Leveraging eID in the Private Sector

D6.1 Production Testing Report

Document Identification			
Status	Final	**Due Date**	30/09/2018
Version	1.0	**Submission Date**	25/10/2018

Related Activity	Activity 6	**Document Reference**	D6.1
Related Deliverable(s)	D2.1, D3.1, D3.2, D3.3, D4.1, D4.2, D4.3, D7.2, D7.3	**Dissemination Level (*)**	PU
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Keywords:
eIDAS, eID, SP e-services, Greek eIDAS Node, Spanish eIDAS Node, Testing, pre-production tests, production tests, cross-border authentication

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Document History			
Version	Date	Change editors	Changes
0.1	01/06/2018	Atos	Initial version including suggested T6.1 ToC
0.2	23/08/2018	Atos+Correos	Correos test cases included in section 2.1 and added titles in section 2.2 and 2.3
0.5	11/09/2018	Atos	Created structure of section 3 and guidelines to fill in the tables
0.6	12/09/2018	UMU	Subsections for ATHEX and ELTA in Section 2
0.7	17/09/2018	ATHEX	ATHEX contribution to section 2.2
0.8	18/09/2018	UMU+Correos+ELTA	Correos and ELTA contributions to 2.1 and 2.3
	19/09/2018	UAEGEAN	Created structure of sections 4 and 5 and guidelines to fill in the tables
	20/09/2019	UAEGEAN	ELTA and ATHEX test cases included in section 4
	21/09/2019	UAEGEAN	Correos test results included in section 5
	22/09/2018	UAEGEAN	Executive summary and Introduction
	25/09/2018	UAEGEAN	Conclusions
0.9	26/09/2018	UMU+Atos	Correos 2.1.6 and 2.1.7 Updated
0.10	1/10/2018	UAEGEAN	Updates on sections 2 and 5
0.11	11/10/2018	UAEGEAN+Atos	Updates on sections 3 and 5
0.12	16/10/2018	UMU	Updates on section 5
0.13-0.16	16/10/2018	UAEGEAN+Atos+ELTA	Updates based on reviews
0.17	23/10/2018	Atos	Added interoperability test with The Netherlands on section 3.6
0.18	24/10/2018	UAEGEAN	Updated section 6
0.9	25/10/2018	Atos	Quality Review
1.0			FINAL VERSION TO BE SUBMITTED

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List of Acronyms

Abbreviation / acronym	Description
CEF	Connecting Europe Facility
CSD	Central Securities Depository
Dx.y	Deliverable number y belonging to Activity x
EC	European Commission
eCATS	eIDAS Connectivity Automated Testing Suite
eID	Electronic Identification
eIDAS	electronic IDentification, Authentication and trust Services
IdP	Identity Provider
LEPS	Leveraging elD in the Private Sector
LEPS eIDAS API Connectors	(SP-side) APIs allowing a Service Provider to easily integrate with the eIDAS Network
LoA	Level of Assurance
NID	National Identity card
OTP	One Time Password
SP	Service Provider

1 Executive Summary

The main goal of the Deliverable "D6.1 Production Testing Report" is to provide a precise description of the actions performed during the process of testing the services of Correos, Hellenic Post (ELTA) and Athens Stock Exchange Services Group (ATHEX Group) in order to prove the success of their integration with the eIDAS Network.

As stated in the Grant Agreement, the first testing phase was carried out with the eIDAS pre-production infrastructure to technically validate the connection to the Spanish (for Correos) and Greek (for Hellenic Post and ATHEX) LEPS eIDAS Node Connectors, using test credentials.

After that, the validation against eIDAS core service platform (production level) was carried out with real eIDAS-compatible means of electronic identity, in order to demonstrate the cross-border dimension and authentication of eID means.

To this end this deliverable includes: a) the description of the tests used in pre-production, b) the results of the execution of pre-production tests and lessons learnt, c) the description of the tests used in production and d) the results of the execution of production tests and lessons learnt.

As a conclusion, we report that the Correos, ATHEX and ELTA services which are part of the LEPS project are functional parts of the pan European eIDAS infrastructure. This was achieved after the detailed tests conducted in the context of the Activity 6 "Testing of cross-border authentication and access to Correos electronic Services and to Hellenic (Financial and Post) electronic Services" and the necessary final adjustments and service business logic modifications.

2 Introduction

The aim of testing is to establish if Correos, ATHEX and ELTA services have been successfully integrated with the eIDAS Network, to check if requirements have or have not been met for the services and to prove their proper function.

Testing is recommended because it improves consistency and performance. Though the main benefit of testing involves error rectification and debugging, testing also helps businesses understand an actual and expected outcome so that they can improve the quality of their services.

Testing is very important because it also proves validation and authentication. If software is produced without testing, it could be dangerous to users because software has a unique development lifecycle that has important technical components. Therefore, testing is a critical part of the LEPS project and deserves an experienced approach.

This deliverable reports on the work performed within:

- Task 6.1: Preparation of tests in pre-production,
- Task 6.2: Execution and documentation of pre-production tests,
- Task 6.3: Preparation of tests in production and
- Task 6.4: Execution and documentation of production tests.

2.1 Purpose of the document

The purpose of this document is to provide a complete description of the activities performed within Activity 6: Testing of cross-border authentication and access to Correos electronic Services and to Hellenic (Financial and Post) electronic Services

This deliverable is related to milestone 10 “Production tests results for Correos, ATHEX and Hellenic Post services: report on cross-border testing with real eIDAS-compatible means of electronic identity)” (Means of Verification: Production testing report”).

2.2 Relation to other project work

The activities described in this document have received input mostly from:

- Activity 2: Business Requirements, Integration and Testing Planning
  - Task 2.1 “Project Operations and Architecture Design”
- Activity 3: Customization of Spanish Postal Services and Integration with eIDAS Infrastructure
  - Task 3.1: Mobile authentication
  - Task 3.2: Customization of Spanish Correos Services Portal
  - Task 3.3: Integration to Spanish eIDAS node

- Activity 4: Customization of Greek Financial Services and Integration with eIDAS Infrastructure
    - Task 4.1 “Customization of Greek Financial Services”
    - Task 4.2: “Develop eIDAS Interconnection Supporting Service”
    - Task 4.3: “Integration to Greek PEPS/eIDAS-Node Connector”
    - Task 4.4: “Mobile authentication”
- Activity 5: Customization of Greek Post Electronic Services and Integration with eIDAS Infrastructure
    - Task 5.1 “Customization of Hellenic Post Services Portal”
    - Task 5.2: “Develop eIDAS Interconnection Supporting Service”
    - Task 5.3: “Integration to Greek PEPS/eIDAS-Node Connector”
    - Task 5.4: “Mobile authentication”

The activities described in this document will provide input mostly to:

- Activity 7: Maximizing eID uptake in private sector, sustainability and road-mapping
    - Task 7.1: Market Research and Feasibility Analysis of elDAS services uptake by private sector
    - Task 7.2: Cost-benefit assessment of CEF elD uptake by private sector

2.3 Structure of the document

This document is structured in 6 major chapters.

Chapter 2 provides a detailed description of the test cases that were used to verify the effective integration of SP services with the eIDAS Network in pre-production environment.

Chapter 3 presents the results of the automated execution of pre-production tests on the different services, the developed mobile test cases and the lessons learnt during the process, Also, the results of the interoperability tests performed with eIDs from other countries than Greece and Spain, are included.

Chapter 4 provides a detailed description of the test cases that were used to verify the effective integration of SP services with the eIDAS Network in production environment.

Chapter 5 presents the results of the execution of production tests on the different services, the mobile tests and lessons learnt.

Chapter 6 concludes the document.

3 "Preparation of tests in pre-production"

3.1 CORREOS Test Cases

This section contains a set of tables with the test cases to check the proper operational of accessing Correos services through its IdM: Correos ID (MyIdentity). Login into any due service will always redirect the user to Correos ID front page. The field "process" describes the steps that will happen in the process in a brief way. These steps are described here in more detail (see Figure 3-1) [1]:

1. **Access to the URL** https://miidentidadpre2.azurewebsites.net **and click on "authenticate with eIDAS"**: The user in any due "Member State A" (*MS A* , now on, in our case Greece) uses the URL https://miidentidadpre2.azurewebsites.net and clicks on "*authenticate with eIDAS*" requesting access to Correos Service Provider (SP) in "Member State B" (*MS B*, now on, in our case Spain).
2. **The user is redirected to eIDAS adapter**: The SP requests authentication sending the request to the eIDAS adapter.
3. **The eIDAS adapter page asks the user for user consent**: The eIDAS adapter shows a page asking the user consent. This page shows to the user the mandatory attributes requested by the SP and also the optional ones. The mandatory data that will be provided are the following:
   - current family name(s),
   - current first name(s),
   - date of birth,
   - personal identifier

   And the optional data would be the gender and address.
   The user selects the optional attributes he wishes to be disclosed.
4. **The user is redirected to the eIDAS network**: the user is redirected to eIDAS-Node B (Spain), where the user selects the origin country (Greece in this case). The Spanish node redirects the user to eIDAS-Node A (it is the user's MS, Greece) and this one connects with the IdP.
5. **The user authenticates with his electronic identity**: The Identity Provider authentication page is showed. The user authenticates using his electronic identity.

6-7 **The user is redirected to eIDAS network, then to eIDAS adapter which validates the response and finally the SP grants access to the user**. The eIDAS-Node Proxy-Service of MS A (Greece) sends a SAML Assertion to the requesting eIDAS-Node of MS B (Spain), then to the Adapter in MS B (Spain), which forwards the response to the SP, and the SP will grant access to the user and the user then can access to the services "My Notifications" and "My Mailbox". There are two scenarios:

   a. ***User previously registered in Correos SP***: MyIdentity checks if the user is already registered, if the SP validates (either grants or rejects) the access.
   b. ***User that was not registered previously in the Correos SP***: MyIdentity checks if the user is already registered, if not the SP shows an additional screen for asking

additional data to complete the registration process, and after finishing successfully, the SP grants the user access to the SP.

