Building the future of European statistics

EUROPEAN STATISTICAL SYSTEM

"The ESSC came to an agreement on the ESS Vision 2020 as the guiding frame for the ESS development during the years up to 2020."

21st Meeting of the
European Statistical System Committee
Luxembourg, 14th and 15th May 2014

ESS Vision **2020**

Building the future of European statistics

1.

Why do we need a strategic debate on the ESS future today?

Information and knowledge are fundamental building blocks for all modern societies. Official statistics offer an information infrastructure and a public good that responds to the needs of many categories of users - citizens, decision makers, researchers and journalists. Official statistics were born together with the modern national state at the beginning of the 19th century and have borne witness to all facets of the historical evolution of the state.

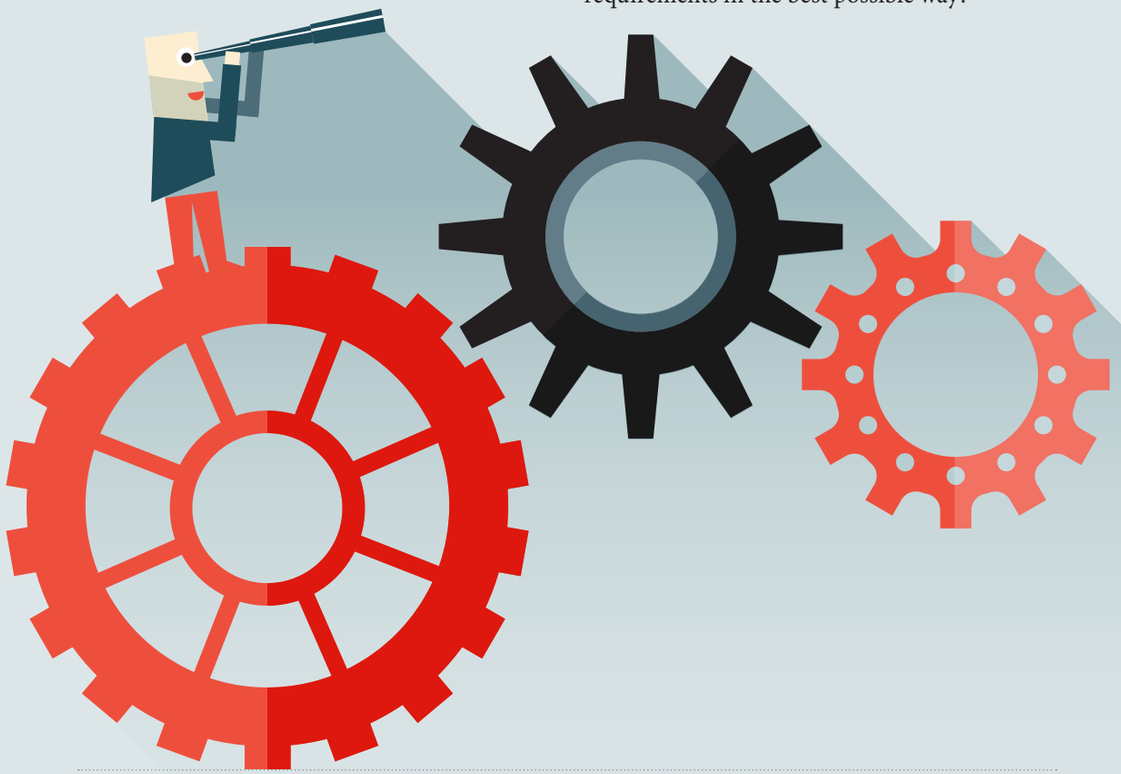
In this sense, it is not surprising that official statistics have always strived to adapt to major developments in society and the economy. What is it that is important enough to trigger a strategic debate and change today? Basically we see four main challenges, the first three of which are generic trends discussed in all statistical offices around the globe while the fourth is more specific in the European context

THE DATA REVOLUTION

A digital transformation is taking place across the globe. The ever increasing availability of data is a trend that is of strategic relevance for official statistics. There is a need to assess and interpret the meaning of these data in an intelligent and interactive fashion. These new data sources offer a huge opportunity to improve the timeliness and relevance of official statistics as well as to lower response burden. On the other hand, there will be more competitive pressure from new data producers which can eventually change the role of official statistics. We have to answer the core question: what is the future role for a reliable and high quality information infrastructure in such an environment?

NEW METRICS

Globalisation has changed our world. A new and complex reality has emerged that has to be captured by official statistics. Important phenomena in our society including large-scale economic, financial and political crises, new forms of organising economic production through global value chains and multinationals, global demographic trends affecting developing and developed countries in many different ways, and issues of sustainable development ask for new statistical products, all of which go beyond the adding of separate national results and which are able to serve multiple purposes. In addition to the global and European level there is a growing need to develop statistics with increasing geographical detail to support national and regional policy making. How can the portfolio of products and services of official statistics be designed to reflect these information requirements in the best possible way?



