

## ANNEX 1 to DIME/ITDG 2014/7b/EN

## DIRECTORS OF METHODOLOGY GROUP IT DIRECTORS GROUP JOINT MEETING

26<sup>TH</sup> AND 27<sup>TH</sup> MARCH 2014

Item 7b of the agenda

Draft deliverable on Impact Assessment



## Method for the costs-benefits assessment

## WP2 – Deliverable 1

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## 1. Background and scope of this document

As part of Work Package 2 of SGA1 of the ESSNet on Standardisation a so called 'SWOT tool' was developed and tested (results of this test are described in the Interim report). The main purpose of this tool was to collect in a qualitative but structured way each Member States' assessment of the potential costs and benefits of different levels of ESS standardisation regarding specific activities, defined according to a reference model of Business Architecture proposed by the Sponsorship on Standardisation<sup>1</sup>. The further development and testing of such an impact assessment is part of the Recommendations of the Sponsorship on Standardisation. These recommendations have been adopted by the ESSC in its meeting of 27 September 2013 in Den Haag (NL).

<u>Impact assessment</u>. For important decisions in the field of standardisation, it is imperative to make a systematic assessment of the costs and benefits implied by the decision proposed. For strategic decisions the assessment often needs to rely on qualitative information only. As a minimum, this assessment has to reflect the impact on the Member States, Eurostat and on the ESS as a whole.

Source: Recommendations of the Sponsorship on Standardisation.

Based on the test results (indicating problems with the understanding of crucial concepts as well as a high burden associated to providing all requested scores), feedback collected at the Forward-Looking Feedback Workshop on Standardisation in The Hague (30 and 31 May 2013), a discussion of the SWOT tool at the meeting of the Task Force on impact analysis of ESS.VIP projects (Luxembourg, June 17 2013) and following suggestions from the Sponsorship aimed at guaranteeing a coherent approach, a new proposal for assessing the costs and benefits of standardization has been developed, the so called "checklist for the assessment of costs and benefits of standardisation". This checklist is not a completely new approach, as it includes most aspects that were used in the SWOT tool, but structured in a different way.

<sup>&</sup>lt;sup>1</sup> see Annex 1: Guidelines of the SWOT tool Eurostat

The ESSNet on Standardisation continued its effort to comment on this checklist and worked on adding further explanations and reflecting on possible impact on the scoring mechanism.

It is useful to highlight that, due to the complexity of the analysis to be made, a simple mathematical scoring mechanism can not be sufficient. It should be combined with open text explanations, which are extremely important because they provide an informative content which is fundamental for the decision making process.

ISTAT, as the leader of Work Package 2, has collected comments from the ESSNet Partners via email and summarised these prior to the coordination meeting in Paris (17-18 October 2013). During the meeting the checklist and the scoring system were discussed in more detail. The results of this discussion were documented and distributed among the ESSNet members. Also, this document was discussed in a telephone conference (February 5 2014) with Wim Kloek (Eurostat) and Barteld Braaksma and Peter Struijs (both Statistics Netherlands and active in the former Sponsorship on Standardisation). This current document, Deliverable 1 of Work Package 2, describes the current state of the cost-benefits assessment checklist, based on the comments received in the reviews described above. This checklist will be the input for further testing and development in SGA2 of the ESSNET on Standardisation.

Section 2 describes the purposes and application of the checklist. Section 3 presents the checklist. Section 4 presents the issues for further testing, as discussed among others in the coordination meeting Paris. A further test plan will be developed in the course of the next phase of this project, SGA2.

## 2. Purposes and application of the checklist

The following preconditions for the checklist were discussed and agreed upon by the ESSNet members during the meeting in Paris.

## Purpose of the checklist

The main purpose of the checklist is to support decision making on standardisation in the ESS by providing a tool which systematically assesses costs and benefits of standardisation as perceived by stakeholders. The information collected with this checklist should allow a systematic preparation to guide further discussion and decision making regarding standardisation at the ESS level.

## Types of objects

The types of objects to be assessed by the checklist may vary. Likely applications are:

- Strategic decisions: e.g. development of a programme of standards for a specific business area;
- The development of a specific standard;
- Implementation of a specific standard;
- A specific project in the context of standardisation.