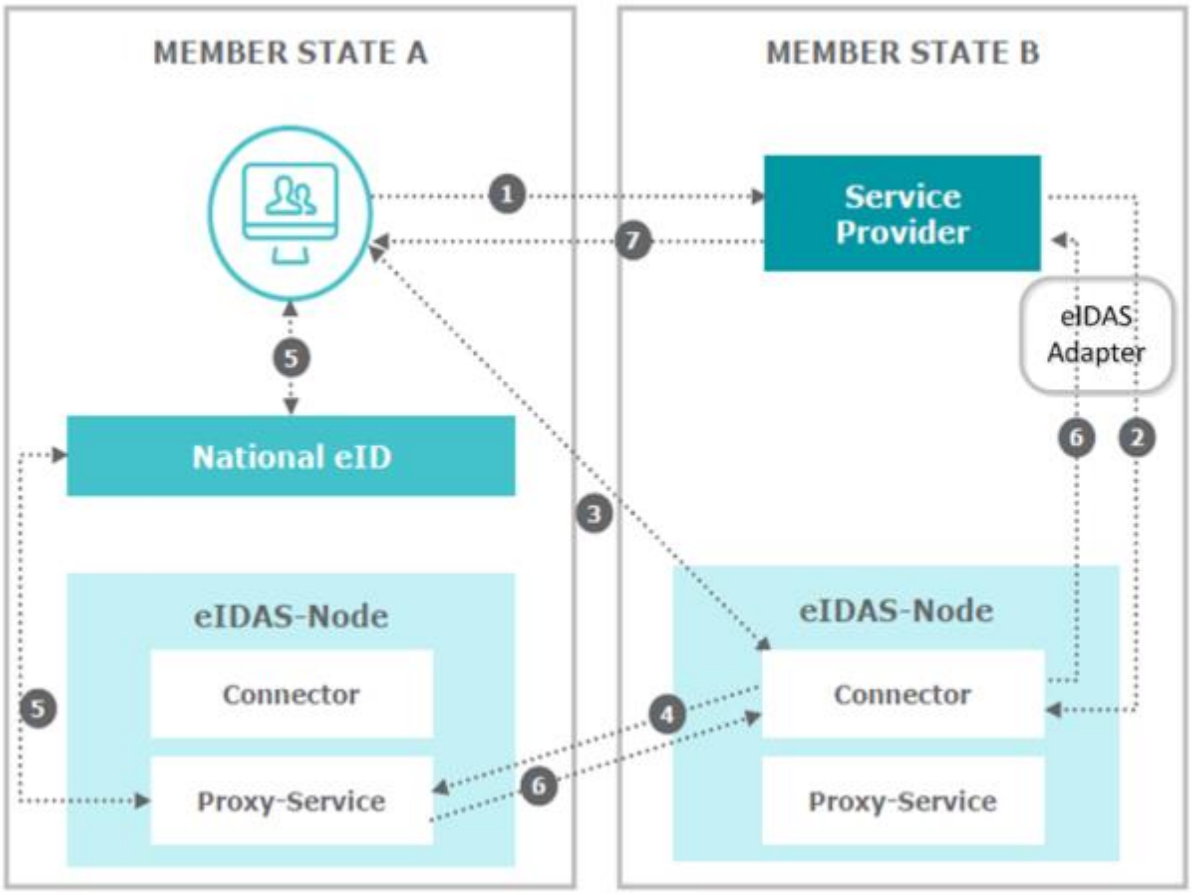


Figure 3-1: Steps accessing CORREOS services [1]

Note: Attributes retrieved not matching anyhow the format agreed in the description of the eIDAS nodes, will be excluded and not shown to the user. At this first version, no notification will be displayed to the user. Moreover, the user won't be informed that such attributes couldn't be included in the creation/update of their information in their Correos profile.

3.1.1 Test Case 1 - Login with SP registration in My Identity (eIDAS registered only)

Description	A user from MS A (Greece) requests access to a Service Provider in MS B (Spain). The user wasn't previously registered in the SP. The user gets access to the SP successfully after registering in the SP and access to My Identity.
Preconditions	The SP is registered in MS B eIDAS node The user from MS A (Greece) is a valid user for eIDAS and holds a valid eID. The user from MS A (Greece) wasn't previously registered in the SP from MS B (Spain). The registration in the SP is performed correctly and the user accesses to My Identity.

Process	1. Access to Correos ID for login or directly access to Correos ID (URL https://miidentidadpre2.azurewebsites.net) and click on "authenticate with eIDAS". 2. The user is redirected to eIDAS adapter. 3. The eIDAS adapter page asks for the user consent. The page is showing the requested data, and the user selects the optional attributes and clicks submit. 4. The user is redirected to the eIDAS network. 5. The user authenticates with her/his electronic identity. a. The MS A (Greece) IdP asks for credentials, b. the user provides right credentials. 6. The user is redirected to eIDAS network and then to eIDAS adapter which validates the response. SP checks that the user was not previously registered in the specific service and asks for registration; after completing successfully the registration the SP grants access to MyIdentity.
Result	The SP grants user access to My Identity after registration
Preproduction particularities	N.A.

Table 3-1: Test Case 3 – Basic login (SP & eIDAS registered user)

3.1.2 Test Case 2 – Basic login and access to My Identity

Description	A user from MS A (Greece) requests access to a Service Provider in MS B (Spain). The user was previously registered in the SP. The user gets access to My Identity.
Preconditions	The SP is registered in MS B (Spain) eIDAS node. The user from MS A (Greece) is a valid user for eIDAS. Holds a valid eID. The user from MS A (Greece) was previously registered in the SP My Identity.
Process	1. The user accesses to My Identity in Correos SP in the URL https://miidentidadpre2.azurewebsites.net) and clicks on "authenticate with eIDAS" correctly. 2. The user is redirected to eIDAS adapter. 3. The eIDAS adapter page asks the user to select the data he/she allows to disclosore from the IdP and clicks submit button. 4. The user is redirected to the eIDAS network 5. The user authenticates with his/her electronic identity a. The MS A (Greece) IdP asks for credentials, b. the user provides right credentials. 6. The user is redirected to eIDAS network and finally to the eIDAS adapter

	which validates the response, and the SP checks that the user was previously registered in the service My Identity of Correos SP and grants access to the user.
Result	Correos SP grants access to My Identity service to the user.
Preproduction particularities	N.A.

Table 3-2: Test Case 2 – Basic login and access to My Identity (SP & eIDAS registered user)

3.1.3 Test Case 3 – Failed My Identity login (eIDAS authentication failed)

Description	A user from MS A (Greece) requests access to the service My Identity of Correos Service Provider (SP) in MS B (Spain). The user was previously registered in the service My Identity. The user provides wrong credentials to the Greek IdP and the login fails.
Preconditions	The SP is registered in MS B (Spain) eIDAS infrastructure. The user from MS A (Greece) is a valid user for Greek eIDAS schema. Holds a valid eID. The user from MS A (Greece) was previously registered in the My Identity. The authentication on Greek IdP fails because the user provides wrong credentials.
Process	1. Access to the service My Identity in URL https://miidentidadpre2.azurewebsites.net and click on "authenticate with eIDAS" correctly. 2. The user is redirected to eIDAS adapter. 3. The eIDAS adapter page asks the user to select the data he/she allows to disclosure from the IdP and clicks submit button. 4. The user is redirected to the eIDAS network. 5. The user authenticates with his/her electronic identity a. The MS A (Greece) IdP asks for credentials, b. the user provides wrong credentials. 6. The user is redirected to eIDAS network and to the eIDAS adapter which send the failed response and the SP receives an authentication fail message.
Result	The user can't access to MS B (Spain) My Identity service due to login process fail during the eIDAS authentication.
Preproduction particularities	N.A.

Table 3-3: Test Case 3 – Failed My Identity login

3.1.4 Test Case 4 – eIDAS adapter fails (no connection)

Description	A user from MS A (Greece) requests access to My Identity in a Service Provider in MS B (Spain). The user was previously registered in the MS B (Spain) SP in My Identity service.
Preconditions	The SP is registered in MS B (Spain) eIDAS infrastructure The user from MS A (Greece) is a valid user for Greek eIDAS schema. Holds a valid eID card. The user from MS A (Greece) was previously registered in the SP.
Process	1. Access to the service My Identity of Correos SP in the URL https://miidentidadpre2.azurewebsites.net and click on "authenticate with eIDAS" correctly. 2. The user can't be redirected to eIDAS adapter because it is down.
Result	The user can't reach the eIDAS adapter and the eIDAS network.
Preproduction particularities	N.A.

Table 3-4: Test Case 4 – eIDAS adapter fails

3.1.5 Test Case 5 – User cancels in eIDAS adapter

Description	A user from MS A (Greece) requests access to My Identity service in MS B (Spain). The user was previously registered in this service. After clicking "authenticate with eIDAS" button, the user clicks on cancel button on eIDAS adapter page and goes back to Correos My Identity login page
Preconditions	The SP is registered in MS B (Spain) eIDAS infrastructure. The user from MS A (Greece) is a valid user for eIDAS. Holds a valid eID. The user from MS A (Greece) was previously registered in My Identity service of Correos SP.
Process	1. Access to the service and then is redirected to Correos ID for login or directly access to Correos ID (URL https://miidentidadpre2.azurewebsites.net) and click on "authenticate with eIDAS" button. 2. The user is redirected to eIDAS adapter. 3. The user decides to press cancel button and goes back to My Identity login page.
Result	The user starts again with login in My Identity page after clicking "cancel" button.
Preproduction particularities	N.A.

Table 3-5: Test Case 5 – User cancels in eIDAS adapter

3.1.6 Test Case 6 – Access to My Mailbox service

Description	A user from MS A (Greece) which is logged in My Identity of Correos SP clicks on the tag "Services". A list of services is displayed, in which it is included "My Mailbox" service. The user selects My Mailbox service and the user accesses to the service and can see the received documents
Preconditions	The user from MS A (Greece) is logged[1] in My Identity service. All the fields necessary to access to the My Mailbox service should be filled in.
Process	1. The user clicks on folder "services". 2. The user selects "My Mailbox" from the list of services. 3. The user can see the list of documents (folders, files, etc).
Result	The user accesses to the folders in which he/she can see the documents.
Preproduction particularities	N.A.

Table 3-6: Test Case 6 – Access to My Mailbox service

3.1.7 Test Case 7 – Access to My Notifications service

Description	A user from MS A (Greece) which is logged in My Identity of Correos SP clicks on the tag "Services". It is showed then a list of services in which it is included "My Notifications". The user selects My Notifications service and the user accesses to the service and can see the notifications
Preconditions	The user from MS A (Greece) is logged[2] in My Identity service. All the fields necessary to access to the My Notifications service should be filled in.
Process	1. The user clicks on folder "services". 2. The user selects "My Notifications" from the list of services. 3. The user can see the notifications
Result	The user accesses to the folders in which he/she can see the notifications.
Preproduction particularities	N.A.

Table 3-7: Test Case 7 – Access to My Notifications service

[1] Following the steps of Test Case 2 Basic login and access to My Identity
[2] Following the steps of Test Case 2 Basic login and access to My Identity

3.2 ATHEX Test Cases

This section contains a set of tables to define the checking procedure of ATHEX use cases.

3.2.1 Test Case 1 - ATHEX Sign (Successful Authentication)

Description	A user from Spain wants to register in AthexSign service. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against AthexSign service.
Preconditions	AthexSign service is registered in Greek eIDAS node. The user from Spain is a valid user for eIDAS and holds a valid eID.
Process	1. The user from Spain accesses AthexSign service through the following url: https://test-athex-sign.athexgroup.gr/ 2. Spanish user selects to apply via eIDAS by clicking on "Sign Up" link. 3. Spanish user is redirected to Spanish IdP and is asked to confirm the use of the software Spanish certificate as credentials. The user clicks on "Confirmar" button. 4. The browser displays a pop-up asking the user to select the digital certificate to use for authentication. The user selects the certificate and clicks on "Aceptar" button. Once the user is authenticated, Spanish user is redirected to the Spanish eIDAS Node, which redirects to the AthexSign service. 5. Upon successful authentication, Spanish user is redirected to AthexSign registration form where he/has to fill in only the email and father's name fields. The fields name, surname, birth date are already filled in.
Result	Spanish user is successfully authenticated and ready to register in AthexSign service
Preproduction particularities	Spanish digital certificate must be pre-installed in the web browser

Table 3-8: Test Case 1 - ATHEX Sign (Successful Authentication)

3.2.2 Test Case 2 - ATHEX Sign (Unsuccessful Authentication)

Description	A user from Spain wants to register in AthexSign service. Spanish user will use his/her software Spanish certificate provided by Spanish Authorities in order to authenticate himself/herself against AthexSign service.
Preconditions	AthexSign service is registered in Greek eIDAS node. The user from Spain is a valid user for eIDAS and holds a valid eID
Process	1. The user from Spain accesses AthexSign service through the following url: https://test-athex-sign.athexgroup.gr 2. Spanish user selects to apply via eIDAS by clicking on "Sign Up" link.