THE PRICE OF STATISTICS

Quality is never cheap. High quality statistical information is not cheap, either. Modern societies and policy makers show little awareness of the necessity to invest in the production of high quality statistics. Respondents are not enthusiastic when they are asked to fill in a questionnaire. Tightened budgets in the public sector have led to shrinking resources also for statistical administrations. All of this creates a dilemma for official statistics. How to cope with reduced budgets and the need to cut red tape further, while keeping the quality high (including relevance) that, in turn, is the characteristic for the brand “official statistics”?

THE FUTURE OF EUROPE

The evolution of official statistics as a public good reflects the evolution of the society in which they thrive and in that context the evolution of official statistics in Europe has accompanied the different phases of the development of the European Union and the future direction of the next evolutionary phase of the European project is unclear. Stronger or weaker forms of integration may follow the current phase, which could be characterised as a period of “crisis management”. New forms of economic governance have emerged from this period and it is clear that decision making in Europe continues to be built entirely on the assumption of a sound evidence base. EU policy increasingly sets quantitative objectives and thresholds making use of statistical indicators and hence NSIs are increasingly confronted with high quality requirements for those indicators.

These four challenges are not entirely new. Rather, they are a continuation of trends which have already manifested themselves over the last ten to twenty years. It is therefore not surprising that a great number of developments and changes have been started or are already realised at national, European and global level. The key milestones in the development of European statistics are summarised in Annex A. In 2013 these developments have accumulated to a point, where a review of the vision and mid-term strategy (until 2020) has become necessary and urgent. In particular, diverging opinions concerning the adequate level of European integration in statistics have led the ESS to a decision to review the modernisation process and update the vision laid down in Commission Communication (404) in 2009.

Today we, the partners in the European Statistical System, are trusted providers of European statistics both in their national and EU dimensions. With this ESS Vision 2020 we commit to a common strategic response to the above challenges. Regardless of which way the European Union will move - are we prepared?

2.

The response of European statistics

"We provide the European Union, the world and the public with independent high quality information on the economy and society on European, national and regional levels and make the information available to everyone for decision-making purposes, research and debate."

That is our mission as formulated in the European Statistics Code of Practice and we are fully committed to it. As our world is changing, we have to change with it. The drivers for change described above indicate the direction in which we must travel in terms of the changes we need to make and the rationale for making those changes.
We are rightfully proud of our considerable strengths: coherent, time-consistent and reliable statistics based on internationally harmonised concepts, sound methodologies and a strict data protection regime. At the same time we have to become more efficient and make improvements in some key aspects such as timeliness, agility and flexibility.
Part of our strength derives directly from the European context with its democratic institutions, legislative powers and culture of cooperation. This is the climate in which we, as information providers, can thrive.

Our ambition is to stay relevant by building upon our strengths. Our main focus will be on our outputs since that is where our value to society lies. We want to increase our value by communicating our products and services in an active and coordinated way. Coherence of our statistics is a key objective. We will improve our responsiveness to new user needs in areas such as globalisation, migration and sustainability. As the world is changing we have to adapt our concepts and the way we measure society. We will work together, in sharing methods, tools and, if all prerequisites are fulfilled and within the appropriate legal frameworks, even identifiable micro data.

We will be agile and look for innovative solutions to deal with the many challenges ahead. We want to harness new data sources to produce meaningful statistics. We will develop novel ways to share data to do our job more efficiently and to reduce burden on our respondents. Here we see benefits to intensify our collaboration and build partnerships for developing new methods, tools, technological infrastructure and also human resources. This will also improve the efficiency of the European Statistical System. At the same time we will explore new roles and collaboration models for our institutes. We will make sure we deliver information in an interactive and easily comprehensible way, and improve statistical literacy of European citizens and institutions by guiding them through the deluge of data and information from various origins.

This agenda will be elaborated in an action plan. In all our actions, we will acknowledge diversity and pay due respect to the key EU principles of subsidiarity and proportionality. We will ensure that we satisfy European, national and regional needs simultaneously and avoid duplication of work where possible. Concrete projects will be checked against the overall vision and will be assessed against costs and benefits at both national and European levels. We will develop the ESS enterprise architecture to enable a systematic and coherent approach. New collaboration instruments will help to share resources in a sustainable way. In the long run we aim for a model that can incorporate institutional changes, demand trends and IT innovations smoothly.

We make an important contribution for the European society as a whole, and the functioning of the European Union and its member states in particular depends on our information. Using the existing infrastructure of Europe we will reach out to every citizen and decision maker and provide them with the information that they need.

In achieving the ESS Vision 2020, we will be guided by the United Nations Fundamental Principles of Official Statistics and the European Statistics Code of Practice.
We will strive for joint cooperation and continuous interaction with users and stakeholders according to the Principles of the European Statistics Code of Practice.
We will also adhere to the general quality management principles including leadership, partnership, staff satisfaction and continuous improvement. Specific principles of non-excessive burden on respondents and providing value for money will also guide our investments decisions which will also be subject to systematic cost-benefit analyses.

