MANCP

Multi Annual National Control Plan the Netherlands

Annual Report 2016

Nederlandse Voedsel- en Warenautoriteit
Ministerie van Economische Zaken

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INTRODUCTION

Since 2007, every Member State of the European Union has been preparing a Multi Annual National Control Plan (MANCP). Using an annual report, the Member States report to the European Commission on the execution and results of official controls. This is the MANCP annual report of the Netherlands for 2016.
The MANCP annual report reviews the official controls in the areas of food safety, animal health, animal welfare, animal feeds, phytosanitary issues and organic production. Various organisations in the Netherlands are involved.

Supervision within the framework of Regulation (EC) No 882/2004 is conducted by:
- the Netherlands Food and Consumer Product Safety Authority (NVWA);
- the Netherlands Controlling Authority for Milk and Milk Products (COKZ);
- the Dutch Controlling Authority for Eggs (Nederlandse Controle Autoriteit Eieren NCAE);
- the Animal Health Service (Gezondheidsdienst voor Dieren, GD).

Supervision within the framework of Directive 2000/29/EC (plant health) is conducted by:
- the Netherlands Food and Consumer Product Safety Authority (NVWA);
- Netherlands General Inspection Service for Agricultural Seeds and Seed Potatoes (Nederlandse Algemene Keuringsdienst voor zaaizaad en pootgoed van landbouwgewassen, NAK);
- Netherlands Inspection Service for Horticulture (Stichting Nederlandse Algemene Kwaliteitsdienst Tuinbouw, Naktuinbouw);
- Flower Bulb Inspection Service (Bloembollen Keuringsdienst, BKD);
- Quality Control Bureau (Kwaliteits-Controle-Bureau, KCB).

Supervision within the framework of Regulation (EC) No 834/2007 (organic production and products) is conducted by:
- Skal Organic Control (de Stichting Skal biocontrole).

The NVWA is responsible for the coordination of the MANCP and drawing up the annual report in the Netherlands. In the first chapter you will find the key findings and conclusions concerning the controls conducted in 2016 (Executive Summary).

Chapter 2 addresses the key data for enforcement in the food chain.

Chapter 3 contains the reports for the various areas of supervision, covering 20 different subjects.

The chapters thereafter report the conclusions from the internal and external audits conducted in 2016 (Chapter 4) and the activities of the NVWA Intelligence and Investigation Service (Chapter 5).

The final chapter describes a number of major developments in the organisations involved in conducting controls.

The MANCP annual reports are available (in Dutch and English) on the NVWA website.

CHAPTER 1
EXECUTIVE SUMMARY OF THE MANCP ANNUAL REPORT 2016

The 2016 Annual Report relates to the MANCP that was compiled in 2011 for the period 2012-2016.

1. Key figures

In total, 160,455 inspections, up 15,000 on previous years, were carried out in 2016. The following table shows the numbers of inspections for each area of supervision.

Number of inspections for each area	2012	2013	2014	2015	2016
Identification and registration (I&R)	2,515	2,521	2,316	2,028	1,783
Animal health – prevention	7,231	7,340	6,951	6,258	6,723
Animal welfare (including transport)	11,993	10,240	9,359	11,889	12,097
Animal feed	2,031	1,564	1,127	1,107	1,896
Animal by-products	5,712	4,307	3,655	3,804	3,356
Meat	2,320	3,022	2,772	3,017	3,736
Meat products and composite products	7,518	7,235	5,349	4,670	6,920
Imports of live animals and animal products	59,159	59,022	60,938	60,289	61,279
Milk and dairy products	993	784	930	1,166	1,227
Egg sector	872	1,028	830	729	714
Hotel/restaurant/catering and retail	29,578	30,220	36,403	33,502	40,833
Claims for foods for particular nutritional uses	1,865	1,734	1,862	1,613	1,611
Residues and contaminants in food	2,090	3,860	7,529	7,843	9,772
Veterinary medicinal products	2,502	1,156	620	628	645
Plant protection products	1,143	1,296	868	944	1,053
Organic production	4,064	4,878	4,908	5,148	5,805
PDO, PGI and TSG			861	936	1,005
Total	**141,586**	**140,207**	**147,278**	**145,572**	**160,455**

The number of certifications has also increased:

Certifications (in hours)	2012	2013	2014	2015	2016
Meat	203,345	273,425	281,747	279,405	287,562
Live animals export	59,514	72,709	108,028	103,933	107,553

2. Effectiveness of controls

Measurement of the effectiveness of the controls is given structure within the control agencies using special projects. Projects such as the 'meat supply chain improvement plan', 'copper in pig feed', and 'compliance monitoring in red meat and poultry slaughterhouses' provide greater insight into compliance by a specific target group or groups and the effectiveness of official controls.
In 2016, in some areas work was carried out on target group analyses and the development of supervision strategies in anticipation of effect measurements.

3. Analysis of the findings

Animal health
The NVWA Improvement Plan has led to more effective supervision and enforcement. Better preparation of controls facilitates risk-oriented inspection and non-compliances are identified earlier. Good coordination with the business community leads to more and practical communication about legislation. This creates a larger support base and ultimately leads to better compliance.

Highly pathogenic and low pathogenic avian influenza: in 2016, nine commercial poultry establishments were afflicted by highly pathogenic avian influenza and two commercial poultry establishments by low pathogenic avian influenza.
The last dairy goat farm which still had Q fever infection status has been cleared.
The mandatory monitoring for zoonotic *Salmonella* at breeding and laying bird establishments revealed 29 establishments where an infection was established in one or more sheds.
In 2016, 105 psittacosis reports were received. Fifty reports concerned suspected cases in birds and fifty-five reports were made by the Municipal Health Service (GGD) in respect of human patients who had been identified as having developed psittacosis.
Infection with infectious haematopoietic necrosis was established at what is known as a Put and Take farm (a farm with ponds in which trout or other fish species are released for recreational fishing). Two of the three fish ponds at the farm tested positive.
No infection with tuberculosis was identified during a more thorough examination of 32 suspect cattle.

Animal welfare
In relative terms, most measures relate to cattle, sheep, goats, pigs and broiler chickens. Those relating to cattle, sheep and goats largely involved risk-based inspections. For that reason, the figures cannot be seen as an accurate reflection of those sectors. The figures for laying hens, pigs, broiler parent stock, fur animals, ducks and turkeys provide a better indication of overall compliance in these sectors.

Animal feed
Compliance in the animal feed sector is, in the main, high. The results of the Copper in Pig Feed project show that the new enforcement approach, where targeted enforcement communication is used, has led to a substantial improvement in compliance (now 92%, initially 67%).
The sector responds to incidents by assuming the responsibility for traceability and the prevention of further spreading. Issues that still require attention are general hygiene management, carry-over/cross-contamination, hazards, risk analysis and traceability. In addition, labelling by animal feed producers and the correct use of claims, the scientific corroboration of claims as well as online trading require a suitable enforcement effort. Further identifying the blind spots such as ‘lower end of the market’, ‘damaged goods’ and ‘registered establishments – transport sector’ requires appropriate commitment.

Animal by-products
The number of establishments working in the ABP sector increases annually. Inspections concerning traceability and safeguarding of trade flows are a priority in supervision, in particular in the case of establishments where derived products are stored. Investigations relating to the fats' chain reveal that the traceability of products in storage establishments is an issue.

Meat
The more uniform and stricter supervision has led to a rise in the number of written enforcement measures (35% up on 2015). The majority of the measures was imposed on poultry slaughterhouses, which also scored worse in (spontaneous) compliance with hygiene rules. For red meat slaughterhouses, the number of written warnings has nearly halved, whilst the number of fine reports has risen slightly. We now need to encourage establishments to comply spontaneously (not just after an infringement has been noted and enforcement subsequently imposed) and to use to appropriate enforcement tools to achieve this. The high compliance scores need to be consolidated and the points requiring attention remedied.

Meat products and composite products
The number of interventions applied in respect of establishments in 2016 is considerably lower than in 2015. Whilst in 2015 the number of interventions involving those establishments totalled 51 (warnings and reports of findings), the number fell to 36 in 2016. This may be explained by the fact that a relatively higher share of establishments were in the follow-up phase in 2016. This means that the establishments demonstrate during inspections that the improvements implemented are of a long-term nature so they are again subject to standard supervision.

Imports of veterinary products
There is a slight increase in the number of consignments presented (1.7%). The number of refusals is largely due to problems with documentation and the consignments subject to more stringent supervision. The number of refusals has fallen by 27%.

Fish and fish products
The risk-oriented supervision, which was continued in 2016, makes an important contribution to the selection of establishments that are to be inspected and the frequency with which they will be inspected.
Official controls carried out in the fish and fish processing industry often reveal points for improvement that are subject to the intervention policy.
The presence and growth of *Listeria monocytogenes* in smoked fish during its shelf life remains an issue that requires attention.
In order to identify the presence of norovirus in oysters, a European baseline study into the presence and spread of the virus in end products and production areas was conducted in collaboration with the European Commission.

Dairy
During the evaluation of the findings relating to the dairy industry's assurance schemes for dairy farms it was concluded that the outcome of the tightening up of those systems in response to the results for 2015 was still unsatisfactory.
Further coordination with dairy companies is required in order to bring the level of assessment into line with the aspects which the Netherlands Controlling Authority for Milk and Milk Products (COKZ) inspects and the weighting of non-compliances which is applied, and will be a point requiring attention in 2017.
When the reports made by farm milk recipients in relation to non-compliance with the maximum residue levels (MRLs) for antibiotics were identified and listed, it was established that the information provided is not always consistent and complete. In 2017, the COKZ will reassess the consistency of the measures and the cases sent for each dairy company by auditing those companies.
In 2016, the traceability of raw materials was examined in a selection of dairy companies. It emerged that all the companies examined were able to trace the direct supplier or suppliers adequately, but the traceability of a raw material or raw materials to other links in the chain was not as good.
The production process for establishments producing grated and cleaned cheese is regarded as high-risk because the raw material used in this sector often consists of rejected cheeses and/or cheese side flows.

Eggs and egg products
In the main, the results of the supervision in the egg sector in 2016 show, to a varying degree, an increase in the number of written warnings, but this does not mean that that increase should be entirely attributed to a worsening of the situation at inspected establishments. On the one hand, the additional attention given to hygiene aspects has played a part, but, on the other, the preparations made to bring the measures policy of the Dutch Controlling Authority for Eggs (NCAE) into line with the NVWA's intervention policy has resulted in more warnings.
In 2016, work continued on the development of the specific dairy and egg intervention policy, which is set to be linked to the NVWA's specific intervention policy for food and fodder safety within the industry. Expectations are that this will take place in mid-2017.

Hotel/restaurant/catering and artisanal production
The number of inspections increased to nearly 7,500. The most common topics for non-compliance in hotel/restaurant/catering, artisanal and retail remain hygiene, correct food handling and temperature. The problems involving vermin have not diminished.
The number of actions aimed at shut-downs has risen sharply (from 169 to 284). The same picture can be seen in the rise in the number of emergency closures (from 21 to 41).
The formula approach shows a moderate improvement in compliance. The number of inspections, by contrast, has fallen from 550 to 398. The current formulas, which achieve below average scores, are more intractable and have greater difficulty putting compliance in order.
Five of the eight self-inspection systems have undergone random checks. Improvements need to be made to all systems, but there is sufficient capacity and potential to implement them. The fact that these systems ensure that all participating establishments are visited at least once, but usually twice a year, continues to provide added value for the NVWA's supervision.

Know what you are buying
In 2016, a number of supervision projects concerning labelling and misleading information were carried out, including in respect of fruit drinks and imitation foodstuffs. A measure was imposed in approximately 1/3 of imitation products.

Contaminants, residues and genetically modified organisms in foodstuffs
Both the non-compliances and the RASFF (Rapid Alert System for Food and Feed) notifications of residues of toxic, old-fashioned pesticides from third world countries (such as carbosulfan and propargite) were striking.
Fewer controls of Dutch products were carried out in 2016, although controls were increased on imported products from countries outside the EU, with particular attention to South East Asia, the Dominican Republic, Surinam, Egypt, India and China.
The most striking finding from mycotoxin screening was that the non-compliance percentage for pistachio nuts upon importation was 2.8% compared with 17.9% on the national market. The problems related to aflatoxin in nutmeg appear to be increasing.

Veterinary medicinal products
In 2016, NVWA conducted inspections of various sectors, on both the legislation relating to antibiotics and other veterinary medicinal products. Issues requiring attention here are product conformity, unwanted trade via import and identifying suspect consignments during import. In addition, the NVWA is working towards innovation, including feather and data analysis.

Microbiology
The increase in GFL (General Food Law) reports by food establishments, the results of NVWA's monitoring programmes and the investigations into the source of outbreaks in food, indicate that the need for attention to microbiological risks is undiminished. Risk-oriented supervision demonstrates that targeted monitoring of specific foods (exotic meat, herbs/spices, and smoked fish) generates targeted inspections aimed at controlling microbiological hazards and can give consumers a framework for action.

Nutrition and health, special foods and drinks
From the supervision perspective, the special food and drinks domain is very broad, ranging from products such as drip feeds to herbal preparations. In 2016, the supervision was largely focused on the enforcement of high-risk food supplements and new legislation, such as a maximum limit for vitamin D supplements. In the main, the approach taken for high-risk supplements in 2016 continued to involve compiling information. In 2017, enforcement will become more stringent, in accordance with the new general intervention policy.
In addition, labelling and nutrition and health claims pertaining to milk for young children received particular attention. The objective of the compliance policy is both to promote compliance by the parties that are inspected and to fulfil an agenda-setting function for the relevant stakeholders. The field is taking steps towards self-regulation.
It can and must be easier for consumers to opt for healthier products. A healthy dietary pattern is important to good health. The salt content of ten product groups was monitored in 2016, and the fat content in 414 foods was also measured. This monitoring allows us to form an impression of how efforts to reduce salt and fat are progressing. The salt content has fallen by 10% over the last five years. The saturated fat content varies greatly from product to product.

Plant health
The number of notifications made by the Netherlands to third countries owing to the discovery of quarantine pests rose slightly from 311 in 2015 to 337 in 2016. There was a sharp fall in the number of interceptions of *Phyllosticta citricarpa* as a result of EU measures for citrus fruits which entered into effect in early 2016. The decrease in the number of interceptions for *Phyllosticta citricarpa* was offset substantially by the increase in the number of interceptions of *Bermisia tabaci*. Those interceptions took place mainly in internal traffic. The United Kingdom carried out 104 interceptions in products originating in the Netherlands in relation to *Bermisia tabaci* pests. They largely involved pot plants. The guarantees for *Bermisia tabaci* are an area requiring attention for future market access of ornamental plants leaving our country for the United Kingdom.
There have been no major changes in the pest status of regulated organisms since 2015.

Plant protection
The approach taken in 2016 has shown that cooperating with growers' organisations, communication and transparency of action can help to improve compliance. Continuing this approach, combined with possible alternative enforcement tools, will provide a perspective for more efficient enforcement.
The checks carried out and notifications and measurements made show, among other things, that compliance in fruit production has improved compared with four years ago.
The supply of and trade in products not authorised in the Netherlands, use of non-authorised products in a number of ornamental plants in greenhouses and the failure to implement or the incorrect implementation of drift reduction measures in open fields near surface water, particularly in fruit production and arable agriculture still require attention.

Organic products
Skal Biocontrole supervises compliance with European regulations in the Netherlands in every link in the organic chain. In total, 5,805 inspections were carried out for that purpose in 2016. Of them, 70% were annual inspections, with the rest primarily being permit inspections, re-inspections (following identified non-compliances) and unannounced inspections.
Based on the non-compliances recorded, it can be noted that the vast majority of establishments adhere to the rules properly. In approximately 1%, non-compliance was critical, which could mean that a premises or consignment is de-certified and may no longer be marketed as organic. That happened 45 times in 2016. In addition, three establishments were de-certified.

Geographical indication: Protected designation of origin (PDO), protected geographical indication (PGI) and traditional specialities guaranteed (GTS)
Generally, compliance with the set standards was satisfactory in 2016. A new development in 2016 was the extension of supervision to include Hollandse geitenkaas, the production and marketing of which started in early 2016. Here, too, compliance with the requirements can be described as satisfactory.
With regard to PGI Gouda Holland and Edam Holland, a substantial improvement in compliance with the quality requirements was noted, in particular in relation to the moisture content and the fat content in the dry matter of the cheese. The infringements observed in 2016 in the case of subsequent processors of cheese in relation to the required raw milk nature of cheese which is designated 'boerenkaas', underline the correctness of the decision to exercise closer supervision of the preparation of boerenkaas in 2016 during this stage. The percentage of infringements relating to the fat content in the dry matter of Boeren-Leidse met sleutels has decreased considerably compared with 2015. Increasing the stringency of the relevant fine regulation as from 1 October 2014 now appears to be bearing fruit.

4. Actions taken on non-compliance

The table below shows the totals for the actions taken on non-compliance reported in Chapter 3. These include written warnings, administrative fines and official reports. In addition, Chapter 3 uses the term 'measures'. These are administrative measures such as a cease and desist order, suspension and/or withdrawal of the authorisation.

Number of measures	2012	2013	2014	2015	2016
Identification and registration (I&R)	1,315	710	1,301	828	848
Animal health – prevention	59	105	976	768	190
Animal welfare (during transport)	693	753	989	934	1,430
Animal feed				114	251
Animal by-products	102	296	599	328	415
Meat	118	330	300	838	1,120
Meat products and composite products	1,466	1,407	757	910	1,114
Imports of live animals and animal products	291	393	436	546	396
Fish, fish products and aquaculture	200	413	287	304	248
Milk and dairy products	0	48	48	58	179
Egg sector	2	12	14	14	29
Hotel/restaurant/catering and retail	9,276	10,385	11,869	11,172	13,985
Veterinary medicinal products	102	258	133	281	193
Claims for foods for particular nutritional uses	438	325	414	361	368
Plant protection products	260	222	242	153	214
Organic production	126	231	792	1,124	1,079
Total	**14,448**	**15,888**	**19,157**	**18,733**	**22,059**

5. National audit systems

Pursuant to Control Regulation (EC) No 882/204, the NVWA conducts internal and external audits to assess the effectiveness of official controls.
These internal audits are conducted annually to verify the accreditation of the laboratories, the national reference centre (NRC), the fish inspection teams and the Border Inspection Posts (BIPs). In addition, audits were conducted in respect of the checks regarding the I&R of bovine animals and welfare of pigs and the system of fine decisions and internal follow-up has been audited.
The external audits were aimed at, among other things, COKZ, Animal Sector Quality Inspection Foundation (Kwaliteitskeuring Dierlijke Sector, KDS) and phytosanitary inspection services.

6. Budget/resources

The following table lists the available budget and staffing levels for the relevant control agencies.

	Resources in 2016		Resources in 2015	
	Budget (EUR 1000s)	**Staff (FTE)**	**Budget (EUR 1000s)**	**Staff (FTE)**
NVWA	333,387	2,471	313,949	2,468
COKZ/NCAE	8,616	53	8,023	53
NAK	20,644	202	20,267	202
Naktuinbouw	27,435	260	26,433	253
BKD	8,846	95	8,799	95
KCB	15,792	141	14,768	141
GD	57,057	334	54,580	307
Skal	4,120	41	3,508	37

7. Actions taken to improve the official controls

Within the domains, concerted efforts have been made to improve the official controls. This has resulted in the following, and other, actions:

- training programmes, courses and exercises.
- NVWA improvement plan (NVWA 2020).
- use of data analysis.
- improvement of working instructions.
- adoption of the compliance risk management strategy.
- updated intervention policy.
- innovation in the supervision of veterinary medicinal products through different analytical methods.
- cooperation with other services, including foreign services.
- satisfaction survey conducted among registered businesses.

8. Actions taken to improve the compliance of the business community

The following actions, and others, have been employed to improve compliance by the business community within the domains:

- close contact and communication with the sector.
- making combined agreements with the sector, including the 'extreme temperatures national plan' protocol for the transport of animals.
- information campaign on regulations and enforcement.
- consultation with owners of private assurance schemes (including in relation to food, animal feed, the dairy sector and hotel/restaurant/catering and artisanal production).
- self-regulation in the form of an 'Infant Formulae' Advertising Code.
- development of a 'Healthy Bulbs, Flourishing Sector' action plan for plant protection.
- development and publication of information sheets.

9. NVWA Intelligence and Investigation Service (IOD)

The NVWA IOD is active in all NVWA domains. The NVWA IOD is deployed in the event of serious or systematic infringements of the law in the NVWA's enforcement domains. When deployed, the NVWA IOD focuses primarily on complex, chain-related, organised and international criminality. The core tasks of the NVWA IOD are:

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- Collecting and refining intelligence.
- Carrying out analyses to improve insights into the nature and extent of compliance and non-compliance.
- Conducting investigations on the basis of a wide range of powers.

In 2016, the investigations addressed the following subjects, among others:

- fraud involving meat or meat products
- manure fraud
- illegal trade and internet trade in protected animals and/or plants
- trade in non-authorised plant protection products
- fraud involving raw materials for animal feed
- fraud involving EU subsidies for greenhouse horticulture.

10. Organisational developments

NVWA 2020
NVWA 2020 is the follow-up to the NVWA 2013 Action Plan. A vision of the future where the NVWA, as a modern and future-proof authority, operates in line with the philosophy of knowledge-driven and risk-focused oversight and puts its reflective role into effect. With NVWA 2020, NVWA seeks to increase compliance regarding the public interests it has been entrusted to protect. The innovations under NVWA 2020 will help enforcers to operate effectively.

Intervention policy
In 2016, a new general NVWA intervention policy was established. This intervention policy describes the policy that the NVWA applies in order to rectify infringements of legislation and regulations observed during supervision, certifications, inspections and product analysis and to prevent their repetition. It also describes the method or procedure which the NVWA uses to determine the intervention to be applied. It is linked to the seriousness of the infringements and to the risks associated with the process and/or the product the company or person concerned deals with.

Compliance risk management strategy
The NVWA's ambition is to operate in line with the philosophy of knowledge-driven and risk-focused oversight and expressly to push for a reduction of risks and increase in compliance, putting its reflective role better into effect.
The NVWA uses the compliance risk management strategy to ensure that it achieves that ambition. The cycle combines governance (at strategic level), development (at tactical level) and implementation (at operational level). The goal of the working methods is to tackle the greatest risks in the chain effectively and efficiently, improve access to information and update supervision.

Disclosure of individual inspection data
The Health Act (Gezondheidswet) was adopted by the Lower House and the Senate at the end of 2016. This Framework Act describes which inspection data the inspection services, such as the NVWA, may publish actively under the Health Act and under which conditions. The information which is actually published, the means by which it is published and when it is published is determined by Order in Council (AmvB). Expectations are that the first AmvB for the NVWA will enter into effect in the first half of 2018.

Supervision of supportive private assurance schemes
The NVWA assesses acceptance applications for private assurance schemes (known as schemes). By participating in accepted private assurance schemes, businesses may be eligible for modified supervision, depending on the degree of support the private assurance scheme provides for monitoring activities. Once those private assurance schemes have been accepted, the NVWA will start (the development of) modified supervision in participating businesses. The NVWA can modify supervision for those businesses: the risk analysis may result in participating companies being subject to fewer inspections, or less intensive inspections, or the focus of the NVWA moving temporarily to other matters.
The NVWA is continuing to monitor the private assurance schemes.

CHAPTER 2
KEY DATA

This chapter reviews the key enforcement figures.

Available resources of the relevant agencies

The following table lists the available budget and staffing levels for the relevant control agencies (see Chapter 2 for a description of the agencies).

	Resources in 2016		Resources in 2015	
	Budget (EUR 1000s)	**Staff (FTE)**	**Budget (EUR 1000s)**	**Staff (FTE)**
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BKD	8,846	95	8,799	95
KCB	15,792	141	14,768	141
GD	57,057	334	54,580	307
Skal	4,120	41	3,508	37

Total number of inspections and certifications (in hours) by domain in the period between 2012 and 2016

The following tables list the total number of inspections and certification hours by domain. See Chapter 4 for specific descriptions of each of the domains.

Number of inspections	**2012**	**2013**	**2014**	**2015**	**2016**
Identification and registration (I&R)	2,515	2,521	2,316	2,028	1,783
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Claims for foods for particular nutritional uses	1,865	1,734	1,862	1,613	1,611
Residues and contaminants in food	2,090	3,860	7,529	7,843	9,772
Veterinary medicinal products	2,502	1,156	620	628	645
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Meat	203,345	273,425	281,747	279,405	287,562
Live animals export	59,514	72,709	108,028	103,933	107,553

Plant health inspections	Number of inspections				
	2012	**2013**	**2014**	**2015**	**2016**
Results for arable agriculture	38,756	34,752	36,696	38,785	40,578
Results for fruit and vegetables	101,050	124,379	117,768	122,560	146,019
Results for ornamental horticulture	177,052	181,854	184,068	167,965	187,787
Results for tree nurseries and green spaces	14,161	14,146	13,971	14,109	12,371
Total	**331,019**	**355,131**	**352,503**	**343,419**	**386,755**

Total number of samples/analyses for each domain in the period between 2012 and 2016

The following table lists the total number of samples and/or analyses by domain. See Chapter 4 for specific descriptions of each of the domains.

Number of samples/analyses	2012	2013	2014	2015	2016
Animal health monitoring	317,481	204,791	133,406	132,849	261,906
Animal feed	3,864	4,636	5,420	2,6401	2,673
Animal by-products	220	10	177	160	87
Meat	166,610	146,679	159,284	155,036	158,560
Imports of live animals and animal products	1,953	1,761	1,530	1,386	1,275
Fish, fish products and aquaculture	2,069	11,409	2,050	2,831	2,949
Milk and dairy products	6,687	6,236	5,366	6,104	6,481
Egg sector	106	226	306	244	227
Hotel/restaurant/catering and retail	5,375	4,977	7,155	5,681	8,371
Residues and contaminants in food	10,694	9,393	9,174	7,844	9,772
Veterinary medicinal products - national plan residues	32,732	32,407	32,810	33,064	34,719
Microbiology	26,336	18,129	15,193	15,463	16,077
Claims for foods for particular nutritional uses	529	573	579	694	678
Organic production	37	137	199	196	326
PDO, PGI and TSG				6,419	6,292
Totaal	**574,693**	**441,364**	**372,649**	**370,611**	**510,393**

** The number of samples has been stated as from 2015.*

Total number of measures for each domain in the period between 2012 and 2016

The following table lists the total number of measures by domain.
Measures may comprise, among other things, warnings, including written warnings, fine reports, official reports, and cease and desist orders. See Chapter 4 for specific descriptions of each of the domains.

Number of measures	2012	2013	2014	2015	2016
Identification and registration (I&R)	1,315	710	1,301	828	848
Animal health – prevention	59	105	976	768	190
Animal welfare (during transport)	693	753	989	934	1,430
Animal feed				114	251
Animal by-products	102	296	599	328	415
Meat	118	330	300	838	1,120
Meat products and composite products	1,466	1,407	757	910	1,114
Imports of live animals and animal products	291	393	436	546	396
Fish, fish products and aquaculture	200	413	287	304	248
Milk and dairy products	0	48	48	58	179
Egg sector	2	12	14	14	29
Hotel/restaurant/catering and retail	9,276	10,385	11,869	11,172	13,985
Veterinary medicinal products	102	258	133	281	193
Claims for foods for particular nutritional uses	438	325	414	361	368
Plant protection products	260	222	242	153	214
Organic production	126	231	792	1,124	1,079
Total	**14,448**	**15,888**	**19,157**	**18,733**	**22,059**

SUMMARY OF FINES

Total number of fines in 2016

Legislation	Number	Total fines paid	Average amount of fine	Amount paid in fines
Commodities Act (Warenwet)	3,975	€ 4,874,609	€ 1,226	€ 4,203,490
Tobacco Act (Tabakswet)	1,466	€ 1,662,840	€ 1,137	€ 1,513,620
Plant Protection Products and Biocides Act (Wet gewasbeschermingsmiddelen en biociden)	210	€ 275,625	€ 1,313	€ 316,789
Medical Preparations Act (Geneesmiddelenwet)	10	€ 241,412	€ 24,141	€ 201,026
Animal Health and Welfare Act (Gezondheids- en welzijnwet voor dieren)	64	€ 150,500	€ 2,280	€ 126,250
Wet dieren	737	€ 2,194,250	€ 2,977	€ 1,878,336
Total	**6462**	**€ 9,399,236**	**€ 1,461**	**€ 8,239,511**

Multi-year summary of fines 2012 - 2016

Fines	2012	2013	2014	2015	2016
Number of fines (Commodities Act)	2,951	3,322	5,327	3,626	3,975
Total amount of fines (EUR 1000s)	4,013	4,084	6,183	4,593	4,874
Average fine	1,360	1,229	1,278	1,267	1,226

Key data and performance indicators

The NVWA has adopted a number of indicators for the assessment of the services it provides.

Complaints about NVWA actions

Complaints about NVWA actions	2012	2013	2014	2015	2016
Inspections		48	47	44	71
Sample analyses		9	0	2	5
Certifications		20	29	22	31
Total	**81***	**77**	**76**	**68**	**107**

** Total number of complaints (subdivision into 2012 was not possible).*

Information requests and reports

The following table lists the developments in the number of requests for information and reports received by the NVWA's Client Services Centre. The Client Services Centre can be contacted by phone or email 24 hours a day and 7 days a week. As the NVWA's name awareness has increased among consumers, more consumers are familiar with the complaint notification procedure.

Reports/requests received	2012	2013	2014	2015	2016
Number of phone calls	66,084	52,155	55,561	56,330	53,983
Emails received	45,130	50,198	42,014	38,990	35,916
Number of reports	4,844	3,569	3,465	3,775	4,409
Number of complaints, of which:	9,316	11,161	11,600	12,622	13,241
Animal welfare/neglect	1,703	2,100	2,556	2,664	2,127
Smoking in hotels/restaurants/catering facilities	1,547	1,692	1,339	1,403	1,040
Food poisoning	801	1,010	1,157	1,250	1,615
Hygiene issues	765	1,326	1,315	1,163	1,163
General Food Law issues	250	262	918	1,141	1,724
Defective conditions/past the best before date	265	324	563	553	502
RASFF issues	261	195	422	542	590
Miscellaneous international alerts	142	154	229	515	897
Vermin in food businesses	489	518	624	505	496
Misleading advertisement and food advertising	489	431	407	478	485
Percentage of justified complaints	64%	62%	65%	64%	64%
Percentage dealt with within 6 weeks	50%	60%	58%	47%	52%

CHAPTER 3
REPORTS ON AREAS OF SUPERVISION IN 2016

3.1 Introduction

Chapter 4 contains the reports on the various domains in 2016.

The following domains are discussed in the following order:

3.2 Animal health – monitoring and control
3.3 Animal health – prevention (live animals and live products)
3.4 Animal welfare
3.5 Animal feed
3.6 Animal by-products
3.7 Meat supply chain (slaughterhouses, cutting plants and cold and frozen stores)
3.8 Industrial production – meat products and composite products
3.9 Imports and exports of veterinary consignments
3.10 Fish, fish products and aquaculture
3.11 Dairy, eggs and egg products
3.12 Hotel/restaurant/catering and artisanal production
3.13 Know what you're buying
3.14 Contaminants, residues and GMOs in food
3.15 Veterinary medicinal products
3.16 Microbiology (pathogens, food-borne infections and zoonoses)
3.17 Nutrition and health/special food and drink
3.18 Plant health
3.19 Plant protection
3.20 Organic products
3.21 Geographical protection: PDO, PGI, TSG

The following will be reviewed for each domain, where data is available:

- applicable legislation and regulations
- size of control file
- results of controls
- findings on compliance
- projects in 2016
- incidents
- effects measurement
- actions taken to improve the official controls
- actions taken to improve the compliance of the business community
- key conclusions.

3.2 Animal health – monitoring and control

Controlling authorities: NVWA, the Veterinary Health Service

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Directive 64/432/EEC	Intra-Community trade in bovine animals and swine (TB, brucellosis, leucosis)
Directive 82/894/EEC	Notification of animal diseases
Directive 91/68/EEC	Intra-Community trade in sheep and goats (Brucella melitensis).
Directive 92/65/EEC	Balai Directive on trade in live animals and live products
Directive 92/66/EEC	Newcastle Disease control measures
Directive 92/119/EEC	General Community measures for the control of certain animal diseases and specific measures relating to swine vesicular disease
Directive 2000/75/EEC	Specific provisions for the control and eradication of blue tongue
Directive 2001/89/EEC	Community measures for the control of classical swine fever
Directive 2003/85/EEC	Community measures for the control of foot-and-mouth disease
Directive 2005/94/EEC	Community measures for the control of avian influenza
Regulation (EC) No 999/2001	Rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies

At national level:

- Animal Health and Welfare Act (Gwwd)

Size of control file in 2015 and 2016:

Type of establishment	**Number in 2015**	**Number in 2016**
Cattle farms	41,620	42,101
Establishments with small ruminants	34,161	34,941
Pig establishments, including non-commercial establishments*	10,634	10,475
Poultry establishments	2,068	1,960

* *Establishments with more than five pigs (the UBN registration system does not distinguish between establishments with animals kept on a non-commercial basis and pig farms).*

The number of establishments relates to the number of registered establishments including those with no animals (what are referred to as 'o establishments'). The databases used for this purpose are: Records of the RVO and the Veterinary Health Service (GD).
The section on Animal health – prevention also lists establishments, although solely establishments that actually held animals in the past year.

Reference to specific reports

- Reports on the basis of Directive 64/432/EEC
- Reports on the basis of Directive 91/68/EC
- Reports on *Salmonella* Controls (on the basis of Regulation (EC) No 2160/2003)
- Half-yearly AI monitoring/surveillance
- Reports on welfare in depopulation operations within the context of Regulation (EC) No 1099/2009.

Animal health, results in 2016

Type of case	Total cases	demonstrated [a]	positive [b]	negative	no action [c]
African horse sickness	2	0	0	0	2
American foulbrood	3	0	0	0	3
Aujeszky	3	0	0	3	0
Avian influenza	310	0	52	152	106
Blue tongue	47	0	0	20	27
Bovine spongiform encephalopathy	2	0	0	2	0
Brucellosis abortus (Bang's disease)	47	0	0	47	0
Brucellosis canis	9	0	1	7	1
Brucellosis (Brucella melitensis)	5	0	0	3	2
Ovine brucellosis	3	0	0	2	1
Swine brucellosis	75	0	1	74	0
Campylobacter	2	1	0	1	0
Campylobacter fetus	0	0	0	0	0
Chlamydia abortus	1	1	0	0	0
Chlamydia caviae	0	0	0	0	0
Dourine	0	0	0	0	0
Echinococcus granulosus	1	0	0	1	0
E-Coli O 157H-7	0	0	0	0	0
Equine Herpes Virus	0	0	0	0	0
Equine Infectious Anaemia	5	0	0	4	1
Equine Viral Arteritis	1	0	0	0	1
Escherichia coli	0	0	0	0	0
Glanders	0	0	0	0	0
Hantavirus	3	0	2	0	1
Infectious haematopoietic necrosis	11	0	0	1	10
Classical swine fever	4	0	0	4	0
Cowpox	0	0	0	0	0
Koi Herpes Virus	2	0	2	0	0
Leptospirosis	9	3	0	0	6
Leukosis	31	0	0	29	2
Listeriosis	3	0	0	2	1
Lumpy Skin Disease	2	0	0	2	0
Glanders	1	0	0	1	0
Anthrax	0	0	0	0	0
Foot-and-mouth disease	1	0	0	1	0
Mycoplasma gallisepticum	4	0	0	3	1
Myxomatosis	0	0	0	0	0
Newcastle disease	13	0	1	11	1
OsHV-1 µvar	0	0	0	0	0
Psittacosis (animal)	50	0	24	21	5
Psittacosis (human)	55	0	22	20	12
Q fever (animal)	2	0	0	1	1
Q fever (bulk tank milk)	2	0	0	1	1
Q fever (human)	3	0	0	0	3
Rabies (bat)	32	0	9	16	7
Rabies (mammal)	43	0	0	27	16
Non-zoonotic Salmonella in poultry	0	0	0	0	0
Zoonotic Salmonella in poultry [#]	81	0	29	18	34

Type of case	Total cases	demonstrated [a]	positive [b]	negative	no action [c]
Salmonellosis	66	65	0	0	1
Sarcosporidiosis	1	0	0	0	1
Swine vesicular disease	11	0	0	7	4
Toxoplasmosis	0	0	0	0	0
Tuberculosis	32	0	0	19	13
Tularaemia	20	0	7	13	0
Venezuelan Equine Encephalomyelitis	1	0	0	0	1
Vesicular Stomatitis	1	0	0	0	1
West Nile Virus	7	0	0	6	1

[a] *'Demonstrated' is the term for Article 10 of Regulation (EC) No 999/2001: animal pathogens which are not subject to compulsory control but which must be reported by the veterinary surgeon.*

[b] *'Positive' are the results for animal diseases subject to compulsory control.*

[c] *Additional testing, the clinical picture, laboratory report and specific circumstances, etc., did not reveal the need for further action.*

[#] *These are verification tests. See the explanation in the paragraph on zoonotic Salmonella.*

Animal health monitoring

Monitoring in 2016	Number of establishments	Number of samples	Number not negative [1]	Positive after confirmation
Brucellosis abortion testing	6,030	12,321	30	0
Brucella melitensis	1,516	18,234	0	0
CSF, FMD, SVD in wild boar (serology) [2]	N/A	235/0/0	0/0/0	0/0/0
Aujeszky's disease in wild boar	N/A	235	0	0
CSF in wild boar (virological (PCR))	N/A	0	0	0
Aujeszky	4,989	82,668	0	0
AI monitoring serology (ELISA)	1,537	147,913	1,271	81 H5H7 5 unique establishments

[1] *Number of 'not negative' for AI monitoring serology (ELISA) = number of samples (i.e. not the number of consignments) which tested positive at the GD in AI ELISA and were forwarded to Wageningen Bioveterinary Research (WBVR) for confirmation.*
Number of 'positive after confirmation' for AI monitoring serology (ELISA) = number of samples (i.e. not the number of consignments) which tested positive at Wageningen Bioveterinary Research for H5 or H7.

[2] *From 2016, FMD and SVD in wild boar will no longer be determined serologically*

Incidents

The annual summary above presents a summary of the number of suspected cases of animal disease where further investigation by laboratory testing was instituted.
A brief explanation of a number of animal diseases in the summary follows:

Avian influenza
Europe was affected by a major outbreak of highly pathogenic H5N8 influenza virus in the last few months of 2016. Several countries are reporting large numbers of wild water fowl carrying the virus which have been found dead. Commercial establishments have also been found to be infected.

On 9 November 2016, the H5N8 avian influenza virus was identified in a wild water fowl (tufted duck) on the edge of the Gouwzee (just below Monnikendam). Despite the protective measures taken, such as the confinement obligation, that outbreak has also affected nine commercial poultry establishments. On Saturday, 26 November, the highly pathogenic H5N8 virus was identified in an establishment holding ducks raised for meat in Biddinghuizen. That was followed by a further two outbreaks in Biddinghuizen and outbreaks in Abbega, Kamperveen, Hiaure, Boven Leeuwen, Stolwijk and

Zoeterwoude. An outbreak just over the border in Germany also meant a surveillance zone had to be set up in the east of the country.
During that outbreak, in addition to the nine commercial establishments, the virus was identified at one animal park in Rotterdam, at the premises of two amateur chicken owners (in Den Oever and Rhenen) and at 38 locations where dead wild birds were found in 2016. In total, 19 establishments were depopulated and over 717,000 animals culled (because of contamination and also as a preventive measure). Transport ban areas were set up around commercial establishments. The limits of the surveillance zones were indicated with over 1,000 signs.

In addition to those outbreaks of HPAI H5N8, there were also two low pathogenic outbreaks in 2016. The first outbreak was in June, at a free range farm in Hiaure, where infection with LPAI H7N9 was established. The same farm was also affected by an outbreak of HPAI H5N8 virus at the end of the year.
The second establishment was a farm in Deurne where turkeys, ducks and pheasants were kept. An LPAI H5N2 infection was established there in October.

Brucella in dogs
In addition to the regular suspicions resulting from the serological monitoring of miscarrying cattle, sheep for *Brucella melitensis* and of pigs from AI stations, 10 suspected cases of brucellosis in dogs were reported and investigated this year. The Brucella bacteria was also identified in two cases.

The first case involved a dog from Hilversum. When castrating the dog, the veterinary surgeon found that the epididymis was inflamed. The dog was also unwell and had fluid in the abdomen. An examination of the inflamed testicle at WBVR in Lelystad showed the presence of *Brucella suis* serovar 1. This is a highly zoonotic variant which normally occurs in South America. The dog did not have a foreign medical history. No new infections were identified when contact with other dogs was investigated. The dog was fed BARF (bones and raw food). The origin of the meat used for that feed is still being investigated.

The second case concerned a dog from Romania, with discospondylitis. *Brucella canis* was isolated in sample taken from the inflamed intervertebral disc. The dog turned out to belong to a foundation which aims to give better lives to dogs from Romania. Alerted by this case, the faculty reported several other dogs with back complaints who, just like the first dog, had originated in Romania. Blood analysis demonstrated that those dogs tested serologically positive for brucellosis. Veterinary and human experts are currently being consulted on how to proceed now that these findings have been made.

Psittacosis
In 2016, 105 psittacosis reports were received. Fifty reports concerned suspected cases in birds and fifty-five were made by the Municipal Health Service (GGD) in respect of human patients who had been identified as having developed psittacosis and where the NVWA was asked to conduct an investigation to identify the source.
In forty-six cases, further examination identified birds as having developed psittacosis.
The majority of those infections were identified in birds in private ownership or kept by small-scale breeders or dealers. In two cases, the infected birds were in a pet shop (in the Hague and Rijswijk).
There were hundreds of birds of various species in the pet shops. Incomplete records mean that it is not always clear where the birds come from and not at all clear to whom they were sold. Large quantities of antibiotics, which were administered to the birds whether they needed them or not, were found in both shops.
Tackling psittacosis infections involves treating all birds present with doxycycline for six weeks. Two weeks after treatment, the NVWA takes samples to see whether the treatment has worked. No birds may be added or removed during that period.

Q fever
After mandatory bulk tank monitoring was introduced in October 2009, tests on bulk tank milk revealed an infection with the Q fever bacteria at 101 dairy goat and dairy sheep establishments with over 50 animals. The approach taken was aimed at removing the pregnant animals from an infected establishment and instituting annual mandatory vaccination for all dairy goat and dairy sheep establishments with over 50 animals and establishments serving a public function.
The infected status can be lifted once the establishment has achieved negative results in the bulk tank monitoring conducted by the Veterinary Health Service for one year. Following a year of good results, the NVWA collects what is

known as an official bulk tank sample. If the Q fever bacteria is not identified in this official bulk tank sample, the infected status is lifted.
On 7 June 2016, the last dairy goat establishment which still had an infected status was cleared. On 31/03/2010, tests on bulk tank milk revealed an infection with *Coxiella burnetii* at this establishment in Maren Kessel. On 02/04/2010, 200 pregnant animals and the billy goats were removed from this establishment and a breeding ban was imposed on the lactating, non-pregnant goats left behind at the establishment.
Since 7 June 2016, there have been no further dairy goat and dairy sheep establishments in the Netherlands with Q fever infection status.

Zoonotic Salmonella in poultry
The mandatory monitoring for zoonotic *Salmonella* at breeding and laying bird establishments revealed 29 establishments where an infection was established in one or more sheds.

They include seven breeding bird establishments where an infection was identified in 10 sheds and 22 laying bird establishments where an infection was identified in 28 sheds.

