adequate apart from the level of salaries (with as a consequence may have increased the ratio of foreign compared to native Icelandic veterinarians although other factors such as a general lack of Icelandic vets will also have played a part) and the budget for samples & analyses which are reported to be insufficient (according to staff interviews) but reflects the agreements on salary payments between the State and the relevant unions, e.g. the Veterinary Association.

Table 14: Annual operational budget of MAST

Annual operational budget of MAST (in million ISK)					
	2014	2013	2012	2011	2010
Allocation from state treasury	933.0	853.4	831.0	771.9	769.8
Operating revenues	367.5	330.0	258.1	248.1	167.7
Other Income	52.9	53.4	54.8	56.6	64.4
Total Income	1353.4	1236.8	1143.9	1076.6	1001.9
Import-Export	96.9	103.9	99.6	97.8	88.7
Field Offices	267.2	205.1	168.2	201.6	186.5
Headquarters	956.1	901.8	900.9	820.4	728.8
Thereof legislation/legal affairs	81.9	76.5	75.5	45.8	37.8
Thereof disease surveillance					
Total expenses	1320.2	1210.8	1168.7	1119.8	1004.0
Net Income	33.2	26.0	-24.8	-43.2	-2.1
Summary of expenses					
Salaries and related cost	839.4	744.5	718.9	721.0	635.0
Laboratories	94.1	91.7	75.8	103.9	56.8
Continuing education	0.7	1.1	0.3	0.4	0.3
Housing cost	121.1	111.9	115.4	102.3	98.7

NB The operating budget is the cost recovery income received.

The Institute For Experimental Pathology, University of Iceland, KELDUR

Years	2010	2011	2012	2013	2014	2015	2016
Public revenues	216,300,000	189,409,000	193,984,000	211,447,138	210,556,010	225,000,000	245,000,000
Income	198,503,341	187,831,830	190,696,839	184,149,848	224,104,460	230,000,000	230,000,000
Total	414,803,341	377,240,830	384,680,839	395,596,986	434,660,470	455,000,000	475,000,000

IMA's expenses are around 600 million ISK and incomes are from registration, inspection fees and provision of scientific advice. Less than 2% of the budget comes for the Ministry of Welfare. The proportion for veterinary products is unknown apart from the share out of the total inspection fees: less than 1% of the inspection fees come from veterinary products.

District Public Health offices receive their budget from each Local Competent Authority. Budgetary information from the 10 LCA is not compiled at the national level. From the data provided for few District Public Health offices, it can be deduced that the expenses for food safety control conducted by these offices would total around 200 million ISK for the entire country.

The CVO, as all other heads of offices at MAST, is directly involved in planning the annual budget of the Authority. The allocation of the budget reflects the budget process as a whole

It can therefore be estimated that the annual budget for VS is over 2,000 million ISK (addition of MAST + Keldur Laboratory + 10 District Public Health offices).

Strengths:

- Annual increases of the operational budget for MAST;
- Clearly defined budget for all areas of MAST (Animal health, veterinary public health and animal welfare).

Weaknesses:

- Low salary agreements limits the possibility to employ Icelandic veterinarians or to contract Icelandic PVP;
- The CVO is involved in the general budget process but has limited power over the allocation of the MAST budget;
- Insufficient budget to conduct sampling and laboratory analysis.

Recommendations:

- Ensure that the preparation of the annual budget takes into account the possibility to recruit short-term consultants to assist the permanent staff when work (whether planned or unexpected) is increasing compared to the previous year;
- MAST, as well as other agencies involved in VS, must actively prepare a detailed proposal for future annual budgets, making it clear to the Ministries that the absence of funding for some activities has a consequence over the quality or quantity of the work to be conducted;
- Conduct a study to compare the current situation with the option to use less veterinarians' time for some activities (e.g. meat inspection; sample taking etc.) that could be conducted by well-trained technicians to be supervised by veterinarians. The financial assessment of that option should include the cost for the development and implementation of training courses for technicians etc.

I-9 Emergency funding	Levels of advancement
<p><i>The capability of the VS to access extraordinary financial resources in order to respond to emergency situations or emerging issues; measured by the ease of which contingency and compensatory funding (i.e. arrangements for compensation of producers in emergency situations) can be made available when required.</i></p>	1. No funding arrangements exist and there is no provision for emergency financial resources.
	2. Funding arrangements with limited resources have been established, but these are inadequate for expected emergency situations (including emerging issues).
	<p>3. Funding arrangements with limited resources have been established; additional resources for emergencies may be approved but approval is through a political process.</p>
	4. Funding arrangements with adequate resources have been established, but in an emergency situation, their operation must be agreed through a non-political process on a case-by-case basis.
	5. Funding arrangements with adequate resources have been established and their rules of operation documented and agreed with interested parties.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): interviews with MAST and Ministry officials.

Findings:

Based on the interviews conducted, there has not been an issue for the government to allocate funding when emergencies occur. There is an emergency fund of 40 million ISK which could be increased if required. However this is a fixed parliamentary budget/fund overseen by the Moll. No specific rules are available regarding the allocation of money from the fund for other cases than Scrapie. The CVO/MAST have no power over the allocation from the fund but can put forward suggestions to the Moll. Neither is there any fund within MAST for emergencies.

The arrangements for compensation to farmers whose sheep are destroyed under the scrapie eradication programme exist not only for the sheep (market price) but also for consequential losses until they can restock which may take 2 years or more.

Strengths:

- Emergency funding has not been an issue for dealing with the equine outbreak (*Streptococcus zooepidemicus*).

Weaknesses:

- No specific rules for allocation of funds exists;
- Additional funds may be approved but are subject to a political process.

Recommendations:

- Introduce specific rules for allocation of additional funds in cases of emergency.

I-10 Capital investment <i>The capability of the VS to access funding for basic and additional investments (material and non material) that lead to a sustained improvement in the VS operational infrastructure.</i>	Levels of advancement
	1. There is no capability to establish, maintain or improve the operational infrastructure of the VS.
	2. The VS occasionally develops proposals and secures funding for the establishment, maintenance or improvement of operational infrastructure but this is normally through extraordinary allocations.
	3. The VS regularly secures funding for maintenance and improvements of operational infrastructure, through allocations from the national budget or from other sources, but there are constraints on the use of these allocations.
	4. The VS routinely secures adequate funding for the necessary maintenance and improvement in operational infrastructure.
	5. The VS systematically secures adequate funding for the necessary improvements in operational infrastructure, including with participation from interested parties as required.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

MAST is spending a lot of time to prepare, attend and address comments of several auditing and inspection missions from institutional (ESA) and trading partners (USA, Chile, Japan etc.). This represents more than a full-time equivalent job.

There are limited investment needs for the VS in terms of infrastructure.

Strengths:

- Sufficient resources available to invest into offices, ICT equipment etc.

Weaknesses:

- There is limited capacity to secure funding for adequate staffing levels e.g. MAST has insufficient personnel to work on important issues like contingency plans;
- There are other areas identified during the mission where more capital investment is required e.g. database systems.

Recommendations:

- Identify the exceptional work (not routine) that will need to be done over the coming years, including to cover the needs identified during this mission. Make a proposal for the Ministry to allocate a special investment budget to fund this, in addition to the annual operational budget that is only supposed to fund routine work.

I-11. Management of resources and operations	Levels of advancement
<i>The capability of the VS to document and manage their resources and operations in order to analyse, plan and improve both efficiency and effectiveness.</i>	1. The VS do not have adequate records or documented procedures to allow appropriate management of resources and operations
	2. The VS have adequate records and/or documented procedures but do not use these for management, analysis, control or planning.
	3. The VS have adequate records, documentation and management systems and use these to a limited extent for the control of efficiency and effectiveness.
	4. The VS regularly analyse records and documented procedures to improve efficiency and effectiveness
	5. The VS have fully effective management systems, which are regularly audited and permit a proactive continuous improvement of efficiency and effectiveness.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 25E, 44E, 102E.

Findings:

Documents are produced adequately in Icelandic language. MAST and its partners (Farmers' Association) have developed at least 6 software programmes to monitor electronically the data from field stakeholders, including farms, slaughterhouses, inspection visits etc.

On the other hand, the management of human resources is observed as not sufficiently professional. Examples include: lack of annual staff appraisals in some cases

Processes for learning lessons has not been effectively practiced. Examples include the scrapie programme that has been implemented for many years without a careful review.

MAST issued in 2011 a quality manual as part of its management systems and this contains a general contingency plan for exotic animal diseases which includes a description of the chain of command in the event of an exotic disease outbreak.

No document was available to the team that presented the annual VS budget in an accurate manner with clear justification on how it is allocated; however the allocation of the budget is based on the needs of each office regarding fulfilment of their duties. The budget is consequently based on previous experience and foreseen needs highlighted by the offices in the budget process. The budget is not divided on office level but rather on the need for sampling, analysis, salaries, resources etc. for the Authority as a whole. It was stated that the allocation of the budget can be clearly documented.

It is not possible to include other Authorities in the financial report of MAST and indeed some of these authorities are under the responsibility of different Ministries. The State budget process and allocation of budgets to different authorities also makes it impossible to prepare an overall budget. However cooperation on certain projects and agreements e.g. on sampling and analysis are the only relevant solutions being practiced in this respect.

Strengths:

- Availability of various reports;
- Capacity to develop software to facilitate the monitoring of data and the conduct of field work;
- There is a published Quality Manual which is under regular and constant review and a system for internal audits is being developed and this should ensure continuous improvement of efficiency and effectiveness;
- There is a good chain of command laid down for a disease response.
- Audits are taking place and being expanded

Weaknesses:

- DVOs interviewed do not know about their budget;
- CVO does not receive any quarterly updates on the annual budget;
- The software developed are being used in most cases but there is no possibility yet to analyse the data that is collected and to produce reports and analyses based on that data;
- No systematic database exists for laboratory diagnosis; results of diagnoses are collected in Excel and summaries sent to MAST.

Recommendations:

- Ensure the financial report for MAST covers, if possible, the laboratory budgets and the DVOs are informed of the report;
- Further develop the software to enable proper compilation of data country wide and larger analyses.

III.2 Fundamental component II: Technical authority and capability

This component of the evaluation concerns the authority and capability of the VS to develop and apply sanitary measures and science-based procedures supporting those measures. It comprises eighteen critical competencies.

For all sections of this chapter, the critical competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas.

Critical competencies:

Section II-1	Veterinary laboratory diagnosis A. Access to veterinary laboratory diagnosis B. Suitability of national laboratory infrastructures
Section II-2	Laboratory quality assurance
Section II-3	Risk analysis
Section II-4	Quarantine and border security
Section II-5	Epidemiological surveillance and early detection A. Passive Epidemiological surveillance B. Active Epidemiological surveillance
Section II-6	Emergency response
Section II-7	Disease prevention, control and eradication
Section II-8	Food safety A. Regulation, authorisation and inspection of establishments for production, processing and distribution of food of animal origin B. Ante and post mortem inspection at abattoirs and associated premises C. Inspection of collection, processing and distribution of products of animal origin
Section II-9	Veterinary medicines and biologicals
Section II-10	Residue testing
Section II-11	Animal feed safety
Section II-12	Identification and traceability A. Animal identification and movement control B. Identification and traceability of products of animal origin
Section II-13	Animal welfare

----- Terrestrial Code References:

- Chapter 1.4. on Animal health surveillance.
- Chapter 1.5. on Surveillance for arthropod vectors of animal diseases.
- Chapter 2.1. on Import risk analysis.
- Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General Organisation / Procedures and standards.
- Point 1 of Article 3.2.4. on Evaluation criteria for quality systems.
- Point 3 of Article 3.2.6. on Evaluation criteria for material resources: Technical.
- Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection.
- Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems.
- Points 1-5 of Article 3.2.9. on Veterinary public health controls: Food hygiene / Zoonoses / Chemical residue testing programmes / Veterinary medicines/ Integration between animal health controls and veterinary public health.
- Sub-point f) of Point 4 of Article 3.2.10. on Veterinary Services administration: Formal linkages with sources of independent scientific expertise.
- Points 2 and 5-7 of Article 3.2.14. on National information on human resources / Laboratory services / Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls.
- Article 3.4.12. on Human food production chain.
- Chapter 4.1. on General principles on identification and traceability of live animals.
- Chapter 4.2. on Design and implementation of identification systems to achieve animal traceability.
- Chapter 4.12. on Disposal of dead animal.
- Chapter 6.2. on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection.
- Chapter 6.3. on Control of hazards of animal health and public health importance in animal feed.
- Chapters 6.6. to 6.10. on Antimicrobial resistance.
- Chapter 7.1. Introduction to the recommendations for animal welfare.
- Chapter 7.2. Transport of animals by sea.
- Chapter 7.3. Transport of animals by land.
- Chapter 7.4. Transport of animals by air.
- Chapter 7.5. Slaughter of animals.
- Chapter 7.6. Killing of animals for disease control purposes.

II-1 Veterinary laboratory diagnosis	Levels of advancement
A. Access to veterinary laboratory diagnosis <i>The authority and capability of the VS to have access to laboratory diagnosis in order to identify and record pathogenic agents, including those relevant for public health, that can adversely affect animals and animal products.</i>	1. Disease diagnosis is almost always conducted by clinical means only, with no access to and use of a laboratory to obtain a correct diagnosis.
	2. For major zoonoses and diseases of national economic importance, the VS have access to and use a laboratory to obtain a correct diagnosis.
	3. For other zoonoses and diseases present in the country, the VS have access to and use a laboratory to obtain a correct diagnosis.
	4. For diseases of zoonotic or economic importance not present in the country, but known to exist in the region and/ or that could enter the country, the VS have access to and use a laboratory to obtain a correct diagnosis.
	5. In the case of new and emerging diseases in the region or world, the VS have access to and use a network of national or international reference laboratories (e.g. an OIE Reference Laboratory) to obtain a correct diagnosis.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 5E, 6E, 17E, 20E, 21E, 32E, 33E, 35E, 37E, 77E, 80E, 104H, 155-157P.

Findings:

MAST designates laboratories to carry out analysis of samples taken during official controls. To be designated, a laboratory must have accredited testing methods. If no laboratory has accreditation for a testing method, a foreign accredited laboratory is chosen. More than half of animal health samples and some food samples are analysed by foreign laboratories. Keldur carried out the following tests in 2014: department of clinical examinations total of 13,957 samples tested; samples for pathology research total of 1307 and for histology and haematology 2988 (see Keldur report for 2104 for additional information in Icelandic).

Three official laboratories and some private laboratories have been designated to handle all of the samples analysed in Iceland. Three Ministries administer official national laboratories. The LCAs use both official and private laboratories and have their own contract with the laboratories.

The Institute for Experimental Pathology of the University of Iceland (“Keldur”, Ministry of Education) analyses official samples for food borne pathogens and animal diseases. It is the National Reference laboratory (NRL) for *Campylobacter*, parasites (*Trichinella*, *Echinococcus*, *Anisakis*), transmissible spongiform encephalopathies (TSEs), fish diseases, bivalve mollusc diseases and crustacean diseases. The institute has made agreements with the Danish National Veterinary Institute, Swedish National Veterinary Institute and the Veterinary Laboratory Agency in the UK, covering services urgently needed to confirm or rule out suspicion of an outbreak of an exotic or other animal virus disease. The Keldur laboratory has two agreements with the Technical University of Denmark to provide capacity, technical assistance and human resources in the case of a crisis. There is good preparedness for referrals to foreign laboratories (sample packaging, IATA certification). Some of the agreements with laboratories outside Iceland are written agreement. However, several agreements are based on oral agreements.

During the visit the staff members indicated that they felt quite isolated from MAST and wanted to be more involved. They are not used for any formal training for MAST veterinarians.

MAST has a contract with Matís (Ministry of Industries and Innovation) laboratory for analysis of official samples for the most common food pathogens. Matís is the National Reference laboratory for *Salmonella* and zoonoses, and viral and bacteriological contamination of bivalve molluscs.

The Department of Immunology, University hospital (Ministry of Welfare) is used by MAST and LCAs for the identification/confirmation of zoonotic agents such as Salmonella serotypes.

A few private laboratories in Iceland analyse samples for food and feed businesses and to a limited extent samples from official controls. All laboratories (official and private) are required to report to MAST if they diagnose reportable zoonotic agents in animals, food or feed, e.g. Salmonella.

Strengths:

- There are several laboratories designated performing laboratory diagnosis for the diseases of zoonotic and economic importance and for the food and feed safety programmes as needed by MAST;
- MAST has access to foreign laboratories if needed;
- The OIE Focal Point for laboratory is appointed.

Weaknesses:

- National reference laboratories are designated only for a few diseases;
- Access to foreign laboratories mainly based on oral agreements.

Recommendations:

- Ensure the access to foreign laboratories by written contracts;
- Involve the laboratories in training of MAST veterinarians in particular for initial trainings;
- Improve contacts with the laboratories.

II-1 Veterinary laboratory diagnosis	Levels of advancement
B. Suitability of national laboratory infrastructures	1. The national laboratory infrastructure does not meet the need of the VS.
<i>The sustainability, effectiveness and efficiency of the national (public and private) laboratory infrastructures to service the needs of the VS</i>	2. The national laboratory infrastructure meets partially the needs of the VS, but is not entirely sustainable, as organisational deficiencies with regard to the effective and efficient management of resources and infrastructure (including maintenance) are apparent.
	3. The national laboratory infrastructure generally meets the needs of the VS. Resources and organisation appear to be managed effectively and efficiently, but their regular funding is inadequate to support a sustainable and regularly maintained infrastructure.
	4. The national laboratory infrastructure generally meets the needs of the VS and is subject to timely maintenance programmes but needs new investments in certain aspects (e.g. accessibility to laboratories, number or type of analyses).
	5. The national laboratory infrastructure meets the needs of the VS, and is sustainable and regularly audited.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 5E, 6E, 17E, 20E, 21E, 32E, 33E, 35E, 37E, 77E, 155-157P

Findings:

MAST designates laboratories to carry out analysis of samples taken during official controls. To be designated a laboratory must have accredited testing materials. If no laboratory has accreditation for a test method then a foreign accredited one is used, taking into account experience and proximity.

Current laboratory capacities can only be achieved by the use of foreign laboratories and more than half of all samples tested are sent abroad. The relatively small livestock production and the favourable animal health situation result in a small number of samples and consequently the experience for diagnosing some diseases is limited.

Four labs are designated to handle all of the samples analysed in Iceland. All four are accredited but not for all of the analyses they perform.

Official national labs are administered by 3 Ministries. The LCAs use both official and private labs accredited for analysis of samples of food and water for human consumption. The LCAs have their own contract with the labs. A list of official labs is published on MAST's website,

<http://MAST.is/matvaelastofnun/eftirlitsnidurstodur/rannsoknastofur/>

The Institute for experimental pathology at Keldur is responsible for diagnosis of diseases in animals. A bio-safety level 3 laboratory was built following the Avian Influenza outbreaks in Europe. The infrastructure in Keldur meets in general the needs.

There is no contract with MAST about coordination and responsibilities. The PVS-team noted that this created in the outbreak of *Streptococcus zooepidemicus* delays in the diagnosis. Formal meetings with MAST are only 1 per year; according to Keldur, the exchange of information between Keldur and MAST should be intensified.

Referrals to foreign laboratories are not always coordinated. Practitioners are not obliged to send samples to Keldur, and often samples are directly sent abroad. Therefore, no overview of samples and diagnoses from laboratories abroad is available.

No systematic database exists; results of diagnoses are collected in Excel and summaries sent to MAST.

Keldur has 3.5 FTE veterinarians; the limited specialised staff together with the lack of young veterinarians in the institute can influence the sustainability of the laboratory in future.

Table 15: NRLs designated by the Ministry of Industries and Innovation

Field of analysis	NRL
Zoonoser and salmonella	Matis ohf
Viral and bacterial contamination in live bivalve molluscs	Matis ohf
Campylobacter	Keldur
Parasites (Trichinella etc.)	Keldur
Transmissible spongiforma encephalopathy (TSE)	Keldur
Fish diseases	Keldur
Bivalve molluscs diseases	Keldur
Crustacean disease	Keldur

Other NRLs have still to be designated by the Ministry of Industries and Innovation.

Strengths:

- The laboratories (in Iceland and abroad) conduct all relevant laboratory analysis in accordance with the OIE Diagnostic Manual of Diagnostic Tests and Vaccines.

Weaknesses:

- No central database for the results of the diagnostic results;
- No written contract with MAST about coordination and responsibilities;
- Lack of junior staff doesn't provide a solid basis for mid- or long-term development strategies for necessary laboratory capacities which might affect the capability of this diagnostic institution to provide reliable services to the VS in the future;
- Reference laboratories haven't been designated for all the notifiable diseases and for control of food safety, zoonoses and antimicrobial resistance.

Recommendations:

- Clarify the coordination and responsibilities with Keldur by a written agreement;
- Re-evaluate the system of direct sending samples abroad;
- Designate national reference laboratories for all the notifiable diseases and for control of food safety and monitoring of residues, zoonoses and antimicrobial resistance.

II-2 Laboratory quality assurance	Levels of advancement
<i>The quality of laboratories (that conduct diagnostic testing or analysis for chemical residues, antimicrobial residues, toxins, or tests for, biological efficacy, etc.) as measured by the use of formal QA systems including, but not limited to, participation in relevant proficiency testing programmes.</i>	1. No laboratories used by the public sector VS are using formal QA systems.
	2. Some laboratories used by the public sector VS are using formal QA systems.
	3. All laboratories used by the public sector VS are using formal QA systems.
	4. All the laboratories used by the public sector VS and most or all private laboratories are using formal QA systems.
	5. All the laboratories used by the public sector VS and most or all private laboratories are using formal QA programmes that meet OIE, ISO 17025, or equivalent QA standard guidelines.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 5E, 6E, 17E, 20E, 21E, 32E, 33E, 37E

EFSA final report zoonosis

Findings:

All laboratories designated are accredited according to the international standard ISO/IEC 17025, on the general requirements for the competence of testing and calibration laboratories and Icelandic Regulation IS No 351/1993 on the operation of accredited testing laboratories. The laboratories participate regularly in inter-laboratories comparison studies organized by relevant laboratories abroad. The Icelandic laboratories demonstrated good performances in these studies. However, they are not accredited for all analyses they perform; for some diseases present, the laboratories do not have accredited testing methods due to the low number of samples.

Iceland's accreditation body ISAC (Icelandic Board for Technical Accreditation), a division of the Icelandic Patent Office, assesses the competence of the laboratories according to Act No 24/2006 on Accreditation. The assessment is carried out by SWEDAC (the Swedish Accreditation Body) on behalf of ISAC according to an agreement between the two accreditation bodies. ISAC and SWEDAC are members of the European co-operation for Accreditation (EA). SWEDAC is also a signatory to the EA Multilateral Agreement for Laboratories (EA MLA) and a member of the International Co-operation for Laboratory Accreditation (ILAC). If no laboratory has accreditation for a testing method, a foreign accredited laboratory is chosen.

Strengths:

- All the laboratories performing official laboratory diagnosis are accredited in accordance with relevant standards;
- All foreign laboratories used for some diagnoses are accredited in accordance with relevant standards.

Weaknesses:

- The laboratories do not have accredited testing methods for some diseases present in the country due to lack of samples.

Recommendations:

- Try to expand accreditation to more diseases.

II-3 Risk analysis	Levels of advancement
<i>The authority and capability of the VS to base its risk management measures on risk assessment.</i>	1. Risk management measures are not usually supported by risk assessment.
	2. The VS compile and maintain data but do not have the capability to carry out risk analysis. Some risk management measures are based on risk assessment.
	3. The VS compile and maintain data and have the capability to carry out risk analysis. The majority of risk management measures are based on risk assessment.
	4. The VS conduct risk analysis in compliance with relevant OIE standards, and base their risk management measures on the outcomes of risk assessment.
	5. The VS are consistent in basing sanitary measures on risk assessment, and in communicating their procedures and outcomes internationally, meeting all their OIE obligations (including WTO SPS Agreement obligations where applicable).

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 29E, 32E, 50E, 88-AE, 88-BE, 108H, 111H

Findings:

The Joint Committee on Health Security and Communicable Disease Control coordinates surveillance, outbreak investigations, risk assessments and prepare contingency plans for zoonosis, antibiotic resistance and foodborne diseases. This committee is only relevant for serious outbreaks and is not involved in daily operations where different authorities cooperate and fulfil their tasks and duties. It is chaired by the Chief (Medical) Epidemiologist in the Ministry of Health under the Ministry of Welfare. There is a good collaboration and meetings are held 3-4 times a year.

Possibilities for postgraduate training in epidemiology in Iceland exist neither for human medicine nor for veterinary medicine. In earlier years training possibilities for epidemiology were created in collaboration.

