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#### E-Cohesion – a Simplification Method within European Union Rules

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**Abstract:** The e-cohesion is according to European Commission (EC) a set of common rules for simplifying the accountancy and more precise reporting for European structural funds and European investment funds by using the digital technologies and public databases for all exchanges of information between the beneficiaries of projects financed with European funds and audit authorities, intermediate bodies, certifying authorities, managing authorities. The budget allocated for investments of the European Union (EU) for period 2014-2020 is of approximately a trillion Euros for sustainable growth, new jobs and competitiveness, solidarity and cohesion for an important role of EU in world. One of the ten points of reforms related with the cohesion politics refers to e-cohesion. The article outline the EU and Romania regulations prepared for e-cohesion target that is established for all EU countries in 2016. The paper is presenting the main opportunities and limits in the e-cohesion process for the horizon 2014-2020 using as methodology of study the computing and analysis based on the documentation published by EU, Netherlands and Romanian regulators. The study is also presenting the stage of e-cohesion changes reported by Netherlands and Romania.

Keywords: EU member states; sustainable growth; e-cohesion; digital technologies

JEL Codes: C88; H83; I38; M15

JEL Coucs.

#### 1. Specific Regulation Related to E-cohesion Rules

The "history" of the process of adopting the e-cohesion into European Union (EU) regulations for the framework 2014-2020 began on 29 June 2011 when the European Commission (EC) presented a proposal for making the EU funding simpler, more transparent and fairer.

On 8 February 2012, the EC launched the Simplification Agenda for the Multiannual Financial Framework (MFF) 2014-2020. The Simplification Agenda was built from two parts of simplification: the reviewed financial regulation and 57 sectorial proposals for specific programs. After consulting with citizens and stakeholders for designing, the programs were released on 1 January 2013. On 26 February 2013 was released the 2nd Simplification Scoreboard. (European Commission, 2013)

By using the digital technologies is considered by EU to reduce amount of work with 11% and to reduce the risks in the process of funding. The applications for e-cohesion are considered to permit the

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interchange of papers only electronically, reducing the burden of the administration costs for the funds beneficiaries. The main challenges for the period 2014-2020 are presented schematically in Appendix 1.

According to the article 125.2.d from the EU regulation no. 1303/2013 is necessary to establish technical specifications for the applications used for registering and storage of data for the operations with European funds in this way to be at disposal for monitoring, evaluation, financial administration, control and audit. Within EU Regulation no. 1303/2013 the minimum requirements on e-Cohesion are:

- Minimum technical requirements: authentication of the sender, data integrity and confidentiality (also according with the EU Directive 1999/93/EC) and the storage must comply with the retention rules (article 140) → E-submission component
- Electronic audit trail (article 122 and 140 and other requirements referring at the document availability) → E-signature component
- 'Only once' submitting of all information using same Operational Program (article 122.3) also it will be assured electronic exchange for post-award processes (article 122.3) and no technical requirements on software platforms and protocols are yet established (article 122.3)→Security web portal (EIPA & ECORYS & PwC, 2014)

An important administrative burden for the period 2007 – 2013 was the administrative cost (for the implementation of the projects financed by EU national and regional), related to projects selection and management of verification (because these are repetitive actions and executed throughout all the period of the projects). (European Commission & SWECO, 2012)

The economic crisis, not yet overcome (according to Janusz Lewandowski, member of EC responsible with the financial and budget programs) has impact into the MFF 2014-2020. The EC considered also other facts to reduce the costs with management and control as complementary to the e-cohesion tools (European Commission & SWECO, 2012):

- Existence of one responsible organism for administration and control (accredited body) and just one authority of accreditation, an annual closing of accounts;
- Ex-ante evaluation of system administration and control: the replacement of the conformity evaluation with a national accreditation together with a proportional revision by the EC;
- Final closure at the end of the programming period with a rolling process for each annual closing of accounts.

