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Directorate D: Government finance statistics (GFS) and quality  
Unit D4: GFS. Risk and quality management

## QUALITY IN THE ESS VISION 2020 – Implementation paper

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*Version 1.1 / November 2015*

*following the recommendations of the Vision Implementation Group on Version 1.0 of the document –  
to include the **implementation details of Action 1 and the state-of-play of Actions 2 & 3 in Chapter 5***

**TO CONFIRM THE ESS AS THE  
STATISTICAL CONSCIENCE OF THE KNOWLEDGE-DRIVEN SOCIETY –**

**TO KEEP AND STRENGTHEN QUALITY  
AS OUR KEY ASSET AND COMPETITIVE ADVANTAGE**

This paper has been prepared by the Task Force (TF) QUAL, a sub-group of the Working Group on Quality in Statistics, with the support of Eurostat and with the aim of describing and explaining how the Quality key area of the ESS Vision 2020 is proposed to be implemented.

The TF was created in February 2015 with the participation of Austria, Croatia, Denmark, Estonia, Finland, Greece, Hungary, Netherlands, Portugal, Slovakia, Slovenia, Spain, United Kingdom and Eurostat D4 – the list of the members of the TF is included in [Annex 5](#) of the paper.

## 1. EXECUTIVE SUMMARY

The long-term strategy of the European Statistical System (ESS), the ESS Vision 2020 was adopted at the 21<sup>st</sup> meeting of the ESS Committee (ESSC) in May 2014. The strategy has got multiple objectives and has been built upon 5 key areas: identifying user needs and cooperation with stakeholders, quality, new data sources, efficient and robust statistical processes, dissemination and communication.

The strategy is intended to be implemented in a portfolio management approach where separate projects, the so-called ESS Vision Implementation Projects (VIPs) contribute to the achievement of the ultimate objectives. In this portfolio implementation quality plays a crucial role by being an overarching/horizontal key area, which means that to various extents but all projects of the portfolio have an impact on quality and/or contain a significant quality component.

Considering these multiple links and the fact that the ESS has a very well established and rooted quality framework for the production of European statistics, it is of utmost importance that a common coordination, monitoring, advising and reporting mechanism of the Portfolio projects' quality work is established, at the service of the ESS Vision Portfolio, in order to assure that the work carried out and the results achieved are in line with the existing quality framework. On the other hand, the impact of the strategic projects on the existing quality framework also needs to be coordinated so that they can be duly taken into account in the upcoming and very near revision and modernisation of the framework.

The QUAL@ESS Vision 2020, i.e. the Quality supporting framework of the ESS Vision 2020 Portfolio, duly replies to all these needs and challenges, and in addition, it also defines how the quality work of the ESS could be taken forward from here in the coming years, in line with the objectives and statements of the ESS strategy. Its scope is limited and covers the main areas of quality where further rationalisation and streamlining can contribute to fulfilling the ultimate goals of the ESS Vision 2020 – it can be defined as the Quality coordinator of the ESS Vision 2020 strategy which also has an advisory role with regard to all issues related to quality.

The present Implementation paper describes the construction of the QUAL@ESS Vision 2020 supporting framework and concludes that it is only through the implementation of the QUAL@ESS Vision 2020 supporting framework that the quality work of the ESS Vision 2020 Implementation Portfolio can be coordinated and the ambitious Quality actions and objectives of the strategy implemented and achieved.

## 2. INTRODUCTION

The Quality key area of the ESS Vision 2020 states that "We will provide high quality products and services that meet user needs. We value quality not only for our core products and processes, but also for our institutions as a whole, for overall management, organisation, and governance. Our strong emphasis on quality remains a precondition for maintaining public trust in official statistics. This is one of our key assets and comparative advantages in a world experiencing a growing trend of instant information which often lacks the necessary "proof of quality". We manifest ourselves as the statistical conscience, which guides society through the information overload".

Annex B of the ESS Vision 2020 document presents an example of a Generic Enterprise Model for Statistics (GEMS) which provides a stylised description of the core aspects of a statistical organisation (or system) and its interrelations (cf. Figure 1).

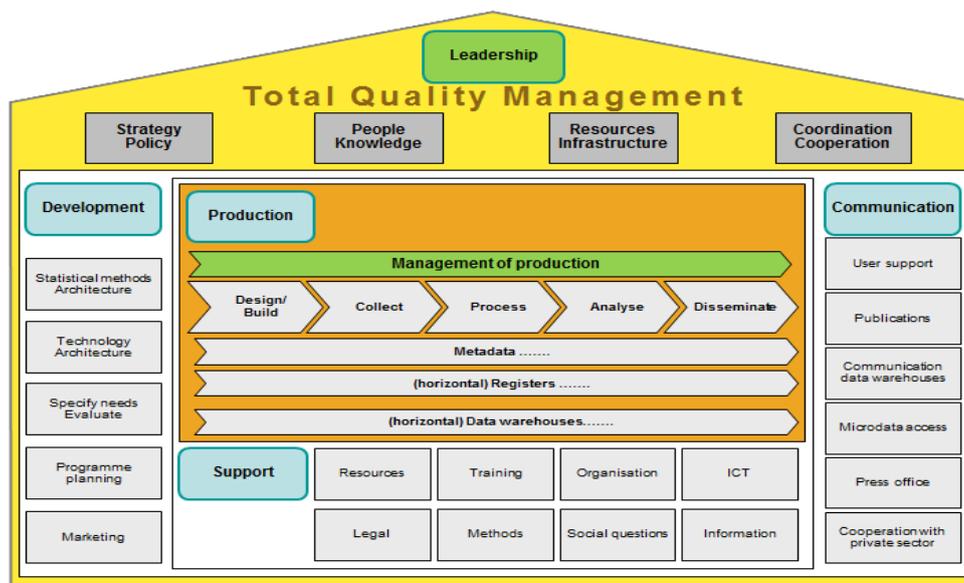


Figure 1.

The Total Quality management approach was integrated into the GEMS model in order to acknowledge the importance attached to quality that encompasses all initiatives and procedures related to managing quality design and development, quality control and maintenance, quality assurance and improvement mechanisms.

