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Ex-ante evaluation of the Partnership Agreement 2014- 2020

First Interim Evaluation Report on
Electronic Systems for Information
Exchange

Ministry of European Funds, Romania





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List of Abbreviations

Abbreviation	Explanation
AA	Audit Authority
CA	Certification Authority
CF	Cohesion Fund
CPR	Common Provision Regulation
CSF	Common Strategic Framework 2014-2020
DB	Database
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EMFF	European Maritime and Fisheries Fund
ERDF	European Regional Development Fund
ES	Electronic System
ESF	European Social Fund
ETC	European Territorial Cooperation
EU	European Union
HTTP	Hyper-Text Transfer Protocol
HTTPS	Secure HTTP
IACS	Integrated Administration and Control System
IB	Intermediate Body
ICT	Information and Communication Technology
IT	Information Technology
MA	Managing Authority
NPRD	National Programme for Rural Development
OP	Operational Programme
OP ACD	Operational Programme Administrative Capacity Development
OPF	Operational Programme for Fishing
OPTA	Operational Programme for Technical Assistance
PA	Partnership Agreement
ROP	Regional Operational Programme
SOP E	Sectoral Operational Programme Environment
SOP HRD	Sectoral Operational Programme Human Resources Development
SOP IEC	Sectoral Operational Programme Increasing Economy Competitiveness
SOP T	Sectoral Operational Programme Transport
STS	The Special Telecommunications Service
ToR	Terms of Reference
VPN	Virtual Private Network



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Executive Summary

This report presents results of evaluation of the electronic systems used within implementation of various Operational Programmes of the 2007-2013 programming period, in Romania. This evaluation has been concluded within ex-ante evaluation of the Romanian Partnership Agreement – a document prepared on 31 May 2013.

The evaluation aimed at answering to three questions:

1. Are there enough regulations and procedures in force for the data exchange required by the new regulations?
2. To what extent are electronic systems comprehensive enough?
3. To what extent do electronic systems meet the elements in the checklist to be drafted by evaluators (ease of use, reduced administrative burden, data aggregation, data quality, search options, data availability in due time, data security, etc.)?

Used methodology included documentary analysis with the most appropriate qualitative and quantitative methods, consultations and plausibility checks with all relevant stakeholders and sector experts:

- Documentary analysis: EU Regulations; Romanian regulations; previous evaluations; documentation of electronic systems, in total 29 documents have been reviewed (see annex 8);
- Check-lists containing 9 areas of analysis have been developed for 7 electronic systems that were analysed (see annex 1);
- 3 online Questionnaires have been disseminated. The one for beneficiaries has been sent by email to over 9440 respondents, out of which 661 replied. The questionnaires for authorities, both for regular users and for coordinators and/or administrators of electronic systems have been sent by official letter to all MAs and IBs (67 institutions), and the link was further distributed inside the organisations to relevant users and coordinators/administrators of electronic systems for data exchange. As a result of this process, the project received 175 answers from users of electronic systems and 69 from coordinators/administrators. (see annex 2);
- Interviews with 17 administrators or coordinators of the electronic systems from 8 institutions were held (see annexed 3 and 4);
- 2 Focus groups – with 17 representatives of all institutions managing various electronic systems and also with 17 representatives of CSF funds beneficiaries were held (see annexes 5, 6 and 7).

The following were the main conclusions of the evaluation responding to the three questions above:

Conclusions related to the requirements of the new EU Regulations and the existing national legal and procedural framework

All key pieces are in place vis-a-vis the national legal framework that should support the fulfilment of the e-Cohesion requirements – they are regulated by the Romanian laws relating to: electronic signature, archiving of electronic documents, electronic time stamping of documents and protection of personal data.

Conclusions related to comprehensiveness of existing electronic systems

In terms of fulfilling minimum requirements stemming from the new Regulations of the European Commission for the programming period 2014-2020, the only area of concern remains the specific e-Cohesion requirement – for “full implementation of the electronic data exchange between beneficiaries and authorities”. At present, with the existing electronic systems, this area is practically uncovered (and therefore needs focus of the Romanian authorities). The exceptions are few and extremely limited.

The MySMIS system that was developed recently and that has just undergone the testing stage, promises to solve most issues of that problem. For the current 6 Operational Programmes the system was designed with and for, MySMIS would fulfil entirely the e-Cohesion requirements.

Conclusions related to compliance of the electronic systems with the checklist

As a general image, the electronic systems are in place, they fulfil the minimum requirements, but they do require improvement of quality. From the technical point of view, all the systems prove to be satisfactory, with only few particular exceptions where improvements are required.

The area where most of the systems disappoint relates to satisfying the users' needs:

- All the systems need to improve their portfolio of predefined reports, in order to produce those reports their specific users need. Especially, SMIS lacks mostly of the predefined specific reports required by its users, depending on their individual and specific needs.
- All systems would benefit of a major revision in terms of features/functionality and data content as such to become more user oriented.

Recommendations are also split along those three main evaluation questions:

Recommendations for ensuring the coverage of the e-Cohesion minimal requirements

1. Finalising the implementation of MySMIS for the 6 current OPs it was designed for:
 - a. The highest levels of management in each relevant Ministry have to be aware of the requirements and support the implementation process of the necessary changes in order to fully fulfil the requirements.
 - b. All IT services from the various involved bodies (Ministries, MAs, IBs, etc.) should coordinate and cooperate at all times. That requires establishment of a working IT group, which would meet regularly to discuss and exchange information on joint implementation of the systems in their respective institutions.
 - c. Each institution involved in the process should make appropriate changes in their internal working procedures in order to ensure effective implementation of the new system.
 - d. Training of users – there is a need for assuring constant long-term schedule of training of users for any IT system, including series of trainings for beneficiaries (it can be financed from OPTA).
 - e. Last but not least, ensuring the full package of IT services and resources for the new system (including system administration, help-desk, data operators and

technical maintenance) – it requires financing of those services, with necessary manpower and budgets.

2. Extending MySMIS in the area of ETC
Further software development for MySMIS is needed. The solution could be either an upgrade of existing MySMIS, or a copy of MySMIS completely modified to fit the ETC requirements.
3. Covering the minimal requirements for SOP HRD
Extending MySMIS to cover also the specific needs of SOP HRD and replacing ActionWeb with MySMIS.

Recommendations for improving the existing electronic systems used by the authorities

All systems should undergo a major revision, which may be required anyway in order to update the electronic systems to the specific elements of the future programming period:

1. Improvement of the portfolio of predefined reports, in order to produce those reports that the users need. SMIS needs mostly that improvement.
2. Improvement of features/functionality and data structures, in order to become more user-oriented. All systems should try to provide more useful features for their users, allowing them to save working time while using the systems and to reduce the risk of human errors.
3. SMIS and MIS-ETC should be improved in their user interface (at least for the most important or complex forms currently used) in order to provide: easier understanding, better overview of data in the system, easier retrieving of needed data, etc.
4. SMIS, ActionWeb and MIS-ETC should ensure enough control mechanisms to allow timely identification of errors existing in the system.
5. SPCDR should revise its mechanisms of validation in order to cover all relevant input data in a reliable manner.
6. Improvement of mechanisms for help-desk and technical assistance for SMIS and ActionWeb is necessary, in order to reduce the rate of minor incidents and to improve the response time in case of incident (at all levels where the system is used).

General recommendations for all electronic systems

1. Ensuring continuous software development support, especially for MySMIS, SMIS and MIS-ETC (which could be brought under the same ownership as SMIS in order to concentrate the efforts):
 - a. Quick repair of software deficiencies claimed by the users.
 - b. Improvement of support provided to the various programmes, especially for their specific needs.
 - c. Quick update to the changes in the real world environment.
2. Ensuring continuous training of all users:
 - a. Introductory training for new users (to be repeated every certain periods of time).
 - b. Second training for existing users, for refreshing knowledge on less obvious features (needed for more complex systems).
 - c. Advanced training for specific categories of users (advanced features of the system and methods of solving certain complex tasks).



- d. Promoting important tools, modules, features, etc., that are less known and that might improve the users' experience. For example, Art4SMIS - the reporting tool for SMIS, deserves to be better promoted among the users, as it can allow them to build their own reports, accordingly to their needs. This tool is not so well known by the current regular users because it was added to SMIS at a later stage and only the supervisors benefited of training.



1 Introduction

This report presents results of evaluation of the electronic systems used within implementation of various Operational Programmes of the 2007-2013 programming period, in Romania.

This evaluation has been concluded within the assignment currently implemented under the framework agreement no. 23/22.08.2011 for the evaluation of structural instruments during the period 2011-2015, lot 1 – evaluations for subsequent contract no. 5 “Ex-Ante evaluation of the Partnership Agreement 2014-2020”.

2 Approach and Methodology

2.1 Description of the assignment (objectives and evaluation questions)

The objective of this evaluation done within ex-ante evaluation of the Partnership Agreement (PA) as defined in the Terms of Reference (ToR) was to answer to the evaluation specific questions regarding the assessment of the electronic systems ensuring the information exchange between the authorities and the beneficiaries (Question III.1):

III.1 Are there enough regulations and procedures in force for the data exchange required by the new regulations? To what extent are electronic systems comprehensive enough? To what extent do electronic systems meet the elements in the checklist to be drafted by evaluators (ease of use, reduced administrative burden, data aggregation, data quality, research options, data availability in due time, data security etc.)?

According to the ToR, the requirements have to be identified and included in the checklist tool for the electronic systems evaluation fundamental question above (Q.III.1).

2.2 Methodology

The evaluation of electronic systems for data exchange covered the last evaluation question of the current assignment – Q.III.1 – but following the same logic of evaluation as foreseen for major Question II.1, it has started with the launch of this project.

The methodology adopted combined documentary analysis with the most appropriate qualitative and quantitative methods, consultations and plausibility checks with all stakeholders and sector experts.

We started this part of evaluation with documentary analysis based on the new regulations issued by the European Commission, the procedures and regulations that are in force and the documentation on the electronic systems for data exchange. We added to the results of the documentary analysis information collected from interviews with administrators or coordinators of the electronic systems.

We have gathered information on several information systems in place within different Managing Authorities and Intermediate Bodies. These systems are listed in the “Findings” section of this evaluation report. Therefore results of our evaluation contain information and analysis concerning the gathered data.

We have prepared an efficient checklist covering the full range of factors that are relevant to the Question related to electronic systems. The list covers: ease of use, reduced administrative burden, data aggregation, data quality, search options, data availability in due time, data security, etc. The completed check-lists prepared by the experts for existing electronic systems are attached in the Annexes.



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The full data collection needed for the completion of the checklist was achieved by additional tools like on-line questionnaires and a focus group similarly organised as for the administrative capacity evaluation (Q.II.1). Details of these tools can also be found in Annexes.

Our methodology can be summed up:

- Documentary analysis – some of the main documents:
 - General EC Regulations;
 - Documents about e-Cohesion Regulation for 2014-2020;
 - Relevant Romanian legislation;
 - Previous evaluations, including references to electronic systems;
 - Documentation of existing electronic systems: presentation, users' manuals, technical documentation, procedures, etc.
- Check-lists;
- Online Questionnaires – 3 questionnaires were elaborated and published online to support filling in the checklists:
 - For beneficiaries (the questions related to electronic systems were incorporated within a common questionnaire used also for administrative capacity);
 - For authorities (regular users);
 - For authorities (coordinators or administrators of electronic systems);
- Interviews with administrators or coordinators of the electronic systems;
- Focus group – with representatives of all institutions managing various electronic systems.

3 Findings

3.1 The requirements of the new EU Regulations and the existing national legal and procedural framework

The list of evaluation questions, as defined by the Terms of Reference of this ex-ante evaluation, contains a subset of three questions, under its section III.1 related to electronic systems for data exchange. The first of these three questions aims at gathering response to: “*Are there enough rules and procedures in place for the data exchange required by the new regulations?*”.

Answering this question required implementation of the desk-research analysis done in two steps:

- First, we had to identify which are the requirements comprised by the new EU Regulations, related specifically to the electronic data exchange.
- Secondly, given the requirements identified during step one, we had to identify which is the needed support from the national legal and procedural framework and to what extent this support exists.

We identified all relevant articles included in the new European Regulations prepared for the programming period 2014-2020 that refer to the electronic systems in the European Union Member States. The desk research was extended with analysis of several working documents of the European Commission that brought a better picture of, especially, the new elements of the e-Cohesion policy foreseen for the new programming period.

Using the information gathered from the documentary analysis, we sorted and grouped the content of the above-mentioned articles from a technical perspective. We were able to organise the EU requirements regarding electronic systems into the following three groups:

1. Requirements regarding the data exchange between beneficiaries and authorities.
2. Requirements regarding electronic information systems for recording and storage of financial and monitoring information.
3. Requirements regarding the storage of electronic data.

It should be noted that only the first group of the requirements, which are the new e-Cohesion requirements, are directly related to the primary objective of this evaluation - meaning the electronic data exchange. The other two groups of these requirements bring additional information about electronic information systems used for programme implementation, in general.

Herein below, we present those three groups in more detail:

1. Requirements regarding the data exchange between beneficiaries and authorities

These are new requirements specific to the programming period 2014-2020 and they are the result of newly introduced e-Cohesion policy. They also represent the central element of this evaluation. Those requirements are defined by **Art. 112(3) of CPR, under part III containing the general provisions applicable to ERDF, ESF and CF**, and they can be summarised as follows:

- **All exchanges of information between beneficiaries and managing authorities, certifying authorities, audit authorities and intermediate bodies can be carried out [solely] by means of electronic data exchange systems.**
- **The systems shall allow for the beneficiaries to submit all information only once.** In this respect, the systems shall facilitate interoperability between systems – the same operation should be accessible for all authorities implementing the same programme (regardless of whether this is an “Investment for growth and jobs” or “European Territorial Cooperation Programme”).

It should be noted and remembered that these requirements are defined only for ERDF, ESF and CF.

2. Requirements regarding electronic information systems for recording and storage of financial and monitoring information

These requirements define the electronic information systems used by authorities as a support for the programme implementation:

- Managing authorities have to ensure that there is an appropriate secure electronic system to record, maintain, manage and report key information on each operation selected for funding.
- The systems shall record and store key information required for the purposes of monitoring, audit and evaluation of the programme implementation, including:
 - Key characteristics of the beneficiary and the project;
 - Financial and accounting data; and
 - Indicators and progress monitoring data.

The requirements are defined by the following articles:

- Art. 62(d) of CPR;
- Art. 77(1) of EAFRD Regulation; and
- Art. 134(1) of EMFF Regulation.

And the following articles define the responsibility for the implementation, which is assigned to the managing authorities:

- Art. 114(2)(d) of CPR, under part III containing the general provisions applicable to ERDF, ESF and CF;
- Art. 73(1)(a) of EAFRD Regulation; and
- Art. 108(1)(a) of EMFF Regulation.

3. Requirements regarding the storage of electronic data

These requirements cover some particular technical issues regarding those electronic systems that comprise data that exist only in electronic version and that are subject to the retention rules.

The requirements are defined by Art. 132(6) of CPR and they state that:

- The systems shall comply with the commonly accepted security standards.
- The systems shall allow certification of data authenticity according to the national regulations of the Member State.
- The systems shall be viable for audit controls.

The responsibility for implementing the requirements pertains to each holder of data that exist only in electronic version and that are subject to retention rules.

General conclusions:

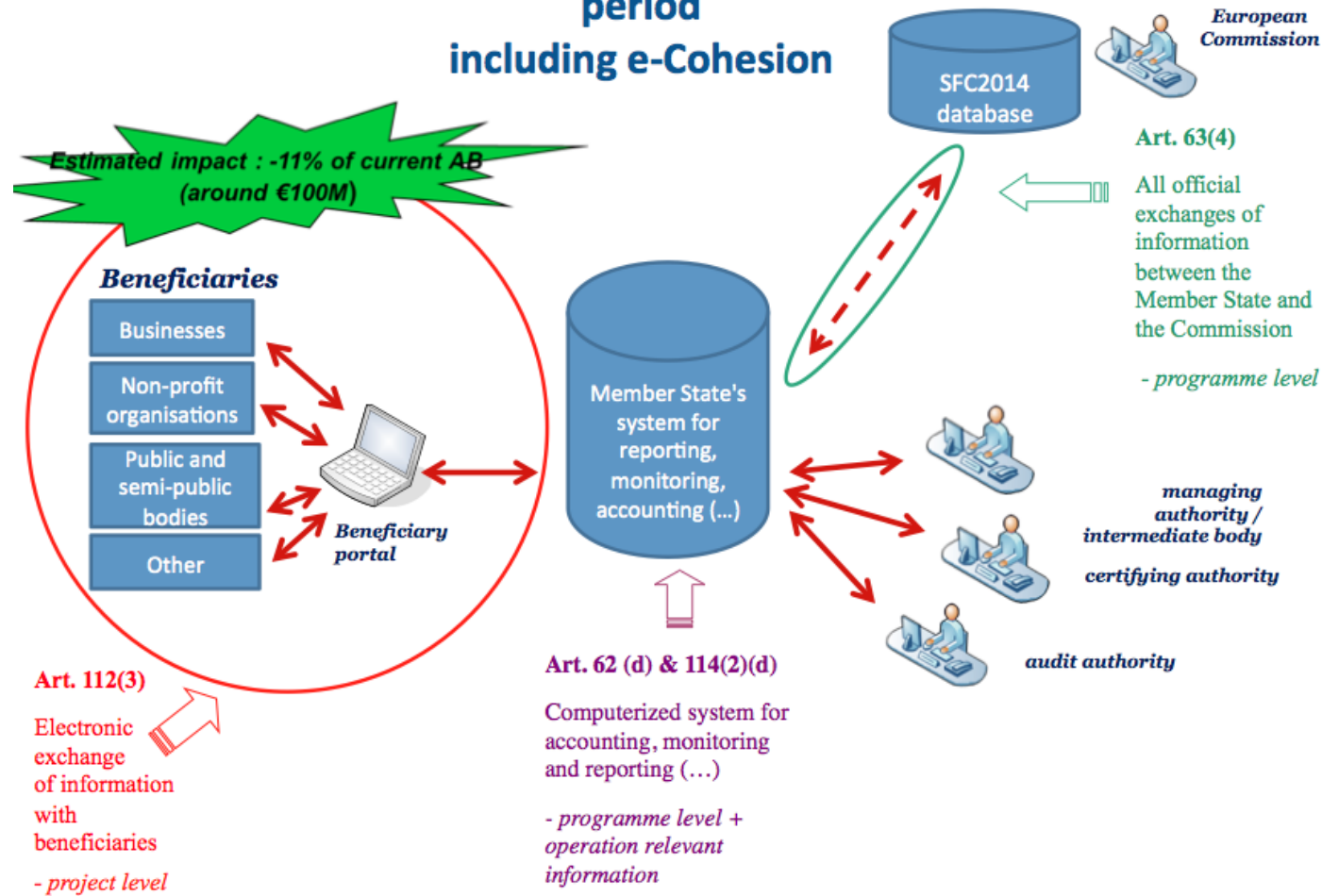
Basically, those three sets of requirements altogether define, in very broad terms, the general architecture of an aggregated virtual system, composed of several individual electronic systems (see the figure on the next page).