There is very limited trained staff in epidemiology (only 1 for AH) in MAST; however, there are examples that MAST contracts epidemiologists abroad to do risk assessments. According to the Food Act the Minister should nominate a Risk Assessment Committee assisting MAST for Fisheries and Agriculture aspects.

Most decisions are mainly science based. The epidemiologist at MAST undertakes basic risk assessments; the OIE and other international standards are understood and applied by the MAST.

However not all risk management decisions are based on scientific risk assessment (unpasteurized milk in Iceland not allowed, but import of unpasteurized cheese is permitted; it is not allowed to vaccinate dogs except when they are exported; private veterinarians are only allowed to vaccinate for rabies with a single permit from MAST and single doses of rabies vaccines have to be ordered).

In addition, the increasing risks through increased imports and tourists are not consequently addressed. Decisions about commodities authorised for import (i.e. bovine semen) are based on demand and risk assessment, under the responsibility of MAST.

A risk classification model is being developed to evaluate the necessary frequency of official controls. The risk-based categorisation of FBOs is a good basis but needs to be extended to farms; in addition, the risk basis is not very flexible and does not take enough into account deficiencies from former controls (i.e. in feed mills salmonella positive results have no influence on the risk categorisation).

Several databases with an enormous amount of information exist and are accessible by MAST; however, the data cannot be extracted as needed and analyses of the data are difficult to perform.

Strengths:

- Committee with Chief epidemiologist for zoonosis and food borne disease;
- Some risk assessments undertaken by epidemiologists abroad:
- Although there is no dedicated risk assessment unit in MAST according to the Food Act a Risk Assessment Committee assisting MAST should be nominated by the Minister for Fisheries and Agriculture.

Weaknesses:

- Only 1 trained epidemiologist in MAST;
- No possibility for postgraduate training in epidemiology in Iceland.

Recommendations:

- Evaluate possibilities for postgraduate training in epidemiology together with the human medicine and also for risk analysis;
- Evaluate the risk management concerning animal health and food safety by taking into account the increasing risks through increased imports and tourists;
- Review management decisions for scientific basis;
- Improve possibilities of analysing data from existing databases:
- Set up a risk Assessment Committee according to the Food Act to assist MAST.

II-4 Quarantine and border security	Levels of advancement
<i>The authority and capability of the VS to prevent the entry and spread of diseases and other hazards of animals and animal products.</i>	1. The VS cannot apply any type of quarantine or border security procedures for animals or animal products with their neighbouring countries or trading partners.
	2. The VS can establish and apply quarantine and border security procedures; however, these are generally based neither on international standards nor on a risk analysis.
	3. The VS can establish and apply quarantine and border security procedures based on international standards, but the procedures do not systematically address illegal activities relating to the import of animals and animal products.
	4. The VS can establish and apply quarantine and border security procedures which systematically address legal pathways and illegal activities.
	5. The VS work with their neighbouring countries and trading partners to establish, apply and audit quarantine and border security procedures which systematically address all risks identified.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 9E, 18E, 19E, 22E (appendix 8), 29E, 32E, 48E, 50E, 54E, 58E, 59E, 60E, 84E, 94H, 107H, 108H, 113H, 122-136P.

Findings:

The 7* Border Inspection Posts are located in Reykjavík, Hafnarfjörður, Keflavík Ariport, Þorlákshöfn, Ísafjörður and Akureyri, which are authorised for particular imports, mainly for fish. Summary of numbers of consignments imported in 2014 are included below:

Table 16: Imported animal products (AP) from third countries according to Border Inspection Post (BIP) for the year 2014

BIP	Fish products (Number of consignments)	AP* (Number of consignments)	Other AP** (Number of consignments)	Total number of consignments	Total weight (kg net)
Reykjavík (Eimskip)	215	51	16	282	11.590.300
Hafnarfjörður	28			28	5.281.272
Reykjavík (Samskip)	20				1.744.815
Keflavík airport	12	1	2	15	1.491
Akureyri	0			0	
Ísafjörður	0			0	
Þorlákshöfn	0			0	
Total:	275	52	18	345	18.617.878

*Animal products for human consumption, other than fish products. ** Animal products for none human consumption.

All BIPs are operated and consignments controlled (identity and documentary checks) from MAST's office of import and export as there are no VOs stationed at the BIPs. However, physical checks are carried out at the BIPs.

*NB BIPs in Iceland only refer to imports of animal product and live aquaculture animals. Importation of pet animals (mainly cats and dogs) is through a reception/examination centre. The reason for this division is the way this is transposed in the EEA agreement between Iceland and the EU.

At a sea port of entry (ferry terminal) in the east of the country handling roll-on roll-off traffic including cars etc. from the Faroe Islands and Denmark there is limited VS involvement. The DVO in the east of Iceland has responsibility regarding import and export at the ferry terminal. The VS rely to a large extent on controls carried out by the Customs services. It

was not possible in the time available to visit this sea port of entry and the VS stated that the Customs were fully engaged here. No audits by the VS for this sea port of entry were available. It is noted that the sea port of entry is not a Border Inspection Post as defined in EU legislation. Virtually all of the goods coming to this port relate to internal trade.

It was stated that overall there is a lack of about 3-4 persons to take full responsibility for imports and exports. However, this would depend on how import control is placed within the organization of MAST. If all border control activities according to current Icelandic legislation were to be placed within the scope of the Office of Import and Export this statement would probably be true. Under the current organization, this would mean relocation of about 3 – 4 staff members to the Office of Import and Export. Currently a number of import and export tasks are carried out by DVOs and their staff, which are placed in six districts around the country.

There is a strong import policy and the following are banned: Raw meat, processed or unprocessed, wool, feathers, down, untreated eggs, eggshells, egg products, unpasteurised milk and milk products, hay, straw, manure, blood, serum, and used agricultural machinery and used fishing gear unless disinfected. However, the Minister may permit import of the above mentioned goods, provided it is regarded as proven that they will not carry any infectious agents which cause diseases in animals or humans.

As mentioned above imports into Iceland are very restricted and no domestic live animal imports are allowed except for hatching eggs (dependent on a permit from the Ministry of Industries and Innovation) from specified countries and only very restricted imports of porcine and bovine semen from specific AI centres in a very few approved countries are authorised. Pets (dogs and cats) require an import licence stipulating certain vaccinations, tests and anti-parasitic treatments certificate and have to undergo 28 days quarantine at the one remaining quarantine station, which is privately run and is about 15 km away from the airport. It is supervised by MAST official veterinarians at the beginning and the end of the quarantine. There are no specific quarantine facilities for experimental rodents (rats and mice). Experimental facilities - closed institutions are licensed by MAST for such purposes. There are bans for the import of certain dog breeds.

For pets, semen, embryos, and hatching eggs there is 100% inspection by the DVO. It is not allowed to bring a pet into the reception/examination area at the airport if the paperwork is not satisfactory or disease is suspected. The certificate must be presented 5 days prior to import. If on entry the certificate is not satisfactory the pet is usually returned to country of origin or another country within a union of countries. According to Icelandic legislation illegally imported pets should be euthanized. However, fortunately, the DVO will always try to solve the problem before resorting to more drastic action. There is only a small window of about 3 days (Monday – Wednesday) entry for pets as the one quarantine unit has to practise an all in all out policy of quarantine lasting 28 days a minimum of three day period should be between groups of entry. This is for cleaning, disinfection and the quarantine facilities to empty for a minimum of 2 days (then next 3 days window can begin). The quarantine holds a maximum of 30 dogs and 10 cats. 165 dogs and 39 cats were imported in 2014.

For animal products (POAO) the main requirements for imports from Non-EEA countries are: the imports must be pre-notified in TRACES of the EU in advance (24 h), which is a trans-European system for issuing common veterinary entry documents for animal products (CVED) following a veterinary control at the BIP of import into the EU.

The product must come from an approved country and from an approved establishment be produced in an approved establishment, cf. the accompanying EU list.

The product labelling must comply with current rules on labelling, advertising and promotion of foodstuffs.

The consignment must be accompanied by an original health certificate, issued by the competent authority of the exporting country, or a captain's declaration, in the case of direct landing from a freezer vessel.

The products may only enter the country at a thereby approved border inspection post.

The major reason for consignments to be rejected relate to certification deficiencies. About 10 consignments of third country goods are rejected annually. All inspections are charged for but the permit for importation of goods that are generally prohibited is issued free of charge. The permit is an open permit lasting for 3-4 years or until there is a change in ownership of the enterprise importing the goods.

For import (trade) of animal products from EU /EEA the requirements are less restrictive but a notification (Tilkynning) of import must be submitted to MAST for a consignment of POAO before customs clearance. This also applies to plants, fertilizers, seeds, feed, used agricultural machinery independent of country of origin. Importer fills in a specific form and sends to MAST along with an invoice and all appropriate documents as necessary. , eg. CVED, CITES, and in addition for raw meat there must be a certificate indicating freezing dates (minimum 30 days) and one for freedom of salmonella. MAST returns the announcement with an MST-number for customs declaration and subsequent release of the goods.

The Office for Import and Export in Reykjavík issues all permits and carries out the necessary documentary, identity and physical checks.

All checks for consignments of third country origin are carried out at the BIPs. The same does not apply for EEA consignments. Specific rules apply regarding cleaning, disinfection and certification for importation of used agricultural machinery (regulation 866/2014) to Iceland. 80-90% of used agricultural machinery landed in Iceland does not fulfil the strict import requirements concerning cleaning and disinfection. All inspections are charged for but the permit is issued free of charge.

Three consignments of animal products were rejected from third countries in 2014. The reason for rejection was due to lack of labelling or health certification.

MAST is the Authority in Iceland responsible for issuing health certificates for export of POAO for countries requiring such documentation. As regards export of fish and fishery products from Iceland in 2014 there were a total of 4,568 certificates issued.

DVOs inspect live horses and animal products requiring certification prior to export. Export certification for horses is dealt with by the DVO and not the Office for import and export DVOs in Iceland are the departments within MAST dealing with some issues related to importation. This is particularly so in the more rural areas of the country. They also form a reserve team for BIP inspections in the districts where BIPs are situated. The main POAO exported is fish and fishery products. Iceland also exports lamb meat, horsemeat, pork, dairy products - mainly milk powder, some offals, hides and skins, and also importantly live horses. Some 1,269 live horses were exported in 2014.

Information on what POAO can be brought to Iceland can be found on MAST's website. However, this information could be clearer and more obvious in particular for passengers. It should be recalled that there has been a significant increase in tourism in the last few years and an increase in imports so the risk of introduction of exotic diseases must be increasing.

The BIPs and reception/examination area for pets visited were of a good structure. However, the facilities for the pets were not suitable and there was no one responsible for the animals when they arrived in the evenings. It was also unclear who had the responsibility for the premises. The holding area with cages for the pets were not suitable for the number of arriving animals and for the different sizes of dogs with the larger dogs allowed to roam free in the facility together with cats in the higher cages. There are 5 cages in total for cats and dogs. The animals were delivered to the reception/examination area by airport staff who

kindly usually fed and watered them if required. Although they were supposed to take biosecurity precautions it was stated that this did not usually happen. Owners are not allowed into the facility. During working hours a VO comes to check the paperwork and examine the pets prior to them being moved to the quarantine unit.

It is highlighted that in general pets only have to wait a few hours before being transported from the examination/reception area at the airport to the quarantine facilities. Under exceptional circumstances, and for late arrivals the pets may have to be retained at the examination/reception area overnight.

There is no microscope and examination lighting at this facility. At the quarantine unit samples are taken for testing for Canine influenza H3N8 originally Horse flu, but now a dog specific H3N8 virus, faecal examination and external examination for parasites; treatment is also given for parasites.

There are no free zones or free customs warehouses in Iceland. It was stated that all waste from international flights and ships was sent to landfill sites for burial.

There are 2 court cases on-going in relation to the restrictive import policy for raw meat to a degree on the requirement for the meat to be frozen for a minimum of 30 days before customs clearance. The importers feel very agitated by this restriction. They also indicated that for pet food having to be pre-registered for imports but if product changes just because of different packaging e.g. 6 pieces instead of 4 in the package they need to reregister.

Strengths:

- Imports into Iceland are very restricted to preserve the health status of animals and humans;
- There are in general good controls by MAST and facilities at approved BIPs;
- MAST staff involved are experienced and conscientious;
- There are printed leaflets for passengers carrying items of veterinary concern;
- Food waste from International flights is well controlled;
- VS have an agreement with Customs to co-ordinate activities
- There are no free zones or customs warehouses.

Weaknesses:

- It is unclear who is responsible for the maintenance of the reception areas and holding facilities for pets at the airport;
- The reception area and holding area for arriving pets at the airport is not adequate and is not biosecure enough for the throughput;
- Pets are unloaded by airport staff and put into the holding area awaiting veterinary examination with no designated person to look after the pets needs i.e. feed and water;
- Examination facilities for pets are limited (no proper lighting or microscope etc.);
- Cats and dogs are held in the same room and larger dogs may be loose rather than in the cages;
- Veterinary staff are not based at the BIPs and reception/holding area;
- There is no signage for travellers carrying items of veterinary concern at entry ports.
- The website is not clear on all items of veterinary concern in particular for passengers although this is a mistake as there is information but it was not visible on the web screens;

- Although there are leaflets these are not routinely distributed to passengers at the airport;
- Although the sea port of entry was not visited cars etc., arrive by ferry and although it is under Customs control there is very limited VS involvement.

Recommendations:

- Regularly audit customs activities at sea port of entry;
- Improve the biosecurity and holding arrangements at the airport holding/reception centre for pets;
- Ensure all incoming animals are housed properly i.e. separate room for cats and dogs and looked after on arrival by properly trained staff;
- Consider whether it would be more practical to transfer pets directly to the quarantine facility (which if introduced would negate the need for the 2 recommendations above).
- Improve the website to make it easier for passengers to see what items are prohibited from entry into Iceland;
- Ensure posters and information leaflets are available to passengers at the airport concerning entry of restricted items;
- Review the possibility of introducing sniffer dogs at ports and airports to control that incoming passengers are not introducing prohibited items of veterinary concern (e.g. meat, riding equipment etc.);
- Review the import requirements for registration and reregistration in particular for pet food.

II-5 Epidemiological surveillance and early detection	Levels of advancement
<p><i>The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations, including wildlife, under their mandate.</i></p> <p>A. Passive epidemiological surveillance</p>	1. The VS have no passive surveillance programme.
	2. The VS conduct passive surveillance for some relevant diseases and have the capacity to produce national reports on some diseases.
	3. The VS conduct passive surveillance in compliance with OIE standards for some relevant diseases at the national level through appropriate networks in the field, whereby samples from suspect cases are collected and sent for laboratory diagnosis with evidence of correct results obtained. The VS have a basic national disease reporting system.
	4. The VS conduct passive surveillance and report at the national level in compliance with OIE standards for most relevant diseases. Producers and other interested parties are aware of and comply with their obligation to report the suspicion and occurrence of notifiable diseases to the VS.
	5. The VS regularly report to producers and other interested parties and the international community (where applicable) on the findings of passive surveillance programmes.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6) 2E, 6E, 32E, 82E, 83E, 86E, 116E.

Findings:

Practically all meat inspection is carried out by experienced veterinarians (except for poultry post-mortem meat inspection which is carried out by slaughterhouse staff) and records of findings are available. This should give a good passive surveillance. Inspection results are fed back to the farmers,

There are very few reported cases of suspicion of disease although this may reflect the very high overall animal health situation in Iceland. There is a general obligation in the legislation for the reporting of suspicion of an Icelandic listed disease to the VS. However there is a lack of awareness to report suspicion of disease which was highlighted by the lack of reporting of higher sheep deaths than normal by some farmers in 2015. The VS only found out through a phone call from a PVP the same day this was reported in the media. Also there was in 2010 a gradual (about 18 months) coughing and nasal discharge problem but without any temperature rise in horses which came to the attention of the VS following a more explosive situation in a number of horse stables. There were time delays in finding the exact cause but this was eventually diagnosed as due to infection with a strain *Streptococcus zooepidemicus*. The Animal Health Trust laboratory at Newmarket, UK confirmed this. In addition the veterinarians met were not that confident they would suspect a serious notifiable disease at the first visit.

The VS covers the whole of the territory and undertake regular farm inspection visits to cattle, poultry and pig farms and this will be extended due to the new welfare legislation which allows for animal welfare visits to all farms and establishments keeping animals so sheep, horses, fur animals and pets will be included. It is presumed that the animal health situation will also be covered by such visits. Risk analysis is being introduced as per those for food and feed establishments concerning the frequency or time allowed for the inspections. It is foreseen to have the system implemented in the next 1-2 years. When implemented this will mean that after an initial inspection the farms will be categorised A, B or C. Category A being the highest with less time for visits and C being the lowest with more time for inspections. So this means that some farms may be visited 3-4 times per year while others this may be every year or every 2-4 years.

PVPs do visit farms as well as the VS but in some times of the year the weather hampers this which means that some farms are snowed in and there are concerns over this when animals are to be examined or treated by a veterinarian. So the quality of the Field Veterinary Network is variable because of this and the difficulty in getting veterinarians to live in less

attractive areas It has been arranged for incentives to be paid to veterinarians to try to improve this situation.

Specific passive surveillance systems for wildlife by the VS are absent, however the only wild life present are reindeer and wild birds. These are covered by meat inspection for reindeer and an active surveillance for the wild birds for AI. However, it was noted that there is little co-operation or co-ordination with the authority responsible for wildlife.

The aquaculture farms seem to be very well controlled and surveyed by MAST but no details have been included as this was not an aquaculture PVS.

Strengths:

- The meat inspection system allows for good passive surveillance;
- Iceland has a very high health status with only a few diseases and a very low incidence of food poisonings;
- Everyone has the obligation in law to report suspicion of notifiable disease;
- Regular inspections to farms holding animals;
- Strong regular surveillance on aquaculture farms.

Weaknesses:

- The number of reported suspicions of disease is very low (but this probably reflects the high health status in Iceland);
- Meat inspection information is put into a database but no systematic analysis by HQ or distribution of information routinely in particular to the CVO;
- The private veterinary practitioners may not be sufficiently aware to suspect or diagnose a major serious disease at a first visit;
- Sheep mortality problem and horse Streptococcus infection indicates level of awareness is quite low with an excessively long interval before disease is reported to VS;
- Little co-operation with wildlife services;
- Too few awareness campaigns have been carried out for serious exotic diseases.

Recommendations:

- Clearly record suspicions of disease and result/action taken and add to annual report;
- Introduce awareness campaigns for serious notifiable diseases both for farmers and the veterinarians;
- Improve analysis of meat inspection results;
- Improve cooperation with wildlife services.

II-5 Epidemiological surveillance and early detection <i>The authority and capability of the VS to determine, verify and report on the sanitary status of the animal populations, including wildlife, under their mandate.</i> B. Active epidemiological surveillance	Levels of advancement
	1. The VS have no active surveillance programme.
	2. The VS conduct active surveillance for some relevant diseases (of economic and zoonotic importance) but apply it only in a part of susceptible populations and/or do not update it regularly.
	3. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases and apply it to all susceptible populations but do not update it regularly.
	4. The VS conduct active surveillance in compliance with scientific principles and OIE standards for some relevant diseases, apply it to all susceptible populations, update it regularly and report the results systematically.
5. The VS conduct active surveillance for most or all relevant diseases and apply it to all susceptible populations. The surveillance programmes are evaluated and meet the country's OIE obligations.	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 2E, 5E, 6E, 23E, 32E, 57E, 87E,94H, 98H and staff interviews.

Findings:

An annual Surveillance Programme is carried out for the following disease (figures for 2014) and numbers in brackets indicate number of samples taken:

Table 17: Annual Surveillance Programme

Cattle	Sheep	Pigs	Horses	Poultry	Fish
EBL (78)	Scrapie (3,949) 2 +ve	PRRS (232)	EIA (50)	ND (59)	VHS (432)
IBR/IPV (78)	ParaTB (205) 48 +ve	Aujeszky's (232)	EHV-1 (50)	Mycoplasma synoviae (90)	IHN (432)
Sal Dublin (78)	ParaTB (62) 23 +ve	Influenza H3N2 (232) 69+ve	EAV (50)	Myco Gallisepticum (100)	IPN (432)
Q fever (78)	Maedi Visna (100)	Influenza H1N1 (232) 46+ve		Smitandi berkjubolga (20)	ISA (10,264) 46 +ve (HPRO)
Brucellosis (76)	Brucellosis (100)			Gumboro (20)	PD (8,772)
BSE (240)				AI (ELISA) (59)	CMS/PMCV (4,713)
ParaTB (2) 1+ve				AI (PCR) (100) 8 +ve H5 & H7	BKD (1,969) ? 2 +ve
ParaTB (19) 12 +ve					

In addition for Wild salmon BKD 628 samples 6 +ve and for Fur animals for Plasmacytosa 4,713 samples.

NB All results negative except where indicated positive (+ve).

The sampling is carried for infections which can be latent and diseases which do not have clear clinical symptoms. The farms are selected at random and samples must be taken on all farms within a certain time interval. The aim is to detect with 95% confidence at least one positive unit if the infection is present at a maximum of 5% prevalence. Samples are taken by MAST's veterinary officers and sent to the laboratory at Keldur. Some samples are analysed

at Keldur, other sent to Denmark and Sweden for analysis. The results of the routine surveillance are published on MAST's website:

<http://mast.is/matvaelastofnun/eftirlitsnidurstodur/dyrasiukdomaskimun/>

BSE has never been detected in Iceland. Since 2000 a survey has been carried out annually. Samples are taken at slaughterhouses from cattle over 24 months of age and cattle displaying behavioural or clinical signs consistent with BSE. In 2004 Iceland was recognised as a negligible BSE risk country, by the OIE World Assembly of Delegates and reconfirmed every year to date. According to the EEA JCD of October 2007, an agreement was made for Iceland to implement TSE legislation Regulation (EC) No 999/2001 with derogation from the requirements to breed for genetic resistance as Iceland has an eradication policy and does not import live animals. According to the agreement, only lambs that are free of the VRQ gene may be used for repopulation.

In addition samples from every poultry flock are tested for *Campylobacter* within 5 days of slaughter and also at slaughter. The EU *Salmonella* sampling plan is in place.

Involvement of wildlife in disease is very unlikely as the only wild animals related to livestock breeds are the reindeers and they are not often seen in the lowlands during the cattle grazing period. The sheep and the reindeers share grazing area in the highlands during the summer, but the area is large and the animals are quite spread out. No active surveillance is carried out in the reindeer population and is not really justified.

Active surveillance AI disease in wild birds is carried out by testing faecal samples.

The budget for samples, analyses and recording were reported to be insufficient (according to staff interviews).

Strengths:

- There is an active surveillance programme for a number of diseases which has found evidence of infections which have then been well investigated.

Weaknesses:

- The programmes are not that well evaluated;
- There are insufficient funds for laboratory testing and recording of data.

Recommendations:

- To improve the evaluation of the programmes;
- To improve the funding for testing and recording of data for the laboratories.

II-6 Emergency response	Levels of advancement
<i>The authority and capability of the VS to respond rapidly to a sanitary emergency (such as a significant disease outbreak or food safety emergency).</i>	1. The VS have no field network or established procedure to determine whether a sanitary emergency exists or the authority to declare such an emergency and respond appropriately.
	2. The VS have a field network and an established procedure to determine whether or not a sanitary emergency exists, but lack the necessary legal and financial support to respond appropriately.
	3. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies, but the response is not coordinated through a chain of command. They may have national contingency plans for some exotic diseases but they are not updated/tested.
	4. The VS have an established procedure to make timely decisions on whether or not a sanitary emergency exists. The VS have the legal framework and financial support to respond rapidly to sanitary emergencies through a chain of command. They have national contingency plans for some exotic diseases that are regularly updated/tested.
	5. The VS have national contingency plans for all diseases of concern, including coordinated actions with relevant Competent Authorities, all producers and other interested parties through a chain of command. These are regularly updated, tested and audited

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 5E, 6D E, 27E, 38E, 49E, 88E, 89E, 98H, 116-E, 158-163P.

Findings:

There is a contingency plan for exotic animal diseases which is included in MAST's quality manual and is accessible on the web site www.mast.is. This is a general one although there are more specific ones for equine flu and strangles for horses nearly finalised.

Work on contingency planning is not a priority due to lack of staff.

There is a compensation fund of some 40 million ISK held by the Moll and this can be increased if required. The compensation in the case of scrapie covers not only the payment of the market/slaughter price of the sheep but the consequential production loss to the farmer who may have to wait 2-3 years before he can restock his farm.