To summarise, while we aim to retain our strengths we will develop an ESS that:

- is guided by quality in all activities and continues to deliver coherent, relevant and reliable statistics based on internationally harmonised concepts, sound methodologies and a strict data protection regime
- engages users proactively and meets their demands in a cost-efficient and responsive manner
- promotes efficiency and realises productivity gains through collaboration in sharing methods, tools, technological infrastructure and where appropriate data and human resources, based on legal frameworks and all prerequisites needed to ensure statistical confidentiality
- embraces opportunities provided by the digital transformation and harnesses new data sources to produce meaningful statistics
- delivers information in an interactive and easily understandable way, and improves statistical literacy of European citizens and institutions by guiding them through the deluge of data and information from various origins

3.

European statistics in 2020: Where do we want to be?

The ESS Vision 2020 builds upon a holistic approach to reach quality and efficiency gains. It elaborates the European systems' method to statistics embracing the opportunities provided by the digital transformation and emerging data sources; putting quality as an overarching element in the statistical production process; suggesting new modes of collaboration and emphasising the importance of dissemination and user engagement to drive continuous improvements.

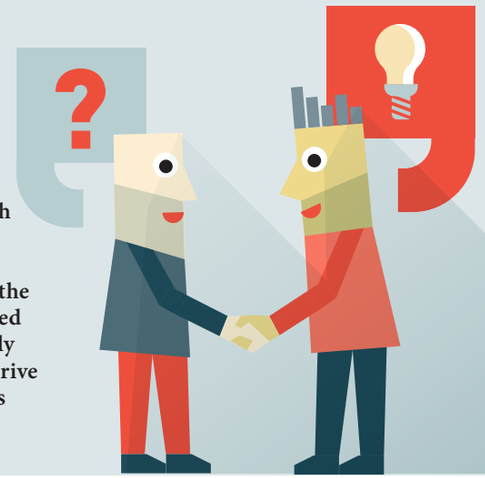
We have identified five key areas for delivering our vision. A broad description of each key area is provided below. The next chapter focuses on the mechanisms for collaborating and capacity-building as well as on the changes we will need to make in the infrastructure and supporting frameworks to achieve our objectives and ensure we create a system that is "fit for the future".

In each of the sections below we start with a box to formulate, in a concise way, where we want to be in 2020 and in the main body of the text below we elaborate on this, focussing in particular on "how we get there".

KEY AREA 1

Identifying user needs and cooperation with stakeholders

We will engage proactively in a regular dialogue with users to understand deeper their needs. Our strategic alliances with both public and private partners will help to respond flexibly to users' needs. We recognize that different user groups have different needs and we will address this diversity by offering the right information in the right way. We will respond to the need to provide policy-makers with reliable, comparable and timely statistics to execute economic and financial policy. We will strive to be a respected partner and a leader for driving innovations and progress in the global statistical community



> HOW DO WE GET THERE?

We will be more agile and responsive to our users' needs

We will obtain a better insight into our users: their current and future data requirements and needs for statistical services as well as their professional knowledge. This will allow us to combine multiple purpose products and data warehouses (e.g. basic statistics and accounts) with customized supplies (e.g. indicators for special purposes, micro-data access) to as many users as possible. Eventually this will strengthen our position in an increasingly complex information market.

We will improve agility in dealing with our core users, increase responsiveness to emerging questions in society and reduce time-to-market of new statistics (e.g.) through the exploitation of existing databases and where appropriate the combination of multiple data sources. We will identify user requirements and will undertake a prioritisation exercise to ensure that we use our collective resources in the most effective and cost efficient manner possible.

We will respond adequately to the different needs of different user groups

Policy-makers, journalists and researchers address the big questions in European society and they need our information to support their work. We will improve agility in dealing with these core users.

Enterprises are both information providers and users. We will consult with enterprises to identify their data needs and if requested develop and provide tailor-made analysis and services facilitating a comparison (benchmarking) with competitors in the same line of industry. At the same time, we will reduce response burden wherever possible.

The general public is commonly served by the press or National Statistical Institute (NSI) websites and we fully recognise the importance of ensuring public trust in official statistics which is the cornerstone of any statistical system. In addition to 'need to know' information that the public need to support "life decisions" we will develop ways to disseminate 'nice to know' statistical facts to increase the public profile of official statistics and raise statistical literacy.

We will strive to be a respected partner and a leader for driving innovation in the global statistical community

We will further develop the infrastructure for access to micro-data for research purposes, while preserving the confidentiality of individual information.

By participating in global statistical community initiatives we will strive to identify synergies and avoid duplication of work. For example, the High-Level Group for the Modernization of Statistics defined generic models (GSBPM, GSIM) under the UNECE flag, which can be reused in the ESS context. The data transmission standard SDMX was developed by a consortium of seven sponsors (BIS, ECB, Eurostat, IMF, OECD, UN and World Bank). More informal communities like the Statistical Network, a worldwide group of NSIs established at the initiative of the Australian Bureau of Statistics, and regional groups like the Nordic group also produce results that are of broader interest.

We will develop strategic alliances with public and private partners

We will cooperate with partners who own, collect, process or store data sources, including big data.