### One list for all purposes

In order to obtain assessments that provide comparable results the checklist items are developed in a way that they could be used for all types of objects. This means that for all uses all aspects of the checklist should be reviewed. Please note that these may be assessed as 'not relevant 'or 'no impact'. The exact scoring of the aspects can vary according to the object being assessed and the level of information available or needed. The level of information needed refers to the fact that depending on the position in the life cycle of a standard, more or less detailed information is easily available and needed to make decisions, varying between for example very qualitative costs estimates and estimates in euros.

## Type of actors involved

The checklist intends to assess the (perceived) costs and benefits of the main ESS stakeholders. These stakeholders are the statistical authorities, the main users of the ESS and national statistics as well as the data providers. Also it may be relevant to take into consideration the interested parties outside the ESS, such as the UNECE. However, this does not mean that each application of the checklist should involve data collection with all stakeholders. At the level of member states the NSIs should provide the assessment, as they act as national coordinators. If necessary, they should consult other relevant national stakeholders. Eurostat will provide the ESS-level assessment and should consult if necessary users of ESS level data.

## What type of data should be collected?

The information collected should be both quantitative information (i.e. a score on a 1- 5 scale) that allows an easy overview of how expected costs and benefits are evaluated, as well as qualitative information that explains the considerations behind this evaluation.



## 3. The checklist

In the following table the checklist fine-tuned by the ESSNet members is reported.

In the first column aspects to be analysed are listed, and in the second column explanatory comments are provided for less self-explanatory concepts.

As already mentioned, the checklist is generalised, meaning that it can be used to assess different types of objects. This makes two considerations necessary:

- 1) some of the listed aspects are asked to be considered at national and EU level, but not all the respondents would be able to do that, as they would not have all the necessary information at their disposal. So for these aspects NSIs will consider the national level, while Eurostat will consider the EU level (this regards aspects 1, 2, 3, 7, 8 and 9).
- 2) the checklist is composed by 9 aggregated aspects, but only for the testing phase a tenth aspect will be added (10. **Other effects national and EU level)** with the purpose of detecting possible missing aspects and making the final checklist exhaustive.

On the other hand, no categories "other" have been added inside the 9 main aspects. This has been done as a consequence of the following considerations: *a*) the need for an "other" category does not seem very likely as the specification of the main categories seems complete, *b*) any need to add other considerations is covered by category number 10 "other" which will be used in the testing phase and *c*) it would risk to distort the results (if for the assessment of a project other aspects are provided, they could be considered with a positive or negative impact, while for another one, where no other aspects are provided, there would be neither positive nor negative impact).

It is important to highlight that experts in charge of using this checklist to make the assessment should be provided with a guide in which the logic underlying the methodology is explained, as well as the concepts used and the criteria to analyse results. A user guide will be produced as part of the tests planned in SGA2.



## 3.1 Checklist fine-tuned and with explanatory comments

Fine-tuned checklist	Explanatory comments
1. Effect on the quality of the statistical output of the ESS (national and EU level), as	The effect on the quality should be carried out by each country,
indicated in the European Statistics Code of Practice (28 September, 2011):	taking into consideration the national point of view.
	Eurostat will consider the EU level.
	To assess this effect, refer to the principles mentioned in the
	European Statistics code of Practice.
a. relevance (including coverage of the statistical programme and level of detail)	See principle 11 in the European Statistics code of Practice.
b. accuracy and reliability	See principle 12 in the European Statistics code of Practice.
c. timeliness and punctuality	See principle 13 in the European Statistics code of Practice
d. coherence and comparability	See principle 14 in the European Statistics code of Practice
e. accessibility and clarity	See principle 15 in the European Statistics code of Practice
2. Effect on the quality of the ESS production system (national and EU level):	The effect on the quality should be carried out by each country,
	taking into consideration the national point of view.
	Eurostat will consider the EU level.
	In the context of statistics production a 'system' is a set of
	processes (regarding procedures, organisation and IT)
a. effectiveness	Capability to produce the desired results and precision in