There is an overview of the contingency plan for exotic animal diseases, as regards the measures taken by the Icelandic Food and Veterinary Authority (MAST) "Awareness and Response to Exotic Animal Diseases, July 2015". It contains a brief description of the legal framework, the chain of command and the initial response to a suspicion or confirmation of an exotic animal disease. The contingency plan is a part of MAST's quality manual, which is fully accessible to all employees on the authority's intranet and partly accessible to everyone through MAST's website. It states there are generic contingency plans with more specific instructions regarding particular diseases as needed but these are very limited as noted above.

In the event of an outbreak of a serious contagious animal disease, MAST is the main disease control centre and its district offices act as the local disease control centre. Assistance is to be provided by Keldur laboratory. Each DVO has emergency boxes for use in suspect case which are very good with a wide range of equipment including tissue sampling media containers although in one DVO this was missing. It was not clear if the solution was buffered and if an indicator of the pH was included.

The competent authorities in the Nordic and Baltic countries have signed a memorandum of understanding on animal health emergencies. The aim is to provide support and assistance to the countries concerned affected by an animal disease outbreak, when resources are not sufficient to meet the needs of the outbreak emergency. Simulation and other training exercises have been performed, most recently in October 2011 with regard to African Swine Fever and on 3-4 December 2014 Iceland will participate in a Nordic- Baltic table-top

exercise on the fish disease Viral Haemorrhagic Septicemia, in Norway. The last emergency disease training exercise was carried out 4 years ago although the infection with *Streptococcus* in horses was in fact a real exercise. It should be recalled that there has been a significant increase in tourism in the last few years and an increase in imports so the risk of introduction of exotic diseases must be increasing.

In cases of food borne diseases, infectious animal diseases of zoonotic nature, emergencies and crisis, MAST co-operates with the Chief Epidemiologist, who is responsible to the MoWF. The Centre for Health Security and Communicable Diseases (Directorate of Health) in co-operation with the Department of Clinical Microbiology at the Landspítali University Hospital is responsible for the monitoring of zoonoses and zoonotic agents in humans. They are also responsible for the collection of information on the trends and sources of zoonoses, zoonotic agents and antimicrobial resistance in humans.

The Centre for Health Security and Communicable Diseases (Directorate of Health) investigates in collaboration with MAST foodborne outbreaks or suspected foodborne outbreaks. In cases of severe food borne diseases, infectious animal diseases of zoonotic nature, emergencies and crisis, MAST co-operates with the Centre for Health Security and Communicable Diseases (Directorate of Health). In such cases, the Joint Committee on Health Security and Communicable Disease Control reviews the situation and decides whether a given situation should be considered an emergency or a crisis.

The overview gives a diagram showing the chain of command in the event of an exotic disease outbreak and thus the CVO is the responsible person in charge of the event.

Figure 10: Diagram indicating chain of command

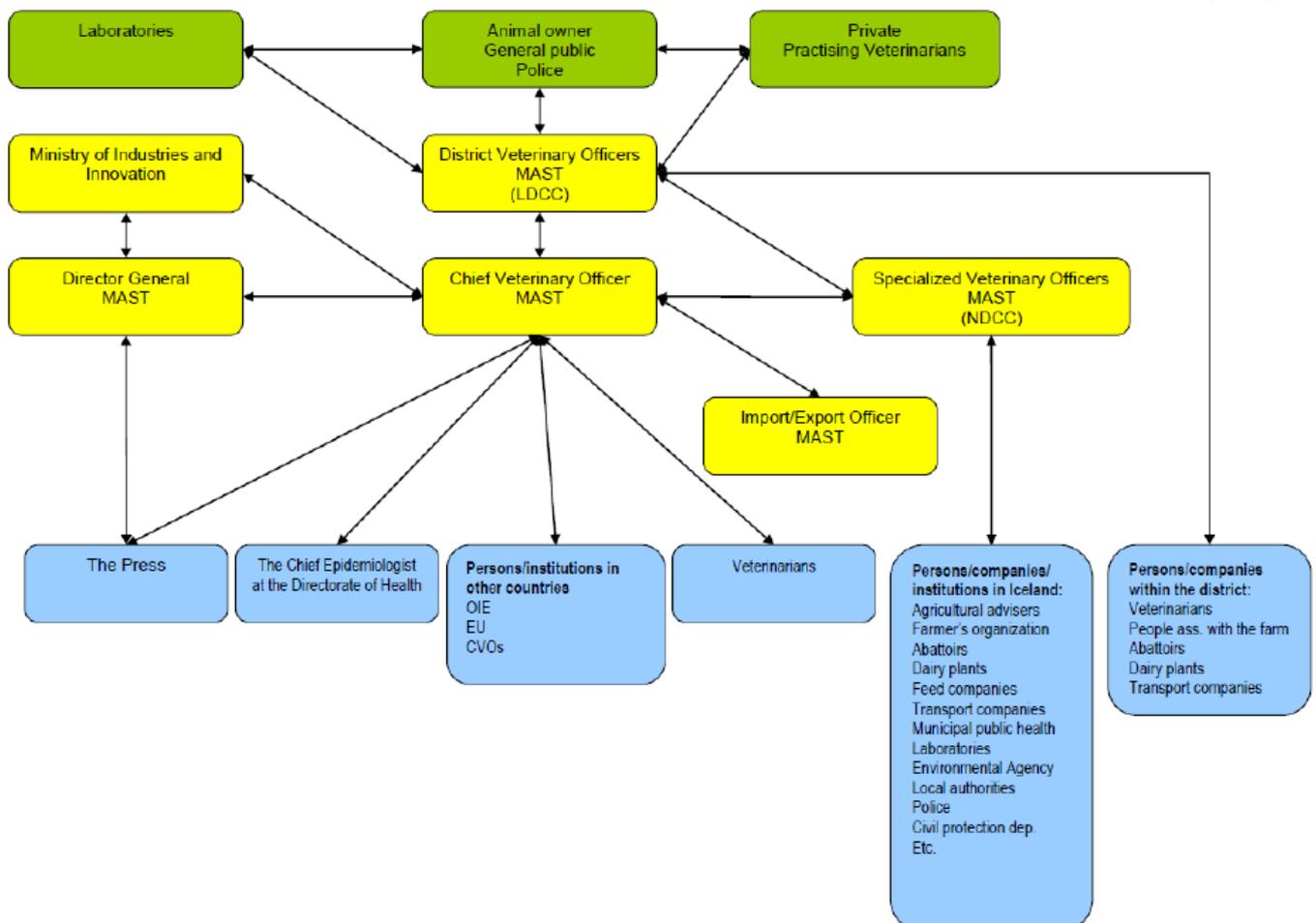
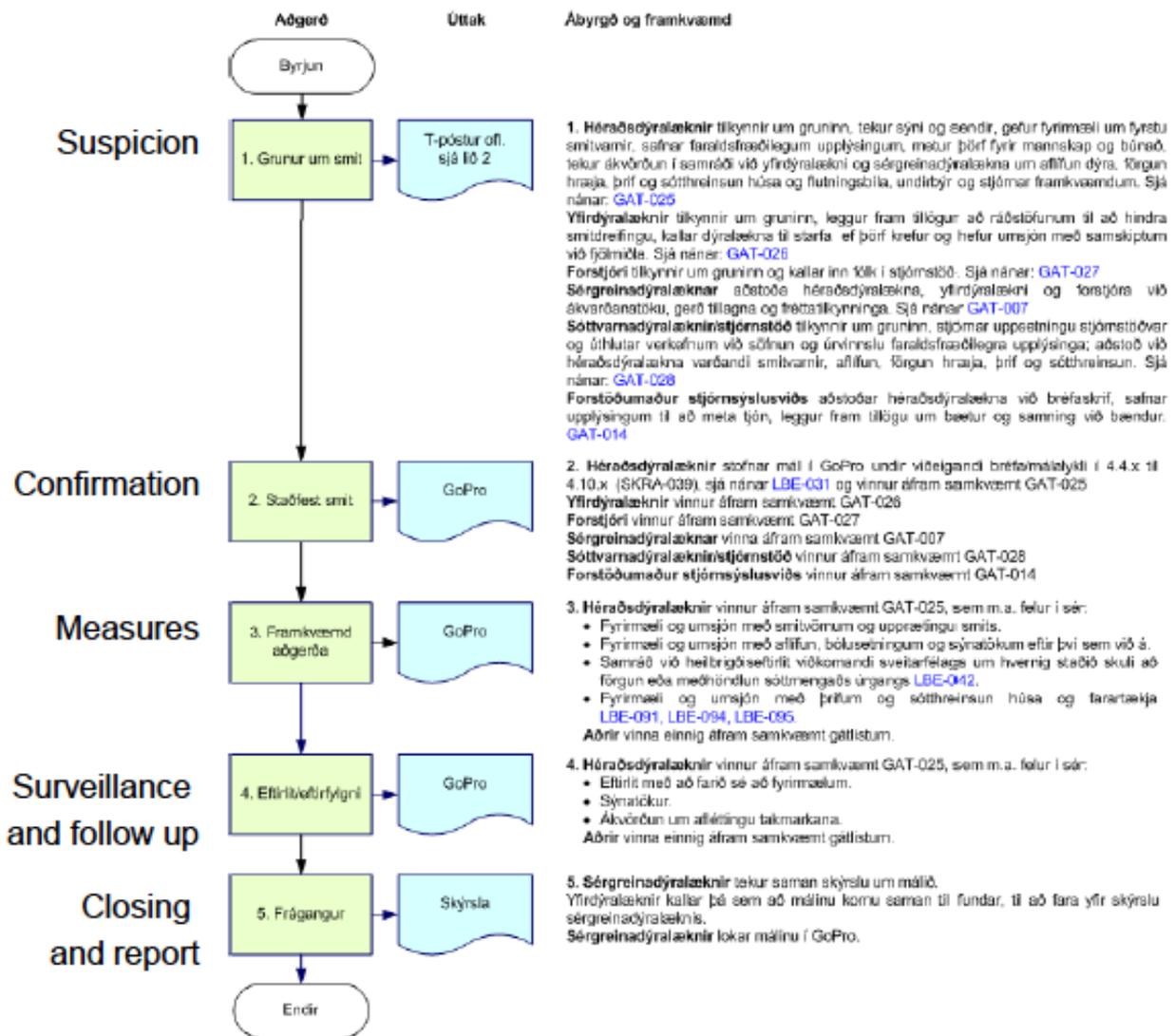


Figure 11: Overview of duties in response to serious contagious animal diseases



Provisions regarding animal diseases and preventive measures against them are laid down in Act No 25/1993 on Animal Diseases and Preventive Measures against them.

On the basis of a regulation, the State gives subsidies to PVPs to provide veterinary services in remote areas and for ensuring emergency shifts through formal agreements.

Notification of suspected animal disease

Any person who has reason to believe that an animal is suffering from a contagious disease covered by Regulation No 52/2014, which is set by virtue of Act No 25/1993, shall immediately report this to any veterinarian who can be reached or to the police. The police shall immediately contact a veterinarian. If a veterinarian feels there is a reason to take action, he/she shall immediately take steps to confirm the diagnosis of the disease and to prevent the disease from spreading.

If testing shows or if a veterinarian suspects this to be a contagious disease, specified in Regulation No 52/2014, or a contagious disease previously unknown in the country, the veterinarian shall immediately inform the Icelandic Food and Veterinary Authority. He shall furthermore prohibit any delivery of the animal or products from being distributed, and shall ensure that the animal is isolated, as well as other animals that may be contagious, and isolate their immediate surroundings. He shall also ensure that articles and products that

have been in contact with the animal be disinfected or destroyed, and that the animal be put down, or that other measures considered necessary regarding the precautionary measures are taken, (Act No 25/1993, Art. 5).

There is a National Control Programme for Salmonella in poultry and poultry products with clear requirements and procedures. However no compensation is paid to farmers for killing of infected flocks on the basis that if compensated, the farmer might reduce efforts in combating Salmonellosis. There is a National Farmers Association (NFA) fund that can pay out a small amount of monies to farmers affected by these controls.

The Chief Medical Epidemiologist indicated 2 disease contingency plans were available (one for Ebola and one for flu) and more being developed. There were also others for disasters. They are also planning epidemiological courses and it could be useful for MAST staff to participate. The Chief Medical Epidemiologist indicated that this would be no problem and there is a very good relationship between the 2 services.

It must be highlighted that there are other threats than disease incursions affecting animal which also have to be handled as an emergency e.g. volcanic activity (gas, ash and flooding) and snowstorms. The effects of these have caused serious animal losses and also to farmers livelihoods. There are plans for such emergencies and also ones for Ebola and Influenza in humans being prepared.

The local Chiefs of Police are in charge of all Civil Protection operations. They organise and carry out rescue and protection activities, preventive measures caused by war, natural catastrophes or other similar incidents. They assemble relevant people, which in case of animal emergency include MAST's veterinary officers. In addition, there are Volunteer organisations such as the Icelandic Association for Search & Rescue and the Icelandic Red Cross provide integral support to the Government in any crisis. These volunteer organisations provide trained manpower as well as other resources such as vehicles, rescue equipment, relief materials and expert knowledge in the hour of need.

Strengths:

- There is a good legal framework and a clear chain of command in case of emergency;
- There is one general contingency plan available and 2 specific one for horses nearly finalised;
- There are clear requirements and procedures for infections with Salmonella in poultry and their products;
- There is a good contingency/compensation fund held by the Moll for use when animals are killed as a result of a serious disease;
- There is a reserve fund for use in some disease situations held by the NFA;
- Agreement with Nordic countries for help in the event of an emergency disease situation;
- DVOs have emergency disease response kits;
- Coverage of the emergency response covers natural disasters as well and the players can be called upon by MAST if needed.

Weaknesses:

- Very limited desk top exercises or emergency disease exercises have been carried out;
- Limited capability for compensation by the NFA only in the areas of Salmonella and for a few other problems e.g. abortions, where a farmer may ask for money from the NFA fund up to 50%.

Recommendations:

- Introduce more disease specific contingency plans e.g for ASF, FMD, CSF, AI, ND as a first step;
- Carry out much more regular emergency disease exercises;
- Review and update as required the emergency disease kits at all DVOs;

II-7 Disease prevention, control and eradication	Levels of advancement
<i>The authority and capability of the VS to actively perform actions to prevent, control or eradicate OIE listed diseases and/or to demonstrate that the country or a zone are free of relevant diseases.</i>	1. The VS have no authority or capability to prevent, control or eradicate animal diseases.
	2. The VS implement prevention, control or eradication programmes for some diseases and/or in some areas with little or no scientific evaluation of their efficacy and efficiency.
	3. The VS implement prevention, control or eradication programmes for some diseases and/or in some areas with scientific evaluation of their efficacy and efficiency.
	4. The VS implement prevention, control or eradication programmes for all relevant diseases with scientific evaluation of their efficacy and efficiency of some programmes.
	5. The VS implement prevention, control or eradication programmes for all relevant diseases with scientific evaluation of their efficacy and efficiency consistent with relevant OIE international standards.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 1E, 6E, 15E, 16E, 22E, 23E, 27E, 32E, 36E, 57E, 58-1E, 94H Annual report, 112H, 116-E, 139P, 145P, 146P

Findings:

Trichinella in pigs and equidae: all slaughtered pigs and horses are sampled and tested for trichinella. The slaughterhouses are responsible for the sampling and to have the samples analysed. MAST is responsible for monitoring that the programme is running satisfactory. Trichinella testing according to the programme is audited by the district veterinary officers and the official veterinarians in the slaughterhouses.

Scrapie was apparently brought to Iceland with imported sheep in 1878. During the following 75 years the disease became prevalent within a limited area in Northern Iceland and was not found in other parts of the country until 1953. In the years 1968-1978 scrapie had spread to most sheep raising districts of the country. The losses became very high. The incidence culminated in 1986 with 104 scrapie farms. In 1978 a plan with the final aim to eradicate scrapie from Iceland was adopted in cooperation with farmers. The programme was enhanced in 1986 and 1993, and has been effective. The incidence has decreased considerably during the last decade (see table below). Areas where no cases of scrapie have occurred the last 20 years are considered scrapie free. Areas where scrapie has been detected are kept under special surveillance for 20 years.

Samples are taken annually from 3000 sheep at slaughter and sheep displaying clinical signs compatible with scrapie. The farmer is fully compensated for his loss for at least the two years that the farm must remain depopulated of sheep. Disinfection procedures carried out on the farm involve removal of all interior wooden material, hay and sheep manure from the sheep houses and their safe disposal. This is followed by disinfection. There are limited incineration facilities in Iceland but wherever possible infected sheep are incinerated and in some cases landfill is used.

The description of the zoning and movement controls are given in critical competency for Zoning.

There is a National Control Programme for Salmonella in poultry and poultry products. The aim of the programme is to keep the prevalence of all Salmonella serovars below 1% per year in flocks of poultry. In production types with less than 100 units within one year, no more than one flock shall be positive in one year. The control of salmonella in poultry aims at detecting all serotypes of salmonella in primary production in order to prevent its spread to other food producing animals and the environment and to prevent Salmonella from entering the food production chain.

Salmonella in poultry: please see: <http://mast.is/dyraheilbrigdi/eftirlit/alifuglaraekt/>

According to annexe 1A in law 25/1993 on animal diseases and their control it is not allowed to vaccinate poultry against Salmonella Gallinarium et Pullorum. It is not allowed to vaccinate against any Salmonella serovars. The control plan goes into great detail concerning sampling and testing. Any flock with an isolation of Salmonella is killed and no compensations is paid to the farmer.

There is also a very effective programme for the control of Campylobacter in poultry; (see: <http://mast.is/dyraheilbrigdi/eftirlit/alifuglaraekt/>). Samples are taken within 5 days of slaughter and if positive birds are slaughtered but the meat must be deep frozen. This together with good biosecurity on the farm including insect screening of ventilation chimneys is very effective. This can be seen from the graphs showing annual cases as when the freezing was stopped in 1996 the cases shot up and freezing had to be re-introduced. Cases decrease enormously to previous levels.

There is a special programme for Salmonella monitoring in pig farms and in the slaughterhouses.

Strengths:

- Iceland has an official free status for FMD, AHS, PPR and a negligible risk status for BSE;
- As Iceland has a high disease status there is only the need for a few control and eradication programmes i.e. Scrapie and paraTB;
- There are very effective control programmes for Salmonella in poultry and poultry products and monitoring in pigs and Campylobacter in poultry;
- Iceland reports to the OIE annually and 6 monthly;
- Iceland is part of the EU Animal Disease Notification System;
- In general there are good biosecurity systems in place at farm level.

Weaknesses:

- Evaluation of some of the programmes in particular their success or otherwise is lacking;
- On the OIE website the notification concerning the epidemic of Streptococcus infection in horses with the export ban is missing.

Recommendations:

- Review current programmes to assess progress, usefulness, effectiveness and set objectives.

II-8 Food safety A. Regulation, authorisation and inspection of establishments for production, processing and distribution of food of animal origin <i>The authority and capability of the VS to establish and enforce sanitary standards for establishments that produce, process and distribute food of animal origin</i>	Levels of advancement
	1. Regulation, authorisation and inspection of relevant establishments are generally not undertaken in conformity with international standards.
	2. Regulation, authorisation and inspection of relevant establishments are undertaken in conformity with international standards in some of the major or selected premises (e.g. only at export premises).
	3. Regulation, authorisation and inspection of relevant establishments are undertaken in conformity with international standards in all premises supplying throughout the national market.
	4. Regulation, authorisation and inspection of relevant establishments (and coordination, as required) are undertaken in conformity with international standards for premises supplying the national and local markets.
	5. Regulation, authorisation and inspection of relevant establishments (and coordination, as required) are undertaken in conformity with international standards at all premises (including on-farm establishments).

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 15E, 16E, 22E/Appendix, 32E, 42E, 68H, 74H, 84E, 99H, 100H, 101H, 102H, 103H, 114H, 146P,

Findings:

According to Article 30 of the Foodstuffs Act No 93/1995 the CAs and their staff have full access to the all premises and documentation of FBOs. The Foodstuffs Act also requires the FBOs to undergo inspections and assist the CAs in the process (Article 24 (1)).

According to Act No 93/1995 on Foodstuffs, all FBOs (food of animal and non-animal origin) need approval following a visit, except for sheep and horse farms and vegetable growers, which need to be registered. Freezer and factory vessels are approved, other fishing vessels need to be registered.

As a general rule, MAST issues approval to FBOs that fall under the scope of Regulation (EC) No 853/2004, the LCAs issues approval for all other FBOs. In certain circumstances the LCAs are the responsible authority for issuing approvals to FBOs that need to be approved according to Regulation (EC) No 853/2004/EC, such as when production of animal products which must be produced in accordance with the Regulation is only a small part of the FBO business.

Only those FBOs that fall under the scope of Regulation (EC) No 853/2004 are given approval number according to Regulation (EC) No 854/2004. All approval numbers for these FBOs are issued by MAST and listed on the website of MAST as approved establishments. For all other FBOs the LCA issue the licence.

Standardised procedures for approval of establishments for food of animal origin and feed production are in place.

NB MAST has no responsibilities under the legislation concerning food safety for restaurants, retailers etc. where the controls are under the LCAs' responsibility.

Performance Evaluation and reporting of control activities

In addition to the risk based prioritisation of controls an evaluation of the performance of FBOs during past controls affects their total control time. Based on their performance evaluation FBOs are categorized into three performance categories: A, B and C. Each performance category has a performance index that affects the total control time of the FBOs.

All new FBOs start in performance category B, which has the performance index 1,0. This means that when multiplied with the FBOs total control time it does not have any effect on the time allocated to that FBO through the risk classification process. FBOs in this performance category are considered to have a satisfactory situation with working internal procedures and established good hygiene practices. It should be noted that when the new risk classification and performance evaluation systems were or will be implemented, all FBOs are categorised in performance category B.

FBOs that are moved to performance category A have their total control time multiplied with the performance index 0,5 and thus receive a 50% reduction of their allocated control time. These FBOs are considered to have excellent internal procedures and hygiene practices, HACCP or HACCP based procedures are established and effective, non-compliances are minimal, not repeated and fixed immediately.

FBOs that are moved to performance category C have their total control time multiplied with the performance index 1,5, which means that their total control time is increased by 50%. This applies only to regular official controls and does not include additional control time due to follow up in cases of infringements. FBOs in performance category C have had several and repeated non-compliances or a serious non-compliance. They have not made appropriate arrangements and enforcement procedures are in progress.

The performance evaluation of FBOs is based on inspection manuals that are part of the work procedures for official controls of food of animal origin and feed. Work procedures for approval of establishments, official controls as well as follow up and enforcement procedures are all established in the Quality Manual of MAST. All information regarding the official controls of FBOs are kept in the database IS-leyfur which contains an active list of all approved establishments producing food of animal origin or feed. All necessary information on each establishment is accessible through IS-leyfur, i.e. the risk category, the total number of hours for official controls, the number of hours already used, the number of hours left, the performance category, previous reports, non-compliances and status of non-compliances. IS-leyfur also automatically calculates the performance of the FBOs based on the inspection reports and notifies senior level staff at MAST when an FBO can be moved between performance categories. All inspection reports are filled out directly into the database and an electronic copy is sent to the FBOs after each inspection. The database is accessible via password controlled access on the internet.

The same performance evaluation system will be implemented for all FBOs falling under official controls of the LCAs alongside the new risk classification. MAST has an inspection manual for food of animal origin (in Icelandic “Skoðunarhandbók fyrir matvæli úr dýraríkinu”) attached to the database “Ísleyfur” system and a new inspection manual has been developed for the LCAs, based on the same principles as the inspection manuals for MAST, which will be implemented with the new control system in 2016.

There are some grey areas concerning responsibilities between MAST and the LCAs but these are generally solved satisfactorily.

All the necessary information on primary producers is currently being transposed into IS-leyfur and it will be used as the database for official controls on primary producers in the future. A performance evaluation system based on the same principles as the system for food of animal origin and feed is also being developed for primary producers.

Several databases have been developed to keep records of live animals, their health status and their treatment with veterinary medicines (see section II.3.B).

There are a total 16 slaughterhouses in Iceland.

- Three only slaughtering poultry, thereof one also turkeys;
- One only slaughtering pigs (approx. 60 % of Iceland total);
- Three only slaughtering sheep (there of one small scale);
- Six slaughtering sheep and other farm animals;

- One slaughtering bovines and horses;
- Two slaughtering bovines, horses and pigs.

The DVO (6 districts) is the responsible in charge in each district and therefore also in the slaughterhouses. Official veterinarians are performing the AM – PM in each slaughterhouse.

In poultry slaughterhouses trained staff of the slaughterhouse performs PM under the supervision of the official vet. The training was done some years ago informally by the DVO and there is no on-going training.

MAST central office is the coordinating and informative instance and performs audits and assists each DVO, with a main focus in the autumn (slaughtering of sheep) but also during other times of the year.

The FBOs buildings and facilities visited were well constructed and operate to a very good standard.