All these electronic systems working together should help the process of implementation and monitoring of the progress of the programmes.

The figure below presents the view within the e-Cohesion Regulation on the architecture of IT systems used by each EU Member State. The figure shows a sample generic architecture of information systems that includes the elements mentioned by the e-Cohesion requirements presented earlier.

There is the electronic data exchange system between beneficiaries and authorities required by art. 112(3) of CPR. And there is a computerised system for accounting, monitoring and reporting, as defined by art. 62(d) of CPR. This last system comprises also a central repository to ensure also the requirements of art. 132(6) of CPR, regarding the storage of electronic data.

Electronic exchange of information in 2014-2020 period including e-Cohesion





The second step in the process of answering the first question of this evaluation consisted of clarification of the current status of the national Romanian legal and procedural framework needed to support those identified EU e-Cohesion requirements for the programming period 2014-2020.

In this respect, for each of the EU requirements, the evaluation focused on what legal support is or may be required. Then the desk research was concentrated on the issue if that legal support exists or not at the national level in Romania.

The result of this comparative analysis is presented in the following table:



Table 3.1.1. Comparative analysis of the required national legal and procedural support needed for the implementation of the EU requirements

Requirements of EU Regulations	National legal and procedural support		
	Needed	Existing	Covered?
1. Requirements regarding the data exchange between beneficiaries and authorities: · All exchanges of information between beneficiaries and managing authorities, certifying authorities, audit authorities and intermediate bodies can be carried out solely by means of electronic data exchange systems. · The systems shall allow for the beneficiaries to submit all information only once. In this respect, the systems shall facilitate their interoperability .	Protection of personal data being submitted by beneficiaries	<ul style="list-style-type: none"> • Law no. 677/2001 for protection of individuals with regard to the processing of personal data and on the free movement of such data • Order no. 52/2002 of the People's Advocate • Decision no. 132/2011 of the National Authority for Supervision of Personal Data Processing 	Yes
	Legal support for authentication of documents submitted by beneficiaries only electronically	<ul style="list-style-type: none"> • Law no. 455/2001 regarding the electronic signature • Procedural framework defined by the Governmental Decision no. 1259/2001 	Yes
	Legal support for authenticated time stamping of electronic documents submitted by beneficiaries	<ul style="list-style-type: none"> • Law no. 451/2004 regarding the time stamp • Procedural framework defined by the Order no. 492/2009 of the Ministry of Communication and Information Society 	Yes
2. Requirements regarding electronic information systems for recording and storage of financial and monitoring information: · Managing authorities ensure that there is an appropriate secure electronic system to record, maintain, manage and report key information on each operation selected for funding. · The systems shall record and store key	Protection of personal data belonging to beneficiaries	<ul style="list-style-type: none"> • Law no. 677/2001 for protection of individuals with regard to the processing of personal data and on the free movement of such data • Order no. 52/2002 of the People's Advocate • Decision no. 132/2011 of the National Authority for Supervision of Personal Data Processing 	Yes

<p>information required for the purposes of monitoring, audit and evaluation of the programme implementation, including: key characteristics of the beneficiary and the project; financial and accounting data; indicators and progress monitoring data.</p>			
<p>3. Requirements regarding the storage of electronic data:</p> <ul style="list-style-type: none"> · The systems shall comply with the commonly accepted security standards. · The systems shall allow certification of data authenticity according to the national regulations of the Member State. · The systems shall be viable for audit controls. 	<p>Protection of personal data</p>	<ul style="list-style-type: none"> • Law no. 677/2001 for protection of individuals with regard to the processing of personal data and on the free movement of such data • Order no. 52/2002 of the People's Advocate • Decision no. 132/2011 of the National Authority for Supervision of Personal Data Processing 	<p>Yes</p>
	<p>Security requirements for archiving electronic documents</p>	<ul style="list-style-type: none"> • Law no. 135/2007 regarding archiving of electronic documents • Procedural framework defined by the Order no. 493/2009 of the Ministry of Communication and Information Society 	<p>Yes</p>
	<p>Legal support for authentication of archived electronic documents</p>	<ul style="list-style-type: none"> • Law no. 455/2001 regarding the electronic signature • Law no. 135/2007 regarding archiving of electronic documents • Procedural framework defined by the Governmental Decision no. 1259/2001, respectively by the Order no. 493/2009 of the Ministry of Communication and Information Society 	<p>Yes</p>
	<p>Legal support for authenticated time stamping of archived electronic documents</p>	<ul style="list-style-type: none"> • Law no. 451/2004 regarding the time stamp • Law no. 135/2007 regarding archiving of electronic documents • Procedural framework defined by the Orders no. 492/2009, respectively 493/2009 of the Ministry of Communication and Information Society 	<p>Yes</p>

As the above table comprehensively confirms, the national legal and procedural framework comprises all needed and required key elements, which have already been regulated through the following Romanian laws:

- Law no. 455/2001 regarding the electronic signature, together with the procedural framework defined by the Governmental Decision no. 1259/2001, ensure the legal and procedural framework needed for legal authentication of electronic data, thus allowing the replacement of original papers signed by hand with electronic data authenticated through electronic signature. This framework is needed in order to support the requirement that “*all exchanges of information between beneficiaries and [...] authorities [...] can be carried out solely by means of electronic data [...]*”, comprised by art. 112(3) of CPR, which implies that authorities will not receive any more papers with original hand signatures. The only possibility to ensure legal authentication of received data will remain the electronic signature.
- Law no. 135/2007 regarding archiving of electronic documents, together with the procedural framework defined by the Order no. 493/2009 of the Ministry of Communication and Information Society, ensure the legal and procedural framework needed in order to support the requirements regarding the storage of electronic data, comprised by art. 132(6) of CPR.
- Law no. 451/2004 regarding the time stamp, together with the procedural framework defined by the Order no. 492/2009 of the Ministry of Communication and Information Society ensure accessory legal and procedural framework for the laws regarding electronic signature, respectively archiving of electronic documents, by providing means for getting legally valid stamps of date and time for the data that is electronically signed or archived in electronic format.
- Law no. 677/2001 for protection of individuals with regard to the processing of personal data and on the free movement of such data, together with the Order no. 52/2002 of the People’s Advocate and the Decision no. 132/2011 of the National Authority for Supervision of Personal Data Processing ensure general legal and procedural framework for all systems that comprise personal data.

References

<i>Data sources and methods</i>	<i>Desk research; documentary analysis – see Annex 8, “List of Analysed Documents”</i>
<i>Conclusions</i>	<i>See section 1 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>As there are no pending issues (see conclusions), there is no point for recommendations</i>

3.2 Comprehensiveness of existing electronic systems

In order to answer to the second question of this ES evaluation – “*Up to which extent are the electronic systems comprehensive?*” – the following electronic systems were analysed (listed in alphabetical order):

- ActionWeb – web-based system (<https://actionweb.fseromania.ro>) that allows data exchange between beneficiaries or potential beneficiaries and authorities, used for SOP HRD:
 - It covers the entire project life cycle.

- It is complemented by “ASEP”, a web-based application used for the evaluation of the proposed projects. Data is transferred electronically from ActionWeb to ASEP.
- It is complemented by “SIMPOSDRU”, a system that incorporates a reporting tool allowing generation of various predefined or custom reports for the use of authorities. It extracts the needed data from the database of ActionWeb.
- MIS-ETC – used only by authorities, for all four ETC OPs:
 - It covers the entire project life cycle and includes additional dedicated modules for programming, evaluation and audit.
 - It is complemented by “MIS-ETC Web Application”, an integrated web-based extension comprising three modules:
 - e-Submission – for potential beneficiaries – developed but not used yet;
 - e-Evaluation – for evaluators of proposed projects;
 - e-Monitoring – for input of data by beneficiaries, about their expenditures within the project – developed but not used yet.
- MySMIS – web-based system (<https://www.mysmis.ro>) that allows data exchange between beneficiaries or potential beneficiaries and authorities, designed for the current 6 OPs (OP ACD, OPTA, ROP, SOP E, SOP IEC, SOP T) – developed and tested, but not used yet:
 - It is integrated with SMIS.
 - It covers the entire project life cycle.
- Own internal Access database used for SOP IEC - Axis 3 – used only by authorities.
- SIMPOP – used only by authorities, for OPF, covering the entire project life cycle.
- SMIS – used only by authorities, for 7 OPs (OP ACD, OPTA, ROP, SOP E, SOP HRD, SOP IEC, SOP T), covering the entire project life cycle and including additional dedicated modules for programming, evaluation and audit.
- SPCDR – used only by authorities, for NPRD, covering the entire project life cycle.
- Web application for uploading of financing requests for SOP IEC - Axis 1 – used by beneficiaries.
- Web application for uploading of financing requests for SOP IEC - Axis 2 – used by beneficiaries.
- Web application for uploading of financing requests for SOP IEC - Axis 3 – used by beneficiaries.

A set of three systems that are used by APIA: IACS, SVAP and IPA on-line constitute a particular case. Each of these electronic systems is a part of an integrated system, where IACS and SVAP provide the “back-office” functions and IPA on-line provides the “front-office” functions. But altogether, they address a very specific issue, which is different from the process of monitoring projects implementation. These systems are used to support the payments to the farmers. The amounts of payments are calculated based on areas of land parcels. The systems are focused on proper GIS identification of land parcels referred in the payment requests and technical checking of correctness of parcels definition. Consequently, these systems were not approached further in this report because they are out of the scope of this evaluation.

Each of the above-mentioned systems was investigated in terms of scope, features, data structures and technical characteristics. The needed information was gathered from the technical documentation and manuals of the systems, whichever available, and the gaps were filled-in with the help of the interviews with the administrators of each of the systems. Thus, a complete image

with all the characteristics of interest (scope, features, data structures and technical characteristics) was built for each of the evaluated systems.

These sets of characteristics were analysed in relation to the EU requirements identified during the first phase of the evaluation (see chapter 3.1), with the objective to identify to what extent the existing electronic systems cover those requirements.

In order to get a better view of the whole overall picture of the systems available at national level, for all OPs, a grid was designed to present the whole potential coverage of those ESs, on two axes:

- X axis: Features & data structures – grouped by major functional areas;
- Y axis: Scope – representing all OPs.

Two grids were drawn:

- One for electronic systems that are used by authorities – see Table 3.2.1 (further in the report, page 23); and
- One for electronic systems to provide the data exchange between beneficiaries and authorities – see Table 3.2.2 (page 24).

It should be noted that the axis of major functional areas is structured differently for each of the two grids, in order to fit to the specificities of those electronic systems.

Each square in the grid, at the intersection of a major functional area with an OP, shows if the given functionalities and data structures are covered by an electronic system, for the given OP:

- Full coverage is indicated by a solid background colour and the name of at least one electronic system inside that square. This means that the indicated electronic system(s) cover(s) entirely, for the given OP, all functionalities and data structures supposed by the given major functional area. It suggests that the electronic system(s) satisfy(ies) the EU requirements on that particular area.
- Partial coverage is indicated by a hashed background colour and the name of at least one electronic system, followed by a note symbol. This means that the indicated electronic system(s), although dealing with the given OP and the given major functional area, do(es) not cover all functionalities and data structures supposed by the given major functional area and the electronic system(s) do(es) not satisfy entirely the EU requirements on that particular area. Details are provided in the indicated note, below the table.
- No coverage is indicated by a blank square.

Ideally, each square of each of the two grids should be fully covered by at least one system. However, it is necessary to note that both grids were drawn for full scope and full sets of **possible** functional areas in the context of programme implementation. It should also be reminded, that **the EU requirements address a narrower coverage**, namely the “Project implementation” group of functional areas (Art. 62(d) of CPR refers to “operation[s] **selected** for funding” and Art. 112(3) of CPR refers to “beneficiaries”, meaning entities **receiving** financial assistance). Moreover, as regards the data exchange between beneficiaries and authorities (the second grid), the respective EU requirements apply only to ERDF, ESF and CF (see chapter 3.1). This means that NPRD and OPF are excluded and the scope of the EU requirements is narrowed, too, for the second grid.

The coverage envisaged by the EU requirements is bordered by a thicker line on each of the two grids. Consequently, full coverage of the EU requirements would be accomplished if all

the squares inside the thicker border were fully covered by at least one electronic system. If there is at least one blank square inside the area bordered by the thicker line, then the EU requirements are not entirely covered. The same is true in case of a square covered only partially.

Thus, the results of the comparative analysis of the electronic systems characteristics in relation to the EU requirements are synthesized in the following two grids showing up to which extent the electronic systems are comprehensive enough, from the point of view of the EU requirements.

The current coverage of the existing electronic systems is shown in a synthetic manner, in the following two tables:

- Table 3.2.1 shows the coverage of those electronic systems that are used only by authorities.
- Table 3.2.2 presents the coverage of those electronic systems that are used for data exchange between beneficiaries and authorities.

Table 3.2.1. Electronic systems that are used only by authorities

Programme	Major areas of data collections managed by the electronic systems in relation to the programme implementation				
	Project selection		Project implementation		
	Proposed projects	The selection process	Project and beneficiary data	Financial data	Progress monitoring data
ETC (all OPs)	MIS-ETC	MIS-ETC + eEvaluation	MIS-ETC	MIS-ETC	MIS-ETC
NPRD	SPCDR	SPCDR	SPCDR	SPCDR	SPCDR
OP ACD	SMIS	SMIS	SMIS	SMIS	SMIS
OPF	SIMPOP	SIMPOP	SIMPOP	SIMPOP	SIMPOP
OPTA	SMIS	SMIS	SMIS	SMIS	SMIS
ROP	SMIS	SMIS	SMIS	SMIS	SMIS
SOP E	SMIS	SMIS	SMIS	SMIS	SMIS
SOP HRD	ActionWeb & SMIS ^[1]	ASEP & SMIS ^[1]	ActionWeb + SIMPOSDRU & SMIS ^[1]	ActionWeb + SIMPOSDRU & SMIS ^[1]	ActionWeb + SIMPOSDRU & SMIS ^[1]
SOP IEC	SMIS	SMIS	SMIS & Internal Access DB for Axis 3 ^[2]	SMIS & Internal Access DB for Axis 3 ^[2]	SMIS & Internal Access DB for Axis 3 ^[2]
SOP T	SMIS	SMIS	SMIS	SMIS	SMIS

Notes:

[1] The ensemble of systems ActionWeb + ASEP + SIMPOSDRU is used as a primary tool by the MA and IBs for SOP HRD. But the same data is entered also in SMIS for reporting towards the higher levels of aggregation. There is no electronic exchange of data between ActionWeb and SMIS. All data are entered twice, manually.

[2] The IB for SOP IEC - Axis 3 uses its own Access database for the internal reporting needs. But the same data is entered also in SMIS for reporting towards the higher levels of aggregation. There is no electronic exchange of data between the internal database and SMIS. All data are entered twice, manually.

In table 3.2.1, the area surrounded by a thicker black border is the area envisaged by the minimum requirements of the EU Regulations, respectively the requirements defined by art. 62(d) of CPR,

art. 77(1) of EAFRD Regulation and art. 134(1) of EMFF Regulation, respectively by art. 132(6) of CPR (see chapter 3.1). Thus, it can be easily seen that as regards the recording and storage of financial and monitoring information, the existing electronic systems are comprehensive enough, covering entirely the area of project implementation, for all programmes (area that represents the minimum requirements). They even extend beyond the project implementation area, ensuring also full coverage of the area of project selection.