	performing functions
b. soundness of methodology	See principle 7 in the European Statistics code of Practice
c. robustness	Robustness is intended as the ability of the system to manage
	exceptional and not predictable situations
d. appropriate statistical procedures	See principle 8 in the European Statistics code of Practice
e. clear and accessible documentation of the whole system	It is intended as transparency of the system as a whole,
	obtained through clear and accessible documentation of all the
	set of processes.
	In the context of statistics production a 'system' is a set of
	processes (regarding , procedures, organisation and IT).
f. sustainability	It is intended as the capability of the system to have a sufficient
	lifespan, considering the investments required.
3. Effect on the ESS production system, other than quality effect (national and EU level):	The effect on the ESS production system should be carried out
	by each country, taking into consideration the national point of
	view.
	Eurostat will consider the EU level.
	In the context of statistics production a 'system' is a set of
	processes (regarding , procedures, organisation and IT)



a. flexibility of the production system. Flexibility includes:	
<ul> <li>i. adaptability to local circumstances</li> <li>ii. ease of incorporation of new dissemination channels</li> <li>iii. ease of development of new output</li> <li>iv. ease of development of new systems</li> <li>v. ease of incorporation of new data sources</li> </ul>	
b. (re)use of existing systems	In the context of statistics production a 'system' is a set of
	processes (regarding , procedures, organisation and IT)
c. use of ESS standards	
4. Effect on the position of the partner of the ESS (NSIs, Eurostat and other national	
authorities)	
a. degree of autonomy	
b. effect on the relationship with other bodies and policies (NSIs, Eurostat and other national authorities)	
5. Effect on stakeholders of the ESS (NSIs, Eurostat and other national authorities)	Stakeholders include the more important users and data providers



a. effects on the different methods/channels of communication and on visibility of	
the individual partners in relation to the ESS as a whole	
b. effect on support and funding	
c. effect on response burden	
6. Other effects on the ESS (NSIs, Eurostat and other national authorities)	
a. ease of entry for new partners	It is asked to assess the impact of using the standard by those not being part of their development or facing their first implementation
b. knowledge management and training requirements	
c. effect on the balance in respect of the partners	It is asked to evaluate the balance in respect of the partners, considering also Eurostat
d. effect on cooperation between NSIs, considering also Eurostat	It is intended that cooperation can be both between NSIs and between Eurostat and one or more NSIs
e. relationship with non ESS parties	
f. synergy with other statistical communities (e.g. OECD, UNECE, UNSO), other non- statistical non-profit (e.g. ministries, agencies, professional organisations, etc) and commercial communities	
g. (re)use of standards, systems and approaches from non ESS parties	
h. effect of the use of proprietary standards	It usually concerns technical standards (e.g. software) owned by an individual or a company (usually the one that developed



	10).
7. Effect on initial costs and investments; (national and EU level)	The effect on initial costs and investments should be carried
	out by each country, taking into consideration the national
	point of view.
	Eurostat will consider the EU level.
a. costs of development (one-off)	
i. personnel costs	
ii. material and other non-personnel costs	
b. costs of transition (one-off)	
i. personnel costs	
ii. material and other non-personnel costs	
8. Effect on recurring costs including support and maintenance (efficiency effect; nationa	I The effect on recurring costs should be carried out by each
and EU level). Please do not include initial costs evaluated in item 7	country, taking into consideration the national point of view.
	Eurostat will consider the EU level.
a. personnel costs	
b. material and other non-personnel costs	
9. Risks connected to the standard project/its implementation phase (national and EL	The effect on risks should be carried out by each country,
level)	taking into consideration the national point of view.Eurostat
	will consider the EU level.



a. project management risks	
b. technical and security risks	
c. business, legal and acceptance risks	

Additional aspects to be used only for the testing phase with the purpose of detecting possible aspects not considered and making the final checklist exhaustive.

10. Other effects (national and EU level)	Please, list other effects not already	
	considered	



### 3.2 Additional overall assessment

Hereinafter proposals of different scoring mechanisms are described, essential to synthesise the results, but regardless of how the items are scored, an overall assessment with room for qualitative explanation will be added. For each object of assessment the overall judgement will be asked the following questions:

All things considered, how would you describe your position regarding [insert name of assessed object]?		
Strongly support	2	
Somewhat support	1	
Not support nor oppose	0	
Somewhat oppose -1		
Strongly oppose -2		
Don't know 9		

What are your main considerations for this?