There is a handbook for veterinary daily control in slaughterhouses (“Handbók um daglegt eftirlit dýralækna í sláturhúsum” in Icelandic) with checklists (in English) for daily control corresponding to the handbook and noncompliance reports etc. (in English)

There are forms for monthly audits in slaughterhouses (USA) and forms for E. coli testing, compliance (USA).

Milk production in Iceland is approximately 130 million litres of raw milk (125-135 mill) per year and there are around 650 dairy farms. There are 5 main dairy plants and a few very small on farm production sites. All milk produced in Iceland must be pasteurized.

- All milk coming into the dairy plants is tested for antibiotics and can be traced back to the farm.
- Milk is not pumped into storage tanks in dairy plants unless the antibiotic test is negative.

Dairy plants including on-farm processors are inspected by MAST according to the risk-based system described above.

Strengths:

- Good legislation using EU feed and food regulations;
- There are regular inspections based on a risk assessment;
- All premises visited were of a very high standard;
- Iceland is approved for exports of certain meats e.g. lamb to USA, Russia as well as the EU and is working on exports to China;
- Establishments are controlled and supervised by MAST down to the retail level;
- Very few food borne disease outbreaks;
- There are good databases available;
- The OIE Focal Point for Animal Production Food Safety is appointed.

Weaknesses:

- It is difficult to obtain analyses from the databases;
- There are too many databases, which contain to some extent similar information;
- There is no database for sample testing results.

Recommendations:

- Review the need for so many separate databases and amalgamate if possible;
- Update and ensure databases are able to provide adequate and easily available analyses of the information stored in them;
- Introduce a database to record sample testing results.

B. Ante and post mortem inspection at abattoirs and associated premises (e.g. meat boning/cutting establishments and rendering plants). <i>The authority and capability of the VS to implement and manage the inspection of animals destined for slaughter at abattoirs and associated premises, including for assuring meat hygiene and for the collection of information relevant to livestock diseases and zoonoses.</i>	Levels of advancement
	1. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are generally not undertaken in conformity with international standards.
	2. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards only at export premises.
	3. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards for export premises and for major abattoirs producing meat for distribution throughout the national market.
	4. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards for export premises and for all abattoirs producing meat for distribution in the national and local markets.
5. Ante- and post mortem inspection and collection of disease information (and coordination, as required) are undertaken in conformity with international standards at all premises (including family and on farm slaughtering) and are subject to periodic audit of effectiveness.	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 22E, 42E, 52E, 58E, 61E, 82E, 83E, 86E, 96E, 115H, 142P, 169P.

Findings:

All slaughterhouses in Iceland have an approval number and can distribute their products within the EEA. There are no slaughterhouses that are only approved for domestic market.

Generally Official Veterinarians (OVs) are doing meat inspection at red meat plants with MAST headquarters supervising and controlling the plants. For sheep there is a special intense slaughtering period covering roughly September – October when many more meat inspectors are required. MAST fills this gap by hiring temporary VOs from abroad on a contract basis. One of the problems is that they don't speak or write Icelandic but all were very competent at their job which is the most important attribute. In the past more Icelandic veterinarians were utilised but there is a marked reluctance by the PVPs to do this now as the payment is not enough. There is one slaughterhouse where contract PVPs are working but this is a special case. According to interviews in the slaughterhouses there is no initial specific training of the temporary veterinarians who are carrying out the meat inspections at the slaughterhouses. All the foreign veterinarians working in the slaughterhouses in the lamb slaughter season come from member states within EEA and therefore they should know the relevant food legislation. When they come to work in slaughterhouses in Iceland for the first time they should receive information on special Icelandic matters and get practical training (few days up to few weeks) in a slaughterhouse by a trained veterinarian who is in charge.

At the poultry plant visited a slaughterhouse staff member who has had some training by the DVO in the past carries out the meat inspection. Also MAST veterinarian only supervised for an hour and at the same time the plant every day. **NB** These deficiencies have decreased the overall score for this CC. This was also noted in the EFTA Surveillance Authority mission to Iceland from 4 to 8 November 2013 where it is stated that *"Serious shortcomings were detected in post-mortem and ante-mortem controls, that were carried out by insufficiently trained slaughter house staff and, in addition, without the presence and supervision from an official veterinarian"*.

There is good record collection including collection of meat inspection result and these results are fed back to the farmers. However, the data is not regularly and widely disseminated in particular to the CVO and no real analysis is made.

There is no training for meat inspection in Iceland and no CE takes place. However, a number of veterinarians have attended BTSF courses on meat hygiene and meat inspection.

Animal-by-products

MAST is the CA for animal-by-products. The Environment Agency (UST) is the CA for issues concerning disposal of contagious animal waste. UST co-operates with MAST as it has overall responsibility for the prevention of spread of animal diseases. Regulation (EC) No 1774/2002 laying down health rules concerning ABPs not intended for human consumption, has been implemented by Regulation IS No 108/2010. The regulation entered into force on 1 March 2010, except for the provisions on ABPs from terrestrial animals, which entered into force on 1 November 2011. Iceland may decide to use a derogation for remote areas (material when at the time of the disposal the SRM has not been removed (category 1 material), category 2 material and category 3 material may be disposed as waste by burning or burial on site).

However, the definition of a remote area still needs to be established. MAST issues approval for fish meal plants, MBM (meat and bone meal) plants, feed plants using ABP, pet food plants, technical plants and composting plants on the basis of an inspection of the premises and the own-check system. An updated list of approved ABP establishments exists and is published on the MAST website. MAST is responsible for the official control of fish meal plants, MBM plants, feed plants using ABP, pet food plants, technical plants and composting plants. Home slaughter is permitted in Iceland. All waste shall be delivered to a facility holding a valid permit to handle waste according to Article 10 of the Waste Act No. 55/2003. However there is not a complete system for collection of home slaughter waste and fallen stock (with exceptions in populated areas). MAST has issued commercial documents and guidelines for the movement of ABPs. Iceland lacks incineration capacity for carcasses potentially infected with TSE. Catering waste is currently disposed in landfill or subject to composting.

There is 1 category 2 MBM rendering plant; the material is used as fertilizer, only if certain conditions are fulfilled.

Category 3 material is mainly used for pet food and mink food.

There is 1 bigger incineration plant, which is used to incinerate infected animals (esp. scrapie cases). There are two smaller incinerators used for incineration of pets. Most of the fallen stock and ABP from slaughterhouses end in landfills. A small amount of collection centres for ABP exists.

Strengths:

- Veterinarians doing meat inspection at red meat plants;
- MAST supervising and controlling plants;
- Good collection of inspection results;
- Results of meat inspection fed back to the farmers;
- Good legislation concerning handling of ABP.

Weaknesses:

- Veterinary supervision in poultry plants is regular, but does not cover full day operations.;
- No official poultry meat inspectors (poultry plant staff do this work);
- No official training programmes for poultry meat inspection;

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- No use and availability of trained red meat inspectors (which if introduced could free up veterinarians for other work);
 - Lack of Icelandic veterinarians for supervision in establishments and operators complaining reports are in English and therefore not in conformity with Icelandic legislation;
 - Transmission and use of disease information is lacking good co-ordinated and dissemination;
 - Capacity for category 1 and 2 material limited;
 - Main ABP disposal at landfills.

Recommendations:

- Increase poultry slaughterhouse VO supervision and at the very least make the supervision more random;
- Ensure that the results of meat inspection are more regularly and widely available, in particular to the CVO;
- Introduce or utilise external training courses for meat inspection;
- Employ qualified meat inspectors to carry out post mortem inspections at slaughterhouses;
- Ensure CE of personnel working in the slaughterhouses;
- Review systems especially for category 1 and 2 material; better solutions should be sought.

C. Inspection of collection, processing and distribution of products of animal origin	Levels of advancement
<i>The authority and capability of the VS to implement, manage and coordinate food safety measures on collection, processing and distribution of products of animals, including programmes for the prevention of specific food-borne zoonoses and general food safety programmes.</i>	1. Implementation, management and coordination (as appropriate) are generally not undertaken in conformity with international standards.
	2. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes.
	3. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards only for export purposes and for products that are distributed throughout the national market.
	4. Implementation, management and coordination (as appropriate) are generally undertaken in conformity with international standards for export purposes and for products that are distributed throughout the national and local markets.
	5. Implementation, management and coordination (as appropriate) are undertaken in full conformity with international standards for products at all levels of distribution (including on-farm establishments).

[Note: This critical competency primarily refers to inspection of processed animal products and raw products other than meat (e.g. milk, honey etc.). It may in some countries be undertaken by an agency other than the VS.]

Evidence (listed in Appendix 6): 6E, 7E, 10E, 14E, 16E, 32E, 42E, 43-1E, 43-2E, 43-3E

Findings:

The mandate of MAST includes the official control of the whole production chain for products of animal origin at all stages of collection, production and distribution. General requirements for infrastructure, hygiene and food safety standards are equivalent to EU legislation and have been transposed to relevant legislation and procedures.

MAST is also responsible for the official control of milk production at farm level, milk transportation, and milk collection and processing. Food Business Operators have to ensure that raw milk meets the criteria laid down in the legislation.

There are 5 main dairy processing plants and few smaller ones. All milk has to be pasteurised. The dairy plant test all milk bulks delivered for inhibitors. In case of positive results (9-10 times/year), the milk is traced back to the farm. The milk goes to landfill or in the sewage system. With regard to total bacterial counts (TCP) and somatic cell counts (SCC) and the calculation of the geometrical averages is same as in the EU.

When bacterial counts or somatic cell counts exceed or in case of positive inhibitors, technicians of the dairy plant investigate the reasons and send a report to the DVO. It is the decision of the DVO, to undertake additional investigations on the farm; usually this is not done. Too high TCP and SCC and positive inhibitors are recorded in the control database and are taken into account when preparing the controls on farm; however, it has no influence on the frequency of farm controls.

The DVOs are responsible for the official control of the dairy plants. These controls are carried out periodically according to a risk-based system. The audits are performed according to written procedures, using checklists.

MAST is also responsible for controls of eggs. The egg packaging plants are regularly controlled. The FBOs are obliged to have adequate biosecurity measures.

Strengths:

- MAST is responsible for controls of animal products (although the LCAs are responsible for controls at the retail level and in restaurants);
- Dairy plants have quality systems in place;

- Procedures for the inspection of collection, processing and distribution of products of animal origin are in place;
- Risk based system for controls of dairy plants in place.

Weaknesses:

- High TCP and SCC and positive inhibitors in the risk basis for the frequency of farm controls are not included.

Recommendations:

- Evaluate the inclusion of findings on high TCP and SCC and positive inhibitors in the risk basis for the frequency of farm controls.

II-9 Veterinary medicines and biologicals	Levels of advancement
<i>The authority and capability of the VS to regulate veterinary medicines and veterinary biologicals, in order to ensure their responsible and prudent use, i.e. the marketing authorisation, registration, import, manufacture, quality control, export, labelling, advertising, distribution, sale (includes dispensing) and use (includes prescribing) of these products.</i>	1. The VS cannot regulate veterinary medicines and veterinary biologicals.
	2. The VS have some capability to exercise regulatory and administrative control over veterinary medicines and veterinary biologicals in order to ensure their responsible and prudent use.
	3. The VS exercise regulatory and administrative control for most aspects of the regulation related to the control over veterinary medicines and veterinary biologicals, including prudent use of antimicrobial agents in order to ensure their responsible and prudent use.
	4. The VS exercise comprehensive and effective regulatory and administrative control of veterinary medicines and veterinary biologicals.
	5 The control systems are regularly audited, tested and updated when necessary.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 17E, 29E, 32E, 76E, 79E, 85E, 90E, 94E, 105H, 106H, 120P, 121P, 152, 177.

Findings:

The responsibility on controls on the production, distribution and use of VMPs based on the Act No 93/1994 on Medicinal Products is divided between the Icelandic Medicines Agency (IMA) and MAST.

IMA, an independent regulatory authority under the auspices of the MoWF, is responsible for licensing and controls of manufacture and distribution of VMP to pharmacy level. They issue marketing authorisations for medicines. In most cases this is done in collaboration with regulatory authorities in the EEA. The Pharmaceutical Committee serves as the advisory committee of the Agency. The Committee comprises seven persons with expertise in VMPs and pharmaceuticals. Private veterinarians can make a request to a VMP wholesaler to import EU approved VMPs, after being pre-approved by IMA which seeks a statement from MAST. Veterinarians interviewed raised problems with the supply of VMPs. Due to the small market there are several VMP not available on the Icelandic market and they have to be imported by specific licences. In general, there is very limited use of VMPs in Iceland.

Large wholesalers should be inspected every three years and smaller ones every three to five years. There is a checklist for use during inspections of wholesalers which includes checks of the VMPs and purchases by veterinarians. VMPs are distributed mainly via practicing veterinarians who purchase VMPs from the wholesalers for use in their own practice and operate veterinary pharmacies selling VMPs to animal owners. Small quantities of VMPs are also distributed through other pharmacies. Retailers are required to be inspected every four to ten years. Checklists are used during inspection of retailers and veterinary practitioners operating veterinary pharmacies.

MAST supervises veterinary practitioners and controls the use of veterinary medicinal products according to Article 11 of Act No 93/1994 on Medicinal Products.

2-3 years ago, combined inspections by MAST and IMA at veterinary practitioners had been undertaken; however, since then, no controls have been undertaken. Interview with one private veterinarian revealed that she had within 12 years only 1 control. To start these combined controls again is under discussion. MAST has not the capacity to control the use of VMP at the level of the veterinarians. Results of the controls are entered in a database. However, neither with the control database of MAST nor with the one of IMA, statistic about inconsistencies can be generated.

There are informal communications between MAST and IMA; the former existing task force has long time been inactive.

IMA is not involved in commenting the Code (the OIE Focal Point for Veterinary Products has not been appointed).

MAST is also responsible for official control on the proper use and storage of medicines on farms. Animal keepers are obliged to keep records on the health status of the animals and their medical treatment. Statistics of non-compliance of the farm controls cannot be generated from the database.

Farmers in remote areas may store/administer drugs under specified conditions if the farmer has a contract with a private veterinarian for the supply of the drugs and the private veterinarian has permission from the CVO. Permissions are currently only given for sheep and pig farms. However, the PVS-team noted that high amounts of VMP can be stored on farm and the farmer use the VMP based on written instructions of the veterinarian.

Veterinary practitioners are required to enter their use of certain VMPs a database (HEILSA), which includes information on animal health and veterinary treatment of horses and cattle; it is also planned to include treatments of sheep and pigs as well as other food producing animals. Private practising veterinarians, district veterinary officers and veterinary specialists at MAST can access HEILSA. The CVO has administrative access (through staff). The DVOs are responsible for the control of prescriptions and use of veterinary medicines but have too limited access to carry out their responsibilities.

Within three days after a visit the private practising veterinarians shall register the date of the visit, the identification of the animals, diagnoses, and type and amount of medicines used. If the treatment includes a medicine which requires a temporary ban of slaughter or milk delivery, the veterinarian is obliged to inform the animal owner about the withdrawal period by a written notification and register the dates in HEILSA within 24 hours. The veterinarian shall also enter information if he has ordered further treatment, including instructions for use. In cases where veterinarians are not fulfilling the requirements concerning registration in HEILSA, Moll can take appropriate measures against the veterinarian. In worst cases, the veterinarian would lose his license to practice as a veterinarian. However, the access for DVOs is restricted to the VMPs used on the farm; the prescribing veterinarian cannot be displayed. The officer at MAST who is responsible for the control of prescription of VMPs can in addition to the above described usage, display a list of medicines each veterinarian has prescribed. The DVOs and veterinary specialists at MAST can look up certain diagnoses or medicines for a particular district or the whole country. They can also display a list of animals which are within the withdrawal period for slaughter or delivering of milk.

There are also to be uncertainties, what pet veterinarians have to enter into a database. One pet veterinarian recorded excessive information on the usage of VMPs; he complained that he had to enter for every treatment the expiry date for the medicine and the lot number. In discussions with IMA later it was worked out, that it has not to be done. However, it showed that the information flow from IMA and MAST concerning VMP to the veterinarians can be improved. On the other hand, the data entering by farm practitioners is limited.

There is an annual statistic about the amount of imported antimicrobials; also antimicrobial resistance is monitored. An awareness campaign concerning antimicrobial resistance was undertaken in cooperation of the previous Authority and the Veterinary association; however, none of the veterinarians was aware of it.

At one of the PVP visited the PVPs were detailing for each client the amount, batch number and expiry date of VMP administered this was very onerous and time consuming. It was found to be a misunderstanding about IMA requirements. In addition, the PVP complained that they had to order one single rabies vaccine to administer to pets being exported; this was to ensure that pets remaining in Iceland were not vaccinated. This was also onerous and expensive as the rabies vaccine comes in packs of 10 without really providing any additional

safeguards and each batch number needs to be recorded on the certificate. This is hopefully being addressed by MAST.

Strengths:

- Most relevant fields of activities concerning VMPs are covered by the current system;
- The responsibility of the two agencies involved (MAST and IMA) is described;
- VMPs are under veterinary control and delivered by prescription only;
- Annual statistics of the volume of imported VMP are available;
- A database (HEILSA), which includes information on animal health and veterinary treatment of horses, cattle and sheep exist;
- Very limited use of VMPs.

Weaknesses:

- Important lack of external co-ordination between the two agencies responsible for inspections of veterinarians;
- Lack of communication with the private veterinarians;
- Inspection of veterinary pharmacies limited;
- Statistics of farm and veterinary controls (non-compliance) not available;
- The treatment of pigs is not included in HEILSA;
- Recording excessive information on usage by veterinary pet practitioner but lack of data recording in farm animals;
- Inadequate solutions for isolated farms in winter for VMPs (exceptions currently only for sheep and pigs);
- An obligatory pharmaco-vigilance system is lacking.

Recommendations:

- Improve the internal co-ordination of IMA and MAST;
- Start the combined controls of veterinarians again;
- Improve the communication with the private veterinarians;
- Include pig treatments in HEILSA;
- Give the DVOs access in HEILSA to the prescribing veterinarian;
- Develop the control databases, that statistic about inconsistencies can be generated;
- Develop solutions for isolated farms in winter for VMPs for other species;
- Introduce an obligatory pharmaco-vigilance system;
- Review the requirements for the supply of rabies vaccination to PVPs for vaccination of dogs intended for export.

II-10 Residue testing	Levels of advancement
<i>The capability of the VS to undertake residue testing programmes for veterinary medicines (e.g. antimicrobials and hormones), chemicals, pesticides, radionuclides, metals, etc.</i>	1. No residue testing programme for animal products exists in the country.
	2. Some residue testing programme is performed but only for selected animal products for export.
	3. A comprehensive residue testing programme is performed for all animal products for export and some for domestic consumption.
	4. A comprehensive residue testing programme is performed for all animal products for export and domestic consumption.
	5. The residue testing programme is subject to routine quality assurance and regular evaluation.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 32E, 37E

Findings:

MAST is responsible for residues monitoring in live animals and animal products. The IMA has an input into the National Residue Monitoring Plan (NRMP) based on their data on VMP use.

The NRMP is based on total national production. The annual monitoring plan and the results are submitted annually to the EFTA Surveillance Authority as well as some third countries due to export of animal products (e.g. the USA). MAST is responsible for supervision of the NRMP. The sampling plan is reviewed and evaluated annually. This takes into account the level of risk for residues in certain areas and animals. MAST operates a monitoring programme for contaminants in feed. In the case of non-compliant results, the MAST NRMP co-ordinator contacts the relevant DVO for follow-up.

MAST operates also a monitoring programme for contaminants in feed. Dairy plants operate own-control programmes for antibacterial substances (every delivery is tested). Noncompliant results can be traced back to each farm and evidence of follow up investigations by the dairy plants must be reported to the district veterinary officer. A positive result found a few years ago demonstrated that it was possible to trace back the products concerned.

Six laboratories (one in Iceland and five EU Member States laboratories) analyse samples for the NRMP. A list of the laboratory details and analytical methods used exist.

The risk basis for the decision which animals/products are included is not always clear, e.g. the number of samples from slaughtered adult pigs is small.

Strengths:

- An extended residue programme exists since years and approved by the EU;
- The sampling plan is reviewed and evaluated annually.

Weaknesses:

- Risk basis not always clear.

Recommendations:

- Review the risk basis for the decision for what samples are taken.

II-11 Animal feed safety <i>The authority and capability of the VS to regulate animal feed safety e.g. processing, handling, storage, distribution and use of both commercial and on-farm produced animal feed and feed ingredients.</i>	Levels of advancement
	1. The VS cannot regulate animal feed safety.
	2. The VS have some capability to exercise regulatory and administrative control over animal feed safety.
	3. The VS exercise regulatory and administrative control for most aspects of animal feed safety
	4. The VS exercise comprehensive and effective regulatory and administrative control of animal feed safety.
	5. The control systems are regularly audited, tested and updated when necessary.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 17E, 32E, 153P 154P.

Findings:

MAST is responsible for official controls on feed. Informal co-operation is also in place with the Icelandic Medicines Agency regarding the definition of "feed" and "medicine" where there may be an overlap and with the Customs Authorities regarding imports.

Inspections are carried out by MAST according to Act No 22/1994 on control of feed, fertilisers and seeds. The control frequency is based on a risk classification system, based on the risk of production and processing method, labelling, packaging and the complexity of the production process. The risk category of each establishment is based on the nature of the production and product, the size of the production and the consumer group. The risk category establishes then the hours of inspection. In addition, based on the evaluation of the performance of the last controls, the establishment is categorised in A, B or C, which also influences the hours for inspection. However, non-compliances of former controls or findings of salmonella-positive feed do not influence the basic number of yearly inspection hours but does result in more frequent inspection visit through follow-up or lower performance grading (e.g. from B to C class). It should be noted that the same system applies for feed safety risk classification and controls as for food safety establishments, i.e. the same model is applied, cf. Chapter II-8A.

Official controls have focused on verification of internal quality management systems and sampling for FBOs in the higher risk groups. Control of the lower risk groups is primarily based on registration, documentation and import control.

There are 66 registered feed businesses (mainly importers of feed) and 81 approved feed producers. Feed mills have an own sampling plan for Salmonella in place for imported feedstuffs and final products. In addition, the suppliers of raw material had to provide negative Salmonella laboratory certificates.

There are 3 feed mills (of two companies) registered for the production of feed for farm animals. According to several interviews, one feed mill had a longstanding salmonella-problem. Although this was known by MAST and several tries undertaken to improve the situation (closure and cleaning of the feed mill for several days), apparently it could not be solved. Finally all poultry owners stopped to buy feed from this producer. Currently there is only 1 feed mill producing poultry feed in Iceland. An emergency plan in case of a problem in this only feed mill does not exist.

MAST cooperates with two laboratories abroad for analyses of feed.

Since 1968, it has been prohibited to import meat and bone meal and greaves for use in feeding stuffs for livestock (except pet food). The current legislation regarding import ban of all meat and bone meal is article 10 of Act No 25/1993. There has been a ban on feeding meat and bone meal (MBM) to ruminants since 1978 and all food producing animals since 2001. Fish-meal is readily available and is used as a protein source for food producing animals instead of MBM. Almost all compound feed for livestock is produced domestically.

The main importation is of additives, premixes and pure feed ingredients. There have been no registered imports of compound feedstuffs since 1968.

The control of primary producers on farm level is part of the regular control system for animal welfare and production on farms. All farms in the country will be inspected with regard to primary production of feed.

Production and distribution of medicated feed is permitted in Iceland. The surveillance of medicated feeding stuffs is under the supervision of the Icelandic Medicines Agency. The medicines shall be mixed in pre-mixtures before they are mixed into the feed that is combined with normal feed. The preparation of the medicated feeding stuffs shall only be done by specially authorised feed operators. However, only 2 authorisation of producing medicated feed is given by IMA, but this is not used.

Strengths:

- Feed establishments are approved and registered;
- Legislation and procedures for producing feed exist;
- Feed mills are controlled based on a risk basis;
- Risk based control;
- Non-compliances of former controls does result in more frequent inspection visit through follow-up or lower performance grading.

Weaknesses:

- Ineffective follow up/implementation after incident with Salmonella;
- Only 1 feed mill now producing poultry feed without emergency plan.

Recommendations:

- Ensure in case of serious non-compliance to take effective actions;
- Develop emergency plan in case of a problem in the only feed mill producing poultry feed;
- Include non-compliance (i.e. salmonella positive) in increasing basic number of yearly inspection hours.