	3. Spanish user is redirected to Spanish IdP and is asked to confirm the use of the software Spanish certificate as credentials. The user clicks on "Confirmar" button. 4. The browser displays a pop-up asking the user to select the digital certificate to use for authentication. The user either cancels the operation or has not an available certificate. Since the user is not authenticated, he/she is redirected to the Spanish eIDAS Node. 5. Upon unsuccessful authentication, Spanish user is redirected to AthexSign service where he/she is informed that the authentication process was unsuccessful.
Result	Spanish user is unsuccessfully authenticated
Preproduction particularities	N.A.

Table 3-9: Test Case 2 - ATHEX Sign (Unsuccessful Authentication)

3.2.3 Test Case 3 - ATHEX AXIAweb (Successful Authentication and logon)

Description	A user from Spain wants to login in Athex AXIAWeb service. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against Athex AXIAWeb service.
Preconditions	Athex AXIAWeb service is registered in Greek eIDAS node. The user from Spain is a valid user for eIDAS and holds a valid eID. The user from Spain is already a valid user of AXIAWeb.
Process	1. The user from Spain accesses Athex AXIAWeb service through the following url: https://test-axiaweb.athexgroup.gr 2. Spanish user selects to apply via eIDAS by clicking on "Sign Up" link. 3. Spanish user is redirected to Spanish IdP and is asked to confirm the use of the software Spanish certificate as credentials. The user clicks on "Confirmar" button. 4. The browser displays a pop-up asking the user to select the digital certificate to use for authentication. The user selects the certificate and clicks on "Aceptar" button. Once the user is authenticated, Spanish user is redirected to the Spanish eIDAS Node, which redirects to the Athex AXIAWeb service. 5. Upon successful authentication, Spanish user is redirected to Athex AXIAWeb main menu page, from where he can navigate to the service individual pages.
Result	Spanish user is successfully authenticated and logged on to register in AthexSign service
Preproduction	Spanish digital certificate must be pre-installed in the web browser

particularities	

Table 3-10: Test Case 3 - ATHEX AXIAweb (Successful Authentication and logon)

3.2.4 Test Case 4 - ATHEX AXIAweb (Unsuccessful Authentication)

Description	A user from Spain wants to register in Athex AXIAWeb service. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against Athex AXIAWeb service.
Preconditions	Athex AXIAWeb service is registered in Greek eIDAS node. The user from Spain is a valid user for eIDAS and holds a valid eID.
Process	1. The user from Spain accesses Athex AXIAWeb service through the following url: https://test-athex-sign.athexgroup.gr 2. Spanish user selects to apply via eIDAS by clicking on "Sign Up" link. 3. Spanish user is redirected to Spanish IdP and is asked to confirm the use of the software Spanish certificate as credentials. The user clicks on "Confirmar" button. 4. The browser displays a pop-up asking the user to select the digital certificate to use for authentication. The user either cancels the operation or has not an available certificate. Since the user is not authenticated, he/she is redirected to the Spanish eIDAS Node. 5. Upon unsuccessful authentication, Spanish user is redirected to Athex AXIAWeb service where he/she is informed that the authentication process was unsuccessful.
Result	Spanish user is unsuccessfully authenticated
Preproduction particularities	N.A.

Table 3-11: Test Case 4 - ATHEX AXIAweb (Unsuccessful Authentication)

3.2.5 Test Case 5 – ATHEX IDP (Successful Authentication)

Description	A Greek user will use ATHEX IDP in order to authenticate himself/herself using the Spanish Demo SP functionality.
Preconditions	Spanish Spanish Demo SP is registered in Spanish eIDAS node. The user from Greece is a valid user for eIDAS and holds a valid eID issued by ATHEX IDP.
Process	1. The user from Greece accesses Spanish service through the following url: https://se-eidas.redsara.es/SP/populateIndexPage 2. Greek user selects his /her country of origin and also gets informed about the attributes requested by Spanish Demo SP. a. Greek user selects "ES" in "SP COUNTRY" drop-down list, "GR" in "CITIZEN COUNTRY" drop-down list and press

	"SUBMIT" button. b. Greek user press "SUBMIT" button in order to send the SAML request to Spanish eIDAS Node. c. Greek user is asked from Spanish eIDAS Node to choose the country from where his /her eID is issued. User selects "Greece" from the drop –down list and clicks "Login" button. d. Greek user is redirected to Greek eIDAS Node and he/she is informed about the attributes requested (Basic Information) from Spanish Demo SP. User clicks «NEXT» button. e. Greek user is also informed about the attributes requested (Additional Information) from Spanish Demo SP. User clicks «NEXT» button. 3. Greek user is redirected to ATHEX IdP and he/she is asked to provide his/her credentials. (Username, password, One Time Password) in order to authenticate him/herself. a. Greek user fills in his/her username and password. b. Greek user retrieves the One Time Password (OTP) from his/her smartphone, by opening Google Authenticator Application which is already installed in his/her smartphone and fills in the "Extended Password" field. c. Greek user clicks "Submit" button. 4. Upon successful authentication, user is asked to give his/her consent in order his/her personal information to be forwarded to Spanish Demo Service Provider. User clicks "SUBMIT" button. 5. Greek user is redirected back to Spanish Demo SP. a. Greek user can view SAML response from Greek eIDAS Node. User clicks "SUBMIT" button. b. Greek user is successfully logged in Spanish Demo SP.
Result	Greek user is successfully authenticated against ATHEX IDP and ready to use Spanish Demo SP
Preproduction particularities	N.A.

Table 3-12: Test Case 5 – ATHEX IDP (Successful Authentication)

3.2.6 Test Case 6 – ATHEX IDP (Unsuccessful Authentication)

Description	A Greek user will use ATHEX IDP in order to authenticate himself/herself against Spanish Demo SP. User will provide wrong user credentials and authentication process will be unsuccessful.
Preconditions	Spanish Demo SP is registered in Spanish eIDAS node
Process	1. The user from Greece accesses Spanish Demo SP through the following

	url: https://se-eidas.redsara.es/SP/populateIndexPage 2. Greek user selects his /her country of origin and also gets informed about the attributes requested by Spanish Demo Service Provider. a. Greek user selects "ES" in "SP COUNTRY" drop-down list, "GR" in "CITIZEN COUNTRY" drop-down list and press "SUBMIT" button. b. Greek user press "SUBMIT" button in order to send the SAML request to Spanish eIDAS Node. c. Greek user is asked from Spanish eIDAS Node to choose the country from where his /her eID is issued. User selects "Greece" from the drop –down list and clicks "Login" button. d. Greek user is redirected to Greek eIDAS Node and he/she is informed about the attributes requested (Basic Information) from Spanish Service Provider. User clicks «NEXT» button. e. Greek user is also informed about the attributes requested (Additional Information) from Spanish Demo SP. User clicks «NEXT» button. 3. Greek user is redirected to ATHEX IdP and he/she is asked to provide his/her credentials. (Username, password, OTP) in order to authenticate him/herself. a. Greek user provides wrong user credentials. b. Greek user clicks "Submit" button. 4. Upon unsuccessful authentication, user is redirected back to Spanish Demo SP and the following message appears "**003002 - Authentication Failed.**".
Result	Greek user is unsuccessfully authenticated against ATHEX IDP and can't use Spanish Demo SP
Preproduction particularities	N.A.

Table 3-13: Test Case 6 – ATHEX IDP (Unsuccessful Authentication)

This section contains a set of tables to define the checking procedure of ELTA use cases.

3.3 ELTA Test Cases

This section contains a set of tables to define the checking procedure of ELTA use cases.

3.3.1 ELTA Portal/e-Shop

3.3.1.1 Test Case 1 - User Registration Normal Flow to ELTA portal [ELTAPORTAL-TR1]

Description	A User successfully registers to ELTA portal / e-Shop (Service: registration via

	eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his eID 6. User is automatically redirected to the ELTA Register Form URL https://www.elta.gr/en-us/eidaslogin.aspx (User must complete the necessary information, for example username, email, password, confirm password) and click on "Register" 7. User is redirected to the ELTA home page of Portal or eShop (English version) http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx (depending on the starting point) - The page shows the name of the User
Result	The SP grants User access to ELTA Portal and eShop (after registration) Ending Event: The User accesses the ELTA Home Page (or e-Shop Home Page)
Preproduction particularities	non

Table 3-14: Test Case 1 – User Registration Normal Login Flow to ELTA portal.

3.3.1.2 Test Case 2 – User Registration Invalid Credentials Flow [ELTAPORTAL-TR2]

Description	A User fails to register via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID

	Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	non

Table 3-15: Test Case 2 – User Registration Invalid Credentials Flow to ELTA portal.

3.3.1.3 Test Case 3 - User Cancels Registration Flow on Country Page [ELTAPORTAL-TR3]

Description	A User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL" 4. User is automatically redirected Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled
Preproduction particularities	non

Table 3-16: Test Case 3 - User Cancels Registration Flow on Country Page to ELTA portal.

3.3.1.4 Test Case 4 - User Registration IdP Cancel Flow [ELTAPORTAL-TR4]

Description	A User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	non

Table 3-17: Test Case 4 - User Registration IdP Cancel Flow to ELTA portal.

3.3.1.5 Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAPORTAL-TL1]

Description	A Registered User requires access to ELTA portal (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is redirected to the ELTA home page of Portal http://www.elta.gr/en-us/home.aspx (depending on the starting point) - The page shows the name of the User 7. User clicks on "Track An Item" on right sidebar menu named tools 8. User is redirected to the ELTA track an item page http://www.elta.gr/en-us/personal/tracktrace.aspx
Result	The SP grants User access to ELTA Track & Trace page (after login) Ending Event: The User accesses the ELTA Track & Trace page
Preproduction particularities	Non

Table 3-18: Test Case 5 - Registered User Normal Login Flow to ELTA portal.

3.3.1.6 Test Case 6 - Registered User Invalid Credentials Flow [ELTAPORTAL-TL2]

Description	A Registered User fails to authenticate via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card 5. User fails to register via eIDAS eID

	6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	Non

Table 3-19: Test Case 6 - Registered User Invalid Credentials Flow to ELTA portal.