For some of the Operational Programmes (SOP HRD and SOP IEC - Axis 3), the main central system, SMIS, is used in parallel with other systems that are specific to the respective programme(s). The authorities managing those programmes felt the need of additional features to help with their specific needs. Thus, specific systems were developed in addition to SMIS. Unfortunately, none of these systems has the ability to interface with SMIS for data exchange. Consequently, users have to enter certain sets of data twice: once in SMIS and once in one of the programme specific systems. For these programmes, data entered in SMIS often has quality gaps (e.g. available with significant delays, missing data etc.). *This finding led to conclusion 4.1 in Chapter 4, "Conclusions", and to recommendation 4.1 in Chapter 5, "Recommendations".*

Table 3.2.2. Electronic systems that are used for data exchange between beneficiaries and authorities

Program me	Major areas of data collections managed by the electronic systems					
	Project selection		Project implementation			
	Proposed projects	Exchange of additional data	Procurement data	Financial data	Progress monitoring data	Exchange of additional data
ETC (all OPs)	eSubmission ^{[1] [4]}			eMonitoring ^{[1] [2] [4]}		
NPRD						
OP ACD	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
OPF						
OPTA	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
ROP	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
SOP E	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
SOP HRD	ActionWeb ^[4]			ActionWeb ^{[3] [4]}	ActionWeb ^{[3] [4]}	
SOP IEC	MySMIS ^[1] + Web app. for uploading requests for Axis 1 ^[4] + Web app. for uploading requests for Axis 2 ^[4] + Web app. for uploading requests for Axis 3 ^[4]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
SOP T	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]

Notes:

[1] MySMIS, e-Submission and e-Monitoring have not been used yet. They are developed and tested, but they were never used for real operation.

[2] e-Monitoring has limited features in the area of financial data. This system allows only the input of data related to the expenditures within the project.

[3] ActionWeb lacks some features in the areas of financial data and progress monitoring data. Financial data consists only of the expenditures of the project; the system does not include data about the financial flows between the beneficiary and the authorities (e.g. requested, paid). Progress monitor data consists mostly of data about the individuals participating in the project (e.g. final beneficiaries, experts); the system does not include indicators that are not linked directly to persons.

[4] e-Submission, e-Monitoring, ActionWeb and all the three web applications for uploading financing requests for SOP IEC - Axis 1, 2 and 3 do not implement yet the technology needed for electronic certification of authenticity for the data that is available only in electronic format.

In table 3.2.2, the area surrounded by a thicker black border is the area envisaged by the minimum requirements of the EU Regulations, respectively the requirements defined by art. 112(3) of CPR (see chapter 3.1). Thus, it can be seen that in terms of **currently used** electronic systems for data exchange between beneficiaries and authorities, this area is almost totally not covered, as **MySMIS, e-Submission and e-Monitoring are not used at present** (see note [1] below the table). The only existing implementations are ActionWeb and the three web applications for uploading financing requests for SOP IEC - Axis 1, 2 and 3, which offer limited features for SOP HRD, respectively for SOP IEC. Strictly in the area of the minimum requirements of the EU Regulations, only ActionWeb covers partially only two sections (financial data and progress monitoring data – see also notes [3] and [4] of the table) and only for SOP HRD.

If the implementation of the recently developed system MySMIS is finalised, then most of the area of data exchange between beneficiaries and authorities will be covered. In this case, as it can be seen from table 3.2.2, from the point of view of the minimal requirements (the area surrounded by a thicker black border), gaps will remain only for the ETC programmes and for SOP HRD. It is worth to be noted here that the minimal requirements are not applicable to EAFRD and EMFF, corresponding to NPRD and OPF.

References

<i>Data sources and methods</i>	<i>Desk research; documentary analysis – see Annex 8, “List of Analysed Documents”</i> <i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i>
<i>Conclusions</i>	<i>See section 2 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See section 1 of Chapter 5, “Recommendations”</i>

3.3 Compliance of the electronic systems with the checklist

The third and last question for the current ES evaluation asks: “*Up to which extent do the electronic systems satisfy the items in the checklist to be elaborated by the evaluators?*”.

One checklist was filled in for each of the relevant electronic systems that are currently used, based on the results of a survey conducted among the users of the electronic systems.

Three different questionnaires were designed for three target groups:

- Beneficiaries;
- Regular users within authorities; and
- Administrators / coordinators of electronic systems.

The questionnaire for administrators / coordinators is the most extensive one, covering all the items in the checklist. The questionnaires for regular users, including the beneficiaries, are more restricted, in order to avoid technicalities that cannot always be known or understood by users. Consequently, the items of the checklist of more technical nature were filled in based only on the answers received from administrators or coordinators of electronic systems.

The answers to the questionnaires were collected and grouped by each electronic system. In order to get the results needed for the checklist, the answers from the questionnaires were synthesized for each electronic system as standard average for the numeric values or as percentile statistics of “yes” or “no” answers, upon the case.

In case of items in the checklist that were addressed in more questionnaires (e.g. for users and for administrators, too), all received answers for that item participated in the computation of the average value, meaning that all parties were taken into account, upon the case: beneficiaries, users and administrators.

The filled checklists can be found in the Annex 1 of this report.

The results obtained from the checklists were expanded by the findings of the documentary analysis, the interviews and the focus group. It is necessary to be noted that no conflicting findings rose from this pool of sources.

A summary of the findings resulting from the data provided by the respondents through filled in checklists is presented below:

3.3.1 *Ease of use*

The following synthetic results were obtained for each of the items in this section of the checklist:

- Users' general opinion regarding the ease of use – Answers received from all types of users, including administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 2.95; ActionWeb – 3.57; SPCDR – 3.63; SIMPOP – 3.88; MIS-ETC – 2.25
- Average number of training days required to get a new user prepared – Answers received from administrators / coordinators (days; satisfactory values max. 2): SMIS – 10.97; ActionWeb – 2; SPCDR – 5.5; SIMPOP – 6.5; MIS-ETC – 7
- Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help) – Answers received from administrators / coordinators (weeks; satisfactory values max. 4): SMIS – 5.42; ActionWeb – 1.33; SPCDR – 10.25; SIMPOP – 3; MIS-ETC – 6

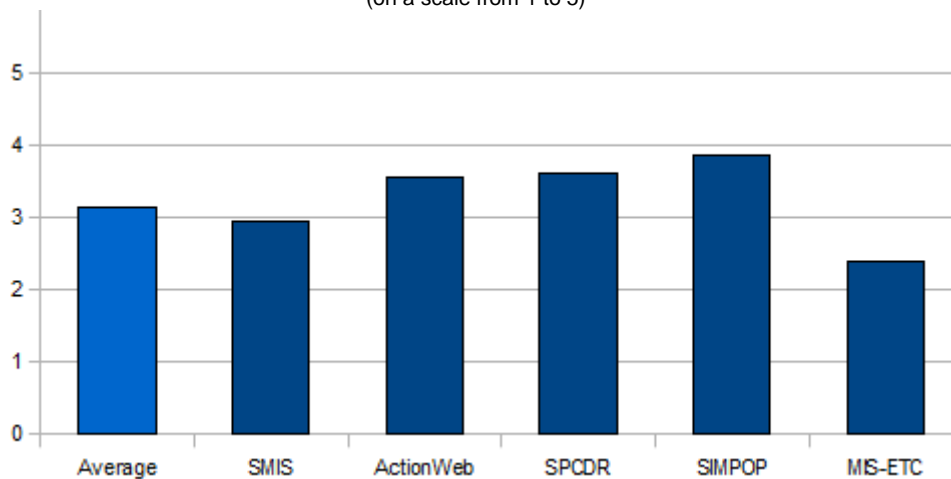
It is necessary to be noted that the above figures are rough statistic computations based on users' opinions and **they should be interpreted with caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based

on manuals and technical documentation) and the confrontation of those statistical figures within the focus group.

Most values in this section of the checklist are outside the satisfactory range and the rest of them are not far from the limit value of the satisfactory range. It may be concluded that, in general lines, the existing electronic systems are perceived by their users as not being very user friendly. The general trend for user friendliness is around the medium rating on the scale.

The systems that are dedicated to a single OP (like ActionWeb, SPCDR or SIMPOP) are regarded slightly positive (with average scores ranging from 3.5 to 3.8 on a scale from 1 to 5), opposed to the bigger systems like SMIS (covering 7 OPs) or MIS-ETC, which are regarded slightly negative (with average scores below 3).

Figure 3.3.1.1. How easy to use are the electronic systems?
(on a scale from 1 to 5)



This perception is sustained also by the estimative figures for the time needed to train new users and to have them fully accommodated with the system. It should be noted that the figures related to training **should not be regarded as absolute measurements** due to the risk of being altered by different methodologies of computation used by each of the administrators. The figures should be regarded only in terms of magnitude.

References

<i>Data sources and methods</i>	<p><i>Questionnaires – see Annex 2, “Questionnaires”</i></p> <p><i>Checklists – see Annex 1, “Completed Checklists”</i></p> <p><i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i></p> <p><i>Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants”</i></p> <p><i>Documentary analysis – see Annex 8, “List of Analysed Documents”</i></p>
<i>Conclusions</i>	<i>See conclusions 3.1 and 3.3 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See recommendations 2.2 and 2.3 in section 2 of Chapter 5, “Recommendations”</i>

3.3.2 Administrative burden

The following synthetic results were obtained for each of the items in this section of the checklist:

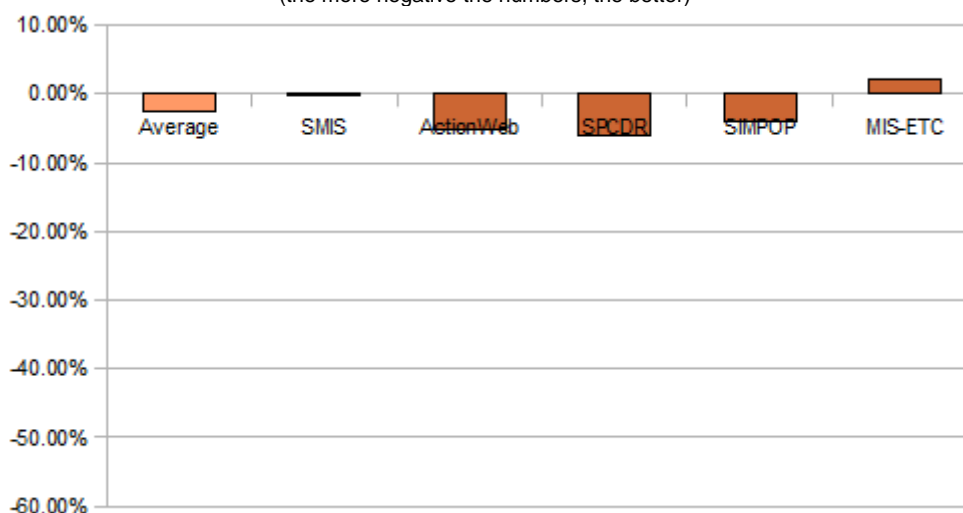
- Estimation of relative difference between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system – Answers received from all types of users, including administrators / coordinators (satisfactory values are negative): SMIS – -0,11%; ActionWeb – -6,47%; SPCDR – -6,25%; SIMPOP – -4,11%; MIS-ETC – +2,5%.
- Estimation of relative difference between the average work time consumed by a beneficiary in relation with the authorities (including the preparatory work), in the case when the system is used and in the case when no information system is used – Answers received from beneficiaries (satisfactory values are negative): ActionWeb – -3.18% – ActionWeb is the only system used by beneficiaries.

It is necessary to be noted that the above figures are rough statistic computations based on users' opinions and **they should be interpreted with much caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based on manuals and technical documentation) and the confrontation of the statistical figures within the focus group.

Most of the values are negative but still near the zero value – one digit figures, barely surpassing a 5 percentile points margin of statistical error, in the best cases. Consequently, the results of the questionnaires show that the general perception on the existing electronic systems is that they are not very efficient in reducing the administrative burden. The results show only a slight gain of working time through the implementation of the electronic system.

One of the main causes for this lack of performance is the fact that the existing electronic systems are not well fitted to the needs of the users. This can be seen in the correlation of the scores for this subject with the scores for general usefulness and for ease of use (see chapter 3.3.1).

Figure 3.3.2.1. Reducing the time consumed by the administrative burden
(the more negative the numbers, the better)



Other important factors that limit a potentially positive impact of electronic systems on reducing the administrative burden are the multiple parallel flows of the same data (on paper and electronically,

sometimes even in more than one electronic system) and the lack of interfaces between the various electronic systems that should have allowed sharing common data (see also table 3.2.1 above, in chapter 3.2, its notes and the references to conclusions and recommendations included there).

References

<i>Data sources and methods</i>	<i>Questionnaires – see Annex 2, “Questionnaires” Checklists – see Annex 1, “Completed Checklists” Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews” Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants”</i>
<i>Conclusions</i>	<i>See conclusions 3.1 and 3.3 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See recommendations 2.1, 2.2 and 2.3 in section 2 of Chapter 5, “Recommendations”</i>

3.3.3 General usefulness

The following synthetic results were obtained from the questionnaires for each of the items in this section of the checklist:

- Users' general opinion regarding the usefulness of the system for their daily activity – Answers received from all types of users, including administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 3.53; ActionWeb – 4.02; SPCDR – 4.5; SIMPOP – 4.2; MIS-ETC – 3.25.
- Relevance of the data content for the users' needs – Answers received from all types of users, including administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 3.24; ActionWeb – 3.67; SPCDR – 3.85; SIMPOP – 4.49; MIS-ETC – 3.7.
- Usefulness of the reports generated by the system – Answers received from all types of users, including administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 3.03; ActionWeb – 3.04; SPCDR – 3.38; SIMPOP – 4.18; MIS-ETC – 2.25.

It is necessary to be noted that the above figures are rough statistic computations based on users' opinions and **they should be interpreted with much caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based on manuals and technical documentation) and the confrontation of the statistical figures within the focus group.

In spite of modest results reported for the ease of use and for reducing the administrative burden (see chapters 3.3.1 and 3.3.2), the electronic systems are regarded however better in terms of general usefulness. Almost all values recorded for this section of the checklist are within the satisfactory range. Users appreciate that the electronic systems are, as marked in the questionnaire, “rather useful”. This is a positive assessment, in the given context, and it is fed by a general positive attitude towards the concept of electronic systems.

Although the users are not always too content about certain features of their electronic systems (as indicated by the results obtained in the other sections of the checklist), they are generally positive

about having an electronic system at hand as an alternative to paper files (as indicated by the results in this section of the checklist).

Figure 3.3.3.1. General usefulness of electronic systems
(on a scale from 1 to 5)

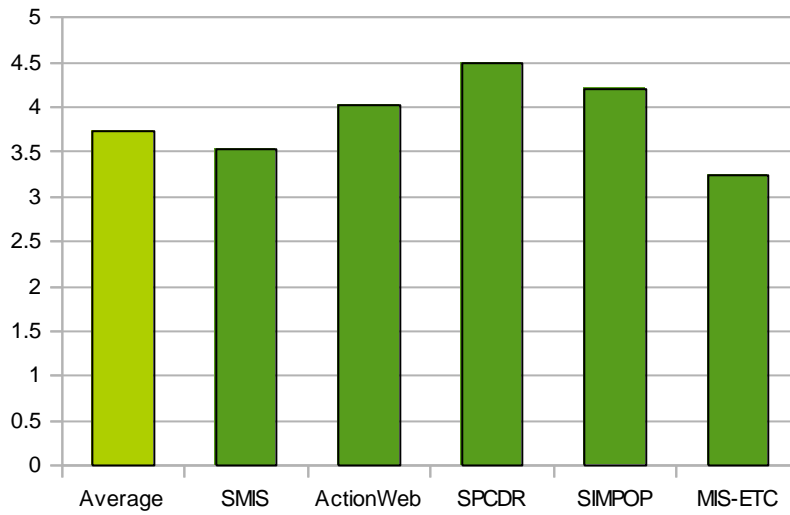


Figure 3.3.3.2. Relevance of the data provided by the electronic systems
(on a scale from 1 to 5)

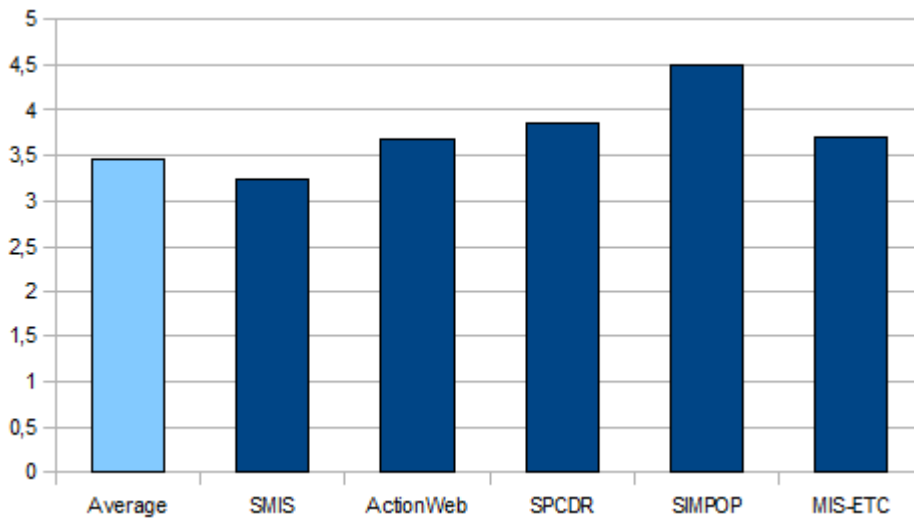
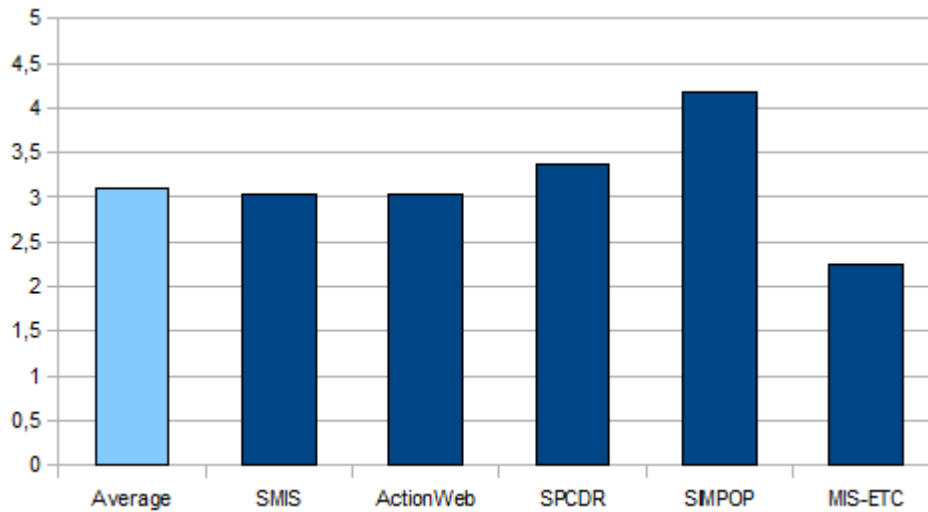


Figure 3.3.3.3. Usefulness of the reports
(on a scale from 1 to 5)



To be noted that the scores for general usefulness are high even in spite of the lower scores obtained for relevance of the data provided by the electronic system and the even lower scores obtained for usefulness of the reports generated by the system, which are only slightly above the medium rating (see the results presented above and the graphs).