II-12. Identification and traceability	Levels of advancement
A Animal identification and movement control <i>The authority and capability of the VS, normally in coordination with producers and other interested parties, to identify animals under their mandate and trace their history, location and distribution for the purpose of animal disease control, food safety, or trade or any other legal requirements under the VS/OIE mandate.</i>	1. The VS do not have the authority or the capability to identify animals or control their movements.
	2. The VS can identify some animals and control some movements, using traditional methods and/or actions designed and implemented to deal with a specific problem (e.g. to prevent robbery).
	3. The VS implement procedures for animal identification and movement control for specific animal subpopulations as required for disease control, in accordance with relevant international standards.
	4. The VS implement all relevant animal identification and movement control procedures, in accordance with relevant international standards.
	5. The VS carry out periodic audits of the effectiveness of their identification and movement control systems.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 13E, 108P, 137P, 147P, 148P, 149, 150P, 151P, 152P, 165P, 166P, 170P, 176P.

Findings:

The Moll is in charge of legislation and regulations on identification and movement control. MAST is responsible for the official controls of the identification and registration including the computerised database, ear tags and on-farm registers. Act No 38/2013 on livestock management and Regulation IS No 916/2012 on identification of livestock lays down the principles for animal identification and registration of their movement.

The identification system for animals is based on ear tagging. Bovine animals must be identified by two ear tags. Ovine and caprine animals must be identified by a tag in one ear of sheep and goats. When ovine or caprine animals are sold between herds, they have to be identified with two tags. Horses are micro-chipped; there is an excessive number of persons authorised to microchip horses, which makes it difficult to control their actions and competence.

The Farmers' Association keep the centralised system for bovine ear tags through the MARK system (under supervision by MAST). The farmers must order ear tags through this website and pay to the Farmers' Association. The computerised database keeps track of each farm and the running numbers of bovines on each farm. Only one type of ear tag has been approved by MAST for bovines. In the farms and slaughterhouses visited, all animals had ear tags.

When livestock is transported, a copy of their health-card must accompany them and the information is registered electronically in the database HEILSA, which is connected to the database HUPPA. The use of bovine passports was not implemented in Iceland and this is not required any longer under the EU legislation for domestic transportation, cf. Regulation (EU) No 653/2014 amending Regulation 1760/2000.

Sheep may be moved within a region without a movement document (e.g. during the summer, animals may be moved to highland grazing and returned to their home farm in the autumn).

Records are maintained on farm registers and databases. Farm holdings are registered in a national interface (MARK) the operation of which MAST oversees. The Icelandic Farmers Association manages its daily operation as well as its further development. A livestock database - BUSTOFN - in operation since November 2010, is primarily for livestock owners (cattle, sheep, goats and horses) to enter information on the numbers of their livestock and other related information. This database is connected to MARK and other livestock

databases (HUPPA (bovine), FJARVIS (ovine) and FENGUR (horses)). BUSTOFN is accessible to all on the MAST website. All farmers have access to the database. Livestock keepers are responsible for keeping records of all animals in their herd in a herd-book. Information may be entered into MARK directly by owners/keepers of livestock or indirectly by retrieving data from databases used by the Farmers Association for breeding purposes. All stakeholders have access to information in the database and keepers of livestock are required to keep their records updated. MAST has full access to these databases via MARK.

Livestock keepers are also responsible for recording diseases identified, medical treatments and preventive measures.

Control on the application of identification marks and traceability control is included in MAST inspection tasks and carried out on a regular basis. The risk-based approach of checking farms has not yet been established. However, a risk classification model is being developed to evaluate the necessary frequency of official controls. It will have the same basic structure as the model for food of animal origin and feed.

There is currently no “cross compliance” system established to link non-compliances in holdings to the payment system.

Dogs have to be microchipped and there is a central database (Dyraudkenni.is) for record keeping for pets, microchipping included. The database is owned and operated by the Veterinary Association, recognition by MAST is in process..

Strengths:

- MAST is the competent Authority for the animal ID & Registration system;
- Comprehensive legislative framework is in place;
- Procedures are developed and a central database for animal ID & Registration established;
- Controls of animal ID & Registration on farms and in slaughterhouses are established.

Weaknesses:

- Statistics on the controls over the implementation are not available;
- Sheep may be moved within a region without a movement document; exceptions for grazing on the highlands;
- Too many databases containing similar information.

Recommendations:

- Evaluate the exceptions for sheep movement;
- Consider introducing “cross compliance” system to link non-compliances in holdings to the subsidy payment system;
- Evaluate possibility to rationalise the databases.

II-12 B. Identification and traceability of products of animal origin <i>The authority and capability of the VS, normally in coordination with producers and other interested parties, to identify and trace products of animal origin for the purpose of food safety, animal health or trade.</i>	Levels of advancement
	1. The VS do not have the authority or the capability to identify or trace products of animal origin.
	2. The VS can identify and trace some products of animal origin to deal with a specific problem (e.g. products originating from farms affected by a disease outbreak).
	3. The VS have implemented procedures to identify and trace some products of animal origin for food safety, animal health and trade purposes, in accordance with relevant international standards.
	4. The VS have implemented national programmes enabling them the identification and tracing of all products of animal origin, in accordance with relevant international standards.
5. The VS periodically audit the effectiveness of their identification and traceability procedures.	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 13E, 14E, 43E, 141P, 143P, 144P, 168P.

Findings:

The Moll is in charge of drawing up legislation and general administrative regulations on meat labelling. Food Business Operators (FBO) have to ensure traceability of food of animal origin through all stages of productions, processing and distribution. Mandatory labelling has to establish the link between the meat and animal or group of animals (batch). This information has to be contained on the labels on carcasses. The label needs to have the approval number of the slaughterhouse and the name of the country or ISO code of the country where the animal has been slaughtered.

The DVOs are responsible for the official controls of compulsory labelling of meat in all approved establishments, e.g. in slaughterhouses, cutting plants, meat production plants. In the retail sector, the LCAs are responsible for the official controls of labelling of meat.

The establishments visited had traceability systems in place.

During the visits in particular to the slaughterhouses and dairy plants, it was noted that traceability for meat and milk is good down to the retail level; however there is no adequate traceability system for meat products. Poultry meat can be very well traced even to retail level due to the campylobacter controls. At the slaughterhouse meat can be very well traced up to entering the cutting plant. After, that can trace by timings on entry to cutting plant down to a quarter of a day production. A positive result found a few years ago in the NRMP demonstrated that it was possible to trace back the products concerned. MAST has had to recall meat because of possible dioxin contamination so system does work in practice.

For dairies the milk from each farm can be traced as a sample is kept from each farm collection. The tankers usually have 3 farm collections per tank and there are 3 separate tanks per tanker. Only after the tests are completed are the tankers emptied. Therefore, the milk that may have to be destroyed, e.g. for positive antibiotic results, would involve a maximum of 3 farms. This happens quite rarely.

Strengths:

- Legislation concerning identification and tracing of animal derived products is in place and widely implemented;
- There is generally a good traceability system for meat and very good for poultry meat.

Weaknesses:

- No regular traceability exercises;
- Traceability for meat products and some other products of animal origin is lacking.

Recommendations:

- Improve the traceability system for meat products and other products of animal origin;
- Conduct traceability exercises on a regular basis to verify effectiveness of the traceability system.

II-13 Animal welfare <i>The authority and capability of the VS to implement the animal welfare standards of the OIE as published in the Terrestrial Code.</i>	Levels of advancement
	1. There is no national legislation on animal welfare
	2. There is national animal welfare legislation for some sectors
	3. In conformity with OIE standards animal welfare is implemented for some sectors (e.g. for the export sector)
	4. Animal welfare is implemented in conformity with all relevant OIE standards.
5. Animal welfare is implemented in conformity with all relevant OIE standards and programmes are subjected to regular audits.	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 32E, 58-4E, 58-10E, 72H, 73H, 89-A E, 115H,174P, 175P.

Findings

A new animal welfare act no 55/2013 was implemented on January 1st 2014. Building on this new act, regulations for the welfare of farming and companion animals were updated. The description for minimum requirements for housing, environment and handling for most of the farming animals can be found in the new regulations for welfare. Updated national regulations for horses (No 910/2014), pigs (No 1276/2014), poultry (No 135/2015), sheep and goat (No 1066/2014), cattle (No 1065/2014) and minks (No 1277/2014), were published in the period end of 2014 to beginning of 2015. The welfare regulation for companion animals is expected before end of this year. Regulations for rabbits and zoo's need to be updated, but the work on that has not yet started.

If an animal holding is planned to be over a certain size or is considered to be "technical" the person responsible for the animals needs to send a notice to the VS and the facilities have to be approved by the them prior to commencing activities.

The regulation for transport of farming animals in Iceland dates from 1958 (No 127/1958). The updating of this regulation has been on-going for a couple of years, and is expected to be published within the next year. Iceland has not implemented the EU transport regulation EC/1/2005; however the draft of the new transport regulation is largely based on this EU regulation. However, less focus is on the requirement for logging of long distance transport, as this does rarely apply for Iceland. In the draft drivers need training approved by the VS and the vehicles and containers for animal transport need approval before being used.

There are very limited movements by boat of sheep (less than one hour) to small islands (Vestmannaeyjar in the South and Breiðafjarðareyjar in the West) for summer pasture. There are occasional horse exports by boat but only in the summer.

The VS undertake farm inspection visits to cattle, poultry and pig farms at present and due to the new welfare legislation this has been extended, to include all farms, so sheep, horses and fur animals will be included.

The new animal welfare act and the updated welfare regulations define the required competence standards for the animal handlers and the managers of facilities.

The animal welfare act defines that:

"anyone who has animals in their care must possess or acquire basic knowledge of the needs and care of the species, and must also possess sufficient capacity to handle the animal in accordance with the act. Manager of facilities holding animals shall ensure that the staff, that is responsible for the care of the animals, possesses sufficient knowledge and skills in the relevant field. A person supplying service to the animals should possess sufficient knowledge for the work. It is prohibited to include children under 18 and a minor one responsible for the animals".

The welfare regulations for each species define the responsibility of the animal handlers and managers. Under the new legislation more demanding requirements for space allowances for sows and poultry cages have been introduced with time delays for their introduction by farmers the times delays had been prolonged on a couple of occasions which had led to some confusions. There were no plans included to give farmers any financial support and the new regulations regarding animal welfare will be difficult to fully implement without providing a delay for some farmers to adapt their premises accordingly however during the mission the Minister gave a media interview when he indicated there would be state support for farmers forthcoming. The NFA and the local farmers association were supportive of the higher welfare standards but had complained about the lack of government financial support.

In the new Act there is no specific definition for animal cruelty however Article 6 on animal care in general states “that animals must be treated well and their keepers shall be responsible for ensuring that they are cared for in accordance with the provisions of this Act and ill treatment of animals is prohibited”. In addition in Article 1, Objective, it is stated that “the objective of this Act is to promote animal welfare, which entails ensuring that they do not suffer distress, hunger or thirst, fear or suffering, pain, injuries or disease, considering that animals are sentient beings. Another objective of the Act is to allow animals to express their natural behaviour to the fullest”

During the routine veterinary control for competition horses in Iceland bit-related lesions were found to be a general problem in competition and breeding horses. The sensitive periostium of the mandible is covered with a thin layer of a mucosa, which is not able to resist the pressure from the bit, and this was considered to be of most concern for animal welfare. The lesions were strongly related to curb bits with a port which took the protective function of the tongue out of work by inhibiting the tongue in lifting the bit this meant that there was increased pressure directly to the bars causing serious damage to the mandible area. New rules banning the use of curb bits with a port in competition was put in force by the Icelandic Riding association in the spring 2014. Comparable rules were not put in force in the breeding shows but more frequent inspections (although not veterinary controls) were introduced. The problem has been solved by banning the use of curb bits with a port in competition with a regulation published in 2014.

During the visit there were 2 welfare problems highlighted. The first was because of a MAST welfare report on problems found during an inspection of a pig farm earlier in the year was released on demand to the media. The second case was of a cat owner keeping a large number of cats in poor conditions in a lock up. The cats were seized under the welfare legislation because of the conditions and lack of medical attention given to them.

The slaughterhouses (including poultry) have a specific person responsible for animal welfare carrying out controls e.g. to ensure unloading and stunning are carried out correctly.

Stray dog control is not a great problem and is the responsibility of the LCAs.

There is some research using laboratory animals and Iceland has a special regulation (IS 279/2002) for animal research based on the animal welfare law (IS 55/2013). MAST is responsible, the CVO office issues licence for all research work using animals. However the team did not evaluate this area during the mission.

Strengths:

- New more extensive animal welfare legislation came into force on 1 January 2015;
- Legislation covers all main species and includes wild mink (mink are not covered by the OIE);
- New requirements for, inter alia, use of sow crates, banning cattle tethering and increasing poultry battery cage sizes;
- New regulation for all domestic species laid down this year;

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- New regulation for pets and mink being drafted;
 - Stunning at slaughter is well controlled;
 - NFA supportive of high welfare standards;
 - MAST has given animal welfare a higher focus.

Weaknesses:

- Drowning of mink is allowed as it an effective way of killing them;
- There is insufficient animal welfare awareness campaigns or information to the media;
- Farmers receiving no aid to improve livestock conditions which are required under the new legislation in particular concerning increasing size of battery cages, changes to sow stalls and tethering in cattle stalls (however this may now be irrelevant as Minister has promised to give some financial support);
- Licensing/registration of livestock vehicles has not been introduced yet;
- The OIE focal point for animal welfare has not been appointed.

Recommendations:

- Finalise the missing welfare regulations;
- Increase welfare awareness campaigns concerning the new raft of animal welfare legislation both to the public, farmers and PVP;
- Consider giving financial support to farmers to speed up the introduction of the new welfare requirements in particular concerning the change in sow stalls, cattle – increased space allowances and increased cage sizes for layers;
- Introduce licencing/registration requirements for animal transport vehicles to ensure welfare of animals being transported;
- Appoint an OIE focal point for animal welfare.

III.3 Fundamental component III: Interaction with interested parties

This component of the evaluation concerns the capability of the VS to collaborate with and involve stakeholders in the implementation of programmes and activities. It comprises seven critical competencies

Critical competencies:

Section III-1	Communication
Section III-2	Consultation with interested parties
Section III-3	Official representation
Section III-4	Accreditation / Authorisation / Delegation
Section III-5	Veterinary Statutory Body (VSB)
	A. VSB authority
	B. VSB capacity
Section III-6	Participation of producers and other interested parties in joint programmes

Terrestrial Code References:

Points 6, 7, 9 and 13 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards / Communication.

Point 9 of Article 3.2.1. on General considerations.

Points 2 and 7 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services.

Sub-point b) of Point 2 of Article 3.2.6. on Administrative resources: Communications.

Article 3.2.11. on Participation on OIE activities.

Article 3.2.12. on Evaluation of the veterinary statutory body.

Points 4, 7 and Sub-point g) of Point 9 of Article 3.2.14. on Administration details / Animal health and veterinary public health controls / Sources of independent scientific expertise.

Chapter 3.3. on Communication.

III-1 Communication	Levels of advancement
<i>The capability of the VS to keep interested parties informed, in a transparent, effective and timely manner, of VS activities and programmes, and of developments in animal health and food safety. This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas</i>	1. The VS have no mechanism in place to inform interested parties of VS activities and programmes.
	2. The VS have informal communication mechanisms.
	3. The VS maintain an official contact point for communication but it is not always up-to-date in providing information.
	4. The VS contact point for communication provides up-to-date information, accessible via the Internet and other appropriate channels, on activities and programmes.
	5. The VS have a well-developed communication plan, and actively and regularly circulate information to interested parties.

Terrestrial Code reference(s): Appendix 1

Evidence 6E, 24E, 66H

Findings:

The Head of Information and Communication (HIC) of MAST is in charge of the Authority's website, public relations, graphic design of publications, as well as the organisation of conventions, seminars and meetings. MAST publishes its communication plan on its website stating what information pertaining to the operation of the Authority is made public.

All media enquiries go through the HIC. The HIC collects the necessary information regarding the inquiry, designates a spokesperson among the staff in agreement with the respective Office Director, and relays the information to the contact person. Once designated, the contact person answers all media enquiries on the topic in question. It is noted that the Authority does in some difficult and sensitive cases hire a private consulting business to assist in their handling, including the making of press releases.

In case of a crisis, the HIC assembles a crisis team consisting of the HIC, the Director General, the respective Office Director (including the CVO) and the Director of Legal and Executive Affairs. The crisis team collects all pertinent information and calls upon the help of specialists, if needed. The crisis team designates a spokesperson among the staff and lays out a communication plan that is immediately put into effect.

The website is extensive. However, when searching certain topics in English, it is difficult to find them; they are only partly available (e.g. English part about the requirements to bring food into Iceland) and are not all up to date. As there are some staff who do not speak Icelandic and for use in external audits from VS or food business operators in importing or potentially importing countries, more English information could be usefully added to the website.

Awareness campaigns are rarely done and only few leaflets exist. E.g. most veterinarians did not know which diseases were notifiable; although a leaflet about risk of imports exist, it was not readily available outside MAST. Apparently, in earlier years, the veterinarians, working for the former CVO authority were responsible for awareness campaigns and the development of leaflets. According to interviews, this task was taken over by the communication team, but is not yet really fully developed. MAST is using its website to give information to the media and the public. MAST has issued a leaflet on the protection of animals from infectious diseases, on amendments of the zoning for sheep and on the legislative amendments made in the last years affecting farmers, feed mills and food businesses. Other leaflets have also been issued mainly in the area of official food control.

Communication materials produced by MAST are not adequately positioned in airports and ports to inform passengers about what they have to do to comply with import regulations for both live animals and food products.

An awareness campaign concerning antimicrobial resistance was undertaken in cooperation with the Authority at the time (former MAST) and the Veterinary association; however, none of the veterinarians was aware of it and there is a lack of communication with the PVPs concerning VMPs.

There is an OIE appointed focal point for Communication and this at the moment is the Deputy CVO.

Strengths:

- There is a Communication Plan which is part of the Quality Manual and is published on the website;
- Designated communication point and the OIE Focal Point for Communication is appointed;
- Extensive website.

Weaknesses:

- Website needs simplification, updating and with more English information;
- Some instances of lack of adequate agreement on what and who to communicate to
- Lack of awareness campaigns.

Recommendations:

- Maintain and update the website;
- Include more English information on the website where necessary;
- Review agreements on what and who to communicate to;
- Increase awareness campaigns and the development of leaflets;
- Introduce awareness campaigns for serious notifiable diseases both for farmers and the veterinarians.

III-2 Consultation with interested parties	Levels of advancement
<i>The capability of the VS to consult effectively with interested parties on VS activities and programmes, and on developments in animal health and food safety. This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas</i>	1. The VS have no mechanisms for consultation with interested parties.
	2. The VS maintain informal channels of consultation with interested parties.
	3. The VS maintain a formal consultation mechanism with interested parties.
	4. The VS regularly hold workshops and meetings with interested parties.
	5. The VS actively consult with and solicit feedback from interested parties regarding proposed and current activities and programmes, developments in animal health and food safety, interventions at the OIE (Codex Alimentarius Commission and WTO SPS Committee where applicable), and ways to improve their activities.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

MAST has a formal mechanism to regularly consult with the Farmers' Association on activities and programmes related to animal health, animal welfare and food safety. This is mainly the case at central level but some gaps were observed at district level.

Consultation is less effective with some partners like the Veterinary Association.

Consultation between MAST and other public agencies has been discussed in the previous competency ("external coordination").

Stakeholders are consulted in the legislation elaboration process the draft legislation is submitted for comments to stakeholders; however, Stakeholders complained that Moll makes changes after joint committee procedures on consultation.

Strengths:

- Consultation with the Farmers' Association;
- Consultation with stakeholders concerning new legislation.

Weaknesses:

- Consultation in the field is much less organised; job descriptions in this respect did not appear to be that clear to the DVOs interviewed concerning consultation;
- Difficulties for non-Icelandic speaking veterinarians.

Recommendations:

- Review the legal possibility, i.e. when this would not go against the legal provisions regarding impartiality and conflict of interest, to include a consultation role for district veterinary officers in their job description.

III-3 Official representation <i>The capability of the VS to regularly and actively participate in, coordinate and provide follow up on relevant meetings of regional and international organisations including the OIE (and Codex Alimentarius Commission and WTO SPS Committee where applicable).</i>	Levels of advancement
	1. The VS do not participate in or follow up on relevant meetings of regional or international organisations.
	2. The VS sporadically participate in relevant meetings and/or make a limited contribution.
	3. The VS actively participate⁵ in the majority of relevant meetings.
	4. The VS consult with interested parties and take into consideration their opinions in providing papers and making interventions in relevant meetings.
5. The VS consult with interested parties to ensure that strategic issues are identified, to provide leadership and to ensure coordination among national delegations as part of their participation in relevant meetings.	

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

The CVO is the formal delegate for OIE but has no mandate over food and feed safety aspects. Other MAST staff are focal points for some OIE specialised topics, but the Focal Points for Animal Welfare and Veterinary Products have not been appointed. Budget is not always available to enable the staff to attend all relevant international meetings.

The Authority as such is the contact point for the WTO/SPS agreement regarding animal and plant health. See: https://www.utanrikisraduneyti.is/media/fta-kina/Annex_II_final_IS.pdf. There is no specific contact person appointed.

The CVO, other Directors and staff members participate in the work of the EEA. As an example the Director of Legal Affairs is the co-chair of the EFTA Working group on the Food Chain under Subcommittee I. The DG is a member of the Advisory Forum of EFSA and several staff members participate in EFSA meetings on food, animal health and welfare. MAST staff also participate in Nordic meetings on a regular basis.

Strengths:

- The CVO, other Directors and staff participate in key meetings organised by OIE or by EEA.

Weaknesses:

- Budget and time limitations;
- Active participation is lacking;
- MAST does not attend EU coordination meeting for commenting new chapters in OIE codes.

Recommendations:

- Allocate more time and travel budget to the CVO and colleagues to attend international meetings of OIE, CODEX, WTO and SPS etc.
- Encourage the country to nominate all 8 OIE Focal Points.

⁵ Active participation refers to preparation in advance of, and contributing during the meetings in question, including exploring common solutions and generating proposals and compromises for possible adoption.

III-4 Accreditation / authorisation / delegation <i>The authority and capability of the public sector of the VS to accredit / authorise / delegate the private sector (e.g. private veterinarians and laboratories), to carry out official tasks on its behalf.</i>	Levels of advancement
	1. The public sector of the VS has neither the authority nor the capability to accredit / authorise / delegate the private sector to carry out official tasks.
	2. The public sector of the VS has the authority and capability to accredit / authorise / delegate to the private sector, but there are no current accreditation / authorisation / delegation activities.
	3. The public sector of the VS develops accreditation / authorisation/ delegation programmes for certain tasks, but these are not routinely reviewed.
	4. The public sector of the VS develops and implements accreditation / authorisation / delegation programmes, and these are routinely reviewed.
	5. The public sector of the VS carries out audits of its accreditation / authorisation / delegation programmes, in order to maintain the trust of their trading partners and interested parties.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E

Findings:

The former system with private veterinary practitioners carrying out also official duties was changed in 2011. In addition the livestock inspection, which was done by the municipalities, is since 2014 undertaken by MAST. Practically all official veterinary tasks are done by MAST veterinarians.

DVOs work exclusively on official controls and are not allowed to work as veterinary practitioners.

Based on a regulation, the State gives subsidies to PVPs to provide veterinary services in remote areas and for ensuring emergency shifts through formal agreements.

According to the legislation, official tasks could be delegated. However, rarely are official tasks delegated. There is an extremely limited delegation to private veterinarians for meat control mainly during lamb slaughter season. This delegated work is supervised by official veterinarians.

In the East of Iceland, due to a temporary lack of a DVO (for more than a year) and limited staff, some tasks were delegated to a private veterinarian. In addition, the issuance of loading certificates and import and export controls are delegated in the East of Iceland. Official supervision did not exist at the time in this area.

Strengths:

- The VS has the authority to delegate official tasks.

Weaknesses:

- Although there are not enough official veterinarians in the country to fulfil all official tasks, there are very limited delegated activities to PVPs.

Recommendations:

- Expand the delegation of some official tasks to PVPs.

III-5 Veterinary Statutory Body (VSB) A. VSB authority <i>The VSB is an autonomous regulatory body for veterinarians and veterinary para-professionals.</i>	Levels of advancement
	1. There is no legislation establishing a VSB.
	2. The VSB regulates veterinarians only within certain sectors of the veterinary profession and/or does not systematically apply disciplinary measures.
	3. The VSB regulates veterinarians in all relevant sectors of the veterinary profession and applies disciplinary measures.
	4. The VSB regulates functions and competencies of veterinarians in all relevant sectors and veterinary para-professionals according to needs.
	5. The VSB regulates and applies disciplinary measures to veterinarians and veterinary para-professionals in all sectors throughout the country.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

There is no legislation establishing a Veterinary Statutory Body (VSB).

