### **From policy to practical implementation** Component A: Quality Management of Official Statistics

Component A: Quality Management of Official Statics Activity A.6: Coordination of the national statistical system – development of a roadmap 6.-9. March 2017

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## **Outline of the presentation**

- 1. Coordination of European statistics in DK
- 2. Process for developing national quality guidelines and monitoring procedures
- 3. DK national quality guidelines
- 4. DK monitoring procedure
- 5. ONA consultations spring 2017
- 6. Lessons learned (so far)



## **Coordination of European statistics in DK**

Legal requirement to coordinate European statistics given in Regulation 223/2009 on European statistics:

- The NSI is responsible for coordinating all activities at national level for the development, production and dissemination of European statistics
- The National Statistician shall produce national quality guidelines and monitor their implementation
- The Member State shall ensure compliance with the national guidelines (enforcement)



The plan is to apply the same guidelines and monitoring procedures to all national official statistics if/when the new law on Danish official statistics is adopted

## **Producers of European statistics**

- **European statistics are:** Statistics delivered by Danish authorities to EU
- **13 Other National Authorities (ONAs)** 
  - Statistics production is a secondary task
  - Producers of both European and National statistics
- **Coordination Committee** on European Statistics
  - Established in 2009 •
  - Chaired by Statistics Denmark
  - Representatives from each ONA
  - Meets once per year + occasional extra meetings



Danish Energy

Agency

Danish

## **Process for developing guidelines and monitoring procedure**



- Guidelines drafted by internal TF in Statistics Denmark (representatives from management office, quality, it, statistical domains, data collection, dissemination)
- Draft guidelines and monitoring procedure incl. self-assessment questionnaire presented to the Coordination Committee on European Statistics fall 2015 (...but very little concrete feed back from ONAs)
- First round of self-assessments by ONAs June 2016
- **Review-team analysing self-assessments** (Review-team: 2 ONAs and SD)
- Report of review-team to Coordination committee in Dec 2016: Identified need for further adjustments of guidelines and monitoring procedure
- **ONA consultations** spring 2017 with the aim to:
  - increase mutual understanding of the guidelines / questions
  - increase SDs understanding of the production of European statistics in Danish ONAs
  - qualify an adjustment of the guidelines and self-assessment questionnaire
- **Next steps:** Revision of guidelines and questionnaire, pilots in 3 ONAs, revised guidelines and questionnaire in August 2017.

# **DK national quality guidelines**

- The 15 principles and 82 indicators of CoP are "translated" into 21 guidelines in a Danish context
- 61 criteria follow the guidelines
- Organised under the same headings as CoP
  - Institutional environment 10 guidelines
  - Statistical processes 5 guidelines
  - Statistical output 5 guidelines
- The objective is to operationalize the CoP to make it practical applicable for institutions who do not have statistical production as their main task – a 'pixi-version' of the CoP
  - (...but we still need to adjust further to achieve this goal)





### **Structure of the guidelines**

#### Institutional environment

Institutional and organizational factors have a significant influence on the effectiveness and creditability of a statistical authority developing, producing and disseminating European Statistics. The relevant issues are professional independence, mandate for data collection, adequacy of resources, quality commitment, statistical confidentiality, impartiality and objectivity.

**Professional independence.** Professional independence of statistical authorities from other policy, regulatory or administrative departments and bodies, as well as from private sector operators, ensures the credibility of European Statistics.

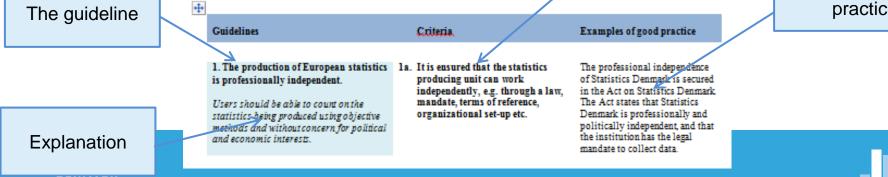
Mandate for data collection. Statistical authorities have a clear legal mandate to collect information for European statistical purposes. Administrations, enterprises and households, and the public at large may be compelled by law to allow access to or deliver data for European statistical purposes at the request of statistical authorities.

Adequacy of resources. The resources available to statistical authorities are sufficient to meet European Statistics requirements.

**Commitment to quality.** Statistical authorities are committed to quality. They systematically and regularly identify strengths and weaknesses to continuously improve process and product quality.

Statistical confidentiality. The privacy of data providers (households, enterprises, administrations and other respondents), the confidentiality of the information they provide and its use only for statistical purposes are absolutely guaranteed.