When a shed at a breeding bird establishment is infected, the animals have to be slaughtered early in a channelled system. The hatching eggs present must be removed for industrial processing. The livestock farmer receives compensation for the early slaughter of hens and the depreciation of the hatching eggs. The hatching eggs from that shed which have already been placed in the hatchery are removed for destruction once a valuation has been carried out. There is no compensation system in place for infected laying bird establishments.

Tuberculosis
The 32 cases of suspected TB are based on:
- 14 import reports of cattle from the United Kingdom, Ireland, Belgium and Germany, where an outbreak of TB has been identified at the establishment of origin of the cattle concerned.
- four suspected cases in pet animals (dogs, cats, ferrets).
- twelve suspected cases following the findings during the PM (post mortem) certification of cattle presented for slaughter.
- one suspected case involving a monkey at an animal park.
- one suspected case involving a goat.

No infection with tuberculosis was identified when the suspected cases were investigated further.

IHN
An infection with infectious haematopoietic necrosis was identified at what is known as a put-and-take farm (trout pond where you can fish in exchange for payment) in Zwolle in August. Two of the three fish ponds at the farm tested positive. The trout from those ponds turned out to originate in a German farm. The Chief Veterinary Officer (CVO) informed our German colleague of this. All the trout from the two ponds were culled and removed for destruction. After remaining empty for several weeks and having been disinfected, the farm was cleared. Tracing revealed a further 10 farms. No new infections were found.

Training for the animal disease control organisation

In 2016 the following training programmes, courses and exercises were organised and held for the animal disease control organisation:
- Two refresher days were organised for the animal disease specialists (DZD), one of which focused on the revised 'Hygiene and Health and Safety (ARBO)' procedures, processes related to NVWA suppliers, the benefits of and necessity for correct records, evaluations of incidents, the statutory framework for animal disease control, mycoplasma and the introduction of the digital sampling form. On the other day, the animal disease specialists visited the National Reference Laboratory (WBVR) in Lelystad. The day focused on the revised 'Hygiene and Health and Safety' procedures including zoning and the new instruction film for personal protective equipment, Psittacosis, Blue tongue, Lumpy Skin Disease, Vesicular Stomatitis, FMD, AHD and SVD.
- Eight new animal disease specialists received training. They have all now sat examinations and will be deployed for the first time from the end of February 2017.

- A training day was organised for the front teams. The following subjects were dealt with: revised 'Hygiene and Health and Safety' procedures, processes related to NVWA suppliers, the benefits of and necessity for correct records, and evaluations of incidents. In addition, the tasks and responsibilities involved of each front team role were addressed comprehensively in small groups.
- The departmental heads of the regional coordination centre received two half-days of training, one in March and one in November. During those half-days, the participants mainly looked into combining roles and preparing job descriptions. An annual refresher day on in-house emergency response (bedrijfshulpverlening (BHV)) was organised for the hygiene and enforcement officers who are members of the front team.
- The 9th e-learning module was delivered. This module has to do with zoonotic *Salmonella*, non-zoonotic *Salmonella*, Mycoplasma, Vesicular Stomatitis, Toxoplasmosis, Rift Valley, West Nile, Nodular Dermatosis, Blue tongue and the new digital sampling form.
- This year, the NVWA's Veterinary Incident and Crisis Centre (NVIC) also received several groups of final year veterinary science students and informed them about relevant animal disease control issues and the notification obligation.

Risk assessments

In 2016, the following risk assessments (RA) were carried out in response to outbreaks of animal diseases in other countries:

Animal disease	Country	Number of RA
Lumpy Skin Disease	Bulgaria	1
Highly pathogenic avian influenza	Hungary	1
Highly pathogenic avian influenza	Sweden	1
Highly pathogenic avian influenza	Germany	2
Highly pathogenic avian influenza	Denmark	1
Highly pathogenic avian influenza	Poland	1
Highly pathogenic avian influenza	Italy	1
African Swine Fever	Poland	1

Conclusions for 2016

- HPAI : Nine commercial poultry establishments were afflicted by highly pathogenic avian influenza.
- LPAI: Two commercial poultry establishments were afflicted by low pathogenic avian influenza.
- Q fever: On 7 June 2016, the last dairy goat establishment which still had an infected status was cleared.
- Zoonotic *Salmonella*: the mandatory monitoring for zoonotic *Salmonella* at breeding and laying bird establishments revealed 29 establishments where an infection was established in one or more sheds.
- Psittacosis: in 2016, 105 psittacosis reports were received. Fifty reports concerned suspected cases in birds and fifty-five were made by the Municipal Health Service (GGD) in respect of human patients who had been identified as having developed psittacosis.
- IHN : an infection with infectious haematopoietic necrosis was identified at what is known as a put-and-take farm. Two of the three fish ponds at the farm tested positive.
- TB: No infection

3.3 Animal health – prevention (live animals and live products)

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Directive 90/425/EEC	Trade in live animals and products
Directive 64/432/EEC	Trade in cattle and pigs
Directive 2009/156/EC	Import and trade in equidae
Directive 90/427/EEC	Zootechnical and genealogical conditions for equidae
Directive 2009/158/EC	Trade in poultry and hatching eggs
Directive 91/68/EEC	Trade in sheep and goats
Directive 92/65/EEC	Balai Directive
Directive 88/407/EEC	Bovine semen
Directive 90/429/EEC	Porcine semen
Directive 89/556/EEC	Bovine embryos
Directive 92/102/EEC	I&R of animals
Regulation (EC) No 1760/2000	I&R of bovine animals
Regulation (EC) No 21/2004	I&R of sheep and goats
Regulation (EC) No 262/2015	I&R of equidae
Regulation (EC) No 318/2007	Bird quarantine
Regulation (EC) No 1255/1997	Control posts
Regulation (EC) No 1739/2005	Circus animals
Regulation (EC) No 998/2003	Non-commercial movement of pet animals

National legislation

Animal Health and Welfare Act with detailing in the form of specific regulations including:

- Regulation on the Prevention, Control and Monitoring of Infectious Animal Diseases, Zoonoses and TSEs (Regeling preventie, bestrijding en monitoring van besmettelijke dierziekten en zoönosen en TSE's).
- Regulation on trade in live animals and live products (Regeling handel levende dieren en levende producten).
- Regulation on Equine Semen (Regeling paardensperma)
- Regulation on Bovine Semen (Regeling rundersperma)
- Regulation on Porcine Semen (Regeling varkenssperma)
- Regulation on the Identification and Registration of Animals (Regeling identificatie en registratie van dieren)

Size of control file, number of 'Animal health – prevention' inspections and interventions in 2016

Type of establishment	**Number as of December 2016**	**Number of inspections**	**Number of interventions***
Approved assembly centres (VC) of which approved as:	76		SW4, LOD2
• pig assembly centre	21	72	
• cattle assembly centre	61	122	
• sheep/goat assembly centre	26	87	
Control post, of which approved as:	4		
• Control post (cattle)	3	5	
• Control post (sheep/goat)	1	-	
• Control post (pigs)	1	2	
Cleaning and disinfection locations, of which:			
• approved	163	422	
• designated, poultry	42	59	SW4, LOD1
• simple and authorisation holder	124	80	

Type of establishment	Number as of December 2016	Number of inspections	Number of interventions*
Semen collection centres, of which approved as:	119		
• Bovine semen collection centres	7	16	
• Porcine semen collection centres	20	36	
• Equine semen collection centres	16	20	
• National equine semen collection centres	75	-	
• Sheep/goat semen collection centres	1	1	
Quarantine, of which approved as:	21		
• quarantine for porcine SCCs	14	26	
• quarantine for bovine SCCs	7	14	
• quarantine for ovine and caprine SCCs	-	1	
Storage centres, of which approved as:	15		
• bovine semen storage centres	12	18	
• equine semen storage centres	2	3	
• bovine embryo storage centres	1	-	
Embryo teams, of which approved as:	13		
• bovine embryo teams	8	3	
• bovine embryo production team	2	-	
• equine embryo teams	3	2	
Approved institutions 92/65	20	20	
Registered circuses	5	-	
Bird quarantine stations	1		
Approved poultry establishments, of which approved as::	641(672 erk.)		
• hatchery		37	
• hatching egg export station	40	5	
• poultry-breeding establishment	6	285	
• breeding establishment	297	see below	
• rearing establishment	37	348 (breeding	
	292	and rearing)	
Cattle establishments	34.575	1.143	
• I&R			MM351,SW82,PV70
• simple C&S			MM8, PV9
Sheep/goat establishments	36.502	640	
• I&R			MM170,SW132,PV42
• simple C&S			MM11, SW3, PV2
Approved livestock dealers	508	-	
Registered dealers in other species	174	-	
Destination controls		5.039	
Total establishment inspections by visit frequency		8.506	
Certifications for export certification in hours		107.553	
Dealing with complaints:			
• prevention	-	49	MM8,SW13,2BB,PV9
• Trade control	-	19	MM1, SW12, PV2
• I&R combined with prevention/trade	-	5	PV2
Transport controls:			
• unloading at multiple addresses		24	MM7, SW1, PV2
• 21-day rule		5	MM1, SW1, PV2
• transport controls surveillance		1.020	MM9,SW42,BB16,PV16

** SW = written warning, MM = verbal notification, LOD = cease and desist order, PV = official report and BB = administrative fine.*

Reference to specific reports:
In relation to I&R: Annual report in accordance with Regulation (EC) No 1082/2003 relating to cattle and Regulation (EU) No 1505/2006 relating to sheep and goats.

More detailed explanation of supervision of Animal Health – Prevention

In 2016, no resources or budget were available for controls of the registers of approved or registered traders.
Transport controls on the road relate to controls of cattle trucks for non-compliances in connection with arrival at or departure from establishments, the (complete) unloading, the correct assembly on the trucks, C&D registration, etc.
The C&D of vehicles, including empty vehicles, is also controlled. Consequently, cattle wagons can also be diverted from the road for controls.
The mandatory presence and functionality of a simple washing area was also checked during all I&R controls at livestock establishments (cattle and sheep or goats). Any welfare issues identified during these controls are included in the enforcement. The report on these transportation welfare issues are set out in the chapter on animal welfare.
More I&R controls of bovine animals were carried out in 2016 than in 2015 because of intensification of cross compliance. The number of controls at the simple washing area has also increased as a result. The number of controls at sheep and goat establishments has remained virtually the same.
The bovine, sheep and goat I&R controls are focused on compliance with the percentage prescribed in the EU (3%) and on actively tracking down establishments not in compliance. The controls are in part random and in part structured.
The prescribed percentage of controls for I&R of bovine animals was achieved in 93% of cases (controls connected with cross compliance intensification are not included); the percentage achieved for sheep and goats is 53%. The failure to achieve the target has to do with the setting of priorities for activities and the annually decreasing number of hours available for such controls.
The number of transport controls shown is substantially lower than in 2015. The reason for this is that this is the year when a decision was made as to which controls would, or would not, involve checks relating to prevention and or trade control. In 2015, all transport controls were shown; only those relevant to animal health and prevention are shown now.

Projects in 2016

Data from all assembly centres were collected (for risk classification purposes), control lists fleshed out and the working methods improved to ensure better archiving for the Improvement Plan for Assembly Centres which seeks to make supervision more risk-oriented, uniform and efficient.
To bring national regulations into line with the European trade directive, work was carried out jointly with the Ministry of Economic Affairs on including approved equine assembly centres in the prevention Regulations.
The transport controls included a number of focus areas aimed at animal health and prevention, such as the existence of certificates upon the importation or exportation of animals (administration and implementation) C&S, unloading at multiple addresses and the 21-day rule.
The number of controls varied from focus area to focus area from just a few controls to more than 100 controls.

Incidents

Highly pathogenic avian influenza outbreak
At the end of November 2016, the influenza virus AI (H5N8), which is highly pathogenic for birds, was identified at an establishment holding ducks raised for meat in Biddinghuizen. It was the start of a series of outbreaks, the last of which was identified on 25 December in Zoeterwoude.
In total, nine establishments became infected and were depopulated, ten were depopulated for preventive purposes and three premises of amateur chicken owners became infected and were depopulated.
Dealing with suspected cases and the infections which followed in quick succession, taking preventive measures and supervising the administrative processing of all the work carried out required substantial effort on the part of the NVWA. The NVWA received several compliments for the way in which it performed the abovementioned work; from the sector right up to the Minister.

Effects measurement

As from 2016, the NVWA has been operating the 'Meat Supply Chain Improvement Plan' programme at all red meat and medium-sized and small red meat slaughterhouses and poultry slaughterhouses.
With the introduction of the improvement plan, the NVWA has set up a supervision system for the 'cleaning and sterilisation of means of transport' depending on the risk profiles that have been estimated or established for each slaughterhouse. The NVWA also took samples of the disinfecting water presented at a number of slaughterhouses in 2016. This revealed that by no means all disinfecting water presented is provided in accordance with the regulations (under-dosage). In response to these findings, the NVWA will be starting taking samples and having them analysed on a long-term basis in 2017.
The NVWA has been drawing up reports on the effects since the introduction of the improvement plan. They show that the picture as regards the objective of the compliance policy in relation to C&S remains mixed.

Actions taken to improve the official controls

- SANTE.F general follow-up audit
- Three subjects were discussed during the general follow-up audit for the animal health domain.
- Approved institutions.
- In 2015, as a result of an FVO (Food and Veterinary Office) mission for authorised establishments, the NVWA implemented the improvements agreed in 2016 and presented them during the general review in 2016.
- Once the Ministry of Economic Affairs has also implemented proposed changes in legislation, something it is expected to do by 1 July 2017, all outstanding points will have been dealt with.
- Zoonotic Salmonella
- The mission in 2013 produced five recommendations, two of which could be crossed off the list in advance. The other three recommendations have been approved by SANTÉ.F.
- Animal health
- The three outstanding recommendations relating to animal health have been approved by SANTE.F.
- Internal newsletters
- NVWA's internal newsletters devote a great deal of attention to changes in legislation, new or improved methods, changes to the inspection lists and improved instructions.
- Improvement plan for assembly centres
- In view of the positive experiences with the improvement plans for red meat and poultry slaughterhouses, the NVWA decided to implement an improvement plan for assembly centres in 2016. All preparatory work was carried out in 2016, which meant a pilot could be launched in early 2017.
- In 2016, as support for the improvement plan, consideration was given as to which analyses of I&R data from assembly centres should be used in the long term and whether the data required could be retrieved from RVO.nl.
- Poultry Supply Chain Improvement Plan
- The Poultry Supply Chain Improvement Plan was started in order to improve supervision within the poultry supply chain in the long term. The work carried out for animal health and prevention in 2016 concerned, in particular, zoonotic Salmonella.
- Instruction for veterinary surgeons and inspectors
  - Common instructions to the establishment controllers at assembly centres
- In a new section, the NVWA has organised kick-off meetings for the establishment controllers. The NVWA hopes that this will achieve a high-quality, effective and uniform approach.
  - A kick-off meeting is held at the start of projects in order to inform inspectors of the current legislation and the interventions to be applied.
  - A specific work instruction is drawn up for inspectors for each project to ensure that the inspections are carried out uniformly.
- Data analysis
- Controls are increasingly being conducted following a data analysis. As a result, the time available is used more efficiently.
- I&R controls
- Alternative enforcement options which may make it possible to satisfy the European regulations with the resources available are currently being examined.

Actions taken to improve the compliance of the business community

- In 2015, the NVWA found having more talks with the business community on the interpretation of legislation and on compliance a successful experience. That approach was continued in 2016 and the talks were also broadened. In addition, the NVWA often contributes thoughts to and advises sector organisations on communications about parts of the legislation and the practical implementation thereof.
- In 2016, the NVWA gave out signals to the sector organisations concerned regarding compliance with certain parts of concern to the NVWA. The sector organisations picked up that general signal and they shared the concerns with their members, or called on them to improve compliance by alerting them to the importance of doing so.
- Jointly with the Ministry of Economic Affairs, the NVWA has established structured discussions with the business community where questions, difficulties and requests for amendments of the prevention Regulations and trade Regulations can be raised and discussed. It may be pointed out during those discussions that certain regulations are in fact firm requirements imposed by the EU and explained why such rules are in place. Often, however, the rules will be national rules which have application in addition to European regulations. In some cases, it will turn out that it is no longer necessary to impose those additional restrictions, thanks to developments within the sector, and the regulations will be amended in that respect. This, too, has led to greater understanding and support.
- The NVWA's general intervention policy was tightened up in 2016. Expectations are that the specific I&R, prevention, animal health and trade intervention policies will also be tightened up along the same lines in 2017.

Conclusions

The improvement plan leads to more effective supervision and enforcement.
Better preparation of controls facilitates risk-oriented inspection and non-compliances are identified earlier.
Good coordination with the business community can lead to more and practical communication about legislation.
This creates a larger support base and ultimately leads to better compliance.

3.4 Animal welfare

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 1/2005	protection of animals during transport and related operations
Regulation (EC) No 1099/2009	protection of animals at the time of killing
Directive 93/119/EEC	protection of animals at the time of slaughter or killing
Regulation (EC) No 853/2004	hygiene rules for food of animal origin
Directive 98/58/EC	protection of animals kept for farming purposes
Directive 1999/74/EEC	minimum standards for the protection of laying hens
Directive 2007/43/EEC	minimum rules for the protection of chickens kept for meat production
Directive 2008/119/EC	minimum standards for the protection of calves
Directive 2008/120/EC	minimum standards for the protection of pigs

National legislation:

- Animals Act, section of Chapter 2: animals
- Animal Keepers Decree
- Regulation on Animal Keepers
- Enforcement and other Animals Act Matters Decree (Besluit handhaving en overige zaken Wet dieren)
- Regulation on Enforcement and other Animals Act Matters (Regeling handhaving en overige zaken Wet dieren)
- Animal Welfare Policy Rules (Beleidsregels dierwelzijn) 2009
- Animal Disease Specialists Decree

Size of control file in 2016

Type of establishment	**Number**
Livestock transporters (short journeys)	1,704
Livestock transporters (long journeys)	298
Large ungulate slaughterhouses (continuous supervision)	22
Small and medium-sized ungulate and farmed game slaughterhouses	161
Large poultry slaughterhouses (continuous supervision)	18
Small poultry slaughterhouses	8

Type of establishment	**Number at 01/04/2016***
Laying hens	1,010
Calves	1,651
Pigs	4,440
Broilers	630
Cattle	24,147
Sheep	5,744
Goats	402
Broiler parent stock	250
Flightless birds	3
Ducks	60
Geese	10
Fur animals	150
Turkeys	40

* *CBS, The Hague/Heerlen*

Supervision of Animal Welfare, results in 2016

Welfare During Transport 2016 (controls by transport teams)	Number of inspections	Number non-compliant	% non-compliant
On the road	1,217	260	21
Slaughterhouse	166	32	19
Assembly centres	49	8	16
Primary establishment	155	72	46
Total during road transport	1,587	372	23
Administrative enquiries and reports/complaints	455	361	79
Total	**3,629**	**1,105**	**30**

Supervising veterinary surgeons' reports on findings on slaughterhouses and assembly centres	Number	Number of interventions
Regulation (EC) No 1/2005	539	424
Regulation (EC) No 1099/2009	253	240

Journey log controls and GPS controls	Number	Number of interventions
Journey log controls (100%)	5,590	34
GPS project (approx. 10%)	564	26

Supervision of laying hens (Directive 1999/74/EC)	Number
Inspections	24
Measures	2

Supervision of calves (Directive 2008/119/EC)	Number
Inspections	340
Measures	53

Supervision of chickens kept for meat production (Directive 2007/43/EC)	Number
Inspections	90
Measures	33

Supervision of pigs (Directive 2008/120/EC)	Number
Inspections	486
Measures	173

Supervision of cattle (Directive 98/58/EC)	Number
Inspections	784
Measures	335

Supervision of sheep (Directive 98/58/EC)	Number
Inspections	243
Measures	81

Supervision of goats (Directive 98/58/EC)	Number
Inspections	75
Measures	15

Supervision of broiler parent stock (Directive 98/58/EC)	Number
Inspections	135
Measures	1

Supervision of ducks (Directive 98/58/EC)	Number
Inspections	22
Measures	6

Supervision of fur animals (Directive 98/58/EC)	Number
Inspections	2
Measures	1

Supervision of turkeys (Directive 98/58/EC)	Number
Inspections	23
Measures	1

Supervision of the killing of animals at primary establishments (Regulation (EC) No 1099/2009)	Number
Inspections	28
Measures	5

Reference to specific reports

- Annual reports to the European Commission as referred to in Decision 2006/778/EC concerning inspections of production sites on which certain animals are kept for farming purposes.
- Annual reports in accordance with Commission Implementing Decision 2013/188/EU on annual reports on non-discriminatory inspections carried out pursuant to Council Regulation (EC) No 1/2005 on the protection of animals during transport and related operations.
- Annual reports on depopulation operations in accordance with Article 19(4) of Regulation (EC) No 1099/2009 on the protection of animals at the time of killing

Further explanation of the results for 'Animal Welfare'

Laying hens: the infringements involved the incorrect or inadequate opening of the access points to outdoor areas, which meant those areas cannot be counted officially as usable surface. This, in turn, has an impact on the number of laying hens to be kept.
Calves: the figures are based on inspections in both the veal calf and dairy cow sectors. The inspections were conducted in combination with other controls, such as a cross compliance control for example. In a number of cases the inspections were conducted in response to a report. Infringements mainly related to no clean and dry place to lie down and insufficient drinking water and/or feed.
Broilers: the most common infringements in 2016 were failure to properly enforce rules on light in the sheds. The length of the dark period was not observed or the light intensity of 20 lux was not achieved. In addition, errors were made in noting the daily mortality or whether mortality was too high. Litter that was too wet and compacted was another very common infringement.
Pigs: Most of the infringements identified in 2016 related to floors, the permanent availability of sufficient material for pigs to investigate and play with, correct dimensions of pens (and floors) and minimum lighting (increasing the light intensity from at least 40 lux during at least 8 hours per day).
Cattle, sheep and goats: inspections were carried out in response to a report or a risk analysis. Most of the infringements involving cattle, sheep and goats related to no clean and dry place to lie down, insufficient drinking water and/or feed and inadequate medical care.
Broiler parent stock: the infringement detected involved sharp and protruding parts on which an animal could injure itself.
Ducks: in 2016, most of the infringements detected concerned minimum lighting. There are some establishments which do not apply a day/night rhythm for ducks raised for meat.
Fur animals: the infringement detected involved sharp and protruding parts on which an animal could injure itself.
Turkeys: in 2016, a sizeable number of inspections was carried out for baseline measurement purposes (as a result of the NVWA's having taken over product board duties). The infringement involved an incorrect lighting schedule and light intensity.
Death of animals at the primary establishment: in response to a request for a visit in 2016 by the European Commission, DG Santé, Directorate F, the method of killing for turkeys was also examined alongside the project for 'the welfare of

turkeys reared for meat'. The infringement for turkeys involved use of an incorrect method of stunning. In addition, infringements involving incorrect methods of stunning, acts of killing not being carried out after stunning or the method of killing not guaranteeing instantaneous death were identified at other production sites.

Projects in 2016

Animal welfare at the primary establishment
Cattle and calves. In 2016, there was a follow-up for dairy cattle for large growers with high mortality rates with particular attention paid to male calves in dairy farming. This project was carried out in order to obtain a picture of compliance. What are known as establishments warranting attention were re-inspected this year, too. They are establishments with a history of animal neglect.
2016 saw the first visits to duck holdings on behalf of the NVWA. The purpose was to form a picture of animal welfare in the duck sector and to establish whether any action had been taken in response to the recommendations made by 'The Standing Committee of the European Convention on the Protection of Animals kept for Farming Purposes' and Wageningen University & Research (WUR).
In 2016, controls were again carried out for turkeys, rabbits, broiler parent stock and mink, as a result of the NVWA's having taken over product board duties. Not all of them have been carried out yet, but expectations are that the baseline measurements will be carried out in full in 2017.
In addition to the welfare of turkeys raised for meat, the methods of killing turkeys were also identified and listed. This was requested by the HFAA.

Animal welfare during transport – explanatory notes to the results of controls
The percentage of non-compliance in relation to animal welfare detected in the course of inspections carried out during road transports has increased from 17% in 2015 to 23% in 2016.
A total of 1,587 inspections were carried out during road transports in 2016, with 1,898 being carried out in 2015. This increase can be explained by the outbreaks of AI, which led to deployment being prioritised differently.
The percentage of non-compliance identified during controls at assembly centres has fallen considerably compared with 2015 (32%). There was a sizeable increase in 2015 compared with 2014 (18.5%). One explanation for this may be that most of the inspections were announced in advance.
Attention was paid to specific high-risk transports. They involve, among other things, animals transported within a week of giving birth and the transportation of animals unfit for transport. Such cases have come to light during 'administrative enquiries and reports/complaints' inspections. This also explains the high percentage of non-compliance identified during those inspections.

Animal welfare during transport - projects
In 2016, there were various focus areas in the controls targeting animal welfare during transport. Within these focus areas, special attention was devoted to high-risk transports as a result of which the percentage of non-conformity is generally higher. The number of controls varied from focus area to focus area from just a few controls to more than 100 controls.
Poultry supply chain analysis: the Poultry Supply Chain Improvement Plan was started in order to reinforce supervision within the poultry supply chain structurally and make it demonstrably more efficient and effective. Various projects pertaining to animal welfare were conducted in 2016, including: a project concerning intra-Community trade and imports/exports and transport which is not conductive to animal welfare (focusing on crates). Preparations were also made in respect of controls for slow growing chicken strains. A dashboard has also been set up to enable better preparations to be made for controls.
Importation of calves (long distance transport watering system): there were additional controls of imports of newborn calves where the transport lasted 8 hours or more. The focus was on the watering arrangements. The use of metal teats was sanctioned. The transport sector has so far been unable to find adequate solutions which is why the export of newborn calves over long distances was not permitted in 2016.
'Transport of late term pregnancy cattle' project: within this project, the finding that a cow presented for slaughter has turned out to be heavily pregnant is put to dairy farmers. Where such a finding is made, the farmers concerned are given a warning if this is a first-time offence. That will be followed by an administrative fine in the event of recidivism. In one official report, the dairy farmer concerned was also charged with the suffering of the unborn calf; he has recently been convicted (in the first instance).

Headroom for cattle: a small number of inspections regarding the headroom for cattle (rose veal calves) took place. They included the question of whether the animals' backs had been injured. This was not found to be the case. The continuing failure to reach agreement on standards for the load rate and headroom complicates the inspection and enforcement of these transport requirements.

Animal welfare at the time of stunning and killing
As regards slaughter without stunning, the NVWA inspected all slaughterhouses where cattle are slaughtered without stunning. Many shortcomings came to light. Slaughterhouses were given until mid-August to remedy those shortcomings. The outcome was that six of the twenty-eight slaughterhouses were no longer given permission to slaughter cattle without stunning. One of the conclusions is that the frequency of supervision will have to be increased using the risk matrix.
At ten poultry slaughterhouses, poultry were removed from the transport containers and 'turned onto their backs' and put on conveyor belts whilst still alive. This was the case in two slaughterhouses when the back-up method was used. Turning animals onto their backs whilst still alive entails a welfare risk that is greater than is the case with high line speeds. Slaughterhouses are responsible for ensuring that animals are spared every avoidable form of pain, stress or suffering and 'turning animals onto their backs whilst still alive' must therefore be avoided. A project to ensure uniform supervision and enforcement for this was started in September 2016. The ultimate objective of this project is to have establishments modify the equipment used to turn animals onto their backs, or to change the way they use that equipment to ensure that animals can no longer be turned onto their backs whilst still alive.

Animal welfare of laboratory animals
The NVWA's laboratory animals domain supervises the Experiments on Animals Act (Wet op de dierproeven, Wod). This legislation is based on European Directive 2010/63/EU.
The laboratory animals domain carries out inspections at nearly 80 institutions that have been issued a permit to carry out experiments on animals, rear animals for scientific purposes and/or to supply animals for scientific purposes. Inspections are carried out on the basis of a risk analysis of permit holders. This risk analysis is in turn based on parameters specified by the EU.
In 2016, the NVWA carried out 298 inspections within the context of the Experiments on Animals Act. Three measures (written warnings) were taken during these inspections.

Incidents

No incidents were reported in 2016.

Effects measurement

Animal welfare at the primary establishment
No effects measurement regarding animal welfare took place in 2016. However, a target group analysis, which focused on footpad lesions in broilers, was carried out.

Animal welfare at the time of stunning and killing
As part of the Red Meat Improvement Plan the NVWA tightened up supervision at slaughterhouses in 2014.
The compliance monitor shows the level of compliance with the rules pertaining to animal welfare at large red meat slaughterhouses.
As part of the Poultry Improvement Plan the NVWA tightened up supervision at poultry slaughterhouses in 2015.
The compliance monitor shows the level of compliance with the rules pertaining to animal welfare at large poultry slaughterhouses. There are 18 large poultry slaughterhouses where 99.9% of the animals produced in the Netherlands are slaughtered. The more stringent supervision was rolled out in phases for those slaughterhouses.

Actions taken to improve the official controls

Animal welfare at the primary establishment
Inspections involving animal-based measures began in 2016 with the cattle inspections. In addition, amendments were made to the work instructions for various animal species and improvements were made to the control content for broilers.

A ‘shed climate measurement’ pilot was carried out for pigs on the basis of environment variables (including gas concentrations) and animal-based indicators.

Animal welfare during transport
The working method employed in transport is becoming increasingly project-based, based on the focus areas. Specific instruction meetings were held in relation to the projects pertaining to transport so that inspectors could be informed of the current legislation and intervention options. In addition, a specific work instruction is drawn up for inspectors for each project to ensure that the inspections are carried out uniformly.
Controls are increasingly being carried out in response to data analyses for risk-based supervision.

Actions taken to improve the compliance of the business community

The NVWA's general intervention policy was tightened up in 2016. Expectations are that the specific intervention policy for animal transport - prevention will also be tightened up along the same lines in 2017.

Animal welfare at the primary establishment
A pilot concerning the implementation of compensation payments in the event of re-inspections has been running since mid-2016.
No specific actions have been taken. However, there has been contact with the sector regarding the requirements set by the Netherlands for perches and the availability, whether or not permanent, of feed and water for broiler parent stock. Research and a risk analysis are now being conducted for this.

Animal welfare during transport
In 2016, the NVWA and the business community made agreements concerning the transport of pigs, cattle, sheep and goats in extremely hot and cold temperatures, each within its own role and responsibility and with due observance of the statutory provisions. Those agreements are described in the ‘extreme temperatures national plan’. The heat plan was deployed three times in the summer of 2016. Talks with the poultry sector started in 2016 and it is expected to be in line with the extreme temperatures national plan in 2017..

Conclusions

In relative terms, most measures relate to cattle, sheep, goats, pigs and broiler chickens.
However, those relating to cattle, sheep and goats largely involved risk-based inspections. For that reason, the figures cannot be seen as an accurate reflection of those sectors.
The figures for laying hens, pigs, broiler parent stock, fur animals, ducks and turkeys provide a better indication of overall compliance in these sectors.
The picture for calves is mixed.

3.5 Animal feed

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 178/2002	General principles and requirements of food law
Regulation (EC) No 183/2005	Feed hygiene requirements
Regulation (EC) No 1831/2003	Additives for use in animal nutrition
Regulation (EC) No 1829/2003 Regulation (EC) No 1830/2003	GMOs in animal feed and foodstuffs
Regulation (EC) No 999/2001	TSE regulation
Regulation (EC) No 1069/2009	Animal by-products – basic regulation
Regulation (EC) No 142/2011	Animal by-products – implementing regulation
Regulation (EC) No 767/2009	Trade and use of animal feed (including prohibited materials)
Directive 2002/32/EC	Undesirable substances in animal feed
Regulation (EC) No 669/2009	Import controls on high-risk products
Directive 90/167/EC	Medicated feed

National legislation:

- Animals Act (Wet Dieren)
- Animal Feedstuffs Decree 2012 (Besluit diervoeders)
- Regulation on Animal Feedstuffs 2012 (Regeling diervoeders)
- Veterinary Medicinal Products Decree

Size of control file in 2016

Type of establishment	Number
Approved and registered production establishments of which food establishment operators	2,500 800
Transporters (road transport and inland navigation)	2,900
Traders	2,500
Approved animal protein establishments	46
Storage and transshipment establishments (without trade)	800
Third country representatives	46

Supervision of Animal Feed, results in 2016

Supervision domain name	Number
Inspections	1,896
Samples	2,673
Measures	251

Measures comprising 204 written warnings, 43 reports on findings and 4 official reports.

Further explanation of the results for 'Animal Feed'

Re-registration of animal feed establishments with the NVWA remains an issue requiring attention. The same applies to the registration of correct activities.
Compliance in the animal feed sector is, in the main, high. Further identifying the blind spots such as 'lower end of the market', 'damaged goods' and 'registered establishments – transport sector' requires appropriate commitment.
The sector responds to incidents by assuming the responsibility for traceability and the prevention of further spreading.
Issues that still require attention are general hygiene management, carry-over/cross-contamination, hazards, risk

analysis and traceability. In addition, labelling by animal feed producers and the correct use of claims, the scientific corroboration of claims as well as online trading require a suitable enforcement effort.

Projects in 2016

Registration of animal feed establishments
In 2016, too, the NVWA invested in continuing its efforts to bring the registration of animal feed establishments (re-registration and registration of the correct activities) into order by, among other things, improving the NVWA website and challenging incorrect registration during inspections.

Laboratories' notification obligation
The Laboratories' notification obligation project report was produced in early 2017. It was noted that not all animal feed laboratories are capable of meeting the notification obligation provided for by the Animals Act and the amended Regulation laying down requirements for feed hygiene because they are failing to find out the status of the product to be analysed or because the status (animal feed or not animal feed) is not determined by the party commissioning the analysis until after the analyses have been performed in the laboratory (upon importation, for example).
Seven animal feed laboratories have received accreditation for the analysis of dioxins and dioxin-like polychlorinated biphenyls (PCBs). That notwithstanding, a recent proficiency test organised by the RIKILT (the Dutch Reference Laboratory) showed that there are valid doubts as to whether the analyses are being performed with an adequate degree of competence by all those laboratories.
https://www.nvwa.nl/Subject:Animal feed/documenten/Communication/inspectieresultaten/Animals/2017m/inspectieresultaten-meldingsplicht-Animal feed

Road transport
In 2016, 43 transport trucks carrying animal feed or raw materials for animal feed were inspected. In three cases, 'not in compliance with the statutory provisions' was the outcome of the inspection. Three warnings were issued; not being registered as required as a carrier of animal feed (2) and animal feed and the consignee's address not being indicated on the transport documents (1).

Plant-based by-products of food businesses
NVWA visited 62 establishments of origin for plant-based by-products in 2016, namely potato-processing, corn-processing and rice-processing establishments and fruit and vegetable-processing businesses. As a follow-up, the buyers of those plant-based by-products were investigated (23 companies). It was found that 66% of the 62 establishments of origin visited are complying in full with the regulations. whilst 8 of the 62 establishments of origin were not registered for animal feed. Identification and/or the traceability of the products was not as it should be in 4 of the 62 establishments of origin.
Traceability was at it should be in 65% of the 23 buyers visited (traders and processing establishments). One customer was found to have uprated animal feed to food.

Labelling and claims
The reports on the inspections carried out in 2015 and 2016 were prepared and have since been published.
https://www.nvwa.nl/onderwerpen/diervoeder/documenten/communicatie/inspectieresultaten/dier/2016m/onderzoek-diervoederetikettering-2015 - 2016.-naleving-etiketterings--en-claimvoorschriften
The information provided on the NVWA website was amended at the same time.

The NVWA noted a great diversity of prohibited medical claims. Prohibited (medical) claims were found at 31 of the 72 establishments visited (43%).
Shortcomings related to labelling of additives were noted at 15 of the 30 establishments inspected (50%).
Most common discrepancies: absence of functional group, and coding and/or functional designation not in accordance with the authorisation; labelling information not in Dutch. Labelling relating to premixes and/or supplementary animal feed is also often unclear.
Products offered for sale online usually do not meet the labelling requirements of the Market Regulation.

A pilot to assess health claims took place in 2016. The purpose of the pilot was to develop a method to assess such claims. Points requiring attention here include collaboration with the Veterinary Medicinal Products Unit (Bureau Diergeneesmiddelen) and the assessment method used by the NVWA.

Medicated feed investigation 2014-2015 investigation into carry-over
Since 1 July 2014, the animal feed establishments which had previously received authorisation through the Animal Feed Product Board (PDV) to produce and/or place on the market medicated premixes, semi-finished products and/or medicated animal feed, have been under the supervision of the NVWA for authorisation.

The NVWA assessed the compliance of those holders of authorisation permit holders with the authorisation conditions. It examined, in particular, whether sufficient measures are taken during the production of medicated animal feed, and when they are placed on the market, to avoid cross-contamination and/or carry-over of medicines to other animal feed, or to reduce any such occurrences to a minimum.
Cross-contamination with and/or carry-over of coccidiostats (additives) was also included in the assessment.
The reports were prepared in 2016; however, owing to, among other things, coordination with a RIKILT-WUR report due to be produced, they will not be published until 2017. https://www.nvwa.nl/onderwerpen/diervoeder/documenten/communicatie/inspectieresultaten/dier/2016m/onderzoek-gemedicineerde-diervoeders.-onderzoek-naar-versleping-2014-2015

Based on the information supplied by the establishments, the carry-over percentage exceeded the permitted carry-over of 2.5% on one or more production lines at 43 of the 98 establishments inspected. Not all establishments have taken adequate control measures. The verification of the carry-over control measures is not as it should be at 1/4 of the establishments.

Animal Feed National Plan
Under the 2016 Animal Feed National Plan a total of approximately 4,582 analyses of 2,673 samples were requested. This excludes: ± 100 ICP-MS measurements which investigated a wide selection of elements and ± 1,500 moisture analyses to facilitate reports on 12% moisture.
The 2016 and 2017 Animal Feed National Plans are published on the NVWA's website. .
https://www.nvwa.nl/onderwerpen/diervoeder/inhoud/toezicht-nvwa-bij-diervoeder/nationaal-plan-diervoeders
The publication of the results for 2014, 2015 and 2016 is scheduled to take place in the first half of 2017.

Incidents

Inspections in the case of incidents/complaints/reports play an important role in the supervision performed by the NVWA. The NVWA receives indications of non-compliant animal feed via the European Rapid Alert System for Food and Feed (RASFF), direct contacts with other colleague services in EU Member States, reports from consumers submitted with the NVWA notification line and from NVWA and industry controls. Irregularities usually relate to non-compliance with the standards for undesirable substances, but also to incorrect labelling of animal feed.
There were no cases leading to measures in 2016. However, the NVWA did take a number of measures owing to establishments failing to make reports.

Effects measurement

See the Copper in Pig Feed project in Actions taken to improve the compliance of the business community.

Actions taken to improve the official controls

Animal feed compliance risk management strategy
The Animal Feed Compliance Risk Management Strategy document, which describes the ,various chains and sub-chains in the animal feed supply chain, was updated in 2016. A description of the establishments, risk factors, risk analysis, compliance level, blind spots and the enforcement method to be used now and in the future is given for each target group. This document is updated periodically based on the compliance risk management strategy cycle. The target group analysis for Fats was delivered in 2016.

Copper in pig feed
The results of the Copper in Pig Feed project show that the new enforcement approach, where targeted enforcement communication is used, has led to a substantial improvement in compliance (now 92%, initially 67%). Pig farmers were informed of the results in a pamphlet: Compliance with the statutory standard on copper in pig food has vastly improved.
The results of the effects measurement are expected in the first half of 2017.

Private assurance schemes
In 2016, three private assurance schemes (GMP + International (Good Manufacturing Practices), Feed Chain Alliance and European Feeds Ingredients Safety Certification (EFISC)) were assessed on the basis of the criteria set out at Ketenborging.nl. The desk-based research and the verifications have been completed. The schemes have been asked to provide an amendment relating to 'unannounced and risk-oriented visits'. Expectations are that the procedure will be completed in the first half of 2017.

Blind spots regarding the traceability of oils and fats
In 2016, the NVWA investigated whether the source data of the Chamber of Commerce are sufficiently specific to assist with the selection of animal feed establishments. The trading in and/or production of plant-based oils and fats activity was not sufficiently specific; nearly half (44%) of the establishments selected turned out not to be animal feed establishments.

Training
Further investment in the traceability inspection method in 2016. In a number of specific projects, such as plant-based product residues, the inspectors were asked to establish a link between the physical stream and the administrative documents (including bill of lading, entry into the records, invoicing and payment).

Actions taken to improve the compliance of the business community

In 2016, investments were mainly made in the preparation of a number of reports and improving the information provided on the website.

Use of copper in pig feed enforcement strategy
In 2015, the NVWA held an information campaign, informing cattle farmers of their obligations and announcing inspections. Following the inspections in 2015 and 2016 in respect of a representative sample of pig farmers, it was found that the animal feed used at 92% of the establishments meets the statutory standard for copper. In comparison with 2014, this represents a substantial increase, from 67% to 92%. https://www.nvwa.nl/documenten/communicatie/inspectieresultaten/dier/2016m/naleefbeeld-2016-wettelijke-norm-voor-koper-in-varkensvoer
An effects measurement was also performed for which a pragmatic approach was adopted (interviews by the inspectors). The reports are being prepared.

Conclusions

- Correct registration or re-registration of the animal feed establishments with NVWA continues to be an issue requiring attention both from the perspective of compliance with obligations and from the perspective of risk-oriented working.
- Compliance in the animal feed sector is, in the main, high. Further identifying the blind spots such as 'lower end of the market', 'damaged goods' and 'registered establishments – transport sector' requires appropriate commitment.
- The results of the Copper in Pig Feed project show that the new enforcement approach, where targeted enforcement communication is used, has led to a substantial improvement in compliance (now 92%, initially 67%).
- The sector responds to incidents by assuming the responsibility for traceability and the prevention of further spreading.

Issues that still require attention are general hygiene management, carry-over/cross-contamination, hazards, risk analysis and traceability. In addition, labelling by animal feed producers and the correct use of claims, the scientific corroboration of claims as well as online trading require a suitable enforcement effort.