Licenses for practicing as a veterinarian in Iceland are given by the Ministry; the CVO within MAST is reviewing the application and interviewing all applicants to ensure that they are familiar with the Icelandic legislation. Applications from outside EEA are also reviewed by the Veterinary Council (with 4 veterinarians, one from Keldur, 1 from the veterinary association, 1 from the farmer association and 1 appointed by ministry).

However, it is not obligatory to understand Icelandic and there is no examination. Complaints about inappropriate work of veterinarians are handled by the CVO. There is an official veterinary code of conduct, which all veterinarians sign upon receiving their licence. In addition Icelandic Veterinary Association has Codex Ethicus. Non-acceptance or withdrawal of a license, although legally possible, has never happened. Continuing education is not an obligation for veterinarians to keep the license.

Strengths:

- Procedure exists for licensing veterinarians;
- Responsibility for complaints about veterinarians is clear.

Weaknesses:

- There is no VSB;
- Disciplinary measures/withdrawal of a license never happens;
- Continuing education of veterinarians is not obligatory.

Recommendations:

- Evaluate the possibilities to establish a VSB;
- Introduce CE for all veterinarians.

B. VSB capacity	Levels of advancement
<i>The capacity of the VSB to implement its functions and objectives in conformity with OIE standards.</i>	1. The VSB has no capacity to implement its functions and objectives.
	2. The VSB has the functional capacity to implement its main objectives.
	3. The VSB is an independent representative organisation with the functional capacity to implement all of its objectives.
	4. The VSB has a transparent process of decision making and conforms to OIE standards.
	5. The financial and institutional management of the VSB is submitted to external auditing.

Terrestrial Code reference(s): Appendix 1

A VSB does not exist.

A Veterinary Association (VA) exist with a Committee (president and 3 members). The VA has two parts, the academic for education and the Union of veterinarians (which is part of the umbrella organisation, the Academic Union).

All veterinarians working in Iceland (except owners of a veterinary practice) have to be member of a Union and if they are members of the VA they pay a fee of 1% of the salary. The Union is responsible for the conditions of the contracts of veterinarians (salary, holiday, disease...).

The VA has no legal basis and is not financially supported by the ministry.

Although the VA has a Committee on Ethics and there is a Codex Ethicus, they have no legal rights for action.

Strengths:

- A veterinary association exist.

Weaknesses:

- There is no VSB;
- The quality of the work, the initial education and the continuous education of veterinarians is not controlled.

Recommendations:

- Evaluate the possibilities to establish a VSB or evaluate how to introduce some objectives of a VSB;
- Strengthen the powers of the Committee of Ethics.

III-6 Participation of producers and other interested parties in joint programmes <i>The capability of the VS and producers and interested parties to formulate and implement joint programmes in regard to animal health and food safety. This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas</i>	Levels of advancement
	1. Producers and other interested parties only comply and do not actively participate in programmes.
	2. Producers and other interested parties are informed of programmes and assist the VS to deliver the programme in the field.
	3. Producers and other interested parties are trained to participate in programmes and advise of needed improvements, and participate in early detection of diseases.
	4. Representatives of producers and other interested parties negotiate with the VS on the organisation and delivery of programmes.
	5. Producers and other interested parties are formally organised to participate in developing programmes in close collaboration with the VS.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

Examples of participation from stakeholders include:

- Control programme against scrapie
- Control programme against paratuberculosis. Vaccination is paid by livestock owners. Vaccines are sold by PVP. Mandatory.
- Control programmes for Salmonella and Campylobacter.
- Identification of animals.

Strengths:

- Farmers' Association: database development etc.
- Control programmes on scrapie and paratuberculosis.

Weaknesses:

- Little involvement of private veterinary practitioners.

Recommendations:

- Participation of producers and PVP in early detection of diseases should be improved.

III.4 Fundamental component IV: Access to markets

This component of the evaluation concerns the authority and capability of the VS to provide support in order to access, expand and retain regional and international markets for animals and animal products. It comprises eight critical competencies.

Critical competencies:

Section IV-1	Preparation of legislation and regulations
Section IV-2	Implementation of legislation and regulations and compliance thereof
Section IV-3	International harmonisation
Section IV-4	International certification
Section IV-5	Equivalence and other types of sanitary agreements
Section IV-6	Transparency
Section IV-7	Zoning
Section IV-8	Compartmentalisation

Terrestrial Code References:

Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards.

Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection.

Points 1 and 3 of Article 3.2.8. on Animal health controls: Animal health status / National animal disease reporting systems.

Sub-point g) of Point 4 of Article 3.2.10. on Veterinary Services administration: Trade performance history.

Article 3.2.11. on Participation in OIE activities.

Points 6 and 10 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities / Membership of the OIE.

Chapter 3.4. on Veterinary legislation.

Chapter 4.3. on Zoning and compartmentalisation.

Chapter 4.4. on Application of compartmentalisation.

Chapter 5.1. on General obligations related to certification.

Chapter 5.2. on Certification procedures.

Chapter 5.3. on OIE procedures relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization.

Chapters 5.10. to 5.12. on Model international veterinary certificates.

IV-1 Preparation of legislation and regulations	Levels of advancement
<p><i>The authority and capability of the VS to actively participate in the preparation of national legislation and regulations in domains that are under their mandate, in order to guarantee its quality with respect to principles of legal drafting and legal issues (internal quality) and its accessibility, acceptability, and technical, social and economical applicability (external quality). This competency includes collaboration with relevant authorities, including other ministries and Competent Authorities, national agencies and decentralised institutions that share authority or have mutual interest in relevant areas</i></p>	1. The VS have neither the authority nor the capability to participate in the preparation of national legislation and regulations, which result in legislation that is lacking or is outdated or of poor quality in most fields of VS activity.
	2. The VS have the authority and the capability to participate in the preparation of national legislation and regulations and can largely ensure their internal quality, but the legislation and regulations are often lacking in external quality.
	3. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, with adequate internal and external quality in some fields of activity, but lack formal methodology to develop adequate national legislation and regulations regularly in all domains.
	4. The VS have the authority and the capability to participate in the preparation of national legislation and regulations, with a relevant formal methodology to ensure adequate internal and external quality, involving participation of interested parties in most fields of activity.
	5. The VS regularly evaluate and update their legislation and regulations to maintain relevance to evolving national and international contexts.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 6E, 22E, 30E, 38E

Findings:

The legal drafting is generally carried out by the Moll. There are 2 ways to get a Bill (Draft Act) to Parliament; firstly, by the Minister and secondly by a private Parliamentary Member. The Parliament is only concerned with the main Laws. Regulations are issued by the Minister.

The Ministry will in some cases, when drafting a new national legislation (not EEA legislation), form a special committee involving specialists from MAST and even stakeholders. The draft is submitted for comments to stakeholders and interest parties and then passed to the Moll for final revision.

There are also announcements, which are part of the legislation, but these are rarely used.

There is a list of legislation on the Moll internet and on the website of the Parliament and some pieces of legislation have been translated into English and were passed to the team. A table indicating correspondences with a list of legislation can be found at Appendix 8.

For all legislation concerning food and feed, as Iceland is a member of the EEA, this area is completely covered by EU legislation. However, for animal health and animal welfare this is purely Icelandic although some aspects of EU legislation and OIE standards have been used.

Strengths:

- The legislation is well developed with good coverage being primarily based on EU legislation;
- There is good internal consultation as well as with stakeholders.

Weaknesses:

- The Moll is mainly responsible for drafting legislation with input from various committees and MAST but this means, due to lack of human resources that MAST staff occasionally spend part of their time working on and reviewing legislation rather than on other work such as contingency planning;

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- Although MAST cannot initiate new legislation or amendments; there have been occasions when MAST has asked Moll to initiate new or updating of old legislation but has received limited and late responses;
 - Some quality drafting issues were noted e.g. legislation requires a consignment of meat to be Salmonella free but there is no indication of how this is to be achieved;
 - There is insufficient staff for drafting legislation and for carrying out their normal duties;
 - Stakeholders complain that Moll makes changes after joint committee procedures.

Recommendations:

- When drafting legislation improve internal and external quality;
- Explain to stakeholders reasons for changes after consultations;
- Review the legal possibility to allow MAST to initiate draft legislation in particular concerning updating old legislation and for necessary regulations;
- Ensure adequate numbers of staff to properly cover all functions.

IV-2 Implementation of legislation and regulations and compliance thereof	Levels of advancement
<i>The authority and capability of the VS to ensure compliance with legislation and regulations under the VS mandate.</i>	1. The VS have no or very limited programmes or activities to ensure compliance with relevant legislation and regulations.
	2. The VS implement a programme or activities comprising inspection and verification of compliance with legislation and regulations and recording instances of non-compliance, but generally cannot or do not take further action in most relevant fields of activity.
	3. Veterinary legislation is generally implemented. As required, the VS have a power to take legal action / initiate prosecution in instances of non-compliance in most relevant fields of activity.
	4. Veterinary legislation is implemented in all domains of veterinary competence and the VS work to minimise instances of non-compliance.
	5. The compliance programme is regularly subjected to audit by the VS or external agencies.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 4E, 6D E, 32E, 69H, 71H,73H, 91E,92E, 93E, annual report 94H

Findings:

The Food Act 93/1995 has been amended to include enforcement measures. MAST has developed detailed guidelines on how to follow up non-compliant cases.

Depending of the seriousness of a case, the inspectors may choose to use the following measures listed in Article 30 in the Act on Foodstuffs No 93/1995: issue safeguards or precaution; inform the general public of the nature of the risk to health; order decontamination of food; stop or limit the production and placing on the market of food, detain food and/or destroy it; shut down the activities of a food business; and withdraw the operating licence.

While MAST and LCAs have legal powers to impose daily fines until the corrective action has been implemented, they have not used it to date. The daily fines issued by the CAs are subject to Regulation IS No 767/2010. The regulation stipulates the maximum fines per day, at 500.000 ISK. The daily fines are subject to an administrative complaint to the Moll. Serious infringements may be reported to the police and eventually the courts for possible measures under criminal law.

The CAs may also order tasks to be performed at the expense of the business responsible for executing the task. Such costs and daily fines may be collected without a prior judgment or settlement.

In general, LCAs do not report their non-compliant cases to MAST, unless they are related to FBOs designated to LCAs by MAST or if there are any serious public health issues. The IS-leyfur database clearly identifies different degrees of non-compliance and actions to be taken but cannot easily extract a list of non-compliances – this has to be done by hand.

Sanctions, as described in Article 55 Regulation (EC) No 882/2004, may be imposed by the court. Article 31 of the Food Act No 93/1995 provides for a maximum imprisonment of 4 years in case of serious or repeated violations of law. There are no limits set out in law regarding the amount of fines.

The legal basis for sanctions is the Acts No 93/1995 on Foodstuffs (see Article 31), No 55/1998 on Fishery Products (see Article 32) and No 96/1997 on Slaughtering etc. (see Article 21).

Iceland is a member of the European Economic Area (EEA) and as such it is the EFTA Surveillance Authority (ESA) that carries out missions/audits in Iceland comparable to the ones that the Food and Veterinary Office of the EU (FVO) carries out in EU Member States.

In general 4-5 missions are carried out each year, in Iceland by ESA but not the FVO. The latter might come as an observer in occasional audits.

In Iceland it is the Icelandic National Audit Office that carries out irregular internal audits on public institutions and authorities. Such audits focus on various aspects of the work of the institutions and are mainly documentary checks. The National Audit Office carried out a general audit in 2013.

An internal and external audit system is being developed based on the requirements of Decision 2007/667/EC on audit guidelines and the ISO 19011:2—2 standard. The Quality Manager of MAST is responsible for the internal audit process as the Chief Auditor, under the authority of an audit committee and an audit steering committee. The Quality Manager is independent of all other organisations in MAST. The internal audit teams consist of MAST specialists who have received training as internal auditors at BTSF “training on audit systems and internal auditing’ and a TAIEX seminar on internal audits of official controls.

MAST is preparing a five-year plan (multi-annual internal audit plan for 2015-2019 (MANIAP)) to cover all areas of Regulation (EC) 882/2004 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 and all responsible authorities i.e. MAST, LCAs Laboratories and the Moll. An annual risk-based audit plan is also being developed based on the multi-annual programme as well as any recent developments previous audit findings and identified risk areas..

Mast has designed an audit system based on Article 4 of the above regulation that covers internal audits both at MAST and the LCAs. The Moll has certified the system but the audit committee is not appointed yet.

In the case of welfare breaches direct action can and is taken (see also animal welfare critical competency

Concerning animal health the VS do have direct powers of entry and right to sample; in accordance with Article 22 in Act 25/1993 on animal health where it says “[The Food and Veterinary Authority],⁽¹⁾ District Veterinary Officers and their representatives shall at all times be granted access to premises, farms and businesses where animals or their products are stored, and shall be provided with all information necessary for surveillance and testing purposes”. In cases where the owner denies entrance MAST could call for assistance from the police. In other less urgent cases a court order would be required which may take some time to obtain.

There are databases containing information on inspections carried out and the findings including non-compliances held both by MAST and the IMA but it was not possible to extract any overview of non-compliances.

Strengths:

- There are regular audits from many third countries (USA, Japan, China, Canada, Chile, Russia and ESA);
- Generally the legislation is well implemented;
- The VS work to minimise instances of non-compliance.

Weaknesses:

- There are some instances where the VS do not fully implement the legislation e.g. control and meat inspection in poultry slaughterhouses;
- Follow up of isolations of Salmonella in feed mill was carried out but at the time of the mission had not proved to be effective;

- Although in accordance with Act 25/1993 on animal health MAST has the responsibility of inspection of all farm animals, approval of sheep or horse farms for food production for animal health purposes is not in the legislation;
- There are databases containing information on inspections carried out and the findings including non-compliances held both by MAST and the IMA but, up to now, it has not been possible to extract any overview of non-compliances. The Mast database Isleyfur is being further developed which will improve the situation for 2016.

Recommendations:

- Rectify the instances noted where MAST is not fully implementing the legislation;
- Improve the link between risk analysis and risk evaluations from inspection visits to better address the problems noted;
- To add in the legislation approval of sheep and horse farms to cover those for food production;
- Improve outputs from databases so proper analysis and evaluation of results in particular for non-compliances can be made;
- Implement the possibility for MAST to give fines for non-compliances in all fields (which is currently only laid down in the Animal Welfare Act and in the Act on Feed, Fertiliser and Seeds.)

IV-3 International harmonisation <i>The authority and capability of the VS to be active in the international harmonisation of regulations and sanitary measures and to ensure that the national legislation and regulations under their mandate take account of relevant international standards, as appropriate.</i>	Levels of advancement
	1. National legislation, regulations and sanitary measures under the mandate of the VS do not take account of international standards.
	2. The VS are aware of gaps, inconsistencies or non-conformities in national legislation, regulations and sanitary measures as compared to international standards, but do not have the capability or authority to rectify the problems.
	3. The VS monitor the establishment of new and revised international standards, and periodically review national legislation, regulations and sanitary measures with the aim of harmonising them, as appropriate, with international standards, but do not actively comment on the draft standards of relevant intergovernmental organisations.
	4. The VS are active in reviewing and commenting on the draft standards of relevant intergovernmental organisations.
	5. The VS actively and regularly participate at the international level in the formulation, negotiation and adoption of international standards ⁶ , and use the standards to harmonise national legislation, regulations and sanitary measures.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

Several regulations are based on the EEA agreement i.e. EU legislation, especially regarding food and feed safety.

Many missions are carried out in Iceland by ESA and importing countries which aids the CA in raising the need to draft new legislation or amend existing ones revised. The VS do not actively participate in the international harmonisation of regulations and sanitary measures. In addition, IMA is not involved in commenting on revisions to the OIE Code and the OIE Focal Points for Veterinary Products and Animal Welfare are not appointed.

Strengths:

- EFTA surveillance authority (ESA) and importing countries conduct regular missions in the country to advise on the potential needs for revision of the legislation and issues in its implementation.

Weaknesses:

- Are not active in reviewing and commenting on the draft standards of relevant intergovernmental organisations;
- Do not participate in the regular EU OIE coordination meetings.

Recommendations:

- Be more active in reviewing and commenting on draft international standards;
- Ensure participation in EU OIE co-ordination meetings and for Codex.

⁶ A country could be active in international standard setting without actively pursuing national changes. The importance of this element is to promote national change.

IV-4 International certification⁷ <i>The authority and capability of the VS to certify animals, animal products, services and processes under their mandate, in accordance with the national legislation and regulations, and international standards.</i>	Levels of advancement
	1. The VS have neither the authority nor the capability to certify animals, animal products, services or processes.
	2. The VS have the authority to certify certain animals, animal products, services and processes, but are not always in compliance with the national legislation and regulations and international standards.
	3. The VS develop and carry out certification programmes for certain animals, animal products, services and processes under their mandate in compliance with international standards.
	4. The VS develop and carry out all relevant certification programmes for any animals, animal products, services and processes under their mandate in compliance with international standards.
	5. The VS carry out audits of their certification programmes, in order to maintain national and international confidence in their system.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): Link to the EFTA's FTAs: <http://www.efta.int/free-trade/free-trade-agreements>, <https://www.utanrikisraduneyti.is/samningar/friverslunarsamningar/> and [interviews with staff](#).

Findings:

MAST has the authority and capacity to issue international certificates for the export of pets, live horses, lamb and horse meat, hides & skins and fish products. This is evidenced by the many agreements with other countries including USA, China and Russia. In addition, according to the EEA agreement there is free trade of Icelandic products within the EEA without issuing certificates.

Strengths:

- Recognition by several countries of the international certification system implemented by MAST.

Weaknesses:

- VS do not carry out internal audits (only external). This is however compensated by the numerous audits conducted by ESA and the trading partners. See additional information in IV-2 concerning internal audits

Recommendations:

- None.

⁷ Certification procedures should be based on relevant OIE and Codex Alimentarius standards.

IV-5 Equivalence and other types of sanitary agreements	Levels of advancement
<i>The authority and capability of the VS to negotiate, implement and maintain equivalence and other types of sanitary agreements with trading partners.</i>	1. The VS have neither the authority nor the capability to negotiate or approve equivalence or other types of sanitary agreements with other countries.
	2. The VS have the authority to negotiate and approve equivalence and other types of sanitary agreements with trading partners, but no such agreements have been implemented.
	3. The VS have implemented equivalence and other types of sanitary agreements with trading partners on selected animals, animal products and processes.
	4. The VS actively pursue the development, implementation and maintenance of equivalence and other types of sanitary agreements with trading partners on all matters relevant to animals, animal products and processes under their mandate.
	5. The VS actively work with interested parties and take account of developments in international standards, in pursuing equivalence and other types of sanitary agreements with trading partners.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6): 117A,117B,178-A E,178-B E and Link to the EFTA's FTAs: <http://www.efta.int/free-trade/free-trade-agreements>, [https://www.utanrikisraduneyti.is/samningar/friverslunarsamningar/ and interviews with staff.](https://www.utanrikisraduneyti.is/samningar/friverslunarsamningar/and_interviews_with_staff)

Findings:

Iceland has agreements with several countries and with EEA which function very well and in general, regarding export or trade to other countries, there are very few SPS (Sanitary and Phytosanitary) agreements.

Iceland has a great number of free trade agreements (FTA) with various countries. In these there is usually a chapter on SPS matters. The majority of the FTAs having been made through EFTA (European Free Trade Association) of which Iceland is a member.

Probably the most important FTA for Iceland is the EEA agreement, giving Iceland access to the EU market. This has been done by implementation of EU's legislation into Icelandic legislation.

There are various other FTAs in force, which are specifically between Iceland and a particular country (which are not available in English). There is the link to these on the website of the Ministry of Foreign Affairs:

<https://www.utanrikisraduneyti.is/samningar/friverslunarsamningar/> and there are some links to English editions of some of the FTAs and in most instances the appendices.

The only specific SPS agreements Iceland has are with Russia (see attachments). From the Icelandic side, they are not very sure of the validity of these since the establishment of the Eurasian Economic Union (EAEU).

Strengths:

- Iceland has many agreements and working on implementing additional agreements with China.

Weaknesses:

- None.

Recommendations:

- None.

IV-6 Transparency	Levels of advancement
<i>The authority and capability of the VS to notify the OIE of its sanitary status and other relevant matters (and to notify the WTO SPS Committee where applicable), in accordance with established procedures.</i>	1. The VS do not notify.
	2. The VS occasionally notify.
	3. The VS notify in compliance with the procedures established by these organisations.
	4. The VS regularly inform interested parties of changes in their regulations and decisions on the control of relevant diseases and of the country's sanitary status, and of changes in the regulations and sanitary status of other countries.
	5. The VS, in cooperation with their interested parties, carries out audits of their transparency procedures.

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings:

Iceland regularly (after sometimes some reminders from OIE) sends 6 monthly and annual reports to OIE and some other disease reports. It does not notify changes to its legislation or new legislation to WTO/SPS focal point.

It was noted that there is a general obligation for the reporting of suspicion of an Icelandic listed disease in the Icelandic legislation.

However an epidemic of equine respiratory disease characterized by coughing and nasal discharge but normal temperature with the first cases reported in early April 2010 by a private veterinary practitioner (PVP) was probably introduced in January 2009. A water treadmill was at the primary centre of transmission with the probable incursion between the 5th and 10th February 2010. There was a high dose infection of the resident horses and during February and March the disease was transmitted from there to at least 18 new training yards. The export of horses was stopped in the beginning of May 2010 and was resumed September 14th. The disease was eventually found to be caused by *Streptococcus zooepidemicus* strain ST209 following testing of samples being sent to the Newmarket laboratory in the UK. It must be noted that there was a considerable delay in sending samples from the NRL to the UK.

NB There was no report of this as an exceptional event to the OIE.

Strengths:

- Annual reports are published on the MAST website;
- 6 month and annual reports are sent to OIE;
- Iceland is part of the EU Animal Disease Notification System;
- The OIE Focal Point for disease notification is appointed.

Weaknesses:

- MAST does not notify WTO when legislation is being changed;
- Exceptional report of streptococcus infection in horses was not sent to OIE;
- Lack of WTO/SPS specific designated contact person (the Authority is designated as a whole as the SPS contact point for Iceland).

Recommendations:

- Improve notifications to international bodies and other interested parties;
- Ensure all unusual disease events notified to OIE.

IV-7 Zoning	Levels of advancement
<i>The authority and capability of the VS to establish and maintain disease free zones, as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).</i>	1. The VS cannot establish disease free zones.
	2. As necessary, the VS can identify animal sub-populations with distinct health status suitable for zoning.
	3. The VS have implemented biosecurity measures that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary.
	4. The VS collaborate with producers and other interested parties to define responsibilities and execute actions that enable it to establish and maintain disease free zones for selected animals and animal products, as necessary.
	5. The VS can demonstrate the scientific basis for any disease free zones and can gain recognition by trading partners that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).

Terrestrial Code reference(s): Appendix 1

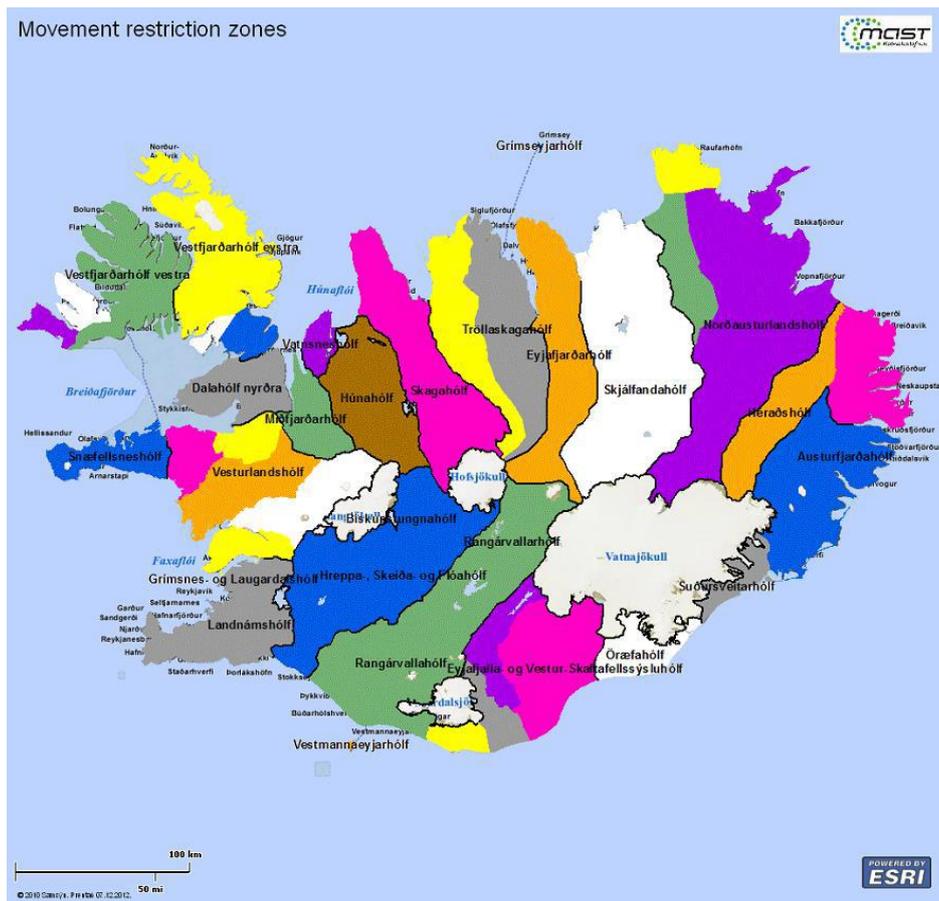
Evidence (listed in Appendix 6): 1E, 6D E, 32E

Findings: Not applicable at this stage

The zoning in Iceland for scrapie and paratuberculosis is not according to the OIE standards and this is explained here.