Again, higher scores are obtained by the systems that are dedicated to a single OP (ActionWeb, SPCDR and SIMPOP, with score above 4 on a scale from 1 to 5). SMIS and MIS-ETC, which are broader systems, obtained lower scores but still above the medium level (see the results presented above and the graphs).

References

<i>Data sources and methods</i>	<i>Questionnaires – see Annex 2, “Questionnaires”</i> <i>Checklists – see Annex 1, “Completed Checklists”</i> <i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i> <i>Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants”</i>
<i>Conclusions</i>	<i>See conclusions 3.1 and 3.3 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See recommendations 2.1 and 2.2 in section 2 of Chapter 5, “Recommendations”</i>

As a partial conclusion, the results obtained for all the first three sections of the checklist (see chapters 3.3.1, 3.3.2 and 3.3.3), which relate directly to the user satisfaction level, show that users are not very content about the performance of the existing electronic systems (see the relatively low scores obtained for the various items relating to precise characteristics). But the users are still positive about the idea of an electronic system helping them with the administrative tasks (see the relatively high scores obtained for the item relating to the “general usefulness”).

3.3.4 Data querying and data aggregation

The following synthetic results were obtained for each of the items in this section of the checklist:

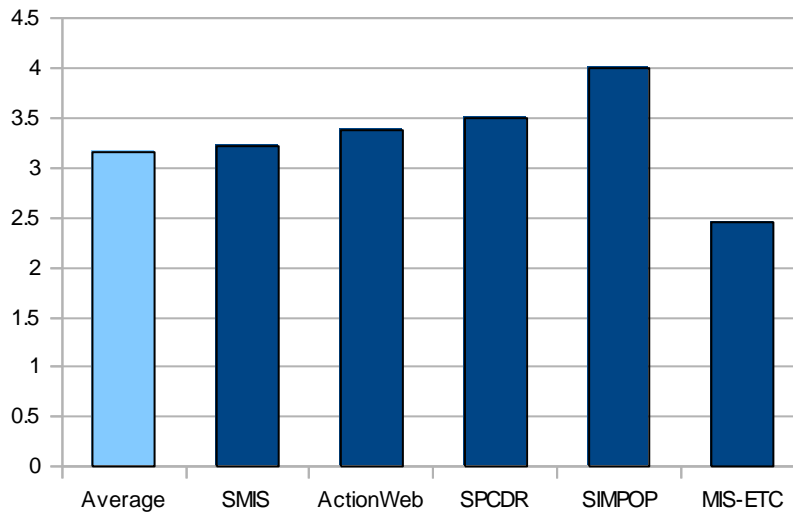
- Availability of functions for searching individual data – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 3.03; ActionWeb – 3.33; SPCDR – 3.25; SIMPOP – 3.75; MIS-ETC – 2.
- Availability of functions for listing a subset of a data collection (filtering) – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 3.16; ActionWeb – 2; SPCDR – 3; SIMPOP – 3.5; MIS-ETC – 2.
- Users' general opinion regarding the ease of retrieving needed data – Answers received from all types of users, including administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 3.22; ActionWeb – 3.38; SPCDR – 3.5; SIMPOP – 4; MIS-ETC – 2.25.
- Availability of functions for aggregating data – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 2): SMIS – 3; ActionWeb – 2.33; SPCDR – 3.25; SIMPOP – 3.5; MIS-ETC – 3.
- Availability of predefined reports – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 2,56; ActionWeb – 2; SPCDR – 3.5; SIMPOP – 3.75; MIS-ETC – 4.
- Availability of functions for building customised reports – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 2): SMIS – 2.66; ActionWeb – 2; SPCDR – 3.5; SIMPOP – 3.33; MIS-ETC – 3.

It is necessary to be noted that the above figures are rough statistic computations based on users' opinions and **they should be interpreted with much caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based on manuals and technical documentation) and the confrontation of the statistical figures within the focus group.

Similarly to the general user satisfaction level (see chapters 3.3.1, 3.3.2 and 3.3.3), the availability of sufficient and efficient features for data processing is seen as rather modest (most of the results are oscillating in the vicinity of the average level, which is also the limit for the satisfactory range).

The features related to the data extraction (e.g. searching, querying, filtering) are appreciated slightly positive for all systems (scores ranging mostly from 3 to 3.5 on a scale from 1 to 5), except for MIS-ETC, which presents a rather negative perception (see the figures above and the graph below):

Figure 3.3.4.1. How easy is to retrieve the needed data?
(on a scale from 1 to 5)



The features related to data aggregation and especially to the availability of reports obtained lower scores for most of the systems, but still above the medium level of 3. SMIS obtained negative ratings (below the medium level) for the availability of useful reports (see the figures above). This could be explained by the broader scope of SMIS, which is not able to address the specific needs of each authority or OP. Also, many users are not enough acquainted with the ART4SMIS reporting tool that accompanies SMIS and they are not aware of the real capabilities of such a tool. Insufficient training regarding this tool (which was implemented at a later stage, after SMIS initial implementation) could also explain the low results.

Note: This led to recommendation 3.2.d, in Chapter 5, "Recommendations".

The very low scores obtained by ActionWeb for data aggregation tools (including reporting – see figures above) are explained by the fact that ActionWeb itself does not include reporting features. For this purposes it works in conjunction with the more versatile reporting tool included in SIMPOSDRU. The combination of the two systems ensures the appropriate features needed by the users.

Note: Details are based on information gathered from documentary analysis and from interviews.

SPCDR and SIMPOP benefit of their own sets of reports incorporated in the system and designed specifically for the OPs they manage.

Note: Details are based on information gathered from documentary analysis and from interviews.

References

<i>Data sources and methods</i>	<i>Questionnaires – see Annex 2, “Questionnaires”</i> <i>Checklists – see Annex 1, “Completed Checklists”</i> <i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i> <i>Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants”</i> <i>Documentary analysis – see Annex 8, “List of Analysed Documents”</i>
<i>Conclusions</i>	<i>See conclusions 3.1 and 3.3 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See recommendations 2.1, 2.2 and 2.3 in section 2 of Chapter 5, “Recommendations”</i>

3.3.5 Data quality

The following synthetic results were obtained for each of the items in this section of the checklist:

- Data input is based on trustworthy sources and clear procedures – Answers received from administrators / coordinators (% of “yes” answers): SMIS – 100%; ActionWeb – 100%; SPCDR – 100%; SIMPOP – 100%; MIS-ETC – 100%.
- Input data are validated properly – Answers received from administrators / coordinators (% of “yes” answers): SMIS – 84,4%; ActionWeb – 66,7%; SPCDR – 50%; SIMPOP – 100%; MIS-ETC – 100%.
- Checks are available to allow detection of errors – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 2.94; ActionWeb – 2.33; SPCDR – 3; SIMPOP – 4; MIS-ETC – 2.
- Required data are available in due time for the final recipients – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 3): SMIS – 4.03; ActionWeb – 4.67; SPCDR – 4.25; SIMPOP – 4.75; MIS-ETC – 3.5.

It is necessary to be noted that the above figures are rough statistic computations based on users’ opinions and **they should be interpreted with much caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based on manuals and technical documentation) and the confrontation of the statistical figures within the focus group.

The data entered in all systems are based entirely on trustworthy sources of information (like original documents or copies certified against their originals) – see figures above.

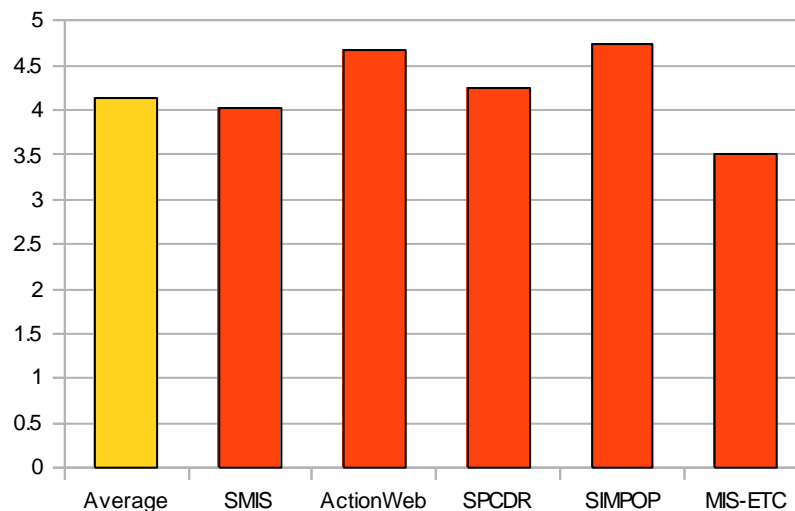
Most systems foresee validation of all relevant input data (automated or through manual validation procedures) – see figures above. Except for SPCDR, which relies rather on the inherent data processing flow that allows several persons to work on the same data, thus expecting that the invalid data would be spotted somewhere in the work flow (based on information gathered from documentary analysis and from interviews).

Generally, the effort for ensuring data quality is focused on the input of data. It seems, however, that the systems do not envisage enough controls to allow timely identification of errors already residing in the system (which either by-passed the control of input data or which were eventually generated by some system malfunctions). The scores recorded for this subject (see figures above) show concerns regarding the availability of enough checks to allow identification of errors in the

system. The general perception in this respect is rather negative (below the medium level for SMIS, ActionWeb and MIS-ETC).

In terms of timely availability of data required from the electronic system, all the systems are performing very well (rated above 4 on a scale from 1 to 5).

Figure 3.3.5.1. Timely availability of needed data
(on a scale from 1 to 5)



References

<i>Data sources and methods</i>	<i>Questionnaires – see Annex 2, “Questionnaires”</i> <i>Checklists – see Annex 1, “Completed Checklists”</i> <i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i> <i>Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants”</i> <i>Documentary analysis – see Annex 8, “List of Analysed Documents”</i>
<i>Conclusions</i>	<i>See conclusion 3.2 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See recommendations 2.4 and 2.5 in section 2 of Chapter 5, “Recommendations”</i>

3.3.6 Data security

The following synthetic results were obtained for each of the items in this section of the checklist:

- Only authenticated users are allowed to access non-public data or to modify data – Answers received from administrators / coordinators (% of “yes” answers): SMIS – 93,8%; ActionWeb – 100%; SPCDR – 100%; SIMPOP – 100%; MIS-ETC – 100%.
- Each user is limited to a specific set of access rights, for specific sections of the system – Answers received from administrators / coordinators (% of “yes” answers): SMIS – 90,6%; ActionWeb – 66,7%; SPCDR – 100%; SIMPOP – 100%; MIS-ETC – 100%.
- Communication channels used for exchanging sensitive data between various parts of the system are protected – Answers received from administrators / coordinators (% of “yes”

answers): SMIS – 87,5%; ActionWeb – 66,7%; SPCDR – 100%; SIMPOP – 75%; MIS-ETC – 100%.

It is necessary to be noted that the above figures are rough statistic computations based on users' opinions and **they should be interpreted with much caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based on manuals and technical documentation) and the confrontation of the statistical figures within the focus group.

In general, all the systems are reasonably well secured, data security being considered in all cases (see figures above; also confronted with the results of the documentary analysis and the interviews). All systems require users to authenticate and foresee specific access rights limiting the access of users only to those areas that are pertinent for their roles.

Communication between the various locations of offices is done through secured channels, usually VPNs provided in many cases by the Special Telecommunications Service (STS), even for the most remote locations. In cases when the web applications are accessible from Internet (e.g. in order to allow access of beneficiaries or external evaluators), the communication is done entirely through Secure HTTP (HTTPS), ensuring a reasonable level of software protection.

Note: Details are based on information gathered from documentary analysis and from interviews.

References

<i>Data sources and methods</i>	<i>Questionnaires – see Annex 2, “Questionnaires” Checklists – see Annex 1, “Completed Checklists” Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews” Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants” Documentary analysis – see Annex 8, “List of Analysed Documents”</i>
<i>Conclusions</i>	<i>See conclusion 3.2 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>As there are no pending issues (see conclusion: “all the systems prove to be satisfactory”), there is no point for recommendations.</i>

3.3.7 System stability

The following synthetic results were obtained for each of the items in this section of the checklist:

- Average downtime of the system in a month – Answers received from administrators / coordinators (hours; satisfactory values max. 2): SMIS – 8.75; ActionWeb – 2.67; SPCDR – 1; SIMPOP – 5.75; MIS-ETC – 36.
- Frequency of major failures of the system (requiring the intervention of administrators for restoring the system) – Answers received from administrators / coordinators (on a scale from 1 to 5; satisfactory values above 4): SMIS – 4.28; ActionWeb – 4.67; SPCDR – 4.67; SIMPOP – 5; MIS-ETC – 4.5.
- Frequency of significant malfunctions impeding the proper use of the system – Answers received from all types of users, including administrators / coordinators (on a scale from 1 to 5; satisfactory values above 4): SMIS – 3.43; ActionWeb – 3.64; SPCDR – 4.34; SIMPOP – 4.45; MIS-ETC – 4.

It is necessary to be noted that the above figures are rough statistic computations based on users' opinions and **they should be interpreted with much caution**. The following interpretations took into account also the opinions gathered from interviews, the results of the documentary analysis (based on manuals and technical documentation) and the confrontation of the statistical figures within the focus group.

Although the results obtained for system stability show a rather low frequency of malfunctions (see figures above), some of the indicated levels are not entirely satisfactory for a quality and reliable production system.

The major failures are very seldom for all systems (see figures above). But when they happen, it takes a lot of time to restore the system, as indicated by the high numbers of hours of downtime. One of the explanations is that most of the systems are managed by generally understaffed IT units of public institutions, which cannot provide a 24/7 support.

Note: Details are based on information gathered from interviews and focus group.

A poorer performance is recorded in relation to the frequency of minor incidents, which averages around 4 on a scale from 1 to 5, meaning "seldom", but not "very seldom". This indicates that at least for some of the systems, there are a significant number of cases of users that meet incidents regularly. One cause for this could be the web-based nature of most of the systems, thus relying on the proper functionality of the whole network of communication inter-connections, sometimes crossing the country from one end to the other. One failure of a device or a cable somewhere in the network could bring the electronic system unusable for some of the users.

Note: Details are based on information gathered from documentary analysis, interviews and focus group.

Another cause could be the software failures of some technical solutions that were left in a non-mature stage of development, due to the lack of appropriate services for continuous development of the software (needed both for repairing the hidden bugs discovered later and for updating the software to the changes appeared in the real world environment during time).

Note: Details are based on information gathered from documentary analysis, interviews and focus group.

