D1.1. Use Case Identification

Project Title: Interconectivity solutions on an European Level – eDelivery AccessPointImplementation

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1.2. Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

2. List of references

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3. Table of Acronyms

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<th>Acronym</th>
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<tr>
<td>SNEP</td>
<td>National Electronic Payment System</td>
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<td>AP</td>
<td>Access Point</td>
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<td>ONRC</td>
<td>Oficiul National Registrul Comertului – National Business Registry</td>
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4. Executive Abstract

This document is the first deliverable of the project and aims at identifying the usability scenarios for the access point deployment, as well as the practical use cases for the systems integration – SNEP - and delivery of notifications to the end users.
In section 7, the potential use-cases for future deployments or integrations starting from existing systems in Romania are described. Section 7.1 – 7.3 present a more practical approach, with specific use-cases of integrating SNEP with eDelivery and services that the system will provide.

Section 7.4 presents a practical use case that involves delivery of electronic notifications to the end users instead of paper based notifications. The use case aims of replacing the legally binding notifications sent on paper, using postal services, with electronic notifications, with comparable binding value.
5. Table of content

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6. Introduction

The objective of the action is to support Romania’s integration in the eDelivery Digital Service Infrastructure (DSI). The project aims at the implementation of generic services and the adoption of the DSI amongst private and public entities in Romania. This will contribute to achieving compliance with the eIDAS Regulation and to support the implementation of AccessPoints for other services such as elnvoking, transportation, Environment, health, eTendering or eJustice.

The action will implement an AccessPoint (AP) and Service Metadata Publisher (SMP) to interconnect to the EU Core Platform, in order to increase the cross-border exchange of electronic documents amongst private and public sectors, and between those entities and citizens or business.

The envisaged AccessPoint is an implementation of the AS4 and AS2 profiles in a production environment. The action includes conformance testing towards the EU Core Service Platform and the deployment and connectivity testing of two SMPs.

The general project objective is to increase efficiency of the Romanian Authorities (public administration) and facilitate the cross-border exchange of documents and data through the eDelivery DSI.

The high-level objective of implementing eDelivery (eSens) is to acquire knowledge and provide national authorities in Romania the opportunity to develop interoperability standards and data exchange amongst systems. It will also help increase the scalability of SNEP by facilitating message exchange with other systems.

The business needs are represented by a better exchange of data and documents amongst stakeholders, benefitting the citizen.

How it works: by electronic message exchange (channel provisioning) amongst stakeholders.

What the project implements: an eDelivery AccessPoint

7. Potential use-cases identified

eDelivery access points enable cross-border communication and message/documents sharing, amongst back-end systems. Public administration bodies and governments become more and more interconnected while struggling to provide better service for their citizens. Integrated, cross-governmental services for citizens are both demanded by their end-users, as by European Directives.

Therefore, the deployment of cross-border digital services through generic and re-usable components represents the core foundation for eGovernment services.

Main benefits envisaged by an eDelivery AccessPoint in Romania are both domain specific and domain neutral.

Domain specific use-cases, envisaged for a later stage are related to Justice, Procurement and Consumer protection.

Domain-neutral use-cases are the object of this project, and refer to the exchange of data and documents amongst public authorities in a cross-border dimension and authorities and citizens/business.

Considering the limited number of national-available eGovernment systems, great entropy amongst existing systems and low interconnectivity of services in Romania, the eDelivery Access Point
Implementation and uptake starts with the most suited and functional National Electronic System in Romania – SNEP, also known as Ghiseul.ro.

7.1. Informational notifications

The National Electronic Payments System is a web-based integration solution where Romanian Citizens (natural persons) can pay their fines, local and national taxes. It has over 230,000 users and growing. Its purpose is to support citizens finding out their due taxes and perform payments. The system, created in 2011 and supported throughout the years by the Romanian Association of Electronic Payments (APERO), was designed as an integration on a national level of all existing software tools for local tax management. Through a standardized set of webservises, SNEP enables citizens to inquire, in real time about their debts towards local authorities and make credit-card payments according to each property they own. User credentials are obtainable from the enrolled municipalities or by credit-card authentication (on-line). A major development milestone was achieved last year, when the National Fiscal Agency enrolled into the system and currently enables users to pay their national budget debts as well (taxes on income, liberal professions, rents, and others).