Impartiality and objectivity. Statistical authorities develop, produce and disseminate European Statistics respecting scientific independence and in an objective, protessional and transparent manner in which all users are treated equitably.



Operationalization of the guideline criteria

> Examples of good practice

Principals from the CoP

## **Guidelines – example (1)**

Guidelines	Criteria	Examples of good practice
1. The production of European statistics is professionally independent. Users should be able to count on the statistics being produced using objective methods and without concern for political and economic interests.	1a. It is ensured that the statistics producing unit can work independently, e.g. through a law, mandate, terms of reference, organizational set-up etc.	The professional independence of Statistics Denmark is secured in the Act on Statistics Denmark. The Act states that Statistics Denmark is professionally and politically independent, and that the institution has the legal mandate to collect data.
2. The head of the statistics producing unit has the sole responsibility for deciding on statistical methods, standards, and procedures as well as the content and timing of statistical publications. By securing that decisions regarding methods, timing of statistical releases etc. is the sole responsibility of the unit producing the statistics, the statistical process is protected from political	<ul> <li>2a. There are transparent procedures securing that the head of the statistics producing unit is hired solely on professional criteria.</li> <li>2b. A potential dismissal of the head of the statistics producing unit must not bring the professional independence of the unit into question.</li> <li>2c. It is described, e.g. in the statistics producing unit's mandate that the</li> </ul>	The Act on Statistics Denmark states that the Director General has the responsibility for the professional and administrative management of Statistics Denmark.

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## Guidelines – example (2)

### Guidelines

### Criteria

9. All users have equal access to the statistics at the same time. If any outside users have privileged pre-release access, this is announced on the website.

Equal access to the statistics for all users is fundamental to ensure impartiality. To a large, an extent as possible, privileged pre-release access to selected users should be avoided. If it is unavoidable to provide some users with this type of access, transparency surrounding the pre-release access is essential, so that it is possible to evaluate the statistic and its use in light of this. 9a. Privileged pre-release access is limited, controlled, and announced together with the statistical publication.

9b. If embargoed access is granted, this is announced together with the statistical publication.

9c. There are procedures to prevent and handle leaks of unpublished statistical information.

### **Examples of good practice**

All users have equal access to statistics from Statistics Denmark. No one can access a statistic before 09:00 on the day of publication. No privileged pre-release or embargoed access is granted.

## **DK monitoring procedure**

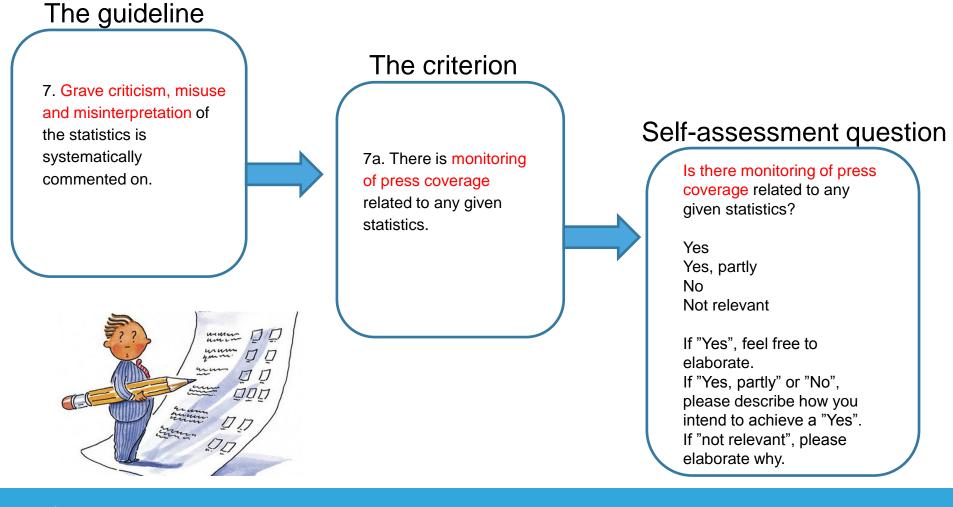


Monitoring compliance with the national quality guidelines:

- Self-assessment questionnaire based on guidelines to be filled in by each ONA every year
  - 9 mandatory criteria. For questions related to these, the answers can only be Yes or No.
- Individual feed back to each ONA based on selfassessments
- Summary report to Coordination committee and to Eurostat
- "Mini" peer-reviews (audits) in ONAs every 3-5 year (2-3 ONAs to be reviewed every year)



## **Example of self-assessment question**



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## **Challenges related to monitoring**

The results of the first round of self-assessments:

