



ACTIVITY REPORT 2021 - EXECUTIVE SUMMARY

DIRECTORATE-GENERAL QUALITY AND SAFETY



FPS Economy, S.M.E.s, Self-employed and Energy

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Foreword

Dear reader,

The Directorate-General Quality and Safety of the FPS Economy supports companies in their innovation efforts by sharing its knowledge, so that high quality products are offered on the market. In addition, the Directorate-General guarantees the safety of consumers and users by monitoring the placing on the market or putting into service of products or the provision of services.

The regulatory framework is often imposed at European level or drawn up at national level. Nevertheless, the needs of stakeholders – companies or consumers/users – are always considered and consultation between stakeholders is part of our daily work.

This Annual Report presents the achievements of our employees in 2021. They have fully committed themselves in order to create a fair playing field on our internal market. Due to the limited availability of personal and budget resources, certain choices had to be made with regard to market surveillance. These choices are based on a risk assessment and prioritization. I invite you to browse through the results that may surprise you, but offer at the same time a glimpse of the many areas of activity of our Directorate General.

To find out more about our activities, please go to [our website](#) or subscribe to our [external newsletter](#).

[Enjoy your reading.](#)

Maureen Logghe

Director General

1. Our Mission Within the FPS Economy

The Directorate-General Quality and Safety has defined its mission on the basis of the mission and vision of the FPS Economy. In our daily activities, we continually ask ourselves: Are we assisting the companies and in particular the SMEs? Are we protecting consumers? Are our actions as efficient and effective as possible?

Companies shall comply with consumer protection regulations. Nevertheless, we are fully aware that there is no such thing as zero risk and that all regulatory and executive measures should be taken based on the principle of proportionality.

The mission of the Directorate-General can, therefore, be summarized as follows: **“Ensuring a competitive and balanced operation of the technical goods and services market, by regulating, authorizing, enforcing, investigating and coordinating”**.

1.1. Vision

The Directorate-General Quality and Safety strives to be a **reliable partner** for all its stakeholders. It communicates transparently with all parties involved. In its actions, it pays **specific attention to consumers and businesses, particularly SMEs**. Its initiatives must be supported by all parties involved and should be as simple and practical as possible.

Its employees excel in technical and scientific knowledge; their impartiality makes them the ideal point of reference for questions concerning the application of legislation.

We take great pride in carrying out our work professionally and with high quality. By continuously improving our quality system, we contribute to the excellence and consistency of the operation of our Directorate-General and the FPS.

1.2. Strategic Goals

Based on the mission and vision of the Directorate-General, the following six strategic objectives were set:

1. Ensuring a regulatory framework that takes into account the needs of stakeholders, reflects the current state of the art and allows for innovation.
2. Efficiently applying and monitoring the regulations in our jurisdiction. Focusing the available resources on those services and products and their suppliers that pose the greatest risk to consumers or to fair competition.
3. Strengthening the role of the Directorate-General as a key Belgian player within the European framework of technical regulations
4. Standing out by technical and scientific knowledge.
5. Increasing the confidence of the economic operators, users (including consumers) and organisations in the single market for goods and services through communication about our activities.
6. Implementing the policy within an organization that respects the values of the FPS with motivated employees.

2. Overview of our Activities and Statistics

2.1. Promoting a Sustainable and Competitive Economy

We support companies in their innovation efforts, so that they can deliver high-quality products and services. In order to do this, we use conformity assessments, knowledge transfer and an efficient and effective standardisation policy.

Accreditation of Conformity Assessment Bodies

BELAC, the Belgian national accreditation institution for conformity assessment bodies, continued its activities on a legal basis and in accordance with the recognized requirements and criteria at European and international level (Regulation EC 765/2008, standard ISO/IEC 17011:2017 and the related documents of EA, ILAC, IAF and FALB). BELAC was able to maintain its status as signatory of the international recognition agreements between the accreditation bodies of EA, ILAC, IAF and FALB. It also participated actively in the activities of these organizations.

In 2021, 598 accreditation certificates were issued. 29 new customers were registered with mainly activities within testing (34%) and inspection (38%). 27 new certificates were issued, of which 33% in testing and 37% in inspection activities.



A Better Framework for Standardisation Activities

The FPS Economy is the supervisory authority of the Bureau for Standardisation (NBN), to which it pays a grant for the performance of tasks of general interest. The supervision in the context of the agreement signed in 2018 between the NBN and the FPS Economy allows a better justification of the use of the allocated resources.

In addition, the FPS Economy also provided financial support for 21 pre-standardisation projects in order to contribute to the development of standards for which scientific knowledge had to be developed. Moreover, an in-depth reform of the system of standards antennas has been carried out, which raises awareness and informs SMEs in the field of standards and standardization so as to better justify the subsidies awarded and to meet the expectations of SMEs even better. Establishing the link between the amount of the grant and the activities of the previous year constitutes the second phase of the reform. It was partially implemented in 2021 for the three highest subsidy levels.

Status-Quo in the Number of Applications for Recognition as a Contractor

The number of **applications for recognition** as a contractor in 2021 was about the same as in 2020. It amounted to 3,600, which represents an average of 300 requests for advice per month. 3,501 applications were submitted by Belgian companies and 99 by foreign companies, mainly from neighboring countries. The **total number of accredited contractors** remained stable in 2021 at **10,500**.

Construction Products: Constant Consultation and Increasing Number of Inspections

The Building Regulations Department is the competent authority for implementing the European regulation (EU) 305/2011, which sets harmonised conditions for the marketing of construction products.