At the November 2014 ESSC meeting, the Quality area was proposed to be an ESS Vision Implementation Project (ESS.VIP) while the February 2015 meeting transformed the project into an "overarching framework linking all relevant elements of the ESS Vision 2020 Portfolio" which is coordinated by the Vision Implementation Group (VIG). It was also underlined that "elaboration of possible elements of a common Total Quality Management framework should continue with a view to strengthening the quality in the ESS at the level of organisations."

Therefore, the QUAL@ESS VISION 2020 is proposed to be a supporting framework, at the service of the Portfolio, rather than a project, which aims at advising and coordinating the quality work of the ESS Vision 2020 Implementation Portfolio as well as implementing the Quality key area of the ESS Vision 2020, in line with the priorities and availability of the resources. As a next step, the details of the QUAL@ESS Vision 2020 implementation (timetable, roadmap, actors, estimation of the required resources, working arrangements, governance structure, etc.) will be elaborated – Chapter 5 the first outlines of the next steps for Action 1 of the QUAL supporting framework.

## 3. AIM AND SCOPE OF THE QUAL@ESS VISION 2020

The aim of the QUAL@ESS Vision 2020 overarching / supporting quality framework of the ESS Vision 2020 is first of all to coordinate and advise on the quality work of the ESS VIPs, and therefore, to assure that all developments which are undertaken adequately cover the Quality key area of the ESS Vision 2020 and are in line and within the existing quality framework and approach of the ESS. Through this coordination it also aims at possibly enriching the existing ESS quality framework with relevant quality developments arising from the ESS.VIP projects themselves including needs and phenomena identified in the fast evolving statistical context of the knowledge-driven society.

Additionally, and in line with the February 2015 ESSC conclusions<sup>1</sup>, the QUAL@ESS Vision 2020 is also proposed to take forward the quality approach of the ESS by developing the conceptual elements of a common ESS quality framework at the level of organisations, inspired by the total quality management principles and by duly taking into account the existing quality achievements of the ESS members.

The **QUAL@ESS VISION 2020 SUPPORTING FRAMEWORK** is therefore proposed to be composed of 2 main action lines (AL)<sup>2</sup>, built around the basic principles of Coordination, Trust and Quality Management – for the general overview of the QUAL@ESS Vision 2020 structure, please refer to [Annex 1](#) of the paper.

**AL1. COORDINATE QUALITY IN THE ESS VISION 2020 PORTFOLIO AND PRESERVE TRUST IN EUROPEAN STATISTICS** by continuously **PROVIDING HIGH-QUALITY PRODUCTS AND SERVICES** – Coordinate quality in the ESS Vision 2020 Portfolio, ensure consistency with the ESS quality framework and enhance the ESS quality framework where appropriate.

**AL2. ENHANCE QUALITY MANAGEMENT IN THE ESS, DEVELOP THE CONCEPTUAL ELEMENTS OF A COMMON QUALITY FRAMEWORK FOR THE ESS** – develop further the quality approach which is applicable to the statistical institutions as a whole, inspired by the total quality management principles and embed risk management in quality management.

The deliverables of AL2 (like e.g. the knowledge base with experiences, lessons learned and good practices) will provide the necessary elements, core values, principles and models to manage the quality in the ESS in an integrated manner. These elements are of crucial importance to the implementation of the Quality key area of the ESS Vision 2020, as emphasised in the February 2015 ESSC meeting. An integrated approach to quality will also underpin the way the QUAL itself will help to coordinate and advice on the quality work of the ESS VIPs.

Alternative options could be to implement AL2 in another context, for example, to include this action line in the portfolio itself or to develop a project with the help of the WG on Quality in Statistics and present it to the Directors of Methodology Group (DIME) for having the necessary arrangements and resources. For the above mentioned reasons however, and also to ensure consistency of the quality developments under the Vision, which would be kept under the same governance arrangements, the TF QUAL proposed to keep AL2 as a part of the QUAL@ESS Vision 2020 supporting framework.

Chapter 4 describes the set-up of both action lines – it identifies concrete actions for their implementation and specifies the benefits and potential deliverables for the specific tasks included.

Chapter 5 identify the next steps to be carried out in order to guarantee a successful realisation of the different actions and tasks proposed in the present document.

#### 4. SET-UP OF THE ACTION LINES

**ACTION LINE 1: COORDINATE QUALITY IN THE ESS VISION 2020 PORTFOLIO AND PRESERVE TRUST IN EUROPEAN STATISTICS** by continuously **PROVIDING HIGH-QUALITY PRODUCTS AND SERVICES**

##### Action 1: Coordinate quality in the ESS Vision 2020 Portfolio

##### Task 1.A: Identify the key quality elements in the ESS Vision 2020 and ESS VIPs and map them to the existing ESS quality framework

###### Milestones:

1. Identification of key quality elements (KQE)<sup>3</sup> under the ESS Vision 2020 through a stock taking/screening exercise. As a starting point, the concept of KQE in the context of the ESS Vision 2020 and its Implementation Portfolio will be defined.

The ESS Vision 2020 Portfolio as a set of implementation projects might include new (key) elements on quality that would impact the existing quality approach, including the aspects of quality measurement and certain quality (sub) dimensions. The identification process should not only take into account existing quality elements in ESS.VIPs but also

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<sup>1</sup> "Member States recognised that the quality dimension is crucial for the implementation of the ESS Vision 2020. However, it was agreed that given the multiple links to other projects, the proposed QUAL project should not be executed as an ESS.VIP, but quality should rather become an overarching framework linking all relevant elements of the ESS Vision 2020 Portfolio and be coordinated by the VIG. In particular, elaboration of possible elements of a common Total Quality Management framework should continue with a view to strengthening the quality in the ESS at the level of organisations".

<sup>2</sup> It has to be noted that the 2 action lines have been built upon the potential actions as they were identified by the PG TF "Implementation of the ESS Vision 2020" in November 2014. Following the streamlining requests of the Vision Implementation Group (VIG), some of the previously proposed actions (like cost of quality and quality reporting) have been taken out of the QUAL@ESS Vision 2020 framework.

<sup>3</sup> A Key Quality Element may be roughly defined, at the current initial stage, as a characteristic of an object. A quality element could be, e.g., robustness of a process.

elements which might not be fully integrated yet (for instance, elements related to multi-sources statistical production processes). The ESS Vision 2020 and the business cases for the ESS VIPs as well as the relevant project related documents will serve as a basis for this stock taking exercise. Based on the identification exercise a tool for monitoring, reporting, advising and coordination of quality developments under the ESS Vision 2020 (for instance a generic quality checklist) will be developed. The deliverable will serve as an input for Task 1.B. (Establish and operate regular monitoring, reporting, advising and coordination of the key quality elements of the ESS Vision 2020 and its Portfolio).