If the assessment involves scoring different alternatives (e.g. different levels of standardisation as those identified by the Sponsorship of standardisation, which represent four levels of coordination of the different ESS organisations), an additional question will be added to provide an overall judgement comparing the alternatives:

All in all, which of the assessed alternatives would
you prefer?
What are your main considerations for this?



## 4. Issues for further testing

## 4.1 Hypothesis on scoring mechanism and synthesis of scores

The SWOT approach for the analysis of costs and benefits suggested by the Sponsorship of standardisation identified two concepts to be used to evaluate the impact of standardisation:

*Relevance*: which is aimed at collecting the respondent's point of view about the importance of each aspect regardless of the object to be assessed

*Effect*: which is aimed at collecting the respondent's point of view about the impact of the object to be assessed on each aspect. If an aspect is not involved in a given activity, the value '**neutral**' can be assigned.

As already stated, this new approach should combine the assignment of scores concerning Relevance and Effect with open text explanations, so as to produce a basis to discuss different assessment of relevance and impact, without having a mathematical derivation of the impact for the ESS as a whole.

The proposal for scores is the following:

- three scores for Relevance, which can be labelled: highly relevant, relevant and not relevant
- five scores for Effect, which can be labelled: highly desirable, desirable, neutral, undesirable, highly undesirable.

Concerning the scoring mechanism, two alternative proposals have been identified. Both are aimed at containing respondent burden, as it was one of the main difficulties outlined in the pretest of SWOT analysis. In addition, as already mentioned, regardless of how the items are scored, a few questions for an overall assessment have been added, with room for qualitative explanation.

## Proposal no. 1

This proposal follows the approach implemented in the 'SWOT tool' developed and tested before Summer 2013. As a matter of fact, it confirms the assessment according both the concepts (Relevance and Effect), which allows to collect a broad informative content, trying to contain the respondent burden which was one of the main drawbacks emerging from the test.

As a matter of fact, as high number of items is to be evaluated from two points of view (Relevance and Effect), **the suggestion is to make the evaluation in two steps:** 

- 1. Assign first scores for Relevance to all items
- 2. Assign secondly scores for Effect only for the items scored as 'high relevant' or 'relevant' and not to those scored 'not relevant'.



In this way, the total number of items to be evaluated is reduced, but this number can be further reduced **assigning scores for Relevance only to the ten aggregated items** (with a longer explanation of each of them) and then to **assign scores for Effect to each elementary item corresponding to the aggregated items considered relevant**.

For example, when asking to assign Relevance score, Item 1 could be described as follows:

**1.** Effect on the quality of the statistical output of the ESS (national and EU level), **as indicated** in the European Statistics Code of Practice (28 September, 2011).

Quality of statistical output includes: **a**) relevance (including coverage of the statistical programme and level of detail), **b**) accuracy and reliability, **c**) timeliness and punctuality, **d**) coherence and comparability, **e**) accessibility and clarity

This proposal could also help to make the synthesis for results easier.

As a matter of fact, when making the synthesis, different problems can arise depending on whether:

- a) a single respondent makes this analysis for different projects (or for different standards to be developed or implemented) and he expects to compare the scores he assigned for each of them to rank projects/standards and take a strategic decision
- **b)** different respondents provide answers for the same projects (or standards to be developed or implemented).

In the second case, respondents could assign different scores for Relevance to each item of the table, so the comparison of results would be more difficult. The described proposal helps to minimize this possibility.

Concerning how to analyse results, even if the qualitative information provided by respondents is really determinant, a quantitative analysis, using simple mathematics, is useful.

A scoring proposal is shown below.

It is important to specify that the values of the second column are only reported as examples, because in practice, it could be useful to define them according to the object to be assessed. The only recommendation when defining these values is that they must be fixed for each assessment procedure so to be used for all the objects to be evaluated and by all the respondents who fill in the questionnaire.



