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A Review of Certification and its Impact on Regulatory Intervention

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July 2021

Abstract

The Nederlandse Voedsel-en Warenautoriteit (The Netherlands Food and Consumer Product Safety Authority, NVWA) is the competent authority responsible for the supervision and enforcement of food safety regulations in the Netherlands. As part of its inspection regime, the Regulator has monitored the results of the supervision of Food Business Operators (FBOs) for the 2015-2020 period. This information records compliance performance against the food-associated regulations and whether the business is certified to a recognised food safety management system. This paper explores the interplay between regulations and certification, and whether third-party certification results in improved compliance, and therefore a means to ensure that food manufactured into the market in the Netherlands is safe for consumers.

1 Acknowledgements

The findings of this paper draw on data provided by the Nederlandse Voedsel-en Warenautoriteit¹ (NVWA - The Netherlands Food and Consumer Product Safety Authority) as part of its annual evaluation of the collaboration between BRCGS and the Dutch Regulator. The data covers the monitoring results of audits of Food Businesses (FBOs) for the 2015-2020 period. The author is grateful to NVWA for permission to access the data and to publish the subsequent findings.

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2 Foreword

By Hans van der A

Senior Advisor NVWA Public-Private Partnerships.

Legislation states that Food Safety Operators (FBOs) are responsible for providing safe products. In order to produce, process and distribute safe foodstuffs, companies usually require assurances from their suppliers in the form of certificates based on private standards and independent assessments. The NVWA wants to encourage this form of self-regulation. We do this, among other things, by collaborating with providers of private certification and control systems that, like the NVWA, monitor compliance with (parts of) legislation. It is important to realise that private control systems cannot replace NVWA supervision, but they can support it. The NVWA wants to enter into a sustainable partnership with these providers in order to work together to promote FBO compliance to legislative requirements, by making agreements about sharing information and coordinating each other's activities.

The NVWA sees the collaboration as a continuous process of improvement, in consultation with the certification program owner. The aim is to place responsibility where it belongs, to strengthen mutual trust, to organize efficient information exchange, and to realise a more effective deployment of resources based on risk analyses. Ultimately, all parties involved (government, business and consumers) will benefit from this.

Since 2016, we have been successfully collaborating with several GFSI recognised Certification Programme Owners (CPOs) active in the food sector. Without altering the division of responsibilities, this public-private partnership has led to better outcomes in safeguarding the general public interest of safe foodstuffs. Both nationally and internationally, public-private partnerships are becoming increasingly important in our changing society. The NVWA would like to contribute to this and sees GFSI recognised CPOs as reliable partners for jointly safeguarding food safety now and in the future.

3 Introduction

Food safety is essential at all levels of the manufacturing supply chain, which has been a driving factor in the adoption of third-party certification programmes such as ISO 22000² and GFSI benchmarked certification programmes³, such as BRCGS.

BRCGS certification programmes are increasingly considered as a benchmark for best food safety practices⁴. A majority of Brands, Retailers and Quick Service Restaurants are now requiring BRCGS certification from manufacturers of branded food products⁵. BRCGS certification helps to promote consistency across the supply chain for food manufacturers, wholesalers, and distributors.

This paper explores the interplay between regulations and standards, and the value that third-party certification provides as means to ensure that food manufactured into the market in the Netherlands are safe for consumers.

As part of the annual evaluation of the collaboration between BRCGS and the NVWA, the NVWA presented the monitoring results for the 2015-2020 period⁶.

This information, which has been used as a reference for this paper with the permission of the NVWA, aims to identify the extent of non-compliance with legislative requirements on the part of Food Businesses (FBOs) in the Netherlands, and how this is affected by the use of third-party standards.

4 About BRCGS

BRCGS is the operator of the world's most rigorous third-party quality and safety certification schemes that help build confidence in the supply chain. Its Global Standards for Food Safety, Packaging and Packaging Materials, Storage and Distribution, Consumer Products, Agents and Brokers, Retail, Gluten Free, Plant-Based and Ethical Trading set the benchmark for good manufacturing practice, and help provide assurance to brands and consumers that products are safe, legal and of high quality.