The systems usage is higher in march, due to regulations of discounted tax rates for yearly payments before march 30th.

The purpose of SNEP was to simplify the interaction between taxpayers and authorities and reduce the queues for tax payment throughout the country. The system’s usage is not mandatory for citizens, but authorities should enroll (according to legislation).

The envisaged international (eDelivery) integration is considered starting from the system’s main purpose – improving the quality of life for citizens and easing their interaction with the local and national government authorities.

As a first step, we consider SNEP could bring major benefits in terms of interaction by transforming into a relay for information amongst third parties and users. In a special designated area, the system will provide notifications from any third party towards a user. SNEP users are identified by the Romanian National Identification Number – CNP. All messages destined to a natural person in Romania will contain that information, in order to unlikely identify the addressee. Th person will also be able to reply via SNEP by sending a text and attached file message to the other recipient.
The following use-cases have been identified:

**Taxes from other European Countries**

SNEP will provide a service that connects to the eDelivery AccessPoint and enables third-party authorities inform about taxes and fines due by Romanian citizens in other European States. This way, Romanian citizens would be informed about due taxes or fines (e.g. from speed cameras) and be able to pay them accordingly to each country’s specific regulations.

SNEP will receive from the AP a message containing

- Country of issue
- Legal entity of issue
- Type of debt
- Due date
- Bank account for payment
- Other payment possibilities
- Scanned debt document

SNEP will also enable the end-user to upload a scanned document – proof of payment and send it to the legal entity.

Information messages from international authorities
Any international authority that wants to send a notification to a Romanian citizen can use SNEP as rapid means of contact. The authority will send a message via eDelivery to SNEP and the system will inform the user. Using the same channel, the user will be able to reply. All messages will include the personal identification number (CNP) of the Romanian citizen and the reply path.
Information messages from third parties

Third parties (banks, the education system, the health system, justice systems) can be delivered via SNEP. These examples include:

1. From the banks: loan/ debt info, payment due dates, policy changes (no commercial offers)
2. From the education system: information about the person’s diplomas emission. This could also be used by third-party authorized education providers.
3. From the health system: information about vaccination campaigns, epidemics in the user’s area, personalized messages about the patient’s condition, scheduled treatment, etc.
4. From the justice system – information about legal procedures the person is involved in (lawsuits, terms, decisions)
As regulations across Europe regarding the date of delivery/information are diverse, the purpose of the AccessPoint Integration is solely to inform the citizen and does not represent a legal proof of receipt.

Considering the usage of the system is not mandatory, transforming the notification into a legal notification and acknowledgement of debt would only reduce the number of users, while not adding relevant benefits.

The implementation of the service has the purpose of supporting citizens in finding out about their debts, rather than sanctioning them.

7.2. Romanian Single Sign On options

A large number of eGovernment solutions employ different types of log-in requesting end-users to create accounts, demand credentials from institution offices, or providing other types of unsecure authentication. SNEP provides pre-validated accounts which can be used for identity management as follows through a simple procedure:

- The third-party system sends SNEP through the eDelivery AccessPoint a username and password
- SNEP replies with error code if username/password combination is not valid
- SNEP replies with specific hash information if the user/password combination is valid
7.3. Citizen to government interaction / SNEP – PCU interconnectivity

Citizens could use their electronic identity verification through SNEP and send notifications to the enrolled entities (discovered via AccessPointDiscovery).

SNEP would list all discovered services and display the ones that are able to receive citizen notifications.

7.4. Legally binding electronic notifications

Nowadays, the official notifications are sent Romania on paper, using registered postal services. The eIDAS Regulation defines the electronic registered delivery services and their legal effects. Although...
the legal framework and the technical mechanisms to implement such service are available, it is important to evaluate the impact on end users before promoting it on a large scale.

The use case shall implement electronic notifications, compliant with the technical requirements of eIDAS Regulation, for a limited number of volunteer users. The notifications shall include information similar with the information from SNEP use case.

