

How to cope with all those rules

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Abstract

International law, international regulations, national law, specific statistical regulations, Code of Practice, Privacy, ISO 27001 and ISO 9001. Some of the examples of 'rules' we have to work with. How do we manage, how do we transform rules into practice? For Statistics Netherlands this is a continuing challenge. Until recent we combined all the rules in the Quality guidelines and worked directly with those guidelines, for instance as an audit framework and a self-assessment questionnaire. The peer review was very positive. The Peer Review team concluded that Statistics Netherlands, and by extension the production of European statistics in the Netherlands, is very highly and uniformly compliant with all principles of the CoP. But we are moving on; we want more external proof to show our commitment with quality of process and product, privacy and security (ISO 27001).

Employees of Statistics Netherlands are reliable professionals and responsible for the quality of their products. But the main task is to produce statistics, not to understand all those rules mentioned before. Therefore we, the people from the quality department, have the task to guide and inform, to translate existing rules; not only from English to Dutch, but also from theory to practise. That is to our opinion the only way to make them involved: to make them real owners of quality. That is our goal for the years to come.

In the proposed paper we shortly explain the system which leads to the positive remark from the peer review. Subsequently we explain the next steps: Privacy certification and ISO 9001:2015 certification for every (statistical) production process of Statistics Netherlands. The lessons learned from our original approach and the privacy and ISO approach will bring Statistic Netherlands to the next level: proven in control.

Keywords: Audits, external proof, ISO, privacy, quality.

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 figures with the brand *CBS* is very high. Naturally, we want to nourish this trust in our statistics.

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.¹

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

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

2. Tools supporting quality

2.1 Quality Guidelines: our main tool

The general framework for quality management at SN is set by the Quality Guidelines. Our Quality Guidelines integrate all relevant international (CoP), national and Statistics Netherlands' regulations and other rules about statistical processes and products, and provide a basis for the organisation of design, production and quality management. At this moment there are 40 sources for the quality guidelines. By the way; there are no new rules in the quality guidelines!

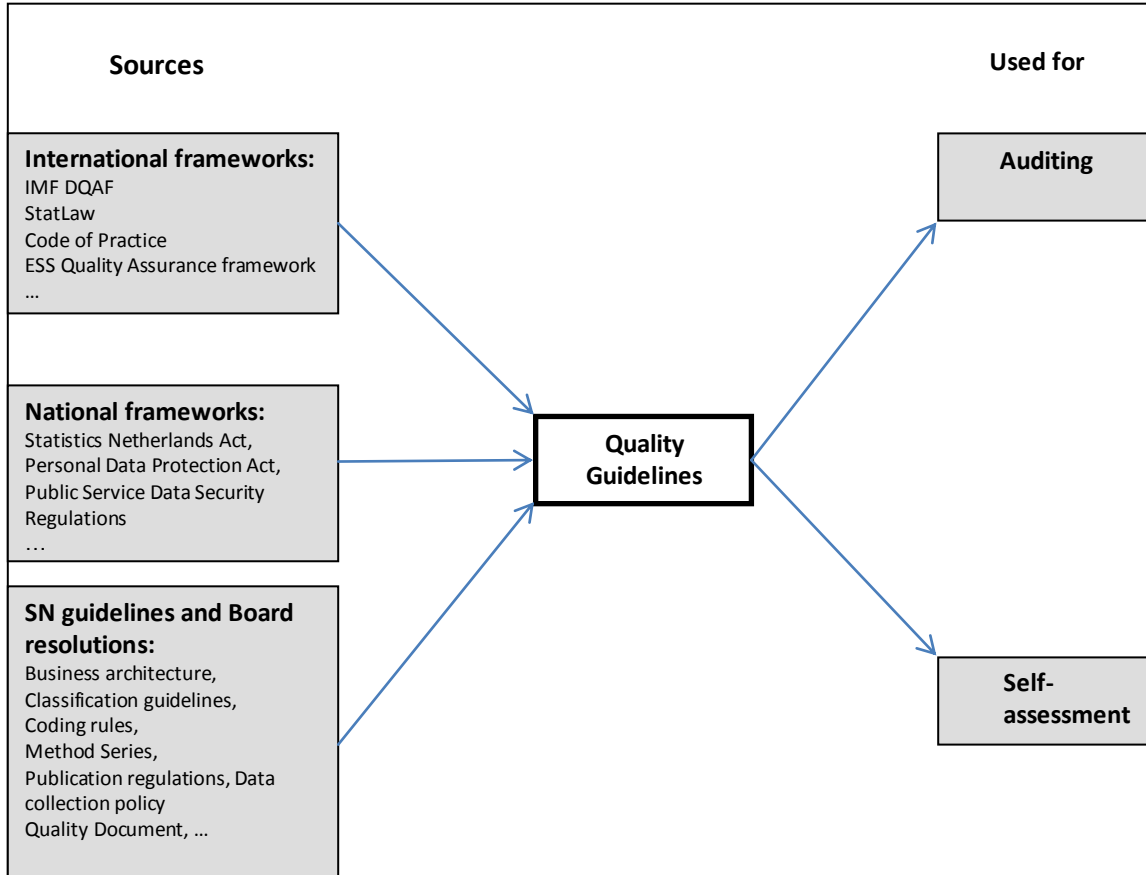
¹ The translated text of Statistics Netherlands' quality declaration, including explanatory notes is available in PDF: <https://www.cbs.nl/-/media/ccs-jaarverslagen/quality-declaration-of-statistics-netherlands-2014-01.pdf><http://www.cbs.nl/NR/rdonlyres/15241495-A800-460E-A740-FDC9B815D0A6/0/201401qualitydeclarationofstatisticsnetherlands.pdf>