3.6 Animal by-products

Controlling authority or authorities: NVWA, COKZ/NCAE

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 1069/2009	Basic regulation
Regulation (EC) No 142/2011	Implementing Regulation
Regulation (EC) No 999/2001	TSE regulation

National legislation

- Animals Act (Wet Dieren)
- Animal Products Decree (Besluit dierlijke producten)
- Regulation on Animal By-products (Regeling dierlijke producten)

Size of control file in 2016

Type of establishment	**Number**
Establishments of origin - primary production	Approx. 35,000
Establishments of origin for red meat, white meat, game, food production establishments, hotel/ restaurant/catering, retail	Approx. 87,000
Section I: storage of animal by-products (Cat. 1, Cat. 2 and Cat. 3)	456
Section II: storage of derived products (authorised)	132
Section III: incineration/combustion (authorised)	47
Section IV: processing establishments	24
Section V: oleochemical establishments	3
Section VI: biogas establishments	113
Section VII: composting establishments	59
Section VIII: pet food	85
Section IX: handling of animal by-products and derived products outside the feed chain	121
Section X: registered users	425
Section XI: assembly centres	17
Section XII: manufacture of organic fertilisers/soil improvers	50
Section XIII: other registered operators	
• transporters	1,329
• traders	323
• storage establishments	181
• incineration and co-incineration plants	7
• other	141

Supervision of Animal By-products, results in 2016

Supervision of animal by-products	Number
Supervision of authorised/registered/new ABP establishments	1,081
Supervision of ABP establishments of origin – food	> 900
Supervision of establishments of origin – livestock farming	209
Supervision of ABP transport	101
Traceability projects (fats, processed animal proteins, co-fermentation)	Fats: 17 PAP: 32 Co-fermentation: 12
Destination controls	582
Inspections in response to complaints and reports	116
Unplanned inspections	137
Re-inspections	169
Microbiology samples	63
Chemical samples	24
Measures	
• written warnings	312
• fine reports	97
• official report	6

Further explanation of the results for 'Animal By-products'

The number of establishments working in the ABP sector increases annually. As a result, the number of inspections at approved and registered establishments is rising as is, for example, the number of destination controls.
The number of inspections relating to destination controls rose in response to the introduction of more risk-oriented supervision. Several consignments were inspected during one inspection. Compliance is good in relation to category 1 and category 2 material. A number of establishments (traders, in particular) engaged in trading in processed animal proteins are knowingly entering incorrect information into the TRACES system. Supervision is also hampered by the fact that the TRACES/DOCOM system is not in line with the statutory requirements (for example, in relation to the identification of consignments) and also provides establishments with the opportunity to enter incorrect information.
Inspections in respect of traceability and safeguarding flows are a priority in supervision, in particular at establishments where derived products are stored. Investigations relating to the fats' chain reveal that the traceability of products in storage establishments is an issue. In addition, a project during which the sale of certain residues (glycerine, used cooking oils) to biodiesel manufacturers and co-fermentation plants was examined was conducted jointly with manure inspectors and the Human Environment and Transport Inspectorate. Biodiesel establishments, traders and co-fermentation plants were inspected during that project.
Since 2015, efforts have been made to develop an approach to tackle the illegal export of processed animal proteins originating from ruminants to third countries. Storage establishments and traders are involved in those efforts. So far, this has resulted in five establishments ceasing such activities. Progress is being hampered by legal proceedings instituted against the NVWA by the establishments concerned, complex trading arrangements and the international component of this trade. One case was passed on to the police, through the IOD, for involvement in other criminal activities. That led to a raid and the arrest of the persons concerned.
Inspections relating to the collection, storage and transport of PAP from slaughterhouses were carried out jointly with inspectors of red meat and white meat slaughterhouses. Compliance ranges from reasonable to moderate, but is improving. This remains an area requiring attention.

Projects in 2016

- 'Supervision of authorised/registered/new ABP establishments' comprises dealing with authorisation applications, planned inspections, system inspections, audits of authorisation requirements, industry controls, process management, HACCP or traceability at authorised or registered establishments and supervision of Rendac/Sonac/Noblesse.
- 'Supervision of ABP establishments of origin – food' comprises inspections planned by the ABP domain, but carried out by inspection teams from other domains (Industrial Production (IP), fish, meat) whether or not together with an ABP inspector.

- ‘Supervision of establishments of origin – livestock farming’ comprises inspections of compliance with the rules for the supply and disposal of carcases by livestock farmers.
- ‘Supervision of ABP transport’ comprises inspections of halted vehicles transporting animal by-products.
- ‘Traceability projects’: supervision of trade in animal by-products and derived products. This relates, in particular, to inspections of identification, documentation and traceability. Inspections of traceability are in-depth inspections which examine not only the entry of items into storage and their removal from storage but the financial records, too.
- Destination controls of consignments traded in Intra-Community trade for which TRACES notifications are mandatory and imported consignments that must be transported in channelled transports from the Border Inspection Post.
- ‘Inspections in response to complaints and reports’ comprise inspections carried out by Consumer & Safety (C&V) and Agriculture & Nature (L&N).
- ‘Unplanned inspections’ are at the initiative of inspectors (C&V and L&N) in response to indications of non-compliance with ABP regulations other than complaints or reports.
- ‘Microbiology sample’ comprises the samples of pet food and feed materials of animal origin taken and analysed by the NVWA.
- ‘Chemical sample’ comprises the samples that NVWA has taken at Rendac by way of supervision of the addition of the colouring agent glyceroltriheptanoate (GTH).
- Supervision of the illegal export of processed animal proteins (PAP). The PAP Task Force was set up in 2015. It specifically focuses on establishments (storage establishments and traders in particular) which are involved in the illegal export of PAP originating from ruminants.

Reports/incidents

The majority of RASFF reports concerned non-compliance with microbiological standards relating to *Salmonella* in processed animal proteins. Other reports mainly related to omissions in TRACES, including destination controls, and incorrect commercial documentation for animal by-products and derived products.

Following on from an investigation conducted by the IOD, a specific inspection procedure which focuses on the traceability and disposal of animal by-products was set up for one company. It involves cooperation with colleagues from the animal feed and manures' domain and colleagues from the Human Environment and Transport Inspectorate (ILT).

Effects measurement/target group analyses

In 2015, a second target group analysis was carried out into the chain trade of raw pet food (BARF) with the objective of getting to know the target group better and based on this to develop a supervision strategy with effects measurement.

In early 2016, a target group analysis was carried out with respect to establishments which trade in and store fats. Following on from it, at the end of 2016, a project in respect of the traceability of fats in this sector was implemented. This project will be continued in 2017.

Actions taken to improve the official controls

The intervention policy has been revised and tightened up.

As a follow-up to the training in 2015, training is being provided for the inspectors who are specifically involved in in-depth controls on the records of establishments and traceability of goods. In the process, the link to an establishment's financial records is also made.

Training relating to the granting of approval, registration and authorisations, as well as the processes surrounding the performance of supervision in general (the ‘supervision circle’) are also being provided.

Inspectors supervising the fats' sector received training whose subject-matter included general knowledge of the sector (products, the chain, trade flows), HACCP and food safety.

The supervision of certain establishments involved collaboration with other divisions, including L&N (supervision of co-fermentation plants) or other inspection services, including ILT.

3.7 Meat supply chain (slaughterhouses, cutting plants and cold and frozen stores)

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2014

EU Legislation	
Regulation (EC) No 178/2003	General principles of food law
Regulation (EC) No 882/2004	Ensuring proper checks on food and animal feed
Regulation (EC) No 852/2004	Food hygiene
Regulation (EC) No 853/2004	Hygiene rules for food of animal origin
Regulation (EC) No 854/2004	Food products of animal origin – official controls
Regulation (EC) No 2073/2005	Microbiological criteria for foodstuffs
Regulation (EC) No 2074/2005	Implementing measures for certain animal products
Regulation (EC) No 1375/2015	regulations on official controls for Trichinella in meat
Regulation (EC) No 999/2001	Prevention and control of specific TSEs (BSE)

National:

- Animals Act (Wet Dieren)
- Regulation on Animal By-products (Regeling dierlijke producten)

Size of control file in 2016

Type of establishment (authorisation)	**Number at 01/01/2016**	**Number at 31/12/2016**	**V&I management ****
Domesticated ungulates slaughterhouses	195	183	183
Poultry slaughterhouses	32	32	32
Rabbit (lagomorphs) slaughterhouses	6	6	6
Farmed game slaughterhouses	24	22	22
Wild game slaughterhouses (WGS)	17	15	15
Cutting plants (all types of meat)	1,251*	1,225*	215***
Cold and frozen stores	499*	502*	97

Note: an establishment may have a number of authorisations: most slaughterhouses also have a cutting plant authorisation and sometimes also a cold and frozen store authorisation!

* *These are all cutting plan and cold and frozen store authorisations from the Veterinary & Import (V&I) division and elsewhere (C&V division).*

** *All slaughterhouses and establishments whose main activity is cutting meat and/or the storage of fresh meat come under the V&I.*

*** *These are independent cutting plants not attached to a slaughterhouse which sometimes have additional authorisations.*

Supervision of Meat Supply Chain, results in 2016

Audits and inspections in 2016	**Number of basic inspections**	**Number of re-inspections**
HACCP audits	348	38
Authorisation upkeep	359	66
Inspections for new authorisation application	46	10
Traceability (tactical and system inspections)	807	20
Microbiological criteria system inspection	97	6
Tactical inspections of hygiene rules	2,056	47
Other system inspections	712	20
Total	**3,736**	**187 (5%)**

Meat certifications Red meat *(source: RSG)*

Species	Number of animals slaughtered
Pigs	14,885,453
Calves	1,525,582
Cattle	568,382
Other ruminants*	694,223
Solipeds	3,500
Total for red meat	**17,677,140**

** sheep, goats, farmed deer, llamas*

Meat certifications Poultry mea *(Source: PLADMIN)*

Species	Number of animals slaughtered*
Broilers	614,113,222
Chickens	17,166,324
Ducks	8,692,710
Other**	5,008
Total for poultry meat	**639,977,264**

** number of poultry transported to the slaughterhouse whilst still alive*

*** bpigeons, geese, turkeys*

Number of certifications (in hours)

Meat certifications	Number of hours
Red meat	180,122
Poultry meat	107,440
Total	**287,562**

Number of samples/analyses (*source: Labvantage, KBBL)*

Samples/analyses*	Number of samples	Number of analyses
Microbiologisch	615	1,252
Antibioticaonderzoek	226	254
Trichinen gehouden varkens	155,573	14,903,515
Trichinen overige (wildzwijn, paard)	2,146	7,062

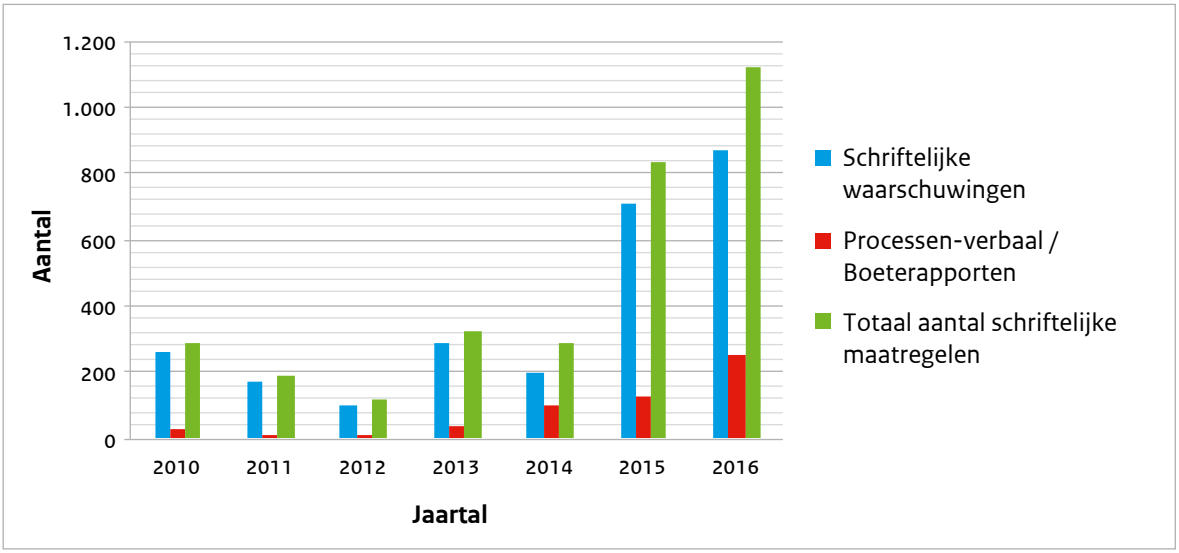
** These are samples taken and analyses within the scope of PM certification at the slaughterhouse.*

Measures taken by NVWA (2016)

Measures in 2016	Written warning	Fine report*
Red meat slaughterhouses	291	86
Poultry slaughterhouses	505	152
Game processing establishments	2	0
Cutting plants	58	9
Cold and frozen stores	18	1
Total	**872**	**248**

** These are reports on findings sent to NVWA's TBM division for compiling a fine report.*

Trend in the number of written measures in this domain:



Reference to specific reports:
The Residues National Plan is reported on specifically (see also 4.15 Veterinary medicinal products).

Further explanation of the results for the 'Meat Supply Chain' supervision'

Slaughterhouse, game processing establishments, cutting plants and cold and frozen stores authorisations:
In 2016, there were reports on 359 authorisation upkeep inspections and 56 inspections in relation to an application for new authorisation. Infringements in the basic conditions such as architectural and hygiene requirements for floors, walls, ceilings, equipment and hygienic slaughter, in particular, were detected during those inspections. The architectural state and hygiene appear to be improving, in particular, in respect of red meat slaughterhouses.

HACCP audits: In 2016, 348 system audits were performed in connection with HACCP supervision and 29 re-audits If shortcomings are detected during an audit, there is a re-audit to establish whether the shortcomings have been rectified. The application of HACCP principles is reasonable to good. Monitoring procedures are not always used as set out (8% infringements and 1% serious infringements). Infringements were observed in 10% of the cases concerning the requirement that procedures must guarantee that products of animal origin meet specific requirements. In addition, it appears that, as in previous years, the results for the basic conditions were the poorest. Large establishments with many different production areas will be involved relatively often. The likelihood of encountering shortcomings at such establishments is therefore great.

Traceability: Since 2013, a mandatory traceability and labelling system inspection has been conducted annually at all meat processing establishments. In 2016, 324 inspections and 14 re-inspections were carried out to this end. In the process, 76 minor infringements, 21 infringements and 1 serious infringement were detected.
In addition, risk-oriented inspections pertaining to this subject are conducted at slaughterhouses under regular supervision (supervision as a follow-up to certification).
In total, the infringements detected in relation to this subject resulted in 22 written warnings and 6 intentions to impose a fine report. Infringements related to, among other things, problems with the identification of the meat (9 times), shortcomings relating to the labelling of beef (6 times), but mainly shortcomings relating to traceability (13 times). It was noteworthy that the traceability problems were observed, in particular, at cutting plants (8 times) and, to a lesser extent, at red meat slaughterhouses (3 times) and cold and frozen stores (twice). No traceability problems were reported for poultry slaughterhouses in 2016.

Hygiene rules: the supervision results for hygiene rules in slaughterhouses are explained in more detail under effects measurement/compliance monitor. Slaughterhouses are themselves responsible for ensuring compliance with the applicable legislation and regulations and have been making conscious efforts in this regard since the start of the NVWA's Meat Supply Chain Improvement Plan. At red meat slaughterhouses, the NVWA inspects two points on the slaughter line (before the PM certification and before refrigeration) for visible contamination of carcasses. In the event of non-compliance, the NVWA takes corrective measures to ensure that the establishment is in compliance. Conversely, well-performing establishments are allowed to carry out those inspections themselves, under the NVWA's supervision. At the end of 2016, nine of the twenty-two large red meat slaughterhouses had their own hygiene controls on contamination, supervised by the NVWA, instead of being subject to controls performed by the NVWA itself. The NVWA checks for visible contamination of carcasses at the end of the line for dressed meat (before refrigeration) at poultry slaughterhouses. In the event of non-compliance, the NVWA takes corrective measures to ensure that the establishment is in compliance (see also under 'incidents').

Certifications: the activities concerning red meat have not altered appreciably in 2016; two large slaughterhouses have closed, one new large one has opened and several are going to continue slaughtering. In 2016, too, pig slaughterhouses sought permission to conduct the post mortem inspection with fewer official assistants following logistical changes to the slaughtering process. As in previous years, a specific type of visual inspection, what is referred to as 'supply chain meat inspection', was used to assess three pig slaughterhouses by means of audits and verifications at both slaughterhouse and farm level. The results are good. At calf slaughterhouses, post mortem certification takes place by means of the visual inspection method for the majority of calves. The NVWA audit in 2016 revealed that calf slaughterhouses need to pay greater attention to the procedure in the primary phase. This area will be the focus in the scheduled NVWA audits in 2017. The controls on the implementation of the PM certification of red meat by official assistants carried out in 2016 reveals that the certification was performed correctly and effectively, in accordance with the required standards, in 97% to 99% of the controls. Corrective measures were taken when non-compliances were detected.
As for poultry slaughterhouses, one duck slaughterhouse was closed in 2016. The activities of that establishment have been taken over by the sole remaining duck slaughterhouse. This leaves a total of 18 poultry slaughterhouses under permanent supervision. Since 1992, the post mortem certifications have been carried out by in-house inspectors, supervised by the official veterinary surgeon, at those slaughterhouses. The regulations for the supervision of in-house inspectors are described in detail in a work instruction. It also describes the measures to be taken when an in-house inspector deviates from the performance standards laid down. Many data, which are still being analysed, became available in 2016 thanks to a more uniform method of supervision and central recording of the controls. This way, the results of the various establishments can be compared and, where necessary, substantiated changes will be made.

Measures taken by the NVWA: the substantial rise in the number of written measures (warnings and fine reports) reported for 2015 continued in 2016 and led to a further rise by 35% compared with 2015 (see the chart showing the trend).
In 2016, the number of written warnings increased by 23% compared with 2015, whilst the number of fine reports virtually doubled. The majority of the measures was compiled for poultry slaughter houses: 505 written warnings and 152 fine reports. This is largely the result of enforcement measures taken as part of the Meat Supply Chain Improvement Plan.
In the case of red meat slaughterhouses, there is just a slight increase in the number of fine reports compared with 2015, whilst the number of written warnings has decreased substantially.
There were 58 written warnings and 9 fine reports for cutting plants; finally, 18 written warnings and 1 fine report were compiled for cold and frozen stores. In addition to food safety and hygiene, infringements were also noted in the area of animal by-products, animal welfare and animal health during the supervision of the types of establishment specified for this domain. The infringements in the area of animal by-products during the supervision connected to the meat supply chain and food safety domain (in total, 33 written warnings and 45 fine reports) have been included in the numbers reported here. See elsewhere in this annual report for details of the infringements in respect of animal welfare and animal health

Incidents

On 15 December 2015, the NVWA imposed on a large red meat slaughterhouse an intention to suspend authorisation, informing it that an evaluation would take place three months later. However, before that period expired (February 2016) the operator suddenly terminated the slaughtering activities of the establishment himself.
In November 2016, the NVWA imposed on a large poultry slaughterhouse an intention to suspend authorisation with a probationary period of 3 months. During that period, the establishment must show that it is performing better in respect of the shortcomings previously established.
In 2016, various poultry slaughterhouses, supported by their sector organisation Nepluvi, started legal proceedings against the more stringent supervision of the NVWA. Supervision and enforcement in respect of visible contamination is often the reason for proceedings being instituted. To date, the courts have found in favour of the NVWA. Proceedings will often be lengthy.

Projects in 2016

Meat Supply Chain Improvement Plan: as part of the improvement plan, the supervision method for slaughterhouses was applied to all red meat slaughterhouses and the large poultry slaughterhouses in 2016. Determining the frequency of supervision based on specific establishment risk profiles is the key element. The introduction of this method and more uniform and stringent enforcement have contributed to improved compliance with the statutory rules by slaughterhouses (see effects measurement - compliance monitor). However, its introduction has also resulted in a spectacular increase in the number of measures taken by the NVWA and in many legal proceedings. Implementation for poultry slaughterhouses not under permanent supervision and game processing establishments is scheduled for 2017. To that end, pilot projects were carried out and then evaluated in the autumn of 2016.

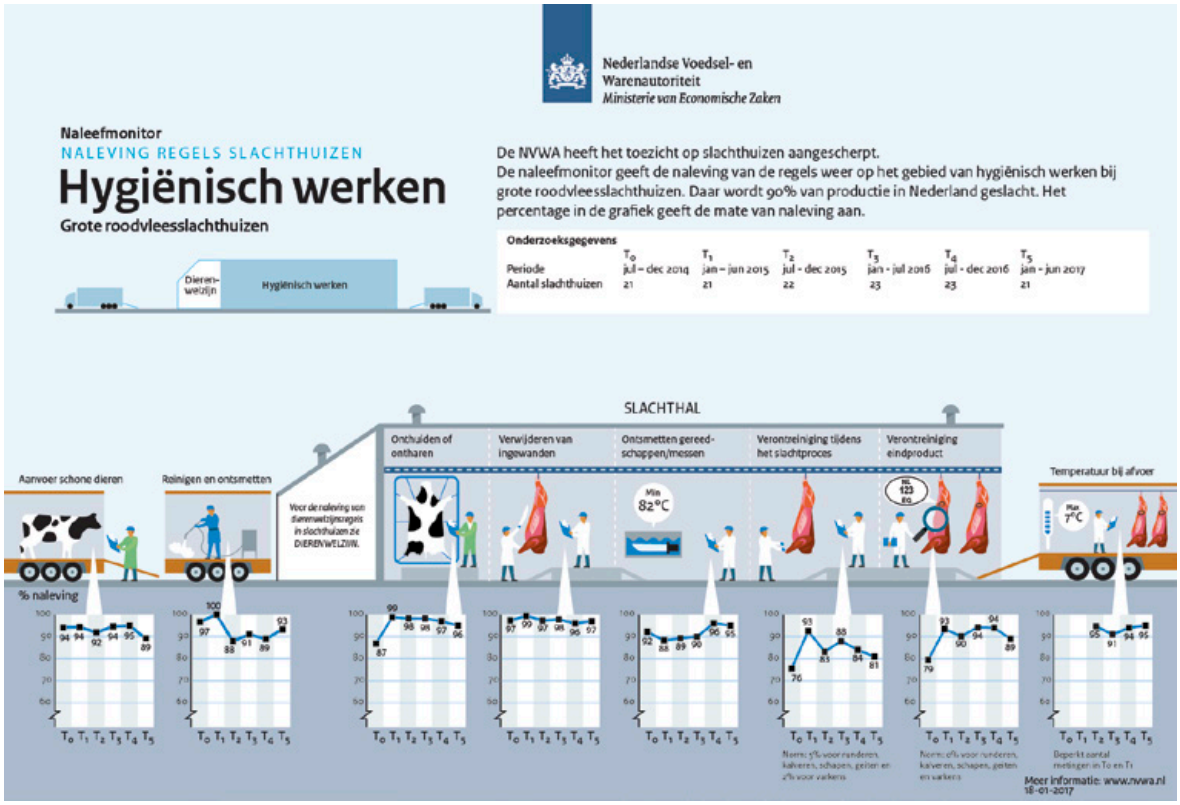
Cutting plants and cold and frozen stores: in 2016, work on what is referred to as the supervision pyramid continued for stand-alone approved cutting plants and frozen stores. Following an evaluation, it was agreed that from now on the classification system would be based solely on the written measures that had been drawn up and the systems used in the NVWA's V&I and C&V divisions harmonised. Establishments whose establishment history shows a greater number of interventions or measures are prioritised.

Remote tracing exercise: In the summer of 2016, a joint tracing exercise was also held with the V&I and C&V divisions during which a faster, more efficient method for tracing products in the chain was examined. Establishments were not visited but contacted by telephone. The results were encouraging and will be used to fine tune the method in 2017.

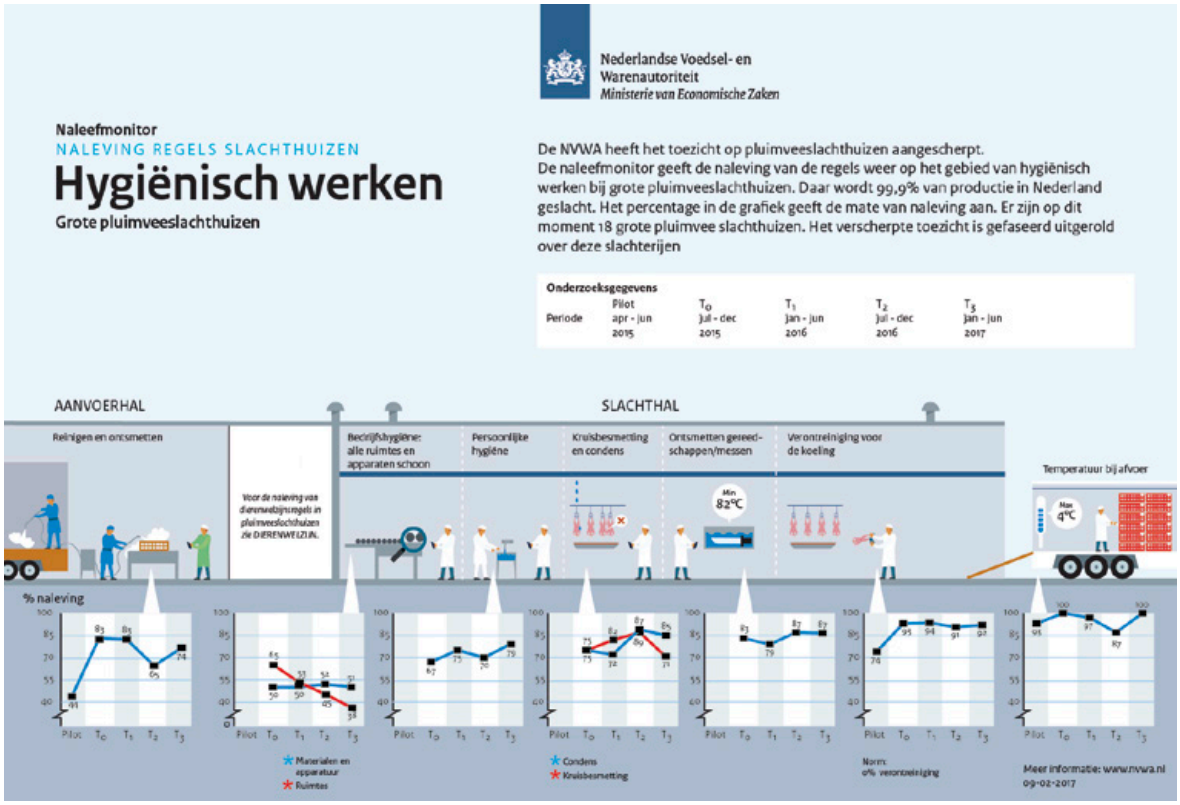
Supervision in respect of microbiological criteria rules:
2016 saw the start of the development of more efficient and risk-oriented supervision of compliance with the statutory requirements for microbiological criteria for slaughterhouses. To this end, establishment data were requested and analysed. The results will become available in 2017.

Effects measurement

Red meat slaughterhouse compliance monitor: in 2014, the NVWA began implementing more uniform and risk-oriented supervision in red meat slaughterhouses (improvement plan). The analysis of the check lists for a number of important and high-risk parameters has produced a clear picture of an establishment's compliance. What are known as infographics concerning, among other things, hygiene rules, were developed and subsequently published in 2016. The result, what is referred to as a compliance monitor, shows that compliance has improved since the new method of supervision started. Nevertheless, some areas requiring attention remain, such as preventing the contamination of carcasses during the slaughter process and more regular cleaning and disinfecting of tools and knives, where compliance, including spontaneous compliance, requires improvement.



Poultry slaughterhouse compliance monitor: the new supervision system was started for the 19 large poultry slaughterhouses in 2015. The NVWA has been taking several random samples on a daily basis since then. Where necessary, the NVWA takes enforcement action. No contamination whatsoever was found on the meat from chickens entering the cooling phase in more than 90% of those random samples last year. The previous figure was 74%. Despite this progress, many improvements are still necessary. They have to do, in particular, with cleaning and disinfecting means of transport, keeping the processing areas and equipment clean and the personal hygiene of staff. The impression is that some poultry slaughterhouses mainly use their staff to remedy identified shortcomings, causing them to lower their guard as far as other areas are concerned. In the event of non-compliance, the NVWA takes corrective measures to ensure that the establishment is in compliance. The NVWA is also engaging in talks with the slaughterhouses with respect to the individual issues they need to address.



Conclusion

The increase in the number of written enforcement measures in 2015 resulting from the more uniform and stringent supervision (improvement plan) also led to a further substantial increase in the number of measures in 2016, namely 35% up on 2015. The majority of the measures was imposed on poultry slaughterhouses, which also scored worse in (spontaneous) compliance with hygiene rules. For red meat slaughterhouses, the number of written warnings has nearly halved, whilst the number of fine reports has risen slightly. We now need to encourage establishments to comply spontaneously (not just after an infringement has been noted and enforcement subsequently imposed) and to use to appropriate enforcement tools to achieve this. The high compliance scores need to be consolidated and the points requiring attention remedied.

3.8 Industrial production – meat products and composite products

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 178/2002	General Food Law Regulation
Regulation (EC) No 852/2004	Food hygiene
Regulation (EC) No 853/2004	Food hygiene of products of animal origin
Regulation (EC) No 2073/2005	Microbiological criteria for foodstuffs

Size of control file in 2016:

Type of establishment	**Number registered**	**Number approved**
Production establishments	1,949	667
Warehouses	3,396	242
Office addresses	938	1
Total number of establishments	**6,283**	**910**

Supervision of Industrial Production – Meat Products and Composite Products, results in 2016

Supervision of industrial production	**Number**
Inspections (targeted audits)	6,653
Audits	267
Samples*	-
Maatregelen bij inspecties	1,114

* *The samples that are taken at industrial establishments are reported by the domains responsible for analysing the samples (including Microbiology and Contaminants).*

Further explanation of the results for 'Industrial Production – Meat Products and Composite Products'

Audits	**Approved establishments n = 205 % failing to comply**	**Registered establishments n = 62 % failing to comply**
Hazard identification	37	28
Critical control points	7	6
Critical limit values	2	6
Where HACCP is applied	3	5
Monitoring procedures	8	13
Corrective measures	3	4
Procedures for verification purposes	23	21
Review of HACCP procedures	2	1

Inspections of basic conditions/prerequisites n = 3203	**% failing to comply**
General hygiene	15
Architectural state	8
Other basic conditions	6

Systeeminspecties/targeted audits n= 3.450	Number	% failing to comply
Hazard identification	360	33
Critical control points, limit values and corrective measures established	95	11
Monitoring procedures and corrective measures implemented	782	9
Procedures to verify whether the HACCP system is working	220	21
Microbiological Regulation - shortened inspection	386	30
Microbiological Regulation	303	46
Tracing/reporting/recalling	585	19
The establishment implements HACCP using the hygiene code	417	23
The establishment has no food safety plan	195	88
Inspection list: the establishment is under VETO (more stringent supervision) (see below)	107	34
Total number of inspections	**3,450**	

Risk-based supervision

The NVWA uses a risk-based approach whereby industrial establishments are assigned a colour based on infringements identified in the past. Risk-based supervision takes place on the basis of the colours assigned to establishments.
The visit frequency for establishments and the content of the inspection depends on the colour classification for the establishment concerned.
Orange: these establishments have for a long time not been in compliance with legislation; they are visited on the basis of the VETO (more stringent supervision) regime. The supervision of those establishments is customised and aimed at improving the situation or a temporary shut-down or suspension or withdrawal of authorisation.
Yellow: these establishments are occasionally not in compliance with legislation. In the past two years, a measure has been taken for a shortcoming at least once. Regular supervision is aimed at eliminating infringements (re-inspection) and/or assessing whether the shortcomings can once again be observed. Supervision will also focus on basic conditions (at least in the case of production establishments) and other applicable inspection items.
Green: these establishments are in compliance with legislation and are rewarded for that by a minimum inspection frequency. No infringements were identified at those establishments during the inspections carried out over the last two years. Supervision for green production establishments focuses in any event on basic conditions and one other applicable item (targeted inspections). The 'other item' choice is made in a way such that all items relevant to the establishment are addressed over the course of a few years.
White: no inspections have been conducted at these establishments for the past 2 years so no inspection data are known for that period.

Colour classification for industrial production in 2016:

Registered	Number	Percentage
Green	2,132	34%
Yellow	1,193	19%
Orange	46	1%
White	2,912	46%
Total registered	**6,283**	**100%**

Recognized	Number	Percentage
Green	348	38%
Yellow	532	58%
Orange	9	1%
White	21	2%
Totally recognized	**910**	**100%**

Total	Number	Percentage
Green	2,480	34%
Yellow	1,725	24%
Orange	55	1%
White	2,933	41%
Total	**7,193**	**100%**

The relatively high percentage of registered establishments classified white is caused in part by the fact that many office addresses fall into that category. The inspection frequency for them is relatively low.

More stringent supervision (VETO)

As from November 2015, the approach taken for industrial establishments forming part of the more stringent supervision process has been modified in parts. The objective here is to inform establishments at an earlier stage of the consequences of failure to improve compliance with hygiene legislation on a long-term basis in order to motivate them to set improvements in motion faster and thus avoid the potential closure of the establishment or other legal measures.

The number of industrial establishments subjected to the more stringent supervision approach has risen slightly in recent years. Whilst the figure was just 39 in 2015, a total of 45 establishments underwent this process in 2016. This may be explained by the more consistent application of the intervention policy by inspectors, which resulted in establishments meeting the criterion for more stringent supervision earlier (= 3 reports of findings in 2 years).

The number of inspections carried out at industrial establishments subject to this approach in 2016 was 107. By way of comparison: a total of 116 inspections was recorded in 2015. The fact that fewer inspections were carried out indicates that companies are passing through the VETO process faster and are ceasing to be subject to the more stringent supervision approach earlier thanks to improved compliance. Further analysis should confirm this.

The number of interventions applied in respect of the establishments in 2016 is considerably lower than in 2015. Whilst in 2015 the number of interventions involving those establishments totalled 51 (warnings and reports of findings), the number fell to 36 in 2016. This may be explained by the fact that a relatively higher share of establishments were in the follow-up phase in 2016. This means that the establishments demonstrate during inspections that the improvements implemented are of a long-term nature so they are again subject to standard supervision. A better understanding of the results will require further examination of this point, too.

An initial cautious conclusion that could be drawn is that industrial establishments finding themselves in the VETO process are quicker to return to regular supervision. That was also the objective behind the modification of the more stringent supervision method as implemented at the end of 2015.

The results of the inspections in 2016:

	Number	Percentage
Total number of establishments subject to VETO:	**45***	
Inspections classified in establishment categories:		
• trading establishment	23	21%
• importers	18	17%
• production establishment	66	62%
Total number of inspections carried out:	**107**	
Interventions in response to VETO inspections:		
• report on findings (RvB)	17	16%
• written warning (SW)	11	10%
• RvB and SW	8	8%
• No intervention	71	66%
Inspections carried out in respect of settlements:		
• establishment is in compliance during this inspection	65	90%
• establishment is not in compliance during this inspection	7	10%
Total number of inspections in respect of settlements	**72**	

* *the number may vary slightly with the colour classification orange because this is a continuous process.*

3.9 Imports and exports of veterinary consignments

Controlling authority or authorities: NVWA, Customs

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Directive No 91/496/EEC	Veterinary checks on animals from third countries
Directive No 97/78/EC	Veterinary checks on animal products from third countries
Directive 2002/99/EC	Animal health rules governing the production, processing, distribution and introduction of products of animal origin for human consumption
Decision 2004/292/EC	Introduction of TRACES
Regulation (EC) No 282/2004	Document for the declaration of and veterinary checks on animals from third countries
Regulation (EC) No 136/2004	Procedures for veterinary checks on products imported from third countries
Regulation (EC) No 882/2004	Official controls on compliance with feed and food law, animal health and animal welfare rules
Regulation (EC) No 853/2004	Specific hygiene rules for food of animal origin
Regulation (EC) No 854/2004	Specific rules for the organisation of official controls on products of animal origin intended for human consumption
Decision 2007/275/EC	Lists of animals and products to be subject to controls at border inspection posts
Decision 2000/571/EC	Supervision in warehouses
Decision 2000/208/EC	Transit
Decision 2001/812/EC	BIP (Border Inspection Points) authorisation requirements
Regulation (EC) 1/2005	on the protection of animals during transport and related operations
Regulation (EC) No 1069/2009	laying down health rules as regards animal by-products and derived products not intended for human consumption
Decision 2011/163/EU	Residue monitoring plans of third countries

National legislation

In the Netherlands, two ministries are involved with the NVWA at policy level: the Ministry of Health, Welfare and Sport (VWS) and the Ministry of Economic Affairs (EZ)

VWS

- Commodities Act, Section 9
- Import of food from third countries (Commodities Act) Decree (Warenwetbesluit Invoer levensmiddelen uit derde landen)
- Commodities Act Regulation on Veterinary Controls (third countries) (Article 2/4) (Warenwetregeling Veterinaire controles (derde landen)
- Commodities Act Regulation on the Import of Egg Products from Third Countries (Warenwetregeling invoer eiproducten uit derde landen).

EZ

- Mandate, power of attorney and authorisation decree for the Ministry of Economic Affairs 2015 (Besluit mandaat, volmacht en machtiging EZ 2015)
- Decision on marketing animals and products and the application of measures relating to animals and products brought into the Netherlands.
- Regulation governing the veterinary legal rules on trade in animal products (Regeling veterinair rechterlijke voorschriften handel dierlijke producten).
- Regulation on trade in live animals and live products (Regeling handel levende dieren en levende producten).

Size of control file in 2016

Type of establishment	Number
Border Inspection Posts	7
Inspection points	22
Warehouses without veterinary surgeons	12
Ship suppliers	7
Special warehouses	17

Supervision of 'Imports of Veterinary Consignments', results in 2016

Supervision domain name	Number
Inspections	61,279
Samples	1,275
Measures	396

Further explanation of the results for 'Imports of Veterinary Consignments'

Compared with 2015, there is a small increase in the number of consignments presented for certification. The number of measures, by contrast, has decreased.
This could mean that importing establishments are complying better with the conditions.

Actions taken to improve the official controls

Once again, in 2016 there was participation in national and international training sessions to keep expertise up to date. In addition, training was given to the Dutch Customs personnel who carry out the document controls on behalf of the NVWA. Work was also continued on the NVWA's accreditation at warehouses without veterinary surgeons; it will probably be completed in 2017.

Actions taken to improve the compliance of the business community

As part of the customised approach to tackling the regulatory burden in respect of logistics there has been collaboration with the business community aimed at dealing with problem areas which may help to improve compliance. In addition, an initial inventory of the reasons why consignments are held, based on the documents, was prepared. That laid the foundations for talks with the parties presenting consignments aimed at reducing the number of incomplete or unsound documents..

Conclusions

There is a slight increase in the number of consignments presented (1.7%).
The number of refusals is largely due to problems with documentation and the consignments subject to more stringent supervision. The number of refusals has fallen by 27%.

Exports to countries outside the EU
Exports are one of the mainstays of the Dutch economy. Agricultural products from the Netherlands represent an export interest of €85 billion in 2016, up approximately 4.4% on 2015.
Where there may be risks to human health, animal health, animal welfare and plant health, the country to which products are exported requests guarantees from the exporting country. The NVWA, designated the competent authority in the Netherlands, assesses the opportunities in issuing the guarantees provided by the country of export and thus plays a crucial role in the export of products, including agricultural products.
The NVWA supervises the requirements and can issue between 12,000 and 15,000 export certificates a week on the basis of that supervision. The NVWA also supports the policy departments in making agreements with third countries (outside the EU) on exports and export guarantees.

Number of electronic certificates issued for each product type

Sector	2015	2016	Growth in percentage terms
Animal feed	12,654	12,787	+1%
Consignment notes	54,921	59,687	+8%
Livestock	3,069	3,899	+21%
General veterinary matters	4,282	5,470	+22%
Fish & fish products	9,973	10,649	+6%
Meat & meat products	38,278	47,350	+19%
Dairy & dairy products	66,097	71,601	+8%
Total	**189,274**	**211,443**	**+10%**

Explanation of the table
The above table shows the trend in the number of electronic export certificates issued. Nearly all certificates were issued for export outside the EU.

Work to promote exports

Questionnaires
Questionnaires are the first step towards market opening. These are questionnaires which third countries send to the Netherlands as preliminary research in response to a request made by the Netherlands to be allowed to export a particular product to that third country. For some countries, the level of detail in the questions is extremely high, making answering them a complex matter.
By even more effective reuse of other questionnaires, a milestone was reached at the end of 2016 when all questionnaires sent to the NVWA were completed in full.
Eighteen questionnaires were completed in 2016, an increase compared with 2015.

Visits abroad
Eighteen missions were completed in 2016. Those missions range from straightforward study visits to high level meetings. Although all visits proceeded satisfactorily, the outcome, opening of third country markets, is not always immediately apparent. The outcome sought was achieved in all cases involving missions carried out to extend exports (market retention).

3.10 Fish, fish products and aquaculture

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 852/2004	Food hygiene
Regulation (EC) No 853/2004	Hygiene during production of products of animal origin
Regulation (EC) No 854/2004	Supervision of products of animal origin
Regulation (EC) No 2073/2005	Microbiological criteria for foodstuffs
Directive 2006/88/EC	Aquaculture

Size of control file in 2016

Type of establishment	**Number**
Fish auctions	13
Cold and frozen stores	59
Dispatch centres	45
Fresh fish processing	145
Purification centre	16
Processed fisheries products	140
Fish farms	55
Mollusc and crustacean farms	143
Total number of establishments with EC authorisation	**616**

Type of establishment	**Number**
Freezer vessels	9
Shrimp cooking vessels	213
Total number of vessels with EC authorisation	**221**

Production areas	**Number**
Number of production areas (open)	14
• Category A	13
• Category B	1
Number of designated purging areas*	166
• Mussel purging beds	76
• Oyster beds	90

** Set annually, non-authorised purging areas are part of the production area in which they are situated.*

Supervision of Fish, Fish Products and Aquaculture, results in 2016

Supervision of fish supply chain	**Number**
Inspections	1,343
Samples	1,069
Measures of which: • written warnings • fine report • official report	225 206 19 -

Monitoring	Number of samples	Number of non-compliant samples
E.coli purging areas	186	1
E.coli production areas	913*	9*
Phytoplankton	350	34**
Biotoxins	417	0
Chemical contaminants	14	0

* ** 4 samples per area (= 227 sampling points); if non-compliance is measured in 1 of the 4 samples then measures are imposed for the entire production area. Five individual samples were also taken.*

*** In the event of non-compliance the number of samples taken within the production area is increased.*

Measures/non-compliances	Number
Area classification for purging areas *(E. coli)*	2*
Area classification for production areas *(E. coli)*	8
Measures for phytoplankton in production areas	14
Measures for biotoxins in production areas	9**
Measures for chemical contaminants in production areas	0
Other (preventative) measures for purging areas	0
Other (preventative) measures for production areas	0

* *One purging area was de-categorised based on regular monitoring data, and one purging area was de-categorised because molluscs were raised from a Category B production area which is not permitted.*

*** Measures were taken in two production areas owing to the presence of tetrodotoxin (TTX). No measures have been in place for Amnesic Shellfish Poisoning (ASP), Paralytic Shellfish Poison (PSP) and lipophilic toxins.*

Further explanation of the results for Fish, Fish Products and Aquaculture

This target group is represented by a relatively large number of small and medium-sized fish processing establishments with a relatively simple production process. The sector also has about 20 large industrial establishments.
There are currently 418 EU approved fish processing establishments in the Netherlands (situation on 1 January 2017, not including fish farms). The NVWA inspects these establishments as part of the official control. The Netherlands also has 221 EU approved factory vessels, the majority of which are engaged in shrimp fishing, and 9 EU approved freezer vessels. 1,343 inspections were carried out in 2016. The NVWA implemented its intervention policy on 225 occasions in the period from 1 January 2016 to 31 December 2016 inclusive.
The supervision of aquaculture production establishments is risk-based. The risk-classification of fish farms was further developed in 2016. The selection of establishments to be inspected and the inspection frequency is based on this.

Projects in 2016

The following projects were carried out in 2016:

- Basic conditions, focusing on the establishment's architectural infrastructure, hygiene and working method within the establishment and correct storage temperatures.
- Supervision of HACCP related procedures, setting up and implementing these procedures on an ongoing basis.
- Tracing and reporting: Establishments must be able to trace their products. They must be able to establish the origin and destination of each product. Specific attention to the obligation for establishments to notify the competent authority if they know that unsafe or harmful food has been introduced to the market.
- Microbiological criteria: do establishments comply with the microbiological criteria as laid down in Regulation (EC) No 2073/2005 which also focuses on the method by which the establishments should verify the food safety criteria from this Regulation? Specific attention is given to the control of Listeria, in particular in smoked fish products.
- Chemical criteria: do establishments comply with the statutory provisions for, among other things, contaminants, additives, biotoxins, etc.?
- Publication of inspection data for all fish processing establishments: the inspection results for fish auctions were published in 2015. Further work on the publication of the inspection results for all fish processing establishments was carried out in 2016. They will be published in the course of 2017.