The data analysed in this report relates to the

monitoring results of industrial food production companies, with approximately 900 of these companies certified to the BRCGS Global Standard for Food Safety.

5 About NVWA

NVWA monitors animal and plant health, animal welfare, and the safety of food and consumer products, as well as enforcing nature legislation in the Netherlands. It is an independent agency in the Ministry of Agriculture, Nature and Food Quality⁷ and a delivery agency for the Ministry of Health, Welfare and Sport⁸.

It is the competent authority responsible for the supervision and enforcement of regulations. It supervises businesses operating within the food supply chain and monitors their compliance with the legal requirements for safe food. This supervision covers the entire food supply chain, focusing on both plant-based and animal-based food production.

While there are approximately 250,000 businesses⁹ operating within the food supply chain in the Netherlands, the data used for this analysis relates only the supervision of industrial production locations of food and food storage locations, which represent approximately 14,000 locations. The data used for this paper is of a general nature and is indicative. It should be noted that no distinction is made between the type and reason for inspection and/or audit. Nor has the scope of certification, and the certification coverage by business category been taken into account.

6 Regulation and standards

In general, approaches to ensuring food is safe for consumers include:

- regulations, requiring suppliers to meet specific conditions or to follow specific practices and
- standards or codes of practice, which are voluntary and set out best practices in aspects of food processing and distribution.

In some markets, certification programmes can

provide earned recognition where regulatory bodies factor in certification as part of their inspection programmes¹⁰. But where public health issues are important, as in food processing and distribution, regulations are common. Standards demonstrate due diligence and a method of meeting regulations, for example by setting out the processes needed to supply safe food where the conditions for achieving that purpose are specified in a regulation.

7 Food standards and regulations in the Netherlands

Food safety rules in the Netherlands are set in National and EU legislation. The latter is embodied in the General Food Law¹¹. The relevant EU Regulations are (EC) 852/2014¹², (EC) 853/2004¹³ and (EC) No 2073/2005¹⁴ which relate to Food Hygiene and micro-biological criteria and cover all stages of the production, processing, distribution and placing on the market of food intended for human consumption. The underlying principle is that food companies are responsible for complying with regulations and supplying safe, edible foods. If they discover some form of contamination or hazard in foods that they have placed in the supply chain they must immediately withdraw the products and inform customers, consumers and the relevant authorities of the affected foods.

The types of hazard that underly the legal basis for encouraging safety in food, in Europe and elsewhere are:

- Chemical
- Micro-biological
- Physical

The regulations are designed to prevent these hazards entering the food supply chain and to ensure the rapid withdrawal of affected foods. Between 2015-2020, there were a total of 496 safety alerts of food products entering the Dutch market¹⁵, of which 457 were identified as serious.

The relevant EU regulation requires FBOs to set up food safety processes based on HACCP principles as set out in the Codex Alimentarius¹⁶.

Standards for food processing, handling, packaging and labelling are based on HACCP. They offer more detailed, practical guidance, supported by regular audits, on how to ensure that the organisation and management of all processes in the supply chain prevent contamination or untoward risks from any of these hazards.

7.1 Regulation

Supervision and enforcement for all food related laws and regulations are the responsibility of the NVWA.

7.2 Monitoring

The NVWA undertakes systematic monitoring of FBOs food safety processes, through programmes of testing and audits of the safety of FBOs processes¹⁷.

Testing - Samples of food products from domestic sources and imports are tested for Chemical and Biological contamination and for the presence of physical hazards.

Audits and Inspections - Samples of Food Business Operators (FBOs) are audited or inspected against the requirements of the legislation. Remedial action is required from those who do not meet the criteria.