Relevance		Value
✓	Highly Relevant	2
×	Relevant	1
×	Not relevant	0
Effect		
✓	Highly Desirable	3
×	Desirable	2
×	Neutral	0
×	Undesirable	-2
×	Highly Undesirable	-3

The result, for each aspect considered, is the product of Relevance and Effect and, using this metric, produces **univocal meaning** of each score result:

6	Highly Relevant - Highly Desirable
4	Highly Relevant – Desirable
0	Neutral
-4	Highly Relevant – Undesirable
-6	Highly Relevant – highly Undesirable
3	Relevant – Highly desirable
2	Relevant –desirable
-2	Relevant – undesirable
-3	Relevant –highly undesirable

The Results could be represented with a graphic constituted of bars, using colours and length in a meaningful way, for instance:

• Producing no bars when R = 0



- Producing bars with a length corresponding to the result of the product R per E (R= relevance score, E= effect score) when the item is considered relevant and the Effect is no Neutral
- Producing a bar of a different colour with a constant length when the item has been evaluated 'relevant' or 'very relevant ' but with neutral effect.

#### Proposal no.2: Only score effect

This proposal is more efficient than the previous one in reducing respondent burden, but less extensive as far as the collected informative content is concerned.

In this approach respondents are only asked to score expected effect, including information on both: 1) if an effect is expected and 2) how the desirability of the effect is assessed. Aspects that are not relevant for a certain assessment (for example when assessing a project that has no effect on data collection, the aspect 'response burden' would not be relevant) will be judged with a 0 score.

Effect	
✓ Highly Desirable	2
<ul> <li>✓ Desirable</li> </ul>	1
<ul> <li>✓ Neutral effect or no effect</li> </ul>	0
✓ Undesirable	-1
✓ Highly Undesirable	-2

Scoring according to proposal 2 will (as in proposal 1) allow insight in the overall desirability of the project or strategy that is assessed, as well as detailed insights in which aspects are judged as very (un) desirable.

## 4.2 Final considerations

Each of these approaches has its pros and cons.

As it can be seen, at this stage, it is not possible to identify which of the two approaches is more suitable to produce useful results to support the decision making process.

The suggestion is that in the planning of the test of the costs/benefits assessment checklist both scoring approaches are considered so as to be able to compare their results.



Annex 1

ESSNet on standardisation

WP 2: Framework and documentation

Deliverable 1. M4: Refined SWOT tool for analysis of standards

## **Guidelines for the SWOT analysis**





## **Technical information**



Please, do not use Internet Explorer

Link: <u>https://indata.istat.it/swot</u>

Userid: \_\_\_\_\_

Contact people:

- $\checkmark$  for technical problem:
  - → Massimilano Degortes <u>degortes@istat.it</u>
- ✓ for other purposes
  - → Stefania Macchia macchia@istat.it
  - → Manuela Murgia murgia@istat.it



## **Background and purpose**

The ESSNet project on Standardisation has been constituted to support the establishment of the Integrated Statistical System within the ESS as outlined in the Communication from the Commission to the European Parliament.

One of the tasks of the project is to further develop and test the so called "SWOT tool" for assessing potential costs and benefits of standardisation in the ESS. The ESSNet project has asked you to participate in this test by completing a first version of the SWOT tool.

The main purpose of the SWOT tool is to collect in a qualitative but structured way each member states' assessment of the potential costs and benefits of different levels of ESS standardisation regarding specific activities, defined according to a reference model of Business Architecture.

It is useful to highlight that these levels of standardisation refer to integration of each NSI with respect to a common ESS approach (regardless the level of standardisation at the national level)

The information collected will support the ESS discussion regarding which level of standardisation seems desirable and feasible for specific activities and should help to identify priority areas for standardisation.

Please note that for this purpose only one single reply per NSI is required, even if several experts can be involved and must co-ordinated with.



## 1. Framework – Concepts used

## **1.1 Business Architecture Model**

The Sponsorship on Standardisation proposed a Business Architecture (BA) model which can be viewed as a model for the conceptual description of statistical processes, to be considered as common reference by the different ESS organisations.

This model is organised in four Business Areas:

- *Policy*: provides the frameworks for the control and organisation of the statistical process. Policy products include regulations, agreements, strategy, etc..
- *Design*: provides the metadata that lays down specifications with regard to the functional organisation and control of the statistical process. The products include designs, models, instructions, indicators and descriptions.
- *Management*: provides control so that the statistical process can be carried out. The products include schedules, quality standards, results, descriptions, progress reports, quality reports improvements and adjustments.
- *Implementation*: provides products to satisfy the agreed output. Products of implementation are databases, statistical products and descriptive metadata.