3.3.1.7 Test Case 7 - Registered User Cancels Registration Flow on Country Page [ELTAPORTAL-TL3]

Description	A Registered User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL". 4. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	Non

Table 3-20: Test Case 7 - Registered User Cancels Registration Flow on Country Page to ELTA portal.

3.3.1.8 Test Case 8 - Registered User IdP Cancel Flow [ELTAPORTAL-TL4]

Description	A Registered User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)

Preproduction particularities	Non

Table 3-21: Test Case 8 - Registered User IdP Cancel Flow to ELTA portal.

3.3.1.9 Test Case 9 - Registered User Normal Login Flow [ELTAESHOP-TL1]

Description	A Registered User requires access to ELTA e-shop (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-shop
Process	1. Access to the URL http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is redirected to the ELTA home page of e-shop http://www.elta.gr/en-us/business/eshop.aspx (depending on the starting point) - The page shows the name of the User 7. User click on item "Armored Cruiser Averof" 8. User is redirected to the "Armored Cruiser Averof" desciption page https://www.elta.gr/Business/eshop/tabid/558/ProductID/1304/language/en-US/Default.aspx 9. User click on Add to Cart button 10. User is redirected to the page https://www.elta.gr/Business/eshop/tabid/558/ProductID/1304/language/en-US/Default.aspx?addmessage=success_c_%22Armored+Cruiser+Averof%22 11. User click on "My Basket" on right sidebar menu named my account 12. User is redirected to the customer basket page https://www.elta.gr/en-us/customermybasket.aspx
Result	The SP grants User access to My Basket (after login) Ending Event: The User accesses the ELTA My Basket page where can find an item named "Armored Cruiser Averof"
Preproduction particularities	Non

Table 3-22: Test Case 9 - Registered User Normal Login Flow to ELTA e-Shop.

3.3.1.10 Test Case 10 – Registered User Invalid Credentials Flow [ELTAESHOP-TL2]

Description	A Registered User fails to authenticate via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-shop.
Process	1. Access to the URL http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	Non

Table 3-23: Test Case 10 – Registered User Invalid Credentials Flow to ELTA e-Shop.

3.3.1.11 Test Case 11 - Registered User Cancels Registration Flow on Country Page [ELTAESHOP-TL3]

Description	A Registered User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-Shop.
Process	1. Access to the URL http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL". 4. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	Non

Table 3-24: Test Case 11 - Registered User Cancels Registration Flow on Country Page to ELTA e-Shop.

3.3.1.12 Test Case 12 - Registered User IdP Cancel Flow [ELTAESHOP-TL4]

Description	A Registered User quits the registration process when reaching the IdP page

Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the Portal or e-Shop
Process	1. Access to the URL http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	Non

Table 3-25: Test Case 12 - Registered User IdP Cancel Flow to ELTA e-Shop.

3.3.1.13 Test Case 13 - Unregistered User Access Attempt Flow [ELTAPORTAL-TRL]

Description	A non-Registered User wants to login to ELTA portal/e-Shop via eIDAS eID: Is Redirected to a Registration Form
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the Portal or e-Shop
Process	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is automatically redirected to the ELTA Register Form URL https://www.elta.gr/en-us/eidaslogin.aspx (User must complete the necessary information, for example username, email, password, confirm password) and click on "Register"
Result	User is Redirected to a Registration Form Ending Event: ELTA portal Registration form
Preproduction particularities	Non

Table 3-26: Test Case 13 - Unregistered User Access Attempt Flow to ELTA portal.

3.3.2 ELTA – Parcel Delivery Voucher

3.3.2.1 Test Case 1 - User Registration Normal Flow (eIDAS eID)[ELTAVOUCHER-TR1]

Description	A User successfully registers to HELLENIC POST: BUSINESS APPLICATIONS (Parcel Delivery Voucher) (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is automatically redirected to the ELTA my profile page https://eltab2b.gr/index.php/en/my-profile (User must complete the necessary information, for example email, company name, company address, zip/postal code, city, country, company phone and applicant mobile phone) and click on "Save" 7. User is redirected to the HELLENIC POST: BUSINESS APPLICATIONS home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User
Result	The SP grants User access to HELLENIC POST: BUSINESS APPLICATIONS (after registration) Ending Event: The User accesses the HELLENIC POST: BUSINESS APPLICATIONS Home Page
Preproduction particularities	Non

Table 3-27: User Registration Normal Flow to ELTA Parcel Delivery Voucher.

3.3.2.2 Test Case 2 - User Registration Invalid Credentials Flow [ELTAVOUCHER-TR2]

Description	A User fails to register via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS

Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	Non

Table 3-28: User Registration Invalid Credentials Flow to ELTA Parcel Delivery Voucher.

3.3.2.3 Test Case 3 - User Cancels Registration Flow on Country Page [ELTAVOUCHER-TR3]

Description	A User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL" 4. User is automatically redirected Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled
Preproduction particularities	Non

Table 3-29: User Cancels Registration Flow on Country Page to ELTA Parcel delivery Voucher.

3.3.2.4 Test Case 4 - User Registration IdP Cancel Flow [ELTAVOUCHER-TR4]

Description	A User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on

	"Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	Non

Table 3-30: User Registration IdP Cancel Flow to ELTA Parcel Delivery Voucher.

3.3.2.5 Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAVOUCHER-TL1]

Description	A User successfully registers to HELLENIC POST: BUSINESS APPLICATIONS (Parcel Delivery Voucher) (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is redirected to the HELLENIC POST: BUSINESS APPLICATIONS (Zip Codes) home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User 7. User selects and click on "Parcel Delivery Voucher Form" from PARCEL DELIVERY VOUCHER menu 8. User is automatically redirected to HELLENIC POST: BUSINESS APPLICATIONS Parcel Delivery Voucher Form page https://eltab2b.gr/en/parcel-delivery-voucher/parcel-delivery-voucher-form
Result	The SP grants User access to ELTA BUSINESS APPLICATIONS (after login) Ending Event: The User accesses the ELTA BUSINESS APPLICATIONS Parcel Delivery Voucher Form page

Preproduction particularities	Non

Table 3-31: Registered User Normal Login Flow to ELTA Parcel Delivery Voucher.

3.3.2.6 Test Case 6 - Registered User Invalid Credentials Flow [ELTAVOUCHER-TL2]

Description	A Registered User fails to authenticate via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	non

Table 3-32: Registered User Invalid Credentials Flow to ELTA Parcel Delivery Voucher.

3.3.2.7 Test Case 7 - Registered User Cancels Registration Flow on Country Page [ELTAVOUCHER-TL3]

Description	A Registered User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL". 4. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction	Non

particularities	

Table 3-33: Registered User Cancels Registration Flow on Country Page to ELTA Parcel Delivery Voucher.

3.3.2.8 Test Case 8 - Registered User IdP Cancel Flow [ELTAVOUCHER-TL4]

Description	A Registered User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	Non

Table 3-34: Registered User IdP Cancel Flow to ELTA Parcel Delivery Voucher.

3.3.2.9 Test Case 9 - Unregistered User Access Attempt Flow [ELTAVOUCHER-TRL]

Description	A non-Registered User wants to login to HELLENIC POST: BUSINESS APPLICATIONS (Pacel Delivery Voucher) via eIDAS eID: Is Redirected to a Registration Form
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is automatically redirected to the ELTA my profile page https://eltab2b.gr/index.php/en/my-profile (User must complete the necessary

	information, for example email, company name, company address, zip/postal code, city, country, company phone and applicant mobile phone) and click on "Save"
Result	User is Redirected to a Registration Form Ending Event: ELTA my profile page
Preproduction particularities	Non

Table 3-35: Unregistered User Access Attempt Flow to ELTA Parcel Delivery Voucher.

3.3.3 ELTA Zip Codes

3.3.3.1 Test Case 1 – User Registration Normal Flow (eIDAS eID) [ELTAZIPCODES-TR1]

Description	A User successfully registers to HELLENIC POST: BUSINESS APPLICATIONS (Zip Codes) (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is automatically redirected to the ELTA my profile page https://eltab2b.gr/index.php/en/my-profile (User must complete the necessary information, for example email, company name, company address, zip/postal code, city, country, company phone and applicant mobile phone) and click on "Save" 7. User is redirected to the HELLENIC POST: BUSINESS APPLICATIONS home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User
Result	The SP grants User access to HELLENIC POST: BUSINESS APPLICATIONS (after registration) Ending Event: The User accesses the HELLENIC POST: BUSINESS APPLICATIONS Home Page
Preproduction particularities	non

Table 3-36: User Registration Normal Flow to ELTA Zip Codes.

3.3.3.2 Test Case 2 - User Registration Invalid Credentials Flow [ELTAZIPCODES-TR2]

Description	A User fails to register via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	non

Table 3-37: User Registration Invalid Credentials Flow to ELTA Zip Codes.

3.3.3.3 Test Case 3 - User Cancels Registration Flow on Country Page [ELTAZIPCODES-TR3]

Description	A User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL" 4. User is automatically redirected Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled
Preproduction particularities	non

Table 3-38: User Cancels Registration Flow on Country Page to ELTA Zip Codes.

3.3.3.4 Test Case 4 - User Registration IdP Cancel Flow [ELTAZIPCODES-TR4]

Description	A User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	non

Table 3-39: User Registration IdP Cancel Flow to ELTA Zip Codes.

3.3.3.5 Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAZIPCODES-TL1]

Description	A User successfully registers to HELLENIC POST: BUSINESS APPLICATIONS (Zip Codes) (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is redirected to the HELLENIC POST: BUSINESS APPLICATIONS home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User 7. User selects and click on "BUY ONLINE ZIP CODES" from ZIP CODES menu

	8. User is automatically redirected to HELLENIC POST: BUSINESS APPLICATIONS Buy Online Zip Codes page https://eltab2b.gr/en/zip-codes/buy-online-zip-codes
Result	The SP grants User access to HELLENIC POST: BUSINESS APPLICATIONS (after login) Ending Event: The User accesses the HELLENIC POST: BUSINESS APPLICATIONS Buy Online Zip Codes page
Preproduction particularities	Non

Table 3-40: Registered User Normal Login Flow to ELTA Zip Codes.

3.3.3.6 Test Case 6 - Registered User Invalid Credentials Flow [ELTAZIPCODES-TL2]

Description	A Registered User fails to authenticate via eIDAS eID
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	non

Table 3-41: Registered User Invalid Credentials Flow to ELTA Zip Codes.

3.3.3.7 Test Case 7 - Registered User Cancels Registration Flow on Country Page [ELTAZIPCODES-TL3]

Description	A Registered User quits early the registration process
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS

	API adapters) 3. User selects “CANCEL”. 4. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-sucessful authentication page
Preproduction particularities	non

Table 3-42: Registered User Cancels Registration Flow on Country Page to ELTA Zip Codes.

3.3.3.8 Test Case 8 - Registered User IdP Cancel Flow [ELTAZIPCODES-TL4]

Description	A Registered User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential. The user was previously registered in the HELLENIC POST: BUSINESS APPLICATIONS.
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on “Login with eIDAS eID” 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin “SPAIN” and click on “NEXT”. 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	non

Table 3-43: Registered User IdP Cancel Flow to ELTA Zip Codes.