2. Mapping of the key quality elements (KQE), as defined under first action of Task 1.A, with the ES Code of Practice (CoP), the Quality Assurance Framework of the ESS (QAF) and other important sets of quality components (like e.g. the Single Integrated Metadata Structure, SIMS).

The relevant indicators of the CoP as well as the related methods of the QAF, as far as they are concerned by the implementation of the ESS Vision 2020, shall be identified. Besides the CoP/QAF, there might be other important quality components, like the SIMS, deserving to be mapped against the ESS Vision 2020 Portfolio. Secondly it should be answered if and how the ESS Vision 2020 and ESS VIPs call for new methods / tools which would deserve enhancement of the CoP, QAF and possible other quality components (like SIMS) in order to preserve coherence, consistency and possible forward looking developments within the overall quality framework of the ESS.

#### **Benefits:**

- A clear overview and common terminology about KQE embedded in the ESS Vision 2020 and the ESS Vision 2020 Portfolio
- ESS VIPs might get new common quality aspects to their work – areas for redirection might be identified in the ESS Vision 2020 Portfolio in order to ensure consistency with the current ESS quality framework
- Having a common understanding about the relations between the CoP/QAF/other important quality components (like SIMS) and the ESS VIPs
- Providing valuable input for a possible future enhancement of the CoP, the QAF and other important quality components (like SIMS)

#### **Deliverables:** Report containing the following:

- Definition of KQE in the context of the ESS Vision 2020 (including terminology) and ESS Vision 2020 Implementation Portfolio based on a common language
- Link KQE to the different ESS VIPs
- Assignment of KQE possibly not covered yet by the ESS VIPs, in particular to explore new, multi-source (combined) statistics
- Correspondences between the CoP/QAF/other quality components like SIMS and the ESS Vision 2020 Portfolio
- A first list of new areas/items being proposed which might deserve further attention to be integrated where appropriate into the CoP, QAF or other quality components (like SIMS) as a result of the ESS Vision 2020 implementation<sup>4</sup>
- Possible areas for improvements within the ESS Vision 2020 Portfolio identified by the mapping exercise
- An appropriate basis for the set-up of a quality monitoring, reporting, advising and coordination mechanism of the ESS Vision 2020 Portfolio (Task 1.B)
- Possible contribution to Task 1.C (Make proposals for the revision and extension of the Quality framework of the ESS – covering new, multi-source statistics as well).

A first example of a possible layout of the mapping exercise can be found in [Annex 3 of the present Implementation paper](#).

### **Task 1.B: Establish and operate regular monitoring, reporting, advising and coordination of the key quality elements of the ESS Vision 2020 and its Portfolio**

#### **Milestones:**

1. Identify a robust governance for coordinating quality under the ESS Vision 2020<sup>5</sup>

Assessing the suitability of the current governance structure; identifying the responsibilities, roles and tasks of different groups taking into account VIG, VIN<sup>6</sup>, WG Quality, DIME<sup>7</sup>, etc. Another component of this sub-task is to

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<sup>4</sup> The developments under the Action Line 2 might also provide input for possible enhancements of those quality components.

<sup>5</sup> Strategic guidance of the VIG will be needed in particular for this aspect.

<sup>6</sup> Vision Implementation Network – network of senior managers in the NSIs, involved in the implementation of the ESS Vision 2020.

<sup>7</sup> Directors of Methodology Group.

consider alternative governance formats for Quality under the ESS Vision 2020, such as for example the set-up of a Quality Board for the ESS Vision 2020 Portfolio from VIG members. The TF QUAL could also evolve into a Steering Committee for the QUAL implementation.

2. Ensure a regular monitoring, reporting, advising and coordination of the KQE of the ESS Vision 2020 and its Portfolio and reporting the results, assuring consistency and compatibility with the current quality framework of the ESS – special attention would be given to the work developing quality frameworks for administrative data (ESS.VIP.ADMIN), big data (ESS.VIP.BIGD) and validation (ESS.VIP.CDVP). Regular contact would be set up with the Project Managers and advice would also be given to them on the design and implementation of the quality aspects of their projects, as well as assessment of the quality dimension of the ESS.VIPs outputs. Regarding ESS.VIP.CDVP, there might be a need to provide a specific quality related input to the project, subject to its approval and its agreed scope; this might require a specific action and cooperation between QUAL and ESS.VIP.CDVP.

After a stock taking action (collecting already existing monitoring tools within the ESS Vision 2020 Portfolio), a reporting (sub) mechanism aiming at delivering decision makers a suitable set of information on quality would be developed and embedded in the reporting mechanisms already in place for the ESS Vision 2020 Portfolio. Under this action, it will be ensured that the results of Task 1.A are translated into an appropriate monitoring, reporting, advising and coordination mechanism serving as input for information and decision making purposes. Operational guidelines for practical implementation of quality monitoring under the ESS Vision 2020 and the ESS Vision 2020 Portfolio will be developed, where appropriate.

#### **Benefits:**

- A robust governance at European level in order to ensure the harmonized development and implementation of key quality elements in the context of the ESS Vision 2020 and ESS Vision 2020 Implementation Portfolio, in line with existing ESS quality components as appropriate
- Anchoring QUAL@ESS Vision 2020 into the ESS governance framework, applicable to the ESS Vision 2020 and ESS Vision 2020 Portfolio
- A clear monitoring, reporting, advising and coordination on and maximum use of the quality developments of ESS.VIPs, based on a well-defined set of mechanisms and suitable guidelines on how to operate these mechanisms
- Assuring consistency on quality in the ESS Vision 2020 Portfolio
- In particular, a clear understanding of and a common approach taken to the quality framework aspects of three ESS VIPs concerned (ADMIN, BIGDATA and VALIDATION) where appropriate

**Deliverables:** A Report containing the following:

- Proposal for a robust quality governance (sub) mechanism under the ESS Vision 2020, building on the existing governance in place, identifying the roles and the reporting lines of the involved groups and including ESSVIPs related Quality mandates for the different groups
- An appropriate monitoring, reporting, advising and coordination mechanism suitable to deliver information on quality related to the ESS VIPs to decision makers (for instance a quality profile for ESS VIPs) and a plan for operating this mechanism.
- Guidelines on how to operate (based on the outcome of Task 1.A) in a sustainable way this monitoring, reporting, advising and coordination mechanism, including the role of the main actors
- Regular progress report on the work developing quality components for ESS.VIPs, in particular for administrative data (ESS.VIP.ADMIN), big data (ESS.VIP.BIGD) and validation (ESS.VIP.CDVP)
- Guidance in the work of the ESS.VIPs to ensure consistency with the overall ESS approach to quality
- Possible contribution to Task 1.C.