The below numbers are presenting the diminishing of the EU budget from MFF for period 2007-2013 to MFF period 2014-2020:

Table 1. Comparison of engagements and payments in billion Euros in 2011 prices for the funding period 2007-2013 vs. 2014-2020

| Prices in 2011            |                  | 2007-2013 | 2013   | 2013*7   | 2014-2020 |
|---------------------------|------------------|-----------|--------|----------|-----------|
| Commitment appropriations | In billion Euros | 993.60    | 146.40 | 1,024.80 | 959.99    |
|                           | % of GNI         | 1.12%     | 1.12%  |          | 1.00%     |
| Payment appropriations    | In billion Euros | 942.80    | 137.80 | 964.40   | 908.40    |
|                           | % of GNI         | 1.06%     | 1.05%  |          | 0.95%     |

Processed data with primary data retrieved from: <a href="http://www.fonduri-structurale.ro">http://www.fonduri-structurale.ro</a>

For the new period the EU budget allocation is 1025 billion Euros, from which 336 billion is dedicated for the cohesion policies, and 40 billion is facilitating the programs for European connections like information technology projects together with energy projects and cross border projects. (The budget of the Cohesion policy 2014-2020, 2015)

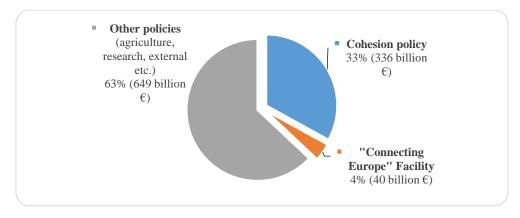


Figure 1. The EU budget allocation by policy for 2014-2020 period

Source: The budget of the Cohesion policy 2014-2020 (2015) retrieved from <a href="http://www.fonduri-structurale.ro/detaliu.aspx?">http://www.fonduri-structurale.ro/detaliu.aspx?</a> eID=10117&t=fs2014-2020

Elements not yet analysed in the design of MFF 2014-2020 budget, which impact the administration cost analysis and the allocation of the budget (European Commission & SWECO, 2012):

- The changes related to the programs proposed for the period 2014-2020 that are different organized than the ones from 2007-2013, this effect was not measured as impact into the new budget;
- Reduction of the functions and responsibilities that overlap in the systems of administration, control and motorization;
- A proportional use of audit according with the risks and operations dimension for reducing the administrative costs;
- Introduction of common plans of action for diminishing the administrative costs through the simplification of financial management

In the Partnership Agreement 2014-2020 signed by Romania with EU (2014) at the point 1172 the "Mechanisms to ensure effective implementation of ESI funds" was presented by the evaluators the importance of using the new technologies in order to obtain: less administrative tasks, easy access of data, quality and security of data, make queries for research of data.

#### 2 Research Methodology

The methodology of the study conducted is represented by the analysis of the documentation and data published by the EU and the two countries regulators, on this topic. The analyzed data was presented using tables and graphics for presentation by comparison of the systems used in the e-cohesion process. The paper aims to present the status of the e-cohesion process for the horizon period 2014-2020, reported until this moment by two EU countries (Netherlands and Romania) taking into consideration the main limits and the opportunities of this process.

#### 3 The E-cohesion Status in Netherlands and Romania – Case Study

The web design of systems used in Romania for the period 2007-2013 according with the Partnership Agreement 2014-2020 signed by Romania with EU (2014) is described in the figure below (applications and functions):

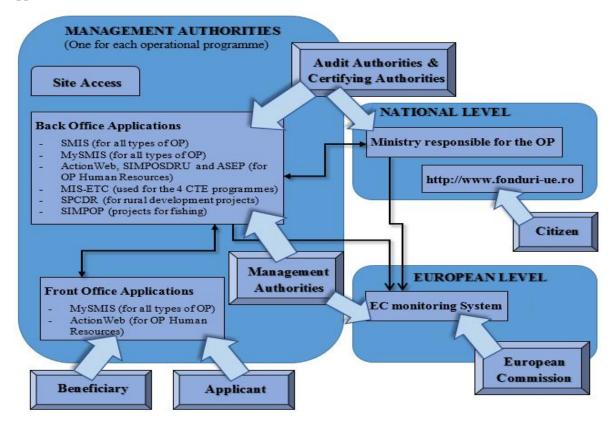


Figure 2. System Overview 2007-2013 for Romanian Operational Programmes

Source: Processed data with primary data from Partnership Agreement 2014-2020 (2015), retrieved from <a href="http://www.fonduri-ue.ro/res/filepicker\_users/cd25a597fd-62/2014-2020/acord-partnership Agreement 2014R016M8PA001 1 2 ro.pdf">http://www.fonduri-ue.ro/res/filepicker\_users/cd25a597fd-62/2014-2020/acord-partnership Agreement 2014R016M8PA001 1 2 ro.pdf</a>

As it can be seen from the above representation SMIS web application and the MySMIS application can be used for all OPs, the last one being also able to ensure the contact with beneficiaries.