7.3 Standards

In a previous report published in 2018¹⁸, NVWA emphasised that compliance with the legislation can be materially supported by certification to a third-party standard. It was noted that compliance with third party standards usually involves annual audits, compared with less frequent risk-based inspections that the regulator may undertake, provided that the standard has a clear scope and is clearly defined against regulations combined with sufficient data exchange to substantiate the risk-based resource allocation. As a result, the NVWA perceives that standards and regulation can be complementary in promoting food safety.

8 Standards and food safety indicators

The findings of this paper draw from a selective analysis of data from the results of audits of FBOs by the regulator against the requirements of National and EU laws, which records if the FBO is certified to one of the

recognised Global Food Safety Initiative¹⁹ (GFSI) third-party certification programmes. GFSI, a part of the Consumer Goods Forum (CGF)²⁰, brings together 34 retailers and manufacturers from across the CGF membership and an extended food safety community to oversee food safety standards for businesses.

The data covers a period between 2015 and 2020, and reports on an average of 3,300 inspections per year from a population of 14,000 industrial business-to-business and cold store FBOs. In general, these companies produce, import, process, store, distribute and transport vegetable, animal (including fish) and composite foodstuffs. 2,500 of these FBOs are industrial food producers, of which 600 are approved by the European Commission for exporting.

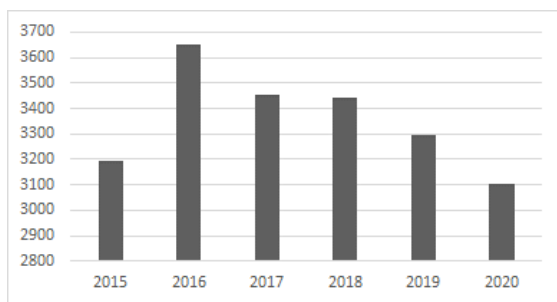


Figure 1: Number of industrial business-to-business and cold store FBOs inspected by NVWA per year 2015-2020.

Figure 2 shows the breakdown of industrial business-to-business and cold store FBOs that have been inspected between 2015-2020. It demonstrates that a total of 3,118 were certified to BRCGS, 4,083 certified to other GFSI programmes, and 12,941 not certified at all.

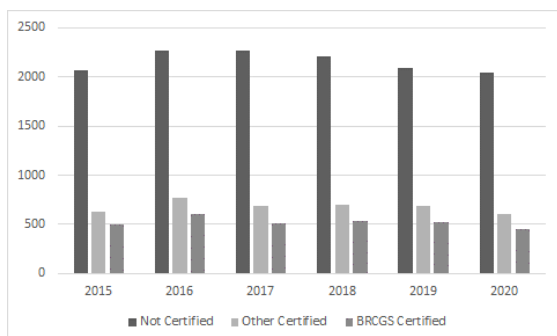


Figure 2: Breakdown of certification status of industrial business-to-business and cold store FBOs inspected per year 2015-2020.

8.1 The indicators

A set of indicators are derived which provide insight into the compliance of FBOs against food related regulations. Regulation (EC) 852/2014 and Regulation (EC) 853/2004 relate to hygiene of foodstuffs and food of animal origin. Regulation (EC) No 2073/2005 sets out the microbiological criteria for food. The regulations also cover packaging, by-products, storage and transportation.

The analysis uses NVWA monitoring data to summarise FBOs found to be in breach of these regulations to some degree, and therefore require remedial action and / or intervention. The paper will identify differences in compliance levels between FBOs that are certified to a recognised third-party GFSI management system, and FBOs that are not certified. Further analysis will be carried out to determine whether regulatory compliance and the levels of intervention differ between FBOs certified to BRCGS to those on other programmes. The results related to other programmes are aggregated and reported as one population.

For most indicators, the observations used are the percentages of FBOs that experienced an NVWA intervention.

8.2 FBOs with a form of intervention 2015-2020

Figure 3 sets out the percentage of industrial business-to-business and cold store FBOs found to be in breach of the food safety laws to some degree and therefore requiring remedial action.