#### **Task 1.C: Make proposals for the revision and extension of the Quality framework of the ESS – covering new, multi-source statistics as well**

With the increasing use of data coming from administrative sources and new, technology-driven data sources, or a mix of more conventional and new sources, the quality approach and quality framework of the ESS need to be modernised, to the extent to which is appropriate. Based on the outcomes of Tasks 1.A and 1.B, the main aim of this task is to enrich the ESS quality framework and to propose possible recommendations for its enhancement based on the developments of the ESS Vision 2020 Implementation Portfolio<sup>8</sup>.

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<sup>8</sup> It has to be underlined that specific methodological developments which go beyond the scope of the QUAL@ESS.Vision 2020 might be needed for the implementation of this task.

The outcomes of this task, i.e. the "quality lessons" learned from the ESS Vision 2020 implementation, will serve as an input for the next revision and modernisation of the ESS quality framework, and more precisely, the European Statistics Code of Practice, together with possible inputs coming from the second round of ESS peer reviews, the revision of Regulation 223 of 2009 on European statistics and action line 2 of QUAL@ESS Vision 2020 etc.

**Milestones:**

1. Review the current quality framework in the light of the quality developments of the ESS VIPs, and more specifically, the most relevant ones like ADMIN, BIGD, VALIDATION and DIGICOM<sup>9</sup>
2. Make proposals and recommendations for the revision and extension of the ESS quality framework

**Benefits:**

- Full integration of the ESS Vision 2020 achievements in the common ESS Quality framework
- Keeping consistency whilst modernising the approach to quality
- Assessment of quality in the context of use of combined and/or new data sources

**Deliverable:** Report on how the quality framework of the ESS should evolve, containing proposals and recommendations for the second revision of the European Statistics Code of Practice

**Action 2: Make quality assurance fit-for-purpose – differentiate the ESS quality approach, make proposals on branding and labelling/certification**

The ESS Vision 2020 calls for quality assurance tools and mechanism which are fit for purpose<sup>10</sup> and "are appropriate and effective for all elements of the statistical life cycle, including data sources". The strategy then further defines that clusters of quality assurance tools should be consistently applied to statistics with a similar usage profile and that a well-informed cost/benefit assessment of the importance of applicable quality dimensions should systematically feed strategic decisions. This will then ultimately contribute to maintaining and strengthening public trust in official statistics.

The aim of Action 2 is to implement the objectives described above and to take forward the existing ESS quality assurance achievements by exploring the concepts of fit-for-purpose quality assurance and make, where appropriate, proposals for branding and labelling/certifying European statistics. The scope of this action shall duly take into account the developments under the DIGICOM project.

**Task 2.A: Set up a knowledge-base and model of Quality assurance methods and tools in the ESS**

**Milestones:** Build a knowledge base and model of existing quality assurance methods and tools in the ESS.

**Benefits:**

- Clear and model-based understanding of how quality is assured and monitored across statistical domains in the ESS
- Sharing of knowledge and best practices for quality assurance across the ESS

**Deliverable:** A taxonomy and model of existing quality assurance methods and tools at ESS level

**Task 2.B: Define fit-for-purpose quality assurance**

**Milestones:**

- Develop the framework for a fit-for-purpose, differentiated quality assurance mechanism in the ESS
- Define the different quality assurance layers/clusters with the corresponding, appropriate and effective quality assurance methods and tools for all elements of the statistical life cycle, including data sources

**Benefits:**

- Better use of resources
- Better information of users on quality
- Avoid expectation gaps from users regarding quality

**Deliverable:** Detailed report describing

- The framework of a fit-for-purpose, differentiated quality assurance mechanism for the ESS
- The different quality assurance layers/clusters identified and

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<sup>9</sup> The DIGICOM programme, which is part of the ESS Vision 2020 portfolio, is aiming at identifying solutions in user analytics, innovative and sharable products and tools; contributing to the branding of European statistics and improving information delivery by means of engaging users and enhancing digital communication.

<sup>10</sup> Cf. in point 3.2 on page 9 of the ESS Vision 2020 – Doc ESSC 2014/21/7a/EN – 05.05.2014

- Their corresponding, appropriate and effective quality assurance methods and tools for all elements of the statistical life cycle, including data sources
- Possible recommendations for implementation

### Task 2.C: Investigate and make proposals on branding and labelling, certification

#### Milestones:

- As a final step in differentiating quality assurance of the ESS, investigate and analyse the pros and cons of setting up a system/mechanism for branding and labelling, certifying European statistics
- Clarify the terminology issue, make proposals for the update of the ESS Quality Glossary<sup>11</sup>
- Make recommendations and proposals for attributing all European statistics to the different quality assurance layers/clusters identified in Task 2.B
- Make proposals on the communication aspects, liaise closely with the ESS.VIP DIGICOM – assess the impact of the system on the users, the public and the media and the risks involved

#### Benefits:

- Clear understanding of the pros and cons of the branding and labelling, certification system/mechanism
- Clarified and harmonised terminology on the subject, using the same words while discussing about the subject all across the ESS
- First ideas on what the implementation of a branding and labelling, certification system/mechanism would mean
- Good understanding of the communication aspects and impacts related to differentiated quality assurance and of the risks involved
- Avoiding expectation gaps from users regarding quality

#### Deliverable: A Report containing the following:

- The pros and cons and final conclusions on branding and labelling, certification system/mechanism for the ESS
- Proposals for clarifying the terminology used in the ESS and updating the ESS Quality Glossary
- First recommendations for attributing all European statistics to the different quality assurance layers/clusters identified
- Concrete proposals on the communication aspects and impacts - assessment of the system's impact on the users, the public and the media and the risks involved, in coordination with ESS VIP DIGICOM results.