Relations with public and private partners will help us in areas where we lack data, knowledge or expertise. At the same time we should be aware that we possess unique data, conceptual frameworks, analysis capabilities and a public reputation that make us interesting and valued partners. We must find creative ways to maximize mutual benefits with partners.

The pace of new developments in fields like research, technology and legislation is ever accelerating while our resources are steadily diminishing. Given the global nature of many developments there is a value in identifying ways to establish partnerships with expert communities in these fields.

We will investigate the appropriateness and possibility of statistical offices fulfilling the role of a trusted third party through which market competitors can share information without risk of disclosing sensitive data.

KEY AREA 2

Quality of European statistics

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 pre-condition 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.

> HOW DO WE GET THERE?

In all our work we will abide by the principles of the European Statistics Code of Practice and implement it through the ESS Quality Assurance Framework

We have integrated our key quality principles into a comprehensive quality approach, the European Statistics Code of Practice. This Code defines the quality indicators of European statistics in terms of the institutional environment, statistical processes and outputs. The Code of Practice is accompanied by the ESS Quality Assurance Framework, which is a repository of best practices and tools to guide the implementation of its different indicators. The ESS will build on the core underlying principles applied across the official statistical community, namely the UN Fundamental Principles of Official Statistics and the European Statistics Code of Practice and place a strong focus on monitoring and adherence to these principles.

We will enhance our quality management with quality assurance tools that are fit for purpose

High quality will remain a key asset of all European statistics. All our statistics adhere to well defined quality standards, aimed at the highest possible quality. The quality assurance mechanisms we use to monitor these standards will be fit for purpose, agreed by the ESS and applied in close cooperation between Eurostat and national partners.

An important example of the demanding quality expectations of users are the indicators that provide input for policy decisions at the highest EU level, feeding almost automatically into the EU monitoring of national policies: government finance statistics and indicators like MIP, GNI, HICP and unemployment rates. A common set of quality

assurance tools dedicated to such indicators ensures strict, transparent and effective quality assessment and can be referred to in appropriate legal acts.

We will further enhance the existing approach to quality assurance with appropriate and effective quality assurance tools for all elements of the statistical life cycle, including data sources. Clusters of quality assurance tools will be consistently applied to statistics with a similar usage profile. A well-informed cost/benefit assessment of the importance of applicable quality dimensions will systematically feed strategic choices. For example, the relative weight of dimensions like timeliness and accuracy must be assessed from a users' perspective.

We need to assess the usability and quality of source data

As data is the source and input of our statistical production chain their quality is a key point. We have to agree on evaluation standards in line with the Code of Practice. A full quality assessment is not always possible and therefore it is important to address provenance and trust issues related to the use of both new and existing sources.

We will promote the quality of our statistics based on sound methodology and effective quality assurance mechanisms

We will continue to use sound, transparent and internationally agreed best practices from a methodological perspective. We will require more sophisticated estimation methods to compensate for a declining response rate to traditional surveys and we must also develop new methods to integrate the range of data sources now available into our production processes.

Verifiable quality is our main asset and comparative advantage. Therefore, we will put more emphasis on publicising quality as a driving force for all our activities and develop new meaningful and transparent ways of communicating the user-oriented quality assurance mechanisms applied to our statistics. We will invest in educating our users to increase their statistical literacy, in particular to mitigate the risk of improper and unjustified use of our statistical products and services.

KEY AREA 3

New data sources

We base our statistical products and services on both traditional surveys and newer sources, including administrative data, geospatial and where possible big data. New data sources complement the existing ones and help us to improve the quality of our products. We will work together to get access to new data sources, create methods and find suitable technology in order to use new data sources in producing European statistics in a reliable way.

> HOW DO WE GET THERE?

We will exploit the potential of new data sources

The data revolution is already presenting official statistics with profound strategic questions, which need to be addressed urgently. The possibility of using big data in the production of official statistics will be fully explored. Big data can potentially be integrated with existing data systems or in some cases it may be used to replace traditional sources, for example by using web scraping techniques to collect data that would otherwise require direct surveys. Big data can possibly also be used to provide auxiliary variables in models that estimate economic and social phenomena at detailed geographical level, or to "nowcast" macroeconomic series. Geospatial data can be merged with official statistics in particular for the benefit of social and environmental information. Furthermore, new data sources can be used to measure so far unmeasured or only partially measured phenomena. However, it would be a mistake to expect big data sources to provide the answers to all of our outstanding questions. The most probable scenario is that survey-based activities will continue to be carried on in the usual way as new sources cannot simply replace the traditional approach. In many cases new sources may complement but not fully replace the need for specific statistical surveys using more traditional tools. This reflects the need to take into account lack of coverage with respect to selected topics, population groups and potential bias.

We will establish alliances and partnerships with data owners

We will establish mechanisms to engage with new data providers and enter into a dialog with them to see what can be achieved. This is a key issue since we do not own the new data sources. Not only do we have to negotiate access to the sources, but the stability of data deliveries depends on external parties.