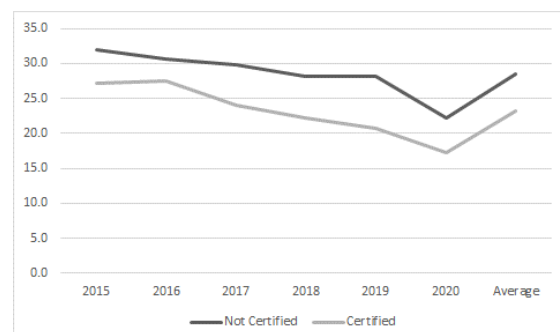


Figure 3: Percentage of certified and non-certified FBOs subject to a form of intervention.

On average across the period, 25% of all FBOs were subject to an intervention. This consisted of 28.5% of FBOs without certification, and

23.1% of FBOs with certification.

For each year of the period from 2015 to 2020, FBOs certified to a third-party standard were materially less likely to require an intervention than those that relied only on their own resources to meet the regulations.

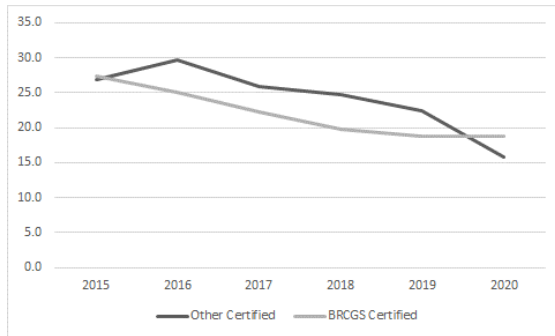


Figure 4: Percentage of FBOs with BRCGS certification compared to other certification programmes subject to a form of intervention.

Considering the data for certified FBOs only, in four of the six years, those with BRCGS certification were less likely to trigger an intervention than those holding other certifications. Taking the period as a whole, 22% of BRCGS certificated businesses experienced an incident compared to 24% on other certification programmes.

8.3 FBOs requiring a major intervention 2015-2020

An average of 6.9% of non-certified industrial business-to-business and cold store FBOs were subject to major interventions against all food-related regulations. This compares to an average of 5.2% for FBOs with a certified management system.

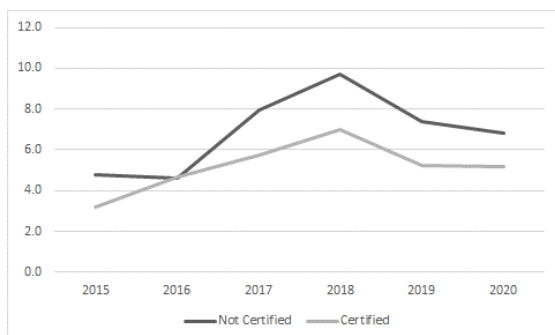


Figure 5: Percentage of certified and non-certified FBOs subject to a major intervention.

In each year of the period, while a similar share of certified businesses in general were

subject to major interventions, BRCGS certified FBOs were less likely to trigger major interventions in four of the six years. An average of 5.6% FBOs certified to other certification programmes were subject to a major intervention, compared to 4.7% of BRCGS certified organisations.

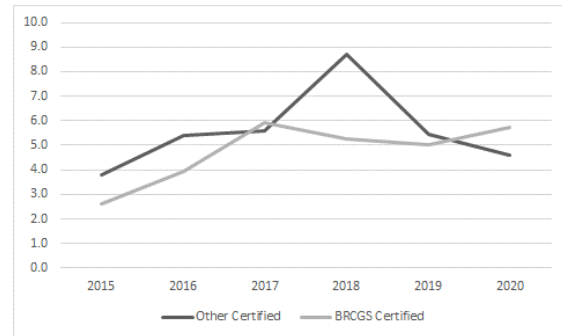


Figure 6: Percentage of FBOs with BRCGS certification compared to other certification programmes subject to a major intervention.

8.4 FBOs with an intervention on EC reg. 2073 (Micro-Biological Criteria)

For microbiological issues, a more serious health hazard, certification is associated with a substantially lower probability that an intervention will be required.