Figure 3.3.7.1. Frequency of malfunctions that impede the proper use of the system (on a scale from 1 to 5; the higher, the better: 5 means "very seldom", 4 means "seldom")



References

<i>Data sources and methods</i>	<i>Questionnaires – see Annex 2, “Questionnaires”</i> <i>Checklists – see Annex 1, “Completed Checklists”</i> <i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i> <i>Focus group – see Annex 5, “Focus Group Agenda”, Annex 6, “Focus Group Presentation” and Annex 7, “Focus Group List of Participants”</i> <i>Documentary analysis – see Annex 8, “List of Analysed Documents”</i>
<i>Conclusions</i>	<i>See conclusion 3.2 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>See recommendation 2.6 in section 2 of Chapter 5, “Recommendations”</i>

3.3.8 Technology

All the systems are based on web-based software, which is the more modern technical solution allowing for a high decrease of administration costs, broad accessibility and high flexibility in the evolution of the system. The drawback of this technology relates to high demands at the level of the central node (the servers) and the reliance on a properly functioning network reaching even the most distant users. But the continuous and fast improvements in the ICT networks and systems in Romania should allow for easier fulfilment of these demands.

In terms of technical support, various solutions were approached. Bigger systems, like SMIS and MIS-ETC, have already migrated their hardware to specialised data centres; but the services are still managed internally. Other systems, like ActionWeb and SIMPOP, are entirely externalised. The hardware is hosted in other institutions that detain locations that are appropriate for this purpose. And all the services are provided by specialised IT companies, including services of continuous development (e.g. system and software updates). There is also the case of SPCDR, which is managed entirely internally (hardware and services).

More details are available in each of the checklists in Annex 1.

References

<i>Data sources and methods</i>	<i>Interviews with administrators of electronic systems – see Annex 3, “Interview Structure”, and Annex 4, “List of Interviews”</i> <i>Documentary analysis – see Annex 8, “List of Analysed Documents”</i>
<i>Conclusions</i>	<i>See conclusion 3.2 in section 3 of Chapter 4, “Conclusions”</i>
<i>Recommendations</i>	<i>As there are no pending issues (see conclusion: “all the systems prove to be satisfactory”), there is no point for recommendations.</i>

4 Conclusions

4.1 Conclusions related to the requirements of the new EU Regulations and the existing national legal and procedural framework

The conclusions in this section are based on the findings in Chapter 3.1, “The requirements of the new EU Regulations and the existing national legal and procedural framework”.

As regards the national legal framework that should support the fulfilment of the e-Cohesion requirements, all key pieces are in place, being regulated by the Romanian laws relating to:

- Electronic signature,
- Archiving of electronic documents,
- Electronic time stamping of documents and
- Protection of personal data.

4.2 Conclusions related to comprehensiveness of existing electronic systems

The conclusions in this section are based on the findings in Chapter 3.2, “Comprehensiveness of existing electronic systems”.

Recommendations regarding the conclusions in this section can be found in section 1 of Chapter 5, “Recommendations”.

In terms of fulfilling minimum requirements stemming from the new Regulations of the European Commission for the programming period 2014-2020, the only, however important, area of concern remains the specific e-Cohesion requirement – for “full implementation of the electronic data exchange between beneficiaries and authorities”. At present, with the existing electronic systems, this area is practically uncovered. The exceptions are few and extremely limited.

The details can be observed in table 4.1, on the next page. This table represents an extract from table 3.2.2, in chapter 3.2, and focuses only on those areas representing the relevant EU requirements (marked by a thicker black border). For more details, see table 3.2.2 (chapter 3.2, and its accompanying notes, page 24).

The MySMIS system that was developed recently and that has just undergone the testing stage, promises to solve most issues of that problem. For the current 6 OPs the system was designed with and for, MySMIS would fulfil entirely the e-Cohesion requirements. See also recommendation 1.1 in chapter 5.

As a reminder – NPRD and OPF are not subject of consideration of the minimal requirements of e-Cohesion.

Therefore, only SOP HRD and the 4 OPs for ETC (would) remain uncovered. For SOP HRD, the ActionWeb system is successfully used since 2008, but its scope is still limited at present, not covering all e-Cohesion requirements. MIS-ETC has implemented e-Monitoring, a module of MIS-ETC Web Application, but this module is even more limited, dealing only with the beneficiary's

expenditures, out of the whole area of financial data. See also recommendations 1.2 and 1.3 in chapter 5.

The Focus Group confirmed, with minority of different opinions, that MySMIS should be the one system developed further and used as the only system responding to the requirements of the e-Cohesion Regulation.

Table 4.1. Electronic systems coverage of the **e-Cohesion minimal requirements** (data exchange between beneficiaries and authorities)

Programme	Major areas of data collections related to project implementation, to be exchanged between beneficiaries and authorities			
	Procurement data	Financial data	Progress monitoring data	Exchange of additional data
ETC (all OPs)		eMonitoring ^{[1] [2]}		
OP ACD	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
OPTA	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
ROP	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
SOP E	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
SOP HRD		ActionWeb ^[2]	ActionWeb ^[2]	
SOP IEC	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]
SOP T	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]	MySMIS ^[1]

[1] Not implemented yet

[2] Limited features

4.3 Conclusions related to compliance of the electronic systems with the checklist

4.3.1 In terms of quality of the existing electronic systems, the results of this evaluation show that many improvements are needed in various aspects.

As a general image, the electronic systems are in place, they fulfil the minimum requirements, but they do not excel. Therefore they need further improvements/development.

This conclusion is based on the findings in chapters 3.3.1, 3.3.2, 3.3.3 and 3.3.4.

This conclusion led to recommendations 2.1, 2.2 and 2.3 in section 2 of Chapter 5, "Recommendations".

4.3.2 Strictly from the technical point of view, all the systems prove to be satisfactory, with only few particular exceptions where improvements are required:

- SMIS, ActionWeb and MIS-ETC lack enough check mechanisms for timely identification of errors existing in the system. All the other systems could improve these mechanisms, too.

This conclusion is based on the findings in chapter 3.3.5.

This conclusion led to recommendation 2.4 in Chapter 5, "Recommendations".

- SPCDR should revise its mechanisms of validation in order to cover all relevant input data in a reliable manner.

This conclusion is based on the findings in chapter 3.3.5.

This conclusion led to recommendation 2.5 in Chapter 5, "Recommendations".

- SMIS and ActionWeb display a too high frequency of minor incidents.

This conclusion is based on the findings in chapter 3.3.7.

This conclusion led to recommendation 2.6 in Chapter 5, "Recommendations".

4.3.3 *The area where most of the systems disappoint relates to satisfying the users' needs:*

- All the systems need to improve their portfolio of predefined reports, in order to produce those reports their specific users need. Especially, SMIS lacks mostly of the predefined specific reports required by its users, depending on their individual and specific needs.

This conclusion is based on the findings in chapters 3.3.2, 3.3.3 and 3.3.4.

This conclusion led to recommendation 2.1 in Chapter 5, "Recommendations".

- All systems would benefit of a major revision in terms of features/functionality and data content as such to become more user oriented. Beside the initial objective of covering the minimal requirements, now the systems should provide more useful features for their users. Especially SMIS and MIS-ETC need major improvements in terms of usefulness, but also in terms of user friendliness. For this latter issue, these systems need also a revision of their user interface in order to become easier to understand and to use.

This conclusion is based on the findings in chapters 3.3.1, 3.3.2 and 3.3.3.

This conclusion led to recommendations 2.2 and 2.3 in Chapter 5, "Recommendations".

4.4 Other conclusions

4.4.1 *The existing electronic systems are not able to interface each other.*

This leads to cases when users have to enter certain sets of data twice, in two different systems. This implies additional effort from users and additional risks regarding data quality (one of the systems being usually disregarded).

This conclusion is based on the finding in chapter 3.2, within the text related to table 3.2.1.

This conclusion led to recommendation 4.1 in Chapter 5, "Recommendations".

5 Recommendations

5.1 Recommendations for ensuring the coverage of the e-Cohesion minimal requirements

The recommendations in this section are based on the conclusions in section 2 of Chapter 4, “Conclusions”.

5.1.1 Finalising the implementation of MySMIS for the 6 current OPs it was designed for

The following issues should be had in view, among many others:

- a. The highest levels of management in each relevant Ministry have to be aware of the requirements and support the implementation process of the necessary changes implementing MySMIS in their respective institutions in order to fully fulfil the requirements.
- b. All IT services from the various involved bodies (Ministries, MAs, IBs, etc.) should coordinate and cooperate at all times within preparation and implementation of new programmes. That requires establishment of a working IT group, which would meet regularly to exchange information and discuss joint implementation of the systems in their respective institutions. Another solution assuring constant contact and cooperation among the specialists is to create ‘a chat group’ within MySMIS specifically for this IT working group.
- c. Each institution involved in the process should make appropriate changes in their internal working procedures in order to ensure effective implementation of that “new system”.
- d. Training of users – there is a need for assuring constant long-term schedule of training of users for any IT system (that covers also users of MySMIS), including series of trainings for beneficiaries (it can be financed from OPTA).
- e. Ensuring the full package of IT services and resources for the new system (including system administration, help-desk, data operators and technical maintenance) – it requires financing of those services, with necessary manpower and budgets.

Suggested activities:

- Finalise the on-going development process of MySMIS (final stages of testing and, if needed, the final adjustments to the system).
- Develop the full package of manuals for MySMIS (including for beneficiaries) and a model of procedures.
- Conclude administrative decisions or protocols for implementation of MySMIS in each relevant institution.
- Each institution should update their internal procedures, based on the provided model of procedures.
- Secure hosting for MySMIS (hardware resources, system administration, technical maintenance) and finalise the installation process.
- Provide large-scale initial training of all users in all institutions – a basis for long-term training schedules during implementation of the programmes (covering new users but also updates to the system).
- Ensure data operators and initial population of the database with start up data.

- Ensure a permanent help-desk service functioning in 24/7 mode.
- Promote MySMIS among the beneficiaries, including periodical sessions of training.

5.1.2 Extending MySMIS in the area of ETC

Further software development for MySMIS is needed. The solution could be either an upgrade of existing MySMIS, or a copy of MySMIS produced however modified to fit the ETC requirements.

Suggested activities:

- Continue the development process of MySMIS by adding the features required for ETC.
- After the development of this extension is finalised, perform final tests and final adjustments.
- Update the manuals and the procedures with new elements brought by this extension.
- Conclude administrative decisions or protocols for implementation of MySMIS in the new relevant institutions.
- Each of the new participant institutions should update their internal procedures, based on the provided model of procedures.
- Upgrade the production version of MySMIS with the new version including the extension.
- Provide large-scale initial training of all new users.
- Ensure data operators and initial population of the database with start up data for the new extension.
- Update the help-desk service with the new elements (training).

5.1.3 Covering the minimal requirements for SOP HRD

One of two options can be used:

- A. Extending the features of existing ActionWeb in order to comply with all the minimal e-Cohesion requirements and developing an interface for data exchange between ActionWeb and SMIS.
- B. Extending MySMIS to cover also the specific needs of SOP HRD and replacing ActionWeb with MySMIS.

Each option has its own advantages and disadvantages. But the decisive question is who is better prepared for the required further process of software development and implementation. We suggest using the latter option (B) – expand MySMIS to become “The System” for the new programming period for all the new Romanian OPs.

Suggested activities for option B: the steps are the same as for recommendation 1.2. above.

5.2 Recommendations for improving the existing electronic systems used by the authorities

The recommendations in this section are based on the conclusions in section 3 of Chapter 4, “Conclusions”.

All systems should undergo a major revision, which may be required anyway in order to update the electronic systems to the specific elements of the future programming period.

During this revision, the following issues should be had in view for all systems:

2.1. Improvement of the portfolio of predefined reports, in order to produce those reports the users need. SMIS needs mostly such improvement.

This recommendation is based on the conclusions 3.1 and 3.3 in Chapter 4, "Conclusions".

2.2. Improvement of features and data structures, in order to become better user-oriented. All systems should try to provide more useful features for their users, allowing them to save working time and to reduce the risk of human errors.

This recommendation is based on the conclusions 3.1 and 3.3 in Chapter 4, "Conclusions".

Additionally, the following issues should be considered for certain systems, respectively:

2.3. SMIS and MIS-ETC should be improved in their user interfaces (at least for the most important or complex forms) in order to provide: easier understanding, better overview of data in the system, easier retrieving of needed data, etc.

This recommendation is based on the conclusions 3.1 and 3.3 in Chapter 4, "Conclusions".

2.4. SMIS, ActionWeb and MIS-ETC should ensure enough control mechanisms to allow timely identification of errors existing in the system.

This recommendation is based on the conclusion 3.2 in Chapter 4, "Conclusions".

2.5. SPCDR should revise its mechanisms of validation in order to cover all relevant input data in a reliable manner.

This recommendation is based on the conclusion 3.2 in Chapter 4, "Conclusions".

2.6. Improvement of mechanisms for help-desk and technical assistance for SMIS and ActionWeb in order to reduce the rate of minor incidents and to improve the response time in case of incident (at all levels where the system is used).

This recommendation is based on the conclusion 3.2 in Chapter 4, "Conclusions".

Suggested activities (for each of the electronic systems):

- Detailed analysis for the purpose to develop a new version of the system.
- General design of the new version of the system.
- Development of the new version of the system, until final stages of acceptance, including testing.
- Develop new manuals for the system and update the internal procedures of the institutions using the system.
- Upgrade the production version of the system with the new version, including data migration from the old database, if it is the case.
- Provide new training for all users.

5.3 General recommendations for all electronic systems

The recommendations in this section are the result of the synergetic effect of all information gathered and processed during this evaluation. They are typical best practice recommendations applied to the current cases, which may bring consistent improvement to the existing information systems.

5.3.1 Ensuring continuous software development support, especially for MySMIS, SMIS and MIS-ETC (which could be brought under the same ownership as SMIS in order to concentrate the efforts):

- a. Quick repair of software deficiencies claimed by the users.
- b. Improvement of support provided to the various programmes, especially for their specific needs.
- c. Quick update to the changes in the real world environment.

5.3.2 Ensuring continuous training of all users:

- a. Introductory training for new users.
- b. Second training for existing users, for refreshing knowledge on less obvious features (needed for more complex systems).
- c. Advanced training for specific categories of users (advanced features of the system and methods of solving certain complex tasks).
- d. Promoting important tools, modules, features, etc. that are less known and that might improve the users' experience. For example, Art4SMIS, the reporting tool for SMIS, deserves to be better promoted among the users, as it can allow them to build their own reports, accordingly to their needs. This tool is not so well known by the regular users because it was added to SMIS at a later stage and only the supervisors benefited of training.

5.4 Other recommendations

5.4.1 Any new development should take into account the opportunity to use data already existing within other databases / systems.

Thus it should be avoided duplication of data between several different systems. The users should not be required to input the same data twice. That would be avoided by using one, proposed above, new system.



Annexes

The following documents were prepared during gathering of data for this Evaluation Report.

Annex 1 Completed Checklists

Checklist for SMIS:

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
1. Ease of use				
1.1. Users' general opinion regarding the ease of use	Average value of at least 3 (on a scale from 1 to 5, where 1 is "very difficult to use" and 5 is "very easy to use")	2.95	No	The result is close to the limit for accomplishment, but it should be also regarded in correlation with the other results.
1.2. Average number of training days required to get a new user prepared	Maximum 2 days	10.97 days	No	The result is an absolute number and it should be regarded with a big margin of tolerance.
1.3. Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help)	Maximum 4 weeks	5.42 weeks	No	The result is an absolute number and it should be regarded with a big margin of tolerance.
2. Administrative burden				
2.1. Estimation of relative difference between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system	Negative average value (decrease of time required in the case when the system is used)	-0.11%	Yes	Too close to the limit for accomplishment
2.2. Estimation of relative difference between the average work time consumed by a beneficiary in relation with the authorities (including the preparatory work), in the case	Negative average value (decrease of time required in the case when the system is used)	Not applicable	Not applicable	Beneficiaries are not users of this system.