- European baseline survey of norovirus in oysters (2016-2018): The baseline survey was started in 2016. The purpose of the study is to identify the spread and contamination of oysters with norovirus throughout Europe.

HACCP system supervision
In 2016, 1,343 inspections were carried out in the fish sector, of which 148 were audits of the application of the HACCP procedures. Official controls at purification centres focused specifically on the validation of the purification process as part of Regulation (EC) No 853/2004.

RASFF 2016
Findings in respect of fishery undertakings resulted in 30 RASFF notification submitted by the Netherlands in 2016. In addition, Dutch fishery undertakings were involved in 30 follow-up reports.
Priority is assigned to excessive levels of residues of environmental contaminants in fish and *Listeria monocytogenes* in smoked fish as well as the presence of unauthorised additives (phosphate) in unprocessed fish.

Incidents

There were no major incidents in 2016. However, temporary measures were taken for two production areas for oysters and mussels owing to the presence of Tetrodotoxin (TTX).

Actions taken to improve the compliance of the business community

HThe intervention policy laid down is applied strictly and further work on the publication of the inspection results for all fish processing establishments was carried out in 2016. They will be published in the course of 2017.

Conclusions

The risk-based supervision, which was continued in 2016, makes an important contribution to the selection of establishments that are to be inspected and the frequency with which they will be inspected.
In 2015, the NVWA published its reports on the inspection of EU approved fish auctions. Reports on the inspection of all EU approved fish processing establishments will be published in 2017.
Official controls carried out in the fish and fish processing industry often reveal points for improvement that are subject to the intervention policy.
The presence and growth of *Listeria monocytogenes* in smoked fish during its shelf life remains an issue that requires attention.
In order to identify the presence of norovirus in oysters, a European baseline study into the presence and spread of the virus in end products and production areas was conducted in collaboration with the European Commission.

3.11 Dairy, eggs and egg products

Controlling authorities: COKZ, NCAE and NVWA

Dairy sector

Summary of the main legislation addressed by controls in 2016 **(Dairy sector component)**

EU Legislation	
Regulation (EC) No 178/2002	General principles of food law
Regulation (EC) No 852/2004	Food hygiene
Regulation (EC) No 853/2004	Hygiene during production of products of animal origin
Regulation (EC) No 2073/2005	Microbiological criteria for foodstuffs
Regulation (EC) No 1069/2009	Animal by-products (basic regulation)
Regulation (EC) No 142/2001	Animal by-products (implementing regulation)
Regulation (EC) No 1169/2011	The provision of food information to consumers
Regulation (EC) No 1881/2006	Setting maximum levels for certain contaminants in foodstuffs
Regulation (EC) No 1333/2008	Food additives
Regulation (EC) No 37/2010	Veterinary medicinal products residues
Directive 2006/141/EC	Infant formulae and follow-on infant formulae
Directive 1999/21/EEC	Dietary foods for special medical purposes

National legislation:

- Commodities Act (Warenwet)
- Dairy Decree (Warenwetbesluit zuivel)
- Food Hygiene (Commodities Act) Decree (Warenwetbesluit hygiëne van levensmiddelen)
- Preparation and Handling of Food (Commodities Act) Decree (Warenwetbesluit Bereiding en behandeling van levensmiddelen)
- Commodities Act Regulation on Infant Formulae (Warenwetregeling zuigelingenvoeding) 2007
- Commodities Act Regulation on Dietary Foods for Special Medical Purposes (Warenwetregeling dieetvoeding voor medisch gebruik)
- Animals Act (Wet Dieren)
- Animal Products Decree (Besluit dierlijke producten)
- Regulation on Animal By-products (Regeling dierlijke producten)

Size of control file in 2016 (Dairy sector):

Type of establishment	**Number**
Agricultural establishments in the dairy sector	
• dairy farms	Approx. 17,800
• goat dairy farms	Approx. 500
• sheep dairy farms	40
• horse dairy farms	25
• camel dairy farms	1
Total	**Approx. 18,400**

Food manufacturers, importers, trading and storage establishments in the dairy sector	
• farm milk recipients	35
• industrial dairy producers	177
• subsequent processors of cheese	107
• storage locations	29
• small-scale processors and farm dairy processors including door-to-door sales of dairy products	455
• producers of special foods	10
Total	**813**

Supervision within the context of the package of hygiene measures in the dairy sector, results in 2016

Dairy sector	Number
Audits of dairy farms	
• audits by dairy farm animal health assessors	8
• assessments of animal health follow-up actions	20
• audit of animal health monitor	1
• assessments of the implementation of the colony-forming unit and cell count control and bacterial growth inhibitors	42 30
• audits of recipients of farm milk, including central departments	77
• audits of dairy farms/farm dairy producers not covered by the dairy system	109
• unannounced assessments of dairy farming	7
- additional unannounced inspections in response to shortcomings	
Inspections of producers	
• industrial dairy producers (including farm milk central departments)	181
- additional audits and unannounced inspections in response to shortcomings	23
- unannounced randomly selected/stopped	34
• Subsequent processors	105
- additional audits and unannounced inspections in response to shortcomings	14
- unannounced randomly selected/stopped	13
• storage locations	33
- additional audits and unannounced inspections in response to shortcomings	4
- unannounced randomly selected/stopped	2
• Producers of special foods	12
- additional audits and unannounced inspections in response to shortcomings	1
• Farm dairy producers and small-scale dairy producers	427
- additional audits and unannounced inspections in response to shortcomings	33
- unannounced randomly selected/stopped	51
Samples/analyses	
• Microbiological analyses at dairy establishments	2.455
- number of deviations from standards found	6 (0,2%)
• Microbiological analyses at producers of special foodstuffs	176
- number of deviations from standards found	1 (0,6%)
• Microbiological analyses at farm dairy producers and small-scale producers	3,850
- number of deviations from standards found	103 (2,7%)
Measures	
• Warnings	2
- dairy farmers	52
- industrial dairy producers (including farm milk central departments)	31
- subsequent processors	86
- farm dairy producers and small-scale dairy producers	3
- producers of special foods	
• Reports on findings	2
- industrial dairy producers (including farm milk central departments)	3
- subsequent processors	-
• official reports	-
• suspensions of registrations/authorisations	-
• withdrawals of registrations/authorisations	

Further explanation of the results for Dairy 2016

The activities carried out by the COKZ were performed in line with the COKZ Work Plan for performing the package of hygiene measures, animal by-products and other Commodities Act legislation activities – year 2016. This Work Plan was approved by the Netherlands Food and Consumer Product Safety Authority (NVWA) on 26 February 2016.

Dairy farms

Quality systems
When carrying out its supervision the COKZ makes no distinction between the various dairy farmers. Up to and including 2014, the supervision focused on the functioning of the quality systems of the dairy company. 'Supervision of controls' was applied in the form of system assessments, assessment of control bodies engaged by the dairy companies and assessments of assessors. Despite the use of quality systems in dairy farms and their supervision by the COKZ, the NVWA and the COKZ identified a relatively large number of non-compliances during official controls of dairy farms. In 2015, this form of supervision of controls was converted into direct supervision, where inspections are not announced in advance, for a number of dairy farms.

In 2016, 109 establishment assessments took place. Specific agreements relating to the rectification of shortcomings, emphasising that dairy farms must comply with the dairy farm regulations at all times, were made with the establishments where non-compliance was noted. The shortcomings noted at seven dairy farms were such that a reassessment was necessary. A written warning for failing to rectify previously noted shortcomings was given to two of those establishments.
During the evaluation of the findings in 2016 it was concluded that the tightening up of the system in response to the 2015 results has not been sufficiently successful. Further coordination with dairy companies is required to bring the level of assessment into line with the aspects which the COKZ inspects and the weighting of non-compliances which is applied. This will be re-evaluated in 2017.

COKZ supervision programme for dairy farms
The assessment list for dairy farms was evaluated in 2016. As a follow-up, the field staff workers received more detailed instructions regarding making a clear distinction between assessment points where the COKZ is the primary supervisory body and assessment points where both the COKZ and the NVWA fulfil (to a certain extent) a supervisory role.
In addition, the assessment points of the dairy farming supervision were implemented in 2016 in the specific dairy and egg intervention policy, which means that this intervention policy can also be applied in 2017 to dairy farming supervision.

Direct supervision
At dairy farms that are not affiliated to a quality assurance system for dairy farming (< 100 establishments), supervision is carried out directly by the COKZ. This takes place by means of announced inspections.
From 2017 onwards, a revised version of the assessment list will be used and this will enable findings to be reported more clearly. As a consequence, the generation of data statements will be simpler and therefore more reliable.

Colony-forming unit, cell count and bacterial growth inhibitors
Since 2015, all farm milk recipients (cow's milk, goat's milk and sheep's milk) have been assessed by means of an audit to establish whether they are acting in accordance with the stipulated method in case of excess levels in relation to the colony-forming unit, cell count and bacterial growth inhibitors. It was concluded that the establishments concerned were correctly applying the method for the colony-forming unit and cell count. A re-assessment is conducted in case of non-compliances. One report of findings was drawn up for inability to demonstrate with results the colony-forming unit and cell count for a specific period.

When dairy companies accept farm milk, each consignment is tested for the presence of bacterial growth inhibitors (antibiotics). Since mid-2015, dairy companies have been notifying the COKZ/NVWA of non-compliances with the maximum residue levels (MRLs) for antibiotics in consignments of farm milk.

At 0.09‰, the percentage of non-compliances with the MRL was again very low in 2016. However, the COKZ did note when the reports made by farm milk recipients were identified and listed that the information is not always consistent and complete.

In 2017, the COKZ will reassess the consistency of the measures and the cases sent for each dairy company by auditing those companies. If applicable, the specific dairy and egg intervention policy will be applied.
In addition, specific cases (involving recidivism and high non-compliance percentages) will be forwarded to the NVWA in 2017 so that they can be prioritised in the follow-up action taken by the NVWA. The agreed arrangement that the NVWA is responsible for following up such cases remains in place.

Rejection of milk
As from July 2015, dairy companies have been reporting rejections of milk to the NVWA and the COKZ.
A total of 142 reports of milk having been rejected was made in 2016. In 24 cases the milk was rejected on the basis of requirements exceeding the statutory minimum. Depending on the reason for the milk being rejected, the primary task of the NVWA or the COKZ is to ensure that the appropriate follow-up action is taken.
The COKZ and the NVWA have agreed that in 2017 the NVWA will be primarily responsible for following up companies where milk has been (repeatedly) rejected (there were 16 such cases in 2016). In addition, in 2017 the COKZ will verify with recipients of farm milk whether no milk was actually collected from the dairy farm concerned during the period in which milk was rejected.

Monitoring animal health
To guarantee the health of lactating animals, the quality systems have also
been included in the animal health monitoring programmes. The monitoring is implemented by periodic company visits by a veterinary surgeon and a system which monitors animal health by means of data analysis.
The COKZ supervises animal health monitoring programmes by:
- assessing the periodic company visits by veterinary surgeons (limited sample)
- assessing the follow-up actions taken by dairy companies in response to unsatisfactory animal health results
- performing audits of the functioning of the animal health monitoring programmes.

It emerged during the supervision activities that veterinary surgeons' awareness as to whether it is permitted (or not) to use the milk of animals requiring special attention has improved markedly compared with previous years. There has also been an improvement in relation to the completeness of the assessment of the livestock herd by the veterinary surgeon and the analysis of animal disease records. The incorrect classification of animals requiring attention remains an area of concern.
A positive development could also be seen in relation to follow-up actions taken by dairy farmers to improve animal health where unsatisfactory animal health had been identified at a farm. However, it turns out that improvement plans used do not always result (within a reasonable period) in an improvement in animal health.
The findings are raised for discussion during the annual meeting with the dairy sector.

Industrial dairy producers
One regular audit (system inspection) in relation to the authorisation of the establishment is carried out every year for industrial dairy producers. At least 80% of the following elements are assessed during that annual audit: the design and maintenance of the processing areas and equipment, hygiene, cleaning and disinfection, water quality, HACCP including documentation, the quality of raw materials including farm milk, pest control, the risk of cross-contamination, personal hygiene, training and instruction of staff, the refrigeration chain, packaging, transport, sampling and analysis and the correct handling of animal by-products. All those elements must be discussed at least once every three years.
Establishments which are not subject to authorisation, including ice cream producers, are also inspected in accordance with the aforementioned system.

Several establishments selected at random are also inspected unannounced.
Points to be addressed which received specific attention during inspections are raised annually.
The following points were addressed specifically in 2016:
- tracing dairy raw materials
- processing specific side flows during cheese processing.

The specific dairy and egg intervention policy, currently still in draft form, was applied in 2016 when weighting non-compliances, in accordance with the NVWA's intervention policy.
To that end, new assessment lists, where a distinction is made between ‘unsatisfactory B’ and ‘unsatisfactory C’ non-compliances and ‘type D minor infringements’ in relation to shortcomings, was used in 2016.

In addition to inspections, dairy products' actual compliance with the (food safety) standards of the package of hygiene measures is verified by means of microbiological sampling. The frequency of analysis and the parameters on which the analysis is based depend on the type of product and the risk assessment for that type of establishment. The frequency of sampling at establishments which produce dairy products on an industrial scale ranges from twice to six times a year.

The use of the new assessment lists in 2016 resulted in the issuing of a greater number of written warnings to industrial initial processors of dairy products compared with 2015: 48 in 2016 versus 20 in 2015. In two cases in 2016, the non-compliances that were observed warranted compiling a fine report. This was also the case in 2015.

Subsequent processors of cheese
One regular audit (system inspection) in relation to the authorisation of the establishment is carried out every year for subsequent processors of cheese (establishments producing grated and sliced cheese). At least 80% of the following elements are assessed during that annual audit: the design and maintenance of the processing areas and equipment, hygiene, cleaning and disinfection, water quality, HACCP including documentation, the quality of raw materials including farm milk, pest control, the risk of cross-contamination, personal hygiene, training and instruction of staff, the refrigeration chain, packaging, transport, sampling and analysis and the correct handling of animal by-products. All those elements must be discussed at least once every three years.

In addition to inspections, dairy products' actual compliance with the (food safety) standards of the package of hygiene measures is verified by means of microbiological sampling. The frequency of analysis and the parameters on which the analysis is based depend on the type of product and the risk assessment for that type of establishment. The frequency of sampling at establishments producing grated and sliced cheese ranges from four times to six times a year.

Compared with previous years, there was an increase in the number of written warnings issued (31 in 2016 versus 9 in 2015). This increase is related to the more stringent application of the NVWA's intervention policy. Three reports of findings were also drawn up.

Storage locations
One regular audit (system inspection) in relation to the authorisation of the establishment is carried out every year for dairy product storage locations. Only storage locations providing temperature-controlled conditions are subject to authorisation. At least 80% of the following elements are assessed during that annual audit: design and maintenance of the processing areas and equipment, hygiene, pest control, the risk of cross-contamination, personal hygiene, refrigeration chain, transport and the correct handling of animal by-products. All those elements must be discussed at least once every three years.
Unannounced inspections are also carried out.
Establishments which are not subject to authorisation, such as establishments which do not provide temperature-controlled storage for dairy products, are also inspected in accordance with the aforementioned system.

Based on the inspections carried out, there was no cause to issue written warnings or draw up a report of findings in relation to storage locations in 2016. A customer complaint received through the NVWA resulted in the establishment concerned terminating its activities, following a number of unannounced inspections and re-inspections. Thereafter, its authorisation was (voluntarily) withdrawn.

Random unannounced inspections of industrial dairy farmers, subsequent processors and storage locations
In 2016, 38 of the abovementioned establishments were selected at random for an unannounced inspection. The inspections focus, in particular, on compliance with the basic hygiene rules. Based on the findings, four establishments were issued with one written warning each. The inspections did not warrant the drawing up of a report of findings.

Small-scale processors and farm dairy processors including door-to-door sales of dairy products
One regular audit (system inspection) in relation to the authorisation of the establishment is carried out every year for small-scale processors and farm dairy processors. Some of these establishments use the hygiene code for farm dairy production in the production process. Those establishments are assessed to establish whether they are complying with the code.
At least 80% of the following elements are assessed during the annual audits of the establishments: the design and maintenance of the processing areas and equipment, hygiene, cleaning and disinfection, water quality, HACCP including

documentation, the quality of raw materials including farm milk, pest control, the risk of cross-contamination, personal hygiene, training and instruction of staff, the refrigeration chain, packaging, transport, sampling and analysis and the correct handling of animal by-products. All those elements must be discussed at least once every three years.
Audits are also carried out in accordance with the aforementioned system on establishments from this category which are not subject to authorisation because they mainly supply direct to the consumer.
Several establishments selected at random are also inspected unannounced.
Points to be addressed which received specific attention during inspections are raised annually. Additional attention was paid in 2016 to ensuring that milk is analysed, or arrangements made for its analysis, in respect of the colony-forming unit, cell count and bacterial growth inhibitors with sufficient frequency.

During the assessments based on the hygiene code (regular assessments, re-assessments and unannounced assessments), the non-compliances noted for 69 establishments were of a nature such that a written warning was given on 70 occasions for one or more assessment points. The assessments did not warrant the drawing up of reports of findings.
A written warning was issued for nine establishments. Here, too, the assessments did not warrant the drawing up of a report of findings.

Random, unannounced inspections at small-scale dairy processors and farm dairy processors including door-to-door sales of dairy products
Forty-one inspections were carried out in 2016. The inspections focus, in particular, on compliance with the basic hygiene rules. The unannounced nature of those inspections resulted in more non-compliances being detected in the area of hygiene than during the announced inspections.
In total, seven written warnings were given to seven establishments during this type of inspection

Producers of special foods
Foodstuffs intended for particular nutritional uses (hereinafter called 'special foods') are foodstuffs which can be distinguished from ordinary foodstuffs owing to:
- their composition
- the specific nutritional purpose
- the specific target groups associated with the foregoing.

Within a European context, special food is regulated by the national implementation of the European Directive for foodstuffs intended for particular nutritional uses. In line with the categories defined in that directive, the COKZ supervises Dutch producers of special foods (infant formulae, dietary foods for special medical purposes, processed food based on cereals and baby food for infants and young children).
In the Netherlands there were eleven establishments that process one or more of the aforementioned categories of special foods and are supervised by the COKZ in 2016. This supervision focuses on the provisions in the package of hygiene measures, composition and provisions in other Commodities Act regulations. Supervision in respect of claims for products of this type is not part of the supervision performed by the COKZ; it is carried out by the NVWA.

One regular audit (system inspection) in relation to the authorisation of the establishment is carried out every year for producers of special foods. At least 80% of the following elements are assessed during the annual audits of the establishments: the design and maintenance of the processing areas and equipment, hygiene, cleaning and disinfection, water quality, HACCP including documentation, the quality of raw materials including farm milk, pest control, the risk of cross-contamination, personal hygiene, training and instruction of staff, the refrigeration chain, packaging, transport, sampling and analysis and the correct handling of animal by-products. All those elements must be discussed at least once every three years.
In addition to inspections, the special food products' actual compliance with the (food safety) standards of the package of hygiene measures is verified by means of microbiological sampling. The frequency of analysis and the parameters on which the analysis is based depend on the type of product and the risk assessment for that type of establishment. The sampling frequency for establishments producing special foods is six times a year.
In addition to microbiological analysis, the composition is also analysed. This takes place three times a year.

The inspection of compliance with the basic hygiene rules for infant formulae establishments sets the bar high because of the special target group for which these establishments produce food. In nearly all cases only minor shortcomings

were revealed by the inspections conducted in 2016. In three cases the finding warranted the issuing of a written warning. No shortcomings which would warrant the drawing up of report of findings were identified.

Control and processing of milk from establishments with suspected animal health issues
Milk from dairy farms suspected of tuberculosis or brucellosis must be heat treated under the supervision of the competent authority. Suspected tuberculosis or brucellosis must be reported to the NVWA or COKZ, after which the COKZ will supervise the transport and processing of the milk. In addition to physical inspections at processing sites conducted to find out whether the milk has been heat treated, administrative checks are also carried out for verification purposes and to find out whether the milk of the establishment concerned was actually processed at the stated processing site.
In the case of reports of other animal diseases, *Salmonella* or Listeriosis, for example, inspections are conducted when it turns out that the farms concerned also produce dairy products themselves or supply milk to producers making their own dairy products. An inspection involves checks to ensure that the hygiene processing of the milk is satisfactory. Microbiological samples are also taken for verification purposes. In this context, special attention is given to establishments which normally produce raw milk dairy products. Those establishments must immediately start pasteurising the milk, or cease processing the milk themselves and instead supply it to a dairy company, which will then ensure it receives adequate heat treatment.

In 2016, 33 establishments with suspected cases of tuberculosis or brucellosis were reported to the COKZ. It turned out that two of those establishments were not dairy farms.
The COKZ conducted 14 audits of producers of dairy products, verifying whether the milk concerned was processed correctly at the processing site. In all cases it was established that appropriate heat treatment had taken place.
During 31 administrative checks of farm milk it was established that the milk of the establishment concerned was actually processed at the stated processing site.

Projects in 2016

Project involving establishments producing grated and sliced cheese
In 2016, sliced and grated cheese was again (repeat of the 2013 test) sampled and tested for the correct fat content indication and, in the case of grated cheese, the starch content. It turned out that there was an improvement compared with the previous findings as regards the results relating to starch in grated cheese. The results relating to the fat content in the dry matter in grated or sliced cheese proved to be substantially the same.
Additional attention will be paid to establishments producing grated and sliced cheese in 2017. This process is regard as high-risk because the raw material used in this sector often consists of rejected cheeses and/or cheese side flows.

Implementation of the NVWA intervention policy
A draft for the specific dairy (and eggs) intervention policy was drawn up in preparation for the formal implementation of the NVWA intervention policy (which is expected to take place in mid-2017). It was used to modify assessment lists by linking them to the specific intervention policy and revising the weighting of non-compliances. Those lists were incorporated into supervision with effect from 2016.
Staff at the COKZ underwent training provided by the NVWA, based in part on the draft specific dairy intervention policy, to enable them to apply the NVWA intervention policy. The NVWA will lay down the final form of the specific policy in the course of 2017.

Traceability of raw materials
An FVO (Food and Veterinary Office) inspection was conducted in 2015 to assess the functioning of traceability of foodstuffs. Good traceability is essential, in particular, for products produced using a variety of raw materials and/or raw materials resulting from the further processing of raw materials. As a result, the COKZ decided to start a project in the dairy sector in 2016.
The particular aim of the project was to gather information about traceability from producers of infant formulae, establishments which repack milk products in powder form, and establishments producing grated and sliced cheese. This target group was chosen since it is known that the establishments concerned often have a long chain and use a variety of raw materials and no factors other than export are available to provide a picture of the chain in its entirety. Particular attention was paid to the traceability of the end product, through the various intermediaries back to the level of the production establishment which had received the primary raw material, milk, for the initial processing.

The investigation revealed that all the establishments examined were able to trace the direct supplier or suppliers adequately, but the traceability of the raw material or raw materials to other links in the chain was not as good.
The project results are not a reflection of the dairy sector in its entirety. An evaluation will be carried out in 2017 to establish the extent to which the traceability of dairy products requires follow-up action.

Cheese side flows
In 2016, in accordance with the work plan, particular attention was paid to the way in which side flows in the cheese sector are processed. Elements discussed included the way cheese is kept before it is collected, the separate storage of the shavings in order to prevent cross-contamination, the conducting of additional microbiological and/or chemical tests, where necessary, bearing in mind the destination of the side flow, and correct labelling and records. It can be concluded that side flows are generally handled or removed in accordance with the legislation.

Residues of veterinary medicinal products
A project proposal relating to the conducting of an evaluation of the testing methods relating to antibiotics in farm milk was drawn up in 2016. In the process, the adequacy of the level of testing of the bacterial growth inhibitors which dairy farms use, or may use, will be evaluated. That evaluation will be carried out by the RIKILT. By the end of 2016, no reports were yet available.

Incidents

Dairy farms
Indications received through the NVWA or through other agencies (veterinary surgeons, for example) concerning dairy farms which are possibly not taking sufficient account of hygiene are passed on to the relevant recipient of the milk. The recipient of the milk is asked to formulate a specific action plan and keep the COKZ informed of the developments. The action plan will generally include an unannounced visit being paid to the dairy farm concerned by the controlling authority.

In the event of reports of contaminants in animal feed raw materials or feed for dairy cattle, the dairy farm concerned is asked not to deliver the milk until tests have demonstrated that the milk meets the standard (again). In cases where dairy products are produced in-house, in addition to the destruction of the milk at the establishment, end products are also tested. End products are destroyed if it turns out that they do not meet the standard.

When dairy companies report the presence of too high a concentration of antibiotics in farm milk to the NVWA and the COKZ, the COKZ carries out an initial administrative analysis. Depending on the reason for this and the seriousness, a decision will be made as to whether an inspection should be carried out or whether additional information or measures are required. The COKZ regularly provides the NVWA with information regarding its analyses after which they decide jointly whether an inspection is necessary. Enquiries may also be made to find out whether products prepared using non-compliant milk infringe the standard.

Four cases relating to reports in the area of dairy farm supervision were dealt with in 2016. They came from the NVWA and were all related to non-compliances pertaining to hygienic milking.
The cases were dealt with in accordance with the abovementioned procedure. One of them was closed in 2016. The recipients of the milk had not yet completed the action plan for the other cases by the end of 2016. The COKZ and also the NVWA were involved in one of the cases because the non-compliances related to the tank area and milking area (COKZ) and welfare issues (NVWA).

Dairy establishments
Deviations from standards involving products or conditions can come to light in various ways. Examples include the findings resulting from official sampling, reports made by the establishment itself, through consumers or through RASFF notifications by other authorities. Reports of product non-compliances are always dealt with on an individual basis and actions undertaken are carried out in consultation with the NVWA.

In 2016, the COKZ opened 44 cases within the context of the EU package of hygiene measures; 42 of these related to product non-compliances. Microbiological deviations from standards related to deviations which the COKZ had identified by official sampling and also reports made by the establishments themselves. Other cases related to a variety of matters, such as physical contamination and unsatisfactory compliance with hygiene rules in establishments.

A distinction between infringements of food safety criteria and process hygiene criteria in the definition of microbiological criteria (Regulation (EC) No 2073/2005).
There is no obligation to report when process hygiene criteria are infringed. The establishment must investigate the cause, take corrective measures and demonstrate with tests that the measures have been effective. The extent to which the establishment has undertaken those actions is evaluated during the regular assessment of the establishment.
The COKZ carries out a separate inspection in the event of deviations from the standard under food safety criteria. The establishment must block the batches concerned around or as from the production date on which the deviation from the standard was established. A recall procedure may have to be instituted for batches that have already been delivered during that period. The cause of the contamination must be discovered and removed. A thorough analysis of the critical points of the production process must be conducted. Corrective measures should be taken and testing must demonstrate that the measures were effective. This is supervised by the COKZ by inspection and additional sampling if necessary.

In 2016, 22 food safety criteria non-compliances were dealt with in relation to microbiological quality. They included non-compliances related to *Listeria monocytogenes* where it could not be demonstrated that they would not develop and the presence of *Listeria monocytogenes* was proved.
When the COKZ took the official samples, only non-compliances regarding *Listeria monocytogenes* were taken into account in the assessment of food safety criteria. In one instance there was a deviation of >100 kve/gram in raw milk cheese, and one instance of a deviation from the 'absent' standard in curd cheese.
Two cases related to the presence of *Salmonella* in (raw milk) cheese were dealt with.
In addition, the COKZ was informed of various cases involving non-compliances relating to *Listeria monocytogenes*, Escherichia coli and STEC in foreign cheeses. The NVWA dealt with those cases.

Thirteen cases regarding deviations relating to chemical or physical contamination were dealt with. Cases concerning relevant non-compliances in relation to food safety are dealt with in accordance with the aforementioned method of dealing with food safety microbiology.

The cases dealt with related, among other things, to:
- the presence of plastic particles in various products including cheese and butter;
- metal filings in ice cream of a foreign producer
- abnormal smell and taste of milk owing to over-long pasteurisation
- presence of particles of manure in cheese originating from a farm dairy producer, caused by a malfunctioning milk filter at the dairy farm.

Two cases involving unsatisfactory at the establishment were also dealt with.

Effects measurement

The report on this section is incorporated in the dairy farms, dairy establishments, farm dairy producers and small-scale dairy producers, and producers of special foods section of the paragraphs above.

Actions taken to improve the official controls

Consultations in 2015 between the NVWA and the COKZ on the one hand and the dairy sector on the other, have led to the sector implementing changes in dairy farming private quality systems. Where previously all inspections were announced some time in advance, the sector has moved to 5%–10% of the inspections being unannounced or being announced a maximum of 1 day prior to the inspection being carried out. Some of these establishments are selected at random and others are risk-oriented. Furthermore, the measures policy has been tightened up by designating certain findings as impermissible and rejecting milk deliveries on this basis. This involves aspects relating to hygiene, the feed and care status of the dairy cows and the use of veterinary medicinal products. In addition, the follow-up periods have been decreased based on weighting of non-compliances (major and/or many non-compliances). If the dairy farmer concerned does not achieve improvements on these aspects in the short term, this will also result in the dairy establishment rejecting that milk delivery.
It has been agreed with the dairy sector that they will handle the revision of the interpretation documents on weighting and the follow-up of non-compliances.
During the evaluation of the findings in 2016 it was concluded that the tightening up of the system in response to the 2015 results has not been sufficiently successful. Further coordination with dairy companies is required to bring the level of assessment into line with the aspects which the COKZ inspects and the weighting of non-compliances which is applied. This will be re-evaluated in 2017.

Actions taken to improve the compliance of the business community

Consultations in 2015 between the NVWA and the COKZ on the one hand and the dairy sector on the other, have led to the sector implementing changes in dairy farming private quality systems. Where previously all inspections were announced some time in advance, the sector has moved to 5%–10% of the inspections being unannounced or being announced a maximum of 1 day prior to the inspection being carried out. Some of these establishments are selected at random and others are risk-oriented. Furthermore, the measures policy has been tightened up by designating certain findings as impermissible and rejecting milk deliveries on this basis. This involves aspects relating to hygiene, the feed and care status of the dairy cows and the use of veterinary medicinal products. In addition, the follow-up periods have been decreased based on weighting of non-compliances (major and/or many non-compliances). If the dairy farmer concerned does not achieve improvements on these aspects in the short term, this will also result in the dairy establishment rejecting that milk delivery.
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Conclusions

As from mid-2017, the specific dairy and egg intervention policy will be incorporated into the NVWA intervention policy. Expectations are that this will provide a more nuanced and clearer picture of the establishments' compliance with the applicable rules.

During the evaluation of the findings relating to the dairy industry's assurance schemes for dairy farms it was concluded that the outcome of the tightening up of those systems in response to the results for 2015 was still unsatisfactory. Further coordination with dairy companies is required to bring the level of assessment into line with the aspects which the COKZ inspects and the weighting of non-compliances which is applied and will be a focal point in 2017.

When the reports made by farm milk recipients in relation to non-compliance with the maximum residue levels (MRLs) for antibiotics were identified and listed, it was established that the information provided is not always consistent and complete. In 2017, the COKZ will reassess the consistency of the measures and the cases sent for each dairy company by auditing those companies.

In 2016, the traceability of raw materials was examined in a selection of dairy companies. It emerged that all the companies examined were able to trace the direct supplier or suppliers adequately, but the traceability of a raw material or raw materials to other links in the chain was not as good.
The project results were not a reflection of the dairy sector in its entirety. An evaluation will be carried out in 2017 to establish the extent to which the traceability of dairy products requires follow-up action.

In 2016, in accordance with the Work Plan, particular attention was paid to the way in which side flows in the cheese sector are processed. It can be concluded that side flows are generally handled or removed in accordance with the legislation.

The production process of establishments producing grated and cleaned cheese. This process is regard as high-risk because the raw material used in this sector often consists of rejected cheeses and/or cheese side flows. It will receive additional attention in 2017.

Egg sector

Summary of the main legislation addressed by controls in 2016 (part of the egg sector)

EU Legislation	
Regulation (EC) No 178/2002	General principles of food law
Regulation (EC) No 852/2004	Food hygiene
Regulation (EC) No 853/2004	Hygiene during production of products of animal origin
Regulation (EC) No 2073/2005	Microbiological criteria for foodstuffs
Regulation (EC) No 1069/2009	Animal by-products (basic regulation)
Regulation (EC) No 142/2001	Animal by-products (implementing regulation)
Regulation (EC) No 1169/2011	The provision of food information to consumers
Regulation (EC) No 1881/2006	Setting maximum levels for certain contaminants in foodstuffs
Regulation (EC) No 1333/2008	Food additives
Regulation (EC) No 2160/2003	Control of Salmonella

National legislation:

- Commodities Act (Warenwet)
- Food Hygiene (Commodities Act) Decree (Warenwetbesluit hygiëne van levensmiddelen)
- Preparation and Handling of Food (Commodities Act) Decree (Warenwetbesluit Bereiding en behandeling van levensmiddelen)
- Animals Act (Wet Dieren)
- Animal Products Decree (Besluit dierlijke producten)
- Regulation on Animal By-products (Regeling dierlijke producten)

Size of control file in 2016

Type of establishment	Number
Agricultural establishments in the poultry sector	
• Egg laying poultry establishments	950
Food manufacturers, importers, trading and storage establishments in the poultry sector	
• Collectors	11
• Packing stations	108
• Wholesalers	121
• Egg product producers	19
• Egg product traders	15
Total	**1,224**

within the context of the package of hygiene measures in the egg sector, results in 2016

Egg sector inspections	Number
Egg laying poultry establishments (regular, announced inspections)	292
• additional announced inspections in response to shortcomings	11
Collectors (regular, announced inspections)	10
• additional announced inspections in response to shortcomings	0
Packing stations (regular, announced inspections)	107
• additional announced inspections in response to shortcomings	7
• unannounced regular inspections	202
• additional unannounced inspections in response to shortcomings	2
Egg product producers (regular, announced inspections)	23
• additional announced inspections in response to shortcomings	2
• unannounced regular inspections	39
• additional unannounced inspections in response to shortcomings	3
Egg product producers (regular, announced inspections)	15
• additional announced inspections in response to shortcomings	0
• unannounced regular inspections	1
• additional unannounced inspections in response to shortcomings	0
Samples/analyses	
Microbiological analyses at egg product producers	227
• number of deviations from standards found in sub-samples (four batches were involved)	12 (5,3%)
Measures	
Warnings	26
Administrative fines	3
Official reports	-
Suspensions of registrations/authorisations	-
Withdrawals of registrations/authorisations	-

Further explanation of the results for the Egg sector 2016

In the Netherlands, the Dutch Controlling Authority for Eggs (NCAE), a division of the Netherlands Controlling Authority for Milk and Milk Products (COKZ) has been designated as the authority for implementing supervision of the regulations relating to the package of hygiene measures in the egg sector. The activities carried out by the NCAE in relation to this package were performed in line with the NCAE Work Plan for performing the package of hygiene measures, animal by-products and other Commodities Act legislation activities (year 2015). The Work Plan was approved by the Netherlands Food and Consumer Product Safety Authority (NVWA) on 26 February 2016.
Apart from in the case of egg laying poultry establishments, the specific dairy and egg intervention policy, currently still in draft form, was applied in 2016 when weighting non-compliances.

Egg laying poultry establishments

Regular controls and re-inspections
Approximately 950 egg laying poultry establishments are active in the Netherlands. Of these, 790 establishments have implemented an assurance system for egg laying poultry establishments whereby they implement the application of the EU hygiene package.
The basic principle of the supervision of egg laying poultry establishments is that establishments with an assurance system are assessed once every three years and establishments without an assurance system are assessed annually.
The controls focus on records, animal feed, veterinary medicinal products, animal health, accommodation, pest control products and plant protection products, waste, water, eggs, sampling and testing and animal by-products.

At 292, the number of regular inspections actually carried out turned out lower than planned (381) as a result of cessations of operations and avian influenza (HPAI) in the Netherlands, which meant it was not possible to carry out inspections at egg laying poultry establishments from the beginning of November 2016 because of the visitors' regulations that had been introduced.
The non-compliances that were observed related to inadequate hygiene in the processing areas and/or inadequate pest control. One or more written warnings were issued to eleven establishments in this context. One written warning was issued to ten establishments, twice in the case of one of those ten establishments.

Compared with 2015, there is an increase in the number of written warnings issued for egg laying poultry establishments (three in 2015). This increase is related to the more (phased) application of the NVWA's intervention policy. No reports of findings were drawn up.

Dioxins, dioxin-like polychorinated biphenyls (PCBs) and PCBs
As from 2014, random samples have been taken for analyses of dioxins, dioxin-like PCBs and PCBs in the eggs of free-range chickens.
Eggs from 66 establishments were analysed in 2016. No non-compliances were identified at 64 establishments. At one establishment there was deviation from the standard for the total dioxins for one shed. The establishment was told to block the eggs from the shed concerned and to have them destroyed (animal by-product), to conduct an analysis of the origin and to take corrective measures.
Non-compliance in respect of the threshold for action in relation to dioxins and dioxin-like PCBs was identified at one establishment. It was therefore possible to limit the notice given to the establishment to the obligation to conduct an analysis of the origin and to take corrective measures.
Sampling for verification purposes was carried out at both establishments in order to check compliance with the notified actions. It turned out that both establishments were now in compliance with the standard or threshold for taking action. Nevertheless, both were selected for the current sampling in 2017.

Collectors
Inspections in respect of collectors are carried out once a year, unannounced. Those inspections are focused on hazard identification and risk assessment, food safety, traceability, general hygiene rules, specific rules on design and environment, transport, waste, personal hygiene, packaging, training, eggs and suppliers.
In 2016 there were eleven regular, unannounced assessments of inspectors. Again, no non-compliances were observed during these assessments.

Packing stations
There were 107 announced and 202 unannounced assessments of packing stations. The announced assessments were carried out on the basis of the hygiene code for packing stations, collectors and wholesalers approved by the Ministry of Health, Welfare and Sport and take place once a year. The extent to which packing stations comply with the hygiene code is assessed. The hygiene code contains statutory requirements and also requirements exceeding the statutory minimum. The unannounced assessments are carried out on the basis of the NCAE's HP assessment list for packing stations. The extent to which the establishments comply with the statutory rules of the package of hygiene measures is assessed. At least 80% of the following elements are assessed in the process: the design and maintenance of the processing areas and equipment, hygiene, cleaning and disinfection, water quality, HACCP including documentation, the quality of raw materials including farm milk, pest control, the risk of cross-contamination, personal hygiene, training and instruction of staff, the refrigeration chain, packaging, transport, sampling and analysis and the correct handling of animal by-products. Those elements are discussed at least once every three years.
The number of inspections performed turned out lower than planned. This is because in the last quarter of 2016, establishments which combine operations, being poultry establishments and also packing stations, could not be visited owing to the outbreak of avian influenza in the Netherlands. The number of establishments which combine operations is increasing because a growing number of poultry establishments are developing packing station activities. All new packing stations which started in 2016 were also assessed in 2016.

In 2016, 5 packing stations received a written warning (four received one in 2015).
Three of the establishments involved complied with the hygiene code; the other two were assessed in accordance with the HP assessment list. In percentage terms, the non-compliances observed varied only slightly from those in 2015 and related mainly to hygiene and measuring and/or recording temperature and humidity.

Egg product producers
There were 23 announced and 39 unannounced assessments. Compared with 2015, an increased number of non-compliances were detected in relation to the cleanliness and maintenance of the preparation areas. In 2016, too, more non-compliances than previously noted were established in relation to ‘raw materials' acceptance’ and ‘HACCP/basic conditions’, aspects which in 2015 did not fall in to the category of (one of the most) commonly observed non-compliances. The explanation for this can be found in the naming of priorities for the supervision of egg product producers in 2016:

- the application of HACCP
- compliance with specific rules for egg products
- general hygiene in the preparation areas
- the use of additives.

The non-compliances noted resulted in the issuing of eight written warnings to the eight establishments concerned in 2016. In 2017, the NVWA's final specific dairy and egg intervention policy will be applied during supervision. In accordance with that policy, a report of findings will therefore be drawn up in appropriate cases.

For egg product producers, too, official sampling and analyses verified the degree to which implementation of the regulations concerning the package of hygiene measures is effective at the establishments. In the analyses, 107 batches were tested for enterobacteriaceae, 12 for *Listeria monocytogenes*, and 108 for *Salmonella*. The latter tests revealed non-compliance with the relevant food safety criterion. As a result, a report of findings was drawn up (see also the 'RASFF notifications' section below).

Egg product traders
A total of 16 egg product traders were assessed, 15 announced and 1 unannounced. No non-compliances were detected during these assessments.

Projects in 2016

In 2016, further work was carried out on the preparations for NCAE's revision of the measures policy; the objective being to bring it as closely in line with the NVWA's intervention policy as possible. Apart from in the case of egg laying poultry establishments, the specific dairy and egg intervention policy, currently still in draft form, was applied in 2016 when weighting non-compliances. However, it will not be possible to apply the specific dairy and egg intervention policy formally until it has been adopted officially. Expectations are that this will happen in mid-2017.

Incidents

Dioxins, dioxin-like PCBs (polychlorinated biphenyls) and other PCBs.
This subject has already been dealt with in the 'Egg laying poultry establishments' section.

Salmonella contaminations at egg laying poultry establishments
Since mid-2015, the supervision to monitor and control *Salmonella* at the egg laying poultry establishments has been carried out solely by the NVWA. However, the NCAE continues to supervise the correct marking of eggs contaminated with salmonella and the channelled removal of those eggs directly from the poultry establishment to the egg product producers.
The NVWA made 31 reports to the NCAE in this context. Subsequently, 14 initial inspections and 29 re-inspections took place. In 27 cases these were regular re-inspections (hens not removed). In the case of two establishments the remedying of shortcomings noted previously was verified. A written warning was given for two re-inspections.

In addition, two reports of findings (two establishments) were drawn up, for the egg laying poultry establishment involved and for the packing station. However, the NVWA was unable to deal with either report because the NCAE is not formally designated as the authority for supervision of compliance with legislation on zoonoses. The NVWA has indicated it will arrange the required formal designation for that supervision in 2017.

Salmonella in Polish eggs
In the period between October 2016 and December 2016, the NCAE worked closely with the NVWA on the emergency relating to *Salmonella* infected eggs from Poland. The NCAE performed various operations related to tracing at several establishments under its supervision and in relation to the verification of Polish documentation.

Avian influenza (HPAI)
In 2016, the NCAE's field staff were authorised (temporarily) by the NVWA to carry out cleaning disinfection checks of trays and the like at designated establishments receiving eggs from what are known as Protection and Surveillance zones in connection with avian influenza. In that context, 12 inspections were carried out in 2016, followed by close collaboration between the NCAE and the NVWA in relation to the shortcomings noted and other relevant aspects.

RASFF reports
In response to a RASFF report from Germany relating to a *Salmonella* infection in liquid whole egg from a Dutch egg product producer, the NCAE carried out an emergency assessment at the establishment concerned. No infringements were observed here. All the additional samples taken met the statutory standard.

In collaboration with the NCAE, the NVWA made a RASFF report for *Salmonella* infection in whole chicken eggs at a Dutch egg product producer (see also section 7.2). The batches concerned had already been processed in the Member States concerned. The cause turned out to be a recently installed pasteuriser which had been inadequately validated, with the result that insufficient pasteurisation had taken place unnoticed. Following the discovery of the fault, the old pasteuriser was re-installed until the new one had been fully validated.
That egg product producer was issued with a report of findings for unsatisfactory implementation of the HACCP system, which had resulted in an unsafe product being placed on the market.