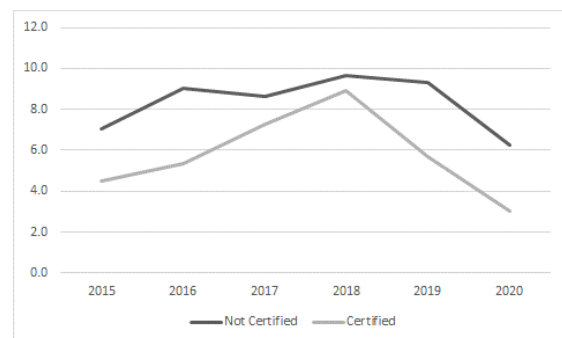


Figure 7: Percentage of certified and non-certified FBOs with an intervention on EC reg. 2073 (Micro-Biological Criteria)

Intervention was required for an average of 8.3% of industrial business-to-business and cold store FBOs. For certified businesses, this reduced to 5.8%.

Looking at certified FBOs only, interventions are lower for businesses with BRCGS certification, with an average of 5.2% fewer interventions than 6.4% for other certification programmes.

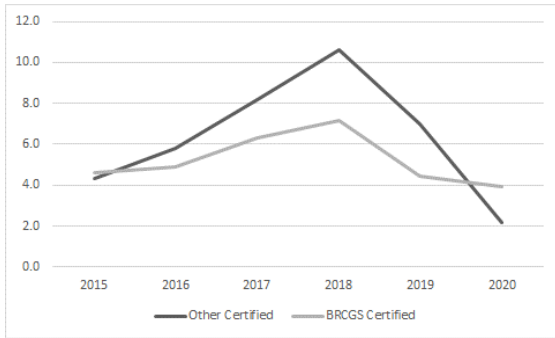


Figure 8: Percentage of FBOs with BRCGS certification compared to other certification programmes with an intervention on EC reg. 2073 (Micro-Biological Criteria)

8.5 FBOs with an intervention on EC reg. 852/853 (Food hygiene)

For EC regulations 852/853, concerned with food of animal origin, certified industrial business-to-business and cold store FBOs were substantially less likely to face an intervention in each reported year.

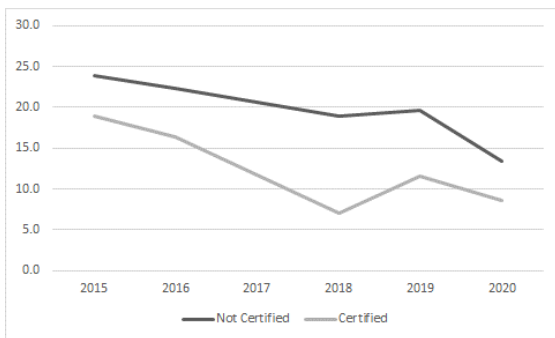


Figure 9: Percentage of certified and non-certified FBOs with an intervention on EC reg. 852/853 (Food hygiene)

19.8% of non-certified businesses were subject to a remedial intervention, compared to 13.1% of FBOs with certification.

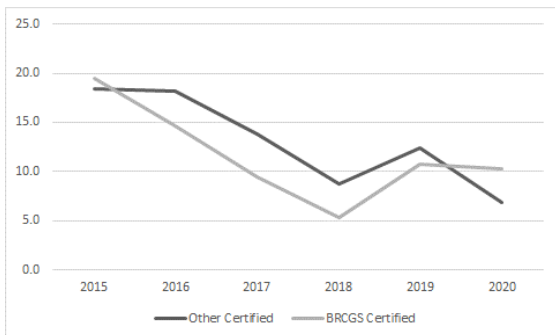


Figure 10: Percentage of FBOs with BRCGS certification compared to other certification-programmes with an intervention on EC reg. 852/853 (Food hygiene)

BRCGS certified businesses were less likely to

require an intervention in four of the six years between 2015-2020. On average, 13.1% of businesses with other certification programmes required an intervention compared to 11.7% on BRCGS's programme.