So far, the scope of some 450 harmonised standards has been studied. These standards are divided into 35 product categories for which 32 product lists have already been published on the [website](#) of the FPS Economy (you can find them under the question “How can I check the compatibility of the product with the scope of the harmonised standard?”). No product list has yet been published for the 3 other product categories, as the corresponding harmonized standards are still awaited.

The department is also in charge of the notification of notified bodies to the European Commission

In 2021, three bodies requested an extension of their scope, namely BCCA, WOOD.BE and WTCB. Six bodies (BE-CERT, CENTEXBEL, ISSeP, SGS CEBEC, ULg Liège-Labo d'essai au feu and UGent-Centre for Textile Science and Engineering) had their scope updated out as a result of the release of a new version of the standard or an extension of the period of the accreditation scope.

The Building Regulations Department also takes part in the market surveillance for construction products covered by a harmonised technical regulation. It carries out checks either on the basis of complaints or proactively. In 2021, 9 formal complaints were registered: 5 of these were closed following an exchange of information by mail and 4 are still being processed. The proactive market surveillance campaigns illustrate how regulations are followed in a certain sector. A total of 359 companies were visited.

Table 1. Proactive Market Surveillance Campaigns for Construction Products

Proactive checks	Number
Smoke detectors	40
Electric cables	35
Individual heating appliances	30
Load bearing structures	70
Floor coverings	80
Natural stone	50
EPDM membranes	35
Facades: insulation elements	50
Glass	1
Facades: cladding elements	55
Fire detection and fire alarm systems	3
Preparations and mixtures art 31 and 33 Reach	70
Gypsum products	65
Garage doors and gates	34
Steel tanks	8
Windows and external doors	109
Masonry	20
Geotextiles	7
Code 01: Precast normal/light-weight/autoclaved aerated concrete products	18
Reactive checks	5
Market analysis – Product codes (*)	10

(*) Market analysis for the purpose of developing lists of harmonised standards for each product area, to be published subsequently on the website of the FPS Economy

Source: FPS Economy.

In total:

- 359 companies were visited;
- 206.5 man-days were worked.

The Innovation Bonus, a Support for Innovative Processes

The innovation bonus gives companies the opportunity to reward their creative employees with a bonus that is completely exempt both from taxes and social security contributions. The FPS Economy approves applications from companies on the basis of the innovative nature of the projects. In 2021, the FPS Economy evaluated 1,753 applications within an average period of 5 working days, of which approximately 93% were approved - in 15% of the cases additional information was requested. In 2021, 320 companies benefited from the exemption of innovation bonuses.

Optimisation of the Monitoring of Sand Extraction in the North Sea

In 2021, the sand extraction sector extracted 3.7 million m³ of sand for the construction sector. 1.8 million m³ of sand was extracted for the maintenance of the beaches.

In 2021, the scientifically grounded reference level for sand extraction in the Belgian part of the North Sea was used for the first time as a basis for determining the maximum extraction depths for sand (compared to the previous applicable vertical limit of 5 meters). On the basis of the reference level, sub-zones within the control zones were demarcated, where this level was globally reached or exceeded. These areas were closed for extraction from 1 January 2021. The available sand stocks are updated and evaluated every year and the demarcated sub-zones are adjusted if necessary. More information is available on the FPS webpage about [Offshore Sand and Gravel Extraction](#).

In 2021, a project was launched to use, in addition to the automatic registration system, data from the Automatic Identification System (AIS) for the control and monitoring of sand extraction. This data includes real-time information about the location of ships. By developing specific tools to process this data, and developing a method to identify sand extraction from this data, sand extraction can be monitored in near-real time. The AIS data was used, among other things, to check whether the closed zones were well respected.

The Continental Shelf Service financed a high-resolution Kongsberg EM2040 multibeam echosounder, which was installed on the new research vessel Belgica. This equipment will be used for monitoring the effects of sand extraction on the marine environment and for innovative research projects (high resolution habitat mapping, quantification of particulate matter in the water column, etc.)

For more information, see the page about [the activities of the Continental Shelf service](#).

Electronic Trust Services

As far as electronic service providers are concerned, it is not just about monitoring, but above all about guiding companies through a labyrinth of complex rules and procedures. This is the role of the “Digital Trust” unit of the Metrology Regulations Service, which has been appointed as the monitoring body to supervise the trust services and digital service providers in Belgium, in order to guarantee the integrity and origin of the electronic data. The eIDAS regulation entered into force on 1 July 2016 and the Digital Trust cell has since made a huge effort to inform and support the parties involved in this area.

2.2. Guaranteeing Consumer Safety Through Surveillance In High-Risk Areas

Market surveillance campaigns: safety of personal protective equipment in the context of COVID, of children’s and leisure articles as the main focal points in 2021

In order to guarantee user safety while ensuring fair competition between economic operators, we conduct proactive inspection campaigns every year. In addition to our national campaigns, we also participated in European surveillance campaigns to monitor a broader market segment.

Safety of Products

In 2021, the safety of personal protective equipment in the context of COVID, of children's and leisure articles figured among the priorities. The Safety Division was active in the inspection campaigns for the following products:

- protective masks and gloves;
- visors;
- fireworks;
- bicycle helmets and high-visibility accessories;
- e-cigarettes;
- child use and care articles (reclined cradles and baby swings);
- toys.

In 2021, 962 case files related to product safety were handled. This number includes the 607 files opened due to a request for advice by the Customs services. The processed files were handled until April 30 by Product Safety under the Safety Control North (Coveno) and Safety Control South (Cosesu). From May 1, 2021, these were handled by the newly established product safety service "Prosabel".