### ACTION LINE 2: ENHANCE QUALITY MANAGEMENT IN THE ESS; DEVELOP THE CONCEPTUAL ELEMENTS OF A COMMON QUALITY FRAMEWORK FOR THE ESS

#### Action 3: Develop the conceptual elements of a common Quality framework<sup>12</sup> for the ESS

The principles of the Code of Practice together with the general quality management principles represent a common Quality framework in the ESS (see the Preamble of CoP). In view of continuous improvement and preserving quality as the competitive advantage for official statistics in a rapidly changing environment, it is proposed to explore these general quality management principles on the basis and inspiration of generally accepted total quality management (tqm) approaches. Possible enhancements of the CoP could derive from this exploration. The tqm approach is an integral part of "managing organisation" and it focusses on quality in a holistic way, i.e. "managing for quality", by bringing together the different managerial aspects.

This task will build on the broad quality management experience of the ESS and, in particular, on the experiences and good practices that some Statistical offices have gained in tqm implementation<sup>13</sup>. It will take into account the very challenging environment in which the ESS operates as well as the managerial approaches which are necessary for the good functioning of modern organisations.

<sup>11</sup> Cf. <http://ec.europa.eu/eurostat/documents/64157/4373903/04-ESS-Quality-Glossary-2012.pdf/e6a0f9df-c137-4bb2-90cd-8f3f25f0b39b>

<sup>12</sup> The framework is proposed to be inspired by the total quality management (TQM) approach – the TQM is a set of principles, model and requirements for managing quality in an institution as a whole. TQM systems are in general based on the following approach: 1. The core values and general principles of the system are formulated. 2. A model of the system is established in order to implement the principles and structure the framework. 3. Requirements for the TQM-systems to be implemented by the organisations are determined – they should be formulated in a general way allowing for customisation of their implementation with a view to enhance quality. This is the core of the TQM framework. 4. Terms used in the system and their definitions are described in a special vocabulary.

<sup>13</sup> There are already implementations of specific TQM elements in several countries like for example Sweden (ISO), Slovakia (ISO), Lithuania (ISO), UK (ISO), Finland (EFQM), Czech Republic (EFQM), Estonia (EFQM), Eurostat (EFQM).

In this way, this task will contribute to using opportunities and addressing threats the ESS faces with regard to quality and will ensure provision of statistical products and services that consistently meet and anticipate as much as possible users' needs and requirements and enhance user satisfaction and public trust in official statistics.

This common quality framework is expected to be beneficial to the ESS and its members in view of meeting or even exceeding the objectives defined, taking into account their capabilities and the context in which they operate. Effectiveness and efficiency gains for the ESS as a whole will also be sought.

### **Task 3.A: Experiences, lessons learned & comparative study between the ESS quality framework and the tqm principles**

This task is a stock-taking and mapping exercise in order to launch the work on developing the conceptual elements of a common quality framework for the ESS. The CoP and the QAF already contain some elements of the total quality management (tqm) approaches but they are not the result of a systematic, structured and exhaustive review. Within this task, a comparative study between the common ESS Quality framework and generally accepted tqm approaches will be carried out. Practical experience of Member States in implementing tqm will also be considered in this process. The study will also elaborate high level recommendations, where appropriate, on how to enhance the current ESS quality framework, as appropriate.

#### **Milestones:**

- Collect experiences and lessons learned in the field of tqm from ESS members
- Identify and share good practices for assuring the quality of management, particularly in the context of reduced budgets and tighter financial constraints
- A part of the ESS peer review reports containing good/innovative practices will also be used for this stock-taking exercise
- Carry out a (high-level) comparative study on total quality management frameworks (like e.g. EFQM and ISO) and identify possible elements which would fit the ESS context
- Identify possible high level quality management gaps in the existing common ESS quality framework
- Describe how the current common ESS Quality framework could evolve taking into account the results of this high level comparative study
- Define recommendations on how a tqm framework could be implemented in the ESS, where appropriate

#### **Benefits:**

- Inspiration for ESS members for improving their quality management frameworks and one of the inputs for the elaboration of the common quality framework of the ESS
- Effective and efficient knowledge management within the ESS
- A comparative picture and general overview of quality management in the ESS compared to total quality management approaches (like EFQM and ISO e.g.) and possible ways to strengthen it

#### **Deliverables:**

- A knowledge base with experiences, lessons learned and good practices in the field of total quality management which is available to the ESS
- A high level comparative study on the total quality management approaches, identifying elements which would fit the ESS context
- Defining where and how existing total quality management approaches could be used to strengthen the common ESS Quality framework

### **Task 3.B: Develop core values, principles and model, tqm elements and requirements<sup>14</sup> and a common vocabulary**

Existing tqm core values, principles and models are the starting point for this Task, covering quality management principles such as customer focus, leadership, processes and systemic approach, engaged and competent people and continuous improvement<sup>15</sup>. The results of the comparative study under Task 3.A will also provide valuable input for this Task.

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<sup>14</sup> There are various synonyms for the term requirement. The EFQM Excellence model contains *criteria*, *sub criteria* and *guidance* for the sub criteria. ISO 9001 is a set of *requirements* for a tqm. The structure of CoP/QAF is *principle*, *indicator* respectively *method*.

<sup>15</sup> The principles and model should be formulated in such a way that they also cover, e.g.: risk management; knowledge management; quality in specification of needs and in (re)design stage of a statistical process ('quality by design') as necessary precondition for statistical output of required quality; dependence of the quality of the statistical output on the quality of other object's such as process, methodology, input data, systems and staff.

The core values, the general tqm principles and the selected model are implemented through tqm elements. The elements are translated into action via set of requirements determined for each element. Leadership plays a key role in such quality models.

Possible elements (in bold letters) with examples of some basic requirements (in form of key words /phrases) are described in [Annex 4](#) of this Implementation paper.

Terms and their definitions are a key part of tqm and a common, unified vocabulary also needs to be established for a common ESS quality framework through an iterative process. Some definitions are already included in the ESS Quality Glossary, but they might need some revision and some new terms might also need to be added.