To prevent spreading of diseases, the country is divided into surveillance, quarantine, and movement restriction zones, separated by natural barriers or fences, see map below. The zones were first established in 1937. For decades the number of zones was 36 but due to improved animal health status within the zones, some zones have been merged and the number is now 26, see regulation no. 793/2009 and 867/2010. The zones are categorized according to the status of the most important infectious diseases. Sheep in each zone are ear-tagged with special colour, according to an official map. Transport of sheep, goats and cattle between zones is prohibited or strictly controlled, depending on the disease status of the zones, and sheep straying over boundaries are killed. Movement of cattle between zones is only allowed upon approval by the veterinary authority. Transport of sheep within scrapie-infected zones is prohibited or strictly controlled. Transport of hay and agricultural machinery between zones is prohibited without a special permission.

Figure 13: Movement restriction zones



The zones are divided by fences, natural barriers (rivers, glaciers, mountains) and cattle grids in roads that are financed by the Moll (MAST is responsible for contracts) but there is lack of financial resources to properly maintain them. In addition, sheep from different zones can be identified by their ear tag colours. There are movement restrictions in the zones to protect the free zones but the sheep can mix during summer grazing on the hills however when gathered to bring them in for the winter any sheep found from other zones are immediately taken to be slaughtered. This is done under the control of a designated farmer; there is no VS supervision. Adult sheep are not allowed to move in a non-free scrapie zone to another farm either in that zone or to another zone only lambs can be authorised to move to another farm. The reason given was that adult sheep would try to get back to their original home.

Strengths:

- There are good animal identification systems in place;
- There are very few animals kept outside. Gracing animals are kept outside in summer (June – October) and cattle must be kept outside on pasture for a minimum of 8 weeks of the year;
- There are no free ranging swine;
- There are no free range poultry except for a few hobby farmers;
- The whole country is divided/defined in zoning areas for sheep concerning scrapie and paratuberculosis controls with fencing and specific movement controls, (see map above).

- Zoning does exist for sheep;
- Animal ID and databases for recording of animals and their movement would facilitate zoning if required.

Weaknesses:

- The zoning for sheep is not strictly according to OIE standards;
- The zoning does not fully apply when sheep need to be moved for summer grazing as there is mixing and contact between different flocks when gathered and some sheep from other zones are normally found;
- NFA and local farmers association complained not enough resources to maintain fences adequately.

Recommendations:

- Ensure adequate budget and proper maintenance of fences separating zones;
- Review programme in particular concerning movement controls, restrictions and numbers of zones for scrapie and paratuberculosis.

IV-8 Compartmentalisation	Levels of advancement
<i>The authority and capability of the VS to establish and maintain disease free compartments as necessary and in accordance with the criteria established by the OIE (and by the WTO SPS Agreement where applicable).</i>	1. The VS cannot establish disease free compartments. ⁸
	2. As necessary, the VS can identify animal sub-populations with a distinct health status suitable for compartmentalisation.
	3. The VS ensure that biosecurity measures to be implemented enable it to establish and maintain disease free compartments for selected animals and animal products, as necessary.
	4. The VS collaborate with producers and other interested parties to define responsibilities and execute actions that enable it to establish and maintain disease free compartments for selected animals and animal products, as necessary.
	5. The VS can demonstrate the scientific basis for any disease free compartments and can gain recognition by other countries that they meet the criteria established by the OIE (and by the WTO SPS Agreement where applicable).

Terrestrial Code reference(s): Appendix 1

Evidence (listed in Appendix 6):

Findings: Not applicable at this stage

NB There is no intention to use compartmentalisation in terrestrial species at this time. However the VS are working on compartmentalisation for the aquaculture farms and the VS have a good understanding of the principles of zoning. If needed it would be possible to introduce compartmentalisation in some areas e.g., poultry breeders.

Strengths:

- VS working on introducing compartmentalisation for aquaculture farms;
- VS understand the principles of compartmentalisation;
- Breeding fish stock for aquaculture are identified using microchips;
- There are good biosecurity programmes in place for poultry.

Weaknesses:

Not applicable.

Recommendations:

Not applicable at this time.

⁸ If the VS has the authority and capability but chooses not to implement compartmentalisation, this CC should be recorded as “not applicable at this stage”

PART IV: CONCLUSIONS

Iceland has and maintains a high disease free status that is a result of its island situation and a restrictive import policy in particular concerning live animals. This has given Iceland a good advantage and realised opportunities to export to a wide range of markets: lamb meat, horsemeat, aquaculture, fish/fishery products and Icelandic horses (32 countries).

As a result of membership of the EEA Iceland has taken over a lot of EU legislation in particular concerning EU food and feed regulations. Whereas because of the need to preserve its high health status it has not taken over EU legislation in the animal health area. New welfare legislation has been introduced this year which although it does not completely take over EU legislation it does reflect international standards.

The government is slowly making MAST (The Icelandic Food and Veterinary Authority in English but Food Authority in Icelandic) responsible for more areas, however MAST cannot initiate legislation, this has to be done by the Moll and its budget is controlled by the Moll.

The VS has well qualified and conscientious veterinarians in spite of recent difficulties (strike over pay etc.) but some are frustrated over their conditions and a perceived lack of support from HQ. There is a shortfall in the number of veterinarians and limited specialised veterinarians. There are problems with attracting Icelandic veterinarians, mainly because of a lack of Icelandic veterinarians and partly as the salaries and working environment in MAST are not so attractive to Icelandic graduates, who have to train abroad because there is no veterinary faculty in Iceland. Because of this, some foreign veterinarians are employed but most do not speak Icelandic and this causes problems. There is no Veterinary Statutory Body in Iceland although the registration of veterinarians and complaints are handled by the CVO. There are very few technical staff and secretarial support e.g. the CVO or DVOs do not have a personal assistant. The CVO and DVOs are supported by the Office for Administration and the Office of Legal Affairs for all relevant issues including enforcement actions taken by the Authority.

There has been an increasing and diverse workload which has necessitated prioritisation of work and therefore not all areas of the veterinary domain are being adequately covered. There are budgetary constraints, which are affecting the overall ability to cover all aspect of the work, as well as lack of maintenance of the zonal fences. This also limits training, continuing education and attendance to meetings and conferences abroad.

In making decisions on priorities the Authority has put emphasis on implementing and applying new legislative measures in the area of food and feed and similarly the same has been the case for the new legislation on animal welfare.. As a consequence there has not been the same emphasis with respect to the implementation of the risk classification system and consequently the frequency of inspections in businesses for animal health aspects although it is noted that more staff are involved in animal health controls than in food and feed controls

Iceland has a negligible OIE risk status for BSE and there are control plans for a number of diseases such as scrapie, paratuberculosis salmonella and campylobacter. There are good surveillance programmes in place but a few exotic diseases have been introduced, some identified via the surveillance testing programme e.g. IBR, others by veterinarians but there have been problems with early identification of disease.

The main challenges for the country are firstly concerning attracting and retaining suitably qualified veterinarians and technical staff and ensuring continuous education. Secondly maintaining the disease status in spite of significant increase in tourism and imports. This means improving surveillance, disease awareness, improving coverage of contingency planning and carrying out disease simulation exercises.

MAST has had to prioritise as there is a lack of staff to carry out all the functions and responsibilities required by MAST in order inter alia to ensure the maintenance of the high health status. In addition the VS and stakeholders need to better co-operate to improve the quality and efficiency of livestock production and the rest of the food chain. It is important also to improve traveller awareness to avoid jeopardising the health status and thereby maintaining and improving market access for Iceland.

Iceland could consider as the next steps to request OIE missions for a specific PVS for aquaculture, a PVS GAP analysis and a PVS Veterinary legislation.

PART V: APPENDICES

Appendix 1: Terrestrial Code references for critical competencies

Critical Competences	Terrestrial Code references
I.1.A I.1.B I.2.A I.2.B	<ul style="list-style-type: none"> ➤ Points 1-5 of Article 3.1.2. on Fundamental principles of quality: Professional judgement / Independence / Impartiality / Integrity / Objectivity. ➤ Points 7 and 14 of Article 3.1.2. on Fundamental principles of quality: General organisation / Human and financial resources. ➤ Article 3.2.5. on Evaluation criteria for human resources. ➤ Article 3.2.12. on Evaluation of the veterinary statutory body. ➤ Points 1-2 and 5 of Article 3.2.14. on Organisation and structure of Veterinary Services / National information on human resources / Laboratory services.
I.3	<ul style="list-style-type: none"> ➤ Points 1, 7 and 14 of Article 3.1.2. on Fundamental principles of quality: Professional judgement / General organisation / Human and financial resources. ➤ Article 3.2.5. on Evaluation criteria for human resources. ➤ Sub-point d) of Point 4 of Article 3.2.10. on Veterinary Services administration: In-service training and development programme for staff. ➤ Point 9 of Article 3.2.14. on Performance assessment and audit programmes.
I.4	<ul style="list-style-type: none"> ➤ Point 2 of Article 3.1.2. on Fundamental principles of quality: Independence.
I.5	<ul style="list-style-type: none"> ➤ Point 1 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➤ Point 9 of Article 3.2.14. on Performance assessment and audit programmes.
I.6.A I.6.B	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Article 3.2.2. on Scope. ➤ Points 1 and 2 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➤ Point 4 of Article 3.2.10. on Performance assessment and audit programmes: Veterinary Services administration.
I.7	<ul style="list-style-type: none"> ➤ Point 2 of Article 3.2.4. on Evaluation criteria for quality system: “Where the Veterinary Services undergoing evaluation... than on the resource and infrastructural components of the services”. ➤ Points 2 and 3 of Article 3.2.6. on Evaluation criteria for material resources: Administrative / Technical. ➤ Point 3 of Article 3.2.10. on Performance assessment and audit programmes: Compliance. ➤ Point 4 of Article 3.2.14. on Administration details.
I.8 I.9 I.10	<ul style="list-style-type: none"> ➤ Points 6 and 14 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Human and financial resources. ➤ Point 1 of Article 3.2.6. on Evaluation criteria for material resources: Financial. ➤ Point 3 of Article 3.2.14. on Financial management information.
I.11	<ul style="list-style-type: none"> ➤ Points 7, 11 and 14 of Article 3.1.2. on Fundamental principles of quality: General organisation / Documentation / Human and financial resources. ➤ Point 4 of Article 3.2.1. on General considerations. ➤ Point 1 of Article 3.2.2. on Scope. ➤ Article 3.2.6. on Evaluation criteria for material resources. ➤ Article 3.2.10. on Performance assessment and audit programmes.
II.1A II.1B II.2	<ul style="list-style-type: none"> ➤ Point 9 of Article 3.1.2. on Fundamental principles of quality: Procedures and standards. ➤ Point 1 of Article 3.2.4. on Evaluation criteria for quality systems. ➤ Point 3 of Article 3.2.6. on Evaluation criteria for material resources: Technical. ➤ Point 5 of Article 3.2.14. on Laboratory services.
II.3	<ul style="list-style-type: none"> ➤ Chapter 2.1. on Import risk analysis
II.4	<ul style="list-style-type: none"> ➤ Points 6 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Procedures and standards. ➤ Point 2 of Article 3.2.7. on Legislation and functional capabilities: Export/import inspection.

	<ul style="list-style-type: none"> ➤ Points 6 and 7 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls.
II.5.A II.5.B	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems. ➤ Sub-points a) i), ii) and iii) of Point 7 of Article 3.2.14. on Animal health: Description of and sample data from any national animal disease reporting system controlled and operated or coordinated by the Veterinary Services / Description of and sample reference data from other national animal disease reporting systems controlled and operated by other organisations which make data and results available to Veterinary Services / Description and relevant data of current official control programmes including:... or eradication programmes for specific diseases. ➤ Chapter 1.4. on Animal health surveillance. ➤ Chapter 1.5. on Surveillance for arthropod vectors of animal diseases.
II.6	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems. ➤ Sub-point a) of Point 7 of Article 3.2.14. on Animal health and veterinary public health controls: Animal health.
II.7	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Points 1-3 of Article 3.2.8. on Animal health controls: Animal health status / Animal health control / National animal disease reporting systems. ➤ Sub-point a) of Point 7 of Article 3.2.14. on Animal health and veterinary public health controls: Animal health. ➤ Chapter 4.12. on Disposal of dead animal.
II.8.A II.8.B II.8.C	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Article 3.4.12. on Human food production chain. ➤ Points 1-5 of Article 3.2.9. on Veterinary public health controls: Food hygiene / Zoonoses / Chemical residue testing programmes / Veterinary medicines/ Integration between animal health controls and veterinary public health. ➤ Points 2, 6 and 7 of Article 3.2.14. on National information on human resources / Veterinary legislation, regulations and functional capabilities / Animal health and veterinary public health controls. ➤ Chapter 6.2. on Control of biological hazards of animal health and public health importance through ante- and post-mortem meat inspection. <p>References to Codex Alimentarius Commission standards:</p> <ul style="list-style-type: none"> ➤ Code of Hygienic practice for meat (CAC/RCP 58-2005). ➤ Code of Hygienic practice for milk and milk products (CAC/RCP/ 57-2004). ➤ General Principles of Food Hygiene (CAC/RCP 1-1969; amended 1999. Revisions 1997 and 2003).
II.9	<ul style="list-style-type: none"> ➤ Points 6 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / Procedures and standards. ➤ Points 3 and 4 of Article 3.2.9. on Veterinary public health controls: Chemical residue testing programmes / Veterinary medicines. ➤ Sub-point a) ii) of Point 6 of Article 3.2.14. on Animal health and veterinary public health: Assessment of ability of Veterinary Services to enforce legislation. ➤ Chapters 6.6. to 6.10. on Antimicrobial resistance.
II.10	<ul style="list-style-type: none"> ➤ Points 3 and 4 of Article 3.2.9. on Veterinary public health controls: Chemical residue testing programmes / Veterinary medicines. ➤ Sub-points b) iii) and iv) of Point 7 of Article 3.2.14. on Veterinary public health: Chemical residue testing programmes / Veterinary medicines.
II.11	<ul style="list-style-type: none"> ➤ Chapter 6.3. on Control of hazards of animal health and public health importance in animal feed.
II.12.A II.12.B	<ul style="list-style-type: none"> ➤ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➤ Chapter 4.1. on General principles on identification and traceability of live animals. ➤ Chapter 4.2. on Design and implementation of identification systems to achieve animal traceability.

II.13	➤ Section 7 on Animal Welfare
III.1	<ul style="list-style-type: none"> ➤ Point 13 of Article 3.1.2. on Fundamental principles of quality: Communication. ➤ Sub-point b) of Point 2 of Article 3.2.6. on Administrative resources: Communications. ➤ Point 4 of Article 3.2.14. on Administration details. ➤ Chapter 3.3. on Communication.
III.2	<ul style="list-style-type: none"> ➤ Point 13 of Article 3.1.2. on Fundamental principles of quality: Communication. ➤ Point 2 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➤ Point 4 and Sub-point g) of Point 9 of Article 3.2.14. on Administration details and on Sources of independent scientific expertise. ➤ Chapter 3.3. on Communication.
III.3	<ul style="list-style-type: none"> ➤ Article 3.2.11. on Participation on OIE activities. ➤ Point 4 of Article 3.2.14. on Administration details.
III.4	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Point 7 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➤ Article 3.4.5. on Competent Authorities.
III.5.A III.5.B	<ul style="list-style-type: none"> ➤ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➤ Point 9 of Article 3.2.1. on General considerations. ➤ Article 3.2.12. on Evaluation of the veterinary statutory body. ➤ Article 3.4.6. on Veterinarians and veterinary para-professionals.
III.6	<ul style="list-style-type: none"> ➤ Points 6 and 13 of Article 3.1.2. Fundamental principles of quality: Veterinary legislation / Communication. ➤ Points 2 and 7 of Article 3.2.3. on Evaluation criteria for the organisational structure of the Veterinary Services. ➤ Point 7 of Article 3.2.14. on Animal health and veterinary public health controls. ➤ Point 4 of Article 3.4.3. on General principles: Consultation.
IV.1	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection. ➤ Point 6 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities. ➤ Chapter 3.4. on Veterinary legislation.
IV.2	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Points 1 and 2 of Article 3.2.7. on Legislation and functional capabilities: Animal health, animal welfare and veterinary public health / Export/import inspection. ➤ Point 6 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities.
IV.3	<ul style="list-style-type: none"> ➤ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➤ Article 3.2.11. on Participation in OIE activities. ➤ Points 6 and 10 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities / Membership of the OIE.
IV.4	<ul style="list-style-type: none"> ➤ Points 6, 7 and 9 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation / Procedures and standards. ➤ Point 2 of Article 3.2.7. on Legislation and functional capabilities: Export/import inspection. ➤ Sub-point b) of Point 6 of Article 3.2.14. on Veterinary legislation, regulations and functional capabilities: Export/import inspection. ➤ Chapter 5.2. on Certification procedures. ➤ Chapters 5.10. to 5.12. on Model international veterinary certificates.
IV.5	<ul style="list-style-type: none"> ➤ Points 6 and 7 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation / General organisation. ➤ Sub-point g) of Point 4 of Article 3.2.10. on Veterinary Services administration: Trade performance history. ➤ Chapter 5.3. on OIE procedures relevant to the Agreement on the Application of Sanitary and Phytosanitary Measures of the World Trade Organization.
IV.6	<ul style="list-style-type: none"> ➤ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation. ➤ Points 1 and 3 of Article 3.2.8. on Animal health controls: Animal health status / National animal disease reporting systems. ➤ Chapter 5.1. on General obligations related to certification.

IV.7	➤ Point 6 of Article 3.1.2. on Fundamental principles of quality: Veterinary legislation.
IV.8	➤ Chapter 4.3. on Zoning and compartmentalisation. ➤ Chapter 4.4. on Application of compartmentalisation.

Appendix 2: Glossary of terms

Terms defined in the Terrestrial Code that are used in this publication are reprinted here for ease of reference.

Animal

means a mammal, bird or bee.

Animal identification

means the combination of the identification and registration of an animal individually, with a unique identifier, or collectively by its epidemiological unit or group, with a unique group identifier.

Animal identification system

means the inclusion and linking of components such as identification of establishments/owners, the person(s) responsible for the animal(s), movements and other records with animal identification.

Animal welfare

means how an animal is coping with the conditions in which it lives. An animal is in a good state of welfare if (as indicated by scientific evidence) it is healthy, comfortable, well nourished, safe, able to express innate behaviour, and if it is not suffering from unpleasant states such as pain, fear and distress. Good animal welfare requires disease prevention and veterinary treatment, appropriate shelter, management, nutrition, humane handling and humane slaughter/killing. Animal welfare refers to the state of the animal; the treatment that an animal receives is covered by other terms such as animal care, animal husbandry, and humane treatment.

Border post

means any airport, or any port, railway station or road check-point open to international trade of commodities, where import veterinary inspections can be performed.

Compartment

means an animal subpopulation contained in one or more establishments under a common biosecurity management system with a distinct health status with respect to a specific disease or specific diseases for which required surveillance, control and biosecurity measures have been applied for the purposes of international trade.

Competent Authority

means the Veterinary Authority or other Governmental Authority of a Member, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the Terrestrial Code and the OIE Aquatic Animal Health Code in the whole territory.

Disease

means the clinical and/or pathological manifestation of infection.

Emerging disease

means a new infection or infestation resulting from the evolution or change of an existing pathogenic agent, a known infection or infestation spreading to a new geographic area or population, or a previously unrecognised pathogenic agent or disease diagnosed for the first time and which has a significant impact on animal or public health.

Equivalence of sanitary measures

means the state wherein the sanitary measure(s) proposed by the exporting country as an alternative to those of the importing country, achieve(s) the same level of protection.

International veterinary certificate

means a certificate, issued in conformity with the provisions of Chapter 5.2., describing the animal health and/or public health requirements which are fulfilled by the exported commodities.

Laboratory

means a properly equipped institution staffed by technically competent personnel under the control of a specialist in veterinary diagnostic methods, who is responsible for the validity of the results. The Veterinary Authority approves and monitors such laboratories with regard to the diagnostic tests required for international trade.

Meat

means all edible parts of an animal.

Notifiable disease

means a disease listed by the Veterinary Authority, and that, as soon as detected or suspected, must be brought to the attention of this Authority, in accordance with national regulations.

Official control programme

means a programme which is approved, and managed or supervised by the Veterinary Authority of a country for the purpose of controlling a vector, pathogen or disease by specific measures applied throughout that country, or within a zone or compartment of that country.

Official Veterinarian

means a veterinarian authorised by the Veterinary Authority of the country to perform certain designated official tasks associated with animal health and/or public health and inspections of commodities and, when appropriate, to certify in conformity with the provisions of Chapters 5.1. and 5.2. of the Terrestrial Code.

Official veterinary control

means the operations whereby the Veterinary Services, knowing the location of the animals and after taking appropriate actions to identify their owner or responsible keeper, are able to apply appropriate animal health measures, as required. This does not exclude other responsibilities of the Veterinary Services e.g. food safety.

Risk analysis

means the process composed of hazard identification, risk assessment, risk management and risk communication.

Risk assessment

means the evaluation of the likelihood and the biological and economic consequences of entry, establishment and spread of a hazard within the territory of an importing country.

Risk management

means the process of identifying, selecting and implementing measures that can be applied to reduce the level of risk.

Sanitary measure

means a measure, such as those described in various Chapters of the Terrestrial Code, destined to protect animal or human health or life within the territory of the OIE Member from risks arising from the entry, establishment and/or spread of a hazard.

Surveillance

means the systematic ongoing collection, collation, and analysis of information related to animal health and the timely dissemination of information so that action can be taken.

Terrestrial Code

means the OIE Terrestrial Animal Health Code.

Veterinarian

means a person with appropriate education, registered or licensed by the relevant veterinary statutory body of a country to practice veterinary medicine/science in that country.

Veterinary Authority

means the Governmental Authority of an OIE Member, comprising veterinarians, other professionals and para-professionals, having the responsibility and competence for ensuring or supervising the implementation of animal health and welfare measures, international veterinary certification and other standards and recommendations in the Terrestrial Code in the whole territory.

(Veterinary) legislation

means the collection of specific legal instruments (primary and secondary legislation) required for the governance of the veterinary domain.

Veterinary para-professional

means a person who, for the purposes of the Terrestrial Code, is authorised by the veterinary statutory body to carry out certain designated tasks (dependent upon the category of veterinary para-professional) in a territory, and delegated to them under the responsibility and direction of a veterinarian. The tasks for each category of veterinary para-professional should be defined by the veterinary statutory body depending on qualifications and training, and according to need.

Veterinary Services

means the governmental and non-governmental organisations that implement animal health and welfare measures and other standards and recommendations in the Terrestrial Code and the OIE Aquatic Animal Health Code in the territory. The Veterinary Services are under the overall control and direction of the Veterinary Authority. Private sector organisations, veterinarians, veterinary paraprofessionals or aquatic animal health professionals are normally accredited or approved by the Veterinary Authority to deliver the delegated functions.

Veterinary statutory body

means an autonomous regulatory body for veterinarians and veterinary para-professionals.

Wildlife

means feral animals, captive wild animals and wild animals.

Zoonosis

means any disease or infection which is naturally transmissible from animals to humans.