We will invest in new IT tools and methodological development

Technology is a key ingredient in our strategy. We will invest in IT infrastructure related to data collection, transfer and storage. We will develop tools to process data and benefit from new advances in visualisation and dissemination, taking into account the web 3.0 developments and the high level of interconnectedness, openness and standardization required to function in this environment. Our work will make use of the outcomes from the work done by the global statistical community.

We will invest in methodological advances to harness new data sources. In this area, partnership with other organisations and data providers will be essential. We can add value to the data scientist community in terms of solid methodological frameworks for data production and quality assessment. Appropriate methods must be designed to consider selectivity and bias issues. Statistical methods to minimize identification risks are an important area for development, along with data visualisation and dissemination techniques that put users in the "driving seat".

We will consider organisational challenges in harnessing new data sources

We will investigate under which conditions new sources can become accessible to our community. We will work together to promote legislation that enables the use of new data sources in the production of official statistics. First and foremost, we will consider privacy and security issues. In addition, we will tackle financial issues related to adaptation of processes and infrastructure for the use of new data sources. In general, costs should be balanced with the benefit that can be reasonably obtained if using these sources.

We will continue to improve existing data collection methods

While there are quite a number of emerging new sources that have potential for our work, there is still room from improvement with more traditional sources. We will continue our efforts to improve these sources, in particular with respect to non-response approaches, efficient mixed-mode data collection strategies and exploitation of administrative sources.

KEY AREA 4

Efficient and robust statistical processes

We will improve our efficiency through systematic collaboration within the ESS, while fully respecting the subsidiarity principle. We will intensify our collaboration by further intensifying the sharing of knowledge, experiences and methodologies but also by sharing tools, data, services and resources where appropriate. The collaboration will be based on agreed standards and common elements of technological and statistical infrastructure. We will adopt enterprise architecture as a common reference framework

> HOW DO WE GET THERE?

We will further intensify the collaborative partnership of the ESS

We have a long tradition of cooperation within the ESS in which the focus has always been on sharing knowledge and expertise, harmonizing concepts and definitions, and implementing joint policies and programmes. Today, we are fully aware that in order to meet the ever increasing user demands, while faced with shrinking resources, efficiency gains have to be made either nationally or through collaboration within the ESS.

What form the collaboration will take and whether it will be on a voluntary or mandatory basis will be decided case by case, in the light of the respective domain.

We will further identify and implement standards for statistical production

The implementation of standards for statistical production is necessary to improve the comparability of our statistical outputs. Standards are required to ensure smooth communication in the system and to make process components interoperable. Standardisation will include setting-up and maintaining a catalogue of standards under well-defined governance.

We will adopt enterprise architecture as a common reference framework

Enterprise architecture is a systematic language to describe the way our business wants to operate and how the various components fit together. It serves to translate our vision into implementation strategies and priorities in a systematic way. It will be based on principles of standardisation and interoperability, reuse, domain-independent standard processes, metadata driven business chains and service-

oriented data-based outputs of statistical processes. Annex B presents an example of a Generic Enterprise Model for Statistics, which provides a stylized description of the core aspects of a statistical enterprise (or system) and its interrelations. This model will be further developed into the ESS enterprise architecture, in order to translate the vision for re-engineering the production into implementation strategies encompassing all four layers of an enterprise architecture model, namely business, information, applications and technology.

We will use common methods and tools

For specific steps of the statistical production process we can use the same methods and tools across NSIs. Well-established examples include seasonal adjustment, disclosure control and administrative data validation methods. We will explore other areas and use all the opportunities, in particular when dealing with new technology-driven areas like big data, open data and visualization techniques where we expect concrete opportunities to emerge.

We will benefit from exchange of (micro)data, while fully respecting statistical confidentiality

We will explore the opportunities and risks of exchanging confidential micro data. Each time a new statistical domain is considered for sharing micro data among ESS partners, it will be necessary to consider the practical arrangements, legal constraints and their durability, implementation and enforcement as well as to conduct a sound analysis to assess whether this action will bring more efficiency and improved quality.

The exchange of confidential micro data will proceed in domains where there is a clear business case for improving the quality or efficiency of both European and national statistics and all pre-requisites have been satisfied. For instance, exchange of data may provide a more accurate picture of the activities of multinationals and associated global value chains. The first steps towards the creation of a European business register are already under way. Intra-European trade and migration provide other examples of cross-border phenomena where exchange of data may be beneficial for both increasing quality of statistics and reducing response burden. In those domains where new and alternative sources become available at global level (like Internet data and other big data sources), setting-up common infrastructures may be the most efficient way for capturing, storing and disseminating data.

In the long run we will explore the potentials of setting up a protected data exchange area, in which the exchange of micro data does not cause any data privacy or security concerns in any member state. Since the partners of micro data exchange should be capable of implementing the highest data protection standards we will explore starting the micro data exchange network within the partnership of statistical producers in the ESS only.

It requires the development of appropriate technical and organisation measures to manage the risks and in so doing protect statistical confidentiality and provide appropriate mechanisms to react to any breach of security swiftly and effectively.