Table 2. Number of Cases Handled in Relation to Product Safety in 2021

Regulation	Number of cases
General product safety	141
Pressure equipment	17
Products appearing to be other than they are	5
New lifts	6
Machines	115
Personal protective equipment	247
Pyrotechnic articles	1
Toys	90
Playground equipment	334
Aerosol dispensers	5
Other	1
Totaal	962

Source: FPS Economy

Table 3. Cases Related to Product Safety, Opened in 2021 at the Request of the Customs Services

Regulation	Number of customs case files
General product safety	79
Pressure equipment	2
Machines	96
Personal protective equipment	136
Toys	277
Other	17
Total	607

Source: FPS Economy.

The Central Contact Point for Products monitors dangerous products. Producers and distributors are required to immediately inform the Central Contact Point by mail or through the European Business Alert Gateway¹, if they have information on the dangerousness of products or services that they put on the market, or in case of an accident caused by such an unsafe product or service. The Central Contact Point also receives complaints from consumers/users regarding a dangerous product. It is also the Belgian contact point for the Rapid Alert System, the European system for the exchange of information on products presenting a serious risk.

The total number of notifications decreased slightly in 2021 compared to previous years (2,540 against 2567 in 2020 and 2,707 in 2019). The number of notifications created by the Belgian authorities exceeds 100 for the second consecutive year (compared to 49 in 2019 and less than 20 in previous years). The number of complaints and voluntary measures reported to the Central Contact

¹ The online platform where producers can notify to the authorities of all member states the voluntary measures they have taken regarding a dangerous product.

Point is rising again after a year 2020 that was marked by a sharp decline (315 voluntary measures in 2021 compared to 291 in 2020 and 380 in 2019).

Table 4. Notifications treated by the Central Contact Point in 2021

		Safety	Mobility	Energy	Public health	Explosives	Construction products	Total	Belgian	Customs
RAPEX	Article 12*	620	507	205	493	49	8	1.882	105	645
	Article 11*	48	16	47	18	0	0	129	0	78
	For information*	53	45	10	63	0	0	171	2	64
Complaints		35	1	4	3	0	0	43		0
Recalls		123	119	49	24	0	0	315		0
Total		879	688	315	601	49	8	2.540	107	787
Total number of notifications										
Total number of RAPEX								2.182		

* Art. 11 and art. 12 of the General Product Safety Directive (2001/95/EC): art. 12: serious risk, art. 11: non-serious risk, for information: no risk identified but lack of information.

Source: FPS Economy.

Supervision of the Services and Installations

The safety of services and installations also remains a priority. In 2021 this was especially the case for the trampoline parks and events with inflatable structures.

The following routine checks were performed:

- 441 playgrounds;
- 12 amusement parks;
- 21 fairground attractions;
- 26 active and extreme leisure activities.

In addition, 45 complaints and reports were investigated. The complaints related, among other things, to the safety of playgrounds, active leisure activities and elevators. Finally, 29 reports of accidents and incidents were investigated.

In 2021, checks on the safety of lifts were carried out together with the FPS Employment, Labour and Social Dialogue (WASO). In 2021, the External services for technical inspections (EDTC) provided the Directorate-General for Quality and Safety on a monthly basis with a list of inspected elevators that showed serious technical deficiencies. These lifts were then distributed between the FPS WASO and the FPS Economy according to their competences. Based on our control plan, the Directorate General subsequently made a random selection from the list of lifts allocated to the FPS Economy. These lifts were then checked by the field services of the Directorate-General.

Explosives and Gases: Safe Use and Transport

Explosives

The production, storage, sale, transport and use of explosives are legally regulated and monitored. In 2020, the Safety Division issued 480 national and 65 European permits for the transport of explosives and carried out technical inspections of the vehicles transporting these products.

88 technical opinions were given to local authorities that issued or refused permits to explosives manufacturers and economic operators requesting permission to store explosives, ammunition and fireworks (storage sites A, B, C, D, E, F, G), including 15 opinions for folkloric marches.

For the storage permits appealed against, 3 proceedings were initiated in 2021. 5 proceedings were concluded with the publication of a Royal Decree. Three proceedings are still pending.

Table 5. Activities and Inspections in the Field of Explosives for Civil Use and Pyrotechnic Articles in 2021

Description	Number
Complaints Investigations of accidents, incidents	8
Commissioning inspections (verification art. 27 before commissioning)	16
Routine inspections of storage sites for fireworks	321
Routine inspections of storage sites for explosives	161
Inspections of ADR vehicles	296
Inspections of the setting off of fireworks	2
Inspections of blasting works in quarries	61
Inspections of blasting works other than in quarries (open cast mines etc.)	10
Seveso inspections	9
Shipping-related cases	6
Exams for ADR drivers (mainly of the Ministry of Defense)	130
Exams for approved co-drivers	30
Exams for authorized blasters (quarries)	24
Permits, derogations	4
Product approval	4
Transport	13

Source: FPS Economy.

Party Fireworks

As part of the control campaign on party fireworks (2021 results), the FPS Economy took samples of CE-marked party fireworks of category F2 on the Belgian market for inspection purposes. This concerned articles that were stored in wholesale depots in October 2021. A total of 20 types of articles were sampled. They were tested by an accredited laboratory.

In the past year, 38 checks of internet sales were carried out and 14 findings were made of illegal internet sales. The checks were mainly aimed at sales on social networks and sales sites between private individuals, such as 2ememain.be, Marketplace, E-Bay, with the aim of combating illegal sales. Illegal sales will be reported to the competent public prosecutor's offices.