The Quality Guidelines contribute to:

- achievement of Statistics Netherlands' mission;
- achievement of Statistics Netherlands' core values: reliability, relevance, consistency and timeliness. Statistics Netherlands also takes due care with regard to privacy and confidentiality;
- conformity with legislation;
- the confidence of all stakeholders in Statistics Netherlands and its products;
- stakeholder satisfaction with the products of Statistics Netherlands;
- the image and reputation of Statistics Netherlands;
- the transparency of Statistics Netherlands.

Moreover, the Quality Guidelines:

- serve as input and explanatory notes for an audit framework;
- serve as input and explanatory notes in setting the self-assessment questions;
- provide a framework for statistical process redesign and amendment;
- ensure conformity with existing lower-level frameworks.



2.2 Statistical audits

Our 18 key statistics and 78 most important statistical processes comprise products which are very important for the image and reputation of the institute. They are distinguished by the board and are subject to statistical audits on a regular basis.²

An audit team evaluates these processes every three years. The audits are managed by a central department according to ISO 19011 (Guidelines for auditing management systems). The auditors themselves are all internal statisticians and methodologists. Audits are directly reported to the director-general. The results of the audits are used by process owners to plan improvement actions. The audit framework is fully consistent with the Quality Guidelines. The director-general can also order an audit on other processes on an ad hoc basis or in the case of an emergency.

² Key statistics are for instance: consumer price index, employment, unemployment, government debt, international trade, short term indicators, economic growth, population (dynamics) and population forecast.

2.3 Self-assessment

All statistical processes are subject to self-assessment: yearly for the key statistics and most important statistical processes and three-yearly for other statistical processes. The self-assessment questionnaire is fully consistent with the Quality Guidelines. The purpose of the self-assessment is to identify points for improvement. Process owners compile action plans based on the results of the self-assessment.

2.4 Process descriptions

Quality Documents are mandatory for all statistical processes (± 240). These documents contain a process description, a list of information systems, a list of relevant documentation, agreements with data users and data suppliers, a completed self-assessment and an action plan. The Quality Document is regularly updated: yearly for the key statistics and most important statistical processes and three-yearly for other statistical processes. The update process is planned and monitored.

3. Check

Every x years it is necessary to evaluate the things you are doing. In 2013 we evaluated our system of quality assurance and especially our audits. In 2014 a new director general was appointed. He introduced the idea of ‘external proof’, not only on privacy but also on the statistical processes.

3.1 Evaluation of the audit program

In the evaluation of our audit program we concluded that our audits were widely accepted but that they were very costly and had a long completion time. One audit took us at average about 850 working hours and half a year. In times of shrinking budgets we could not afford to go on with those audits and our clients told us that although the quality of our reports are good, the completion time was too long. They wanted to act faster on imperfections and did not want to wait half a year until the final audit results were presented.

The only way to make the program cheaper and faster was to diminish the number of audit items. Until 2013 we audited on the whole of the quality guidelines (approximately 254 norms). We tested a system with roughly 100 norms and conditions were set on costs (450

hours) and completion time (4 months). The test was successful and we implemented this new kind of audit.

3.2 External proof

In 2014 there was a big issue in The Netherlands on privacy; a healthcare authority had not enough protected its data about individuals. The first question the new Director General asked to our data protection officer was: how is the situation at Statistics Netherlands? Good, great but can we prove that to the public? No, there was no proof. So we started with external certification. 'External' because we want to deliver an independent proof to the public.