Effects measurement

The report on this section is included in the egg laying poultry establishments, collectors, packing stations, egg product producers and egg product traders sections of the paragraphs above.

Actions taken to improve the official controls

During the assessments more attention was paid to hygiene aspects.
In addition, as stated elsewhere in this report, work was carried out on revising the NCAE'S measures policy in order to bring it as closely in line with the NVWA'S intervention policy as possible. New assessment lists were used and that also brought about an improvement as regards the clearer and more accurate recording of shortcomings the new lists were intended to achieve. This will be set out in further detail in mid-2017, when the use of the specific dairy and egg intervention policy is formalised.

Actions taken to improve the compliance of the business community

No initiatives for specific actions focusing on improving compliance by the business community were developed in 2016.

Conclusions

In the main, the results of the supervision in the egg sector in 2016 show, to a varying degree, an increase in the number of written warnings issued, but this does not mean that that increase should be entirely attributed to a worsening of the situation at inspected establishments. On the one hand, the additional attention given to hygiene aspects has played a part, but, on the other, the preparations made to bring the measures policy of the NCAE into line with the NVWA's intervention policy has resulted in more warnings.

In 2016, work continued on the development of the specific dairy and egg intervention policy, which is set to be linked to the NVWA's specific intervention policy for food and fodder safety within the industry. Expectations are that this will take place in mid-2017.

Incidents were dealt with in a fitting manner. Where necessary, suitable measures were taken and sanctions were imposed.

3.12 Hotel/restaurant/catering and artisanal production

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2015

EU Legislation	
Regulation (EC) No 178/2002	General principles and requirements of food law
Regulation (EC) No 852/2004	Food hygiene

National legislation:

- Commodities Act (Warenwet)

Results 2016

Size of control file in 2016

Type of establishment	Number
Hotel/restaurant/catering	± 60,000
Retail (supermarkets and similar)	± 21,000
Artisanal (butcher, baker, greengrocer, poulterer, market trader)	± 25,500
Institutions (including crèches)	± 10,000

A further increase in the size of the control file is apparent. This is due, on the one hand, to a better picture (based on various sources) of the actual situation. On the other hand, there are indications that the decline of certain target groups has stopped and that some are even gathering momentum. This is the result of the growing economy.

Supervision of Hotel/Restaurant/Catering and Artisanal Production, results in 2016

Inspections	Number
Hotel/restaurant/catering	20,745
Retail	1,927
Artisanal	5,431
Institutions	160
Total	**40,833**
Re-inspections	
Total number of chargeable re-inspections	12,570
Of which: digital re-inspections	5,808
Samples/analyses (microbiological)	**8,371**
Inspection measures	
Hotel/restaurant/catering	10,686
• fine/official report	2,761
• written warning	7,925
Retail	754
• fine/official report	191
• written warning	563
Artisanal	2,237
• fine/official report	479
• written warning	1,758
Institutions	24
• fine/official report	2
• written warning	22
Temporary shut-down of activities	
• intention to close	155
• closures	69
• shut-down of process	7
• seizure	50
• periodic penalty payments	3

Reference to specific reports
Various substantive reports will be published in various forms, ranging from limited reports to an infographic up to more comprehensive reports.

Further explanation of the Hotel/Restaurant/Catering and Artisanal Production results

It is apparent in 2016 that the hiring of new inspectors has translated into a further increase (by nearly 7,500) in the number of inspections. More inspections, based on a risk-oriented selection, have also resulted in an accompanying rise in the number of samples taken and the number of measures.

The intended risk selection process was again restricted in 2016. Despite the fact that the group of inspectors was up and running, they were also being called on to carry out other duties or duties which influence the risk selection process. The latter aspect applied in the case of broadening disclosure. Many unknown establishments were identified regardless of whether they represented a high or low risk (to the extent that was possible to estimate). As a result, the percentage of re-inspections as opposed to inspections rose to 31% (previously 23%).
In 2016, 33.5% of the inspections resulted in the imposition of a measure (25% in 2015). A serious infringement was identified in 8% of the inspections (6% in 2015) and 25% of the inspections identified an infringement (19% in 2015). A clear increase in targeted supervision is apparent and is approaching the 2014 level.
The measures focus on basic conditions (in particular hygiene and architecture) and HACCP (safe processes) (87.5%), temperature (10%), vermin (1.5%) and unsafe products (1%).

More stringent supervision
The improvement brought about by more stringent supervision (issues can be tackled faster with fewer inspections) of persistent offenders is apparent in the number of interventions made. In 2016, a total of 284 actions aimed at shut-down were performed (169 in 2015). There were 542 checks in respect of settlements and 41 emergency closures were imposed (21 in 2015).

Formula approach
The formula approach is characterised by the use of random samples to arrive at a conclusion on compliance throughout the entire formula. The above control file consists of about 15,000 branches that form part of a formula, an establishment with multiple locations. This efficient and effective method was continued in 2016.
Based on random sampling, the NVWA groups the establishments into:
- 'green' formulas: more than 90 percent of the locations comply with the food safety requirements
- 'yellow' formulas: fewer than 90 percent of the locations comply with the food safety requirements
- individual locations posing structural risks.

The NVWA devotes attention to establishments in the yellow category by including more locations in a subsequent random sampling. An objective allocation key is used to do this[1]

This formula approach method has been adopted for well-known national formulas (chains) of supermarkets, bakeries, caterers, petrol stations, hotels and restaurants. At the end of 2016, the situation was as follows:

Sector	Number of formula establishments	Number of enforcement inspections	Number of measures
Bakeries	6	51	19
Catering	10	0	0
Hotel/restaurant/catering	53	136	52
Butchers	1	0	0
Supermarkets	22	211	54
Petrol stations	7	0	0
Total	**99**	**398**	**123**

[1] An allocation key is an objective instrument for determining the size of a random sample which takes account of the size of the formula and the percentage of non-compliance in the previous random sampling. The size of the sample will never encompass more than 50% of the locations.

The results from the inspections are published on the NVWA website. In 2016, 99 formulas were assessed in this way. Three hundred and ninety-eight inspections were carried out at eighteen formulas in the yellow group. 31% of the inspections resulted in the imposition of a measure (fine report). Three formulas had improved to such an extent that they were categorised as green. However, one newcomer was not yet good enough and was categorised as yellow.
In comparison with 2015, the improvement in compliance is slight (from 18 yellow formulas in 2015 to 16 yellow formulas in 2016). The number of inspections has also fallen (from 550 inspections in 2015 to 398 inspections in 2016).

In addition to this form of supervision, there are individual locations whose compliance is still so bad that they are included in more stringent supervision. Alongside hotel/restaurant/catering locations, it is mainly supermarket locations which experience so many problems with vermin that an emergency closure is required.

The green formulas undergo a different form of supervision. Reduced supervision is applied where the focus is on contact with the head office and inspection of the systems and in-house control data. Based on that information, it has been decided that the NVWA will limit its supervision to those elements.

Projects in 2016

The development of the compliance risk management strategy continued in 2016. Influencing the behaviour of operators as a means of ensuring compliance is becoming ever more important. Targeted where appropriate and where other instruments are or will be more effective. For the kebab operators target group it was established that film clips contribute to better compliance and they will be integrated into risk-based supervision in 2017.
A qualitative effects measurement was taken for the Chinese hotel/restaurant/catering operators in 2016. The results show that the enforcement tools developed will require some adjustment. A new survey will be set up and started in 2017.
Various tools aimed at raising knowledge levels have been developed for the infants ward target group in hospitals. They will be made available in 2017 after which measurements can start.

Private assurance schemes
Eight private self-inspection systems (POC[2]) have now been accepted. These systems have been developed specifically for those target groups. In 2016, five systems were subjected to random testing. The random testing took place at sites in order to assess self-inspection systems. The results show that there is room for improvement, but also that this is a very valuable tool in the supervision process. Analysis of the inspection reports demonstrated that this can also be a means of gaining an insight into a system, alongside the physical visits to operators' premises. Based on the results a customised approach can be taken for each system and input provided to optimise the assessment criteria on the NVWA website.

Effects measurement

Following on from the effects measurement in respect of kebab operators, a general follow-up field experiment was carried out so as to be able to specify which instrument will bring about a particular improvement. The results of the study confirm the significant contribution made by the films in promoting compliance.

Actions taken to improve the official controls

Various elements of supervision are of a fairly hands-on nature. In 2016, the move towards a new digital form of controls, from the planning stage up to and including implementation, was set out in more specific terms, in particular with regard to hygiene legislation within those target groups. When this system (known by the name Inspect) is put into practice, the work carried out from the planning stage up to and including the implementation of measures will be process-oriented which will provide far better support for quality, speed and uniformity.
Implementation in practice will start in 2017.

Improvement of supervision is also being fostered through the introduction and implementation of an amended intervention policy. Implementation is accompanied by thorough training, which also covers a number of implementation-related subjects where the range in application is too great.

[2] POC: Private agency control system

Actions taken to improve the compliance of the business community

In 2015, a card was developed to warn establishments that they are on the cusp of more stringent supervision. 'Be warned, and avoid this process. Start improving and complying now.' The card was developed with the business community and was used in 2015 and 2016. An evaluation will be carried out in 2017 to find out whether the card is working.

Self-inspection systems continue to require attention. It is not only the eight accepted systems which need to recruit more participating establishments, new systems registering will also be dealt with seriously by the NVWA. This may make the choice for individual operators wider still.

Conclusions

- The number of inspections has increased (nearly 7,500). The risk-based selection of establishments has again improved compared with 2015.
- The most common topics for non-compliance in hotel/restaurant/catering, artisanal and retail remain hygiene, correct food handling and temperature. The problems involving vermin have not diminished.
- The number of actions aimed at shut-downs has risen sharply (from 169 to 284). The same picture can be seen in the rise in the number of emergency closures (from 21 to 41).
- The formula approach shows a moderate improvement in compliance. The number of inspections, by contrast, has fallen from 550 to 398. The current yellow formulas where fewer than 90% of the locations comply with the requirements; are more stubborn and have greater difficulty in straightening out compliance.
- Five of the eight self-inspection systems have undergone random checks. Improvements need to be made to all systems, but there is sufficient capacity and potential to implement them. The fact that these systems ensure that all participating establishments are visited at least once, but usually twice a year, continues to provided added value, being something NVWA cannot and will not do.

3.13 Know what you're buying

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EU) No 1169/2011	The provision of food information to consumers
Regulation (EC) No 110/2008	Labelling of the geographical indication of spirit drinks
Regulation (EC) No 2568/91	Requirements for the characteristics of olive oil
Regulation (EU) No 1308/2013	Establishing a common organisation of the markets in agricultural products

National legislation
Most of the legislation on labelling and allergens is set out in the Commodities Act Decree on Information on Foodstuffs (Warenwetbesluit informatie levensmiddelen). However, the Commodities Act contains 40 other instances of additional labelling regulations.

Size of control file in 2016

Type of establishment	Number
Production establishments	2,400
Importers, wholesalers, storage	4,800
Hotel/restaurant/catering, retailers, supermarkets, institutional kitchens	approx. 100,000

Projects in 2016

Various projects were run in 2016 in the area of the labelling of food products:

Text size
In 2015, the NVWA conducted a small-scale exploratory test in respect of a limited number of products to gain an impression of the extent to which the rules are applied correctly within the industry and to identify the approach that should be used during enforcement. The test revealed that apart from in one case, all the packaging already complied with the new statutory rules.
Subsequently, in 2016, a test where the text size on a large number of products was examined was started.
The 178 pre-packaged food products sampled as part of the salt monitoring process were also tested to establish whether the minimum text size requirement was met.
Nearly 95% of the labels met the text size requirements. This confirms the first limited measurement taken in 2015.

Olive oil
On behalf of the European Commission, the Member States carry out annual controls on olive oil with the objective of promoting quality and honesty in the trade and to combat any fraud. The NVWA carries out this inspection annually. In the period between October 2016 and November 2016, the NVWA sampled olive oil from the trade channel. The emphasis was on the most expensive oil quality, 'extra virgin olive oil' (49 samples). Five samples of a lesser quality were also sampled. Of the 54 olive oil samples, three (5%) turned out to be not fully in compliance with all legal requirements. The infringements involved were minor, single non-compliances: excessive acidity (1.22%) and in two samples a spectrophotometry deviation from the K720 parameter (0.271 and 0.331 respectively), which indicates a small loss of quality through the effects of light and heat.

Misleading information on drinks containing fruit
In 2016, tests were carried out to establish whether there was any misleading information on drinks to which fruit had been added. Several samples were taken from the supermarket in an exploratory survey involving one major operator which markets various brands of drinks containing fruit. A total of 15 products were assessed. The products were fruit juices, fruit nectars/fruit drinks, lemonades/soft drinks and dairy drinks to which fruit had been added. Labelling aspects which, although in compliance with the law, could possibly nevertheless mislead the consumer, were then discussed with the producer. The producer was issued with a written warning for not stating on the packaging that 12 of those products had undergone treatment (heat treatment), which mean the consumer was unable to distinguish those products from similar ones which had not undergone similar treatment.

Misleading imitation
Ingredients which are normally used in the preparation of food products may be replaced entirely or in part by similar ingredients. Suggesting that a particular ingredient is present when that ingredient is not present in its entirety is a form of deceit. When an ingredient the consumer expects to be used entirely or in part in the preparation is substituted, the name of the foodstuff must indicate that substitution or partial substitution.
Compliance with these requirements was examined during the 'Misleading Imitation' project. A total of 249 products were assessed. The products were divided into various groups and examined in respect of the specific ingredient:
- food products to which meat is added (21 products)
- food products to which fish is added (32 products)
- food products to which cheese is added (27 products)
- food products to which fruit is added (34 products)
- food products to which chocolate is added (58 products)
- food products to which other ingredients are added (77 products).

A measure for 'imitation' (either it had been suggested that an ingredient was present when the ingredient concerned had not been added, or the substitution or partial substitution of an ingredient was not mentioned) was taken for 81 products.
In addition, a measure was imposed for 23 products for a different non-compliance related to labelling.

Defrosted stated on the product
Pre-packaged food products which have been frozen but are sold to the consumer defrosted must have 'defrosted' stated on them (apart from a few exceptions). The scope of this project covered 'raw meat' (plain or seasoned). One hundred and two photographs of pre-packaged food products were taken in supermarkets. In instances where 'defrosted' was not stated on the product, the producer was asked whether it had been frozen. Two shortcomings were identified here.

Origin labelling
The origin of pre-packaged meat must be stated on the packaging. This obligation has applied to beef for over 15 years (pursuant to Regulation (EC) No 1760/2000), and is an obligation for meat of other animal species (pigs, poultry, sheep and goats) provided for in Regulation (EU) No 1169/2011 which has been in force since December 2014.
Inspections are carried out to establish whether the origin is stated on pre-packaged meat in the case of animal species which are subject to that obligation in accordance with Regulation (EC) No 1760/2000 or Regulation (EU) No 1169/2011. The products photographed as part of the 'defrosted' project and fell within the scope of the project were assessed for origin labelling. There were 79 products (39 pork products, 33 beef products and 6 poultry meat products). Three of the pork products turned out not to be in compliance with the law.

3.14 Contaminants, residues and genetically modified organisms (GMOs) in foodstuffs

Controlling authority or authorities: NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 669/2009	increased level of official controls on imports of certain feed and food of non-animal origin
Implementing Regulation (EU) No 884/2014	special conditions governing the import of certain feed and food from certain third countries due to contamination risk by aflatoxins
Commission Recommendation 2013/647/EU	investigations into the levels of acrylamide in food
Commission Recommendation 2012/154/EU	Monitoring of the presence of ergot alkaloids in food
Commission Recommendation 2013/165/EU	presence of T-2 and HT-2 toxin in cereals and cereal products
Regulation (EC) No 396/2005	setting maximum residue levels of pesticides in or on food
Regulation (EC) No 1829/2003, Regulation (EC) No 1830/2003	on authorised GMOs in animal feed and foodstuffs
Commission Implementing Decision 2013/287/EU	emergency measures regarding unauthorised genetically modified rice in rice products originating from China
Regulation (EC) No 1333/2008	on food additives (Sudan dyes)
Regulation (EC) No 2073/2005	on microbiological criteria for foodstuffs (histamine)
Regulation (EC) No 1881/2006	setting maximum levels for certain contaminants in foodstuffs

National legislation

- Commodities Act (Warenwet), in which all EU legislation has been implemented.

Size of control file in 2016

Type of establishment	**Number**
Importers, wholesalers, manufacturers, supermarket chains, retail stores	approx. 150,000

Supervision of Contaminants, Residues and GMOs, results in 2016

Results of NVWA inspections/samples in 2016	**Number**
Pesticide residues:	
• on the basis of the National Control Plan	
• representative for the market	2,132
• on the basis of a risk profile	996
• On the basis of Regulation (EU) No 669/2009	670
GMO foodstuffs	204
GMO Chinese rice	33
Mycotoxins:	
• on the basis of the National Control Plan	
- representative for the market	2,207
- on the basis of a risk profile	1,265
• On the basis of Regulation (EC) No 669/2009 and Regulation (EC) No 884/2014	1,332
Environmental and process contaminants	933

Reference to specific reports

Report of Pesticide Residues Monitoring Results of the Netherlands for 2016. Non-compliances in respect of the Acute Reference Dose (ARfD) were reported to the Rapid Alert for Food and Feed system. Results of the samples taken within the framework of Regulation (EC) No 669/2009 and (EU) No 885/2014 were then reported to the European Commission every quarter in accordance with the applicable agreements.

Further explanation of the results for Contaminants, Residues and GMOs in Food

Pesticide residues

Testing for pesticide residues reveals that the percentage of non-compliances for crops grown in the EU is still always low. However, the percentage of non-compliances of products from outside Europe remains relatively high. The programme reveals that:

- Almost 3,800 samples were found to contain approximately 8,960 residues of 205 different pesticides. The number of different substances found in 2016 was similar to that found in 2015. The EU has determined which agents must in any case be included in the national control programme. In addition to the compulsory programme, there is also a list of recommended substances. Of the various residues found in 2016, 93% are on that compulsory list and 4% on the recommended list. The results of the recommended list and the national additions can be used to supplement the EU programme where necessary.
- many samples of fruit and vegetables from Asia did not meet the maximum residue level (MRL). A considerable portion of the products from Turkey (22%) and Egypt (18%) also failed to meet the MRL. The following tables list the product/country combinations with the greatest MRL non-compliances. Vine leaves and rambutans are particularly worthy of note. Vine leaves are often harvested in viticulture without account being taken of plant protection products. The importation of those products is therefore subject to stricter controls at the border. This does not alter the fact that importation still takes place and that imported products enter the Netherlands through other EU countries. The Netherlands reported the high percentage of non-compliance in respect of rambutans and vine leaves to the European Commission so that it could take measures. Since compliance with the legislation had improved, Egyptian oranges were removed from the strict control regime. However, the improvement turned out to be temporary. In 2016, many consignments of Egyptian oranges failed to meet the MRLs.
- In 2016, the Netherlands submitted 7 notifications to the Rapid Alert for Food and Feed (RASFF) system on the basis of NVWA inspections and a further 19 notifications on the basis of notifications from the business community within the context of Article 19 of the General Food Law Regulation. The total number of reports is comparable with the number in 2015, but the proportion has shifted substantially to reports based on business community notifications.
- Both the non-compliances and the RASFF notifications of residues of toxic, old-fashioned pesticides from third world countries (such as carbofuran and propargite) were striking.

Fewer controls of Dutch products were carried out in 2016, although controls were increased on imported products from countries outside the EU, with particular attention to South East Asia, the Dominican Republic, Surinam, Egypt, India and China.

Important products analysed in the national control plan with high non-compliance percentages, with country of origin.

Product	Plant protection products	%>MRL	Country of origin
Vine leaves	many	75.0	Turkey
Rambutans	carbendazim, cypermethrin	70.6	Vietnam
Goji berries	acetamiprid, carbosulfan and propargite	37.0	China
Tropical herbs	chlorpyrifos, fenazaquin	50.0	Thailand, Morocco
Oranges	dimethoate, imazalil, chlorpropham	15.0	Egypt

Major products with high non-compliance percentages found after import controls within the context of Regulation (EC) No 669/2009.

Product	Plant protection products	%>MRL	Country of origin
Strawberries	various	28.0	Egypt
Cactus fruit	permethrin, carbendazim, iprodione	11.9	Vietnam
Tea	various	12.5	China

Genetically modified organisms (GMOs)
The following table contains the number of samples of foodstuffs tested for the presence of GMOs. Since RASFF reports have recently been made in relation to papaya, a number of papaya fruit were also tested here.

Samples tested for GMOs

Product	Total	number >0.9%	Number of unauthorised GMOs
Foodstuffs	198	1	-
Papaya	6	N/A	-
Chinese rice products	33	N/A	2

Mycotoxins
As the severity of fungal attacks can vary from one harvesting season to the next and from one country of origin to another, annual attention needs to be devoted to the enforcement of the EU regulations governing mycotoxins. The sampling of relevant products is tailored to this. In addition to risk-based controls of imports from third countries and at production establishments, attention was also paid to products from other EU Member States since high-risk products also enter through this route. A multi-method is used for the analysis of mycotoxins which means several mycotoxins can be measured at the same time. The National Plan samples are analysed for an average of approximately 40 different mycotoxins.

Analysed samples and percentages of non-compliance with maximum limits (MLs, under Regulation (EU) No 1881/2006).

Product	NP	%>ML	import*	%>ML
Grain (and grain products including cake)	447	0.9	0	
Dried tropical fruits	143	2.8	88	6.8
Nuts and seeds (nut and seed products)	1,152	5.3	1,104	4.5
Wine, beer and fruit juice	135	0	0	
Baby foods	63	0	0	
Herbs and spices	143	2.1	146	9.6
Coffee and tea (including liquorice and Dutch liquorice (drop))	84	0	0	
Cocoa (products)	40	0	0	
Final total	**2,207**		**1,338**	

** under Regulation (EC) No 669/2009 and (EU) No 884/2014*

There are a number of additional comments for specific product groups:

Nuts
Ninety-one of the 1,466 consignments of peanuts which were tested upon import (emergency orders and part of the National Plan) for the presence of aflatoxins were found to be above the maximum limit (ML), which led to their importation being refused. The percentage of non-compliance of 6.2% was somewhat higher than in 2015 (5.4%), which could be attributed to a poorer harvest in the United States. As for pistachio nuts, it was striking that the percentage of non-compliance for aflatoxins upon importation was 2.8% and 17.9% in the sampling for the National Plan. This indicates that controls within the EU are not watertight.

Dried tropical fruits
In 7 of the 91 consignments of figs that were tested, the level of aflatoxin B1 that was detected was so high that import was refused. With a percentage of non-compliance of 6.7% this is higher than the level in 2015 without there being any clear cause for this. A level of > 280 g/kg of ochratoxin A was detected in a consignment of dates the importation of which was refused. This is striking not only because of the high content level but also because mycotoxins are seldom found in dates.

Spices
With regard to ochratoxin A, nearly all samples complied with the only recently introduced lower MLs. This contrasts with the problems involved in obtaining nutmegs which are free of aflatoxins. Excessive levels of aflatoxin were found in 14 of the 154 analysed nutmeg samples, a percentage of non-compliance of 9.1%. This is an increase compared with 2015, when the figure was 6.4%. This, then, is the reason why controls in this regard are provided for in Regulation (EC) No 669/2009.

Reference to specific reports
Non-compliances were reported via the Rapid Alert for Food and Feed System. The results of the 669/2009 and 884/2014 samples were then reported every quarter to the European Commission in accordance with the applicable rules.

Environmental and process contaminants
Contaminants are chemical substances which have not been added to foodstuffs but are unintentionally present in them. In addition to substances produced by mould (mycotoxins: see the previous paragraph), these are substances which find their way into foodstuffs through the environment (environmental contaminants) or which arise during the production process (process contaminants). Sampling for these contaminants took place at the premises of importers, at production companies, distribution centres of large multiple retailers, wholesalers and, if necessary, at supermarkets/ retailers' premises.

Samples tested and percentages of non-compliance with maximum limits or guide values/process criteria under Regulations (EC) Nos 1881/2006, 2073/2005, 1333/2008, and 2013/647/EU).

Contaminant	Number	%>ML, reference value or indicative value
PAHs	132	2.3%
3-MCPD	59	0.0%
Acrylamide (guide value)	131	26.0%
Heavy metals	316	5.7%
Sudan dyes	60	18.0%
Biocides, chlorate and perchlorate	124	11.3%
Histamine (process criterion)	110	10.0%
Final total	933	9.8%

There are a number of additional comments for specific contaminants:

Polycyclic Aromatic Hydrocarbons (PAHs)
PAHs arise as a result of incomplete combustion and are carcinogenic. PAHs can be found in dried herbs or in oils which have been pressed using dried products, and in smoked products such as, for example, smoked fish. The following product groups were tested in 2016: smoked fish, coconut oil, dried herbs/spices, tea, cocoa fibre and bananas/cassava chips. The maximum benz(a)pyrene content was found to have been exceeded in the case of dried herbs (2 samples) and coconut oil (1 sample).

3-MCPD
3-monochloropropane-1,2-diol (3-MCPD) is a by-product which can be created during the preparation of soy sauce and hydrolysed protein from vegetables. 3-MCPD en 3-MCPD esters are also unintentionally created during the refining of vegetable oils and fats. These substances are carcinogenic in rats and suspected of being carcinogenic for humans. There is a European Commission Recommendation (2014/661/EU) on the monitoring of the presence of 2 and 3-monochloropropane-1,2-diol, 2- and 3-MCPD fatty acid esters and glycidyl fatty acid esters in food. In the context of that recommendation, 31 samples of margarine/half-fat butter were tested in 2016. 3-MCPD was found in 14 of those 31 samples, with an average content in all samples of 0.08 mg/kg. If the calculation is based solely on the samples in which 3-MCPD was found, that is an average of 0.18 mg/kg, where the most frequently found content was 0.35 mg/kg. A ML of 20 µg/kg has been laid down in the legislation for soy sauce. No 3-MCPD was found in any of the 28 samples.

Acrylamide
Acrylamide occurs during the heating of products which contain reducing sugar and free amino acid. Acrylamide is carcinogenic in mice and rats and suspected of being carcinogenic for humans. There is a European recommendation on the monitoring of acrylamide (2013/647/EU). That recommendation also contains indicative values. Any exceeding of those indicative values will prompt a closer examination of the food safety plans of the production establishment concerned. Such an examination took place in several cases in 2016.
The following product groups were examined: gingersnaps, chips prepared using potato dough and crisps, including vegetable crisps of smaller producers. Non-compliances in respect of the indicative values were found in all three product groups examined. Follow-up inspections were carried out for a producer of gingersnaps, two producers of chips and two producers of crisps.

Heavy metals
Heavy metals are present in the environment (in soil, for example) and may occur naturally in products. Children, in particular, run the risk of ingesting more than the permissible daily intake of a metal. Regulation (EC) No 1881/2006 contains MLs for lead, cadmium, mercury, tin and arsenic, and there is a recommendation for the monitoring of nickel. The following product groups were tested in 2016 for heavy metal content: predatory fish, meat products, tinned vegetables or fruit, rice and rice cakes, baby food and seaweed. Sixty-five samples of predatory fish were tested. In 12 cases, the maximum mercury content was found to have been exceeded, nine involving swordfish, two marlin and one tuna. The average mercury content in them was 0.6 mg/kg and the highest content found was 3.7 mg/kg. No arsenic, cadmium, lead, mercury or nickel was found in any of the 55 samples of meat products tested. In only a few of the 10 samples of tinned vegetables tested were low concentrations of lead found. In the 42 samples of rice and rice cakes tested, an excessively high arsenic content was found in 6 cases, with an average content of 0.18 mg/kg. The highest content found was 0.39 mg/kg. No excessively high lead, cadmium, mercury, arsenic or nickel levels were measured in any of the 58 samples of baby food. The following levels were found in 36 samples of mainly dried seaweed: arsenic - an average of 21 mg/kg and a maximum of 115 mg/kg; cadmium - an average of 1.1 mg/kg and a maximum of 2.7 mg/kg; mercury - an average of 0.02 mg/kg and a maximum of 0.05 mg/kg; lead - an average of 0.33 mg/kg and a maximum of 1.4 mg/kg. Iodine was found 27 times, with an average of 268 mg/kg and a maximum of 2,660 mg/kg.

Sudan dyes
The 'Sudan dyes' group of which 'Sudan Red' is the best-known, may not be added to foodstuffs because they are potentially genotoxic and carcinogenic. The following product groups were tested in 2016: palm oil (36 samples) and red or yellow herbs or spices (24 samples). Non-compliances were detected in both product groups. Sudan dyes in levels up to 740 mg/kg were detected in 10 samples of palm oil. One sample of curry was also non-compliant.

Histamine
Histamine can occur when fish starts to decay. Once it has been consumed, it may attach itself to histamine receptors in the human body and in high doses may lead to clinic effects such as gastrointestinal symptoms, feeling hot (sweating), flushing and headaches. In 2016, 110 samples of predatory fish were tested for it. A number of non-compliances with the process criteria were observed. A level greater than 200 mg/kg was found in 11 samples; this constitutes non-compliance with the process criterion as prescribed in Regulation (EC) No 2073/2005.

Biocides, chlorate and perchlorate
Benzalkonium chloride (BAC) and didecyldimethylammonium chloride (DDAC) belong to the group of quaternary ammonium compounds and are unauthorised plant protection products. Both products are also used as biocides. Such use can lead to demonstrable levels in food. Chlorate is not authorised for use as a plant protection product in the EU. Perchlorate occurs naturally in the environment, in nitrate and calcium deposits, and can be created in the atmosphere and settle in soil and groundwater. The vegetable/fruit and baby food product groups were tested in 2016. 11.3% of the 124 samples had higher levels than the MRL or reference value.

3.15 Veterinary medicinal products

Controlling authority or authorities: The Netherlands Food and Consumer Product Safety Authority (NVWA)

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EU) No 37/2010	MRLs for residues of veterinary medicinal products
Regulation (EC) No 470/2009	Veterinary medicinal products residues
Directive 96/22/EEC	Prohibition on the use of growth promoters
Directive 96/23/EEC	Monitoring residues in live animals and products of animal origin

National legislation:

- Animals Act (Wet Dieren)
- Veterinary Medicinal Products Decree
- Veterinary Medicines Regulation (Regeling diergeneesmiddelen)
- Animal Disease Specialists Decree (Besluit diergeneeskundigen)
- Animal Disease Specialists Regulation (Regeling diergeneeskundigen)
- Animal Keepers Decree (Besluit houders van dieren)
- Regulation on Animal Keepers (Regeling houders van dieren)

Size of control file in 2016

Type of establishment	Number at 01/04/2016[2]
Laying hens	1,010
Calves	1,651
Pigs	4,440
Broilers	630
Cattle	24,147
Sheep	5,744
Goats	402
Broiler parent stock	250
Flightless birds	3
Ducks	60
Geese	10
Fur animals	150
Turkeys	40

National Plan residues total	Number
Analyses	34,719
Measures	9

National Plan residues

In total, 34,719 analyses were conducted in 2016, 64 of which produced non-compliant results, i.e. 0.18%.

Group A substances [3]

Of the group A substances tested, 37 analyses were non-compliant, i.e. 0.19% of the analyses of group A substances (19,676). The substances found were: Thiouracil (20), β-nortestosterone (8), α-boldenone (3), α-nortestosterone (2), nitrofurazone (sem; 3) and salbutamol (1).

[3] As referred to in the Annex to Directive 96/23/EC

Group B substances[3]

Of the group B substances tested, 27 analyses were non-compliant, i.e. 0.18% of the analyses (15,043), distributed as follows among groups B1, B2 and B3:

- Of the group B1 (antibiotics) substances tested, 11 of the 7265 analyses were non-compliant, i.e. 0.15% of the analyses of antibiotics. The substances found were: (Oxy)tetracycline (2) Doxycycline (4) Benzylpenicilline (3) enrofloxacin (1) and sulfamethoxazole (1).
- Of the group B2 substances (other veterinary medicinal products) tested, 5 of the 6,238 analyses were non-compliant, i.e. 0.08% of the analyses of other veterinary medicinal products. The substances found were: Salicylate (2), Toltrazuril-S(1), Salinomycin (1) and Levamisole (1).
- Of the group B3 (contaminants) tested, 10 of the 1,540 analyses were non-compliant, i.e. 0.65% of the analyses for contaminants. The substances found were: lead (7 cases, all in wild game), cadmium (2), and malachite green (1).

Special findings:

The naturally occurring hormones Thiouracil (from brassicas) and ß-nortestosterone, produce many positive results which upon closer examination did not lead to enforcement action being taken.

The discovery of Salinomycine in eggs turned out to be the result of cross-contamination at the mixed feed establishment. The mixed feed for laying hens turned out to have been stored in a silo where mixed feed for broilers was also kept.

The malachite green was found in trout originating in Denmark.

Antibiotics	**Number**
Total inspections:	215
• Pet animal veterinary practices	12
• Analysis of feathers testing positive	144
• PBO (Sectoral organisation under public law) tasks	9
• Antibiotic contact time pilot	38
• Risk-oriented inspections	1
• Selected turkey farmers	
Total measures:	39
• Pet animal veterinary practices	7
• Analysis of feathers testing positive	18
• PBO (Sectoral organisation under public law) tasks	4
• Antibiotic contact time pilot	0
• Risk-oriented inspections	10
• Selected turkey farmers	0

Notifications/own initiative	**Number**
Total inspections:	404
• FCI notifications	139
• Own initiative	184
• National Plan notifications	50
• Other notifications	31
Total measures:	139
• FCI notifications	73
• Own initiative	20
• National Plan notifications	30
• Other notifications	16

Prohibited substances	**Number**
Inspections	10
Measures	5

Trade	Number
Total inspections:	16
• Raw materials traders	16
• Trade, customs	0
• Product conformity project	0
• Prescription only medicines	0
Total measures	1
• Raw materials traders	1
• Trade, customs	0
• Product conformity project	0
• Prescription only medicines	0

Reference to specific reports

- Report on pet animal veterinary practices from inspections from 2016
- March 2016 memorandum and fact sheet on OBV enforcement
- Memorandum and report on antibiotic use in livestock farming

Projects in 2016

Pet animal veterinary practices

Introduction

In recent years, measures have been put in place to ensure more careful use of antibiotics by veterinary surgeons. Much has changed in the farm animal sector as a result: the use of antibiotics has decreased and both veterinary surgeons and cattle farmers are aware of the importance of restrained and selective use. Careful use of antibiotics is also a priority in the pet animal sector.

Third choice antibiotics such as third and fourth generation cephalosporines and fluoroquinolones are critically important to human healthcare. Like antibiotics licensed for human application, they may be used in animals only after a sensitivity test has been carried out.

Inspection method

The inspections took place at 11 randomly selected veterinary practices throughout the Netherlands. The inspections comprised a stock check and then a check of the records over a period of six months. The emphasis was on the use of critical drugs, known as third choice antibiotics.

Results

The inspected pet animal practices had third choice antibiotics in stock and the inspected pet animal veterinary surgeons prescribed these medicines. In a number of cases, the inspected veterinary surgeons used third choice antibiotics without carrying out the compulsory sensitivity test. The justification for non-compliance with the obligation was not found to be warranted in all cases.

Infringements of the compulsory sensitivity test provision when using third choice antibiotics are dealt with by issuing an official report. Where 'infringements of a long-term nature' are involved, the case is also reported to the complaints officer.

Dairy cattle veterinary surgeons and dairy farmers

Introduction

According to the figures of the Netherlands Veterinary Medicines Authority (SDA), relatively few antibiotics are used in the dairy cattle sector. Nevertheless, there are differences between establishments in the quantity of antibiotics administered. Based on the conduct of veterinary surgeons with regard to the supply of antibiotics for udder health purposes, a risk selection of five veterinary surgeons who had prescribed many of those antibiotics was made. Three dairy cattle establishments where much use had been made of antibiotics for udder health purposes were selected for each of those veterinary surgeons.

Inspection method

The veterinary surgeon and farmer were asked to supply records relating to the prescribing, supply and use of antibiotics in relation to udder health. The records were then examined to establish whether those antibiotics had been supplied and used in accordance with the applicable legislation and regulations, specifically Annex 9 of the Veterinary Medicines Regulation (Regeling diergeneesmiddelen).

Results
The records often lacked the measures required to bring about a reduction in the use of antibiotics and large quantities of antibiotics for udders were supplied at the request of the cattle farmer without the veterinary surgeon actually carrying out an examination. In addition, a number of cattle farmers used antibiotics to treat udder inflammation (mastitis) for longer than the marketing authorisation (Summary of Product Characteristics, SPC) prescribes.

Risk-based inspection of calf farmers
Introduction
In connection with the development of resistance to antibiotics, the responsible use thereof by the monitored sectors, including the veal calf sector, is supervised.
Such inspections will preferably take place on the basis of risk selection so that the conditions under which antibiotics may be administered are enforced and enforcement action taken in the event of any unregistered use of antibiotics.

Inspection method
Seven veal calf farmer addresses were selected. Two because they did not have an agreement with a veterinary surgeon and five because, according to the supply statement, they received no or few antibiotics.
Enquiries were made at the establishments where there was reportedly no agreement with a veterinary surgeon to establish whether there really was no agreement. Enquiries were made at the establishments where no or few antibiotics were reportedly supplied to find out whether this was the case. If applicable, samples were taken to verify whether antibiotics had been used.

Results
It turned out during the inspections of the establishments for which no one-to-one agreements were recorded in the database that one-to-one agreements were in fact in place. No non-compliances related to the prescribing of antibiotics or the unregistered use of antibiotics were identified at the other establishments. The use of antibiotics certainly was low at those establishments. This largely had to do with the age of the calves upon delivery.

Analysis of feathers testing positive
Introduction
In collaboration with its partners the NVWA Feed and Food Safety Laboratory, Wageningen University & Research Centres RIKILT and Charm Sciences Inc., the NVWA evaluated the prevalence of antibiotics in the broiler sector. This was performed on the basis of the chemical analysis of feathers for antibiotics and administrative checks made by the Food Chain Information (FCI) and the IKB-CRA sector database.

Inspection method
At fifteen Dutch poultry slaughterhouses under full supervision the official veterinary surgeon was instructed on how feather samples should be taken in duplicate. Feather samples were taken after stunning. In the period between February 2016 and September 2016, 383 flocks at 199 broiler establishments were sampled at the slaughterhouses. An established screening method (Charm Sciences Inc.) which is usually applied in the dairy industry was used. This method, known as a lateral flow immunoassay, tests for 54 different antibiotics.

The samples which tested positive after screening and did not correspond to the FCI were subjected to further tests. Residues of antibiotics in feathers were demonstrated using an accredited and validated confirmatory method, making use of liquid chromatography coupled with tandem mass spectrometry (LC-MS/MS). The RIKILT laboratory and the NVWA Food and Food Safety Laboratory performed that analysis in accordance with European Commission Decision 2002/657/EC. The results of this confirmatory method indicated whether, and if so which, antibiotics were present in the feathers. Residues of antibiotics present in the feathers are proof that the flock of broilers was exposed to the antibiotic concerned. The positive test results produced using this method were compared with the information regarding antibiotics administered stated on the FCI form and information in the sector database.

Results
A representative sample of 199 Dutch broiler establishments was sampled randomly at slaughterhouses in the period between February 2016 and September 2016. In total, 383 flocks from those establishments were evaluated. An inspection took place at 12 establishments. Official reports were also drawn up.

Contact time pilot

Introduction

On 01/01/2017 the conditions under which keepers of animals may have antibiotics in stock and use them will change. Among other things, there will be what is known as a contact time instead of a visit to the establishment. The NVWA ran a pilot at the end of 2016 to assess how this will work in practice and what the changes will mean for enforceability, practicability and protection against fraud.

Inspection method

Seven cattle farms and two veterinary surgeons in the veal calf and pig sectors spent a month practising with the new arrangements, where the focus was on the contact time. After the pilot was completed, the NVWA inspected the participating establishments, focusing on the records kept of the contact time (known as the written instruction). The farmers, veterinary surgeons and NVWA inspectors were also asked to relate their experiences with regard to the practicability of the contact time.

Results

Although the veterinary surgeons and most cattle farmers felt the contact time was an improvement, the NVWA notes that the concerns regarding the enforceability of the contact time had not been dispelled as far as the open standard for the term of validity of a written instruction was concerned (Good Veterinary Practice (GVP)). That written instruction is the only possibility the NVWA has to find out whether the use of a second e choice antibiotic by the farmer took place in accordance with the contact time.

Evaluation of the 2015 PBO Antibiotics report

Introduction

From 1 January 2015, several PBO tasks relating to the establishment health plan, establishment treatment plan, the reporting of antibiotics supplied in a register, the registration of keepers of birds and movements of birds and the monitoring of zoonotic *Salmonella* have been included in national legislation. For veterinary medicinal products the focus was on antibiotics.

In this context, livestock holdings from various sectors were inspected in the period between March 2015 and mid-July 2016.

Inspection method

In anticipation of the transition of the PBO tasks involving antibiotics, zoonotic *Salmonella* and the identification and registration of birds, administrative agreements were made regarding the implementation of risk-oriented supervision of those cases by the NVWA in 2015.

- antibiotics:
  - inspections of all non-participants in quality systems in the pig, calf and broiler sectors
  - random checks of:
    i) non-participants in quality systems in the laying birds and cattle/dairy cattle sectors and
    ii) participants in quality systems

Non-participants in a quality system are understood to be livestock farmers or poultry farmers who are not affiliated to an IKB quality system or dairy farmers who are not affiliated to a dairy quality system.

At the start of the inspections 262 were carried out:

- One calf establishment, 29 pig establishments, 71 broiler establishments and 23 laying hen establishments being IKB non-participants
- Twenty calf establishments, 15 pig establishments, 15 broiler establishments, 48 laying hen establishments and 40 dairy cattle establishments being IKB participants.

Results

Of the 262 inspections carried out in total, 24 inspections had not been completed at the time of the report. The findings from those inspections were not included in the results.

All 124 establishments initially deemed IKB non-participants were inspected.

During those inspections, 5 pig establishments, 21 broiler establishments, 18 laying hen establishments and 1 calf establishment were revealed to be IKB participants. Establishments which turned out to be no longer active at the time

the inspections were carried out were not inspected. In the case of one calf establishment, 8 broiler establishments, 3 laying hen establishments and 15 dairy cattle establishments it was not established whether they were affiliated to a quality system (unknown). No non-compliances were identified in relation to the existence of an establishment health plan (BGP)/establishment treatment plan (BBP). Non-compliances related to actions contrary to the establishment health plan/establishment treatment plan and/or the substantive requirements of those plans were identified at 4 pig establishments, 1 broiler establishment, 1 laying hen establishment, 2 dairy cattle establishments and 1 calf establishment. As for the recording of antibiotics in a register, non-compliances were identified at 2 broiler establishments (no records or incomplete records of the supply of antibiotics). 'Not approved' inspections can be dealt with by issuing a written warning or an administrative fine.

Actions taken to improve the official controls

The clarification of working instructions in collaboration with other domains, such as animal welfare and animal health. The NVWA had discussions with the livestock farmer sectors and the Royal Dutch Society for Veterinary Medicine (KNMvD) about how they can work together to increase compliance and the role enforcement communication might play here. Enforcement by means of administrative law, veterinary disciplinary law and criminal law is being optimised further. In addition to risk-oriented investigations, the NVWA is working towards random investigations ('QuickScans') and increasing compliance through enforcement communication.
Innovation in the supervision of antibiotic use by developing an integrated enforcement approach for animal health and animal welfare, supporting risk-oriented controls with targeted analyses based on relevant data, taking measurements of the animal with on-site quick tests and by using best practices of sister organisations in the Netherlands and abroad.