During the month of December, a total of 178 inspections of fireworks storage sites were carried out. 21 storage sites, i.e. about 12%, were not in order. Of these checks, 54 were carried out in collaboration with Prosabel. The three main types of identified infringements were: unlicensed sales, exceeding storage capacity, and sale of products with non-compliant markings.

Nine seizures were made for a total of approximately 303 kg of NEQ (Net Explosive Quantity). In these cases official reports were drawn up on behalf of the competent public prosecutor's offices. In addition, our services were called upon to take over several seizures carried out by the police. For all these seizures, the goods were repackaged, inventoried and transferred to designated storage sites.

Gas

The Directorate-General Quality and Safety is responsible for public safety in connection with underground gas storage, gas transport through pipelines and gas distribution.

Table 6. Checks of Underground Gas Storage, Gas Transport and Gas Distribution in 2020

Type of check	Number
Underground gas storage	2
Gas transport through pipelines	77
Gas distribution through pipelines	332
Works in proximity to pipelines	252
Total	663

Source: FPS Economy.

Table 7. Investigation of Gas Incidents Involving Underground Gas Storage, Gas Transport and Gas Distribution

Type	Number
Underground gas storage	0
Gas transport through pipelines	3
Gas distribution through pipelines	64
Total	67

Source FPS Economy.

Table 8. Investigation of Complaints in Relation to Underground Gas Storage, Gas Transport and Gas Distribution

Soort	Number
Underground gas storage	0
Gas transport through pipelines	42
Gas distribution through pipelines	1
Total	43

Source: FPS Economy.

Routine Checks and Inspection Campaigns carried out by the Metrology Division

The Metrology Division is in charge of the supervision of measuring instruments and conditioned products (such as prepackages). In 2016, the inspection services of the Metrology Division obtained the ISO/IEC 17020 accreditation as an inspection body for the inspection of automatic and non-automatic weighing instruments, in 2017 for the inspections of fuel pumps and in 2019 for checks of the mass of prepackages.

In 2021, these services inspected 6,013 non-automatic weighing instruments (scales), 1,401 automatic weighing instruments and 4,547 fuel pumps (petrol/diesel/gas oil). A limited number of instruments were taken out of service. The checks carried out in the context of specific control campaigns are not included in these figures.

Table 9. Global Overview of the Checks of Measuring Instruments Performed by the Units Inspection Metrology North and Inspection Metrology South

	Type of check						Result of the check					
	Administrative checks	Technical check initiated by the Metrology	Technical check requested by the client	Initial verification	Periodical verification		Grand total	Conform	Rejected	Decision referred	Warning	Out of court settlement
Weights M1	0	0	0	0	0		0	0	0	0	0	0
Masses	0	0	0	6	698		704	704	0	0	0	0
Water meters	0	0	309	6.641	262		7.212	6.878	334	0	0	0
Gas meters	0	0	0	0	0		0	0	0	0	0	0
Automatic gauges	20	0	0	0	0		20	20	0	0	0	0
Fixed storage tanks	78	0	0	174	232		484	484	0	0	0	0
Pumps for CNG	18	0	0	34	283		335	325	3	0	7	0
Pumps for LPG	1	0	0	0	0		1	1	0	0	0	0
Two-stroke pumps	11	0	0	0	1		12	12	0	0	0	0

	Type of check						Result of the check					
	Administrative checks	Technical check initiated by the Metrology	Technical check requested by the client	Initial verification	Periodical verification		Grand total	Conform	Rejected	Decision referred	Warning	Out of court settlement
Fuel pumps (gasoline/diesel/ gas oil)	4.457	90	0	0	0		4.547	4.225	153	13	46	110
Measuring equipment on tank trucks	15	0	0	7	19		41	40	1	0	0	0
Dipstick volume measurement systems on tank trucks	0	0	0	25	230		255	255	0	0	0	0
Additive pumps on tank trucks	6	4	0	1	0		11	11	0	0	0	0
Loading stations for liquids	0	12	0	0	0		12	12	0	0	0	0
Non-automatic weighing instruments	4.820	1.193	0	0	0		6.013	4.985	36	14	925	53
Automatic weighing instruments	681	44	0	0	676		1.401	1.295	23	15	68	0
Three-dimensional measuring instruments	0	0	0	0	25		25	22	2	0	1	0
Grand total	10.107	1.343	309	6.888	2.426		21.073	19.269	552	42	1.047	163

Source: FPS Economy.

Table 10. Checks of Measuring Instruments and Conditioned Products, excluding control campaigns

Type	Number of checks
Weights and masses	704
Water meters	7,212
Gas meters	0
Automatic gauges	20
Fixed-storage tanks	484
CNG Pumps	335
LPG Pumps	1
Two-stroke pumps	12
Fuel pumps (gasoline/diesel/gas oil)	4,547
Measuring equipment and additive pumps on tank trucks	52
Gauges on tanker trucks	255
Loading stations for liquids	12
Non-automatic weighing instruments	6,013
Automatic weighing instruments	1,401
Three-dimensional measuring instruments	25
Taximeters	0
Batches of conditioned products	1,081

Source: FPS Economy.

As part of the 2021 control plan, the inspection services carried out **five specific inspection campaigns** on measuring instruments. The results can be found below per type of measuring instrument:

1. Truck scales;
2. Non-automatic weighing instruments (balance scales) used in retail in major cities;
3. Pharmaceutical scales;
4. Measuring systems for fuels on tank trucks;
5. LPG pumps in service stations;
6. Bread weight;
7. Prepackages of individually wrapped candies, cookies and chocolate.