In the same figure 2 we can notice that for the period 2007-2013, 6 applications were used for data input and reporting and other 2 applications only for reporting in Romania. The Action Web application and My SMIS application were the front office applications. Taking into consideration the last fact, the Action Web application was the first in being developed in the new period in order to become a useful electronic tool in facilitating the transmitting of electronic information (Annex 2 of the Action Web manual, 2014).

Already in June 2014 Netherlands reported more than 57.000 electronic documents regarding funds administrated by one of the OP's, OP West for a total of 45 GB of data. In the new period (2014-2020) Netherlands will use a more centralized model for inputting and reporting data (see below figure), where all involved parts in the process respectively citizens, beneficiaries, management authorities from each OP, audit authority and certifying authority will have access to the same back office application that will be enquired also by SFC2014 administrated by EU and will have data available from the national authorities such as Chamber of Commerce of Netherlands. (EIPA & ECORYS & PwC, 2014)

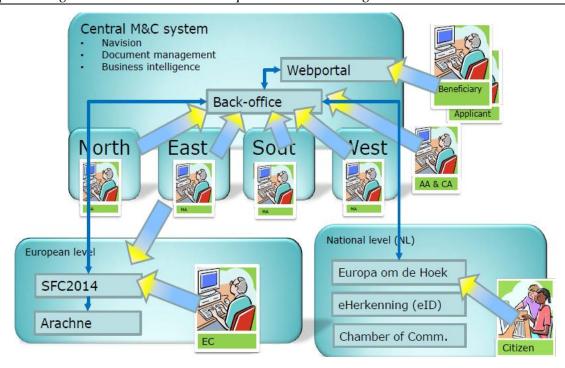


Figure 3. System Overview 2014-2020 for Netherlands Operational Programmes

Source: Fulfilling e-Cohesion requirements, retrieved from <a href="http://www.eipa.eu/files/DGREGDay%201-5%20e-cohesion.pdf">http://www.eipa.eu/files/DGREGDay%201-5%20e-cohesion.pdf</a>

For the period 2014-2020 OP West reported the development of a Dutch system for hosting the components of e-cohesion (EIPA & ECORYS & PwC, 2014):

- → E-submission component: application forms, authentication by login and user, use of Excel file for mass-upload of documents referred to hours spent and invoices, refuse for physical paper documents;
- → E-signature component: use of national signature;
- → Security web portal component: to login with user and password, possibility of management of users for the beneficiaries and secure connection with the My-site;
- → E-storage component: online real-time data, storage of documents in a Document Management System (for different type of document extension), complete digital dossier, no maxim of documents for store, all documents can by accessible for audit reasons;
- → Only once encoding 2014-2020, it is considered useful the pre-filled html forms, for reports that are using the previous reported data and JavaScript validation and connection with the Commerce Chamber for data regarding beneficiaries;
- → Interoperability assured by EC monitoring system and MA Control System through xml file exchange.
- → Audit trail assured by work flows for the MA and need to do, chronological view of the documents, strong authorization in the system.

The Romanian strategy for the next period is to use the MySMIS application for e-cohesion scope and is considered that the Romanian laws regarding the electronic signature, archiving electronic data, data registration on electronic documents and protection of personal data are matching with e-cohesion

policy. The users' necessity in Romania is considered to be of predefined reports, functions and data contain (Partnership Agreement 2014-2020 signed by Romania with EU, 2014).

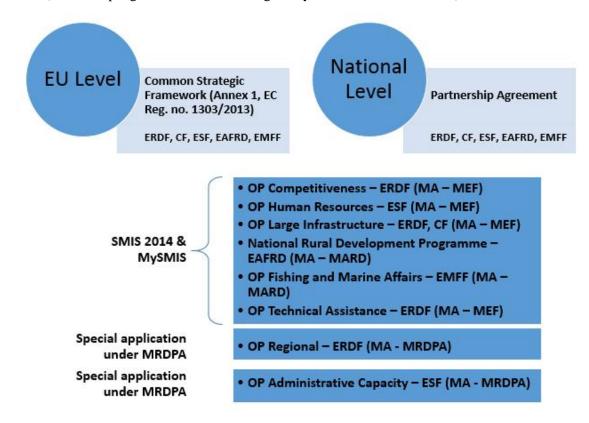


Figure 4. Web applications used for each OP for the period 2014-2020 in Romania

Source: Processed data with primary data from Partnership Agreement 2014-2020 (2015) retrieved from http://www.fonduri-ue.ro/res/filepicker\_users/cd25a597fd-62/2014-2020/acord-partnership\_Agreement\_2014RO16M8PA001\_1\_2\_ro.pdf

Only two types of applications will be used for 6 of the OPs (SMIS 2014 and MySMIS). The MySMIS application was reported as implemented but not used so the new applications will be tested and implemented for the new OPs. At the national level, MRDPA will develop and implement two special applications for the OP Regional and OP Administrative Capacity, two applications that will be implemented according to new requirements of these two OPs.