3.3.3.9 Test Case 9 - Unregistered User Access Attempt Flow [ELTAZIPCODES-TRL]

Description	A non-Registered User wants to login to HELLENIC POST: BUSINESS APPLICATIONS (Zip Codes) via eIDAS eID: Is Redirected to a Registration Form
Preconditions	The user has a valid Spanish eID credential. The user was not previously registered in the HELLENIC POST: BUSINESS APPLICATIONS
Process	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on “Login with eIDAS eID”

	2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is automatically redirected to the ELTA my profile page https://eltab2b.gr/index.php/en/my-profile (User must complete the necessary information, for example email, company name, company address, zip/postal code, city, country, company phone and applicant mobile phone) and click on "Save"
Result	User is Redirected to a Registration Form Ending Event: ELTA my profile page
Preproduction particularities	non

Table 3-44: Unregistered User Access Attempt Flow to ELTA Zip Codes.

3.3.4 ELTA – eDelivery Hybrid Mail Service

3.3.4.1 Test Case 1 - User Registration Normal Flow (eIDAS eID) [ELTAHYBRID-TL1]

Description	A User successfully registers to ELTA e-Delivery Hybrid Service (Service: registration via eIDAS eID)
Preconditions	The user has a valid Spanish eID credential.
Process	1. Access to the URL https://www.e-post.gr/portalLogin.jsp and click on "Login" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User authenticates with his electronic identity (eID) 6. User is automatically redirected to the ELTA e-Delivery Hybrid Service home page - The page shows the Logout button
Result	The SP grants User access to ELTA e-Delivery Hybrid Service (after Login) Ending Event: The User accesses the ELTA e-Delivery Hybrid Service Home Page
Preproduction particularities	Non

Table 3-45: User Registration Normal Flow to ELTA e-Delivery Hybrid Mail Service.

3.3.4.2 Test Case 2 - User Registration Invalid Credentials Flow [ELTAHYBRID-TL2]

Description	A User fails to register via eIDAS eID

Preconditions	The user has a valid Spanish eID credential.
Process	1. Access to the URL https://www.e-post.gr/portalLogin.jsp and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User fails to register via eIDAS eID 6. User is automatically redirected to Non-successful authentication page
Result	User fails to register via eIDAS eID Ending Event: The User is redirected to Non-successful authentication page
Preproduction particularities	Non

Table 3-46: User Registration Invalid Credentials Flow to ELTA e-Delivery Hybrid Mail Service.

3.3.4.3 Test Case 3 - User Cancels Registration Flow on Country Page [ELTAHYBRID-TL3]

Description	A User quits early the registration process
Preconditions	The user has a valid Spanish eID credential.
Process	1. Access to the URL https://www.e-post.gr/portalLogin.jsp and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects "CANCEL" 4. User is automatically redirected Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled
Preproduction particularities	Non

Table 3-47: User Cancels Registration Flow on Country Page in ELTA e-Delivery Hybrid Mail Service.

3.3.4.4 Test Case 4 - User Registration IdP Cancel Flow [ELTAHYBRID-TL4]

Description	A User quits the registration process when reaching the IdP page
Preconditions	The user has a valid Spanish eID credential.
Process	1. Access to the URL https://www.e-post.gr/portalLogin.jsp and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)

	3. User selects country of origin “SPAIN” and click on “NEXT”. 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID 5. User quits the registration process when reaching the IdP page 6. User is automatically redirected to Registration/Login terminated page
Result	User fails to register via eIDAS eID Ending Event: Registration/Login Cancelled (consent required)
Preproduction particularities	Non

Table 3-48: User Registration IdP Cancel Flow to ELTA e-Delivery Hybrid Mail Service.

4 "Execution and documentation of pre-production tests activities"

This section is intended to provide the results of the automated pre-production tests on the different services, described in section 3 of this document and performed in the context of the T6.2.

It provides an overview of the pre-production environment and the results of performing the test execution on the different service providers which are Correos, ELTA and ATHEX (sections 4.2, 4.3 and 4.4).

Section 4.1 provides the description of **eCATS** (eIDAS Connectivity Automated Testing Suite) tool, which is the tool produced during this project based on Selenium[3] tool for performing the automated pre-production testing (see Figure 4-1).

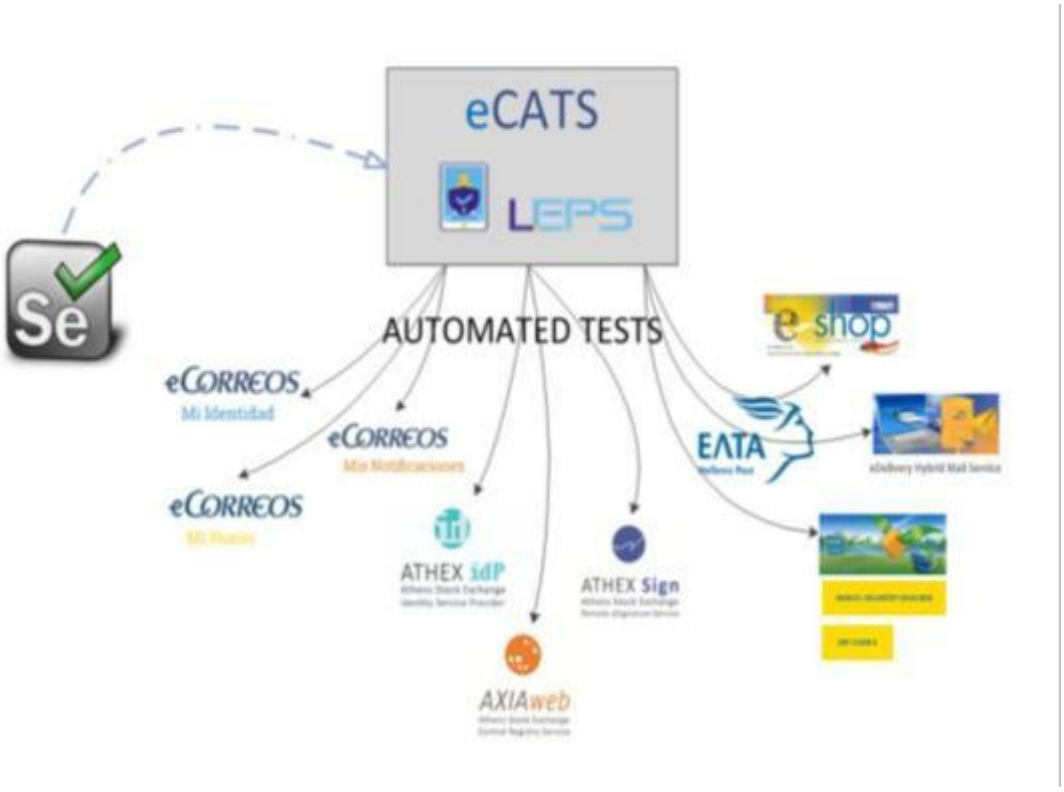


Figure 4-1: LEPS Services and Automated eCATS tool.

Deliverable D2.1 [5] (to be submitted in November 2018) will describe eCATS tool in detail and the environment configuration and installation for using this tool for the execution of automated scripts. D2.1 also contains the preparation of these scripts and how to execute them. As result of this, a set of scripts were prepared for every test case, they can be found in Annex I. Scripts used in automatic testing tool eCATS.

[3] https://www.seleniumhq.org/

As will be explained in D2.1, the execution of the test cases using eCATS and the scripts of the test case produces two results a text file with the logs which contains the list of the pages that have been processed during the execution and a file with the screenshot of the last page of the execution. The results are summarized in sections 4.2.2, 4.3.2and 4.4.2.

Section 4.5 provides the results of execution of the test cases using the Mobile app and section 4.6 the results of the interoperability tests.

4.1 "eIDAS Connectivity Automated Testing Suite (eCATS)"

For the needs of the pre-production testing, LEPS has developed eCATS (eIDAS Connectivity Automated Testing Suite), an automated testing tool based on Selenium portable software-testing framework for web applications[4]; eCATS has been developed using Java as well as the Selenium Library, which enables Java code to access and manipulate web pages. It facilitates the execution of the integration tests of a service with an eIDAS Node, and essentially reduces the requested operational effort. Most important, eCATS enables the periodic, pre-programmed, execution of automated tests, to continuously monitor the integration of a service with an eIDAS Node[5].

eCATS acts as a general-purpose tool to perform the automatic testing of web applications and web-based composite services, even if they span multiple pages completely. It is completely user-interaction free. Used in the case of testing the integration of a service with the eIDAS Network, it deploys three core functionalities:

- Automated execution of the entire eIDAS authentication process
- Automated logging of events/errors/failures
- Multiple tests in a single run

4.1.1 eCATS: automated testing preparation and execution

Essentially, eCATS enables the design and construction of scripts which simulate the User's actions during the execution of an authentication flow (including the test of a pre-defined authentication failure case). These steps are executed in an automated fashion by eCATS, which in turn reports the result of each execution ("Success"/"Failure"). A Success is detected only when eCATS reaches a test specific designated URL whose content indicates the success of the test (the tool identifies certain keywords specific only to the ending page; the page where the User, for example, has been given access to the tested service, in the case of a registered user authentication test). The operational flow of the eCATS software appears in the next Figure.

[4] https://www.seleniumhq.org/

[5] For a more detailed description of the eCATS testing tool, see: D2.1 Business and Technical Design for the effective use of eID DSI report [5]

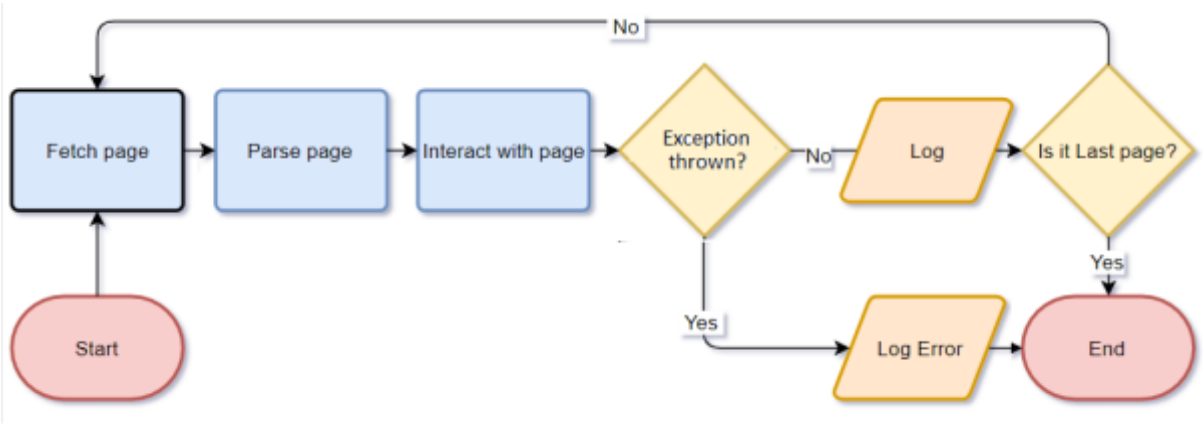


Figure 4-2: eCATS software suite operational flow.