Actions taken to improve the compliance of the business community

The NVWA holds periodic discussions with professional groups/sectors to share inspection results among other things. In addition, it is stepping up enforcement communication and hopes to create greater insight into the various target groups through target group analysis. Through risk-oriented inspections, the NVWA intends to identify the companies it should be targeting.

Conclusions

In 2016, NVWA conducted inspections of various sectors, on both the legislation relating to antibiotics and other veterinary medicinal products. In 2017, the NVWA is exercising project-based and risk-oriented supervision of a number of sectors, focusing on the prudent use of antibiotics and detection of possibly illegal practices. In the process, preventive enforcement communications are being used as a tool to inform the sector even more effectively of the current regulations and the inspections due to be carried out by the NVWA. Attention is also being paid to establishments which use high volumes of antibiotics in the long term and the veterinary surgeon's guiding role.

The NVWA exercises risk-oriented enforcement in the veterinary medicinal products import, production and trade links alongside other partners. To do this, the NVWA collaborates with other supervisors and competent authorities from other Member States. Issues requiring attention here are product conformity, unwanted trade via import and identifying suspect consignments during import. In addition, the NVWA is working towards innovation, including feather and data analysis.

3.16 Microbiology (pathogens, food-borne infections and zoonoses)

Controlling authority or authorities: NVWA (antimicrobial resistance in collaboration with Wageningen Bioveterinary Research (WBR))

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Directive 2003/99/EC	Zoonoses and zoonotic agents
Regulation (EC) No 2073/2005	Microbiological criteria for foodstuffs
Regulation (EC) No 854/2004	Products of animal origin
Commission Implementing Decision 2013/652/EU	Monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria

National legislation:

- Preparation and Handling of Food (Commodities Act) Decree (Warenwetbesluit Bereiding en behandeling van levensmiddelen)

Supervision of Microbiology, results in 2016

Supervision of microbiology	**Number of samples**
1. Monitoring of pathogens, primary phase (farm/slaughterhouse; animal): including farm animals, sampling for AMR WBR	3,389
2. Monitoring and surveillance of pathogens, secondary phase (import, industry, wholesale) Projects including Tofu, Tahini and Hummus, live bivalves (eaten raw), meat substitutes, sprouts, fresh and dried herbs and spices, shrimps, imported poultry, etcetera	4,154
3. Monitoring and surveillance of pathogens in the retail phase eggs, meat, meat preparations, meat products, fish, fish products, raw milk cheese, sushi, cut vegetables, live bivalves, ready-to-bake bread, etcetera	7,181
4. Complaints and reports, source tracing (bacteriology, virology	1,353
Total samples	**16,077**

isolates*	
5. Antibiotics resistance (sensitivity of pathogens, indicators from products)	1,093
6. Isolates ESBL active surveillance – WBR/National Institute for Public Health and the Environment (RIVM)	215
Total isolates	**1,308**

** These are not separate samples but tests for bacterial isolates from regular sample testing.*

Reference to specific reports

- EU zoonosis reports in 2015
- NETHMAP-MARAN reports 2016 (AMR 2014)
- Registration of food-borne infections and poisoning in 2015

Further explanation of the results for Microbiology

The Microbiology domain (pathogens, food-borne infections and alimentary zoonoses) uses the aforementioned laws and regulations to supervise pathogenic micro-organisms in food and anti-microbial resistance. The main tool for this is projects where samples are taken from the entire food chain, from primary production establishments to the retail trade. In addition, this domain is responsible for the coordination of microbiological complaints and reports from consumers, producers and competent authorities in other (Member) States, and the investigation of the source arising from this. The choices of products to be sampled and the pathogens to be analysed from them is determined by: results from earlier projects, scientific insights and as a result of the aforementioned complaints and reports.

Projects in 2016

1. Monitoring of pathogens, primary phase (farm/slaughterhouse; animal)
Since 2013, work has been ongoing on a master plan for periodic monitoring of farm animals within the context of European Directive 2003/99/EC. This plan can be used to track trends in the prevalence of zoonotic agents in populations of farm animals. The results are submitted to the EFSA in the annual EU zoonosis report. In addition, possible relationships can be identified between different types of zoonotic agents carried by farm animals and people living or working on livestock farms. This is a five-year cycle in which a different animal chain is studied each year. The chains monitored for various relevant pathogens are the pig, poultry, cattle, veal calf and small ruminant chains. In 2016, the NVWA took a total of 1151 samples from 182 dairy goat establishments and 24 dairy sheep establishments and analysed them for the presence of *Salmonella*, Campylobacter, *Listeria monocytogenes*, STEC and E. coli ESBL. The antimicrobial resistance profile for Campylobacter and ESBL isolates was also determined. The RIVM took faeces samples from participating livestock farmers, staff and/or family members of 78 participating establishments. The results will be reported later in 2017. Sampling of bovine livestock will take place in 2017.

In the primary phase, approximately 1,300 additional samples were taken, some of which during the first phase of slaughter to obtain isolates, each of which was analysed for resistance to antibiotics in projects 5 and 6 described below.

The competent authority has an obligation under Regulation (EC) 854/2004 to verify *Salmonella* results as sampled by pig slaughterhouses Within this context, the NVWA took 370 samples at pig slaughterhouses and analysed them. In addition to this, 32 samples were taken and analysed for *Salmonella* due to export to the United States.
From 1 July, we also started taking verification samples at poultry slaughterhouses. Within this context, the NVWA took 536 samples in 2016, which were analysed for *Salmonella* and Campylobacter.

2. Monitoring and surveillance of pathogens, secondary phase (import, industry, wholesale)
In the secondary phase, the domain takes risk-oriented microbiology samples from a wide range of food chains. Products of animal origin, and, in particular, meat, remain sensitive products as far as pathogens are concerned. Also in 2015, under the heading 'exotic meat', meat samples were taken from animals that are not farmed (on a large scale) for their meat, such as kangaroo, ostrich and crocodile. STEC was detected in one in ten batches in 2016, too.
It is striking that *Listeria monocytogenes* is detected in one in five batches of beef consumed raw in every 25 grams of the product. However, that does not make such a batch harmful because more than 100 kve per gram of product would be required for that to be the case. It does show, though, that Listeria warrants attention during the processing of beef.
As for imported poultry meat preparations it is striking that the percentage infected with *Salmonella* has fallen by more than 2/3 compared with the previous year.
Like in 2015, in 2016 approximately one in seven batches of fresh herbs were found to contain *Salmonella* during import.

3. Monitoring and surveillance of pathogens in the retail phase
Risk-oriented sampling also takes place on a wide range of products in the retail phase. The picture of the secondary phase, as described above, is largely the same in the retail phase.
Listeria is also found in beef in the retail phase, but in approximately one in 10 consignments here. In cases involving products to be consumed raw, inspections are carried out in respect of the control of Listeria and studies are carried out to determine shelf life.
The presence of *Salmonella* is slightly lower in poultry meat compared with 2015, as is the presence of Campylobacter. However, the presence of Listeria in approximately one in four batches is unexpectedly high. Here, too, the products involved are not directly harmful, and Listeria present in them will usually be killed when the consumer cooks the product concerned. As with other pathogens, cross-contamination could cause sickness.
Salmonella is far less likely to be found in herbs sampled in retail outlets than upon importation (approximately one in thirty batches).

4. Complaints and reports, source tracing (bacteriology, virology)
In 2015 (the 2016 figures are currently being processed) there were more outbreaks of food-borne infections and food poisoning than in previous years. This is largely due to the fact that all non-anonymous reports made to the Netherlands Food and Consumer Product Safety Authority (NVWA) of outbreaks (of two or more people suffering illness) were recorded this year. In previous years, reports were made only after the sites concerned had been examined for pathogens. In 2015, a total of 406 outbreaks were reported with 1,850 people suffering illness compared with 207 reported outbreaks with 1,655 people suffering illness the year before.
This result is from an analysis of the recorded figures for food-borne infections and food poisoning in 2015. This analysis also revealed that Norovirus, followed by *Salmonella* and Campylobacter, remains the principal cause of food-related outbreaks.
The figures come from the NVWA and the Municipal Health Services (GGDs). The reports of both agencies are combined and analysed as a whole by the RIVM's Centre for Infectious Disease Control. This integrated approach provides a clearer insight into the incidence of outbreaks of food-borne infections or poisoning in the Netherlands and trends in the outbreaks over the years. However, the numbers stated are an underestimate of the true number of food-borne infections and the number of people suffering illness. This is because not everyone who is ill visits their GP or notifies the NVWA. It is estimated that every year some 680,000 people in the Netherlands are taken ill due to the consumption of infected food.
The NVWA and the GGDs record and investigate food-borne infections and food poisoning to prevent higher numbers of people suffering illness and more outbreaks. To do this, they gain insight into infected sources and the nature of the pathogens from their own domain. The NVWA examines the food and the location at which it is prepared. The GGD focuses on individuals who have been exposed to infected food and tries to deduce the possible sources from them. (Registration of food-borne infections and poisoning in 2015; RIVM report 2016-0085)

Where norovirus is indicated as the cause, or is suspected of being so, in many cases the NVWA will analyse what are known as fabric swabs for the purposes of tracing the source. That took place 171 times in 2016. In 2016, 682 samples were taken in for the purpose of tracing the bacterial source and/or investigating the cause. In addition, 500 analyses of eggs were carried out in connection with the *Salmonella enteritidis* outbreak affecting eggs from Poland (see incidents below).

As well as the sick reports as described above, a total of 2,232 reports were made to the NVWA in 2016 concerning (potentially) unsafe foodstuffs processed within the microbiology domain. Microbiology monitors and assesses (potentially) unsafe foodstuffs with a microbiological cause and with a physical cause (for example, where glass, metal or plastic are present). Such reports may come from consumers, food companies or fellow (food) authorities within the EU. If a tracing process is started, all establishments involved are obliged to make a report. Several reports should then be combined to create a smaller number of cases. In 2016, the reports for microbiology were combined to form 589 cases.

5. Antibiotics resistance (sensitivity of pathogens, indicators from products)
6. Isolates ESBL active surveillance – WBR/RIVM
Within the context of European Commission Implementing Decision 2013/652/EU, the NVWA, together with the CVI and the RIVM, has been monitoring various isolates for antibiotics resistance for a number of years now. This includes the following:

- *Salmonella*: approx. 2,500 isolates from humans, approx. 1,500 isolates from farm animals and approx. 1,000 from other foodstuffs.
- *Campylobacter jejuni*: approx. 100 isolates per year from broiler manure, approx. 250 isolates per year from poultry products.
- Indicators E. coli: approx. 270 isolates per year per animal species (broilers, dairy cows, fattening pigs and veal calves), approx. 200 isolates from laying hens and approx. 600 isolates per year from raw chicken, pork, beef and veal.
- *Enterococcus faecium, faecalis*: approx. 120–250 isolates per animal species (depending on the species) once every 3 years from animal manure and approx. 350 isolates from raw meat, once every 3 years per animal species.
- ESBL/AmpC and carbapenemase screening in E. coli: in all manure samples (approx. 1,500 a year) and meat samples.

The results from projects 5 and 6 are reported annually in the Netherlands in the NETHMAP-MARAN Report (MARAN = Monitoring of Antimicobial Resistance and antibiotic usage in Animals in the Netherlands). In this report, the use of resistance against antibiotics in animals is reported in combination with the human data. The slight downward trend in resistance in previous years appears to have been maintained. At European level, the results are reported annually in the EU zoonosis reports.

Incidents

The NVWA was involved in very few of the 680,000 cases of food-borne infection estimated by the RIVM. The Food Poisoning Expertise Centre (Expertisecentrum Voedselvergiftigingen, ExpVV) in the Microbiology domain is available 24/7 and is in regular contact with GGD and RIVM who also monitor signs of food poisoning. Every year, the cases of food poisoning where this 'triangle' of organisations is involved are reported in the Register of Food-borne Infections and Food Poisoning 2014, mentioned under point 4 of the aforementioned projects.

In 2016, the NVWA Incidents & Crisis Management department (ICB) was asked for support in a number of incidents. Two incidents stood out where tracing, in particular, proved complex.
Sesame seed imported in early 2016 turned out to contain *Salmonella*. This involved millions of kilograms of sesame seed which the company had sold on in small consignments. Some of the sesame seed had been incorporated into bakery or other products, eliminating the risk because the sesame seed had been heated, but some had also been sold to consumers as sesame seed to be consumed in its unprocessed form. The latter batches were removed from the market with a public recall.
Midway through 2016, the NVWA was involved in an international *Salmonella enteritidis* outbreak. Eggs of a specific origin in Poland were identified, in part on the basis of epidemiological testing by the RIVM and the NVWA tracing investigation. The NVWA carried out 500 analyses of eggs which enabled those eggs to be confirmed as the cause of the outbreak. This was followed by a public warning and additional tracing whereby more than 2000 establishments involved were identified.

Effects measurement

Effects measurement is irrelevant to the Microbiology domain as the domain does not manage a specific target group where focused, compliance-stimulating activities can be employed. An indicator of the establishments' awareness of (microbiological) risks in the entire food supply chain is the number of reports of unsafe batches of food coming from the establishments themselves. These reports, which are mandatory under General Food Law, are being made more frequently. Like in 2015, the number of reports grew in 2016. Reports for microbiology grew by approximately 25%. Assuming that there was not a similarly sharp increase in consignments of foodstuffs that were actually unsafe in 2016, we are observing a steady, positive change in attitude in the business community in relation to microbiological risks.

Actions taken to improve the official controls

European legislation in relation to microbiological risks is complex in places (e.g. with regard to *Listeria monocytogenes* owing to the dual standard as included in Regulation (EC) No 2073-2005) and the often difficult to evaluate studies on the growth capability of Listeria) and in other parts it allows freedom for elaboration by Member States (where there are no standards or flexibility for small establishments for example).
During 2016, the microbiology domain gave refresher training in several sessions to groups of inspectors within the Consumer & Safety division, addressing explicitly the harmonisation of supervision of legislation concerning *Listeria monocytogenes*.

Actions taken to improve the compliance of the business community

In 2016, the NVWA devoted a great deal of attention to feasibility studies in relation to *Listeria monocytogenes*. Despite an improvement in the quality of those studies, the NVWA will actively disseminate its opinion on studies during 2017.

Conclusions

The increase in GFL reports by food establishments, the results of NVWA's monitoring programmes and the investigations into the source of outbreaks in food, indicate that the need for attention to microbiological risks is undiminished. Risk-oriented supervision demonstrates that targeted monitoring of specific foods (exotic meat, herbs/spices, and smoked fish) generates targeted inspections aimed at controlling microbiological hazards and can give consumers a framework for action.

3.17 Nutrition and health/special food and drink

Controlling authority or authorities: NVWA

Summary of the main European legislation which in 2016 formed part of the package falling within the Special Food and Drink domain.

EU Legislation	
Directive 96/8/EEC	on foods intended for use in energy restricted diets for weight reduction
Regulation (EC) No 258/97	concerning novel foods and novel food ingredients
Directive 1999/21/EEC	on dietary foods for special medical purposes
Directive 2002/46/EC	on the approximation of the laws of the Member States relating to food supplements
Directive 2006/125/EC	on processed cereal-based foods and baby foods for infants and young children young children
Directive 2006/141/EC	on infant formulae and follow-on infant formulae*
Regulation (EC) No 1924/2006	on nutrition and health claims made on foods
Regulation (EC) No 1925/2006	on the addition of vitamins and minerals and of certain other substances to foods
Directive 2001/83/EEC	establishing a Community Code relating to medicinal products for human use (hereinafter: Medical Preparations Act)
Regulation (EC) No 1881/2006	setting maximum levels for certain contaminants in foodstuffs
Regulation (EC) No 1333/2008	on food additives
Regulation (EC) No 953/2009	on substances that may be added for specific nutritional purposes in foods for particular nutritional uses
Regulation (EC) No 1169/2011	on the provision of food information to consumers
Regulation (EU) No 609/2013	on food intended for infants and young children, food for special medical purposes, and total diet replacement for weight control (entered into force 20 July 2016)
Delegated Regulation (EU) No 2016/127	supplementing Regulation (EU) No 609/2013 as regards the specific compositional and information requirements for infant formula and follow-on formula and as regards requirements on information relating to infant and young child feeding
Delegated Regulation (EU) No 2016/128	supplementing Regulation (EU) No 609-2013 as regards the specific compositional and information requirements for foods for special medical purposes

* *Directive 2006/141/EC was implemented in the Commodities Act Regulation on Infant Formulae 2007.*

Specific national legislation is also applicable, the most important of which is the Commodities Act and the Herbal Preparations (Commodities Act) Decree (Warenwetbesluit Kruidenpreparaten) and the Addition of Micronutrients to Foodstuffs (Commodities Act) Decree (Warenwetbesluit Toevoeging micro-voedingstoffen aan levensmiddelen). This domain also has many interfaces with the legislation and regulations governing all food, for example the Food Information (Commodities Act) Decree (Warenwetbesluit informatie levensmiddelen), the Commodities Act Regulation on Contamination in Foodstuffs (Warenwetregeling Verontreinigingen in levensmiddelen), Regulation (EC) No 852/2004 on the hygiene of foodstuffs and Regulation (EC) No 178/2002 on the general principles and requirements of food law.

What is characteristic of this domain is that the legal status of many products is not clear in advance. Certain products can be classified as a medical device, medicinal product or food product at the same time.

Size of control file in 2016

Type of establishment	**Number**
Food factory, non-authorised	Approx. 1,400
Importers, wholesalers, food storage (non-authorised)	Approx. 4,500
Hotel/restaurant/catering, retailers, supermarkets, institutional kitchens	Approx. 100,000

Nutrition and health/special food and drink, results in 2016

Nutrition and health/special food and drink	Number
Inspections at establishments[4]	1,611
Samples	678[5]
Measures ensuing from inspections and samples[6]: • Warnings • Administrative fines	368 286 82

Inspections at establishments

Inspections at establishments mainly focus on the following:

- labelling and claims (medical claims and nutritional and health claims) in general
- advertising infant formulae
- novel foods
- prohibited herbs/spices.

Specific label controls

The specific label controls are focused on the following:

- claims (medical claims, nutritional and health claims)
- other labelling requirements.

Of the 368 measures in total, 7 measures were taken for samples (4 for heavy metals and 3 for benzo(a)pyrene). The other 361 measures were imposed in connection with inspections. This includes the measures taken on the basis of reports and projects. These 361 measures generated a total of 381 findings (one inspection may reveal a number of non-compliances).

Reports (MOS and RASFF)

In 2016, 649 inspections were carried out at 330 establishments in response to one or more reports. That produced 135 measures for 102 establishments, i.e. in 31% (102 of 330 establishments) of all cases the report was well-founded. An inventory was made of the legislation applicable to each complaint (whereby more than one Act may be applicable to a complaint). Most findings were made for non-compliance with the conditions under Regulation (EC) No 1924/2006 (37%) followed by non-compliance with the Medical Preparations Act (Geneesmiddelenwet) (15%).

Legislation	Number of findings	%	Number of measures	
Regulation (EC) No 1924/2006	%	37	46	34
Medical Preparations Act (Geneesmiddelenwet)	22	15	20	15
Commodities Act Regulation on Infant Formulae (Warenwetregeling Zuigelingenvoeding) 2007	17	12	17	13
Regulation (EC) No 1169/2011	13	9	13	10
Regulation (EC) No 852/2004	13	9	13	10
Other	26	18	26	18
Total	**145**	**100**	**135**	**100**

[4] 1611 inspections or completed inspection lists for 845 establishments including 649 reports for 330 establishments and 226 inspections in connection with Remote Certification. These numbers include the data from *the Enforcement of claims relating to labelling, presentation and advertising milk for young children, Sampling preparations for analysis for vitamin D, System inspection at the premises of importers and producers - Special Food and Drink (BED)*

[5] This relates to supplements, herbal preparations and products that may contain suspect pharmaceutical substances. Two hundred and eight products were sampled for analysis of benz(a)pyrene, 188 for analysis of heavy metals and 160 products for analysis of pharmacologically active substances (see project), 66 products for analysis for vitamin D (see project) and 56 products for analysis of pharmaceutical substances or plant toxins specifically queried by the NVWA by the RIVM or RIKILT.

[6] Findings (non-compliances) relating to a specific Act or to a number of Acts can occasionally be brought together under one measure. It is also possible that, for example, a report of findings and written warning established during an inspection and/or a sample at one and the same establishment will be combined to form a single report of findings.

Advertising infant formulae
Advertising infant formulae is an infringement of the Infant Formulae (Commodities Act) Regulation 2007, which is based on European Directive 2006/141/EC. In 2016, 39 reports were registered, 17 of these reports resulted in a measure, representing 44%.

Party responsible for the advertising	Number of reports of findings	Number of written warnings
Major retail business office address		1
Point of sale	3	11
Point of sale internet	1	1

Samples (national legislation)
In 2016, 4 of the total of the 208 samples of food supplements and herbal preparations contained benzo(a)pyrene at levels above the standard.

Samples (European legislation)
In 2016, 188 food supplements and herbal preparations were sampled for analysis for cadmium, mercury and lead. One sample had a mercury level above the standard and two samples had lead levels above the standard.

Samples for analysis of specific pharmacologically active substances/plant toxins identified by the NVWA
In 2016, 56 supplements were tested by RIKILT and RIVM for specific pharmacologically active substances/plant toxins . : 29 of the 56 supplements contained one or more pharmacologically active substances (see table). Six of the twenty-nine supplements contained substances in a dosage such that a measure (fine) was imposed.

Pharmaceutical substance/plant toxin identified
1.3-Dimethylamylamine (DMAA)
1.3-Dimethylbutylamine (DMBA)
Caffeine
Epigallocatechin-3-gallate
Higenamine
Hordenine
Icariin
Isopropyloctopamine
Phenethylamine
Phenolphthalein
Sibutramine
Synefrine

Projects in 2016

Enforcement in respect of claims on labelling, presentation and advertising of milk for young children (report published in April 2017)
The NVWA closely supervises the labelling rules, presentation and advertising of milk for infants and young children, including because a group of vulnerable consumers is involved here. What is known as milk for young children was examined specifically in 2016. Of the 25 milk for young children products (from 16 producers) analysed, 17 (68%) complied with the legislation. This means that all rules relating to the use of nutritional and health claims on labelling, advertising and presentation (e.g. in a pamphlet or on a website) were correctly applied. The claims regulation was infringed in the case of 7 products. For instance, the nutritional claim 'no added sugar' was found on a product, when this may be stated only if it is also stated on the label that the product contains natural sugars and that had not been done in this case. Another example of an infringement was the claim 'easily or more easily digestible' on two goat milk products; there is no scientific proof to show that goat milk is more easily digestible, and it is not clear what exactly this means.
European regulations, in the form of Regulation (EU) No 609/2013, applicable since 20 July 2016, no longer contains separate rules for milk for young children. Milk for young children therefore comes under European (and national) rules for ordinary foodstuffs. This does not alter the fact that it is still not permitted to make unauthorised health claims for such products.
The imposition of administrative fines and the taking of more stringent measures where infringements were identified during the last round of inspections in 2014 had an impact in many cases, given the reduction in the number of infringements identified in 2016. In addition, the infant formulae producers sector took the initiative in 2015 and set up a self-regulation system for labelling and advertising for infant formulae. This self-regulation system has probably also contributed to the increase in compliance with legislation among participating producers of milk for young children. In 2017 and 2018, the NVWA will assess whether this self-regulation system had indeed led to improved compliance in practice.

Sampling of preparations for analysis for vitamin D (the report is scheduled to be published in the spring of 2017)
Exposure to sunlight causes vitamin D to be created in the skin. The body also absorbs vitamin D through the ingestion of food and food supplements. Vitamin D is needed for, among other things, the regulation of calcium and phosphate in the blood. Ingestion of a high level of vitamin D can result in hypercalcaemia (raised calcium concentration in serum). Long-term hypercalcaemia can cause the creation of kidney stones and impair kidney function. The European Food Safety Authority (EFSA) therefore recommended a maximum intake quantity (tolerable upper intake level) for vitamin D in 2012. In response to the EFSA report, the Minister of Health, Welfare and Sport (VWS) amended the Commodities Act Regulation on the Exemption of Vitamin Preparations. As from 12 November 2015, the maximum permissible dose has been 75 µg of vitamin D a day.
In early 2016, the NVWA received various reports in which the NVWA was informed that there are food supplements containing vitamin D on the Dutch market which do not comply with the Act. The Commodities Act Regulation on the Exemption of Vitamin Preparations sets the maximum level of vitamin D in food supplements at an intake of 75 µg a day. The NVWA then sampled and analysed food supplements having a high (>75 µg) level of vitamin D.
Analyses of food supplements having high levels of vitamin D revealed that 38 of the 44 products (86%) did not comply with the statutory limit of 75 µg a day. Those products were removed from the Dutch market and destroyed by the owner. Based on the labelling, six products (14%) did not comply with the legislation (> 75 µg a day), but when the analysis result alone was examined, the products were compliant. The consumer is misled in that the vitamin D level stated on the label is not consistent with the content actually measured. The producers received a written warning for providing misleading information and were instructed to review the production process to ensure that any such major non-compliance would be avoided in future.

System inspection of importers and producers
In 2015, inspection projects targeted importers and producers where food safety system inspections and product-oriented inspections were carried out simultaneously. This achieved improvements in efficiency: not all products need to be examined individually, but specific aspects can be inspected through the food safety system. This type of inspection was also conducted in 2016.

Food supplements containing pharmacologically active substances (the report is scheduled to be published in the spring of 2017)
One of the biggest risks with food supplements is that substances not stated on the label, which are not safe and actually have no place in food supplements will have been added to them. They will, however, ensure that the product does what it promises. Examples include substances having a pharmacological effect such as, for instance, sibutramine (for slimming) or sildenafil (libido-enhancing). Occasionally, there were also be substances which occur naturally in foodstuffs, but when present in high concentrations may have an effect and therefore be harmful. Examples include synefrine. Sampling analyses conducted by the NVWA in 2015 and 2016 show that, in total, more than 60% of the libido-enhancing supplements, the slimming preparations, fat burners and pre-workouts contain one of the several pharmacologically active substances. It is impossible for a consumer to predict from the packaging whether a supplement contains a pharmacologically active substance and in what concentration. One substance may increase the effect of another, potentially causing major health risks of which the consumer is not always aware. This is a considerable risk for food safety. The NVWA will continue its supervision in this area in 2017.

Recommendation for vitamin B6 (recommendation published in December 2016)
The NVWA and the Netherlands Pharmacovigilance Centre Lareb regularly receive health complaints connected with the use of vitamin preparations containing a large quantity of vitamin B6. Knowing that, in high doses, vitamin B6 can lead to health risks, this prompted the NVWA's Office for Risk Assessment & Research (BuRO) to research the safe maximum intake level for vitamin B6 present in vitamin preparations. The BuRO has recommended to the Minister of Health, Welfare and Sport to set the maximum level of vitamin B6 in food supplements at 21 milligrams a day for adults in order to avoid adverse health effects for consumers.

Results for nutrition and health

Nutrition memorandum monitoring (reports published in April 2017)
In recent years, agreements have been made under the National Agreement to Improve Product Composition (Akkoord verbetering productsamenstelling) regarding the maximum salt, saturated fat and calorie content (sugars and fats) in foodstuffs. The Minister of Health, Welfare and Sport concluded this Agreement in early 2014 with sector organisations from the foodstuffs industry, and the retail, hotel, restaurant and catering industries. The aim is to ensure that, by 2020, it is easier for consumers to consume a maximum of 6 grams of salt a day and obtain a maximum of 10% of the daily calories required from saturated fat. In this context, on the instructions of the Minister of Health, Welfare and Sport, the NVWA and RIVM are monitoring foodstuffs for their salt, sugar and (saturated) fat levels. Every year since 2011, the NVWA has been sampling 10 food product groups and often a further specific group of products in order to measure, for example, substantial fatty acid composition. This also took place in 2015 and 2016. The product groups involved include bread, crisps and salty snacks, preserved foods, snacks, including frozen snacks, cheese, ready meals, flour confectionery and biscuits, sauces, soup and meat products. The analyses conducted in 2015 and 2016 show that:

- The salt content in the foodstuffs analysed has fallen 10% in the last 5 years but there are still significant differences in salt content within the same product groups.
- Red sauces: 93% meet the maximum salt standard (target date - 30 June 2017)
- Soups and stock cubes: 79% meet the maximum salt standard (target date - 31 December 2016). However, in mid-2016, more than half of the cup-a-soup, stock cubes and liquid-based stocks sampled did not yet meet the maximum salt standard set for the end of 2016.
- Meat products: 90% meet the maximum salt standard and 77% the standard for saturated fat (target date - 30 June 2015). It is mainly products such as salami, paté and liver sausage for spreading that did not yet meet the 2015 standard.
- The analysed salt and saturated fat levels are generally lower than the food value stated on the label.
- As for the analyses of (saturated) fat in 414 foodstuffs, the conclusion is that the saturated fat content can vary substantially for each type of product. The average quantity of saturated fat in most types of product has remained unchanged in recent years and has risen in some products. The saturated fat content has been reduced in a few product groups (for example, some types of meat product). The greatest variation occurred in the large and small savoury snacks and sweet snacks product groups. A large part of the maximum daily saturated fat intake is obtained from sausage rolls, Gelderse rookworst (smoked sausage from Gelderland), and minced meat. Assuming a maximum saturated fat level of 10% provides the daily amount of calories required by a person, those products contribute an amount ranging from one third to more than one half of that requirement

Actions taken to improve the official controls

E-commerce, an area that will receive a great deal of attention in the future, may also pose major risks. Within the NVWA a working group has been set up in order to share the knowledge that is required to implement supervision of the internet throughout the organisation. In doing so, the NVWA is strengthening its knowledge position. It is also an active participant in European initiatives in this area, such as the e-commerce working group of the Food Law Enforcement Practitioners (FLEP) and the European Commission's working group in this area.

Since 2009 the NVWA has had the authority to enforce the Medical Preparations Act. We have this authority in particular to be able to enforce on medicinal products by virtue of their designation and sometimes on medicinal products by virtue of their administration, when food supplements contain pharmacologically active substances for example. To arrange this properly, a collaboration protocol was set up between the Healthcare Inspectorate and the NVWA in 2012. This collaboration will be continued in the coming years.

Incidents

The NVWA received a report stating that a young woman who had been using a slimming tea had reportedly died as a result of acute heart problems. Analysis of those food supplements by RIKILT and the RIVM demonstrated that the products, sold as herbal tea or a herbal preparation, were mixed with substances which are also found in medicinal products. The component identified is sibutramine. Sibutramine is a medicinal product that used to be sold and was removed from the European market in 2010 by the European Medicines Agency (EMA). Literature shows that 10% to 30% of the 'healthy' patients using sibutramine (between 10 and 30 mg a day) experience dizziness, insomnia and a dry mouth. At population level, there are cases where sibutramine is suspected to have produced substantial heart effects. There appears to be a link with pulmonary arterial hypertension (PAH), QTc prolongation, and heart attacks and strokes. Based on those analysis results, the NVWA issued a public warning. Immediately after the warning was issued, the NVWA Intelligence and Information Service (NVWA IOD) initiated a criminal investigation, led by the Functional Public Prosecutor's Office. On Monday, 23 January, the NVWA IOD arrested two people suspected of trading in prohibited slimming products. The NVWA IOD believes that the suspects were selling slimming products containing a hazardous substance despite a trade prohibition. The investigation also shows that those products are mainly sold online through Facebook, Instagram and auction sites, for example. To date, the NVWA has not found them in shops.

Actions taken to improve the compliance of the business community

In response to a large number of infringements and the publication of the NVWA report in 2015, together with the Netherlands Council for the Monitoring of Medicinal Product Advertising/Council for the Monitoring of Health Product Advertising (Keuringsraad Openlijke Aanprijzing Gezondheidsproducten/Keuringsraad Aanprijzing Gezondheidsproducten, KOAG/KAG), the Association of Dutch Children's and Dietary Food Manufacturers (Vereniging van Nederlandse Fabrikanten van Kinder- en Dieetvoedingsmiddelen, VNKFD) branch organisation has commenced the preparation of self-regulation in the form of an Infant Formulae Advertising Code. In June 2016, this resulted in an Infant Formulae Advertising Code of Conduct. Use of this form of self-regulation is optional.

Conclusions

It is striking to note that from the supervision perspective the special foods and beverages domain is very broad, ranging from products such as drip feeds to herbal preparations. In 2016, the supervision was largely focused on the enforcement of high-risk food supplements and new legislation, such as a maximum limit for vitamin D supplements. In the main, the approach taken for high-risk supplements in 2016 continued to involve compiling information. In 2017, enforcement will become more stringent, in accordance with the new general intervention policy.
In addition, labelling and nutrition and health claims pertaining to milk for young children received particular attention. The objective of the compliance policy is both to promote compliance by the parties that are inspected and to fulfil an agenda-setting function for the relevant stakeholders. The field is taking steps towards self-regulation.
It can and must be easier for consumers to opt for healthier products. A healthy dietary pattern is important to good health. The salt content of ten product groups was again monitored in 2016, and the fat content in 414 foods was also measured. This monitoring allows us to form an impression of how efforts to reduce salt and fat are progressing.

3.18 Plant health

Controlling authorities: NVWA, KCB, NAK, Naktuinbouw and BKD.

Summary of the main legislation in force in 2016

EU Legislation	
Directive 2000/29/EEC	on protective measures against the introduction into the Community of organisms harmful to plants or plant products and against their spread within the Community
Directive 2007/33/EEC	on the control of potato cyst nematodes
Directives 2006/63/EC and 98/57/EC	on the control of *Ralstonia solanacearum* (Smith) Yabuuchi et al.
Directives 2006/56/EC and 93/85/EC	on the control of potato ring rot
Directive 68/464/EEC	on the control of potato wart disease

National:

- Plant Disease Act (Plantenziektenwet)

Size of control file in 2016

Type of establishment	**Number in 2014**	**Number in 2015**	**Number in 2016**
Arable agriculture	11,946	12,393	10,811
Ornamental horticulture – flower bulbs	1,520	1,551	1,622
Ornamental horticulture – floristry	3,585	3,314	3,035
Ornamental horticulture – tree nurseries	3,794	3,950	3,680
Vegetables	4,155	4,264	4,185
Fruit	2,344	2,389	2,701

Arable agriculture, results in 2016

The most striking aspect in arable agriculture is the continual effort needed to control a small number of soil organisms in potato and potato seed cultivation. These are quarantine pests such as potato cyst nematode (PCN) and also *Meloidogyne chitwoodi* , brown rot, ring rot and potato wart disease. In addition, organisms from other EU countries such as *Epitrix* spp, and Zebra chip (*Candidatus* 'Liberibacter solanacearum') represent a threat to potato cultivation in the Netherlands.

Results for arable agriculture	**Number of inspections**			**Rejection due to quarantine pests**		
Inspections	**2014**	**2015**	**2016**	**2014**	**2015**	**2016**
• import	806	798	1,178	0	0	0
• Potato wart disease	311	193	80	0	1	0
• National seed potato crop	15,076	18,481	21,695	49	34	45
• Export inspections	20,503	19,313	17,625	25	18	22

In 2016, the most important findings in arable agriculture were:

- There was a substantial supply of potatoes from Poland for the processing industry in the Netherlands. The supply of those potatoes meant there was a danger of ring rot being re-introduced.
- Efforts were made to build up a picture of the increased virulence of potato cyst nematode observed in 2015 by investigating damage in potato fields. The investigation shows that the increased virulence relates to the nematodes Globodera rostochiensis and to G. pallida.
- Brown rot was identified in potatoes grown at four arable agriculture establishments. It was the first outbreak of brown rot in seed potatoes in the Netherlands since 2009. The contamination at those establishments can be attributed to the same source.
- Potato spindle tuber viroid (PSTVd) (systematic name) was detected in potatoes of one potato grower during routine testing. The source of the contamination is in Northern Ireland.

- Meloidogyne chitwoodi and M. fallax were less commonly encountered in the designated areas. By contrast, more stem nematodes were encountered during surveys in other areas.
- No ring rot was encountered in the Netherlands in 2016. This indicates proper compliance with the measures intended to combat ring rot in the Netherlands.
- There was an increase in the imports of ware potatoes, mainly as a result of potatoes supplied from Israel.

Fruit and vegetables, results in 2016

Results for fruit and vegetables	Number of inspections			Rejection due to quarantine pests		
Inspections	**2014**	**2015**	**2016**	**2014**	**2015**	**2016**
• import	72,500	74,400	84,500	145	159	129
• nationale survey	4,152	3,533	3,816	59	36	62
• plant passport	3,513	3,426	3,664	45	46	88
• export	37,603	41,201	54,039	999	853	1,266

The fruit and vegetables sector encompasses the development of new varieties, the worldwide production and distribution of seeds, growing-on of plants and the cultivation of vegetables and fruit in open fields or in greenhouses. Within the sector, there are imports from all over the world, distribution throughout the EU and exports to all corners of the world. In 2016, the most important findings were:

- In 2016, the number of interceptions of quarantine pests during import inspections in the fruit and vegetables sector fell slightly from 159 in 2015 to 151 in the reporting year.
- The number of interceptions for Phyllosticta citricarpa (Citrus Black Spot) has fallen sharply, whilst there were more interceptions for Thaumatotibia leucotreta (regulated at national level for Capsicum).
- There were small-scale outbreaks of PSTVd in paprika cultivation and of Ralstonia solanacearum in aubergine cultivation. Effective measures were taken to combat the outbreaks.

Floristry, results in 2016

Results for floristry	Number of inspections			Rejection due to quarantine pests		
Inspections	**2014**	**2015**	**2016**	**2014**	**2015**	**2016**
• Floristry imports	104,500	87,200	80,100	154	93	183
• Flower bulb imports	439	357	481	0	0	0
• floristry, national survey	573	710	600	11	6	1
• floristry, plant passport	11,451	10,324	10,433	3	3	15
• flower bulbs, plant passport	24,419	27,144	45,195	134	97	116
• floristry exports	35,578	33,328	38,250	8,831	9,618	7,234
• flower bulb exports	7,108	8,902	12,728	273	283	297

The floristry sector encompasses a wide range of ornamental horticulture products, and includes the production of propagating material and end products with all the various stages in between. The highly internationalised production chains have close connections between the various links in the chain. In 2016, the most important phytosanitary findings were:

- The number of interceptions of harmful organisms made during import inspections rose to 183.
- There were many interceptions of Liriomyza huidobrensis, Liriomyza trifolii, Spodoptera littoralis, Bemisia tabaci and Thrips palmi. Those species can survive in greenhouses in the Netherlands.
- In the flower crop cultivation sector in the Netherlands, Scirthotrips dorsalsis and an unidentified gall midge were found in Alstromeria at two pot plant establishments.
- The tracing process started earlier as a result of the outbreak of Ralstonia solanacearum Strain 1 in roses was completed in 2016. The bacteria was eliminated at a number of establishments. The NVWA is focusing on eradication measures and on monitoring this pest.
- As part of the phyto monitoring process, 377 inspections were carried out at floristry establishments. No pest organisms were encountered.

Flower bulbs, results in 2016

- Flower bulbs are grown in the open and that exposes them to specific risks associated with soil-borne organisms. Other organisms, such as viruses, are also a threat to the global marketing of flower bulbs. Since 2014, relaxed measures have permitted flower bulbs from fields which are not free of potato cyst nematodes to be traded within the EU. Third countries, by contrast, are demanding guarantees that flower bulbs come from PCN-free fields. This requires a sound track and tracing system.
- In 2016, the most important phytosanitary findings were:
- During the surveys forming part of the phyto monitoring programme, the Plantiago asiatic mosaic virus and the Tobacco rattle virus were encountred in the lily cultivation sector.
- The Tobacco rattle virus was also encountered in one case in the tulip cultivation sector.
- The Flower Bulbs Inspection Service (BKD) uses a plant test for Arabis mosaic virus and Strawberry latent ringspot virus to enable guarantees to be given when bulbs are exported.

Tree nurseries and green spaces, results in 2016

The tree nursery sector is closely associated with woods, gardens, street planting and parks in what are referred to as green spaces.

Infections in green spaces could have serious consequences for tree nurseries and vice versa. Obligations under EU legislation mandates eradication actions in the event of outbreaks of quarantine pests in green spaces and tree nurseries and they can be very drastic.

In 2016, the most important phytosanitary findings were:

- Raising awareness in the tree nursery and perennials sector of Xylella fastidiosa, a quarantine pest which features high on the EU agenda, was addressed in the Netherlands in 2016. No infection with that pest was encountered in a survey of high-risk products from Italy.
- Climate conditions that year were conducive to the development of fire blight. Slightly more pathogens were encountered in a single region.
- No quarantine pests were encountered in green spaces during the phyto monitoring programme.
- No new quarantine pests were encountered during the inspections in the tree nursery sector.

Results for tree nurseries and green spaces	Number			Rejection due to quarantine pests		
Inspections	**2014**	**2015**	**2016**	**2014**	**2015**	**2016**
• tree nurseries, national survey	224	179	205	1	2	0
• tree nurseries, plant passport	10,353	9,285	9,559	37	28	38
• wood packaging materials inspection programme	2,832	4,008	1,946	35	19	22
• green spaces, national surveys	562	637	661	101[a]	111[a]	134[b]

[a] *relates to Erwinia amylovora in buffer zones outside nurseries.*

[b] *132 rejections relate to Erwinia amylovora in buffer zones outside nurseries.*

Incidents

In August 2015, the NVWA encountered the *Ralstonia solanacearum* bacterium at rose cultivation establishments. Following the discovery of *Ralstonia solanacearum* in rose cultivation establishments, the NVWA carried out a tracing investigation at rose propagation establishments and rose cultivation establishments. The objective was to establish the scale and source of the infection. The NVWA conducted an investigation at a total of 138 establishments. Thirteen establishments were infected with *Ralstonia solanacearum* and further infections were later identified at another two establishments. Elimination scenarios were applied for the infected establishments. When the establishments were monitored following the application of the elimination scenarios, it turned out that a few establishments were still infected. When monitored for a second time, those establishments were found to be free of infection with this bacterium. The period in which those establishments are monitored by the NVWA will continue until well into 2017.

Conclusions

The number of notifications made by the Netherlands to third countries owing to the discovery of quarantine pests rose slightly from 311 in 2015 to 337 in 2016. There was a sharp fall in the number of interceptions of *Phyllosticta citricarpa* as a result of EU measures for citrus fruits which entered into effect in early 2016. The decrease in the number of interceptions for *Phyllosticta citricarpa* was offset substantially by the increase in the number of interceptions of *Bermisia tabaci*. Those interceptions took place mainly in internal traffic.
The United Kingdom carried out 104 interceptions in products originating in the Netherlands in relation to *Bermisia tabaci* pests. They largely involved pot plants. The guarantees for *Bermisia tabaci* are an area requiring attention for future market access of ornamental plants leaving our country for the United Kingdom.

There have been no major changes in the pest status of regulated organisms since 2015. The published list of pests which are regulated in the EU or which the Netherlands considers warrant quarantine measures has been shortened.