In 2015 we got our first certificate 'privacy proof'. We concluded not only that this was a good method to prove the public our involvement with privacy but it also helped us to improve our information security system. Furthermore my colleagues (= "my clients") liked this approach very much. The approach consists of a fit-gap analysis, filling the gap and certification. So we decided not only to go further with privacy certification (in 2018 all processes of Statistics Netherlands will be proven privacy proof) and to start ISO 9001:2015 certification of all our production processes.

In the meantime the Dutch government prescribed to work towards ISO27001 (ISO27001 is an information security standard). Statistics Netherlands decided to be ISO proof on 1/1/2017 and to show that to the public with an external declaration. We made a roadmap (based on a fit-gap analysis) and we are on schedule.

3.3 Peer review

The peer review was very positive. The Peer Review team concluded that Statistics Netherlands, and by extension the production of European statistics in the Netherlands, is very highly and uniformly compliant with all principles of the Code of Practice. But the peer review also concluded: Statistics Netherlands should take measures to embed more deeply its quality management and assurance procedures throughout the organisation and consider also, in the context of external communication, the adoption of recognised industry standard quality assurance/certification systems.

We welcomed the view of the peers; their opinion amplified our evaluation.

4. Act

4.1 *The challenge*

- The Peer Review team concluded
 - Statistics Netherlands, ... , is very highly and uniformly compliant with all principles of the Code of Practice.
 - Statistics Netherlands should take measures to embed more deeply its quality management and assurance procedures throughout the organisation
 - and consider also the adoption of recognised industry standard quality assurance/certification systems.
- Statistics Netherlands decided to be ISO 27001 proof on 1/1/2017.
- in 2018 all processes will be proven privacy proof
- in 2019 all processes will be ISO 9001 proof
- ⇒ How to manage this as a quality department and how can we make this understandable and manageable for our colleagues?
- ⇒ How to cope with all those rules?

4.2 *New approach / vision*

In my vision we maintain our main tool; our Quality Guidelines. This is our theoretical backbone. On the other hand we try to combine the information about our weaknesses to create a new approach.

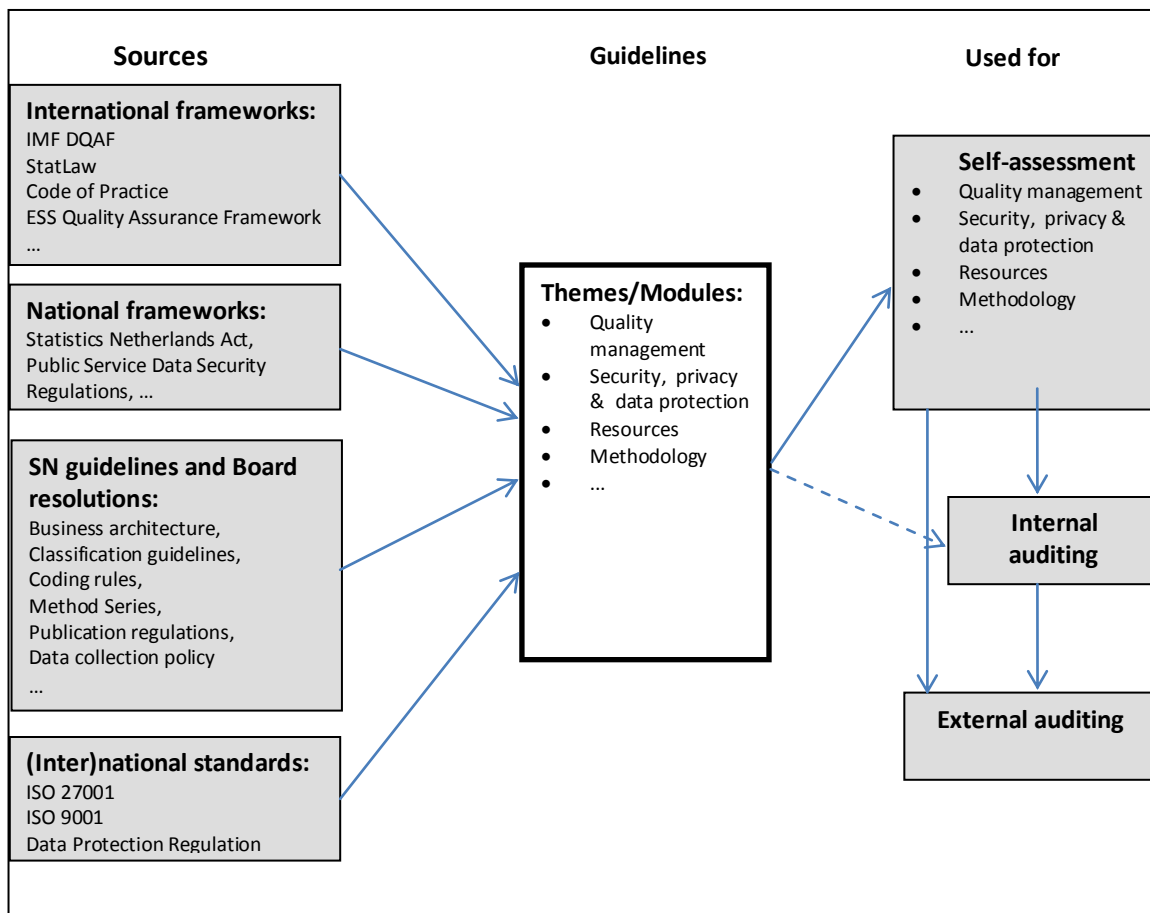
First of all the guidelines have to evolve. Nowadays we try to integrate all relevant regulations and rules into our Quality Guidelines. At this moment the Quality Guidelines is a book of almost 200 pages. We cannot continue this way, otherwise the guidelines will increase and increase. We have to think carefully about the way to go; keeping our backbone but also keeping it manageable and usable as a reference book. 'Reference' because we cannot expect our colleagues to read this book before creating a new process. 'Book' because we do not know if a printed or electronic book is a good form to maintain the guidelines, may be a database or another form of virtual collection is a better way.

