**Almost there!**

**The road to certification**

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**Abstract**

*In 2017 Statistics Netherlands was certified for ISO 27001 (an international standard for information security). In 2017 all statistical processes were certified ‘privacy proof’. In the second half of 2018 we will be certified for ISO 9001 (an international standard for quality management). I am confident we will succeed.*

*The main reason for certification was an external proof to show our commitment with quality of our processes and products, privacy and security. Trust in the way we work can be achieved when experts from outside the office and from outside the statistical system give the public and yourselves assurance.*

*By certification for ISO 27001 and privacy we are also ready for the ESS IT Security framework and the General Data Protection Regulation.*

**Keywords:** Quality management, ISO 9001, certification, ISO 27001, privacy.

**1. Our commitment to quality**

The mission of Statistics Netherlands is to publish reliable and coherent statistical information that meets the needs of society. In view of this mission, the quality of the statistical information must be guaranteed and we must be able to be accountable and transparent about it. The confidence of our users in information with the brand ‘Statistics Netherlands’ is very high. Naturally, we want to nourish this trust.

For this reason, Statistics Netherlands has introduced a system of quality assurance based on the highest international criteria. Statistics Netherlands aims to be one the best performing statistical institutes in an international perspective in terms of quality, without using complex and detailed quality systems.

Quality management at Statistics Netherlands focuses on guiding and informing statisticians. It is based on two principles:

1. Everyone is responsible for their own quality,
2. Employees of Statistics Netherlands are reliable professionals.

2. Strategic agenda Statistics Netherlands

The ambitions of Statistics Netherlands are translated into internal goals by means of the strategic agenda[[1]](#footnote-1). An important objective is to link up better with social questions so that Statistics Netherlands data are used even more in decision making, certainly also at regional level. The agenda focuses on active relationship management to broaden and increase the use of statistics and the services that Statistics Netherlands can offer. Meeting the societal demands requires safe, powerful and flexible IT and efficient and high-quality processes.

The strategic agenda is not a static document and is monitored continuously.

*2.1. External proof*

One of the elements of the strategic agenda is ‘safeguard the quality’. At this moment the sub elements of ‘Quality’ are:

* Reduce measurement errors, adjustments and revisions, and improve methodology;
* Ensure information security, e.g. by privacy and ISO 27001 certification;
* Enhance process quality, e.g. by ISO 9001 certification;
* Reduce risks associated with the use of spreadsheets and manual work;
* Clarify the accuracy of figures.

We want to do things right, the people have to trust us. Therefore, we started with external certification. ‘External’ because we want to deliver an independent proof to the public.

3. What will be certified?



ISO 9001, ISO 27001 and privacy certification have a lot in common. The most important shared elements are:

* It is all about management. You have to prove that you act the right way, now and in the future.
* Plan Do Check Act cycle = be open about mistakes, investigate the possibility to learn from your own mistakes and those of others and decide what you are going to do about it (‘doing nothing’ is also an option, but you need a motivation).

**4. The road to certification**

*4.1. The current situation*

|  |  |  |  |
| --- | --- | --- | --- |
|  | *Goal* | *Current situation* | *Status* |
| Privacy proof | 2018 | 99 % | ☺ |
| ISO 27001 | 2017 | Certified | ☺ |
| ISO 9001 | 2018 | 1. %
 | ☺ |

*4.2 Privacy*

In 2015 we have obtained our first certificate ‘privacy proof’. We concluded not only that this was a good method to prove the public our involvement and commitment to respect privacy but it also helped us to improve our information security system. Furthermore my colleagues (= “my clients”) liked our approach very much.

The approach consists of:

* ‘Translating’ the Dutch privacy code to the practice of Statistics Netherlands;
* A fit-gap analysis and filling the gap;
* Conducting the first step of the external audit: did there remain any major gaps?
* Filling those gaps;
* Conducting the second part of the external audit: are we privacy proof? Is there enough evidence that we manage privacy in a correct way now and in the future?
* Certification.