#### **Milestones:**

- Further develop and make explicit core values, principles and a model for a common ESS quality framework
- Define the elements of a common quality framework for the ESS and formulate high level requirements for these elements – develop training where appropriate
- Define concepts that are used in the framework or change if necessary concepts that are already present in the ESS Quality Glossary

#### **Benefits:**

- A solid foundation for a common quality framework in the ESS – the principles are translated into the requirements of the framework and the model guides the structure of the framework and allows for (self) assessment – a unified and clear vocabulary concerning quality management and total quality all across the ESS
- A common ESS quality framework contributes to assuring the high quality of the statistical input, throughput and output, i.e. that they consistently meet requirements and thus enhance user satisfaction and improve and maintain the public confidence in official statistics

#### **Deliverables:**

- A description and set of the core values, principles, model and a common vocabulary of a common quality framework which would fit to the ESS
- A set of requirements for a common ESS quality framework - this set of requirements, together with the vocabulary, the core values, the principles and the model, would form together the common ESS quality framework
- The framework will allow for a concrete implementation by the ESS members on various development levels – for this implementation, issue recommendations, proposals and include them in the CoP
- A training component for the common ESS quality framework
- A proposal for updating the ESS Quality Glossary with concepts that are used in the common ESS quality framework

### **Task 3.C: Risk and quality management**

Risk can be defined as the adverse effect of uncertainty on objectives. The objective of the total quality approach can be defined as to produce products and services that consistently meet requirements (e.g. that of users but also all applicable legal requirements) and to enhance the user satisfaction and thus improving and maintaining the public confidence in official statistics. Risk management therefore contributes to achieve the objectives of the total quality approach.

**Milestone:** Describe how risk management can be integrated in the common ESS quality framework.

**Benefits:** Risk management is embedded in the common ESS Quality framework. The risk-oriented approach contributes to the effectiveness of the total quality approach itself.

**Deliverable:** A study on how risk analysis can be integrated in the common ESS quality framework.

## **5. Next steps**

In its meeting of September 2015, the Vision Implementation Group (VIG) *"approved Action 1 and asked for the description of its implementation details"* and put Actions 2 and 3 on hold, asking for *"more reflection (organisation of a high-level workshop e.g.) and strategic consultation (VIN, ESAC, etc)"* in the ESS and highlighting that these parts of the document should be further developed in this regard<sup>16</sup>. This chapter replies to these recommendations of the VIG and provides the requested information as it is available today.

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<sup>16</sup> "Governance questions (e.g. who does what on branding and certification, on the revision of the Code, TQM, etc), resource estimations and prioritisation were mentioned amongst the issues discussed" – cf. the rest of the meeting's conclusions on this item.

## 5.1 Implementation details of Action 1

### Project Overview (mandatory)

Stage	Title	Key deliverables	Start of Stage	End of Stage	Resources
1	Coordination of Quality in the ESS Vision 2020 Implementation Portfolio	Regular monitoring, reporting, advising and coordination mechanism of the key Quality elements of the ESS Vision 2020 Portfolio established and operated, proposals for the next revision of the common ESS quality framework formulated.	15/10/2015	31/12/2020 – end of the work of the Portfolio	1 FTE

Task No.	Task	Dependencies	Person Responsible	Resources (HR, financial, IT, etc.)	Deadline	Actual Delivery Date	Progress Report
1	Bilateral meetings with ESS VIP project managers and supporting frameworks managers to identify the quality aspects/the "key quality elements" of their respective project/framework		Eurostat	20 days	30/10/2015		
2	Update the QUAL@ESS Vision 2020 Implementation paper to include detailed planning for Action 1 (Version 1.1)		Eurostat	1 day	09/11/2015		

Task No.	Task	Dependencies	Person Responsible	Resources (HR, financial, IT, etc.)	Deadline	Actual Delivery Date	Report	Progress
3	First draft of the report identifying the quality aspects /the "key quality elements" of each project/supporting framework of the Portfolio		Eurostat	4 days	11/11/2015			
4	Portfolio Workshop with the participation of all Project Managers to identify how the supporting frameworks can be useful to the projects of the Portfolio, i.e. how to get the most out of them		Eurostat	1 day	13/11/2015			
5	Organisation and preparation of the last meeting of the TF QUAL to discuss and agree on the KQEs identified and the relevant governance issues		Eurostat, TF QUAL	2 days	20/11/2015			
6	Draft minutes of the TF QUAL + update of the first report to reflect the outcome of the meeting		Eurostat	2 days	25/11/2015			
7	Final proposal on the KQEs, the governance		Eurostat	4 days	30/11/2105			

	mechanism and implementation plan						
8	Progress report to the WG Quality, discussion with the Member States		Eurostat, Member States	1 day	01/12/2015		
9	Setting up and operate the governance mechanism (e.g. a Steering Committee involving Member States) to ensure regular monitoring, reporting, advising and coordination mechanism of Quality of the Vision Implementation Portfolio, until the end of the Portfolio activity (2020)		Eurostat + Steering Committee with the participation of Member States	10 days	15/01/2016 (set-up) and 31/12/2020, end of the Portfolio Implementation (operate)		
10	Report containing proposals on how the Common ESS Quality Framework should evolve to include the quality elements of / the quality lessons learned from the Implementation of the ESS Vision 2020 Portfolio.		Eurostat + Steering Committee	15 days	end-2017		

### Risk Management Plan

Risk No.	Risk	S	P	M	Mitigation: Proposals to eliminate / minimise the risk ( <i>What you will do in any case to reduce/manage the risk</i> )	Contingency: What you will do to respond/manage the impact if the risk occurs (What you already do when it happens)	Person Responsible	Progress Report
1	Lack of support from ESS VIP managers	2	5	10	Organisation of bilateral meetings to clarify the issues and make sure that QUAL will add value to the Portfolio	Inform the Portfolio Management Bureau	Eurostat	
2	Problems/ delays in agreement on definitions of the key quality elements of the Portfolio	3	4	12	Propose a first document to the TF on 20 November 2015	Make progress via written procedure	Eurostat	
3	Unclear governance of the project	4	2	8	Put a Steering Committee in place with the MS		Eurostat	
4	Unclear support/governance for monitoring, reporting, advising and coordinating	3	5	15	Ensure coordination with the PMB (VIG/VIN)		Eurostat	

S (Severity) \* P (Probability) = M (Magnitude)

1(low) to 5 (high)