The problem with all those rules is the quantity of rules and the theoretical language.

Therefore we have to diminish the number of rules our colleagues are confronted with. We can

do so by collecting them into understandable themes which do not need a lot of explication and without a lot of sub topics. These themes should have common adapted names. For instance “quality management”, “data protection”, “information security”, “resources”, “methodology”, “publication regulations”. Rules must be practical and easy to understand. Also they must be motivated. Preferably the main rules are presented in graphical form.

For the different subjects in a theme it has to be decided if the rule is relevant on a general level or on a specific level. For instance for Statistics Netherlands a lot of whereabouts on resources and IT (and so on security, privacy & data protection) are arranged on a general level. This means that individual managers of specific (statistic) processes do not have any influence at all. As a consequence they should not be asked how they organise these items. On a specific level you should only be questioned on subjects you are responsible for.



All these themes are copied to the general and specific self-assessments with simple yes/no questions. A simple start question is: 'did you change your production process in the last year?' If you did change your process you have to check more than if you did not. Questions to be asked every year are for instance 'did you evaluate your input with your supplier', 'did you evaluate your products with your customers', 'are all intermediate files removed' and 'did you check the access permissions to the data'. Questions about classification and methodology can be asked once in x years. And 'x' can be variable according to the importance of the process. For instance, you can ask from the consumer price index or from unemployment statistics to check (or better to have checked by internal or external experts) their methodology every three year but from statistics about slaughters or forestry a period of once every ten years is enough. It is up to the board to decide about those rules.

Today a self-assessment has 37 pages, in my view this new self-assessments consist of a maximum of two pages. (We did not test upon this moment, so hopefully it will not be a lot more.)

A self-assessment is in first instance used to identify gaps. If there are gaps the owner has to calculate the risk involved and make a decision: will I reduce the risk or not. A general self-assessment is input for external audits. The specific self-assessments are input for internal and external audits.

Every process should be audited every year. In Statistics Netherlands we have about 400 processes and limited resources so we have to work very efficient. So we start with joining statistics in clusters. One criterion can be 'relative importance of the subject'. This means that more important statistics are more frequently audited. Another possible criterion is 'management processes'. We start to audit one process from an owner and if that is all right and the rest of the processes have an identical management process, a quick scan is enough. Every audit begins with the self-assessment and we can focus on a selection of themes. Every year we can take a different selection and we can even use different selections for different

statistical processes. In my vision my department determines the selection according to the maximal possible benefit for the organisation. The selection consists of three parts: a random part equal for every process. A part decided as 'general interest', also for every process. And finally a part specific for a certain process. This last part is based on the self-assessment and our knowledge of a process.

The way we audit will change. Until now the approach was: tell me what you are doing and I will tell you what is right and what is wrong. The new approach is: prove to me that you are in control. In the past it took a lot of time find gaps. Therefor auditors had to understand the documentation and the process. Now we are asking our colleagues to share their knowledge and to show us that they are aware of their weaknesses and the way they handle them. So we change from 'control' to 'in control'.