The notifications shall be automatically sent by the system. The user accessing a notification also acknowledges its receipt. This system guarantees:

- Date and time of the notification
- Confidentiality of the information
- Integrity of the message
- Secure identification of the sender and of the receiver

Considering the usage of the system is not mandatory, transforming at this moment the notification into a legal notification and acknowledgement of debt may have impact on the users. Therefore, in T1.2. Analysis of regulatory constraints and T1.3. Privacy, Threat, Vulnerability, Risk Analysis and Ethical Analysis this impact will be analyzed, together with the best mechanisms to be developed in order to implement the legally binding electronic notifications at a large scale.

7.5. Email notifications via eMailerSafe by Certsign

SNEP delivers notifications and payment confirmations to its users. However, there is currently no delivery receipt and no way to know if the email has been delivered or not.

Information regarding payment possibilities or payment confirmation can be sent in the following manner: SNEP sends information to CertSign’s eMailer Safe, containing the end-recipient (email
address), message to be delivered and signed attachment (optional). eMailerSave is responsible for delivering the email message to the end-user and confirm via eDelivery to SNEP.

Messages can include:

- Account activations
- Registry by municipalities of the end-user
- Payment notifications
- Debt service enabled/disabled by local authorities’ notification
- Personal Data altered by comparing data with the Ministry of Interior.

The eMailer Safe workflow is described by the schematics below:

```
1. Message transmitted
   (message temporary)
2. Inform message notification
   (message temporary)
3. Approval by recipient
   (message temporary)
4. Message receipt
   (message temporary)
5. Inform message receipt
   (message temporary)
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7.6. The Once Only Principle starting point

According to the European Commission's eGovernment Action Plan 2016-2020, digital public services reduce administrative burden on businesses and citizens by making their interactions with public administrations faster and efficient, more convenient and transparent, and less costly.

Integrating eGovernment solutions both internally and on an European Level can support business and citizen mobility, support Digital Single Market initiatives and, most notably, increase the quality of life of citizens and business.

eDelivery prescribes technical specifications that can be used in any Policy Domain of the EU to enable secure and reliable exchange of documents and data both across borders and sectors.

Each eDelivery node is deployed for a specific Pan-European Project within a given policy domain: eJustice, eProcurement, etc. Typically, the nodes of eDelivery are uni-domain.

The deployment model must be defined upfront by the Pan-European project (it is not a generic information exchange platform). And within the context of the pan-european project it enables organizations to set up a network of nodes for digital communications. It is based on a distributed model where every participant becomes a node using standard transport protocols and security policies. eDelivery helps public administrations to exchange electronic data and documents with other public administrations, businesses and citizens, in an interoperable, secure, reliable and trusted way.

eDelivery is one of the building blocks of the European Commission's Connecting Europe Facility (CEF). These building blocks are reusable specifications, software and services that will form part of a wide variety of IT systems in different policy domains of the EU.

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As Romania’s most used eGovernment solution, SNEP can, in time, create an eDelivery network connecting citizens, administration representatives and utilities providers and other interested parties, that need to share information.

On an envisaged SNEP expansion to business (for local and national tax payments), eDelivery can be used for data exchange with the National Business Registrar (ONRC), which is already taking part in an Horizon 2020 project integrating eDelivery services (www.toop.eu).

International cooperation may be enforced by creating a network of eDelivery Tax payment systems, with partners such as the Slovenian Financial Administration\(^2\), which has implemented a similar system. In order to achieve this, some legal and inter-governmental policies and agreements are required.

8. Conclusions

The first use case allows information of the users about taxes and fines due by Romanian citizens in other European States while the second use case builds the mechanisms for sending legally binding notifications to citizens regarding their fiscal duties.

The implementation of eDelivery will represent a major add-on towards national and international systems integration in Romania. Although it is a tool of back-end to back-end communication, the first steps of its implementation are citizen-centric, having this approach of providing better internationalized public services.

The compliance of SNEP with eDelivery and integration via the construction of a SML will help, in time, integrate multiple services supporting eGovernment and other Service Providers. It will also serve the purpose of supporting message and data delivery.

The know-how accumulated by the ARDA and its partners will also be reusable supporting future national integrations in the eDelivery building block, such as Justice, eProcurement (which will already benefit from the current implementation of OpenPEPPOL).

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