### Technical Specification Checklist/Quality Assurance Plan (optional)

Project Deliverable	Technical Specifications and Quality Standards	Quality Assurance Plan		Date Signed Off
		Who	When	
Intermediate/final reports.	Review by the Steering Committee and the project stakeholders. Approval by the project Owner.	Eurostat	After completion of each version of the deliverables.	
Monitoring/reporting process	High level modelling to be approved by the project owner	Eurostat	January 2016	
First report on the possible evolution of the Common ESS Quality Framework	Review by the Steering Committee and the project stakeholders. Approval by the project Owner.	Eurostat	January 2016	

### Communication Plan (if the case)

Target Audience	Objective	Communication tool e.g. report, seminar, meeting etc.	Person Responsible	Date/Frequency	Progress Report	Evaluation of success
VIG	Approval of Version 1.1	QUAL@ESS Vision 2020 Implementation paper	Eurostat	13/11/2015		
DIME-ITDG steering group	Make a progress report on QUAL	QUAL@ESS Vision 2020 Implementation paper + PowerPoint presentation	Eurostat	18/11/2015		
TF QUAL	Discussion on the first draft of the report	First report	Eurostat	20/11/2015		
WG QUAL	Make a progress report on Action 1 + Discuss the draft report	First report + PowerPoint presentation	Eurostat	01/12/2015		
VIG	Progress report on the key quality elements and the monitoring, reporting and advising mechanism	Document	Eurostat	20/01/2015		

## 5.2 Organisation of further reflection and consultation on Actions 2 and 3

Taking duly into account the recommendations of the VIG on Actions 2 and 3, Eurostat has initiated the preparatory work of the requested high-level reflections and consultations. Eurostat will report to the VIG as soon as the first outcomes of these discussions and consultations will be officially approved.

## 6. Conclusions

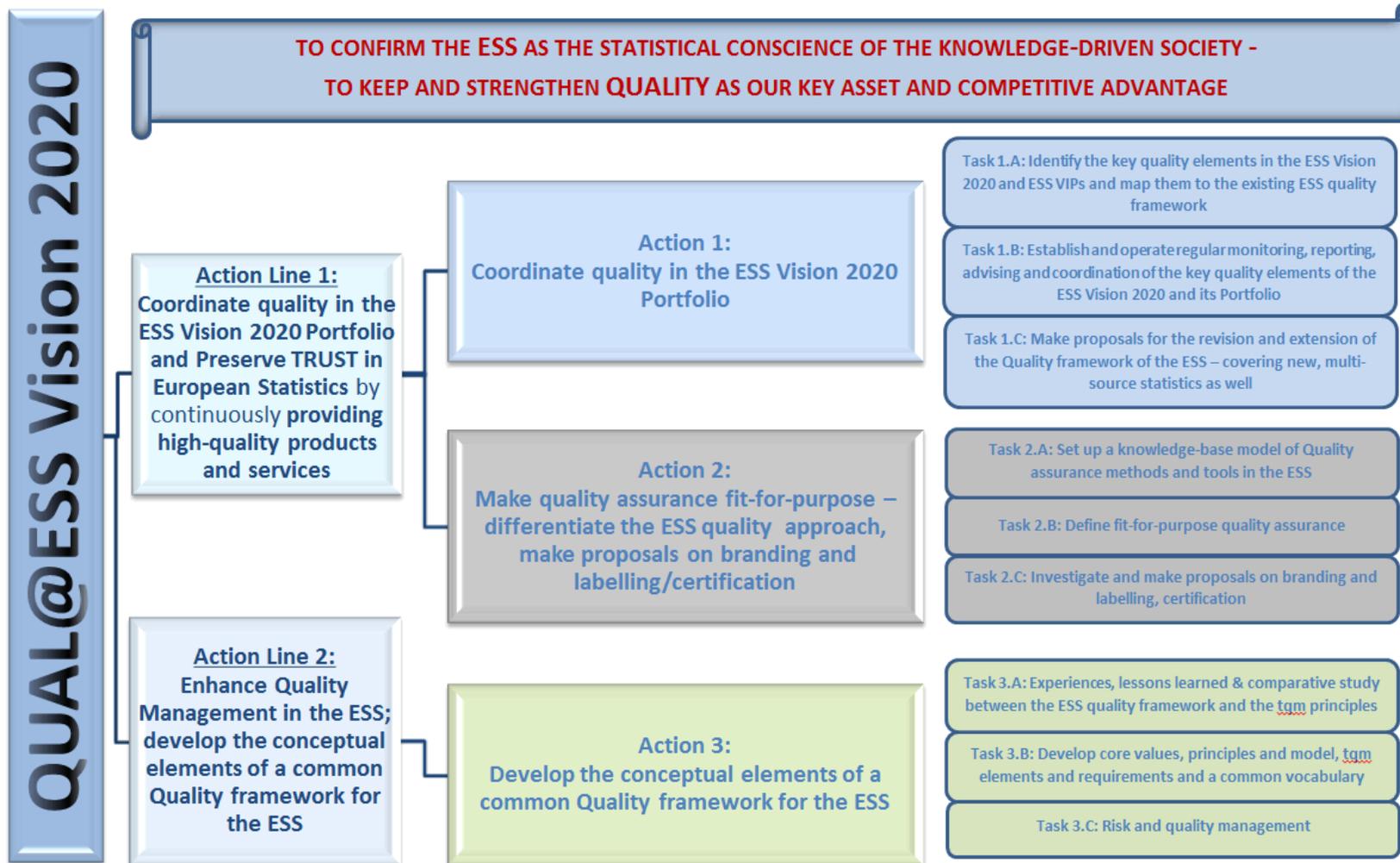
The ESS Vision 2020 identifies ambitious goals and actions for its Quality key area. Although to various extents, all ESS.VIP projects potentially have a quality component in their construction needing proper coordination. The ESS.VIPs should be properly coordinated from a quality point of view to ensure that the existing ESS quality management system is exploited in full in a consistent manner.

On the other hand, the implementation of these projects however will not reply and fulfil all the quality objectives and ambitions as declared by the ESS Vision 2020 strategy; as an example the ESS quality management system needs to evolve to integrate new developments in statistical production.

The ESS has got a very well established and rooted quality framework which – after the closure of the second round of ESS peer reviews – stands before a revision and modernisation. In order to take the full benefits of the developments and achievements of the ESS Vision 2020 Implementation, and at the same time, to make sure that they all fit within an (most probably) extended quality framework, a common coordinating, monitoring, advising and reporting framework needs to be established . This is proposed to be done via the QUAL@ESS Vision 2020, described in this paper, as a support service to the ESS Vision portfolio.