For each test, **two types of files** are created initially by the Service Tester:

- A **Test Configuration** file which contains all necessary information regarding the specific test to be conducted.
- A number of **Page Manipulation** files, one per page participating in the tested process chain. Each file containing which page elements the testing process needs to interact with (called "events:"), the type and the ID of each page element (event), and any additional necessary info. Typically, the last "event" of a page redirects the browser to the next page[6].

The **end of a test automatically creates the following files** (placed in in the same folder with configuration and manipulation files):

- In the case the test was successful: Three (3) **Output** files are created. The first file is a **screenshot of the end page event**; the second, is a **tester log file** that contains the page source of the last page visited; the third file is a log report which contains all the information about the test (timestamp and URL of visited pages)[7].
- In the case the test was not successful; only one tester log file is created that contains exception information.

This end-test file will inform the Service Tester about the test success or let the Tester identify the conditions of an eventual test failure.

4.1.2 eCATS: multiple tests run periodically

The eCATS Testing Tool is responsible for automatically executing a single test and providing its user with the final page reached, Besides, eCATS allows for a group of selected tests to run periodically, with no-human intervention, in a pre-defined date and time, for example once, twice each day etc. A simple Windows PowerShell Script was developed and used. The running example (let's call it "runTest") is as follows:

[6] For more details on how these files are constructed, see: D2.1 Business and Technical Design for the effective use of eID DSI report [5]

[7] For evidence on the Output files of eCATS-based automated tests, see the column "Test Proof Path (log file & endPage screenshot)" in the pre-production summery tests included in the flowing sub-sections.

No	Test Description	Script
1	CORREOS-TL1 Registered User Normal Login Flow	call .\runTest CORREOS-TL1 "CORREOS-TL1 Registered User Normal Login Flow" " NOMBRE142"
2	ATHEXSIGN-TR1 Sign up User Normal Flow	call .\runTest ATHEXSIGN-TR1 "ATHEXSIGN-TR1 Sign up User Normal Flow" " Registration form"
3	ATHEXSIGN-TR1 Sign up User Normal Flow	call .\runTest AXIAWEB-TL1 " ATHEXSIGN-TR1 Sign up User Normal Flow " " No Investor Found in AthexGroup"
4	ELTAPORTAL-TL1 Registered User Normal Login Flow	call .\runTest ELTAPORTAL-TL1 "ELTAPORTAL-TL1 Registered User Normal Login Flow" "Please enter Tracking Number"
5	ELTAESHOP-TL1 Registered User Normal Login Flow	call .\runTest ELTAESHOP-TL1 "ELTAESHOP-TL1 Registered User Normal Login Flow" "Please review your order details"
6	ELTAVOUCHER-TL1 Registered User Normal Login Flow	call .\runTest ELTAVOUCHER-TL1 "ELTAVOUCHER-TL1 Registered User Normal Login Flow" "How to fill the Form"
7	ELTAZIPCODES-TL1 Registered User Normal Login Flow	call .\runTest ELTAZIPCODES-TL1 "ELTAZIPCODES-TL1 Registered User Normal Login Flow" "receive a file"
8	ELTAHYBRID-TL1 User Registration /Login Normal Flow	call .\runTest ELTAHYBRID-TL1 "ELTAHYBRID-TL1 User Registration /Login Normal Flow" "Document Details"

Table 4-1: The composition of LEPS automatic "runTest" (periodic execution – twice per day).

This Script executes the "runTest" script N times in order to execute N different tests (in the LEPS running case 8 tests are executed, the tests shown in the previous Table). The parameters of the "runTest" script are as follows:

- Name of the test (required in the execution the LEPS Automated Testing Tool)
- Description of the Test (used in the notification emails)
- Success condition string
- Date and Time

The steps performed by the "runTest" script are as follows:

- Execute the specified test using the eCATS Testing Tool
- Use grep to check for the success condition[8]

[8] Regarding the parameter "Success condition string", eCATS can conclude on a per case basis, on the "success condition" of each test included in the "run" group. This conclusion is based on the Output file. Generally speaking, the condition for a successful test is the existence of a specific string in the *pagesource* of the final

- Send the appropriate email depending on the result of the grep command

Finally, eCATS use the Windows Task Scheduler to execute the "run" script periodically. As explained before, the test results are emailed automatically to a specified account. Below we provide an example of such test-results (sample) emails:

Test Case	Scenario (Description)	Result (Success - Failure)	Date	Time
ELTAPORTAL-TL1	Registered User Normal Login Flow	Success	30/09/2018	8:00
ELTAZIPCODES-TL1	Registered User Normal Login Flow	Fail	26/09/2018	20:00

Table 4-2: Sample Results from the periodic automated runTest.

4.2 Correos Test cases execution in preproduction

This section contains the description of the pre-production environment for performing the automated test execution of Correos services as well as the results of the execution of the test cases.

4.2.1 Pre-production environment for testing Correos Services (Correos-Atos premises)

The pre-production environment for performing the automated test execution of Correos services comprises the Correos and Atos pre-production environment premises, where the Correos services and the eIDAS adapter are deployed respectively.

Besides the eIDAS Spanish node in pre-production (node of stable services) and the eIDAS Greek node in pre-production, the components deployed, and the associated features are summarized in the following table:

Component	Deployment features
Correos services	Secured cloud-based platforms. Hosted under a post domain (high standards of security, including DNSSEC). The environment includes usage of OTPs and a specification of OAuth2 with Open Id Connect Web Server: Tomcat 8.0.46-jre8. HTTPS protocol.
eIDAS Adapter	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64).

page. This string should be unique only to the page that will be reached by the end of the test, on a successful execution of the test. The existence (or not) of this string in the log file is checked using the Linux "grep" Command, also available for installation in Windows systems.

	CPU: Intel(R) Xeon(R) CPU, E5645 @ 2.40GHz. RAM Memory 15GB Web Server: Tomcat 8.0.46-jre8. HTTPS protocol

Table 4-3: Deployment features of preproduction components for Correos services.

The automatic tests have been executed in a computer with the following features:

- Windows 7 Enterprise 64 bits Service Pack 1
- Intel® Core™ i5-5300U CPU 2.30GHz
- 16,0GB RAM
- Firefox Nightly 61. 61.0a1 (2018-09-13) (64-bit)
- Java version 1.8.0_161

4.2.2 Correos test cases execution results in preproduction

The following table summarizes the results of the test cases:

Test cases	Scenario	Start Event (URL)	Start Event (Description)	End Event (URL	End event (Description)	Test Proof Path (log file & endPage screenshot)
Test Case 1 - SP registration in My Identity	A user from MS A (Greece) requests access to My Identity service of Correos SP in MS B (Spain). The user wasn't previously registered in the SP.	https://miidentidadpre2.azurewebsites.net	Correos (SP) login page.	https://miidentidadpre2.azurewebsites.net/Home/Index	The user gets access to the service successfully after registering in Correos SP and access to My Identity.	LogsAndScreenshotsTC1
Test Case 2 – Basic login and access to My Identity	A user from MS A (Greece) requests access to My Identity service of Correos SP in MS B (Spain). User pre-registered in the SP.	https://miidentidadpre2.azurewebsites.net	Correos (SP) login page.	https://miidentidadpre2.azurewebsites.net/Home/Index	The user gets access to the SP successfully and get access to My Identity.	ÑogsAndScreenshotsTC2

Test Case 3 – Failed My Identity login (eIDAS authentication failed)	A user from MS A (Greece) requests access to the service My Identity of Correos SP in MS B (Spain). User pre-registered in the Correos SP, the user provides wrong credentials.	https://miidentidadpre2.azurewebsites.net	Correos (SP) login page.	https://miidentidaddeveidas.azurewebsites.net/resources/templates/mi_identidad_error.html?errorMsg=%7b%22code%22%3a%22401%22%2c%22message%22%3a%22Authentication+failed%22%2c%22goTo%22%3a%22https%3a%2f%2fmiidentidadpre2.azurewebsites.net%22%2c%22title%22%3a%22Error%22%2c%22acceptBtn%22%3a%22OK%22%2c%22line%22%3a0%2c%22language%22%3a%22en%22%7d	Authentication failed.	LogsAndScreenshotsTC3
Test Case 4 – eIDAS adapter fails (no connection)	A user from MS A (Greece) requests access to My Identity of Correos SP in MS B (Spain). The user was previously registered in the Correos SP.	https://miidentidadpre2.azurewebsites.net	Correos (SP) login page.		Timeout error appears.	LogsAndScreenshotsTC4
Test Case 5	A user from MS A	https://miidentida	Correos (SP) login page.	https://miidentidadpre2.azu	Correos My Identity	LogsAndScreen

– User cancels in eIDAS adapter	(Greece) requests access to the service My Identity of Correos SP in MS B (Spain). The user was previously registered in this service. After clicking "authenticate with eIDAS" the user clicks on cancel button on the eIDAS adapter.	dpre2.azurewebsites.net		rewebsites.net	login page (initial page).	shotsTC5
Test Case 6 – Access to My Mailbox service	A user from MS A (Greece) which is logged in My Identity of Correos SP clicks on the tag "Services". The user selects My Mailbox service.	https://miidentidadpre2.azurewebsites.net	Correos (SP) login page.	https://correos.twindocs.com/app/	The user accesses to the "My Mailbox" service and can see the list of the documents.	LogsAndScreenshotsTC6
Test Case 7 – Access to My Notifications	A user from MS A (Greece) which is logged in My Identity of Correos	https://miidentidadpre2.azurewebsites.net	Correos (SP) login page.	https://demo.ivnosys.net/neosweb/NewAccountI.aspx	The user accesses to the "My Notifications" service and can see the notifications.	LogsAndScreenshotsTC7

service	SP clicks on the tag “Services”. The user selects My Notifications service.					

Table 4-4: Results of Correos Test cases execution in preproduction

4.3 ELTA Test cases execution in preproduction

This section contains the description of the pre-production environment for performing the automated test execution of ELTA services as well as the results of the execution of the test cases.

4.3.1 Pre-production environment for testing ELTA Services (ELTA premises)

The pre-production environment for performing the automated test execution of ELTA services comprises the ELTA pre-production environment premises, where the ELTA services are deployed.

Besides the eIDAS Spanish node in pre-production (node of stable services) and the eIDAS Greek node in pre-production, the components deployed, and the associated features are summarized in the following table:

Component	Deployment features
ELTA Services eIDAS ISS 2.0	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Web Server: Tomcat 8.0.46-jre8 Memory 8GB HTTPS protocol
ELTA TWA (Portal, Zipcodes)	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Memory 8GB HTTPS protocol
ELTA eIDAS WebApp	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Memory 8GB HTTPS protocol

Table 4-5: Deployment features of preproduction components for ELTA services.