2.3. Setting Up a Knowledge Centre and a “Fair Playing Field”

Developing a Knowledge Centre for Metrology

In the context of the multidisciplinary scientific R&D platform, emphasis was placed on the participation of the National Standards and Continental Shelf services in the activities of the EMN (European Metrology Network) dedicated to the climate and oceans. Scientists from both services work together in defining the European research strategy to ensure confidence in the quality of environmental measurements.

In 2021, the National Standards and Continental Shelf services participated as experts in the EMN workshops to identify metrology needs, making it possible to set the future research agenda in this area.

In the context of the digital transition, metrology must deploy new instruments to guarantee the quality and traceability of measurements in Belgium in collaboration with other European countries. We actively participated in working groups and workshops on the harmonized digital strategy for metrology, organized by Euramet in 2021

The two priority axes are:

- harmonization and implementation of digital calibration certificates in close cooperation with stakeholders in the field of metrology, laboratories and industries;
- contribution to the overall European effort for open data in science and research.

Calibration Activities

- The National Standards Service offered calibrations in the following domains:
- nanometrology;
- dimensional metrology;
- electric measurements;
- masses;
- volumes;
- thermometry;
- time and frequencies.

The number of calibration certificates has increased again compared to last year. The increase is almost entirely due to the stabilisation of the COVID-19 situation.

The National Standards Service is actively involved in the European EMPIR program (European Metrology Program for Innovation and Research). The project is part of the European Horizon 2020 project. The aim is innovative metrology research and development in a coordinated collaboration between national metrology institutes, the academic community and the industry. The project coordinates research projects to address major challenges while simultaneously supporting and developing the SI system for units of measurement.

On an international level, the National Standards Department works together with national metrology institutes and other organizations to realize the international time. This is done through our participation in the “key comparison in time, CCTF-K001.UTC”, the results of which are published monthly, and in the realization of UTCr, the results of which are published weekly. Since November 2016, our realization of the UTC (Coordinated Universal Time), the UTC(SMD), is controlled by our hydrogen clock of the VREMYA type. In 2021, a new hydrogen clock was purchased from the company T4Science in Switzerland. The clock will be commissioned in early 2022 and will become the new reference clock for the realization of UTC(SMD).

In the context of the service to the public, the National Standards Department started a project at the beginning of 2019 for the distribution of the reference time scale UTC (SMD). The realization of the web clock on our internet website, together with the realization of the NTP servers, was completed in 2021 .

To obtain and maintain their ISO 17025 accreditation, testing and calibration laboratories must demonstrate and monitor their performance against the results of other laboratories, when available and appropriate. A tool such as proficiency testing (PT), which makes it possible to obtain information about the quality of measurements and to compare/check measurements carried out by different laboratories, is therefore essential to fulfill the missions of the FPS Economy. However, the current offer on the Belgian PT market does not meet the needs of the testing laboratories and makes it necessary to carry out controls of the Belgian market.

Therefore, in 2021, the National Standards Service launched a project to develop the organization of PT and extend the services available to meet the needs of its stakeholders (accredited testing laboratories, in particular laboratories with a legal obligation through delegation / recognized by MetReg; BELAB). The pilot project is being developed by the thermometry department and consists of the organization of an inter-laboratory test for the characterization of climate chambers. The inter-comparison is planned for the first half of 2022.

Table 11. Calibrations Performed Over the Past Years

	2017	2018	2019	2020	2021
Number of calibration certificates delivered	274	293	394	214	279
Number of calibrated objects	1,205	891	1,529	1,205	1,598
Number of calibration results	2,411	1,720	2,788	2,349	2,705

Source: FPS Economy.

The National Standards Service manages and coordinates the Belmet network, i.e. the network of metrology laboratories that establish the primary measurement standards and provide traceability for the measurement units for which the National Standards Service does not have the necessary infrastructure. The laboratories must have ISO/IEC 17025 accreditation for those capabilities and meet additional requirements. Accreditations are valid for 3 years and are renewable.

In 2021, specialists from this service carried out about 10 technical audits for BELAC.

In 2021, just like in 2020, as part of our ISO/IEC 17025 accreditation, we put a lot of effort into meeting the different requirements of the standard (risk and opportunity analysis, internal audit program, new procedure for the rounding off of measurement results and uncertainties, etc.).

Our cleanroom is operational.

We continued the automation of the equipment in the Time and Frequency lab so that our Belgian legal time, UTC (SMD), can be ensured without permanent intervention in the lab itself. The necessary legal and technical initiatives have been taken to make the UTC(SMD) reference time available in Belgium.

The laboratories are equipped with connected sensors, allowing the continuous monitoring of temperature, pressure and humidity of each of the rooms.

Calibrations of thermometers, temperature references and primary DC voltage standards with the Josephson standard are offered in calibration campaigns instead of being offered continuously to optimize workflow and cost.

European and International Cooperation

In order to perform its task properly, the National Standards Service must maintain its primary references with a very high level of precision and quality and use them for the benefit of economic actors. This is achieved through the calibration of the devices and secondary standards and internationally through the recognition of and confidence in its references and measurement results. In order to offer companies evolving in a competitive world economy the opportunity to benefit from the realization and diffusion of the latest metrological innovations, there is intensive international cooperation and coordination. The European organization EURAMET and the Bureau International des Poids et Mesures ensure the mutual international recognition of national standards through comparative measurements of national standards and coordinate the metrological research and development efforts of the Member States in order to optimize and improve the investment in resources and staff.