Above all, the procedures accompanying micro data exchange will be organised in a transparent way, so as to build-up mutual trust based on evidence.

We will advance in sharing IT services and infrastructure

A common and interoperable technological environment will facilitate the collaborative approach that we aim for. Where possible and efficient we will develop shared IT services and infrastructure to support collaboration. We will put an appropriate focus on creating common platforms for data storage, analysis and processing and a common secure IT network for data exchange. We will also promote, where appropriate, the development of open source solutions for official statistics.

We will benefit from our experts working together

We will look for ways to ensure our specialists work together in their respective domains. To this end, we will build upon our development work through ESSnets and other project-based collaborative networks. We will extend this experience to include more permanent work forms including Centres of Excellence.

The ESSC will be the authorising body for the establishment of, and definition of mandates for, ESSnets and Centres of Excellence. Pooling human resources within these work forms will serve as an instrument to deliver the goals laid down in the ESS Vision 2020.

KEY AREA 5

Dissemination and communication on European statistics

We aim for a future-proof dissemination and communication strategy that satisfies divergent and ever-changing user needs at both national and European level, is flexible enough to adapt to emerging technologies, gives guidance in a world of data revolution and serves as a reliable pillar of democracy. We recognise that different user groups have different needs and capabilities, both in terms of products and dissemination channels and we will address this diversity by offering a variety of output channels and services. We will explicitly introduce the brand of "European Statistics" that guarantees a reliable basis for evidence-based decision-making and an unbiased picture of society.

> HOW DO WE GET THERE?

We will adopt a new dissemination and communication strategy

A changing world requires that we adopt a new dissemination and communication strategy which is generic, flexible and global. New information technologies will lead to radical and hardly foreseeable changes in the way users treat, handle and use data. Our communication and dissemination strategy will take this into account in order to translate new technologies and interactive communication channels into appropriate dissemination and communication services and products.

The strategy will be based on two pillars: a data pool of European statistics based on a solid data warehouse approach and a flexible suite of products and services.

We will create a data pool of European statistics based on solid data warehouse approach

We provide a pool of European statistics in a machine-readable open data format. This data pool is publicly available at all times to all user categories. It enables experienced power users such as data-driven journalists, scientists or policy makers to digest statistical datasets in a manner that best suits their needs. Our value proposition is based on their needs. Third parties may also access and re-use the data pool, e.g. for integration (with source notification) in their websites or apps.

In a next phase we will investigate if the data can be made available as linked open data, for easy combination with other data pools.

We will further optimise our portfolio of products and services

We will use our own data pool for creating tailored products and services, including visualizations, animations, interactive tools and apps. We will use our ability to explain our data and complement our publications with explanatory and analytical input. We will be in constant contact with potential user groups to meet their expectations. One part of these activities targets the public at large to guide them through the pitfalls of statistics and enhance statistical literacy. It includes "nice to know" statistics to strengthen our exposure. These products will contain less text and figures, but more graphs, maps, images and videos. Another part of these activities targets special interest groups.

Regarding the selection of products and services we will focus on sustainability based on strong data warehouse architecture. At the same time we want to give as much freedom as possible to active users to create their own statistics.

We will promote European statistics as a brand

We will explicitly introduce the brand of European Statistics that guarantees a reliable basis for evidence-based decision-making and an unbiased picture of society. Promoting a clear and meaningful brand to both key users and the broader public will help to strengthen trust in official statistics. All our users will recognise that our brand represents an independent and internationally comparable information system of high quality. Our common effort to maintain public trust in European statistics requires consistent communication of our products and services, including the high quality standards we maintain.

4.

Approach to implement the ESS Vision 2020

A vision is void if it is not followed by a strategy and concrete actions towards implementation. Below we indicate the overall approach for our actions until 2020, under the existing institutional set up of the ESS. The approach presented below will be further elaborated into concrete implementation projects and programmes, embedded in the ESP 2013-2017 and its possible extension to 2020.

The production of statistics in the limited scope and time horizon until 2020 makes use of all current possibilities of standardisation of production processes and of sharing services and data amongst the members of the ESS, as appropriate. This time horizon is on the one hand distant enough so that we can make significant progress but on the other hand avoids the level of uncertainty that accompanies longer term planning.

Cornerstones for the current ESS operation are the three fundamental EU principles laid down in the Lisbon Treaty: the principle of conferral that limits EU competences, and those of subsidiarity and proportionality that govern the use of EU competences. The acquis communautaire for statistics, including Regulation 223/2009 on European statistics and specific regulations covering individual statistical domains needs to be reviewed within the context of the ESS Vision 2020 and potential necessary amendments to be made.

Another context in which the ESS operates is the technical environment. National governments increasingly define generic IT and other technical policies, and then require NSIs to observe them. At EU level, government institutions are expected to move to open source software where possible and to provide open data.

WORKING TOGETHER

Collaboration principles and instruments

Collaboration will be based on trust and intensive dialogues to agree on shared goals, collective resources, and accountability to stakeholders. It will require commitment, engagement and determination to achieve common objectives. Every collaboration partner will take part in the decision making related to the implementation of the ESS Vision 2020. Joint projects will be based on mutual interests and the common ESS Vision 2020. The general criteria for evaluating and selecting projects are presented in Annex C.