The automatic tests for ELTA Portal, ELTA eShop, ELTA Parcel Voucher and ELTA ZipCodes Services have been executed in a computer with the following features:

- Windows 10 Home (64bit)
- Processor Intel(R) core(TM) i7-8550U
- CPU @ 1.80GHz
- RAM 16GB
- 13.3' 4K Screen

The automatic tests for ELTA e-Delivery Hybrid Service have been executed in a Windows 10 Home (64bit) computer with the following features:

- Windows 10 Home (64bit)

- Processor Intel(R) core(TM) i5-3210M
- CPU @ 2.50GHz
- RAM 6GB
- 15.6' HD Screen

4.3.2 ELTA Test cases execution results in preproduction

The following table summarizes the results of the test cases:

Test Name	Scenario	Start Event (URL)	Start Event (Description)	End Event (URL)	End event (Description)	Test Proof Path (log file & endPage screenshot)
ELTAPORTAL-TR1	User Registration Normal Flow (eIDAS eID) | A User successfully registers to ELTA portal / e-Shop (Service: registration via eIDAS eID)	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	http://elta.gr/en-us/home.aspx	ELTA portal home page (or the page where registration has started)	LogsAndScreenshotsELTAPORTAL_TR1
ELTAPORTAL-TR2	User Registration Invalid Credentials Flow | A User fails to register via eIDAS eID	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://lepsauth.elta.gr/portalEid/authfail?t=d53f8fc1-aa8f-4ec5-828d-6b0007439aad	Non-successful authentication page	LogsAndScreenshotsELTAPORTAL_TR2
ELTAPORTAL-TR3	User Cancels Registration Flow on Country Page | A User quits early the registration process	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://lepsauth.elta.gr/portalEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAPORT

						AL_TR3
ELTAPORTAL-TR4	User Registration IdP Cancel Flow | A User quits the registration process when reaching the IdP page	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://lepsauth.elta.gr/portalEid/authfail?t=f01d47fa-d925-4c6b-91af-20ab893d217e	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAPORTAL_TR4
ELTAPORTAL-TL1	Registered User Normal Login Flow (eIDAS eID) | A Registered User requires access to ELTA portal (Service: authentication via eIDAS eID)	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	http://elta.gr/en-us/personal/tracktrace.aspx	ELTA portal home page - Track an Item (or the page where login has started)	LogsAndScreenshotsELTAPORTAL_TL1
ELTAPORTAL-TL2	Registered User Invalid Credentials Flow | A Registered User fails to authenticate via eIDAS eID	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://lepsauth.elta.gr/portalEid/authfail?t=d53f8fc1-aa8f-4ec5-828d-6b0007439aad	Non-successful authentication page	LogsAndScreenshotsELTAPORTAL_TL2
ELTAPORTAL-TL3	Registered User Cancels Authentication Flow on Country Page | A Registered User quits early the authentication process	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://lepsauth.elta.gr/portalEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAPORTAL_TL3
ELTAPORTAL-TL4	Registered User IDP Cancel Flow | A User quits the authentication flow when reaching the IdP page	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://lepsauth.elta.gr/portalEid/authfail?t=f01d47fa-d925-4c6b-91af-20ab893d217e	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAPORTAL_TL4

ELTAESHOP-TL1	Registered User Normal Login Flow (eIDAS eID) | A Registered User requires access to ELTA portal (Service: authentication via eIDAS eID)	http://www.elta.gr/en-us/business/eshop.aspx	ELTA e-Shop main page (or any other ELTA eShop page)	http://elta.gr/CustomerMyBasket/tabid/770/language/en-US/Default.aspx?addmessage=success_b_You+have+added+%22Armored+Cruiser+Averof%22+to+your+cart.	ELTA e-Shop My Basket (or the page where login has started)	LogsAndScreenshotsELTAESHOP_TL1
ELTAESHOP-TL2	Registered User Invalid Credentials Flow | A Registered User fails to authenticate via eIDAS eID	http://www.elta.gr/en-us/business/eshop.aspx	ELTA e-Shop main page (or any other ELTA eShop page)	https://lepsauth.elta.gr/portalEid/authfail?t=d53f8fc1-aa8f-4ec5-828d-6b0007439aad	Non-successful authentication page	LogsAndScreenshotsELTAESHOP_TL2
ELTAESHOP-TL3	Registered User Cancels Authentication Flow on Country Page | A Registered User quits early the authentication process	http://www.elta.gr/en-us/business/eshop.aspx	ELTA e-Shop main page (or any other ELTA eShop page)	https://lepsauth.elta.gr/portalEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAESHOP_TL3
ELTAESHOP-TL4	Registered User IDP Cancel Flow | A User quits the authentication flow when reaching the IdP page	http://www.elta.gr/en-us/business/eshop.aspx	ELTA e-Shop main page (or any other ELTA eShop page)	https://lepsauth.elta.gr/portalEid/authfail?t=f01d47fa-d925-4c6b-91af-20ab893d217e	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAESHOP_TL4
ELTAPORTAL-TRL	Unregistered User Access Attempt Flow | A non-Registered User wants to login to ELTA portal/e-Shop via eIDAS eID: Is Redirected to a	http://www.elta.gr/en-us/home.aspx	ELTA portal home page (or any other ELTA portal page)	https://www.elta.gr/el-gr/eidaslogin.aspx	ELTA portal Registration form	LogsAndScreenshotsELTAPORTAL_TRL

	Registration Form					
ELTAVOUCHER-TR1	User Registration Normal Flow (eIDAS eID) | A User successfully registers to ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) (Service: registration via eIDAS eID)	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://eltab2b.gr/en/	ELTA BUSINESS APPLICATIONS home page (or the page where registration has started)	LogsAndScreenshotsELTAVOUCHER_TR1
ELTAVOUCHER-TR2	User Registration Invalid Credentials Flow | A User fails to register via eIDAS eID	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=7892ecfd-9cda-4466-8131-3ccbd41edc9d	Non-successful authentication page	LogsAndScreenshotsELTAVOUCHER_TR2
ELTAVOUCHER-TR3	User Cancels Registration Flow on Country Page | A User quits early the registration process	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAVOUCHER_TR3

ELTAVOUCHER-TR4	User Registration IdP Cancel Flow | A User quits the registration process when reaching the IdP page	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=cd017ae7-88c1-4fa2-9b41-309d3bd94728	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAVOUCHER_TR4
ELTAVOUCHER-TL1	Registered User Normal Login Flow (eIDAS eID) | A Registered User requires access to ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) (Service: authentication via eIDAS eID)	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://eltab2b.gr/en/parcel-delivery-voucher/parcel-delivery-voucher-form	ELTA BUSINESS APPLICATIONS parcel delivery voucher form page (or the page where login has started)	LogsAndScreenshotsELTAVOUCHER_TL1
ELTAVOUCHER-TL2	Registered User Invalid Credentials Flow | A Registered User fails to authenticate via eIDAS eID	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=7892ecfd-9cda-4466-8131-3ccbd41edc9d	Non-successful authentication page	LogsAndScreenshotsELTAVOUCHER_TL2
ELTAVOUCHER-TL3	Registered User Cancels Authentication Flow on Country Page | A Registered User quits	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or	https://lepsauth.elta.gr/eltab2bEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAVOUC

	early the authentication process		any other ELTA BUSINESS APPLICATIONS page)			HER_TL3
ELTAVOUCHER-TL4	Registered User IDP Cancel Flow | A User quits the authentication flow when reaching the IdP page	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=cd017ae7-88c1-4fa2-9b41-309d3bd94728	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAVOUCHER_TL4
ELTAVOUCHER-TRL	Unregistered User Access Attempt Flow | A non-Registered User wants to login to ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) via eIDAS eID: Is Redirected to a Registration Form	https://eltab2b.gr/en/parcel-delivery-voucher	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://www.elta.gr/el-gr/eidaslogin.aspx	ELTA BUSINESS APPLICATIONS Registration form	LogsAndScreenshotsELTAVOUCHER_TRL
ELTAZIPCODES-TR1	User Registration Normal Flow (eIDAS eID) | A User successfully registers to ELTA BUSINESS APPLICATIONS (Zip Codes) (Service: registration via eIDAS eID)	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS	https://eltab2b.gr/en/	ELTA BUSINESS APPLICATIONS home page (or the page where registration has started)	LogsAndScreenshotsELTAZIPCODES_TR1

			page)			
ELTAZIPCODES-TR2	Registered User Invalid Credentials Flow | A Registered User fails to authenticate via eIDAS eID	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=7892ecfd-9cda-4466-	Non-successful authentication page	LogsAndScreenshotsELTAZIPCODES_TR2
ELTAZIPCODES-TR3	Registered User Cancels Authentication Flow on Country Page | A Registered User quits early the authentication process	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAZIPCODES_TR3
ELTAZIPCODES-TR4	Registered User IDP Cancel Flow | A User quits the authentication flow when reaching the IdP page	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=cd017ae7-88c1-4fa2-9b41-309d3bd94728	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAZIPCODES_TR4
ELTAZIPCODES-TL1	Registered User Normal Login Flow (eIDAS eID) | A Registered User requires access	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or	https://eltab2b.gr/en/zip-codes/buy-online-zip-codes	ELTA BUSINESS APPLICATIONS Buying online Zip	LogsAndScreenshotsELTAZIPCO

	to ELTA BUSINESS APPLICATIONS (Zip Codes) (Service: authentication via eIDAS eID)		any other ELTA BUSINESS APPLICATIONS page)		Codes page (or the page where login has started)	DES_TL1
ELTAZIPCODES-TL2	Registered User Invalid Credentials Flow | A Registered User fails to authenticate via eIDAS eID	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=7892ecfd-9cda-4466-8131-3ccbd41edc9d	Non-successful authentication page	LogsAndScreenshotsELTAZIPCODES_TL2
ELTAZIPCODES-TL3	Registered User Cancels Authentication Flow on Country Page | A Registered User quits early the authentication process	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAZIPCODES_TL3
ELTAZIPCODES-TL4	Registered User IDP Cancel Flow | A User quits the authentication flow when reaching the IdP page	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Zip Codes) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://lepsauth.elta.gr/eltab2bEid/authfail?t=cd017ae7-88c1-4fa2-9b41-309d3bd94728	Registration/Login Cancelled (consent required)	LogsAndScreenshotsELTAZIPCODES_TL4

ELTAZIPCODES-TRL	Unregistered User Access Attempt Flow | A non-Registered User wants to login to ELTA BUSINESS APPLICATIONS (Zip Codes) via eIDAS eID: Is Redirected to a Registration Form	https://eltab2b.gr/en/zip-codes	ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) home page (or any other ELTA BUSINESS APPLICATIONS page)	https://www.elta.gr/el-gr/eidaslogin.aspx	ELTA BUSINESS APPLICATIONS Registration form	LogsAndScreenshotsELTAZIPCODES_TRL
ELTAHYBRID-TL1	User Registration /Login Normal Flow (eIDAS eID) | A User successfully registers to ELTA eDelivery Hybrid Mail Service (Service: registration via eIDAS eID)	https://e-post.gr/portalLogin.jsp	ELTA eDelivery Hybrid Mail Service home page	https://www.e-post.gr/portalRequests.jsp	ELTA eDelivery Hybrid Mail Service home page	LogsAndScreenshotsELTAHYBRID_TL1
ELTAHYBRID-TL2	User Registration Invalid Credentials Flow | A User fails to register via eIDAS eID	https://e-post.gr/portalLogin.jsp	ELTA eDelivery Hybrid Mail Service home page	http://lepsdelivery.elta.gr/eid/authfail?reason=fail	Non-sucessful authentication page	LogsAndScreenshotsELTAHYBRID_TL2
ELTAHYBRID-TL3	User Cancels Registration Flow on Country Page | A User quits early the registration process	https://e-post.gr/portalLogin.jsp	ELTA eDelivery Hybrid Mail Service home page	https://lepsdelivery.elta.gr/eid/authfail?reason=disagree	Registration/Login Cancelled	LogsAndScreenshotsELTAHYBRID_TL3
ELTAHYBRID-TL4	User Registration IdP Cancel Flow | A User quits the	https://e-post.gr/portalLogin.js	ELTA eDelivery Hybrid Mail Service	https://lepsdelivery.elta.gr/eid/authfail	Registration/Login Cancelled	LogsAndScreenshotsE

	registration process when reaching the IdP page	p	home page			LTAHYBRID_TL4

Table 4-6: Results of ELTA test cases execution in preproduction

4.4 ATHEX test cases execution in preproduction

4.4.1 Pre-production environment for testing ATHEX Services (ATHEX premises)

The pre-production environment for performing the automated test execution of ATHEX services comprises the ATHEX pre-production environment premises, where the ATHEX services are deployed.