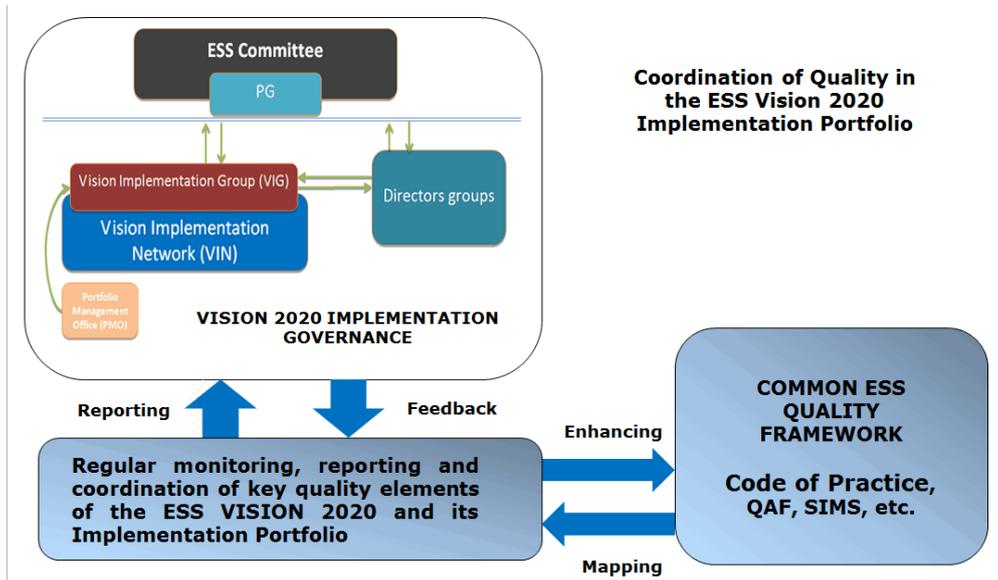
ANNEX 1:

OVERVIEW OF THE STRUCTURE OF THE QUAL@ESS VISION 2020



**ANNEX 2:**

**COORDINATION OF QUALITY IN THE ESS VISION 2020 IMPLEMENTATION PORTFOLIO**



**ANNEX 3:**

**EXAMPLE FOR MAPPING OF VIPs TO PRINCIPLES/INDICATORS**

**Mapping of indicators of the Cop, which contain relevant requirements for the ADMIN and SIMSTAT ESS VIPs**

Principles and Indicators of the CoP							
VIP	Principle 7	Principle 8	Principle 9	Principle 10	Principle 11-13	Principle 14	Principle 15
Projects							
VIP ADMIN		8.1, 8.7, 8.8, 8.9	9.1, 9.4	10.3		14.4	15.6
VIP SIMSTAT			9.5, 9.6				

**Examples of suggestions for enhancing the current indicators so that new key quality elements relevant for the ESS Vision 2020 Portfolio are covered**

Additional Indicators for VIP SIMSTAT

- Indicator 10.2 states: *The productivity potential of information and communications technology is being optimized for data collection, processing and dissemination.* The subitems of 10.2 are more about productivity potential within an NSI. The cost-saving potential of using mirror data from another NSI as proposed in VIP SIMSTAT is not covered by principle 10.2.
- Cross national comparability (and coherence), as demanded by Indicator 14.4, should also be broadened so that it also covers the usage of mirror data from another NSI.
- Indicator 15.5 has to be extended so it covers the exchange of metadata between NSIs who exchange mirror data.
- Principle 13 states: Timeliness and Punctuality is essential if the statistical production of one NSI depends on the micro data delivery of another country's NSI, this could be stated by a new Indicator.

**POSSIBLE ELEMENTS WITH EXAMPLES OF SOME BASIC REQUIREMENTS OF A TQM FRAMEWORK**

The elements have been grouped and inspired by the acknowledged international TQM standards and models and they follow the PDCA cycle<sup>17</sup>. Neither element nor related requirements given below represent the final and exhaustive version – they are mentioned for illustrative purposes only.

- **Environment** (top management role)  
Understanding environment of the organisation (incl. opportunities and threats, needs and expectations of interested parties – users and other. Statutory and regulatory requirements and its impact on the organisation (risk assessment), establishing strategy, defining scope of TQM and processes<sup>18</sup> needed for TQM, risk and opportunities for processes.
- **Leadership** (top management role)  
Quality policy (QP) compatible with strategy; identification of significant risks; communication (to staff) of QP, of importance of TQM and of quality + user orientation; internal communication channels; responsibilities and authorities; resources needed for TQM; management review of TQM.
- **Planning**  
Actions for managing risks and using opportunities, measurable quality objectives (QO) to implement QP, Plan / processes for meeting QO).
- **Support**  
HR needed for processes. Focus on awareness and competence. IS / ICT and other infrastructure needed for processes. Work environment needed for processes; planning, monitoring and measuring, improving resources; documents and records needed for processes (creation, revision, control).
- **Operations**  
Realisation of product, service. Operational process (GSBPM phases). Planning, development, implementation, control. Monitoring and control of externally provided data and generally of externally provided products and services (e.g. fieldwork). Product, service identification. Product, service traceability. Control of product and service release. Control of non-conforming process outputs, products and services.
- **Evaluation** (check)  
Monitoring, measuring, analysing, evaluating process, product, user satisfaction. Monitoring, measuring, analysing, evaluating of meeting quality objectives. Self-assessments, internal audits. Reviewing TQM as a whole (management review at planned intervals).
- **Improvement**  
Based on evaluation: improvement opportunities → improvements. Non-conformities → corrective actions. Enhancement of the whole TQM.

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<sup>17</sup> PDCA (plan–do–check–act or plan–do–check–adjust) is an iterative four-step management method used in business for the control and continuous improvement of processes and products. It is also known as the Deming circle/cycle/wheel.

<sup>18</sup> Consisting of value added processes (statistical processes) and processes necessary to support the value added processes (i.e. supporting managerial processes and supporting resource processes – HRM, IS/ICT M, M of other infrastructure,.. )

**ANNEX 5:****GROUP MEMBERS**

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