It was possible to work on the remaining gaps observed by the external auditor in a period of one or two month because of the nature of the issues. The Do-phase of the PDCA-cycle was all right, the gaps were mainly in ‘Plan’ (not enough documentation) and in the ‘C’ (not enough checks).

We started rather small with applying for certification for one statistical process only. This process was chosen because of the vulnerability for privacy related issues and because of the enthusiasm of the manager.

However, it was not only this process that was audited. The responsibility for privacy is situated on two levels in the organisation:

* Central level
* Process owners

Many privacy related actions are organised on a central level. For instance: IT, personal issues (contracts, wages), contracts with deliverers and finance. Al these actions are taken into account of every privacy audit. Therefore, the first audit was not only about one statistical production process, but the central level was also taken into account.

After the first year, we started to certify all the statistical production processes of organisational entities. In 2017 the central level and all statistical processes were certified. In 2018 all non-statistical processes (internal processes) are added.

Of course, privacy was already an issue before we started to think about certification and before Eurostat started to discuss the GDPR. ‘Data protection’ and ‘privacy protection’ are key elements of ‘trust’ and trust is one of the cornerstones of Statistics Netherlands since 1899.

* 1. *ISO 27001*

In 2015 we started an internal evaluation asking experts to give an opinion about our situation; we made a fit-gap analysis. When we agreed on the existing gaps, we made a roadmap: who is responsible for what subject and when must the action point be completed? Elements to the roadmap were only added if there was an urgent need. (For instance if the privacy auditors told us we had to improve on a special topic before next audit.)

The roadmap was (and ‘is’) monitored by ‘Quality Management & Auditing’ (my department) and discussed in a monitor group lead by the CIO. Results and delays are reported to the Board.

The deadline for most of the actions was 1/1/2017 and an external auditor was selected to audit. As a result, we were certified.

Certification is not the goal neither the end of a process. The goal is to do things right, certification is the proof of it. And after certification the work goes on. In the meantime, we have added new actions to our roadmap. It is work in progress and it will always be. (Continuous improvement.)

The ESS IT Security Framework contains elements of ISO 27001/27002, so by certification for ISO 27001 and privacy, we do also meet with the ESS IT Security Framework.

*4.4 ISO 9001*

The implementation of ISO 9001 was a more difficult process. Our goal was: everyone in the organisation has to work compliant with ISO 9001. However, what does it mean ‘compliant with ISO’ and how do we reach this goal? ISO 9001 is about quality management, it is about managers. However, what is the best way to influence them? As a quality manager you need to have time and be patience, and you need to be flexible to adapt the approach to the costumer. And ‘what does the text of ISO 9001 mean’? That is not always clear! So we had to interpret, had a lot of discussions and some fierce disagreements.

The first year of implementing ISO 9001 we started with one statistical process. It went well but (with the knowledge of today) they have done too much work. We learned that it was better to introduce it at a higher organisational level. We learned that is was important to summarize the goal of ISO 9001 into a short list of necessary actions. The goal is important; the way the colleagues will reach that goal is up to them (within certain boundaries.) It took us three years to find the right approach.

In the beginning we had to help many departments, today almost everyone can do it on its own or with the help of colleagues from the own department.

ISO 9001 requires an internal audit. However, what does that mean? One audit on a central level or an audit for each (statistical) production process. The risk of one audit on a central level is that no one feels addressed; issues are not recognized or tackled. Should every process be audited every year? That is too costly; in Statistics Netherlands we distinguish about 400 processes. Therefore, we defined ‘management processes’. We assume a manager manages all processes in the same way. If we audit the management review and the management system of one of the processes, we will get a good representation and everyone feels engaged. By this approach, we will have about 34 internal audits in 2018. At the end of the year we will evaluate our approach and adapt it (if necessary).