The M4D (Metrology for Digital Transformation) working group that Dana Vlad supports has been very active in 2021 raising awareness among members of the EURAMET community about the concept of digital transformation of metrology, including preparing the scope of the call for the targeted Digital Transformation programme. A number of workshops were organised.

In 2021 we participated in several European comparative measurements and the results of the participation in previous comparative measurements were announced. These results are all good and confirm the professional and correct operation of the service.

The Time and Frequency section participates permanently in the comparative measurement of atomic clocks, with daily, weekly and monthly reporting. In this way, our reference clocks contribute to the global stability of the international UTC time.

In 2021, the National Standards Service participated in about ten EURAMET technical committees – including the committee dedicated to interdisciplinary aspects and chaired by the service – in the EURAMET General Assembly and the EMPIR meetings.

In addition, in the context of the specializations within the service, we regularly participated in workshops, conferences and meetings

Nanometrology

The laboratory of nanometrology continues its research and development work in the field of instruments and methods for the metrological characterization of nanomaterials. In 2021, the laboratory participated in 3 research projects within the framework of the European metrology research program **EMPIR**.

For example, it participated in the **nPSize** project: “Improved traceability chain of nanoparticle size measurements (nPSize)”. The aim of the project is to improve the traceability chain, comparability and compatibility for nanoparticle size measurement in order to support standardization. In particular, the team contributes to improving the traceability chain for measuring nanoparticles with AFM microscopy. In this project, the laboratory mainly works on the measurement uncertainty



budget of AFM microscopy, the development of an AFM sensor reconstruction model, the development of protocols for the preparation and characterization of newly synthesized samples of spherical and non-spherical nanoparticles. and potential candidates as reference materials. These nanoparticle materials were the subject of an inter-comparison of measurements with different instruments. During this project, the team also participated in and contributed to the preparation of an inter-comparison of nanoparticle measurements under VAMAS (Versailles Project on Advanced Materials and Standardization), which concerned the measurement of nanoparticle size and shape with AFM microscopy, as well as the reconstruction of the geometry of the AFM sensor.

The laboratory also participated in the **EMPIRE MUE** project: “Examples of Assessing Measurement Uncertainty”. The aim of this project is to provide a complete set of working examples illustrating the assessment of measurement uncertainty to support standardization and to provide end-user manuals for assessing measurement uncertainties, using the “learning by example” method. In this project, the team integrated work to develop a new method for calculating uncertainty of measurements with AFM microscopy. This work was developed under the ISO/IEC 17025 accreditation of the Nanometrology Laboratory for the calibration of spherical nanoparticles and standard steps by Atomic Force Microscopy. Our examples were presented at a meeting of the ISO/TC 229 committee (nanotechnologies) and attracted a great deal of interest, especially in the field of image metrology.

The laboratory is working on measuring the size and concentration of nanoparticles in a liquid and complex medium (gel, cream, etc.). To do this, the lab combined a size-separation technique for nanoparticles in a liquid medium, called Field Flow Fractionation (FFF), with measuring instruments that work with light scattering, Multi-Angle Light Scattering (MALS) and Dynamic Light Scattering (DLS). The lab continued to develop methodologies for comparing measurement techniques for nanoparticle size determination using light scattering and AFM microscopy. The lab also worked on developing a measurement uncertainty budget for the MALS measurement instrument.

This work will be continued under the **EMPIR POLight** project “Pushing boundaries of nanometrology by light” launched at the end of 2021. An improvement of measurement models will also be developed there with the aim of increasing performance: better traceability to SI units and smaller and better managed uncertainties. The laboratory has also collaborated with KULeuven for the characterization and separation of carbon soot (air pollutants) with FFF-MALS-DLS and other instruments, for use in a biological matrix.

The nanometrology laboratory is also participating in a ring test on the measurement of surface roughness with atomic force microscopy within the framework of EURAMET’s TC Length technical committee.

Finally, the lab’s activities have been the subject of several scientific publications and have been presented at various conferences, via posters and/or oral presentations.

3. New Regulations

Few new regulations were adopted in 2021.

Nevertheless, in the field of product safety, we can point to the adjustments of the specific limit values for the chemicals used in certain toys, the mandatory affixing of a warning message on plastic face masks resting on the nose or chin (Covid 19) and the extension of the ban on small individual spits for cooking with open flame †

It should also be noted that the reform of the Test Bench for Firearms continued with the amendment of the Test Bench Act, the appointment of a Government Commissioner and the preparation of two decrees on the operation of the Test Bench and on the Bank's staff.

However, other important regulatory reforms are in the pipeline.

The draft reform of the regulations governing the storage, manufacture, transport, delivery and use of explosives has been the subject of several consultations.

The adaptations with regard to the modernization of elevators have been discussed between the different stakeholders and it is expected that the regulations will be amended shortly.

At the level of the European Council, major reforms of European regulations related to machine safety and general product safety are being negotiated.

Finally, construction product regulations are currently under review at both national and European level.

Metrology

Royal Decree of 6 May establishing the legal units of measurement and the standards and rules for the reproduction of these units and amending Article VIII.35 of the Code of Economic Law.