### Possible to identify some general indications

- overall compliance regarding guidelines on: confidentiality, data security, minimising administrative burden
- challenges related to guidelines regarding: release calendar, privileged pre-release access, quality assurance of administrative

### ..but not possible to draw any conclusive conclusions

- Different interpretations of questions in different ONAs
- Not all answers accompanied by an explanation (difficult to interpret)
- Some criteria/questions not suitable too ONA (e.g. regarding statistical head)
- Many questions marked "not relevant" (re. publication calendar, equal access to statistics at the same time, user-consultations etc.)
  - Because Eurostat is responsible for the release etc. of European statistics
  - The size and priority of the statistics production is too small
- ...not possible to give any valid individual feed back based on the self-assessments
- This is why we proposed a consultation in all ONAs



## **ONA consultations spring 2017 (1)**

Common agenda;

- Background for the consultation
- Introduction to the statistics production in the ONA
- Presentation of the NSI perspective
- Joint review of the ONS's self-assessment
- Evaluation of the guidelines and self-assessment form
- Identifying examples of "good practice" to be shared with other ONA's
- Topics for an ONA seminar





# **ONA consultations spring 2017 (2)**

Introduction to the statistics production in the ONA

- The statistical production is usually not in one unit, but spread throughout the organisation
- The basis for statistical production is usually some administrative data collected to manage some authority tasks
- Usually they do not connect EU-statistics to their own statistics even if it comes from the same data

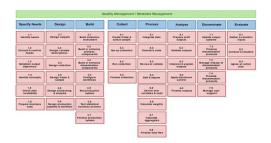


# **ONA consultations spring 2017 (3)**

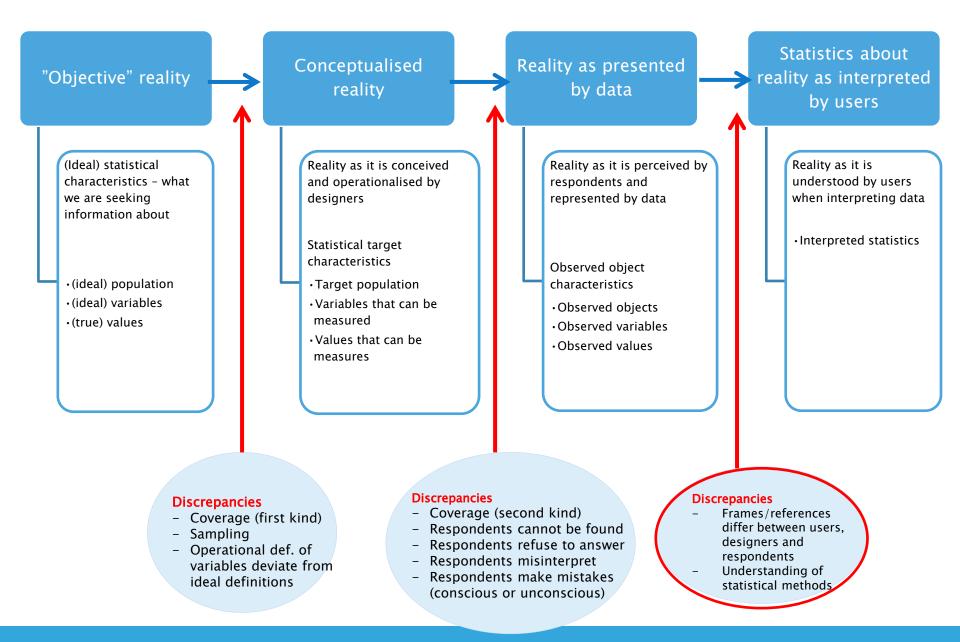
Presentation of the NSI perspective

- From the answers in the self-assessment it is clear that we do not have the same perspective
- We therefore introduce our perspective
- First by introducing a model for statistical production
- Second by introducing GSBPM









#### 堂 STATISTICS DENMARK

## The Generic Statistical Business Process Model (GSBPM)

Quality Management / Metadata Management								
Specify Needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate	
1.1 Identify needs	2.1 Design outputs	3.1 Build collection instrument	4.1 Create frame & select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs	
1.2 Consult & confirm needs	2.2 Design variable descriptions	3.2 Build or enhance process components	4.2 Set up collection	5.2 Classify & code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation	
1.3 Establish output objectives	2.3 Design collection	3.3 Build or enhance dissemination components	4.3 Run collection	5.3 Review & validate	6.3 Interpret & explain outputs	7.3 Manage release of dissemination products	8.3 Agree an action plan	
1.4 Identify concepts	2.4 Design frame & sample	3.4 Configure workflows	4.4 Finalise collection	5.4 Edit & impute	6.4 Apply disclosure control	7.4 Promote dissemination products		
1.5 Check data availability	2.5 Design processing & analysis	3.5 Test production system		5.5 Derive new variables & units	6.5 Finalise outputs	7.5 Manage user support		
1.6 Prepare business case	2.6 Design production systems & workflow	3.6 Test statistical business process		5.6 Calculate weights				
		3.7 Finalise production system		5.7 Calculate aggregates				
				5.8 Finalise data files				