3.19 Plant protection

Controlling authority: NVWA, the Water Boards

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 1107/2009	The placing of plant protection products on the market
Directive 2009/128/EU	Sustainable use of pesticides
Regulation (EC) No 1185/2009	Statistics on plant protection products
Directive 2006/42/EC amended by Directive 2009/127/EC	Machines for the application of plant protection products
Regulation (EC) No 396/2005	Plant protection product residues

National legislation:

- Plant Protection Products and Biocides Act (Wet Gewasbescherming en biociden)
- Plant Protection Products and Biocides Decree (Besluit gewasbescherming en biociden)
- Regulation on Plant Protection Products and Biocides (Regeling gewasbescherming en biociden)
- Environmental Activities Decree

Size of control file in 2016

Type of establishment	**Number (approx.)**	**Hectares (approx.)**
Authorisation holders	150	Nvt
Importers	40	Nvt
Trade (professional)	258[a]	Nvt
Users of plant protection products:		
• ornamental crops grown in greenhouses[b]	2,588	4,273
• vegetable cultivation, open field	8,113[c]	83,703
• trees and perennials, outdoor cultivation	3,045	17,252
• arable agriculture	12,911	444,368
• fruit cultivation, open field (outdoor)	2,541	20,199
• flower bulbs	1,613	26,024
• vegetables grown in greenhouses	1,325	4,915
• floristry crops (outdoor cultivation)	1,048	2,755

*a Source CDG** list. Two hundred and twenty-three CDG branches and 35 VKL*** branches*

b Encompasses tree nurseries, tree and perennial cultivation in greenhouses

c Also encompasses vegetable growers at arable agriculture establishments

** CBS = Statistics Netherlands*

*** CDG = Certification for the distribution of plant protection products*

**** VKL = Voedselkwaliteit loonwerk (Food Quality Contract Work)*

Target groups

A multi-annual enforcement programme has been developed for the control of the trade in and use of plant protection products. This includes an analysis of the Plant Protection Products and Biocides Act target groups. The risks for each target group are re-evaluated regularly. The various target groups are monitored periodically and controls are intensified where necessary by way of targeted control plans.

The target groups were classified as follows in 2016:

High risk	Medium risk	Low risk
Ornamental crops grown in greenhouses[b]	Tree nursery	Arable agriculture
Flower bulb production	Floristry crops (outdoor cultivation)	Field-scale vegetable production
Fruit production		Greenhouse vegetables
Trade (professional)		Authorisation holders
Imports		

This table includes the most important target groups. Target groups that are subject to NVWA controls on the use of plant protection products carried out solely as part of a broader inspection or on the basis of reports and personal observations such as public green spaces, livestock farming and private use, are not included.

The 'trade and professional users' and 'import' target groups require further clarification. These target groups are classified as high risk.
Trade: As a result of its position in the chain it has an effect on the compliance level for all target groups. After all, the correct use of a product depends on users being provided with the correct information and resources.
As from 1 January 2010, all establishments that supply to professional users of plant protection products must be affiliated with the foundation for the certification of the distribution of plant protection products (Stichting CDG). Pursuant to this affiliation, the CDG supervises the target group's compliance with the regulations among other things.

Import: Given the number of illegal imports observed and the carry-over of the effects of illegal agents into the rest of the chain, this target group has been classified as high risk.

Cultivation in areas with large amounts of surface water or in water extraction or ground water protection areas is a high risk to the environment. This contributes to the prioritisation of the target group. Target groups are also assigned a higher priority when the risks are greater due to more intensive plant protection and an increased probability of the identification of non-compliance, such as ornamental crops grown in greenhouses.

Controls

The NVWA makes use of two forms of controls when monitoring users of plant protection products:

- Application controls. These involve surveillance in the field at the point when a grower sprays his crop. The inspector focuses primarily on the use of plant protection products authorised for use in the Netherlands and use within 14 metres of surface water. This control is focused on compliance with the legal instructions for use and the special rules (emission abatement measures) applicable to spraying near surface water.
- Establishment controls are designed to ensure that growers are using only authorised products and are using them in accordance with the legal requirements. In addition to a thorough inspection of the establishment and its records, the inspector may also take a plant sample for laboratory testing for residues of unauthorised products. This enables the NVWA to demonstrate whether a grower has used an unauthorised plant protection product and whether he has complied with the instructions stated on the label. In addition, the records are inspected, including the presence of a certificate of professional competence.

For controls of open and protected crops, the NVWA works with other bodies responsible for enforcing the Plant Protection Products and Biocides Act (Wet gewasbeschermingsmiddelen en biociden), in particular the Water Boards. In addition to this, a covenant for joint supervision of the import of plant protection products was agreed with Dutch Customs in 2011.

Supervision of 'Plant Protection', results in 2016

Results in 2016	Number of establishment controls	Administrative and criminal law settlements	Warnings
Authorisation holders	24	-	1
Importers	87	10	2
Trade	13	4	1
Users of plant protection products:			
• ornamental crops grown in greenhouses	283	47	28
• vegetable cultivation, open field	9	2	1
• trees and perennial cultivation	13	2	-
• arable agriculture	16	7	6
• fruit cultivation, open field	256	22	32
• flower bulbs	12	2	1
• public spaces	9	-	1
• vegetables grown in greenhouses	29	-	3
• other (private individuals/cattle farmers)	2	1	-
• contractors	4	2	-
Total number of plant protection products users	**633**	**85**	**72**
Application inspections		30	8
Reports/complaints/incidents	107	1	-
Total results in 2016	**1,053**	**130**	**84**

A total of 537 samples were taken and analysed during the controls in 2016.

The numbers are determined on the basis of the inspections completed in 2016. Since the majority of the inspections were in projects that were not demarcated by 31 December, it is not possible to form an opinion on compliance based on the above figures. Consequently, the clarification of the results may also contain different figures.

In 151 inspections, one aspect which had previously not been approved was approved following a re-inspection.
In 2016, the NVWA also inspected compliance with the good plant protection practices and instructions for use in approximately 500 cross compliance controls, 123 of which were at arable agriculture and vegetable cultivation establishments and the remainder animal-only establishments. Two infringements in respect of arable agriculture/ open-field vegetable cultivation were noted. There was considerably less use of plant protection products at animal-only establishments compared with arable agriculture establishments. Work at those establishments is often carried out by contractors.

In total, then, the NVWA completed approximately 1,200 controls aimed specifically at the use of plant protection products and approximately 500 controls where such use was included in a broader context in 2016.

As well as the NVWA, the Water Boards also supervise the use of plant protection products in areas near surface water. Based on that supervision, they submitted 121 reports on findings to the NVWA for further administrative processing in 2016.

The results in the table above are not representative for the Dutch situation because, in addition to monitoring the situation, the NVWA takes a targeted approach, based on unsatisfactory levels of compliance, reports and other indications. In other words, the NVWA also targets its inspections at establishments where a greater likelihood of infringements is anticipated. In addition, the projects aimed at monitoring often continue into the following year, producing a distorted picture.

Further explanation of the results for 'Plant Protection'

To comply with the obligations in Regulation (EC) No 1107/2009 on the placing of plant protection products on the market, the NVWA made a risk-oriented selection of a total 16 plant protection product files and carried out inspections. This included taking 66 samples for the quality requirements and the authorisation decision for the products selected was compared with the text on the label. The results of the analysis of the products tested revealed one instance of contamination. A written warning was issued for this. Various non-compliances were observed in the control on the label texts. In the case of 12 authorisation holders, the label texts did not match the authorisation files as submitted to the Board for the Authorisation of Plant Protection Products and Biocides (CTGB) on one or more points. These were generally minor non-compliances.

The NVWA, in cooperation with Dutch Customs, inspected 12 postal parcels and 47 containers being imported that could have contained plant protection products during the course of 2016. Twenty-eight inspections were carried out on parallel imports. The number of inspections and infringements is comparable with 2015.

Thirteen plant protection product traders were inspected in response to reports of, among other things, placing illegal substances on the market and in connection with a follow-up inspection into illegal discharging (tracing investigation); a report of findings and/or an official report was drawn up in four instances and a written warning in one.

In addition to the specific establishment and application controls, the NVWA also carries out one or more compliance measurements in certain target groups each year. These offer a more or less representative insight into compliance in a target group. In 2016, the NVWA carried out measurements in the ornamental crops grown in the greenhouses target group and also in the fruit production target group. The inspection spread over five ornamental plant groups has not yet been fully completed. The groups which had previously had markedly lower than average levels of compliance, such as chrysanthemums, potted orchids and roses, will not be completed until early 2017. As a result, it is not yet possible to provide a compliance picture for the entire target group.

A total of 220 inspections carried out to measure compliance in the ornamental crops grown in greenhouses target group were completed in 2016, with 32 reports of findings being drawn up. In 31 cases this was for misuse of plant protection products and in one case for having out-of-date products in stock.

In 2016, the NVWA also carried out compliance measurements in the fruit production (unprotected) target group. Those compliance measurements were partly completed in 2017. For this reason, the figures do not match those in the 'Supervision results' summary table. As part of that measurement process, 290 establishment inspections and 73 application inspections were carried out. Those inspections involved growers of large fruit plants and also small fruit plants. In the case of the establishment inspections, 29 fine reports were drawn up for one or more infringements, with 13 fine reports being drawn up for the application inspections. That makes the level of compliance within this target group 88%. The compliance level has improved, in particular in the case of application inspections. In addition, fewer cases involving substances not approved for use in cultivation were encountered.
Furthermore, 50 written warnings were given for various infringements. The vast majority of infringements related to the use of products contrary to the regulations. In terms of compliance, there was virtually no difference between growers of large fruit plants and growers of small fruit plants. However, those growers do differ in the part of the instructions of use which was infringed. The infringements committed by growers of large fruit largely related to non-compliance with the required drift-reducing measures to protect surface water or the restrictions concerning the maximum number of applications, the maximum (total) dosage or minimum interval period. In the case of growers of small fruit, the infringements mainly related to the use of products which are not authorised for use in the cultivation of the plant concerned. All establishments had used products authorised exclusively in the Netherlands.

Inspections in arable agriculture were mainly targeted inspections based on indicators. Having products that are not authorised in stock, the use of products that are not authorised and use contrary to the instructions were the most significant infringements.
In flower bulbs there were re-inspections of non-compliers, inspections at the initiative of the NVWA and in response to reports.
Testing of vegetables grown in greenhouses primarily focused on fruit cultivation. Three written warnings were issued here.

In 2016, 189 application inspections were carried out; 80% of these were within 14 metres of surface water. In total, 30 reports of findings were drawn up. The majority were for failing to comply with drift-reducing measures. Nearly 40% of those inspections were carried out within the fruit cultivation target group. A report of findings was drawn up for 13 of those 73 inspections. Here, too, the main reason was acting contrary to the drift-reducing regulations.

The number of reports to the NVWA relating to careless use, such as sprayed liquid blowing over and the consequences for local residents such as stench and irritation of the airways in 2016 was 68. Cases of physical complaints or health concerns were referred to the GGD. No infringement was detected where health complaints were involved in 2016. However, a number of reports did mention not entirely careful use. Those situations were discussed with the operators concerned and/or warning action was taken.

In 2016, the NVWA received 23 reports concerning bee deaths. An investigation to establish whether the bee deaths might be linked to the incorrect use of plant protection products was conducted for 17 of those 23 reports. The other six reports subsequently turned out not to concern (directly) bee deaths, although they were related to this subject. For instance, several reports about contaminated combs were received. Further investigations in respect of the 17 reports revealed that in 15 cases the use of plant protection products was not the cause of the bee deaths.
In the case of two reports received simultaneously from the same region, it turned out that the use of products (harmful to bees) not authorised in the Netherlands) was the cause of bee deaths. The mass death of bees was observed at seven beekeepers from that region during the investigation. An official report has been drawn up for the user of the unauthorised product.

The Rapid Alert System (RAS) was set up on the initiative of the OECD in order to enable consignments of illegal or suspected illegal plant protection products to be tracked from the point of entry into the EU to the destination within the Member States.
This system has been operational since October 2012. In 2016, the Netherlands submitted 11 RAS notifications of suspected illegal plant protection products and/or active substances from third countries that had been imported into the Netherlands and were destined for one of the EU Member States. There were 26 reports in 2015.

Inspections which focused specifically on compliance with the conditions (for discharging) set for the use of products containing imidacloprid in greenhouse horticulture were carried out in late 2015, early 2016. Thirty-eight inspections were conducted and resulted in the drawing up of eight reports of findings, two of which were for discharging contrary to the conditions, five for excessive dosages and one for having foreign products in stock.

Actions taken to improve the official controls

In 2016 we started implementing larger projects instead of many limited actions. These projects were implemented in 2016 in open field fruit cultivation and ornamental crops grown in greenhouses. The target groups were given advance notification of the aspects that the NVWA would examine. The expectation is that this approach and the associated communication will improve the level of compliance. Communication has become a central theme to be used to promote compliance.
Both of the selected target groups are classified as high risk, where the known level of compliance could be improved.

A target group analysis was carried out in 2016 on the basis of which actions will be taken in 2017, jointly with the business community, to improve compliance in the flower bulb production sector.

Various options aimed at promoting compliance were examined. Expectations are that it will be possible to convert positive results into concrete actions in 2017.

Actions taken to improve the compliance of the business community

The flower bulb sector is developing initiatives to reduce the number of infringements. The sector has developed an action plan, 'Healthy Bulbs, Flourishing Sector', which, among other things, strives for a more sustainable use of plant protection products. The compliance results from the NVWA are a clear stimulus to the sector to develop alternatives. A communication and action plan was drawn up in 2017 by the sector and the NVWA jointly. It is set to run until March 2018 after which a compliance indicator will be produced for this sector.

The fruit cultivation and tree nursery sectors have also expressed an interest in collaborating with the NVWA in order to bring about better compliance.

Conclusions

The approach taken in 2016 has shown that cooperating with growers' organisations, communication and transparency of action can help to improve compliance. Continuing this approach, combined with possible alternative enforcement tools, will provide a perspective for more efficient enforcement.

The controls, reports and measurements carried out show, among other things, that:
- compliance in the fruit production sector has improved compared with four years ago
- the following areas still require attention:
- the supply of and trade in products not authorised in the Netherlands
- the use of non-authorised products in a number of ornamental crops grown in greenhouses
- the failure to implement or the incorrect implementation of drift reduction measures in open fields near surface water, particularly in fruit production and arable agriculture.

3.20 Organic products

Controlling authority or authorities: Skal (Stichting Skal Biocontrole)

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EC) No 834/2007	Basic legislation
Regulation (EC) No 889/2008	implementation provisions
Regulation (EC) No 1235/2008	rules of import

National legislation:
Article 15 of the Agricultural Quality Order (Landbouwkwaliteitsbesluit) 2007:
The Stichting Skal is the authority referred to in Article 27(4)(a) of Regulation EC No 834/2007 and is entrusted with:
a. supervision of compliance with the rules laid down in or pursuant to this regulation with respect to organic production methods and the production methods designated equivalent by ministerial regulation
b. keeping the records referred to in Article 28 of Regulation (EC) No 834/2007
c. other implementation actions that are required for the proper implementation of the regulation referred to in the introduction.

Results in 2016

Every establishment wanting to produce, process, package, import, trade or store organic products must be Skal certified to do so. Skal Biocontrole supervises the entire Dutch organic chain. Part of this supervision is a compulsory, annual inspection of all organic establishments.

Size of control file and number of 'Organic products' inspections in 2016

Size of control file in 2016

Type of establishment	**Number**
Agricultural establishments	1,831
Food manufacturers, importers,	2,586
trading and storage establishments	**4,417**
Total number of establishments	

Supervision of Organic Products, results in 2016

Supervision of organic production	**Number**
Inspections	5,805
Samples	326
Measures: 1008 serious and 60 critical non-compliances	1,068
Number of establishments suspended	8
Number of establishments de-certified	3

Type of inspection	**Number**
Permit inspections	703
Expansion as a result of broader scope	192
Annual inspections	4,054
Re-inspections	182
Targeted inspections	674
Total	**5,805**

Reference to specific reports
Annual report 2016: www.skal.nl/over-ons/publicaties

Further explanation of the results for organic products

The year 2016 was characterised by the considerable growth of the organic sector. The sector is growing in size, turnover and also in complexity. In September, Skal welcomed the 4,000th certified organic establishment. After years of stability, the organic sector has grown by nearly 13%. Representing 136 new establishments, the number of dairy farms converting to organic production is particularly worthy of note.
The sale of organic products has been increasing for years, both in the Netherlands and abroad. The Netherlands is a trading nation, including in the organic sector. Many organic products enter Europe through the Netherlands.
Monitoring the trade flows lying behind those products is an ever more important part of Skal's work. In 2016 more than 5,800 inspections were carried out, 703 of which were permit inspections at new establishments. By the end of 2016, 4,417 establishments had joined, 11% up on the end of 2015.

Projects in 2016

Operating on the basis of risk classification
As a control authority, the Skal is obliged by law to base its supervision in part on a risk evaluation for each establishment (see Article 65(4) of Regulation EC No 889/2008).
In 2016, Skal carried out 80 additional inspections at establishments where there was a high risk of non-compliance with organic regulations. Thirteen serious and one critical non-compliances were observed during those inspections. Ultimately, the organic certificate of the agricultural establishment where the critical non-compliance was observed was suspended for parallel production. Parallel production is where the same crop is produced both conventionally and organically in the same farm operation. This is not permitted in organic farming.

Ukraine Guideline: preventive blocks
In response to irregularities in imports from, among other countries, Ukraine in 2014 and 2015, the European Commission published a Guideline for imports from Ukraine and neighbouring countries.
One part of the Guideline states that importers should take active steps to inform Skal before and after the importation of specific products from those countries. The imported consignment is blocked until Skal releases it. Skal releases the consignment once the documents supplied by the importer and the sampling carried out on Skal's instructions show that there are no doubts as to the consignment's organic status. In 2016, Skal arranged 125 samplings under the 'Ukraine Guideline'.
Nine of the consignments involved in the sampling were de-certified at the end of 2016. They were consignments of maize, rape seed and linseed, all coming from the Russian Federation. No de-certifications were necessary in response to the other reports made in line with the Guideline.

Compliance with plant protection regulations
The use of chemical and synthetic pesticides is not permitted in organic cultivation. This is the basis of organic cultivation. For this reason Skal carries out additional inspections to verify whether agricultural farmers are adhering to the legislation. As far as possible, those targeted inspections take place during the growing season, when the pest and disease level are at their highest and the temptation to use unauthorised products is the greatest.
In 2016, 110 unannounced inspections were carried out during which, in addition to a visual inspection for spray damage, 97 samples of a plant were also taken. In the process, 15 residues of unauthorised plant protection products were found.

Spot checks: import companies
In 2016, 76 additional inspections were carried out at the premises of importers which import products from outside the EU more than three times a year.
Ultimately, minor non-compliances were observed at 15 companies and serious non-compliances at 7, in particular, with regard to the incompleteness of the mandatory certificates of import. Incomplete certificates of import constitute a risk to the organic status of a consignment and reduce the transparency of the commercial chain.
Samples of products where there was a high-risk product/country combination were also taken during the inspections. Analysis of the samples revealed that no use had been made of unauthorised products.

Spot checks: Establishments where minor non-compliances were observed
In 2016, Skal visited 54 establishments unannounced to check whether the minor non-compliances observed at their establishments at the end of 2015 had been remedied in time. This was not the case at eight of the establishments, where the non-compliances were upgraded to serious.
In carrying out these inspections Skal hopes to ensure that certified establishments also take minor non-compliances seriously and remedy them within the time set.

Spot checks: bedding in organic goat and sheep sheds in order
Animal welfare has priority in organic animal husbandry. Sufficient bedding during the period when animals are kept in is one component of it. During the winter period, all animals live in and this means that the livestock farmer must regularly replenish beds to provide the animals with a clean and dry place in which to lie down.
In early 2016, Skal investigated, through 34 unannounced inspections, whether the floors of sheds of organic goat and sheep farmers were sufficiently well covered with dry bedding. A sufficient and dry supply of bedding must be available to all animals kept in sheds, including non-lactating animals. Despite the pressure caused by lambing during that period, nearly all the establishments visited during the spot checks met the standard. An instance of non-compliance was observed at just one establishment: young cattle had not been provided with sufficient bedding.

Incidents

Three hundred and twelve reports of incidents involving biological products were received in 2016. Of the 312 consignments, 168 retained their organic status after testing. The other consignments were either de-certified by Skal, downgraded by the certificate holder, or destroyed or returned to the upstream supplier. Sixty-six reports concerning products from the Netherlands were made in 2016. The majority of the reports (203) concerned products from outside the EU.
Most of the reports had to do with the discovery of residues in the product. The reports were made by registered establishments (59%), followed by reports made by a foreign control authority (20%). This is in line with 2015.

Effects measurement

No specific actions took place on this point in 2016.

Actions taken to improve the official controls

Standard questionnaires are used to ensure that Skal conducts its inspections in a reliable and unambiguous manner. After an induction period, Skal authorises new inspectors by means of a witness audit. Inspectors who have been conducting inspections for some time are audited by Skal every four years to check whether they can retain their authorisation.
Peer support from senior inspectors, common training times and keeping the internal knowledge and information system (IKIS) up to date allows Skal to continuously improve the quality of and further harmonise inspections. Knowledge is exchanged and also tested during the training days for inspectors thus ensuring that inspectors have the required level of knowledge. The inspectors use their practical knowledge to improve risk profiles and supervision plans developed in the office.
In 2016, we began continuously measuring the level of satisfaction of registered establishments. Specifically, this meant that 150 establishments received a telephone call after the annual inspections had been completed. The respondents awarded the inspectors an average report score of 7.8. The respondents are satisfied with the inspectors' expertise, the unambiguous inspections and the efficient way in which they are conducted. Areas requiring improvement include communication regarding preparations for an inspection and the flexibility of the scheduling of an inspection. Skal is continuously making improvements in respect of both points.

Actions taken to improve the compliance of the business community

In 2016, Skal developed an information sheet for importers to clarify further the specific requirements for that sector. Expectations are that this will promote compliance with the regulations for importers.

Conclusions

Skal Biocontrole supervises compliance with European regulations in the Netherlands in every link in the organic chain. In total, 5,805 inspections were carried out for that purpose in 2016. Of them, 70% were annual inspections, with the rest primarily being permit inspections, re-inspections (following identified non-compliances) and unannounced inspections.
Based on the non-compliances recorded, it can be noted that the vast majority of establishments adhere to the rules properly. In approximately 1% of cases the non-compliance was critical. At worst, this means that a premises or consignment will be de-certified and products no longer being able to be marketed as organic. That happened 45 times in 2016. In addition, three establishments were de-certified.

3.21 Geographical protection: Protected designation of origin (PDO), protected geographical indication (PGI) and traditional specialities guaranteed (GTS)

Controlling authorities: COKZ, KCB and the NVWA

Summary of the main legislation addressed by controls in 2016

EU Legislation	
Regulation (EU) No 1151/2012	Quality schemes for agricultural products and foodstuffs
Delegated Regulation (EU) No 664/2014	The establishment of the Union symbols for protected designations of origin (PDO), protected geographical indications (PGI) and traditional specialities guaranteed (TSG)
Implementing Regulation (EU) No 668/2014	implementing provisions of Regulation (EU) No 1151/2012

National legislation:

- Animals Act (Wet Dieren)
- Animal Products Decree (Besluit dierlijke producten)
- Regulation on Animal By-products (Regeling dierlijke producten)

Size of control file in 2016

Type of establishment	**Number**
Producers, importers, trading and storage establishments of cheese with protected geographical indication	15
• factory processors of PDO and/or PGI cheese.[a]	approx. 200
• processors of raw milk cheese (TSG) and/or Boeren-Leidse met sleutels (PDO) cheese	approx. 90
• subsequent processors of PDO, PGI and/or TSG cheese	
Total	**approx. 310**

[a] *Relates to Gouda Holland, Edam Holland and Noord-Hollandse Gouda.*
No Noord-Hollandse Edammer, Kanterkaas, Kanternagelkaas and Kanterkomijnekaas cheeses were produced.

Supervision of PDO, PGI and TSG cheese, results in 2016

Results	**Number**
COKZ inspections in 2016 of cheese with a protected designation	
• factory processors of PDO and/or PGI cheese [b]	341
• factory processors of Hollandse geitenkaas (PGI) [b]	88
• processors of raw milk cheese (TSG) and/or Boeren-Leidse met sleutels (PDO) cheese	498
• Subsequent processors of PDO, PGI and/or TSG cheese	78
Samples/analyses of cheese with a protected designation	
• factory processors of PDO and/or PGI cheese[b]	
- microbiological analyses	341
- phosphatase activity	148
- compositional analysis	4,849
• processors of raw milk cheese (TSG) and/or Boeren-Leidse met sleutels (PDO) cheese	
- compositional analysis	498
- phosphatase	292
• subsequent processors of PDO, PGI and/or TSG cheese	
- microbiological analyses	21
- additives (cheese rind treatment)	55
- phosphatase activity	88

[b] *New in 2016.*

Further explanation of the controls on PDO, PGI and TSG cheese results in 2016

General
Based on statutory regulations within the framework of the Animals Act (the Animal Products Decree and the Regulation on Animal By-products), the COKZ is the authority designated to supervise, among other things, the types of cheese specified in those regulations. This reporting exercise encompasses the types of cheese produced in the Netherlands for which rules are laid down in or pursuant to Regulation (EU) No 1151/2012 on quality schemes for agricultural products and foodstuffs:

- Gouda Holland and Edam Holland (both PGI cheese) and Noord-Hollandse Gouda (PDO)
- (note: no Noord-Hollandse Edammer, Kanterkaas, Kanternagelkaas and Kanterkomijnekaas cheeses were produced);
- Raw milk cheese (TSG) and Boeren-Leidse met sleutels (PDO) cheese
- Hollandse geitenkaas (PGI).

Factory processors of PDO and/or PGI cheese
The vast majority of naturally matured Goudse kaas and, increasingly, naturally matured Edammer kaas is marketed under the respective EU protected geographical indications (PGI) 'Gouda Holland' and 'Edam Holland'. In addition, Goudse kaas is produced in the Province of Noord-Holland which is marketed under the EU protected designation of origin (PDO) Noord-Hollandse Gouda. No PDO protected Dutch cheese of the types Noord Hollandse Edammer, Kanterkaas, Kanternagelkaas or Kanterkomijnekaas were produced in 2015.
2016 saw the first production and marketing of goat's cheese under the protected designation 'Hollandse geitenkaas'. There are four producers in the Netherlands which are engaged in the industrial production of that type of protected cheese.

PDO Noord-Hollandse Gouda
The product specifications for PDO Noord-Hollandse Gouda and Noord-Hollandse Edammer were adopted in 1997. There are two initial processors and four subsequent processors of Noord-Hollandse Gouda.

The two initial processors of Noord-Hollandse Gouda were subjected to two controls on compliance with the process requirements in 2016. No new peculiarities were detected during these controls.
Furthermore, the records of each processing location were inspected to see if the processing of the dairy raw materials for Noord-Hollandse Gouda came exclusively from Noord-Holland. If non-Noord-Hollandse milk was received, the procedures to separate Noord-Hollandse milk and non-Noord-Hollandse milk and compliance with this was assessed. This administrative control was carried out twice at both production locations and concerned the 2015 period. Several non-compliances were observed during those controls. They are being remedied by the establishments concerned. The remedial measures taken will be assessed during a subsequent inspection (in 2017).
The processors concerned are already under COKZ's supervision within the context of other control programmes for cheese. Based on these programmes, from the perspective of supervision of the composition and quality of Noord-Hollandse Gouda the controls that take place within this context were considered to be sufficient.

Consultations are being held with the Ministry of Economic Affairs on the still non-existent specific control regulations for Noord-Hollandse Gouda.

PGI Gouda Holland and Edam Holland
The designations 'Gouda Holland' and 'Edam Holland' have been protected under EU law as geographical indications (PGI) since 24 December 2010, in response to the application submitted by the Nederlandse Zuivelorganisatie (NZO) (Dutch Dairy Association). The similarly named product specifications, which the European Commission approved on 2 December 2010, are the basis for this protection.
The State Secretary of Economic Affairs, Agriculture and Innovation (EL&I) approved the control regulations on 25 January 2011.
The product specifications contain regulations which largely match the regulations that previously applied for Goudse kaas and Edammer kaas in the Agricultural Quality Regulation, Cheese 1998. Contrary to the requirements in this regulation in relation to maturing, Gouda Holland and Edam Holland must be naturally matured, and in addition, the milk used for this must have been obtained in the Netherlands.

Initial processors PGI Gouda Holland and Edam Holland
In 2015, seven establishments with a combined total of 15 production locations were engaged in the production of PGI 'Gouda Holland' or 'Edam Holland' as initial processors.
The standard control programme for PGI cheese includes nine control visits per quarter. Every quarter, a maximum of 150 samples are taken to analyse the composition and pasteurisation of the cheese milk. Furthermore, samples are analysed at a specific frequency for microbiological aspects and nitrate, and the brine is analysed.
In addition, all initial processors are inspected four times each year during which the processor is assessed on the use of the correct rennet and lactic acid and on the correct use of the PGI cheese label among other things. No non-compliances were detected during these assessments.

The administrative control on the origin of the milk used in the production of the cheese takes place once each year. At each production location, a mass balance is used to compare all farm milk received with the amount of cheese produced and the PGI cheese produced. If non-Dutch milk is received, the procedures to separate Dutch milk and non-Dutch milk and compliance with this was assessed. Traceability tests are used to verify that PGI cheese is produced from Dutch milk. A re-inspection takes place shortly thereafter if the nature, severity and scale of the non-compliances that are detected warrant it.
The annual inspection was carried out at all 15 processing locations in 2016. This was for control period 2015. During the regular inspection additional attention was paid to the traceability of the PGI cheese produced by the establishments and non-compliances in this respect were noted at most of the establishments. It was established during the re-inspections it was possible to conduct in 2016 at two establishments that the establishments had since taken appropriate corrective measures to eliminate the shortcomings. This will be verified at the other processing locations during the next inspection in 2017.

Initial processors of PGI cheese can opt for partial self-inspection. In that case, provided they use a COKZ-approved quality assurance system, once they have obtained permission from COKZ they themselves become responsible for analysing two/thirds of the samples (100 samples), or for having them analysed, from the 150 samples that are to be taken for analysis each quarter. The analyses to be carried out by the establishments themselves include at least an analysis of the composition and the pasteurisation of the cheese milk.

The COKZ supervises the proper functioning of the in-house assurance system of establishments that take advantage of this option. If the results of COKZ's supervision warrant it, the COKZ can withdraw permission for partial self-inspection.

Of the 15 initial processors of Gouda Holland and/or Edam Holland, 3 establishments preferred 100% of the controls to be carried out by COKZ. The other 11 establishments opted for the system of supervision by the COKZ where the establishment itself analysed two-/thirds of the samples.

Of the 15 establishments that produce Gouda Holland and/or Edam Holland, 4 succeeded in doing this without infringements during the whole of 2016. Of those establishments, one was under the 100% regime; the other three were companies operating partial self-inspection. The results from the in-house controls at a number of the other establishments were such that the COKZ found itself compelled to assume full responsibility for this review during one or more quarters of the year. This was, or is being, continued until the establishment involved has demonstrated that it once again complies with the conditions for partial self-inspection.

Infringements in relation to the fat content in the dry matter of the PGI cheese at 9 establishments in 2016 warranted submission to the disciplinary tribunal. In the case of one of them, objection proceedings resulted in the charge being withdrawn. The other cases involved a total of 130 charges for the fat content in the dry matter from a total of 241 non-compliances identified. This is a considerable improvement compared with the situation in 2015, when 296 infringements in relation to the fat content in dry matter of the total 386 infringements identified resulted in charges for fat content in dry matter infringements.
The disciplinary tribunal ruled on infringements relating to the fat content in dry matter in accordance with the fine regulation.

Two processors were found to have such serious non-compliances with respect to the moisture content of PGI cheese that they were brought before a disciplinary tribunal as infringements. This involved 9 infringements from a total of 355 infringements relating to the moisture content. In 2015, a further 13 establishments were confronted with this; charges

were preferred for 150 infringements from a total of 422 infringements relating to the moisture content. Here, too, there has been significant improvement.
The disciplinary tribunal penalised the infringements for which charges were preferred in accordance with the fine regulation for infringements relating to the moisture content.

At the initial processors of PGI Gouda Holland and Edam Holland a total of 17 infringements relating to the maximum salt content of the dry matter were identified in 2016. However, these non-compliances were not sufficient reason for submission to the disciplinary tribunal.

At three establishments, a total of seven infringements relating to the phosphate activity of the milk raw material were identified. These infringements were also submitted to the disciplinary tribunal and, after being heard, were penalised in accordance with the current fine regulation.

Two cases of excessively high nitrate levels in the cheese were identified in 2016, one of which warranted submission to the disciplinary tribunal, and, in accordance with its ruling, was settled with a reprimand.

A *Listeria monocytogenes* infection was identified at one establishment. The batch concerned was blocked for further analysis as were technologically similar batches from the same period as a preventative measure. The cause of the infection was identified and removed after intensive investigation by the establishment. During the investigation, all cheese produced on the production line concerned was tested for *Listeria monocytogenes* and was only released when the cheese complied with the requirements concerned.

Subsequent processors PGI Gouda Holland and Edam Holland
In 2015, inspections were carried out at 78 subsequent processors to review compliance with the requirements for the subsequent processing of PGI cheese that are applicable to them The PGI cheese is inspected at an age of approximately 28 days (sub-inspection II) on the subsequent processors' premises.
Sub-inspection II relates to the shape, appearance, rind, milk ingredients, odour/flavour, cheese label and maturing temperature.
Sub-inspection III occurs when the cheese is delivered. In this random sub-inspection, the testing is supplemented by a control on the correct use of the 'Gouda Holland' or 'Edam Holland' designation. It is particularly important that when the cheese is cut it can be demonstrated that the cheese used actually is PGI cheese. The inspections revealed no cases of incorrect labelling.

The non-compliances most frequently identified by sub-inspections II and III are blind cheese and the wrong taste and/or consistency. These non-compliances were not sufficient reason for submission to the disciplinary tribunal. Notification to the establishments concerned that they must take measures to prevent a repetition was sufficient.

In the case of one subsequent processor it was established that an incorrect ripening temperature had been maintained. The establishment was charged with that infringement and the case submitted to the disciplinary tribunal.

Four minor non-compliances with the EU limits were identified during the tests related to the use of natamycin in the surface treatment of cheese. In these cases, it was sufficient to notify those involved.

No infringements were identified when cheese cutters were tested for *Listeria monocytogenes* .

Hollandse geitenkaas
'Hollandse geitenkaas' is a is a traditional, geographical name for a semi-hard, natural or foil-ripened cheese product produced in the Netherlands. The cheese is prepared in accordance with the centuries-old production process used for Gouda cheese.
It must be produced entirely from goat's milk from the Dutch White Goat or cross-breeds of that goat with other typical breeds of dairy goat. Furthermore, the milk must originate exclusively from goat holdings established in the Netherlands. For a minimum period of 25 days, 'Hollandse geitenkaas' is ripened into a product ready for consumption either naturally with rind formation, or as a rindless cheese in foil packaging. Natural ripening may take place only in the Netherlands.

The European Commission officially registered the product specification submitted by the Dutch Goat Dairy Organisation (Nederlandse Geiten Zuivel Organisatie (NGZO)) to it in May 2015. It is laid down in the product specification and in the Regulation on Animal By-products (Animals Act) that the COKZ is the designated supervisory body. That supervision is performed on the basis of a control programme for Hollandse geitenkaas prepared by the COKZ management in 2015.

The five infringements relating to the fat content in dry matter identified in the case of one initial producer of Hollandse geitenkaas were sufficient reason to charge the party concerned with them and present them to the disciplinary tribunal.

The results of the supervision relating to the salt content of the dry matter gave cause for the party concerned to be charged with the infringement identified in seven cases. In the case of one establishment, three of those infringements were sufficient reason to present them to the disciplinary tribunal.

Boerenkaas (TSG)
The product specifications for Boerenkaas were adopted in 2007. This is cheese that is made on the farm from raw milk largely supplied by the farm's dairy cows.

Supervision of the subject sector revealed that in 2016 almost 200 raw milk cheese producers and almost 40 subsequent processors were involved in raw milk cheese. The latter group is mainly involved in storing raw milk cheese for maturing. Control is based on the TSG Boerenkaas 2008 control programme which was specified based on the TSG Boerenkaas 2007 control regulations approved by the Minister of Agriculture, Nature and Food Quality.

The majority of the raw milk cheese that was inspected complied with the relevant requirements. The infringements that were identified mainly related to the fat content of the dry matter and the moisture content. No fine regulation is in force for moisture content infringements. These infringements were dealt with by issuing a warning.
Of the 16 infringements, 7 were submitted to the disciplinary tribunal and penalised in accordance with the fine proposal. Nine cases involved cheese which had been designated 'raw milk cheese' without further type designation 'Goudse ...', 'Leidse ...' or '... from sheep's milk. The Boerenkaas product specification does not include a summary of specific composition requirements for such raw milk cheese. As far as stating the fat content of the dry matter in raw milk cheese without type designation is concerned, testing is against the relevant stipulations in the Dairy (Commodities Act) Decree (Warenwetbesluit zuivel), and in the event of an infringement is generally settled with a warning.
For procedural reasons, a single infringement relating to the fat-free dry matter content of Leidse Boerenkaas could not be dealt with by the disciplinary tribunal.

Persistent indications from the market that producers and/or traders are disregarding the required raw-milk character of cheese which is traded as raw milk cheese, prompted the COKZ in 2015 to take additional actions in 2016 in connection with the present supervision:
- extending testing for phosphatase, which had previously been limited to establishments which were known to have milk-heating equipment, to all producers of raw milk cheese
- extending that testing to successive producers as well
- starting a project in collaboration with the RIKILT to test a number of analysis methods to find out if it is possible accurately to identify the raw-milk character of Boerenkaas with sufficient reliability.

Unlike during the limited testing in 2015 at the premises of producers with heating equipment, infringements of the limit for phosphatase have now been revealed. There were 27 infringements from a total of 292 samples tested. In two cases, the non-compliance identified was reason for the party concerned to be charged with the infringement and the case submitted to the disciplinary tribunal.

Boeren-Leidse met sleutels (PDO)
The product specifications for Boeren-Leidse met sleutels were adopted in 1997. This type of cheese is a semi-hard raw milk cheese, or Boerenkaas, produced in accordance with the special recipe for this type in the Netherlands in an area precisely defined in the product specifications.
Twelve initial processors are engaged in the production of Boeren-Leidse met sleutels.
About fifteen subsequent processors are engaged in the production of Boeren-Leidse met sleutels.

There are specific control regulations for Boeren-Leidse met sleutels and a control programme based on the product specifications and the regulations is applicable.
The Minister of Agriculture, Nature and Food Quality approved the control regulations in 2008 and they have not changed since. The approach to control and the frequency are the same as those for Boerenkaas (TSG).

The majority of the initial processors of Boeren-Leidse met sleutels could be tested within the context of the testing programme for TSG Boerenkaas; this is possible because the broad outlines of the programme included the same testing aspects as the control programme drawn up specifically for Boeren-Leidse met sleutels. The other establishments were tested for compliance with the applicable requirements within the context of the latter programme.
Both programmes encompass analyses including the fat content in the dry matter, the moisture content and the raw milk character of the cheese.
The fine regulation for infringements relating to the fat content in the dry matter, which was tightened up on 1 October 2014 and initially appeared to be ineffective, appears to be bearing fruit. The number of infringements fell to two in 2016, i.e. 20% of the 10 samples tested, whilst in 2015 11 non-compliances were identified (61% of the 18 samples tested).

Projects in 2016

The COKZ, in collaboration with the RIKILT, started a project to test a number of analysis methods to see if it is possible to identify the raw-milk character of Boerenkaas with sufficient reliability. This project was continued in 2016.

Incidents

Supervision related to PGI cheese revealed a *Listeria monocytogenes* infection at one establishment. The measures needed to avoid the possibility of food safety being put at risk were taken immediately after the finding was made. The establishment traced and eliminated the source of the infection.

Effects measurement

The report on this section has been incorporated into the above paragraphs.

Actions taken to improve the official controls

The initiative to collaborate with the RIKILT in a project to test a number of analysis methods for the possibility of using them accurately to identify the raw-milk character of Boerenkaas with sufficient reliability reported under ‘Projects in 2016’ may offer prospects of improving the official controls.

Actions taken to improve the compliance of the business community

No specific actions took place on this point in 2016

Conclusions

Generally, compliance with the set standards was satisfactory in 2016.

A new development in 2016 was the extension of supervision to include Hollandse geitenkaas, the production and marketing of which started in early 2016. Here, too, compliance with the requirements can be described as satisfactory.

With regard to PGI Gouda Holland and Edam Holland, a substantial improvement in compliance with the quality requirements was noted in 2016, in particular in relation to the moisture content and the fat content in the dry matter of the cheese.

The infringements observed in 2016 in the case of subsequent processors of cheese in relation to the required raw milk nature of cheese which is designated 'boerenkaas', underline the correctness of the decision to exercise closer supervision of the preparation of boerenkaas in 2016 during this stage.

The percentage of infringements relating to the fat content in the dry matter of Boeren-Leidse met sleutels has decreased considerably in 2016 compared with 2015. Increasing the stringency of the relevant fine regulation as from 1 October 2014 now appears to be bearing fruit.

CHAPTER 4
AUDITS

Introduction

This chapter reviews the audits conducted within the context of Regulation (EC) No 882/2004 in 2016. The internal audits conducted by the NVWA are described first. Thereafter, the audits conducted by the NVWA in 2016 in respect of the external organisations performing tasks under the responsibility of the NVWA will be dealt with.
Audits are conducted by the Internal Audit Service (IAD) and the quality staff in the NVWA divisions. The external audits are conducted by the inspectors at the NVWA.

Internal audits at NVWA in 2016

Various NVWA laboratory and inspection activities have been accredited by the Dutch Accreditation Council (Raad van Accreditatie, RvA) on the basis of international quality standards. In addition to the annual audits conducted by the RvA, the NVWA also conducted a number of internal audits in 2016. The most important conclusion from these audits is that the NVWA's quality system is appropriate, effective and ISO 17025 or ISO 17020 compliant. These internal audits relate to the following divisions:

- *The Feed and Food Safety Laboratory*
  Het laboratorium verricht laboratoriumonderzoek aan producten van dierlijke oorsprong en levensmiddelen en is door de Raad van Accreditatie (RvA) geaccrediteerd en geregistreerd onder de code L-104.

- *National Reference Centre (NRC)*
  The NRC is the knowledge centre in the division dealing with phytosanitary organisms and diagnostics, vectors and invasive plants. The laboratory's research is RvA accredited and registered under the code L-522.

- *Supervision of fish*
  The Fish teams supervise compliance with the regulations at landing and export of fishery products. This task is RvA accredited and registered under the code I-134.

- *Border Inspection Posts (BIP)*
  One of the tasks of the Import Inspection department is to supervise compliance of imports of live animals and products of animal origin at Border Inspection Posts (BIP). This task is RvA accredited and registered under the code I-134.

In 2016, the following internal audits were also conducted within the context of Regulation (EC) No 882/2004. The main conclusions are:

- *2016-094: IAD I&R of bovine animals*
  The IAD conducted an audit of the 'Identification and registration (I&R) of cattle control' enforcement programme. The main conclusion was that the 'I&R of cattle control' meets the requirements set in European and national legislation and regulations.
  Several recommendations were made for more efficient preparation of control reports. It was also recommended that an evaluation and effects measurement should be carried out for the 'I&R of cattle control' enforcement programme.
  The management has indicated that all recommendations will be developed further.

- *2016-095 IAD pig welfare*
  The IAD conducted an audit of the 'pig welfare control' enforcement programme. The main conclusion was that the 'pig welfare control' meets the requirements set in European and national legislation and regulations.
  It has been recommended that the monitoring information be made more specific so that the team leader can take more targeted action regarding the quality and consistency of the controls. It was also recommended that an evaluation and effects measurement should be carried out for the 'pig welfare control' enforcement programme.
  The management has indicated that all recommendations will be developed further.