Each Business Area is characterized by a list of Activities.

For this test only the **Implementation Business A**rea and the first two activities<sup>2</sup> will be the considered.

#### Activities of the Implementation Business area

$\triangleright$	Data collection
$\triangleright$	linking, deriving and editing
	aggregation, estimation and integration

<sup>&</sup>lt;sup>2</sup> Activities of the Implementation Business Area are slightly different with respect to those identified by the sponsorship.



- disclosure control and making data publishable
- making statistics and Web 2.0 services available for fostering interaction with users and stakeholders.



## **1.2 Levels of standardisation**

Starting from the conceptual model of integration, the Sponsorship on Standardisation has identified four different **levels of standardisation** which represent four levels of coordination of the different ESS organisations.

Please note that these levels of standardisation refer to integration of each NSI with respect to a common ESS approach (regardless the level of standardisation at the national level)

The four levels of standardisation have been identified so as the lowest one (A) represents a high degree of autonomy of the NSI in designing, managing and implementing processes and systems, while the highest (D) stands for a full integration at European level.

A	Autonomous	Business processes and systems are designed and operated without coordination with processes or systems in the ESS. This applies to those architecture components that are distinct.
В	Interoperable	Coordination is through interoperability. The NSIs have the autonomy to design and operate their own solutions, as long as they have the ability to exchange information and operate together effectively by appropriate use of standards.
C	Replicated	Coordination is through duplication. All NSIs have implemented identical business processes, solutions and information
D	Shared	There are common business processes, a single instance of a solution and information that is shared by all the bodies. This level corresponds to a <b>fully integrated</b> view of ESS, which could be considered as a benchmark situation.

The following picture can help in understanding these levels of standardisation.



# Federated Management Model: Four Levels of Consolidation



The SWOT analysis will be performed to assess the impact of reaching higher standardisation levels compared to the current one (*as is* situation). The impact is intended in terms of (potential) costs and benefits.

In order to ease the identification of the 'as is' situation and the evaluation of the impact of moving towards higher levels, an effort has been made to link the BA activities and the GSBPM (Generic Statistical Business Process Model) phases and sub-processes (see paragraph 1.1).

In addition, a rough list of **common infrastructures** supporting each level of standardisation has been identified to help measuring the impact of moving towards each scenario.

Please note that the current 'as is' situation should correspond to the situation where the NSI has already implemented the majority of listed infrastructures.

The following table refers to the first two activities of the Implementation Business Area.

Each activity is defined differently according to each level of standardisation and the list of the corresponding infrastructures has been described too.



ACTIVITY	DESCRIPTION OF ACTIVITY	INFRASTRUCTURES
	ACCORDING TO THE LEVEL OF	
	STANDARDISATION	
DATA COLLECTION	LEVEL A	
	Independent national data	
	collection	
	LEVEL B	✓ Unitary metadata system for microdata
		✓ Common guidelines for microdata
	Input harmonisation	representation and exchange
		<ul> <li>Control repository of questionnaire</li> </ul>
		$\checkmark$ Common guidelines for methods and
	Coordinated methods and tools	tools
	for data collection	$\checkmark$ Generalised tool for the questionnaire
		design and for the implementation of
		electronic questionnaire
	Central data collection	$\checkmark$ EU methods and tools
	management	✓ EU cognitive labs
LINKING, DERIVING		
AND EDITING	Independent national linking.	
	deriving and editing	
	LEVEL B	✓ Unitary metadata system for linking,
		deriving and editing rules
	Common linking, deriving and	<ul> <li>Common guidelines for linking, deriving</li> </ul>
	editing rules representation	and editing rules representation
	LEVEL C	✓ Common guidelines for methods and
		tools for linking, deriving and editing
	Coordinated methods and tools	methods and tools
	for linking, deriving and editing	<ul> <li>Generalised tool for linking, deriving and</li> </ul>
	rules	ealting
	LEVEL D	
	Central linking, deriving and	EU methods and tools
	editing management	



## **1.3 SWOT** analysis

SWOT is a qualitative assessment method based on Strengths, Weaknesses, Opportunities and Threats.