8.6 FBOs requiring a notification

The final indicator is of a different type, not directly involving remedial interventions by the regulator following systematic audits. Instead, the data relates to the regulator attending an FBO on the basis of some type of concern such as a complaint or other information giving rise to concern.

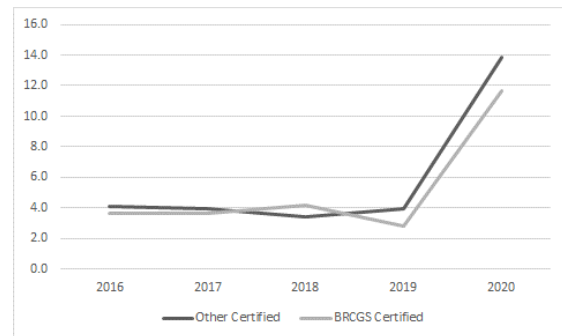


Figure 11: Percentage of BRCGS and other GFSI certified FBOs visited in relation to a notification, alert or complaint per year

Between 2016 and 2019 these affected around 2-4 % of FBOs, with smaller differences between firms certified to different standards (average of 5.9% for other schemes and 5.2% for BRCGS). The spike of incidents in 2020 to 10 to 12 % is linked to the Covid-19 pandemic and NVWA's policy to pay more attention to the follow-up of notifications in view of the inability to carry out on-site inspections.

9 Conclusions

Third-party food certification programmes and regulations are both based on HACCP, good manufacturing practice and quality management system principles and can act together in a complementary way to support the supply of healthy food to retailers and consumers.

Data from the NVWA's interventions under various aspects of the regulations indicates that industrial production FBOs with certifications to third party food safety standards are substantially less likely to experience an intervention than those without.

FBOs with BRCGS certification in place performed well and reported fewer non-compliances with the regulation than both non-certified organisations, as well as those operating on other certification programmes. The improved performance level of BRCGS certified FBOs may be attributed to a number of factors in the framework, management and operational delivery of the programme. The requirements of BRCGS's standards extend beyond those set by GFSI. The standards are rigorous and use prescriptive language which provide a clear framework for global application. A clear point of difference between BRCGS and other certification schemes is a compliance programme that provides control over the operational delivery of its certification programmes and consistent outcomes. This includes delivery partner performance management, management of auditor competence based on exams and training, analytics to benchmark performance, and a confidential reporting system to register issues.

The steady increase in the take up of certification schemes is based on their effectiveness in raising FBOs ability to provide safer and higher quality food to world markets. They also provide a valid basis for

businesses to be rewarded with true 'earned recognition' in the form of lighter touch regulatory oversight.

BRCGS has commissioned an economic research study to evaluate the global impact of BRCGS certification on consumer safety, when compared to other GFSI food certification programmes. It will explore the value that BRCGS provides to those that are certificated to its standards, and the supply chain assurance that it provides brands, retailers and major specifiers. The outcome of this work will feed into the larger research project, due to be published later in 2021, as it supports BRCGS's aim to provide brands and specifiers with the ability to strengthen their resilience and supply chain assurance. The provision of a service package with a portfolio of tools and technical content enables suppliers to continuously improve and position themselves as a best in class supplier, together with a compliance programme to ensure robust and consistent outcomes.