- *2016-099 IAD fines*
  The IAD conducted an audit of the NVWA process which started with the recording of an infringement in a report of findings (RvB) by an inspector and culminated in the imposition of a fine by the Administrative Measures Team (TBM).
  The audit focused, in particular, on the question of whether the reports of findings were submitted within the agreed deadlines and processed by the TBM and whether the quality of the reports of findings was sufficient.
  It was stated in conclusion that the level of the quality assurance of the process was adequate, but that further standardisation and monitoring of the process would contribute towards a more efficient and more manageable process.
  The management response described specific improvement actions for the NVWA organisational units concerned.

- *2015-07 V&I internal follow-up audit*
  In 2015, there was an external audit at red meat slaughterhouses and meat product establishments which produce products for export to the United States. The purpose of the follow-up audit was to determine the effectiveness of the remedial actions taken in response to the non-compliances identified by the external audit.
  It was established that not all of the remedial actions have been effective. Corrective measures have been put in place.

Audits of external bodies conducted by the NVWA in 2016

The NVWA conducted the following external audits in 2016:

Consumer and Safety Division

- *The Netherlands Controlling Authority for Milk and Milk Products (COKZ)*
  In the Netherlands the COKZ has been designated as the authority for supervising this package in the milk and dairy sector. In addition, the Dutch Controlling Authority for Eggs (NCAE), as part of the COKZ, has been designated as the authority for the supervision of this package in the egg sector in the Netherlands.
  On the instructions of the chief inspector (HI) of the Consumer & Safety Division in 2016 an audit (desk research and attendances) was conducted of the work carried out by the COKZ.
  The objective of the audit was to obtain insight into the degree to which COKZ and NCAE adhered to the agreements recorded in the work plans for 2014 and the quality of performing the activities as agreed with the COKZ. These are included in the work plans and in the agreements relating to the issue of veterinary certificates. The scope of the audit was 'the work carried out in 2015 and 2016'.

  It was established that the COKZ had implemented the work plans for 2015 and 2016 well. It was also established that the COKZ had implemented the arrangements as described in the agreement on the issuing of veterinary certificates well. Better coordination with the NVWA with regard to the conducting of spot checks is required, though.
  A NVWA inspector attended inspection visits by a COKZ or NCAE inspector and assessed the working method. The attendances revealed that the COKZ and NCAE inspectors carried out their work in accordance with the procedures and had sufficient knowledge and expertise to do so.
  The audit report contains 10 recommendations for improvements. The main recommendations are:
  - bring the sampling plan more into line with Regulation (EC) No 2073/2005
  - in consultation with the NVWA, develop a policy showing how establishments with internet sales should be supervised
  - in consultation with the NVWA (Remote Certification department (COA)) evaluate the work methods for random checks of certificates and lay down and authorise a clear procedure.

Veterinary & Import Division

- *Animal Sector Quality Inspection Foundation*

  The Animal Sector Quality Inspection Foundation (KDS) is an accredited private organisation that carries out post-mortem (PM) inspections of red meat on behalf of and under the auspices of the NVWA. For this purpose, the covenant on the organisation of (post-mortem) red meat inspections (Convenant Organisatie roodvleeskeuring post-mortem) was drawn up in the Netherlands along with the associated regulatory arrangements. The NVWA and KDS recorded the implementation of Article 3 of the aforementioned covenant and the inspection provisions of Regulation (EC) No 854/2004 in the 'VWA-KDS Contract, contract number: 001' and the associated annexes.
  The NVWA audits the PM inspection of red meat by KDS at least once each year. The audit focuses on the official assistants' performance of their inspection activities and other inspection competences as defined in the VWA-KDS Contract, the associated annexes and the KDS Quality Manual. The audit also includes the internal audits performed by the KDS and the audit by the Dutch Accreditation Council.
  In 2016, attention was focused primarily on the internal supervision by the KDS of official assistants and the training of official assistants.
  Specific attention was also paid to the inspection of slaughterhouses where the NVWA does not permanently supervise post-mortem examinations and the inspection of one slaughterhouse which produces veal for export to the United States.

  The audit conducted by the NVWA revealed that the KDS operates a clearly structured and transparent quality system. The official assistants' participation in the 'Éducation Permanente' refresher training is monitored demonstrably well by the KDS.
  However, there is a certain lack of uniformity in the digitally available personnel files and the actual number of official inspection assistants. As a result, it cannot be demonstrated whether this small number of official assistants are assessed to determine their qualifications in accordance with the contract.
  The KDS's internal supervision of the official assistants' performance was unsatisfactory in 2016. The number of planned internal controls of the official assistants' performance was not achieved. KDS said this was caused by unexpected circumstances which had resulted in a shortage of deployable managers in 2016.
  At slaughterhouses where the NVWA is not permanently present during post-mortem examinations, the official assistants accepted unsatisfactory forms of presentation of the parts due for inspection in a number of cases. That might have contributed to the inadequate inspection results in one instance.
  In general, the inspection actions were performed correctly with the exception of those carried out at the slaughterhouse where veal was produced for export to the United States. The special agreements were not always complied with consistently by the official assistants here.

  The NVWA recommends that the KDS keeps the digital personnel file up-to-date and brings the various files into line with each other.
  It also recommends that the KDS steps up internal supervision so that it once again has a full grasp of the individual and group performances of the official assistants.

Agriculture and Nature Division

- *Phytosanitary inspection services including all related activities*

  The Ministry of Economic Affairs delegated certain phytosanitary inspections to the four inspection authorities Bloembollenkeuringsdienst, BKD (the Flower Bulbs Inspection Service), Kwaliteits-Controle-Bureau, KCB (Quality Control Bureau), Nederlandse Algemene Keuringsdienst voor zaaizaad en pootgoed van landbouwgewassen, NAK (the Dutch General Inspection Service for agricultural seed and seed potatoes) and Naktuinbouw in the Long-term Phytosanitary Inspection Agreement (Meerjarige Overeenkomst, MJO). The NVWA directs these testing services and supervises the conducting of inspections. Supervision is in accordance with a supervision protocol, which is an annex to the MJO (2007) and is specified in supervision annual plans.
  The new version of the supervision protocol was adopted in early 2016. Supervision was then elaborated upon and a multi-annual supervision plan (MTP) drawn up. That MTP was adopted in the spring of 2016.
  In 2016, a project exploring the possibility of developing performance indicators (PIs) for the phytosanitary domain went ahead. These PIs could play a role in improving quality and supervision.
  In 2016, the NVWA conducted supervision audits of these phytosanitary inspections and attended the inspections on a regular basis. Some of the attendances planned were postponed until 2017 in view of certain seasonal activities, because the Agriculture and Nature Division was prioritising a phytosanitary crisis and in view of the lack of clarity

surrounding the status of some of the standard documentation.
During the period under review, inspection visits paid to the four inspection authorities were attended. Those attendances were distributed as follows:
- 26 attendances focused on rejections (import)
- 55 attendances focused on indemnification (export);
- 2 attendances focused on other activities (field inspections in connection with the issuing of plant passports, surveys, sampling, etc.).

This related to activities carried out by 31 officers.
Audits were carried out at the office for each inspection authorities. They focused on the one hand on the quality management system and, on the other, on the performance of a number of other activities (other than inspections).

Midway through 2016 an opinion was given on the period between 2015 and spring 2016 inclusive.
The conclusions in respect of three of the inspection authorities was that:
- the parties involved exhibited a reasonable to good performance and that the inspections and associated actions are carried out at least in compliance with the agreed reference level.
- the organisation of the quality management systems of the inspection authorities and their procedures for carrying out phytosanitary import and export inspections are, in general, well organised.

The conclusion in respect of one inspection authority was that the quality management system and also the performance of phytosanitary activities meet the requirements in some areas. In certain areas, the audit team refrained from giving an opinion because of the absence of clear standard documentation and owing to the lack of clarity regarding the setting up, existence and functioning of the Chain Register.
A definitive conclusion for the 2nd half of 2016 cannot yet be drawn because of the activities extending into 2017.

- *Phytosanitary inspection services diagnosis laboratory*

  External laboratories that carry out official phytosanitary inspections have received the necessary authorisation from the NVWA NRC (National Reference Centre). This relates to inspections of what are referred to as 'official samples' to test for specific organisms referred to in Directive 2000/29/EC. Some of these operations are audited annually by the NVWA within the context of the Phytosanitary Inspection Agreement. The laboratories have also received accreditation for some or all of the authorised operations. The Dutch Accreditation Council (Raad voor Accreditatie, RvA) also conducts annual audits. The reports of these audits are taken into account in the NVWA's assessment.

  The NAK has been authorised for 29 operations. Five phyto operations were accredited by the RvA. The methods audited by the NVWA 2016 concern visual primary diagnostics in the area of nematology and Enzyme-Linked Immuno Sorbent Assay (ELISA) in the area of virology. No infringements were observed.
  On the basis of the RvA report on 2015, the implementation of bacteriological and nematological methods was assessed and approved.

  Naktuinbouw has been authorised for 55 operations. Six operations were accredited by the RvA. The NVWA audited Naktuinbouw in 2016 at the laboratory in Roelofarendsveen. The real-time PCR method (virology and bacteriology) was assessed on the basis of an attendance, interviews and consulting the records. That audit resulted in two non-compliances, one in category B and one in the Comment category. Both non-compliances were rectified.
  The RvA report on 2015 was examined during this audit.
  All the non-compliances identified in the previous audit (2015) have been rectified.

  It was concluded that the functioning of the quality management systems of the NAK and Naktuinbouw meets the requirements of the MJO Plantkeur and the quality requirements for diagnostic laboratory testing for plant pathogens set out in it.

  The BKD does not carry out laboratory tests on EU quarantine pests. It was, however, authorised for seven operations involving organisms which qualify as quarantine pests for third countries. Six of them were accredited by the RvA. The RvA report revealed that those operations were conducted in accordance with the set requirements.

- *Resistance testing for potato cyst nematode and potato wart disease*
  Independent research institutions can make the results of their resistance tests available to the NVWA to allow it to produce name lists of resistant potato varieties. These test results are used for the production of name lists only when it has been confirmed that the test was carried out in accordance with the specified implementation protocols. The NVWA assesses this by auditing the research institutes. This has to do with the resistance of potato varieties to potato cyst nematode (PCN, a pest disease caused by nematodes *Globodera pallida* and *Globodera rostochiensis*) or potato wart disease (a pest disease caused by mould *Synchytrium endobioticum* (PWD)). There are two laboratories (NAK and HLB) in the Netherlands which are authorised to perform the official resistance testing for potato cyst nematode and one (HLB) for the official resistance testing for potato wart disease. The NVWA supervises both laboratories. That is why, in 2016, audits were conducted at the two laboratories whilst tests were being carried out.
  It was found that HLB has a well-functioning quality system and that the PCN and PWD tests were conducted properly, in accordance with the current version of the specified implementation protocols. No non-compliances were identified during the audit.
  The activities carried out by the NAK are generally good and performed in accordance with the implementation protocol.
  Four non-compliances were identified at the NAK. Two were swiftly resolved, one has no impact on the quality of the testing and will be verified during the next audit in 2017. One non-compliance involved a failure to test the inoculum in advance and in full for purity at pathotype level. This meant it was still unclear whether the results were reliable. The NVWA will assess this further in 2017.

CHAPTER 5
NVWA INTELLIGENCE AND INVESTIGATION SERVICE

The tasks of the Special Investigation Service (Bijzondere opsporingsdienst, BOD) of the Ministry of Economic Affairs and the Ministry of Health, Welfare and Sport are brought under the NVWA Intelligence and Investigation Service (NVWA IOD). The NVWA IOD works in all of NVWA's domains and is deployed in the event of serious or systematic infringements of the law in NVWA's enforcement domain. When deployed, the NVWA IOD focuses primarily on complex, chain-related, organised and international criminality.

The core tasks of the NVWA IOD are:
- collecting and refining intelligence
- carrying out analyses to improve insights into the nature and extent of compliance and non-compliance
- conducting investigations on the basis of a wide range of powers.

In 2016, the investigations addressed the following subjects, among others:
- fraud involving meat or meat products
- manure fraud
- illegal trade and internet trade in protected animals and/or plants
- trade in non-authorised plant protection products
- fraud involving raw materials for animal feed
- fraud involving EU subsidies for greenhouse horticulture.

Cooperation with other investigation organisations is assured by means including the Special Investigation Services Platform Cooperation and the National Intelligence Agenda. In areas relating to environmental enforcement, the NVWA IOD cooperates intensively with the police and the Intelligence and Investigation Service of the Human Environment and Transport Inspectorate (ILT-IOD). This cooperation is formalised in the Environmental Chamber.

Investigations and requests for mutual assistance

In 2016, the NVWA IOD completed 16 investigations, including 4 requests for mutual assistance, and submitted them to the Functional Public Prosecutor's Office of the Public Prosecution Service for further investigation.
Food fraud remains an important theme, but topics like fraud involving the export of horses and the illegal importation of protected native species of animals are important topics. The NVWA IOD also focused its attention on ‘facilitators’ in various investigations in 2016: organisations which help fraudsters with the preparation, carrying out or concealment of illegal activities. For instance, two investigations targeted two laboratories which were suspected of having committed fraud with analysis results.

Fraud Expertise Unit

In 2014 the Onderzoeksraad voor Veiligheid (Dutch Safety Board) concluded in the report on risks in the meat supply chain that the NVWA pays insufficient attention to investigating and tackling food fraud and lacks the capacity to do so. For that reason, the NVWA has launched the ‘NVWA Fraud Action Plan’ improvement programme as part of the present reorganisation. The project comprises, among other things, the development of a Fraud Expertise Unit (FEK).
The IOD implemented the Fraud Action Plan in 2016 in cooperation with the Consumer and Safety (C&V), Agriculture and Nature (L&N), Veterinary and Import (V&I) divisions and the Legal Matters (JZ) department. The project comprises the development of a Fraud Expertise Unit. This unit develops (and coordinates) a plan of action to combat fraud through the combined deployment of various supervision divisions and the IOD. The IOD advises inspectors on how to recognise and prove fraud and provides them with guidance on the application of criminal law and economic criminal law. The method was tested in 2016 using 15 pilot cases in areas including:
manure fraud, food fraud, fraud involving plant protection products, fraud involving residual flows, fraud involving the certification of street fair attractions and fraud involving food supplements.

Other tasks

As well as the conducting of investigations, the IOD's expertise includes gathering and analysing information.
To that end, the Intelligence team charts, among other things, domains, sectors and chains, manifestations of crime, modus operandi, trends and developments, relevant legislation and regulations, as well as IOD activities and NVWA supervision.
A better understanding of the meat, special food and drink, manure and animal feed domains is gained from the information obtained from domains.

Jointly with the police (environment) and the Living Environment and Transport Inspectorate, the IOD has contributed to the five-year (2017-2022) National Environment Threat Assessment (NDB) in relation to the themes of manure fraud and residual flows. That contribution was expressly coordinated with the supervision divisions. In the NDB, the focus is on the nature and extent of the fraud, current developments, consequences of fraud and predictions or expectations for the future as far as those themes are concerned. The National Environment Threat Assessment was approved by the Strategic Environmental Chamber in December 2016.

The IOD also has a reflective and informative role within the NVWA and for the Ministry of Economic Affairs and the Ministry of Health, Welfare and Sport. In that role it critically reviews the course of an investigation and makes recommendations relating to its own performance and that of the supervision division concerned. It identifies any gaps in legislation and regulations exposed during an investigation for the ministries in The Hague. The parties involved give their opinion in response to this.
Those insights are shared with the executive board and in three-way consultations.

The NVWA IOD began preparing an 'Investigation Development and Innovation Agenda' in 2016. It elaborates upon five innovative processes which staff of the NVWA IOD have deemed a priority, such as a vision on future-proof investigation and alternative interventions. That agenda will be developed further in 2017 and translated into specific points for improvement.
Finally, the IICE (Internet Intelligence, Coordination and Expertise Centre) pilot project was started in 2016. The aim of the project is to improve the knowledge and information levels of the NVWA IOD in respect of the internet. This, too, will be continued in 2017.

CHAPTER 6
DEVELOPMENTS IN THE ORGANISATIONS INVOLVED

Developments within the organisations

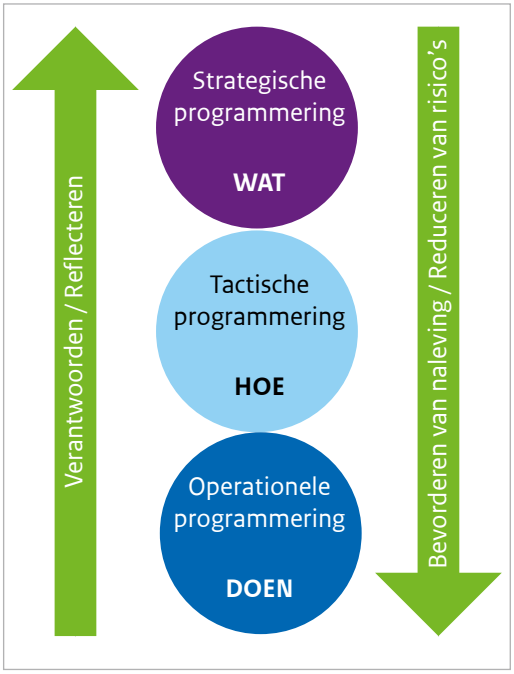
NVWA 2020

NVWA 2020 is the follow-up to the NVWA 2013 Action Plan. With the political task from 2013 to reinforce and improve supervision the NVWA instituted a transformation process aimed at improving the organisation and the way it works. The NVWA is consolidating the improvements brought about under the 2013 Action Plan and moving towards the next speck on the horizon with NVWA 2020. A vision of the future where the NVWA, as a modern and future-proof authority, operates in line with the philosophy of knowledge-driven and risk-focused oversight and puts its reflective role into effect With NVWA 2020, NVWA seeks to increase compliance regarding the public interests it has been entrusted to protect. This being against a background of a slightly decreasing budget and increasing social complexity. To this end, the NVWA has designed its organisation in a way such that most of its work is risk-focused: to take action where the risks to public interests can be reduced effectively. This will require the implementation of a number of programmes. The innovations under those programmes will help inspectors to operate efficiently. With that goal in mind, the focal point is on the end of the transformation in the form of the Implementation programme: to ensure with people on the shop floor that problem areas in practice are resolved.
NVWA 2020 relates to the years 2017 to 2020 inclusive. It is a comprehensive and complex transformation process. In addition to a change in structure, new systems and tools are being implemented and competences adjusted to a changing society and different problems. Transformation and 'going concern' are closely and inextricably linked in the programme. The challenge ahead is to retain and strengthen the course charted and concentrate on embedding the changes in the organisation. It is important that the areas where the NVWA has reinforced its capacity recently continue to be converted into tangible outcomes and social benefits in an even more transparent way in the coming period. Key areas requiring attention including the quality of service provision, sound control of the intended benefits and management of inherent risks.

The NVWA's intervention policy

In 2016, a new general NVWA intervention policy was established. This intervention policy describes the policy that the NVWA applies in order to rectify infringements of legislation and regulations observed during supervision, certifications, inspections and product analysis and to prevent their repetition. It also describes the method or procedure used by the NVWA to apply intervention, linked to the seriousness of infringements and to the risks associated with the process and/or the product the company or person concerned deals with. The general intervention policy contains a general system of classes and describes the possible interventions for each class. The NVWA's general intervention policy is applicable to all the domains supervised by the NVWA. It also involves inspections and certifications in so far as performed by supervisory bodies, if infringements are detected.
The specific intervention policy describes the interventions for specific infringements for each supervision domain. The specific intervention policy categorises infringements into minor infringements (D), infringements (C), serious infringements (B) and very serious infringements (A) and links an intervention to them. The specific intervention policy also gives content to the general intervention policy for each supervision domain. For infringements which are not included in the specific intervention policy the supervisory body can state in its report, giving reasons, which infringement class, including the accompanying intervention, is applicable.

Compliance risk management strategy



The NVWA's ambition is to operate in line with the philosophy of knowledge-driven and risk-focused oversight and expressly to push for a reduction of risks and increase in compliance, putting its reflective role better into effect. The NVWA uses the compliance risk management strategy to ensure that it achieves that ambition. The cycle combines governance (at strategic level), development (at tactical level) and implementation (at operational level). The goal of the working methods is to tackle the greatest risks in the chain effectively and efficiently, improve access to information and update supervision.
At strategic level, we determine WHAT the greatest risks are, where we should intervene in the chain and what the result should be. We conduct integrated risk analyses, set priorities, formulate risk reduction objectives and develop frameworks for enforcement instruments. We do this on the basis of scientific risk assessments at chain level (picture of the risk) and with knowledge of, and information about, compliance with rules (picture of supervision and picture of the position regarding fraud). Strategic evaluations test the effectiveness of the approach and of the tools. We use the outcomes of the evaluations to account for ourselves and to reflect. They are also used as input for the new cycle.
At tactical level, we determine how we can best achieve the risk reduction objectives and evaluate the result. We analyse the cause of the problem and the compliance or non-compliance conduct of the target group. On this basis, we formulate tactical objectives, including compliance objectives, and develop an effective enforcement mix which promotes compliance and contributes to a reduction of risks. The tactical evaluations test whether the compliance objectives have been achieved. The outcomes of the evaluations serve as input for the strategic evaluations and are used to improve our supervision.
At operational level, we determine how to go about implementation and monitor the progress. To implement the enforcement mix and other operational assignments, including output objectives and quality frameworks, we draft a planning schedule that is as efficient as possible and put it into practice. Operational evaluations test whether the requested output objectives and the quality are being achieved in time. We use the outcomes of the evaluations to make adjustments and they are also used as input for the tactical evaluations.

Disclosure of individual inspection data

The Health Act (Gezondheidswet) was adopted by the Lower House and the Senate at the end of 2016. This Framework Act describes which inspection data the inspection services, such as the NVWA, may publish actively under the Health Act and under which conditions. The Minister of Health, Welfare and Sport (VWS) stated in the Lower House that the NVWA's ambition is to have active disclosure of individual control data a structural part of the primary supervision process by five years after the entry into effect of the Health Act.
The information which is actually published, the means by which it is published and when it is published is determined by Order in Council (AmvB). Expectations are that the first AmvB for the NVWA will enter into effect in the first half of 2018. This will involve disclosures relating to fish auctions and product tests for product safety and disclosures relating to the hotel/restaurant/catering sector.

Supervision of supportive private assurance schemes

The NVWA assesses acceptance applications for private assurance schemes (known as schemes). By participating in accepted private assurance schemes, businesses may be eligible for modified supervision, depending on the degree of support the private assurance scheme provides for monitoring activities. The applications may be submitted by scheme owners for B2C (business-to-consumer, such as hotel/restaurant/catering, retail and healthcare institutions) schemes and B2B (business-to-business, such as primary establishments, animal feed and food production companies) schemes. In 2014, a set of criteria was drawn up which private assurance schemes (B2B) must meet to qualify for modified supervision. The aim is to strengthen the chain (animal feed and foodstuffs). The NVWA assesses whether the private assurance schemes which are intended to offer guarantees among establishments meet the criteria set. If that is the case, the system can be mentioned on the www.ketenborging.nl. website as "accepted". Establishments can then do business with reliable suppliers. This can be verified on that website.
The criteria for B2C schemes, which have been in existence for some time now, are more or less the same, apart from accreditation.

Modified supervision

Once those private assurance schemes have been accepted, the NVWA starts (the development of) modified supervision in participating establishments. The NVWA can modify supervision for those businesses: the risk analysis may show that participating establishments have been subjected to fewer inspections or to less intensive inspections or that the NVWA's focus may temporarily be on other matters. However, private quality systems may never replace the official NVWA inspections. They support the supervision process.
This modified supervision is based on the information exchange which is built on during the new phase by the scheme owner and the NVWA. The information relates to, among other things, trends in levels of compliance (both the results of supervision by the NVWA and of inspections/audits by certifying institutions and/or the scheme owner), the effect of the penalty policy and the effect, to be demonstrated by the scheme owner, of the way in which it performs the risk-based, unannounced inspection visits. The NVWA will start using this information, which comes specifically from the private assurance schemes, in sector/domain analyses. As part of the compliance risk management strategy a risk profile will be assigned to establishments and, based on that profile, the supervision of the participating establishments can be modified as compared with the regular supervision in the sector. The development of modified supervision is a dynamic process which involves interaction between the NVWA and the scheme owner and leads to obligatory adjustments/improvements by the private assurance system.

Monitoring

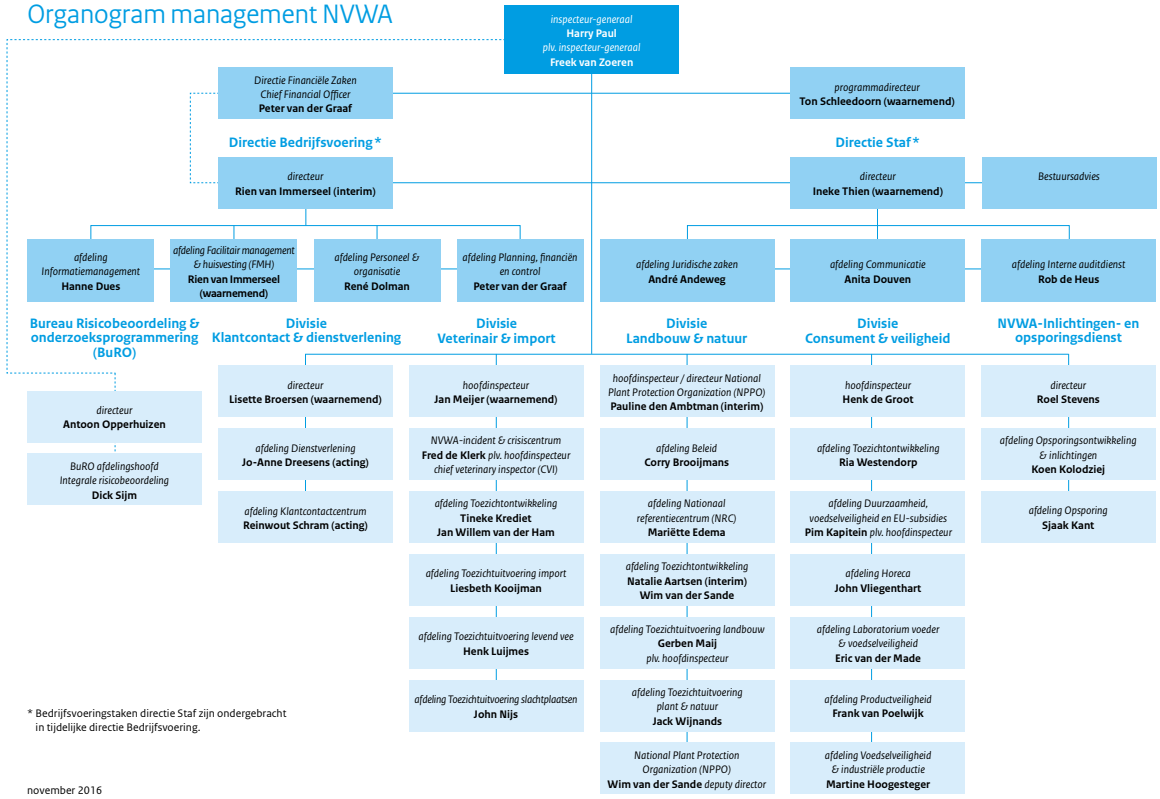
The NVWA is continuing to oversee the private assurance schemes with a monitor. After a maximum period of one year a monitoring result is drawn up. During this period, the NVWA monitors both the implementation of the participating establishments and the private assurance system, in which the scheme owner, certifying institutions and participating establishments each have their own roles and responsibilities. The monitoring result is used to determine the outcome of the adjustments or improvements made to the private assurance system in terms of promoting compliance at participating establishments and what the consequences are for more far-reaching modification of supervision.

Description of the control agencies

The Netherlands Food and Consumer Product Safety Authority (NVWA)

In 2007, the decision was taken to merge all the agencies involved in inspection into one integrated inspection service at the then Ministry of Agriculture, Nature and Food Quality (ministerie van Landbouw, Natuur en Voedselkwaliteit, LNV). In May 2010, and in preparation for this merger, the Phytosanitary Service (Plantenziektenkundige Dienst, PD), the General Inspection Service (Algemene Inspectiedienst, AID) and the Food and Consumer Product Safety Authority (Voedsel en Waren Autoriteit, VWA) brought their organisations together into a temporary work organisation of the new Food and Consumer Product Safety Authority. The merger was completed on 1 January 2012, and the name of the organisation was changed to the Netherlands Food and Consumer Product Safety Authority (NVWA). Since 2013, the merger has been given further shape under the management of the new Inspector General (IG), Harry Paul. In 2016 the structure of the organisation was as follows:

Organogram management NVWA



* Bedrijfsvoeringstaken directie Staf zijn ondergebracht in tijdelijke directie Bedrijfsvoering.

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In 2016, the NVWA had a budget of EUR 333.4 million (EUR 141.2 million from the Ministry of Economic Affairs, EUR 80.4 million from the Ministry of Health, Welfare and Sport and EUR 95.1 million from third parties). The organisation had a staff of 2,471 FTEs.
The staff of three divisions, Veterinary and Import (V&I), Agriculture and Nature (L&N) and Consumer and Safety (C&V), were largely responsible for the results reported in Chapter 4.

Although the product safety domain falls within the C&V Division, it is not included in this annual report as it does not fall within the scope of Regulation (EC) No 882/2004. Product Safety is addressed by a team in the Supervision Development (TO) department that is focused exclusively on product safety issues and by the Supervision Implementation (TU) department with two field teams which operate nationally and two laboratories in Zwijndrecht and Groningen.

The Support Department is responsible for policy, the organisation and management of finances and information management, as well as management control (controlling and auditing) for the whole NVWA. This department also alerts, initiates and advises in the strategy, communication, organisation, human resources and legal affairs areas. The Support

Department is subdivided into Management Advice, Communication, Information Management, Personnel and Organisation, Management and Legal Affairs, Planning, Finance and Control and the Internal Audit Service (See Chapter 5 for this Service's results).

The Risk Assessment & Research Programming Agency (BuRO) is authorised by the Food and Consumer Product Safety Authority Independent Risk Assessment Act 2006 (Wet onafhankelijke risicobeoordeling Voedsel en Waren Autoriteit 2006) to provide independent advice to the Minister and to the IG on feed, food and consumer product risks. The approach was expanded with animal welfare in 2015. BuRO operates in a similar way in the animal health and phytosanitary field. Its advice often relates to situations or actions, as well as products involving risks that could be mitigated by the implementation of measures. BuRO substantiates its advice by commissioning research by knowledge institutes such as the National Institute for Public Health and the Environment (Rijksinstituut voor Volksgezondheid en Milieu, RIVM), RIKILT, Wageningen Bioveterinary Research and universities.
More than 24 people work at the BuRO. An Advisory Board (RVA) monitors the scientific quality of the advice and its substantiation. This guarantees the independence and objectivity of its risk assessments and overall advice. The NVWA publishes its risk assessments and advice. The results of individual risk assessments are not included in this report as risk assessment does not fall within the scope of Regulation (EC) No 882/2004.

The tasks of the Special Investigation Service (Bijzondere opsporingsdienst, BOD) of the Ministry of Economic Affairs and the Ministry of Health, Welfare and Sport are brought under the NVWA Intelligence and Investigation Service (NVWA IOD). The NVWA IOD works in all of NVWA's domains and is deployed in the event of serious or systematic infringements of the law in NVWA's enforcement domain. When deployed, the NVWA IOD focuses primarily on complex, chain-related, organised and international criminality. The NVWA Intelligence and Investigation Service has drawn up a report of the activities in 2016, which is included in Chapter 6 of this annual report.

The Client Services Division (KCDV) bundles specific tasks of the primary process (shared services). KCDV serves as the link between the 'outside' (businesses and the public) and the 'inside' (divisions), where it acts as an information broker.
The core tasks of KCDV are client interaction (receiving and dealing with questions, alerts, reports and enquiries via the website, phone, email, fax and letters), issuing certificates and other export documents, grant management, relationship management and management of establishment files, processing measures and inspections, data processing for the primary process, other administrative tasks for the primary process, documentary information provision, facilities management and related policy development, general and technical support at head office and service offices, and the Fisheries Monitoring Centre (FMC).

Finally, the NVWA has in-house laboratory resources to analyse samples collected during official controls and inspections. The following table lists the laboratories, the number of their staff and their location.

Laboratory	Number of staff	NRL[1]	Location
1 for food safety	121	RIVM[2] Rikilt[3] NVWA[4]	Wageningen
1 for plant diseases and pests	55	NVWA[5]	Wageningen
2 for product safety: • 1 for chemical and microbiological analyses and • 1 for physical, mechanical and electrical analyses	 16,1 18,4	 FCM[6]	 Groningen Zwijndrecht

[1] =NRL = *National Reference Laboratory*

[2] =NRL *for microbiology (except Campylobacter)*

[3] =NRL *for heavy metals, marine biotoxins, dioxins, polycyclic aromatic hydrocarbons (PAHs), growth promoters, veterinary medicinal product residues, animal feed and genetically modified organisms*

[4] =*Pesticides in human food and animal feed*

[5] =*Plant diseases and plant pests (phytosanitary)*

[6] =*FCM = food contact materials*

The Netherlands Controlling Authority for Milk and Milk Products (COKZ)/Dutch Controlling Authority for Eggs (NCAE)

The Netherlands Controlling Authority for Milk and Milk Products (COKZ) is the Dutch authority in the area of control of dairy and dairy products. The control of eggs and poultry meat is carried out by a separate division of the COKZ, namely the Dutch Controlling Authority for Eggs (NCAE).
The COKZ has been entrusted with supervising compliance with the EU hygiene regulations for dairy cows and the dairy sector. Within the framework of the Animals Act, the COKZ is also responsible for supervising compliance with the requirements
governing exports of infant formulae, the quality of Gouda, Edam and Dutch Mimolette cheese, and the protected designation of origin, protected geographical indication and traditional specialities guaranteed certification of a number of specific types of cheese.
The NCAE supervises compliance with the requirements governing trade in eggs. These requirements are laid down in Regulation (EC) No 589/2008. In addition, NCAE supervises compliance with the requirements laid down in Regulation (EC) No 543/2008 that govern the marketing of poultry meat. NCAE is the designated supervisory authority for compliance with all EU hygiene regulations by all food establishment operators in the egg sector.

The Veterinary Health Service (GD)

The GD gathers and analyses data from the laboratory and the post-mortem area during visits to establishments and through the Veekijker [telephone help desk for veterinary surgeons and farmers] for the purposes of Animal Health Monitoring in the Netherlands, an initiative of the government and the livestock farmer sector. The results are incorporated into reports and notified to the commissioning parties. In addition, on the instructions of the government, the GD monitors a number of notifiable animal diseases, such as Newcastle Disease (ND), avian influenza (AI), brucellosis and leucosis.
With more than 400 employees, the GD works daily, in an innovative manner, on the health of livestock and companion animals, doing so together with animal owners, veterinary practices, governments and the business community. The GD, based in Deventer, is an active participant on the Dutch market and is also performing an ever increasing number of international activities. The GD's turnover in 2016 was EUR 57 million.
The organisation has one of the largest veterinary laboratories in the world for the more than four million laboratory tests the GD performs annually. The GD has been ISO 17025:2005 accredited by the RvA for a large number of laboratory tests GD carries out, under registration number L120. The GD has been ISO 17043:2010 accredited for the organisation of a large number of proficiency testing schemes (PTS) (registration number R016). It is also ISO 9001:2008 accredited; this means that GD works in accordance with a quality management system which meets the requirements of ISO standard 9001:2008. The GD is ISO 27001:2013 certified for information security and therefore handles clients' details and data in a secure and responsible way.
The GD has a team of veterinary surgeons, specialists and scientists in the area of histology, microbiology (bacteriology and virology), molecular biology, immunology, epidemiology, chemistry and toxicology. GD's pathology team has its own collection service for bodies and a modern post-mortem examination room for poultry and mammals. GD's veterinary specialists offer livestock owners, veterinary surgeons and the government help and advice for the control of infectious diseases, for business-related conditions and other aspects such as biosecurity and animal welfare. As instructed, the GD monitors animal health, carries out practice-based research and develops voluntary programmes for animal disease prevention and control.
To improve food quality and food safety (in the production of milk and meat products for example) the GD has developed various voluntary eradication and prevention programmes for livestock farmers in order to control infectious animal diseases including infectious bovine rhinotracheitis (IBR), bovine virus diarrhoea (BVD) and Maedi Visna in the Netherlands.

Skal (Stichting Skal Biocontrole).

Skal Biocontrole has been designated by the Ministry of Economic Affairs as the control authority responsible for supervising compliance with EU legislation for organic production. This is laid down in Dutch agricultural quality legislation. The European Regulation allows Member States to choose how to structure the control regime. The Netherlands has opted for a clear structure: One control authority which is responsible for all statutory control tasks within organic production.
Skal has the status of Independent Administrative Agency (Zelfstandig Bestuursorgaan, ZBO).
As a ZBO under private law, Skal is authorised to make its own choices when performing the control tasks.
As an independent supervisory body, Skal Biocontrole is committed to ensuring demonstrable reliability of organic products in the Netherlands. Skal's mission is as follows: Skal supervises compliance with organic regulations in an effective and efficient manner and thus contributes to the reliability of the organic sector.
Organic farming and feed are legally defined terms and the word 'organic' is a legally protected term. The legislation focuses on the maintenance and justification of consumer trust in organic products. Within the EU, the designation 'organic' is only permitted for agricultural products and foodstuffs when they demonstrably comply with the applicable statutory requirements laid down in Regulation (EC) No 834/2007 and Regulation (EU) No 889/2008.
Demonstrably organic means: verified and certified by an EU recognised control body. Skal translates Dutch legislation into a workable control system. The European authorities lay down the regulations, the certified Dutch organic businesses comply with them and Skal monitors compliance.
The number of organic business in the Netherlands has risen sharply in recent years. Every business wanting to produce, process, package, import, trade, store or export organic products must be Skal certified to do so. This means all businesses in the chain, apart from shops that sell packaged products directly to the final consumer and food service establishments serving Dutch people eating food away from home.
All costs for Skal monitoring are funded by contributions from the registered companies.
Use of the European organic label is mandatory if an organic business places pre-packaged consumer products on the market. By issuing that label, Skal is showing the reliability of organic products to buyers and consumers.
The organic label may be used only by certified establishments on organically certified products.
Skal Biocontrole monitors and certifies every link in the organic chain: agricultural establishments, processors, importers and trading and storage establishments.

Flower Bulb Inspection Service (BKD)

The Ministry of Economic Affairs has entrusted the BKD with the inspection of the quality of all flower bulb crops in the Netherlands, other than Freesia and Nerine, which have been entrusted to Naktuinbouw. In addition, BKD conducts phytosanitary inspections and performs other tasks on behalf of NVWA. The BKD inspects flower bulbs for both quality defects and quarantine pathogens. It also carries out quality inspections, import and export inspections and laboratory testing. BKD's testing system has adopted the requirements of the European quality and phytosanitary directives governing propagating material for flower bulbs. These directives have been implemented in the Netherlands in the form of the Agricultural Quality Act (Landbouwkwaliteitswet) and this is elaborated in the BKD Inspection Regulations and Implementation Guidelines. The BKD also applies the requirements that countries outside of Europe stipulate for flower bulbs. This takes place in the form of certifications and tests, which are conducted on behalf of the growers and traders after coordination with the NVWA.

The Quality Control Bureau (Kwaliteits-Controle-Bureau)

The Quality Control Bureau (Kwaliteits-Controle-Bureau, KCB) is an independent administrative agency that is supervised by the Ministry of Economic Affairs and exclusively performs public duties.
At the end of 2016, the Head Office had a staff of about 35 people in the management and support departments, with further staff of some 120 active in the field. The Bureau's control and inspection work is carried out from the offices in the various districts. The KCB, a foundation, has a board with members who are appointed by industry organisations in the fruit and vegetable sector, the ornamental horticulture sector and the Netherlands Food Retailers Association (Centraal Bureau voor Levensmiddelenhandel, CBL). The appointment of the chair of the board is approved by the Minister of Economic Affairs.

The KCB's most important duty is to conduct inspections on batches and consignments of fresh fruit and vegetables, cut flowers and potted plants. The Bureau also monitors the quality of fresh fruit and vegetables that are imported into, exported from and traded in the Netherlands. In addition to this, the KCB inspects establishments within the context of export programmes to specific destinations. The Government has entrusted the KCB with conducting these inspections. Examples of these establishment inspections are 'monitoring exports to Japan for Medfly', 'monitoring the export of tomatoes to the USA' and 'monitoring the export of pears to China'. The phytosanitary export inspections of plant products and issue of phytosanitary export certificates
are carried out by NVWA officers. As an independent organisation, the Dutch Accreditation Council (RvA) has accredited KCB to conduct these inspections.

The Netherlands General Inspection Service for agricultural seeds and seed potatoes (Nederlandse Algemene Keuringsdienst voor zaaizaad en pootgoed van landbouwgewassen)

NAK is the Netherlands General Inspection Service for agricultural seeds and seed potatoes. NAK performs this statutory task on behalf of and under the supervision of the Minister of Economic Affairs. The service conducts phytosanitary inspections under the responsibility of the NVWA. Specialist inspectors conduct field and batch testing that contribute to the high quality of Dutch export products. After certification by the inspector, the grower can order the NAK certificate that must be affixed to the packaging of potatoes and seeds. Potatoes and seeds cannot be traded without a NAK certificate so businesses currently depend on the NAK to certify their seed potatoes and seeds. The NAK certificate represents independence, quality and expertise and is recognised as such by foreign buyers. The NAK also conducts additional phytosanitary batch inspections for export to third countries. To support certification, the NAK also has modern laboratories where large scale virus and bacteria testing of seed potatoes is carried out using molecular testing techniques (PCR) and nematode testing of soil samples. Seeds are tested for moisture, purity, germination, health and cleanliness. In addition to the Head Office in Emmeloord, the NAK has a Testing and Control establishment in Tollebeek where various field test trials and controls are performed on agricultural crops (variety/type comparison, certification control).

The Netherlands Inspection Service for Horticulture (Stichting Nederlandse Algemene Kwaliteitsdienst Tuinbouw)

The Netherlands Inspection Service for Horticulture is better known as Naktuinbouw. Naktuinbouw promotes and monitors the quality of products, processes and supply chains in the horticulture industry. They focus on propagating material, both nationally and internationally. Naktuinbouw is an independent administrative agency that is supervised by the Ministry of Economic Affairs. Naktuinbouw's mandatory inspection system has adopted the requirements of the European directives governing propagating material for floricultural, arboricultural and vegetable crops. These directives have been implemented in the Netherlands in the form of the Seeds and Planting Materials Act (Zaaizaad- en plantgoedwet). Naktuinbouw operates impartially and autonomously. Public duties relating to basic inspections assigned to other national or international quality and/or inspection services are not performed or are only performed on a collaboration basis. Naktuinbouw is the sole organisation in the Netherlands competent to assess varieties of vegetable, arable and ornamental plant crops in terms of their distinctness, uniformity and stability (DUS testing) for registration and/or plant breeders' rights.
Naktuinbouw operates voluntary quality certification systems. These complement the statutory certifications or extend beyond the legal guidelines. These include, for example, the quality assessments of propagating material and examinations of varietal identity and varietal purity. The majority of the service's clients are individuals and groups of producers of propagating material. In addition to this, Naktuinbouw focuses on promoting quality and certain specialisms. This involves establishments from the entire horticulture chain, including outside the Netherlands.