The basic template for SWOT analysis consists of a four fields table to list the **S**trengths, **W**eaknesses, **O**pportunities and **T**hreats of a project. **S**trengths are the opposite of **W**eaknesses and **O**pportunities the opposite of **T**hreats.

SWOT analysis is usually applied to analyse the pros and cons of business projects. In this context it is proposed to assess potential costs and benefits of the main investments for building the infrastructures necessary to reach the different levels of standardisation and to compare the impact of them on each activity pertaining to the selected business area.

Strengths and Weaknesses refer to aspects on which the NSI can have a direct control (internal factors), whereas **O**pportunities and **T**hreats refer to more strategic aspects or aspects related to the external environment (external factors).

The following table gives an overview of potential costs and benefits of standardisation in the ESS.s, defined as a list of '**aspects**', as proposed by the Sponsorship on standardisation.

STRENGTHS	WEAKNESSES
<ul> <li>✓ Improved process and systems quality</li> <li>✓ Easy development of new statistical processes and systems</li> <li>✓ Easy incorporation of new data sources</li> <li>✓ Easy incorporation of new dissemination channels</li> <li>✓ (Re)use of existing ESS standards, systems and/or approaches</li> <li>✓ Reduced personnel costs</li> </ul>	<ul> <li>✓ Costs of development</li> <li>✓ Costs of transition</li> <li>✓ Costs of support and maintenance</li> <li>✓ Loss of autonomy</li> <li>✓ Lack of flexibility</li> <li>✓ Lack of room for differences between parties</li> </ul>
OPPORTUNITIES	THREATS
✓ (Re)use of standards, systems and/or	✓ Loss of identity for ESS partners



✓ Proprietary standards that hamper
cooperation with non-ESS partners
<ul> <li>High entry costs for new parties</li> </ul>
<ul> <li>Lack of coherence with national</li> </ul>
(government) policies
<ul> <li>Lack of synergy with other statistical</li> </ul>
communities
✓ Lack of support from
stakeholders/financers

The impact of standardisation on each of the above aspects is evaluated in terms of:

- ✓ *Relevance*
- ✓ Effect

*Relevance*. The assessment of relevance scores is aimed to collect your member states' assessment of the importance of each aspect **regardless** of the level of standardisation. For example, the Threat 'High entry costs' might be assessed to be less relevant than 'Lack of support' whatever the level of standardisation is. Please assign the **lowest relevance score** to **all aspects that you consider as irrelevant for assessing costs and benefits of standardisation**.

*Effect*. The effect scores represent the impact of a level of standardisation on a given aspect. For example, a standardisation level with a lot of law-enforced rules has a stronger impact on the aspect 'High entry costs' than a level with a lot of freedom. The effect **depends** on the level of standardisation and has to be assessed for each activity of the Business Area. If an aspect is not involved in a given activity, the value '**not applicable**' can be assigned.

In this application of the SWOT analysis, *Relevance* is scored for every SWOT aspect on a scale from 1 to 4, regardless of the level of standardisation, while *Effect* is scored for each SWOT aspect on a scale from 0 to 3 for each level of standardisation that is higher than your current level.

For a given level of standardisation, the result of the SWOT analysis on each aspect is the product of both factors.

#### **Graphical representation**



The scores assigned can be represented by fingerprints which provide a useful graphical tool to support strategic decisions.

For a given level of standardisation, the **result of the SWOT on each aspect is the product of relevance and effect**. In the case of **W**eaknesses and **T**hreats it is preceded by a minus sign to indicate their negative contribution.



## 2. The current test

## 2.1 Purpose

The current test among the members of ESSNet project is aimed at

- ✓ getting feedback from respondents on different issues concerning SWOT methodology and the SWOT tool, like, for instance:
  - ease of comprehension of the used concepts,
  - completeness and pertinence of the SWOT aspects to analyse the impact of

standardisation,

- suggestions for missing aspects,
- validation of results of SWOT analysis in comparison with the perceived situation.
- ✓ fine-tuning the SWOT methodology and consequently the SWOT tool in order to be widely used by the ESS community
- ✓ having first draft results on impact of standardisation on the selected Business Area.

For these reasons, the test will concern only one Business Area - the **Implementation Business Area -** and in particular only the activities **"Data Collection"** and **"Linking, deriving and editing"** will be analysed.