10 List of References

- ¹ Nederlandse Voedsel- en Warenautoriteit (The Netherlands Food and Consumer Product Safety Authority) <https://english.nvwa.nl/>
- ² <https://www.iso.org/iso-22000-food-safety-management.html>
- ³ <https://mygfsi.com/how-to-implement/recognition/>
- ⁴ Food Certification Market Global forecast to 2025, Markets and Markets
- ⁵ QSM Magazine, Deloitte
- ⁶ van der A, J.G. (2020). Annual meeting BRCGS-NVWA. PowerPoint presentation monitoring results. Available on request from the author
- ⁷ <https://www.government.nl/ministries/ministry-of-agriculture-nature-and-food-quality>
- ⁸ <https://www.government.nl/ministries/ministry-of-health-welfare-and-sport>
- ⁹ <https://www.nvwa.nl/documenten/nvwa/organisatie/jaarplannen/2019/verantwoordingsrapportage-2019>
- ¹⁰ <https://www.nao.org.uk/wp-content/uploads/2014/06/Using-alternatives-to-regulation-to-achieve-policy-objectives1.pdf>
- ¹¹ https://ec.europa.eu/food/safety/general_food_law_en
- ¹² EC 852/2014 concerning the authorisation of L-methionine as a feed additive for all animal species <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0852&from=PL>
- ¹³ EC 853/2004 of the European Parliament and of the Council laying down specific hygiene rules for food of animal origin <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32004R0853>
- ¹⁴ EC 2073/2005 on microbiological criteria for foodstuffs <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32005R2073>
- ¹⁵ RASFF – the Rapid Alert System for Food and Feed.
- ¹⁶ <http://www.fao.org/3/Y1579E/y1579e03.htm>
- ¹⁷ <https://www.nvwa.nl/onderwerpen/hygiencodes-haccp/rol-nvwa>
- ¹⁸ The Food Safety Statement <https://english.nvwa.nl/binaries/nvwa-en/documents/consumers/food/safety/documents/food-safety-statement/food-safety-statement.pdf>
- ¹⁹ <https://mygfsi.com/who-we-are/overview/>
- ²⁰ <https://www.theconsumergoodsforum.com/>

11 Annex

This annex sets out the data that is used in the report based on the data provided by the NVWA.

Number of industrial business-to-business and cold store FBOs inspected by NVWA per year 2015-2020, and breakdown by certification status

	Not Certified	Other Certified	BRCGS Certified	Total Businesses Inspected
2015	2071	628	497	3196
2016	2269	774	610	3653
2017	2264	683	505	3452
2018	2208	703	531	3442
2019	2091	687	520	3298
2020	2038	608	455	3101

Percentage of certified and non-certified FBOs subject to a form of intervention against all regulations

	Not Certified	Other Certified	BRCGS Certified
2015	31.9	26.9	27.4
2016	30.6	29.7	25.1
2017	29.9	25.8	22.2
2018	28.2	24.7	19.8
2019	28.2	22.5	18.8
2020	22.3	15.8	18.9
<i>Average</i>	28.5	24.2	22.0

Percentage of certified and non-certified FBOs subject to a major intervention

	Not Certified	Other Certified	BRCGS Certified
2015	4.8	3.8	2.6
2016	4.6	5.4	3.9
2017	8.0	5.6	5.9
2018	9.7	8.7	5.3
2019	7.4	5.4	5.0
2020	6.8	4.6	5.7
<i>Average</i>	6.9	5.6	4.7

Percentage of certified and non-certified FBOs with an intervention on EC reg. 2073 (Micro-Biological Criteria)

	Not Certified	Other Certified	BRCGS Certified
2015	7.0	4.3	4.6
2016	9.0	5.8	4.9
2017	8.6	8.2	6.3
2018	9.6	10.6	7.2
2019	9.3	7.0	4.4
2020	6.2	2.1	4.0
<i>Average</i>	8.3	6.4	5.2

Percentage of certified and non-certified FBOs with an intervention on EC reg. 852/853 (Food hygiene)

	Not Certified	Other Certified	BRCGS Certified
2015	23.9	18.4	19.5
2016	22.3	18.2	14.6
2017	20.6	13.8	9.5
2018	18.9	8.8	5.3
2019	19.6	12.4	10.8
2020	13.3	6.9	10.3
<i>Average</i>	19.8	13.1	11.7

Percentage of BRCGS and other certified FBOs visited in relation to a notification, alert or complaint per year

	Other Certified	BRCGS Certified
2016	4.1	3.6
2017	4.0	3.6
2018	3.4	4.2
2019	3.9	2.9
2020	13.9	11.7
<i>Average</i>	5.9	5.2