Standardisation

Royal Decree of 2 February 2021 on the publication of standards and their possible ratification, amending the Royal Decree of 25 October 2004 on the implementation modalities of standardization programs as well as the ratification or registration of standards

Innovation Bonus – Extension 2021-2022

Act of 12 December 2021 implementing the social agreement in the context of collective bargaining for the period 2021-2022

Sand – North Sea

Royal Decree of 29 September 2021 amending the Royal Decree of 12 August 2000 establishing the Advisory Commission charged with coordination between the administrations involved in the management of the exploration and exploitation of the continental shelf and of the territorial sea and determining its operating modalities and costs

Products

Royal Decree of 2 February 2021 amending the Royal Decree of 19 January 2011 on the safety of toys with regard to aluminum and formaldehyde

Ministerial Decree amending the Ministerial Decree of 11 August 2020 banning the marketing of small individual spits for cooking with open flame

4. Our Quality Policy to Serve you Better

The quality policy within an organisation can only be effective if the management fully supports it and commits the necessary resources to it.

The Directorate-General Quality and Safety focuses on four quality standards: **ISO 9001:2015, ISO/IEC 17025:2017, ISO/IEC 17020:2012 and ISO/IEC 17011:2017**. Their implementation is not a goal in itself but rather a means of demonstrating that the output of our Directorate-General fully supports its mission.

All our processes are designed to be as simple as possible and optimised as much as possible. The objectives are defined in the management plan and operational plan of the Director-General and are translated into objectives by division and department.

Every year, before mid-February, a management review takes place at the highest level and subsequently at service level. During this review, a critical evaluation of past activities, possible improvements and future activities takes place. The long-term aim is to achieve an integrated management system that will not only serve as an example for other Directorates-General of the FPS but also for other public organisations. It is the only way we can demonstrate our added value for the companies and consumers. All of this should be combined with professionalism and with the values of our FPS, namely, "At your service", "Respect", "Stand together", "Excellence" and "Sustainability".

Internal audits

Internal audits are undertaken to check the proper functioning of the quality system and to improve its effectiveness. These internal audits are imposed by the four standards (ISO 9001, 17020, 17025 et 14001) and play a major part in internal control (deontology, internal audit and budget control).

Every year, the activities of all of our services are subject to an internal audit. At each audit, several activities are thoroughly evaluated, so that fundamental improvements may be implemented on a sound basis. In order to step up the frequency of these internal audits and their impartiality, the Directorate-General has been turning to external auditors since 2015 and has organised training sessions for interested staff members.

Due to the Covid crisis, only 9 days of internal audits against the different standards were carried out in 2021. In addition, external audits took place for the different standards, confirming or even extending our certification and accreditation.

In 2021, the internal and external audits resulted in 98 findings: 45 non-conformities, 19 of which had not yet been resolved by 31 December 2021. The necessary steps are taken to resolve them as quickly as possible.

5. Contact Details and Useful Information

5.1. Contact Details and Useful Addresses

Belspoc

Areas of competence: Belspoc is the unique Belgian contact point created in the context of the information exchange systems set up by European regulations to facilitate the functioning of the internal market. It is involved in the exchange of information related to dangerous products.

Tel. : 02 277 53 36 – E-mail : belspoc@economie.fgov.be

Safety Regulations Unit

Areas of competence: general safety regulations for products and services listed in the Code of Economic Law, Book IX, Central Contact Point for Products, RAPEX, explosives and fireworks, etc.

Tel.: 02 277 76 99 – E-mail: ensure@economie.fgov.be

Construction Products

Areas of competence: monitoring the market for construction products and the notified bodies in the construction sector, ensuring the follow-up and drafting of the technical regulations, providing the Belgian position at international level, etc.

E-mail: bocova@economie.fgov.be

Recognition of Contractors

Areas of competence: applying the regulations regarding the recognition of contractors and monitoring their application (financial investigation, bankruptcy screening, etc.), informing the sector, etc.

E-mail: erkenning.aannemers@economie.fgov.be

BELAC – Belgian Accreditation Body

Areas of competence: accrediting all types of conformity assessment bodies, developing and maintaining the accreditation tool for all technological sectors requesting it, with special attention to the support of innovation, ensuring that bodies providing services such as tests, calibrations, inspections and certifications have the competence required for their activities.

Tel.: 02 277 54 34 – E-mail: belac@economie.fgov.be

Standardisation and Competitiveness

Areas of competence: developing and supporting the activities in the field of standardisation and protection of intellectual property developed by the collective centres, the Standards Antennas and the patent cells for the benefit of companies, awarding the innovation bonus, managing the European systems for notification of technical regulations and notification of conformity assessment bodies, etc. This service also plays a role in exchanges between foreign producers and Belgian authorities via the Product Contact Point

Tel.: 02 277 82 20 – E-mail: norcom@economie.fgov.be

Continental Shelf Service

Areas of competence: responsible for sand and gravel extraction in the Belgian part of the North Sea. Its main tasks are granting concession permits, managing operating licenses, monitoring sand extraction, mapping the areas, etc.

Tel.: 02 277 72 77 E-Mail: copco@economie.fgov.be

Metrology – National Standards

Areas of competence: national measurement standards, metrology, European research programs in the field of metrology (EMPIR and Euramet), nanometrology, inspections, etc.