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
when the system is used and in the case when no information system is used				
<u>3. General usefulness</u>				
3.1. Users' general opinion regarding the usefulness of the system for their daily activity	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.53	Yes	
3.2. Relevance of the data content for the users' needs	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.24	Yes	Too close to the limit for accomplishment
3.3. Usefulness of the reports generated by the system	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.03	Yes	Too close to the limit for accomplishment
<u>4. Data querying</u>				
4.1. Availability of functions for searching individual data	Average value of at least 3 (on a scale from 1 to 5, where 1 is "no search functions" and 5 is "plenty of search functions")	3.03	Yes	Too close to the limit for accomplishment
4.2. Availability of functions for listing a subset of a data collection (filtering)	Average value of at least 3 (on a scale from 1 to 5, where 1 is "no filtering functions" and 5 is "plenty of filtering functions")	3.16	Yes	Too close to the limit for accomplishment
4.3. Users' general opinion regarding the ease of retrieving needed data	Average value of at least 3 (on a scale from 1 to 5, where 1 is "very difficult to retrieve data" and 5 is "very easy to retrieve data")	3.22	Yes	Too close to the limit for accomplishment

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
<u>5. Data aggregation</u>				
5.1. Availability of functions for aggregating data	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no aggregate functions” and 5 is “plenty of aggregate functions”)	3.00	Yes	Too close to the limit for accomplishment
5.2. Availability of predefined reports	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no predefined reports” and 5 is “plenty of predefined reports”)	2.56	No	
5.3. Availability of functions for building customised reports	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no functions for building customised reports” and 5 is “plenty of functions for building customised reports”)	2.66	Yes	This result is due to insufficient knowledge about the “ART4SMIS” tool, among too many users.
<u>6. Data quality</u>				
6.1. Data input is based on trustworthy sources and clear procedures	All relevant input data are extracted from verifiable sources (e.g. documents), based on exact procedures that guide users how to find needed data	100.00% of “yes” answers	Yes	
6.2. Input data are validated properly	All relevant input data are validated before being used by the system	84.40% of “yes” answers	Yes	The result is good enough from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
6.3. Checks are available to allow detection of errors	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no checks available” and 5 is “plenty of checks available”)	2.94	No	
6.4. Required data are available in	Average value of at least 3 (on a scale from 1 to 5, where	4.03	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
due time for the final recipients	1 is “never available in due time” and 5 is “always available in due time”)			
<u>7. Data security</u>				
7.1. Only authenticated users are allowed to access non-public data or to modify data	No anonymous users may access non-public data or modify data	93.80% of “yes” answers	Yes	The result is good enough from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
7.2. Each user is limited to a specific set of access rights, for specific sections of the system	All users are restricted by specific access rights	90.60% of “yes” answers	Yes	The result is good enough from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
7.3. Communication channels used for exchanging sensitive data (e.g. personal data, financial data etc.) between various parts of the system are protected	All sensitive communication channels are protected	87.50% of “yes” answers	Yes	The result is good enough from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
<u>8. System stability</u>				
8.1. Average downtime of the system in a month	Less than 2 hours	8.75 hours/month	No	The result is an absolute number and it should be regarded with a big margin of tolerance.
8.2. Frequency of major failures of the system (requiring the intervention of administrators for restoring the system)	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.28	Yes	
8.3. Frequency of significant malfunctions impeding the proper use of the system	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	3.43	No	
<u>9. Technology</u>				

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
9.1. Hardware	Descriptive	Servers hosted in a specialised data-centre, compliant with current security standards. Resources in the central node are exceeding the current needs and they can be expanded easily. Access is restricted within a dedicated private network available across all participant institutions.		
9.2. Software	Descriptive	Web-based system Built on Java and Oracle databases		
9.3. Special characteristics (e.g. no single point of failure, virtualisation)	Descriptive	Servers are hosted in a virtualised environment, allowing for easy scalability.		

Checklist for ActionWeb + ASEP + SIMPOSDRU:

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
<i>1. Ease of use</i>				
1.1. Users' general opinion regarding the ease of use	Average value of at least 3 (on a scale from 1 to 5, where 1 is "very difficult to use" and 5 is "very easy to use")	3.57	Yes	
1.2. Average number of training days required to get a new user prepared	Maximum 2 days	2.00 days	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance.
1.3. Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help)	Maximum 4 weeks	1.33 weeks	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance.
<i>2. Administrative burden</i>				
2.1. Estimation of relative difference	Negative average value	-6.47%	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system	(decrease of time required in the case when the system is used)			
2.2. Estimation of relative difference between the average work time consumed by a beneficiary in relation with the authorities (including the preparatory work), in the case when the system is used and in the case when no information system is used	Negative average value (decrease of time required in the case when the system is used)	-3.18%	Yes	
<u>3. General usefulness</u>				
3.1. Users' general opinion regarding the usefulness of the system for their daily activity	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	4.02	Yes	
3.2. Relevance of the data content for the users' needs	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.67	Yes	
3.3. Usefulness of the reports generated by the system	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.04	Yes	Too close to the limit for accomplishment
<u>4. Data querying</u>				
4.1. Availability of functions for searching individual data	Average value of at least 3 (on a scale from 1 to 5, where 1 is "no search functions" and 5 is "plenty of search")	3.33	Yes	Too close to the limit for accomplishment

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
	functions”)			
4.2. Availability of functions for listing a subset of a data collection (filtering)	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no filtering functions” and 5 is “plenty of filtering functions”)	2.00	Yes	The result ignores the features of the reporting tool included in SIMPOSDRU, which provides extensive features in this area.
4.3. Users' general opinion regarding the ease of retrieving needed data	Average value of at least 3 (on a scale from 1 to 5, where 1 is “very difficult to retrieve data” and 5 is “very easy to retrieve data”)	3.38	Yes	Too close to the limit for accomplishment
<u>5. Data aggregation</u>				
5.1. Availability of functions for aggregating data	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no aggregate functions” and 5 is “plenty of aggregate functions”)	2.33	Yes	The result ignores the features of the reporting tool included in SIMPOSDRU, which provides extensive features in this area.
5.2. Availability of predefined reports	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no predefined reports” and 5 is “plenty of predefined reports”)	2.00	Yes	The result ignores the features of the reporting tool included in SIMPOSDRU, which provides extensive features in this area.
5.3. Availability of functions for building customised reports	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no functions for building customised reports” and 5 is “plenty of functions for building customised reports”)	2.00	Yes	The result ignores the features of the reporting tool included in SIMPOSDRU, which provides extensive features in this area.
<u>6. Data quality</u>				
6.1. Data input is based on trustworthy sources and clear procedures	All relevant input data are extracted from verifiable sources (e.g. documents), based on exact procedures that guide users how to find	100.00% of “yes” answers	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
	needed data			
6.2. Input data are validated properly	All relevant input data are validated before being used by the system	66.70% of “yes” answers	Yes	The result should be regarded from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
6.3. Checks are available to allow detection of errors	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no checks available” and 5 is “plenty of checks available”)	2.33	No	
6.4. Required data are available in due time for the final recipients	Average value of at least 3 (on a scale from 1 to 5, where 1 is “never available in due time” and 5 is “always available in due time”)	4.67	Yes	
<u>7. Data security</u>				
7.1. Only authenticated users are allowed to access non-public data or to modify data	No anonymous users may access non-public data or modify data	100.00% of “yes” answers	Yes	
7.2. Each user is limited to a specific set of access rights, for specific sections of the system	All users are restricted by specific access rights	66.70% of “yes” answers	Yes	The result should be regarded from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
7.3. Communication channels used for exchanging sensitive data (e.g. personal data, financial data etc.) between various parts of the system are protected	All sensitive communication channels are protected	66.70% of “yes” answers	Yes	The result should be regarded from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
<u>8. System stability</u>				
8.1. Average downtime of the system	Less than 2 hours	2.67 hours/month	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance.

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
in a month				
8.2. Frequency of major failures of the system (requiring the intervention of administrators for restoring the system)	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.67	Yes	
8.3. Frequency of significant malfunctions impeding the proper use of the system	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	3.64	No	
9. Technology				
9.1. Hardware	Descriptive	All the servers (for all the three systems) are hosted by STS and maintained by each system’s own provider.		
9.2. Software	Descriptive	All the three systems are web-based systems, accessible from Internet.		
9.3. Special characteristics (e.g. no single point of failure, virtualisation)	Descriptive	Not applicable		

Checklist for SPCDR:

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
1. Ease of use				
1.1. Users' general opinion regarding the ease of use	Average value of at least 3 (on a scale from 1 to 5, where 1 is “very difficult to use” and 5 is “very easy to use”)	3.63	Yes	
1.2. Average number of training days	Maximum 2 days	5.50 days	Yes	The result is an absolute number and it should be

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
required to get a new user prepared				regarded with a big margin of tolerance. Also it should be correlated with the other results and with the knowledge gathered from documentation and interviews.
1.3. Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help)	Maximum 4 weeks	10.25 weeks	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance. Also it should be correlated with the other results and with the knowledge gathered from documentation and interviews.
<u>2. Administrative burden</u>				
2.1. Estimation of relative difference between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system	Negative average value (decrease of time required in the case when the system is used)	-6.25%	Yes	
2.2. Estimation of relative difference between the average work time consumed by a beneficiary in relation with the authorities (including the preparatory work), in the case when the system is used and in the case when no information system is used	Negative average value (decrease of time required in the case when the system is used)	Not applicable	Not applicable	Beneficiaries are not users of this system.
<u>3. General usefulness</u>				
3.1. Users' general opinion regarding the usefulness of the system for their daily activity	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	4.50	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
3.2. Relevance of the data content for the users' needs	Average value of at least 3 (on a scale from 1 to 5, where 1 is “completely useless” and 5 is “very useful”)	3.85	Yes	
3.3. Usefulness of the reports generated by the system	Average value of at least 3 (on a scale from 1 to 5, where 1 is “completely useless” and 5 is “very useful”)	3.38	Yes	Too close to the limit for accomplishment
4. Data querying				
4.1. Availability of functions for searching individual data	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no search functions” and 5 is “plenty of search functions”)	3.25	Yes	Too close to the limit for accomplishment
4.2. Availability of functions for listing a subset of a data collection (filtering)	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no filtering functions” and 5 is “plenty of filtering functions”)	3.00	Yes	Too close to the limit for accomplishment
4.3. Users' general opinion regarding the ease of retrieving needed data	Average value of at least 3 (on a scale from 1 to 5, where 1 is “very difficult to retrieve data” and 5 is “very easy to retrieve data”)	3.50	Yes	
5. Data aggregation				
5.1. Availability of functions for aggregating data	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no aggregate functions” and 5 is “plenty of aggregate functions”)	3.25	Yes	Too close to the limit for accomplishment
5.2. Availability of predefined reports	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no predefined reports” and 5 is “plenty of predefined	3.50	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
	reports”)			
5.3. Availability of functions for building customised reports	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no functions for building customised reports” and 5 is “plenty of functions for building customised reports”)	3.50	Yes	
<u>6. Data quality</u>				
6.1. Data input is based on trustworthy sources and clear procedures	All relevant input data are extracted from verifiable sources (e.g. documents), based on exact procedures that guide users how to find needed data	100.00% of “yes” answers	Yes	
6.2. Input data are validated properly	All relevant input data are validated before being used by the system	50.00% of “yes” answers	No	
6.3. Checks are available to allow detection of errors	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no checks available” and 5 is “plenty of checks available”)	3.00	Yes	Too close to the limit for accomplishment
6.4. Required data are available in due time for the final recipients	Average value of at least 3 (on a scale from 1 to 5, where 1 is “never available in due time” and 5 is “always available in due time”)	4.25	Yes	
<u>7. Data security</u>				
7.1. Only authenticated users are allowed to access non-public data or to modify data	No anonymous users may access non-public data or modify data	100.00% of “yes” answers	Yes	
7.2. Each user is limited to a specific	All users are restricted by specific access rights	100.00% of “yes”	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
set of access rights, for specific sections of the system		answers		
7.3. Communication channels used for exchanging sensitive data (e.g. personal data, financial data etc.) between various parts of the system are protected	All sensitive communication channels are protected	100.00% of “yes” answers	Yes	
<u>8. System stability</u>				
8.1. Average downtime of the system in a month	Less than 2 hours	1.00 hours/month	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance.
8.2. Frequency of major failures of the system (requiring the intervention of administrators for restoring the system)	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.67	Yes	
8.3. Frequency of significant malfunctions impeding the proper use of the system	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.34	Yes	
<u>9. Technology</u>				
9.1. Hardware	Descriptive	Servers hosted by APDRP, by its own IT Department Accessible from internal networks of the central office and all regional and county offices, connected through a dedicated network provided by STS; MA accesses the system through a VPN		
9.2. Software	Descriptive	Web-based system, built around Oracle databases		
9.3. Special characteristics (e.g. no single point of failure, virtualisation)	Descriptive	Not applicable		

Checklist for SIMPOP:

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
<u>1. Ease of use</u>				
1.1. Users' general opinion regarding the ease of use	Average value of at least 3 (on a scale from 1 to 5, where 1 is "very difficult to use" and 5 is "very easy to use")	3.88	Yes	
1.2. Average number of training days required to get a new user prepared	Maximum 2 days	6.5 days	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance. Also it should be correlated with the other results and with the knowledge gathered from documentation and interviews.
1.3. Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help)	Maximum 4 weeks	3.00 weeks	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance.
<u>2. Administrative burden</u>				
2.1. Estimation of relative difference between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system	Negative average value (decrease of time required in the case when the system is used)	-4.11%	Yes	
2.2. Estimation of relative difference between the average work time consumed by a beneficiary in relation with the authorities (including the preparatory work), in the case	Negative average value (decrease of time required in the case when the system is used)	Not applicable	Not applicable	Beneficiaries are not users of this system.

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
when the system is used and in the case when no information system is used				
<u>3. General usefulness</u>				
3.1. Users' general opinion regarding the usefulness of the system for their daily activity	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	4.20	Yes	
3.2. Relevance of the data content for the users' needs	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	4.49	Yes	
3.3. Usefulness of the reports generated by the system	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	4.18	Yes	
<u>4. Data querying</u>				
4.1. Availability of functions for searching individual data	Average value of at least 3 (on a scale from 1 to 5, where 1 is "no search functions" and 5 is "plenty of search functions")	3.75	Yes	
4.2. Availability of functions for listing a subset of a data collection (filtering)	Average value of at least 3 (on a scale from 1 to 5, where 1 is "no filtering functions" and 5 is "plenty of filtering functions")	3.50	Yes	
4.3. Users' general opinion regarding the ease of retrieving needed data	Average value of at least 3 (on a scale from 1 to 5, where 1 is "very difficult to retrieve data" and 5 is "very easy to retrieve data")	4.00	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
<u>5. Data aggregation</u>				
5.1. Availability of functions for aggregating data	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no aggregate functions” and 5 is “plenty of aggregate functions”)	3.50	Yes	
5.2. Availability of predefined reports	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no predefined reports” and 5 is “plenty of predefined reports”)	3.75	Yes	
5.3. Availability of functions for building customised reports	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no functions for building customised reports” and 5 is “plenty of functions for building customised reports”)	3.33	Yes	Too close to the limit for accomplishment
<u>6. Data quality</u>				
6.1. Data input is based on trustworthy sources and clear procedures	All relevant input data are extracted from verifiable sources (e.g. documents), based on exact procedures that guide users how to find needed data	100.00% of “yes” answers	Yes	
6.2. Input data are validated properly	All relevant input data are validated before being used by the system	100.00% of “yes” answers	Yes	
6.3. Checks are available to allow detection of errors	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no checks available” and 5 is “plenty of checks available”)	4.00	Yes	
6.4. Required data are available in	Average value of at least 3 (on a scale from 1 to 5, where	4.75	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
due time for the final recipients	1 is “never available in due time” and 5 is “always available in due time”)			
<u>7. Data security</u>				
7.1. Only authenticated users are allowed to access non-public data or to modify data	No anonymous users may access non-public data or modify data	100.00% of “yes” answers	Yes	
7.2. Each user is limited to a specific set of access rights, for specific sections of the system	All users are restricted by specific access rights	100.00% of “yes” answers	Yes	
7.3. Communication channels used for exchanging sensitive data (e.g. personal data, financial data etc.) between various parts of the system are protected	All sensitive communication channels are protected	75.00% of “yes” answers	Yes	The result is good enough from the statistical point of view and it should be correlated with the knowledge gathered from documentation and interviews.
<u>8. System stability</u>				
8.1. Average downtime of the system in a month	Less than 2 hours	5.75 hours/month	Yes	The result is an absolute number and it should be regarded with a big margin of tolerance. Also it should be correlated with the other results and with the knowledge gathered from documentation and interviews.
8.2. Frequency of major failures of the system (requiring the intervention of administrators for restoring the system)	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	5.00	Yes	
8.3. Frequency of significant malfunctions impeding the proper use of the system	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.45	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
9. Technology				
9.1. Hardware	Descriptive	Servers hosted in a secured location of the Ministry of Agriculture and Rural Development (MARD) and maintained by the provider of the system Accessible from internal networks of the central office and all regional offices, connected through a dedicated network provided by STS; extended through VPN to all other institutions using the system (Audit Authority, Certification Authority, Paying Agency, other directorates of MARD)		
9.2. Software	Descriptive	Web-based system Built on Java and Oracle databases		
9.3. Special characteristics (e.g. no single point of failure, virtualisation)	Descriptive	Not applicable		

Checklist for MIS-ETC:

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
1. Ease of use				
1.1. Users' general opinion regarding the ease of use	Average value of at least 3 (on a scale from 1 to 5, where 1 is "very difficult to use" and 5 is "very easy to use")	2.25	No	
1.2. Average number of training days required to get a new user prepared	Maximum 2 days	7.00 days	No	The result is an absolute number and it should be regarded with a big margin of tolerance.
1.3. Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks)	Maximum 4 weeks	6.00 weeks	No	The result is an absolute number and it should be regarded with a big margin of tolerance.