## 2.2 How to organise data collection

Please note that this tool should **provide the point of view of each NSI as a whole. Therefore** respondents at the higher management level are expected.

On the other hand, it is possible that each NSI could refer to more than one respondent according to the different activities to be analysed or to people working in different departments (methodological or production departments).

In other words, it is possible to have one questionnaire for each NSI filled in by one or more respondents (single user-id) or several questionnaires completed by different people (more than one user-id). In the last case, a synthesis of results has to be done as explained in the following.



To facilitate this process we have developed the following features in the SWOT tool:

- ✓ the questionnaire can be filled in at different times (it is possible to save the answers even if the questionnaire is not finished yet)
- ✓ the same questionnaire can be filled in by more than one person (it is modular, so that, for example, each person could fill in a module concerning one activity)
- ✓ it is possible to ask for more user-ids in order to have the questionnaire completed by different persons (but please note: only one final questionnaire should be submitted to represent the NSIs overall point of view)
- ✓ it is possible to print the questionnaire and share it on paper, to discuss altogether before or after filling in it with definitive contents.

Concerning its use in this test, each representative member of the ESSNet project is asked to:

- ✓ identify a responsible of data collection (he is also free to identify one of the participants of the ESSNet project as responsible of data collection, if this simplifies the task)
- ✓ provide him all the information concerning the purpose of this test, the methodology and the swot tool.

#### The responsible of data collection has the following tasks:

- ✓ Identifying respondent/s in his NSI
- ✓ Organising a face-to-face presentation to him/them to explain the purpose of this test, the methodology and the tool, basing on the documentation provided
- Analysing collected data and, in case of more than one respondents, provide the synthesis.
   In this last case, he should get questionnaires filled in by all the respondents (printed version or PDF file) and, if responses differ critically, he should meet them again and agree with them on a single point of view. In other words, only one questionnaire per NSI has to be sent back
- Provide a short report on the collected data, explaining in particular how he made the synthesis (see the template of the report in attach).

## 2.3 Steps for SWOT analysis

The following steps have to be performed to make SWOT analysis:

1) Assign *Relevance* scores to each aspect of the SWOT analysis for the Implementation Business Area



*Relevance* scores are aimed at stating the importance, in the context of the ESS, of each aspect of the SWOT table. These scores are assigned only once, regardless of the levels of standardisation.

- 2) Select an activity of the Implementation Business Area
- **3)** Identify your own "*as is*" situation for the selected activity

The 'as is' situation represents the current level of standardisation of the NSI with respect to a common European model. As specified, in order to make the identification of the 'as is' situation, a rough list of **common infrastructures** supporting each level of standardisation has been reported.

The current 'as is' situation should correspond to the situation where the NSI has already implemented the majority of listed infrastructures.

4) Assign *Effect* scores to each aspect of the SWOT analysis for the selected activity

The *Effect* scores represent the impact of a level of standardisation on a given aspect. For example, a standardisation level with a lot of law-enforced rules has a stronger impact on the aspect 'High entry costs' than a level with a lot of freedom. The effect **depends** on the level of standardisation and has to be assessed for each activity of the Business Area. If an aspect is not involved in a given activity, the value '**not applicable'** can be assigned

- 5) Repeat step 2, 3 and 4 for the two activities
- 6) Produce the fingerprints graphics for a visual result of your analysis
- 7) Verify whether the graphical results correspond to your expectations and, if not, update the scores.
- 8) Add general comments and suggestions which will be very precious to optimise this method and this tool.

Free texts answers are included, so as you can add comments and suggestions which will be very precious to optimise this method and this tool.



#### **REPORT of the Responsible of Data Collection**

- 1. Describe briefly how you feel about this SWOT approach to collect information to support decision making on standardisation in the ESS
- 2. Describe what is your impression of the SWOT tool
- 3. Provide a feedback about the usability of the tool
- 4. Describe how you organised data collection (did you collect input from different persons, how much time did it take to have the information back, what's your feeling for the time burden of the task)
- 5. If you collected input from different persons, please describe whether the point of view of respondents was uniform or, if not, describe:
  - ✓ What the main contrasts were due to (for instance, not sufficient clarity of concepts used or different opinions of respondents)
  - ✓ Which strategy you adopted to arrive to a synthesis