We will explore new collaboration instruments such as Centres of Excellence to maintain and implement the common methodological and technical solutions developed within ESSnets and Sponsorships. Operational arrangements will be decided upon depending on the statistical domain - legally binding, based on mutual agreement, recommended or voluntary participation, use and implementation.

The collaboration mode chosen will depend on the specific domain, time-horizon and desired level of ambition. It is important to bear in mind that individual NSIs have responsibility over all aspects of the production of national statistics. These national needs will be addressed and taken into account when adopting new data sources, standards, methodologies, tools and modes of cooperation.

Centres of Excellence

Centres of Excellence will provide the institutional framework through which the results (e.g. methods, tools and good practices) are distributed and maintained across the ESS. Centres of Excellence as a form of collaboration refers to a team of persons or an entity that provides methodological expertise, support on IT solutions, best practices and/or training in a focused area. The focused area could be a technology (e.g. J-Demetra+ software), a skill (e.g. seasonal adjustment) or a broad area (e.g. statistics on profiling of multinationals). The guiding principle should be to establish centres based on networks of NSIs collaborating with each other to pursue excellence in a particular area for the benefit of the whole ESS. The practical modalities should be further elaborated. The decisions on the establishment of Centres of Excellence will be made by the ESSC based on early and active involvement of all the partners in the decision making process.

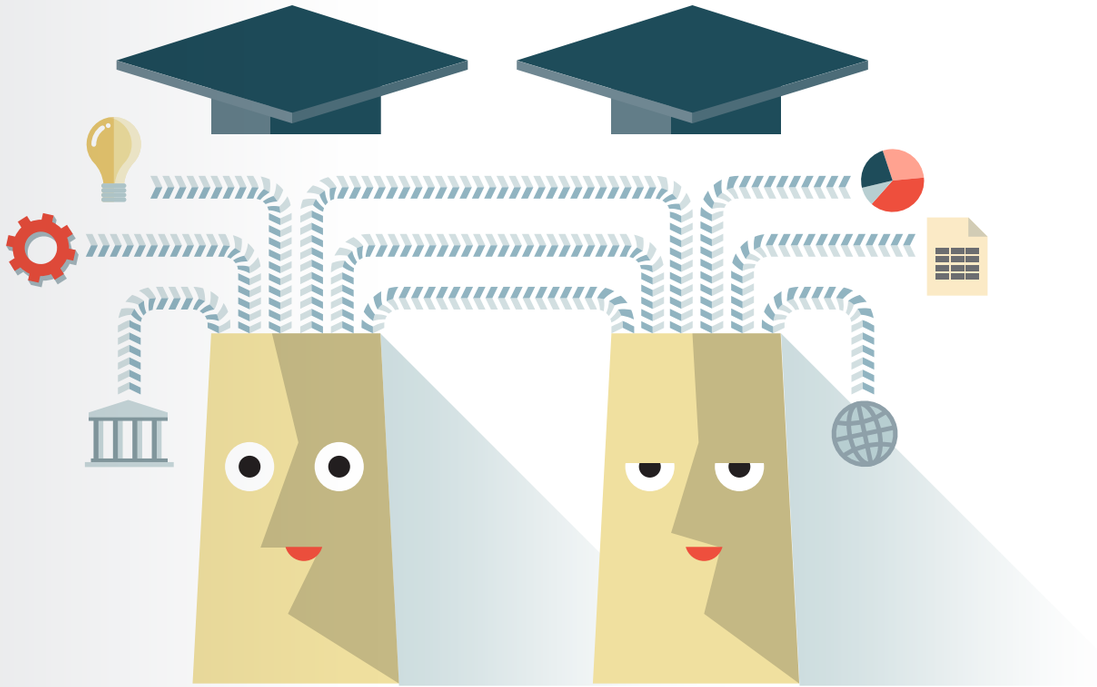
CHANGES IN SUPPORTING FRAMEWORKS

We will further elaborate all supporting frameworks elements that underpin statistical production to ensure a targeted ESS infrastructure for vision implementation. For example, changes in the mechanisms to finance the vision implementation are needed. The administrative procedures accompanying all financial instruments will be made clear and transparent. In selected cases we may need to investigate the feasibility of adjusting the legal framework to meet our long-term goals. Some challenges in terms of data access can be more effectively faced at supra-national level. These include measures to expand access to private sources for statistical purposes and privacy requirements for accessing these new sources. However, national regulations for data access and privacy protection still differ within the EU and common solutions will need to take national specificities and priorities into account.

In all of these cases, the roadmap and scope of concrete changes in legislation (when, what, in which legal acts to change) will have to be decided on the basis of proposed goals and after careful considerations of its effects.