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
without help)				
<u>2. Administrative burden</u>				
2.1. Estimation of relative difference between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system	Negative average value (decrease of time required in the case when the system is used)	+2.50%	No	
2.2. Estimation of relative difference between the average work time consumed by a beneficiary in relation with the authorities (including the preparatory work), in the case when the system is used and in the case when no information system is used	Negative average value (decrease of time required in the case when the system is used)	Not applicable	Not applicable	Beneficiaries are not users of this system.
<u>3. General usefulness</u>				
3.1. Users' general opinion regarding the usefulness of the system for their daily activity	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.25	Yes	Too close to the limit for accomplishment
3.2. Relevance of the data content for the users' needs	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	3.70	Yes	
3.3. Usefulness of the reports generated by the system	Average value of at least 3 (on a scale from 1 to 5, where 1 is "completely useless" and 5 is "very useful")	2.25	No	
<u>4. Data querying</u>				

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
4.1. Availability of functions for searching individual data	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no search functions” and 5 is “plenty of search functions”)	2.00	No	
4.2. Availability of functions for listing a subset of a data collection (filtering)	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no filtering functions” and 5 is “plenty of filtering functions”)	2.00	No	Interpolated value with the results obtained for the very similar SMIS system (due to the very small pool of data available for MIS-ETC) and correlated with the knowledge gathered from documentation and interviews
4.3. Users' general opinion regarding the ease of retrieving needed data	Average value of at least 3 (on a scale from 1 to 5, where 1 is “very difficult to retrieve data” and 5 is “very easy to retrieve data”)	2.25	No	
<u>5. Data aggregation</u>				
5.1. Availability of functions for aggregating data	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no aggregate functions” and 5 is “plenty of aggregate functions”)	3.00	Yes	
5.2. Availability of predefined reports	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no predefined reports” and 5 is “plenty of predefined reports”)	4.00	Yes	Interpolated value with the results obtained for the very similar SMIS system (due to the very small pool of data available for MIS-ETC) and correlated with the knowledge gathered from documentation and interviews
5.3. Availability of functions for building customised reports	Average value of at least 2 (on a scale from 1 to 5, where 1 is “no functions for building customised reports” and 5 is “plenty of functions for building customised reports”)	3.00	Yes	Interpolated value with the results obtained for the very similar SMIS system (due to the very small pool of data available for MIS-ETC) and correlated with the knowledge gathered from documentation and interviews
<u>6. Data quality</u>				
6.1. Data input is based on	All relevant input data are	100.00% of “yes”	Yes	Interpolated value with the results obtained for the

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
trustworthy sources and clear procedures	extracted from verifiable sources (e.g. documents), based on exact procedures that guide users how to find needed data	answers		very similar SMIS system (due to the very small pool of data available for MIS-ETC) and correlated with the knowledge gathered from documentation and interviews
6.2. Input data are validated properly	All relevant input data are validated before being used by the system	100.00% of “yes” answers	Yes	
6.3. Checks are available to allow detection of errors	Average value of at least 3 (on a scale from 1 to 5, where 1 is “no checks available” and 5 is “plenty of checks available”)	2.00	No	
6.4. Required data are available in due time for the final recipients	Average value of at least 3 (on a scale from 1 to 5, where 1 is “never available in due time” and 5 is “always available in due time”)	3.50	Yes	Interpolated value with the results obtained for the very similar SMIS system (due to the very small pool of data available for MIS-ETC) and correlated with the knowledge gathered from documentation and interviews
<u>7. Data security</u>				
7.1. Only authenticated users are allowed to access non-public data or to modify data	No anonymous users may access non-public data or modify data	100.00% of “yes” answers	Yes	
7.2. Each user is limited to a specific set of access rights, for specific sections of the system	All users are restricted by specific access rights	100.00% of “yes” answers	Yes	
7.3. Communication channels used for exchanging sensitive data (e.g. personal data, financial data etc.) between various parts of the system are protected	All sensitive communication channels are protected	100.00% of “yes” answers	Yes	

Check	Criterion for accomplishment	Result synthesized from questionnaires	Status – Yes/No/On-going implementation	Comment
<u>8. System stability</u>				
8.1. Average downtime of the system in a month	Less than 2 hours	36.00 hours/month	No	The result is an absolute number and it should be regarded with a big margin of tolerance.
8.2. Frequency of major failures of the system (requiring the intervention of administrators for restoring the system)	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.50	Yes	Interpolated value with the results obtained for the very similar SMIS system (due to the very small pool of data available for MIS-ETC) and correlated with the knowledge gathered from documentation and interviews
8.3. Frequency of significant malfunctions impeding the proper use of the system	Average value of at least 4 (on a scale from 1 to 5, where 1 is “very frequently” and 5 is “never”)	4.00	Yes	
<u>9. Technology</u>				
9.1. Hardware	Descriptive	Servers hosted in a specialised data-centre, compliant with current security standards. Resources in the central node are exceeding the current needs and they can be expanded easily. Access is restricted within a dedicated private network available across all participant institutions.		
9.2. Software	Descriptive	Web-based system Built on Java and Oracle databases		
9.3. Special characteristics (e.g. no single point of failure, virtualisation)	Descriptive	Servers are hosted in a virtualised environment, allowing for easy scalability.		



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Annex 2 Questionnaires

Electronic Systems Questionnaire for Coordinators or Administrators within Authorities

A. Identification

A.1. Operational programme

<input type="checkbox"/>	ROP
<input type="checkbox"/>	SOP IEC
<input type="checkbox"/>	SOP Environment
<input type="checkbox"/>	SOP Transport
<input type="checkbox"/>	SOP HRD
<input type="checkbox"/>	OP ACD
<input type="checkbox"/>	OPTA
<input type="checkbox"/>	NPRD
<input type="checkbox"/>	OPF
<input type="checkbox"/>	CBC RO-BG
<input type="checkbox"/>	CBC RO-SRB
<input type="checkbox"/>	CBC RO-UA-MD
<input type="checkbox"/>	CBC Black Sea Basin
<input type="checkbox"/>	Other – Please, name it:

A.2. Type of Authority

(one choice only)

<input type="checkbox"/>	Management Authority
<input type="checkbox"/>	Intermediate Body
<input type="checkbox"/>	Certification Authority
<input type="checkbox"/>	Audit Authority
<input type="checkbox"/>	Other – Please, name it:

A.3. Which of the following electronic systems do you use?

(one choice only)

<input type="checkbox"/>	SMIS
<input type="checkbox"/>	ActionWeb
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 1
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 2



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☐	Web application for uploading of financing requests for SOP IEC - Axis 3
☐	SPCDR
☐	SIMPOP
☐	MIS-ETC (the information system for CBC RO-BG, CBC RO-SE, CBC RO-UA-MD, CBC Black Sea Basin)
☐	SIMPOSDRU
☐	Other system – <i>Please, name it:</i>

B. Usage

B.1. How easy is to use the system? (based on the general opinion of the users you coordinate/supervise/manage)

1 (very difficult to use)	2 (rather difficult to use)	3 (medium rating)	4 (rather easy to use)	5 (very easy to use)	I don' know / N.A.
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B.2. What is the average number of training days required to get a new user prepared? (count only for regular users; approximation based on data from previous training sessions and data from evaluations for future needed training sessions)

(input here your estimation on the average number of training days)

B.3. What is the average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help)? (count only for regular users; approximation based on your experience with the users you coordinate/supervise/manage)

(input here your estimation on the average number of weeks)

B.4. How do you evaluate the total time required for the fulfilment of the daily tasks using the system, by comparison to the time that would have been needed to fulfil the same tasks without using the system? (general approximation at the level of the group of users you coordinate/supervise/manage)

It takes a lot less time by using the system	It takes less time by using the system	No significant difference	It takes more time by using the system	It takes much more time by using the system	I don' know / N.A.
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B.5. How do you rate the general usefulness of the system? (based on the general opinion of the users you coordinate/supervise/manage)

1 (completely useless)	2 (rather useless)	3 (medium rating)	4 (rather useful)	5 (very useful)	I don' know / N.A.
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B.6. Does the system contain all the data required for the fulfilment of the purpose of the system?

1 (not at all)	2 (too few)	3 (medium rating)	4 (most of them)	5 (almost everything)	I don' know / N.A.
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B.7. Are there useless data in the system?

1 (most of the data are useless)	2 (many)	3 (medium rating)	4 (only few)	5 (almost everything is useful)	I don' know / N.A.
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B.8. Do the reports generated by the system cover the users' needs?

1 (not at all)	2 (too little)	3 (medium rating)	4 (most of the needs)	5 (almost all the needs)	I don' know / N.A.
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C. Features

C.1. How do you rate the availability of functions for searching individual data?

1 (no search functions)	2 (few search functions)	3 (medium rating)	4 (enough search functions)	5 (plenty of search functions)	I don' know / N.A.
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C.2. How do you rate the availability of functions for listing a subset of a data collection (filtering)?

1 (no filtering functions)	2 (few filtering functions)	3 (medium rating)	4 (enough filtering functions)	5 (plenty of filtering functions)	I don' know / N.A.
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C.3. How easy is to retrieve the needed data in the system? (based on the general opinion of the users you coordinate/supervise/manage)

1 (very difficult)	2 (rather difficult)	3 (medium rating)	4 (rather easy)	5 (very easy)	I don' know / N.A.
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C.4. How do you rate the availability of functions for aggregating data?

1 (no aggregate functions)	2 (few aggregate functions)	3 (medium rating)	4 (enough aggregate functions)	5 (plenty of aggregate functions)	I don' know / N.A.
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C.5. How do you rate the availability of predefined reports?

1 (no predefined reports)	2 (few predefined reports)	3 (medium rating)	4 (enough predefined)	5 (plenty of predefined)	I don' know / N.A.
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			reports)	reports)	
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C.6. How do you rate the availability of functions for building customised reports?

1 (no functions)	2 (few functions)	3 (medium rating)	4 (enough functions)	5 (plenty of functions)	I don' know / N.A.
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D. Data quality

D.1. Are all relevant input data extracted from verifiable sources (e.g. original documents or trustable copies, other trustable sources of data etc.)?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	Mostly yes
<input type="checkbox"/>	Mostly no
<input type="checkbox"/>	No
<input type="checkbox"/>	I don' know / N.A.

D.2. Are all relevant input data collected accordingly to exact procedures that guide users how to find needed data?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	Mostly yes
<input type="checkbox"/>	Mostly no
<input type="checkbox"/>	No
<input type="checkbox"/>	I don' know / N.A.

D.3. Are all relevant input data validated before being used by the system?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	I don' know / N.A.

D.4. How do you rate the availability of checks that allow the detection of errors?

1 (no checks)	2 (few checks)	3 (medium rating)	4 (enough checks)	5 (plenty of checks)	I don' know / N.A.
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D.5. How do you rate the timely availability of data at the final recipients? (general approximation at the level of the group of users you coordinate/supervise/manage)

1	2	3	4	5	I don' know /
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(almost never available in due time)	(only seldom available in due time)	(medium rating)	(usually available in due time)	(almost always available in due time)	N.A.
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E. Data security

E.1. Can an anonymous user (not authenticated) access non-public data or modify some data?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	I don' know / N.A.

E.2. Are there any users that are not restricted by own specific access rights?

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	I don' know / N.A.

E.3. Are all sensitive communication channels protected? (sensitive communication channels are used for exchanging sensitive data between various parts of the system)

<input type="checkbox"/>	Yes
<input type="checkbox"/>	No
<input type="checkbox"/>	I don' know / N.A.

F. Stability

F.1. What is the average downtime of the system, in a month? (measured in hours, rounded to 1 digit after the decimal separator)

(input here your estimation on the average number of hours of downtime, rounded to 1 digit after the decimal separator)

F.2. How frequent are the malfunctions that impede the proper use of the system?

1 (very frequent)	2 (rather frequent)	3 (medium rating)	4 (seldom)	5 (very seldom)	I don' know / N.A.
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F.3. How frequent are the major failures of the system (requiring special intervention in order to restore the normal functionality of the system)?

1 (very frequent)	2 (rather frequent)	3 (medium rating)	4 (seldom)	5 (very seldom)	I don' know / N.A.
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Electronic Systems Questionnaire for Regular Users within Authorities

A. Identification

A.1. Operational programme

<input type="checkbox"/>	ROP
<input type="checkbox"/>	SOP IEC
<input type="checkbox"/>	SOP Environment
<input type="checkbox"/>	SOP Transport
<input type="checkbox"/>	SOP HRD
<input type="checkbox"/>	OP ACD
<input type="checkbox"/>	OPTA
<input type="checkbox"/>	NPRD
<input type="checkbox"/>	OPF
<input type="checkbox"/>	CBC RO-BG
<input type="checkbox"/>	CBC RO-SRB
<input type="checkbox"/>	CBC RO-UA-MD
<input type="checkbox"/>	CBC Black Sea Basin
<input type="checkbox"/>	Other – Please, name it:

A.2. Type of Authority

(one choice only)

<input type="checkbox"/>	Management Authority
<input type="checkbox"/>	Intermediate Body
<input type="checkbox"/>	Certification Authority
<input type="checkbox"/>	Audit Authority
<input type="checkbox"/>	Other – Please, name it:

A.3. Which of the following electronic systems do you use?

(one choice only)

<input type="checkbox"/>	SMIS
<input type="checkbox"/>	ActionWeb
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 1
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 2
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 3



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Instrumente Structurale
2007 - 2013

<input type="checkbox"/>	SPCDR
<input type="checkbox"/>	SIMPOP
<input type="checkbox"/>	MIS-ETC (the information system for CBC RO-BG, CBC RO-SE, CBC RO-UA-MD, CBC Black Sea Basin)
<input type="checkbox"/>	SIMPOSDRU
<input type="checkbox"/>	Other system – <i>Please, name it:</i>

B. About the electronic system

B.1. What is your opinion on how easy is to use the system?

1 (very difficult to use)	2 (rather difficult to use)	3 (medium rating)	4 (rather easy to use)	5 (very easy to use)	I don' know / N.A.
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B.2. How do you evaluate the time required to fulfil your tasks using the system by comparison to the time that would have been needed to fulfil the same tasks without using the system?

It takes a lot less time by using the system	It takes less time by using the system	No significant difference	It takes more time by using the system	It takes much more time by using the system	I don' know / N.A.
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B.3. How do you rate the usefulness of the system?

1 (completely useless)	2 (rather useless)	3 (medium rating)	4 (rather useful)	5 (very useful)	I don' know / N.A.
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B.4. Does the system contain all the data required for the fulfilment of the purpose of the system?

1 (not at all)	2 (too few)	3 (medium rating)	4 (most of them)	5 (almost everything)	I don' know / N.A.
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B.5. Are there useless data in the system?

1 (most of the data are useless)	2 (many)	3 (medium rating)	4 (only few)	5 (almost everything is useful)	I don' know / N.A.
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B.6. Do the reports generated by the system cover the users' needs?

1 (not at all)	2 (too little)	3 (medium rating)	4 (most of the needs)	5 (almost all the needs)	I don' know / N.A.
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B.7. How easy is to retrieve the data you need in the system?

1 (very difficult)	2 (rather difficult)	3 (medium rating)	4 (rather easy)	5 (very easy)	I don' know / N.A.
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B.8. How often did you meet a significant malfunction of the system that impeded its proper use?

1 (very frequently)	2 (rather frequently)	3 (medium rating)	4 (seldom)	5 (almost never)	I don' know / N.A.
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Electronic Systems Questionnaire for Beneficiaries

(the questions related to electronic systems, which are included in the common questionnaire for administrative capacity and electronic systems, addressed to beneficiaries)

A. Identification

A.1. Operational programme

[this question is already included by the Administrative Capacity Questionnaire]

A.2. Type of Beneficiary

[this question is already included by the Administrative Capacity Questionnaire]

A.3. Which of the following electronic systems do you use for reporting to / exchange data with authorities?

(one choice only)

<input type="checkbox"/>	SMIS / MySMIS
<input type="checkbox"/>	ActionWeb
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 1
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 2
<input type="checkbox"/>	Web application for uploading of financing requests for SOP IEC - Axis 3
<input type="checkbox"/>	SPCDR
<input type="checkbox"/>	SIMPOP
<input type="checkbox"/>	Web-application for MIS-ETC (e-Submission / e-Monitoring for CBC RO-BG, CBC RO-SE, CBC RO-UA-MD, CBC Black Sea Basin)
<input type="checkbox"/>	SIMPOSDRU
<input type="checkbox"/>	Other system – Please, name it:
<input type="checkbox"/>	There is no electronic system I can use for reporting to / exchange data with authorities. [In this case, skip the entire section "B. About the electronic system" of the questionnaire.]
<input type="checkbox"/>	I don't use any, although there is such an electronic system for Beneficiaries. [In this case, skip the entire section "B. About the electronic system" of the questionnaire.]

B. About the electronic system

B.1. What is your opinion on how easy is to use the system?

1 (very difficult to use)	2 (rather difficult to use)	3 (medium rating)	4 (rather easy to use)	5 (very easy to use)	I don't know / N.A.
------------------------------	--------------------------------	----------------------	---------------------------	-------------------------	---------------------

B.2. How do you evaluate the time required to fulfil your tasks using the system by comparison to the time that would have been needed to fulfil the same tasks without using the system?

It takes a lot less time by using the system	It takes less time by using the system	No significant difference	It takes more time by using the system	It takes much more time by using the system	I don' know / N.A.
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B.3. How do you rate the usefulness of the system?

1 (completely useless)	2 (rather useless)	3 (medium rating)	4 (rather useful)	5 (very useful)	I don' know / N.A.
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B.4. How easy is to retrieve the data you need in the system?

1 (very difficult)	2 (rather difficult)	3 (medium rating)	4 (rather easy)	5 (very easy)	I don' know / N.A.
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B.5. How often did you meet a significant malfunction of the system that impeded its proper use?