## **ONA consultations spring 2017 (2)**

Joint review of the ONS's self-assessment



- When we have been through the ONA's statistics production and the NSI perspective the understanding of the self-assessment replies changes.
- Some of the questions are understood differently and hence the answers would change
- Some of the questions makes more sense for the ONA's and would be more easy to answer
- The wording of several of the questions in the selfassessment form will need to change to enhance the reality of the ONAs

## Getting to know our ONAs – some examples

### DANISH ENERGY AGENCY

### **Organisational characteristics**

- Typical government agency placed under the ministry/minister
- Statistics are produced in different units – no overall head of statistics
- Historically there has never been any attempts to influence the statistical production
- But difficult to 'document/prove' statistical independence

### **Statistical issues**

statistical methods.

STATISTICS

DENMARK

 Statistics are produced by energy experts (economists and engineers)

 they do not 'think in statistical terms', but their methods for data validation etc. are similar to the



### DANISH FINANCIAL SUPERVISORY AUTHORITY

### **Organisational characteristics**

- Independent agency supervising Danish financial authorities (with independent board)
- Statistics are produced in one unit **Statistical issues**
- Quality of data is highest priority because this is the foundation for the supervisory role
- This means statistical data are of high quality, but creates challenges re. release calendar, timeliness, punctuality.
- Statistics production is a minor task, secondary importance



### DANISH AGRIFISH AGENCY

### **Organisational characteristics**

- Typical government agency placed under the ministry/minister
- Ministry tries to influence sometimes (definitions, publication dates...)
- Statistics are produced in one unit with a 'statistical head' – working to establish a more formalised statistical unit with a clear mandate

### Statistical issues

- Rather large statistics production
- Publications in Statistics Denmark's StatBank
- ...but statistics is still a 'minor' task
- No formal access for researchers
- No press surveillance focused on statistics etc.
- Data serves many purposes not only official statistics



**Ministry of Environment** and Food of Denmark The Danish Agrifish Agency

## **Lessons learned**

- Possibly there should be **fewer questions** 
  - To create more clarity/less noise



- It should be mandatory to assign a short description to each answer that will make it easier to analyse the responses
- Ensuring (and documenting) professional independence is a key challenge
  - For most ONAs it is not possible to secure independence through the institutional/organisational set-up, but various tools and good practices can be promoted (e.g. release calendar and a statistical unit/committee/network with a clear mandate/ToRs)



## Lessons learned (1)



### Guidelines and questionnaires

- Guidelines and criteria/questions should be more generic (i.e. not 'statistical')
- The guidelines/criteria should probably be even more basic at this stage (then we can raise the bar later on)
  - e.g. in stead of asking how the independence of the statistical head is ensured, we should start by asking: "Has a statistical head been appointed with clear responsibility for the statistical production?"
- Some guidelines/criteria are too ambitious in an ONA perspective and needs to be deleted or redrafted
  - e.g. a system for researchers access, press monitoring, publication of annual work programme, systematic user-evaluations and more.



## Lessons learned (2)

- Possibly there should be fewer questions
  - To create more clarity/less noise



- It should be mandatory to assign a short description to each answer that will make it easier to analyse the responses
- Ensuring (and documenting) professional independence is a key challenge
  - For most ONAs it is not possible to secure independence through the institutional/organisational set-up, but various tools and good practices can be promoted (e.g. release calendar and a statistical unit/committee/network with a clear mandate/ToRs)

# Lessons learned (3)

### Process and approach

- Establishing a common understanding/language
  - If we do not understand each other, we will not change anything
  - Our world view is different from ONAs (and ONAs are different from each another) and it takes a lot of work and effort to create a common understanding/language
- Creating buy-in
  - If there is too much resistance, we will not change anything
  - ONAs need to be more actively involved to create ownership and a sense of responsibility (e.g. through involvement in pilots, review-teams, bilateral contacts etc.)
- What's in it for them?
  - We need to provide them with more concrete benefits/motivation (e.g. training, professional networks, funding?)
  - This will be even more important when it comes *national* official statistics, where there is no legal mandate