GOVERNANCE

We will implement a governance structure for delivering our vision in line with the existing ESS governance. The owner of the ESS Vision 2020 will be ESSC. After adoption of the vision, we will establish an operational mechanism for developing and monitoring the implementation strategy and concrete action plans. We will work in a transparent way and involve all partners in the decision-making process at an early stage. Decision-making will aim at mutual benefits for all partners to reach broad agreement within limited timeframes and effort. For example, the starting of new projects that aim to implement the vision will be based on a well-documented business case showing costs and benefits on both national and European levels.



PEOPLE AND SKILLS

Training and learning together

Knowledge building is particularly important and will need support and collaboration at ESS level. The ESTP courses have already proven to be a fruitful way of working together. We will regularly evaluate the competence needs of our staff and adjust our efforts to build these competences accordingly.

We will increase co-operation with universities and establish an international Masters programme "European Master in Official Statistics". Graduates from this programme will have strong skills in methodology, substance area and IT tools. In addition to their technical skills they will be ready to work in an international environment and understand the special characteristics of official statistics.

Our main short-term goal is to promote international mobility of our staff. Eventually this will spread the best practices and ideas among the ESS.

Know-how ensures sustainability of project results

The sustainability of the output from different development projects can be guaranteed only if the tools, methods and good practices developed are complemented with the knowledge that is gained during the projects. We will use this know-how in giving consultancy, providing training courses and producing pedagogical material.

ANNEX A SOME HISTORICAL BACKGROUND AND KEY MILESTONES IN THE ESS DEVELOPMENT

In European Statistics the most important strategic milestones on the way to modernisation over the last years are summarised below:

- Regulation (EC) 223/2009 of the European Parliament and of the Council on European Statistics: the birth of the European Statistical System (ESS);
- Communication 433/2009: GDP and Beyond – measuring progress in a changing world: actions for developing new metrics for a more integrated, balanced and timely view of social, economic and environmental facts;
- Communication 404/2009: a first outline of a vision for modernisation of production of European statistics;
- Communication 211/2011: a strategy for giving the European Union a quality management framework for statistics related to enhanced economic policy coordination which includes mechanisms to ensure the high quality of statistical indicators;
- European Statistics Code of Practice 2011: revised edition, including the Quality Assurance Framework;
- European Statistical Programme ESP 2013–2017: an integrated approach to planning, providing an overall framework for the development, production and dissemination of European statistics while putting in place the new production method of European statistics as described in COM (404);
- First proposal of the ESS-VIP programme: a streamlined approach to the investment for modernisation of the production of European statistics.

More recently, the international statistical community has started to develop a common and generalised business architecture model, which will allow for higher compatibility and interoperability of statistical processes of different actors in the future.

ANNEX B A GENERIC ENTERPRISE MODEL FOR STATISTICS

The figure below presents an example of a Generic Enterprise Model for Statistics (GEMS) which provides a stylised description of the core aspects of a statistical enterprise (or system) and its interrelations. As the Generic Statistical Business Process Model (GSBPM) GEMS describes individual statistical processes. It also includes the GSBPM level 1 phases. GEMS shows the activity and information types required to allow a mature statistical enterprise to develop, produce, market, disseminate and communicate, manage and support its products and services; in short, to perform.

The GEMS model allows for structuring the modernization of statistical production at different levels and in different contexts; but here it will primarily support the articulation of the ESS Vision 2020. It will be further developed using an enterprise architecture approach, in order to translate the vision for reengineering the production into implementation strategies encompassing all four layers of the enterprise - business, information, technology and applications. This model will also be used in the short-term to map priorities in the common ESS developments drawing attention to how all the activities and elements of the statistical enterprise work together as a whole. The work of the Sponsorship on Standardization on a business architecture model can serve as a starting point for developing a full-fledged business architecture model for the ESS.

In addition, a quality management approach is integrated into GEMS in order to acknowledge the importance we attach to quality. It encompasses all initiatives and procedures related to managing quality design and development, quality control and maintenance, quality assurance and improvement mechanisms.

ANNEX B SELECTING NEW PROJECTS

Concrete elements of the ESS Vision 2020 will be implemented through programmes and projects, selected using a pragmatic case-by-case approach and embedded in the ESP 2013-2017 and its possible extension to 2020. The assessment and prioritisation process will be transparent and subordinate to explicit criteria.

The current Vision Implementation Programme as well as the concrete project proposals for implementing the Vision will be evaluated and selected on the basis of the following general criteria:

A. Does the proposal have a positive business case at both ESS and national levels, in the sense that benefits outweigh costs?

B. Does the proposal contribute to the needs and drivers identified in the ESS Vision 2020 such as efficiency, quality and promoting public trust?

C. Can the proposal be clearly positioned according to our ambitions for collaboration set out in the ESS Vision 2020?

D. Does the scope in that sense look manageable?

E. Is the proposal consistent with the full set of other proposals?

F. Does the proposal take into account generic European principles like proportionality and subsidiarity?

G. Is the proposal in line with the European Statistics Code of Practice?

H. Does the proposal observe existing legislation, both at national and EU level?

I. Is the proposal in line with the ESS reference architectural decision and design principles?

J. Does the proposal sustain a simultaneous production of European and national statistics?