1 (very frequently)	2 (rather frequently)	3 (medium rating)	4 (seldom)	5 (almost never)	I don' know / N.A.
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Annex 3 Interview Structure

1. Description of the electronic system (ES):
 - a. Main data collections – scope (e.g. which programmes are covered)
 - b. Users – institutions that use ES
 - c. Other general information about ES:
 - i. Hosting,
 - ii. Maintenance,
 - iii. Location,
 - iv. Software.
 - d. Main data collections – structure:
 - i. Elements/phases of the projects' lifecycle covered by ES:
 1. Application,
 2. Selection,
 3. Contacts,
 4. Payments,
 5. Monitoring and evaluation,
 6. Audit.
 - ii. Details for the data structures that are transferred between systems.
 - e. Usage of ES and integration into the current activity: procedures, legal framework, etc.
2. Related to the check-list for question no. 3:
 - a) Ease of use – general opinion, time needed to get a new user prepared
 - b) Administrative burden – reducing the administrative burden through the use of ES
 - c) General usefulness – general opinion, data relevance, usefulness of reports
 - d) Data querying – search of data, listing filtered sets of data
 - e) Data aggregation – aggregate functions, predefined reports and customised reports
 - f) Data quality – sources of information, data validation, error checking, timely availability of data
 - g) Data security – users authentication, access rights, protection of communication channels
 - h) System stability – average downtime, frequency of failures
 - i) Technology – hardware, software, no single point of failure, virtualisation

Annex 4 List of Interviews

Interviewed institution	Date, hour	Participants
Ministry of Agriculture and Rural Development Managing Authority for National Programme for Rural Development (MA NPRD)	May 8 th , 2013, 11:00-12:00	<ul style="list-style-type: none"> • Mr. Mihai HERCIU, General Director MA NPRD • Mrs. Andreea TUINEA, Head of Monitoring Unit • Mr. Radu MATEI, counsellor of Monitoring Unit • Mr. Dan MIHĂILESCU, counsellor of Methodology Unit • Mrs. Mihaela CONSTANTINESCU, evaluation expert • Mr. Valentin DRAGOMIR, evaluation expert

<p>Ministry of Agriculture and Rural Development Payment Agency for Rural Development and Fishing (PARDF)</p>	<p>May 8th, 2013, 12:45-13:45</p>	<ul style="list-style-type: none"> • Mr. Daniel IFRIM, Director of IT Directorate • Mr. Adrian MORAREȚ, Head of Project Management Unit • Mr. Valentin DRAGOMIR, evaluation expert
<p>Ministry of Agriculture and Rural Development Payment and Intervention Agency for Agriculture (PIAA)</p>	<p>May 9th, 2013, 12:00-12:50</p>	<ul style="list-style-type: none"> • Mr. Alexandru CONSTANTINESCU, Director of IT Directorate • Mr. Valentin DRAGOMIR, evaluation expert
<p>Ministry for European Funds, System Coordination Directorate (SCD)</p>	<p>May 9th, 2013, 14:00-15:45</p>	<ul style="list-style-type: none"> • Mrs. Andra CHIRILĂ, Director SCD • Mr. Eugen GRIGORE, Head of SMIS service • Mr. Radoslaw PIONTEK, evaluation expert • Mr. Valentin DRAGOMIR, evaluation expert
<p>Ministry of Regional Development and Public Administration Management Authority for the European Territorial Cooperation Programmes (MA CBC)</p>	<p>May 9th, 2013, 10:30-11:30</p>	<ul style="list-style-type: none"> • Mr. Nicu BUZGURE, counsellor of ETC Directorate and MIS-ETC coordinator • Mr. Alexandru CULEA, counsellor of ETC Directorate and MIS-ETC coordinator • Mrs. Mihaela CONSTANTINESCU, evaluation expert
<p>Ministry for Information Society Interim Body for SOP IEC – Axis 3</p>	<p>May 9th, 2013, 14:30-15:50</p>	<ul style="list-style-type: none"> • Mr. Alexandru GEAMBAȘU, counsellor of MIS - European Programmes and SMIS coordinator • Mrs. Mihaela CONSTANTINESCU, evaluation expert
<p>Ministry of Agriculture and Rural Development Management Authority for Operational Programme for Fishing (MA OPF)</p>	<p>May 13th, 2013, 10:00-10:30</p>	<ul style="list-style-type: none"> • Mrs. Florentina TUDOR, Director • Mrs. Alina ALEXE, senior adviser of Methodology and Monitoring Compartment • Mr. Valentin DRAGOMIR, evaluation expert
<p>Ministry of Labour, Family, Social Protection and Elderly Management Authority for Sectoral Operational Programme Human Resources Development (MA SOP HRD)</p>	<p>May 14th, 2013, 10:00-11:00</p>	<ul style="list-style-type: none"> • Mr. Marius ȘTEFAN, expert of IT Compartment • Mrs. Irina MATEI, expert of Monitoring Compartment • Mr. Ciprian DOBRICI, expert of IT Compartment • Mr. Valentin DRAGOMIR, evaluation expert



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Annex 5

Focus Group Agenda

AGENDA

**Focus group with authorities of CSF funds
On the evaluation of electronic systems for data exchange**

10th May 2013

**Location: Hotel Intercontinental, Opereta room
No. 4 Nicolae Balcescu Blvd., Bucharest -1**

8,30 – 9.00	Participants' registration and welcome coffee
9.00 – 9.10	Introduction <i>The purpose of the event</i> <i>Summary of the Ex-ante Evaluation of the Partnership Agreement 2014-2020 project</i>
9.10 – 9.20	<i>Presentation of the participants</i>
9.20 – 9.45	<i>Presentation of the preliminary findings of the evaluation of electronic systems for data exchange</i>
9.45 – 10.30	<i>Discussion on question 1: How well the existing electronic systems fulfill the needs?</i>
10.30 – 11.00	Coffee Break
11.00 – 12.15	<i>Discussion on question 2: Do the actual electronic systems fulfill the minimum requirements?</i> <i>Discussion on question 3: What options for future systems development [2014-2020] should be adopted – 1 system or multiple systems?</i>
12.15 – 12.30	<i>Conclusions</i>
13.00	Lunch

Annex 6 Focus Group Presentation

The following screen-shots were presented during the Focus Group:

1

2

3

Preliminary findings – ES for Beneficiaries, related to project implementation

Ex-ante evaluation of the Partnership Agreement 2014 - 2020

Sistem electronic	Program												
	POR	POSCE Axa 1	POSCE Axa 2	POSCE Axa 3	POS Media	POS Transport	POSDRU	PODCA	POAT	PNDR	POP	PCT (trate 4)	
MIS-ETC													
MIS-ETC Web Application													1
MyGIS													
SMPPOP													
SMS													
SPCDR													
Aplicatie pt. Incalzirea centralizata de functionare pentru POSCE-Axa 3													
Baza de date internă (Acces) pt. POSCE Axa 3													
ActionWeb													
Aplicatie pt. Incalzirea centralizata de functionare pentru POSCE-Axa 1													
Aplicatie pt. Incalzirea centralizata de functionare pentru POSCE-Axa 2													
SMPPOSDRU													

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Preliminary findings – ES for Beneficiaries, related to project selection

Ex-ante evaluation of the Partnership Agreement 2014 - 2020

Sistem electronic	Program												
	POR	POSCE Axa 1	POSCE Axa 2	POSCE Axa 3	POS Media	POS Transport	POSDRU	PODCA	POAT	PNDR	POP	PCT (trate 4)	
MIS-ETC													
MIS-ETC Web Application													1
MyGIS													
SMPPOP													
SMS													
SPCDR													
Aplicatie pt. Incalzirea centralizata de functionare pentru POSCE-Axa 3													
Baza de date internă (Acces) pt. POSCE Axa 3													
ActionWeb													
Aplicatie pt. Incalzirea centralizata de functionare pentru POSCE-Axa 1													
Aplicatie pt. Incalzirea centralizata de functionare pentru POSCE-Axa 2													
SMPPOSDRU													

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Presentation of preliminary questionnaire results

Ex-ante evaluation of the Partnership Agreement 2014 - 2020

Subject	Range / M.U.	SMS		ActionWeb		SPCDR	
		Coord./Admin.	Users	Coord./Admin.	Users	Coord./Admin.	Users
I. Ease of use							
1.1. Users' general opinion regarding the ease of use	1-5	2.88	3.08	3.33 (Adjust table row)	4.00	3.75	3.50
1.2. Average number of training days required to get a new user prepared	days	11.09 days		2.00 days		5.50 days	
1.3. Average number of weeks required to get a new user fully accommodated with the system (proper accomplishment of all tasks without help)	weeks	5.47 weeks		1.33 weeks		10.25 weeks	
2. Administrative burden							
2.1. Estimation of relative difference between the time required to fulfil the daily tasks using the system and the time required to fulfil the same tasks without using the system	% (++)	-1.07%	0.00%	-3.33%	-9.60%	-2.50%	-10.00%

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Presentation of preliminary questionnaire results

Ex-ante evaluation of the Partnership Agreement 2014 - 2020

Subject	Range / M.U.	SMS	ActionWeb	SPCDR
I. General usefulness				
1.1. Users' general opinion regarding the usefulness of the system for their daily activity	1-5	3.66	3.46	4.50
1.2. Relevance of the data content for the users' needs	1-5	3.55	3.45	3.8
1.3. Usefulness of the reports generated by the system	1-5	3.00	3.05	3.00
II. Data overview				
2.1. Availability of functions for searching individual data	1-5	3.03	3.33	3.25
2.2. Availability of functions for listing a subset of a data collection (filtering)	1-5	3.19	2.00	3.00
2.3. Users' general opinion regarding the ease of retrieving needed data	1-5	3.13	3.36	3.50

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Presentation of preliminary questionnaire results

Ex-ante evaluation of the Partnership Agreement 2014 - 2020

Subject	Range / M.U.	SMS	ActionWeb	SPCDR
III. Data organization				
3.1. Availability of functions for aggregating data	1-5	3.00	2.33	3.25
3.2. Availability of predefined reports	1-5	2.58	2.00	3.50
3.3. Availability of functions for building customized reports	1-5	2.68	2.00	3.50
IV. Data quality				
4.1. Data input is based on trustworthy sources and clear procedures	% of "yes"	100%	66.7%	100%
4.2. Input data are validated properly	% of "yes"	83.9%	66.7%	50%
4.3. Checks are available to allow detection of errors	1-5	2.94	2.33	3.00
4.4. Required data are available in due time for the final recipients	1-5	4.00	4.67	4.25

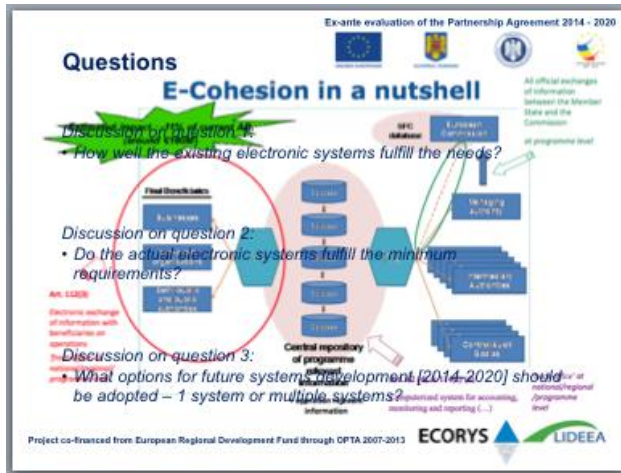
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Presentation of preliminary questionnaire results

Ex-ante evaluation of the Partnership Agreement 2014 - 2020

Subject	Range / M.U.	SMS	ActionWeb	SPCDR
V. Data security				
5.1. Only authorized users are allowed to access non-public data or to modify data	% of "yes"	93.5%	100%	100%
5.2. Each user is limited to a specific set of access rights, for specific sections of the system	% of "yes"	90.3%	66.7%	100%
5.3. Communication channels used for exchanging sensitive data between various parts of the system are protected	% of "yes"	87.1%	66.7%	100%
VI. System stability				
6.1. Average downtime of the system in a month	hours	9.00 hours	2.67 hours	1.00 hours
6.2. Frequency of major failures of the system (requiring the intervention of administrators for restoring the system)	1-5	4.26	4.67	4.67
6.3. Frequency of significant malfunctions impeding the proper use of the system	1-5	3.77	3.10	4.00

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Annex 7 Focus Group List of Participants

Participants to the Focus Group for evaluating the electronic systems for data exchange, organised with authorities of EU funds, on 10th May 2013, at the Intercontinental Hotel, in Bucharest, Opereta room

Romanian Court of Accounts	1	CIOCOIU Cristina	External public Auditor, Audit Authority
Ministry for European Funds	2	BOLCHIS Sorin	Senior counsellor, System Coordination Department
	3	GRIGORE Eugen	Head of Sims Service, System Coordination Department
	4	GORGONEȚU Adriana	expert, Managing Authority for Technical Assistance Operational Programme (MA OPTA)
Ministry of Agriculture and Rural Development	5	PREDA Georgiana	Director, Methodology and Monitoring Department, Managing Authority for Rural Development National Programme (MA NPRD)
	6	MATEI Radu	counsellor, Monitoring Service, Managing Authority for Rural Development National Programme (MA NPRD)
Ministry of Economy	7	SANDU Val Cosmin	counsellor, Energy IB
Ministry of Environment and Climate Change	8	CZEDLY Carol	counsellor, Technical Assistance Department, SOP Environment
Ministry of Internal Affairs	9	ZLOTARIU Ionel	counsellor, Managing Authority for Administrative Capacity Development Operational Programme (MA OPACD)
Ministry of Labour, Family, Social Protection and Social Protection	10	ȘTEFAN Marius	IT Expert, Sectoral Operational Programme Human Resources Development (SOPHRD MA)
Ministry of National Education	11	PĂSĂREL Adina	Director of Education IB, SOP HRD
	12	LUNGOCI Eugen	coordinator of Education IB, SOP HRD
National Agency for Scientific Research (NASR)	13	IONAȘ Viorel	counsellor, Research IB, Increase of Economic Competitiveness Sectoral Operational Programme (Research IB SOP IEC)
National Authority for Tourism	14	HAURES Ștefan	counsellor for Evaluation and analysis, Tourism IB, Regional Operational Programme (ROP)
National Agency for Employment	15	OPREA Cătălin	Senior Counsellor, Intermediate Body of the Sectoral Operational Programme for Human Resources Development (SOPHRD IB)
National Centre for the Development of Vocational and Technical Education	16	NICULAE Cristina	Deputy Director, Sectoral Operational Programme Human Resources Development (SOPHRD IB)



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North-East Regional Intermediary Body for Human Resources Development Sectoral Operational Programme (SOP HRD N-E RIB)	17	BĂICĂNESCU Mugurel	senior Inspector SOP HRD N-E RIB
ECORYS – LIDEEA, “Ex-Ante Evaluation of the Partnership Agreement 2014-2020”	18	PIONTEK Radoslaw	Evaluation expert
	19	DRAGOMIR Valentin	Evaluation expert
	20	SINESCU Catrina	Project assistant

Annex 8 List of Analysed Documents

List of Main Analysed Documents

1	Europe 2020 - A European strategy for smart, sustainable and inclusive growth
2	Proposal for a Regulation of the European Parliament and of the Council laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Council Regulation (EC) No 1083/2006
3	Proposal for a Regulation of the European Parliament and of the Council on specific provisions concerning the European Regional Development Fund and the Investment for growth and jobs goal and repealing Regulation (EC) No 1080/2006
4	Proposal for a Regulation of the European Parliament and of the Council on specific provisions concerning the investment from the European Regional Development Fund for the objective of European Territorial Cooperation
5	Proposal for a Regulation of the European Parliament and of the Council on the Cohesion Fund and repealing Council Regulation (EC) No 1084/2006
6	Proposal for a Regulation of the European Parliament and of The Council on the European Social Fund and repealing Council Regulation (EC) No 1081/2006
7	Proposal for a Regulation of the European Parliament and of the Council on the investment for rural development from the European Agricultural Fund for Rural Development
8	Proposal for a Regulation of the European Parliament and of the Council on the European Maritime and Fisheries Fund [repealing Council Regulation (EC) No 1198/2006 and Council Regulation(EC) No 861/2006 and Council Regulation No XXX/2011 on integrated maritime policy
9	Elements for a Common Strategic Framework 2014 to 2020 – Commission Staff Working Document
10	Guidance document on ex-ante evaluation – DG REGIO
11	e-Cohesion policy: new requirements for 2014 – 2020 programmes – DG REGIO
12	e-Cohesion Policy - Management and Control, Common Provisions Regulation - Fiche no 11 – working paper
13	Opinion of the High Level Group - Subject: Administrative burden reduction; priority area Cohesion Policy, third opinion - eCohesion Policy
14	Measuring the impact of changing regulatory requirements to administrative cost and



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	administrative burden of managing EU Structural Funds (ERDF and Cohesion Funds) – DG REGIO
15	Conducting Evaluations for the Period 2009-10 - A Formative Evaluation of Structural Instruments in Romania - Final Report
16	Intermediary evaluation of OPTA
17	Intermediary evaluation of SOP-HRD
18	Intermediary evaluation of the SOP T
19	Interim evaluation of OP ETC Romania - Bulgaria
20	Interim evaluation of the ROP
21	Interim evaluation of the SOP-IEC
22	Documentation of Web application for uploading of financing requests for SOP IEC - Axis 2
23	Documentation package for MIS-ETC (user manuals and procedures)
24	Documentation package for SIMPOP (user manuals and general description of the system)
25	Documentation package for MySMIS (general description of the system and presentation)
26	Documentation package for ActionWeb (user manuals and instructions)
27	Documentation of ASEP – User Manual
28	Documentation of SIMPOSDRU – General description of the reporting tool
29	Documentation package for SMIS (user manuals and procedures)



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