National Standards: metrology.scientific@economie.fgov.be

Metrology regulations: metrology.regulation@economie.fgov.be

Electronic Certification

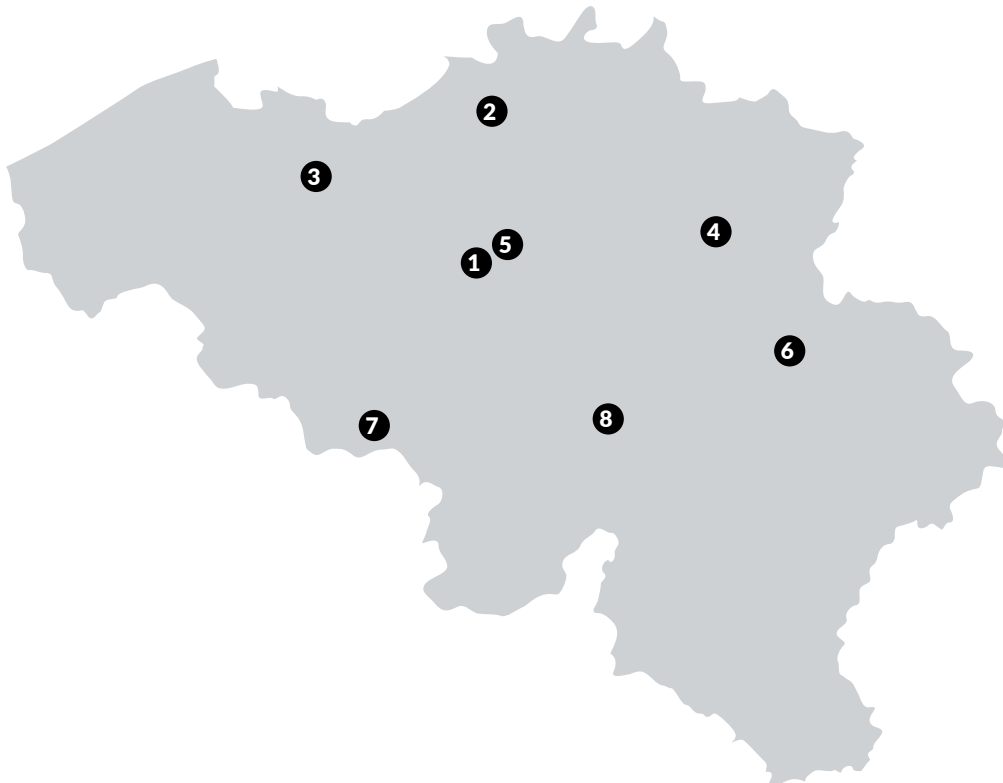
Areas of competence: supervising the providers of electronic trust services in order to strengthen the confidence of the users of such services.

E-mail: be.sign@economie.fgov.be

5.2. Our offices

The Directorate-General Quality and Safety has **eight offices**:

- ❶ [Brussels \(central administration\)](#)
North Gate III
Koning Albert II-laan 16
1000 Brussel
- ❷ [Antwerp](#)
AMCA
Entrepotplaats 1 bus 5
2000 Antwerpen
- ❸ [Ghent](#)
Zuiderpoort Office Park
Gaston Crommenlaan 6
9050 Gent
- ❹ [Hasselt](#)
AC Verwilghen
Voorstraat 43
3500 Hasselt
- ❺ [Haren](#)
Haachtsesteenweg 1795
1130 Brussel
- ❻ [Liège](#)
Saint Jean
Boulevard de la Sauvenière 73-75
4000 Liège
- ❼ [Mons](#)
Avenue Mélina Mercouri, bloc 10
7000 Mons
- ❽ [Namur \(Belgrade\)](#)
Business Center
Route de Louvain-la-Neuve 4 (bus 8, 9, 10)
5001 Belgrade



5.3. Follow the FPS Economy and Our Action on Social Media

Like our Facebook page and get advice on consumer rights, product safety and the activities of our FPS. Follow us on Twitter! You will get information about consumer rights, advice for companies and the self-employed.



<https://www.facebook.com/SPFEco>



<https://twitter.com/spfeconomie>



<https://linkedin.com/company/fod-economie>

5.4. Follow the Actions of the Continental Shelf Service on Facebook

Through its Facebook page, the service keeps you informed about new research, its results and the scientific work of the FPS Economy.



<https://www.facebook.com/Service-Plateau-Continental-319506274818192/>

5.5. Our New Publications in 2021

Activity Report 2021 (Executive summary) of the Directorate-General Quality and Safety

Read the [Executive summary](#)

The **Executive summary** is also available in French, [Dutch and German](#).

[Ne gâchez pas votre fête - Utilisez les artifices en toute sécurité !](#)

[Campagne de contrôle Artifices - Résultats 2020-2021](#)

[Campagne de contrôle Jouets pour enfants de moins de 3 ans 2020-2021](#)

[Campagne européenne de contrôle CASP2020 Lits cododos, gigoteuses et nids d'ange - Résultats belges 2020-2021](#)

[Rapport campagne de contrôle denrées alimentaires pré-emballées conditionnées en poids variable](#)

[Campagne de contrôle dans le secteur des réservoirs en acier - Rapport des contrôles 2021](#)

[Propriétaire, prenez garde à la sécurité de votre ascenseur !](#)

[Campagne européenne de contrôle CASP2020 Lits cododos, gigoteuses et nids d'ange - Résultats belges 2020-2021](#)

[Campagne de contrôle siphons culinaires - Résultats 2018-2020](#)

[Directive Machines \(2006/42/CE\) - Brochure informative](#)

[La prime d'innovation](#)

[Propriétaire, prenez garde à la sécurité de votre ascenseur !](#)

[Campagne de contrôle - Sécurité des vêtements d'enfants - Résultats 2020](#)

[Exploitation de sable et de gravier dans la partie belge de la mer du Nord](#)

[Exploitation de sable et de gravier dans la partie belge de la mer du Nord – la réglementation”](#)

[Programme national de surveillance du marché de la Belgique pour 2021](#)

[Campagne de contrôle dans le secteur des réservoirs en acier 2021](#)



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