Annex I Strategic agenda Statistics Netherlands

*1. Innovation*

* Tap into new and relevant data sources
* Use and integrate new (Big Data) data sources for official statistics
* Make SN information (data, text, videos, audiovisuals, infographics) available to users as open data
* Reinforce collaboration with innovative companies, institutions and users through open innovation and co-creation
* Develop real-time statistics and statistics with more regional information in response to users’ needs

Objective: New and faster services, cost reduction and low administrative burden

*2. Phenomenon-oriented*

* Describe complex phenomena using an adequate and coherent set of indicators
* Publish news releases that respond to societal demand using a narrative, phenomenon-oriented approach
* Provide more explanation on the indicators and methods used
* Show dynamics: present developments and trends incorporating the longest possible time series

Objective: Adopt a phenomenon and society-oriented approach

*3. Communication and news*

* Implement a cross-media communication strategy with state-of-the-art content types and data visualisation techniques
* Intensify dialogue with target groups, e.g. through social media and by encouraging user questions
* Identify and dispel myths and ‘lying with statistics’ more actively
* Increase visibility of Statistics Netherlands’ content on online platforms

Objective: Increase the use and scope of Statistics Netherlands’ information

*4. Paid services*

* Support municipalities, regions and departments by providing quantitative information for the entire policy process
* Promote measurement of progress towards SDGs across all levels of government and establish a connection with well-being
* Expand services including Statistics Netherlands as data hub & open data partner
* Set up a proactive strategy to broaden and deepen usage of statistics
* Develop a new version of Blaise and increase usage

Objective: Increase usage of products and services

*5. Account management*

* Organise account management for all cooperating partners and choose a proactive strategy
* Invest in the managerial relationship with the Ministry of Economic Affairs and Climate Policy and other ministries, public bodies and Parliament
* Invest in the relationship with the media
* Align more closely with perceptions among companies and respondents
* Present Statistics Netherlands as the data expert within the Dutch public sector

Objective: Position Statistics Netherlands as a reliable partner and show the added value of collaboration

*6. IT*

* Invest in a secure, powerful and flexible IT infrastructure with low maintenance
* Continue to develop the level of knowledge and skills within the IT organisation
* Safeguard continuity at the lowest possible cost
* Evolve together (business and IT) using modern technology, methodology, architecture and practices
* Store data in a central location (Data Service Center and data hub) which is secure and easily accessible

Objective: Create a powerful and flexible IT environment

*7. Bureaucracy*

* Streamline decision-making processes: less red tape and faster turnaround
* Improve access to regulatory and protocol compliance information
* Decentralise mandates as much as possible

Objective: Create smooth work processes

*8. Quality*

* Reduce measurement errors, adjustments and revisions, and improve methodology
* Ensure information security, e.g. by privacy certification
* Enhance process quality, e.g. by ISO certification
* Reduce risks associated with the use of spreadsheets and manual work
* Clarify the accuracy of figures

Objective: Safeguard the quality of processes and output, and make them transparent

*9. Processes and organisation*

* Implement Lean Six Sigma, continuous improvement and lean operational management across the organisation
* Improve decisiveness: focus on targets, swift decision-making and adaptation (Agile)
* Aim processes and culture towards the ability to respond quickly and flexibly to opportunities for Statistics Netherlands
* Reorganise processes where needed for maximum efficiency
* Increase collaboration among teams

Objective: Collaborate effectively and efficiently

*10. Workforce*

* Develop the management’s leadership skills and entrepreneurship
* Improve quality and performance by providing more feedback, dialogue and performance management
* Position Statistics Netherlands as employer of choice in order to attract and retain the right people
* Promote development and growth within Statistics Netherlands, e.g. by facilitating staff mobility. Enhance job satisfaction.

Objective: Encourage personal growth and development

**Core values: reliable, society-oriented, innovative**

1. See Annex I. [↑](#footnote-ref-1)