The new applications must assure according with the deficiencies reported a simpler process. In this matter we recommend online submission of projects, computerization and simplification in public procurement process, auditing, reimbursement, computerization process of implementation, giving up paper format, use of electronic signatures, creating databases, storing project documents on electronic media with low accessibility and applications use in decision making. Other measures related to automating release or availability of fiscal information of applicants for funding to improve the efficiency of submitting project applications for funding and reducing the administrative burdens and the number of documents to be transmitted, electronic archiving.

Limits and opportunities of the e-cohesion process identified through documentation analysis:

- A broad framework of documentation of the OPs is diminishing the total impact of the e-cohesion policy;

- Frequent changes of the regulation can increase the costs of implementation and to update the applications for e-cohesion;
- Using applications cross-border can diminish the costs of development of the applications for e-cohesion;
- Using the application for a big sector of programs for convergence can diminish the cost reported for each OP;
- The number of the authorities and the control system can influence the costs of the implementation and update;
- The cultural and organizational conditions of each state member can influence the costs of training and familiarization with the applications for e-cohesion.

#### 4. Conclusions and Limits of the Analysis

Increasing the level of the information integration is used for facilitating compliance, monitoring and audit of the projects funded with European funds. The EU requirements must be followed by both EU countries, Romania and Netherlands, as presented in our study.

In case of The Netherlands, the applications already using electronic documentation are mixed into a single system that is subject of additional development.

In Romania, the applications used in the first period after EU adherence (2007-2013) are now analysed and developed in order to comply with the e-cohesion components presented in our study that will be used in period 2014-2020.

The development process for the application using electronic documentation began in Romania in 2014. First documents are available on one of the web applications, but currently the application is under new developments in order to be successfully used for the new period. In case of Romania the applications will be reduced to two systems that will be used for 6 of the most important OPs and other two applications under MDRPA minister for 2 other OPs.

The European countries are now in a process of analysing the past period experience (2007-2013) and making decisions for the new period 2014-2020. Using an application that can diminish the administration costs of the projects for beneficiaries but also for the management authorities is consider to be a powerful tool for impel the funds absorption process.

The article has some limitations regarding the number of the systems of e-cohesion analysed and regarding the period of the analysis as we are referring to one of the further developments of those systems. When more documentation will be available related to the implemented development further analysis is strongly recommended in order to facilitate the understanding of the e-cohesion process strengths.

#### 5. Glossary of Terms and Acronyms

ARACHNE - Operational tool to identify the most risky project

CF - Cohesion Fund

EAFRD - European Agriculture Fund for Rural Development

EHerkenning (eID) – e-Recognition authentication for companies and government

EMFF-European Maritime and Fisheries Funds

Europa om de Hoek – site for publicity

ERDF – European Regional Development Fund

ESI – European Structural and Investment Funds

ESF – European Social Funds

GNI - Gross national income

MA – Management Authority

MARD – Ministry of Agriculture and Rural Development

MEF – Ministry of European Funds

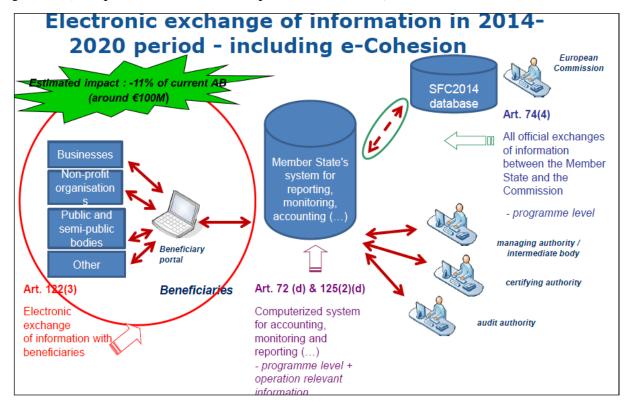
MRDPA – Ministry of Regional Development and Public Administration

Navision – Accounting application

OP – Operational Programme

SFC 2014 – System for Fund Management in the European Union

## **6.** Appendix 1. Key differences between the 2007-2013 and 2014-2020 programming periods (European Parliament & European Council, 2014)



#### 7. Acknowledgement

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