Appendix 3. List of persons met or interviewed

Date	Name	Position	Institution	Location
Opening meeting				
Day 1	Jon Gislason	DG	MAST	Selfoss
	Sigurborg Dadadottir	CVO	MAST	Selfoss
	Eggert Olafsson	Legal Council	Moll	Reykjavik
	Halldor Runolfsson	Senior Adviser	Moll	Reykjavik
	Astfridur Sigurdardottir	Senior Officer	MAST	Selfoss
	Kjartan Hreinsson	Chief of meat inspection and dairies	MAST	Selfoss
		Head of Office	MAST	Selfoss

Date	Name	Position	Institution	Location
Meeting with the Minister				
Day 2	Mr. Sigurdur Ingi Johannsson	Minister of Agriculture and Fisheries	Moll	Reykjavik
	Jon Gislason	DG	MAST	Selfoss
	Sigurborg Dadadottir	CVO	MAST	Selfoss
	Eggert Olafsson	Legal Counsel	Moll	Reykjavik
	Halldor Runolfsson	Senior Adviser	Moll	Reykjavik
	Konrad Konradsson	DVO	MAST	Reykjavik
	Margret Bragadottir	Senior Officer	MAST	Selfoss

Date	Name	Position	Institution	Location
Day 1	Sveinn Olafsson	Veterinarian	Veterinary Clinic	Stuolar Nr Selfoss
	Asdis Linda Sverrisdottir	Veterinarian	Veterinary Clinic	Stuolar Nr Selfoss
	Asdis Bjork Fridgeirsdottir	Inspector	IMA	Stuolar Nr Selfoss
Day 3	Magnus H Gudjonsson	Managing Director	LCA	Suournes
	Gisli Jonsson	Veterinary officer for fish diseases	MAST	Selfoss
	Thorsteinn Sigmundsson	Farmer	Ellioahvammur (Egg laying farm)	Kopavogur
	Kristin Bjorg Gudmundsdotter	VO veterinary inspector	MAST	Selfoss
	Bjorn Styrmir Arnason	Manager	Veterinary Clinic	Garoabaer
	Dr Jakobina Sigvaldadottir	Veterinarian	Veterinary Clinic	Garoabaer
	Asdis Bjork Fridgeirsdottir	Inspector	IMA	Reykjavik
	Brynhildur Briem	Inspector	IMA	Reykjavik

Date	Name	Position	Institution	Location
Final meeting				
Day 10	Jon Gislason	DG	MAST	Selfoss
	Bjarki Rafn Kristjansson	Director of Administration	MAST	Selfoss
	Sigurdur Orn Hansson	Director of Food Safety	MAST	Selfoss
	Eggert Olafsson	Legal Council	Moll	Reykjavik
	Sigurborg Dadadottir	CVO		Selfoss
	Halldor Runolfsson	Senior Adviser	Moll	Reykjavik

Please see scanned sheets for the rest of the contacts which follow:

UNIT 4

NAME CONTACT DETAILS POSITION INSTITUTION LOCATION

Tómas Jónsson	tomas@mattugl.is	Veterinarian / Quality manager	Mattugl ehf	Mosfellsbær
Steinn Jónsson	steinn@mattugl.is	General Manager	Mattugl ehf	Mosfellsbær
Ken Cou	kenkou@masst.is	DVD	Mask —	—
EINAR THORISSON	EINAR@ADFONG.IS	Buying Director	ADFong	Reykjavik
Páll Jónsson	palli@adfong.is	Custom	ADFong	Reykjavik

NAME	CONTACT DETAILS	POSITION	INSTITUTION	LOCATION
Wija Ariyani	wija-ariyani@mast.is	Vet. officer	MAST	Selfoss
Gunnar Þorkeiðsson	gunnar.thorkeiðsson@mast.is	DVO	MAST	Selfoss
Sveinur Þorkeiðsson	sveinur.thorkeiðsson@mast.is	Vet. officer	MAST	Selfoss
Þjörgvín Þorðardóttir	bjorgvinb@ss.is		SS	
Niels Hjælmarsson	niels@ss.is		SS	Selfoss

DATE DAY 5

NAME	CONTACT DETAILS	POSITION	INSTITUTION	LOCATION
Fera Bjarnad	eba@bondi.is	Assisting director of Farmers Association of Iceland	Farmers Association of Iceland	Bandahöllin Hagatorg 1 107 Reykjavik
Sigurdur Eythorsson	sigey@bondi.is	Managing director	"	"
Jon B. Korarge	fb@bondi.is	manager of Agricultural Agency	"	"
Guðbjörg Þorvaldadóttir	gaujso@sigfynnur.is	vet. association → President		Reykjavik
RANNUVEIG HROLFSDOTTIR	rannveig@lifland.is	QUALITY MANAGER	LIFLAND	GRUNDARTANGI
Andri Freyr Þórisson	andri@lifland.is	Production manager	Lifland	Grundartangi

DAY 6 9:00 am.

DATE	TIME	Name	Contact details	Position	Institution	Location
		ÓLÓF G. SIGURDARÐÓTTIR	olof@hi.is	Veterinary pathologist	Keldur	Reykjavík
		EINAR JÖRUNDSSON	einarrjor@niis	VETERINARY PATHOLOGIST	KELDUR	REYKJAVIK
		Sigríður Ólafsdóttir	sigridor.olafsdottir@ima.is	Head of inspections	IMA	Reykjavík
		Stefanía Þóressdóttir	stef@hi.is	Research specialist	Keldur	Reykjavík
		VIKTRÓTTUR JÓHANSSON	viktr@hi.is	- -	KELDUR	REYKJAVIK
		Sigurður Þorgeirsson	siguring@hi.is	Director	- -	- -
		Þorvaldur Guðnason	thorvaldur@landlaeknir.is	Chief Epidemiologist Health	Directorate of Health	Reykjavík
		Guðrún Símunsdóttir	gudrun@landlaeknir.is	Head of surveillance	DIRECTORATE OF HEALTH	REYKJAVIK

DA7.6 ENVIRONMENT

NAME	CONTACT DETAILS	POSITION	INSTITUTION	LOCATION
Sigríður Kristjánsdóttir	Sigríðurk@ust.is	Director for operation (temp) Team leader inspection team	Environment agency of Iceland	Reykjavík
Aðmundur B. Jónsson	gbi@ust.is	Advisor	Environment Agency of Iceland	Reykjavík
Ólafur Jónsson	olafur.jonsson@ust.is	DOO	MAST	AKUREYRI
Sigríður Ólaf Bergsdóttir	sigrbjorg.bergsdottir@mast.is	OU	Mast	Akureyri
Egill Thorvaldson	egillt@ms.is	quality man.	MS	Akureyri
Kristín Hauddalset	kristinh@ms.is	Plant manager	MS	Akureyri

DAY
7

DAY 7

NAME	CONTACT DETAILS	POSITION	INSTITUTION	LOCATION
Frjögvið Sigþórunn	brudlaupni@zmail.is	DAIRY FARMER		BRÉIÐAMMUR
Sæþor Gunnarsson	hildurros@simnet.is	FARMER		5-ÞING Prestakvæmmur
Hildur P. & Hildur	h.p. bjorg@smannid	FARMER		5-ÞING
Gunnar Bryggjarsdóttir	kidgigi@thingeyjarveit.is	FORMER CHAIRMAN OF LOCAL FA	BSSP	ÞÓRGÓÐUR FLÓK SVAETIÐKOT
Ávaldur Ólafsson	Stóri Farmi Ólafsson 15	FARMER	Stóri-Þorunni	Stóri-Þorunni
Laufey Skúladóttir	---	---	---	691 Húsavík

FARMER

FARM CATTLE

NAME INSTITUTION

DAY 8

NAME	CONTACT DETAILS	POSITION	INSTITUTION	LOCATION
Són Kolbeinn Sónsson D.V.O. officer	son.jonsson@mast.is	Distrikt Veterinara	MAST	NV-region
<u>DAY 9</u>				
Senor Karé Magnússon	caras.magnusson@mast.is	Animal Welfare officer	MAST	NV-Region
Haufríður Ósk Ólafsdóttir	haufriduro@hotmail.com haufriduro@ho.com	farmer	Vidvalbunings sheep farm	NV-Region
Ingunn Ragnisdóttir	ingunnr@simnet.is	veterinarian	private practice	NV-Region

DAY 9. Pig Ken

NAMÍZ	GSMAS DETAILS	POSITION	INSTITUTION	LOCATION
THORUNN L. THORARINSD	DYRALAEXNIROINTERNET.IS	Veit in þróun	Dyralaexniroinn MOSFELLSSGA	MOSFELLSSGA
FLORA-JOSEPHINE HILSE	flora.lise@mast.is	DVO	MAST	Stykkishólmur
Ólafur R. Jónsson	ORJ@HIVE.IS		Farmmangur Hjúsmelar	Reyk höll

Appendix 4: Timetable of the mission and sites/ facilities visited

Date	Assessor	Time	Location	Activities
20/9/15	HB/PG/DH	Varios	Reykjavik	Team arrival
21/9/15	HB/PG/DH	09:00 - 16:30	Selfoss	Opening meeting: The Food and Veterinary Authority (MAST)
	HB/PG/DH	17:00 - 18:15	Stuðlar, Selfoss area	Veterinary Practice / Clinique (pets, horses, cattle, sheep),
22/9/15	HB/PG/DH	09:00 - 10:00	Reykjavik	Ministry of Industries and Innovation - Meeting with Minister and staff of Department of Agriculture & Fisheries
	HB/PG/DH	10:00 - 12:00	Reykjavik	Konráð Konráðsson, DVO, MAST district office
	HB/PG/DH	13:00 - 15:00	Reykjavik	Þorvaldur Þórðarson, veterinarian and head of office MAST office of import and export and BIP visit
23/9/15	HB/PG/DH	09:00 – 10:00	Suðurnes	Magnús Guðjónsson, Veterinarian and general manager Public Health local office,
	HB/PG/DH	10:00 – 12:00	Suðurnes	Gísli Jónsson, Veterinary Officer, (fish diseases) Aquaculture farm,
	HB/PG/DH	14:00 – 15:00	Vatnsleysuströnd	Nesbúegg Poultry layers and egg packing farm,
	HB/PG/DH	15:00 – 17:00	Garðabær	Hanna María Arnórsdóttir, Veterinarian Private Pet Clinique, IMA inspector present
24/9/15	HB/PG/DH	09:00 – 10:00	Melavellir Melagerði	Poultry farm Hatchery
	PG/DH	10:00 - 12:00	Matfugl, Mosfellsbær	Konráð Konráðsson, DVO Poultry slaughterhouse,
	PG/DH	13:00 – 15:00	Stjörnugrís, Kjalarnes	Pig slaughterhouse
	HB	14:00 - 15:30	Reykjavik	Importer
25/9/15	HB/PG/DH	09:00 – 11:00	Farmers Association	Sindri Sigurgeirsson, Chairman
	HB/PG/DH	11:00 - 12:00	Slaughterhouse owners	Ágúst Andrésón, Chairman
	HB/PG/DH	13:00 - 15:00	Icelandic Veterinary Association	Guðbjörg Þorvarðardóttir, chairman
	HB/PG/DH	15:00 - 17:00	Sundahöfn	Feed mill, Fóðurblandan
28/9/15	HB/PG/DH	09:00 – 11:00	Official laboratory, Keldur	Ólöf Sigurðardóttir and staff IMA representative present
	HB/PG/DH	11:00 – 12:00	Icelandic Medicines Agency	Rúna Hauksdóttir Hvannberg, Director General
	HB/PG/DH	12:00 – 13:00	Lunch	
	HB/DH	13:00 – 14:00	Chief Epidemiologist	Þórólfur Guðnason, Chief Epidemiologist

	HB/DH	14:00 – 16:00	Environmental Agency	Kristín Linda Árnadóttir, Director General
	PG	14:00	Reykjavik	Moll Head of Finances
				Land fill site (Deleted as flight originaaly scheduled for tomorrow had to be changed to this evening due to bad weather)
				Flight Rek – Ake NY112
29/9/15		08:00 – 11:00	Akureyri	Ólafur Jónsson, DVO MAST district office
		11:00 - 13:00		Dairy (MS Akureyri)
		14:00 – 15:00	Local Farmers Association	Guðrún Svartárkoti
		15:00 – 17:00	Cattle farm in Eyjafjörður (ink. driving)	
30/9/15		08:00 – 12:00	Slaughterhouse (KS Sauðárkrókur), sheep, cattle	Jón Kolbeinn Jónsson, DVO
		13:00 -	Horse farm / training center	Sigríður Björnsdóttir, Veterinary Officer (horse diseases)
1/10/15		09:00 - 10:00	Sheep farm in 'Húnavatnssýsla'	
		10:00 – 12:00	Travel and visit to private practising veterinarian (sheep, cattle, horses)	Ingunn Reynisdóttir, Veterinarian in Hvammstangi
		15:00 -	Pig farm Melar	Flora Josephine Hagen, DVO
		13:00 – 16:00	Final meeting The Food and Veterinary Authority, Selfoss	MAST: Ministry of I&I:
3/10/15	HB/PG/DH	07:15		Departure from Iceland

Appendix 5: Air travel itinerary

ASSESSOR	DATE	From	To	Flight No.	Departure	Arrival
Howard Batho	19/9/15	Brussels	Frankfurt	LH1025	07:05	08:10
Howard Batho	19/9/15	Frankfurt	Reykjavik	LH0856	10:25	12:30
Patrice Gautier	19/9/15	Paris	Reykjavik	FI543	14:10	15:40
Dagmar Heim	19/9/15	Zurich	Reykjavik	FI0569	14:00	15:50
Howard Batho	3/10/15	Reykjavik	Copenhagen	SK6150	08:00	13:00
Howard Batho	3/10/15	Copenhagen	Brussels	SK1593	16:50	17:55
Patrice Gautier	3/10/15	Reykjavik	Paris	FI543	07:40	12:55
Dagmar Heim	3/10/15	Reykjavik	Zurich	FI0568	07:20	13:00

Appendix 6: List of documents used in the PVS evaluation

E = Electronic version

H = Hard copy version

P= Digital picture

Ref	Title	Author / Date / ISBN / Web	Related critical competences
PRE-MISSION DOCUMENTS			
1E	AD control & eradication.pdf		II-7, IV-7
2E	AD_notification&surveillance.pdf		II-5A&B
3E	Annual audit plan.docx		
4E	Internal audits on official controls for food, feed, animal health and welfare.docx		IV-2
5E	Awareness & response.pdf		II-1AB, II-2, II-5,II-6
6E	Country Profile.pdf		I-1A,I-1B, I.2A, I-2B, II-4, I-6A, II-5A, II-5B, II-1AB, II-2, II-3, II-6II-7, II-8A&B, II-13, II-8C, II-9, II-10, II-11, II-12A, II-12AB, III-1, III-4, IV-1, IV-2, IV-7
7E	ESA Final report ABPs 2013.pdf		II-8C
8E	ESA Final report Animal welfare 2014.pdf		II-13
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Appendix 7: Organisation of the OIE PVS evaluation of the VS of Iceland

Assessors Team:

- Team leader: – Dr Howard Batho
- Technical experts: Dr Dagmar Heim, Dr Patrice Gautier

References and Guidelines:

- Terrestrial Animal Health Code (especially Chapters 3.1. and 3.2.)
- OIE PVS Tool for the Evaluation of Performance of VS
 - Human, financial and physical resources,
 - Technical capability and authority,
 - Interaction with stakeholders,
 - Access to markets.

Dates: from 19 September to 3 October 2015

Language of the audit and reports: English

Subject of the evaluation: VS as defined in the Terrestrial Animal Health Code

- Inclusive / Not Inclusive of aquatic animals
- Inclusive / Not inclusive of other institutions / ministries responsible for activities of VS

Activities to be analysed: All activities related to animal and veterinary public health:

- Field activities:
 - Animal health (epidemiological surveillance, early detection, disease control, etc)
 - quarantine (all country borders),
 - veterinary public health (food safety, veterinary medicines and biological, residues, etc)
 - control and inspection,
 - others
- Data and communication
- Diagnostic laboratories
- Research
- Initial and continuous training
- Organisation and finance
- Other to be determined...

Persons to be present: see provisional Appendix 3

Sites to be visited: see provisional Appendix 4

Procedures:

- Consultation of data and documents
- Comprehensive field trips
- Interviews and meetings with VS staff and stakeholders,
- Analyse of practical processes

Provision of assistance by the evaluated country

- Completion of missing data as possible
- Translation of relevant document if required
- Administrative authorisation to visit designated sites
- Logistical support if possible

Reports:

- a fact sheet or powerpoint will be presented at the closing session
- a report will be sent to the OIE for peer-review no later than one month after the mission
- the current levels of advancement with strengths, weaknesses and references for each critical competence will be described,
- general recommendations may be made in agreement with the VS.

Confidentiality and publishing of results

The results of the evaluation are confidential between the country and the OIE and may only be published with the written agreement of the evaluated country.

Appendix 8: List of Corresponding Laws, Regulations and Provisions

Content	Corresponding Laws, Regulations and Provisions
Control and prevention, contingency plan, information notification and eradication of animal epidemics, including border animal health and veterinary public health management, regional animal epidemic (including zoonosis) management	<p>Act No 93/1995 on Food</p>  <p>Act 93_1995.pdf</p> <p>Regulation No 102/2010 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (EC 178/2002)</p> <p>Regulation No 103/2010 on the hygiene of foodstuffs (EC 852/2004)</p> <p>Regulation No 104/2010 laying down specific hygiene rules for on the hygiene of foodstuff (EC 853/2004)</p> <p>Regulation No 106/2010 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (EU 882/2004)</p> <p>Act No 25/1993 on animal disease</p>  <p>Act 25_1993.pdf</p> <p>Act No 96/1997 on the raising and health of slaughter animals, slaughtering, processing, health inspection and quality grading of slaughter products</p>  <p>Act 96_1997.pdf</p> <p>Regulation No 1011/2011 on the control of salmonella and other specified food-borne zoonotic agents (EC 2160/2003) and all other derived/related EU legislation on zoonotic agents</p>
Epidemic monitoring and eradication	<p>Regulation No 52/2014 on notifiable and reportable animal diseases</p> <p>Regulation No 448/2012 on measures to prevent the introduction of animal diseases and contaminated products to Iceland</p> <p>Regulation No 303/2012 on electronic registration of animal disease and treatment by veterinarians</p> <p>Regulation No 651/2001 on the elimination of scrapie and compensation for eradication</p> <p>Regulation No 665/2001 on the reaction to infectious diseases</p> <p>Regulation No 572/1994 on preventive measures towards Sheep scab</p> <p>Advertisement No 793/2009 on animal disease isolation zones</p>
Veterinary health control of imported live animal, animal genetic material, disease pathology materials, pathogens, animal products, vaccines and other products that should undergo veterinary inspection and quarantine	<p>Import of live animals, other than pets, is in general forbidden.</p> <p>Act No 54/1990 on the import of animals</p>  <p>Act 54_1990.pdf</p> <p>Regulation No 448/2012 on measures to prevent the introduction of animal diseases and contaminated products to Iceland</p>  <p>Reglugerd 448_2012.pdf</p> <p>Regulation No 1043/2011 concerning veterinary checks on the health of aquatic animals and animal products in intra-EEA trade (EC Directive 89/662 and several other Directives and Decisions)</p> <p>Regulation No 1044/2011 concerning veterinary checks on imported animal products from third countries (EC Directive 97/78 and several other Directives and Decisions)</p> <p>Regulation No 570/2012 laying down animal health and public health requirements governing trade in and imports into the Community of certain animal products (EC Directive 92/118)</p> <p>Regulation No 560/2010 on the import of deep-frozen swine semen</p>

	<p>Regulation No 489/2010 laying down procedures for veterinary checks at border inspection posts on products imported from third countries (Regulation EC 136/2004)</p> <p>Regulation No 449/2005 concerning the veterinary checks on the health of aquatic animals imported from third countries (several EU directives)</p> <p>Regulation No 935/2004 on the import of pets and dog semen</p> <p>Regulation No 432/2003 on quarantine stations for pet animals</p> <p>Regulation No 831/2014 laying down animal and public health and veterinary certification conditions for the introduction into the EEA of raw milk and dairy products intended for human consumption (EC Regulation 605/2010)</p>
Animal welfare	<p>Act No 55/2013 on animal welfare</p> <p> Act 55_2013 (jan 2015).pdf</p> <p>Regulation No 910/2014 concerning the welfare of horses</p> <p>Regulation No 1065/2014 concerning welfare of bovine</p> <p>Regulation No 1066/2014 concerning welfare of ovine and caprine</p> <p>Regulation No 1276/2014 concerning welfare of pigs</p> <p>Regulation No 1277/2014 concerning welfare of fur animals</p> <p>Regulation No 135/2015 concerning welfare of poultry</p>
Ante-and post-mortem inspection	<p>Regulation No 106/2010 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (EU 882/2004)</p> <p>Fleiri?</p>
Food safety laws and regulations	<p>Act No 93/1995 on Food</p> <p>Regulation No 102/2010 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (EC 178/2002)</p> <p>Regulation No 103/2010 on the hygiene of foodstuffs (EC 852/2004)</p> <p>Regulation No 104/2010 laying down specific hygiene rules for on the hygiene of foodstuff (EC 853/2004)</p> <p>Regulation No 106/2010 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (EU 882/2004)</p> <p>Act No 55/1998 on the processing and distribution of fishery products</p> <p> Act 55_1998.pdf</p> <p>Regulation No 400/2014 concerning the use of lactic acid to reduce microbiological surface contamination on bovine carcasses (EC Regulation 101/2013)</p> <p>Regulation No 522/2012 laying down the animal health rules governing the production, processing, distribution and introduction of products of animal origin for human consumption (EU Directive 2002/99)</p>
Control of production, processing, traceability, storage and transportation of meat and meat products	<p>See legislation listed under ‘control and prevention’ above’.</p> <p>Regulation No 331/2005 on meat and meat products?</p>
Approval and registration of manufacturing establishments of meat and meat products	<p>Regulation No 104/2010 laying down specific hygiene rules for on the hygiene of foodstuff (EC 853/2004)</p> <p>Regulation No 106/2010 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (EU 882/2004)</p>
GMP, SSOP, HACCP	Sömu?
Control of production and use of veterinary medicines and bio-products	<p>Act No 93/1994 on medicinal products</p> <p> Act-No-93-1994.pdf</p> <p>Regulation No 170/2015 laying down procedures for the establishment of residue limits of</p>

	<p>pharmacologically active substances in foodstuffs of animal origin (EC 470/2009)</p> <p>Regulation No 167/2015 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin (EC 37/2010)</p> <p>Regulation No 303/2012 on the electrical registration by veterinarians on the use of veterinary medicines</p> <p>Regulation No 539/2000 on the approximation of the laws of the Member States relating to veterinary medicinal products (EC 81/851)</p> <p>Regulation No 30/2012 on measures to monitor certain substances and residues thereof in live animals and animal products (EC 96/23)</p> <p>Regulation No 607/2013 laying down the conditions governing the preparation, placing on the market and use of medicated feeding stuffs (EC 90/167)</p>
Control of production and use of feed/feed additive	<p>Act No 22/1994 on the control of fertilizers, seed and feed</p> <p>All relevant EU legislation on the use of feed and feed additives applies in Iceland and has been incorporated</p>
Residue monitoring of pesticide, veterinary medicine and contaminant	<p>Regulation No 736/2003 establishing Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin (EC 2002/63)</p> <p>Regulation 672/2008 setting maximum levels for certain contaminants in foodstuffs (EC 396/2005)</p> <p>Regulation No 265/2010 setting maximum levels for certain contaminants in foodstuffs (EC 1881/2006)</p> <p>Regulation No 266/2010 laying down methods of sampling and analysis for the official control of the levels of nitrates in certain foodstuffs (EC 1882/2006)</p> <p>Regulation 270/2010 laying down the methods of sampling and analysis for the official control of the levels of mycotoxins in foodstuffs (EC 401/2006)</p> <p>Regulation No 360/2015 laying down methods of sampling and analysis for the control of levels of dioxins, dioxin-like PCBs and non-dioxin-like PCBs in certain foodstuffs (EC 589/2014)</p>
Allowed and prohibited veterinary medicine and residue limit	
Microorganism monitoring	
Microorganism food safety standard and processing hygienic standard	Regulation No 135/2010 on microbiological criteria for foodstuffs (EC 2073/2005)
Food packaging	Regulation No 398/2008 on materials and articles intended to come into contact with food (EC 1935/2004) and all other relevant EU legislation
Food additive	<p>Regulation No 978/2011 on food additives (EC 1333/2008)</p> <p>Regulation No 106/2010 on official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules (EU 882/2004)</p>
Processing system of processed meat product	
Labelling and identification	<p>Regulation No 1294/2014 on food information to consumers (EC 1169/2011)</p> <p>Regulation No 968/2011 establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products (EC 1760/2000)</p>
Certificate issuance	Regulation No 606/2010 on the certification of animals and animal products (EC 96/93) FLEIRI??
Traceability	Regulation No 102/2010 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (EC 178/2002)
Recall	
Training	
Supervision	
Disposal of inferior meat and meat product	
Penalty for breach	