Besides the eIDAS Spanish node in pre-production (node of stable services) and the eIDAS Greek node in pre-production, the components deployed and the associated features are summarized in the following table:

Component	Deployment features
ATHEX Services eIDAS ISS 2.0 TWA (Axia WEB, Athex Sign)	Operating system: Windows Server 2012 CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz AS: Tomcat 8.x Memory 4GB HTTPS protocol
ATHEX IDP	Operating system: Windows Server 2012 CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz AS: Tomcat 8.x Memory 4GB HTTPS protocol

Table 4-7: Deployment features of ATHEX components in preproduction.

The automatic tests for Axia WEB, Athex Sign have been executed in a computer with the following features:

- Windows 10 Home (64bit)
- VirtualBox VM with CPU 2 cores
- RAM 4GB

4.4.2 ATHEX Test cases execution results in preproduction

The following table summarizes the results of the test cases:

Test name	Scenario	Start Event (URL)	Start Event (Description)	End Event (URL)	End event (Description)	Test Proof Path (log file & endPage screenshot)
TC1 -ATHEX Sign (Successful Authentication)	A user from Spain wants to register in AthexSign Service Provider. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against AthexSign Service Provider.	https://test-axiaweb.athexgroup.gr	Athex Sign (SP) login page.	https://t-sp-gw.eidas.athexgroup.gr/regAthexSign/	Spanish user is successfully authenticated and ready to register in Athex Sign Service Provider	LogsAndScreenshots ATHEXSign_TC1
TC2 – ATHEX Sign (Unsuccessful	A user from Spain wants to register in	https://test-axiaweb.athexgrou	Athex Sign (SP) login	https://t-sp-gw.eidas.athe	Spanish user is unsuccessfully	LogsAndScreenshots

Authentication)	AthexSign service. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against AthexSign Service Provider.	p.gr	page.	xgroup.gr/loginAthexSign/authfail	authenticated	ATHEXSign_TC2
TC3 – ATHEX AXIAweb (Successful Authentication and logon)	A user from Spain wants to login in Athex AXIAWeb service. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against Athex AXIAWeb Service Provider.	https://test-axiaweb.athexgroup.gr	Athex AXIAWeb (SP) login page.	https://test-axiaweb.athexgroup.gr/gr/menu.jsp	Spanish user is successfully authenticated and logged on to register in Athex AXIA Web Service Provider	LogsAndScreenshots ATHEXAXIAweb_TC3
TC4 – ATHEX AXIAweb (Unsuccessful Authentication)	A user from Spain wants to register in Athex AXIAWeb Service Provider. Spanish user will use his/her eID	https://test-axiaweb.athexgroup.gr	Athex AXIAWeb (SP) login page.	https://t-sp-gw.eidas.athexgroup.gr/loginAxia/authfail	Spanish user is unsuccessfully authenticated	LogsAndScreenshots ATHEXAXIAweb_TC4

TC5 – ATHEX IDP (Successful Authentication)	A user from Greece requests access to a Spanish Service Provider. Greek user will use ATHEX IDP in order to authenticate himself/herself against Spanish Service Provider.	https://se-eidas.redsara.es/SP/populateIndexPage	Spanish demo SP welcome screen.	https://se-eidas.redsara.es/SP/populateReturnPage	Greek user is successfully authenticated against ATHEX IDP and ready to use Spanish Service Provider	LogsAndScreenshots ATHEXIDP_TC5
TC6 – ATHEX IDP (Unsuccessful Authentication)	A user from Greece requests access to a Spanish Service Provider. Greek user will use ATHEX IDP in order to authenticate himself/herself against Spanish Service Provider. User will provide wrong user credentials and authentication process will be unsuccessful.	https://se-eidas.redsara.es/SP/populateIndexPage	Spanish demo SP welcome screen.	https://se-eidas.redsara.es/SP/populateReturnPage	Greek user is unsuccessfully authenticated against ATHEX IDP and can't use Spanish Service Provider	LogsAndScreenshots ATHEXIDP_TC6

Table 4-8: Results of the execution of ATHEX test cases in preproduction.

4.5 Mobile Test Cases

LEPS' mobile application has evolved from its initial implementation to the final production version. The results of the pre-production testing of the mobile App were integrated in Deliverable D4.4 [2] (Section 9) where services from each Industrial partner were tested and screenshots were captured.

The initial prototype which was successfully integrated with the eIDAS authentication process stopped working due to changes in the Spanish eIDAS infrastructure such as a modification of the Certification Authority chain. Also, the Spanish ministry office offered a new version of the Spanish DNIe NFC libraries which in this case were based on Android Fragments solving issues related to private key extraction. The new approach forced a deep source code refactoring. Taking profit of the refactoring, UI improvements focusing on user quality of experience perception while operating the NFC cards were made. This final version is the one with which the production tests in section 6 of this deliverable have been performed.

4.6 Interoperability tests

As indicated in section 7 of both deliverables D3.3 [3] and D4.3 [4] several interoperability tests in pre-production environment have been developed. The main goal of these tests is to prove the integrated services in both Greek and Spanish side, are available not only to Spanish and Greek citizens, but also to the rest of European citizens holding a valid European eID belonging to an eID schema integrated into the eIDAS infrastructure. Table 4-7: Deployment features of ATHEX components in preproduction. provides the list of countries with a stable connectivity to pre-production environment, at this moment.

Connected Country	Spain	Greece
Belgium	X	-
Czech Republic	X	X
Estonia	X	X
Greece	X	-
Iceland	X	-
Italy	X	X
Lithuania	X	-
Malta	X	-
Norway	X	-
Spain	-	X
Sweden	X	-
The Netherlands	X	-

Table 4-9: Countries connected with the Greek and Spanish eIDAS node in pre-production environment.

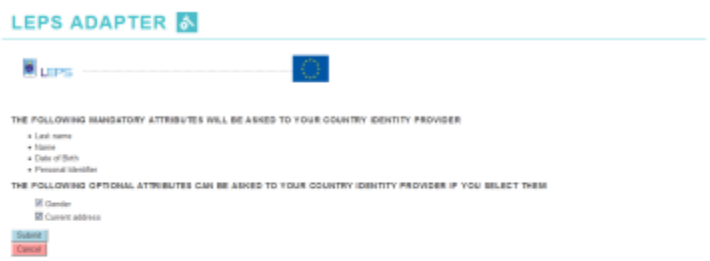
From the list of connected countries in pre-production environment the chosen countries for performing the interoperability tests were Italy, Iceland and Czech Republic. At this moment additional contacts have been established with The Netherlands, Estonia and Germany. Additional results are provided in Annex II. Interoperability Tests Extension on this document.

4.6.1 "Italy"

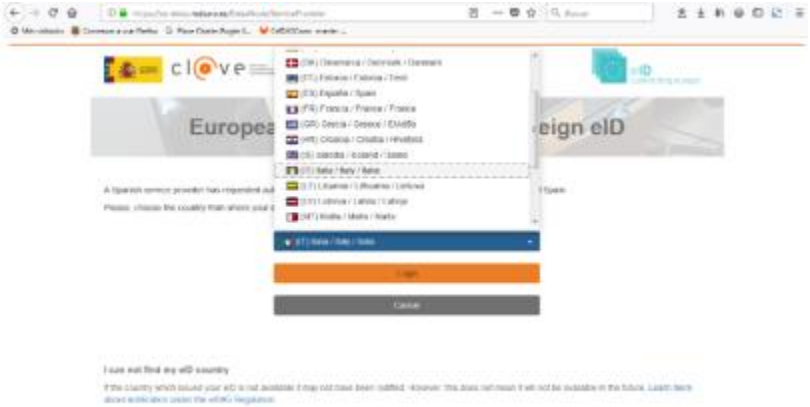
This test case has been performed using Italian test credentials provided by InfoCert[9] Company. InfoCert is one of the six Italian IdPs approved by the Italian government. The test case tested with the Italian credentials is the Correos TC 1 accessing MyMailbox service.

Description	A user from Italy requests access to a Service Provider of Correos (Spain). The user wasn't previously registered in the SP. The user gets access to the SP successfully after registering in the SP and gets access to MyIdentity and MyMailbox services.
Process and screenshots	1. An Italian citizen try to access the Correos service and then is redirected to Correos ID for login or directly access to Correos ID (URL https://miidentidadpre2.azurewebsites.net) and click on "Authenticate with eIDAS" button. 2. The user is redirected to Spanish eIDAS adapter. The eIDAS adapter page is showing the mandatory and the optional requested data. The user selects the optional attributes to be disclosed, and gives consent by clicking the "Submit" button.

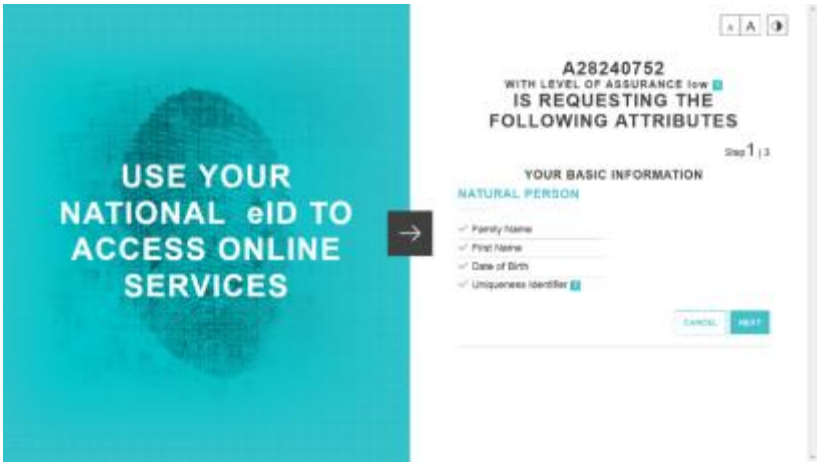
[9] https://www.infocert.it/



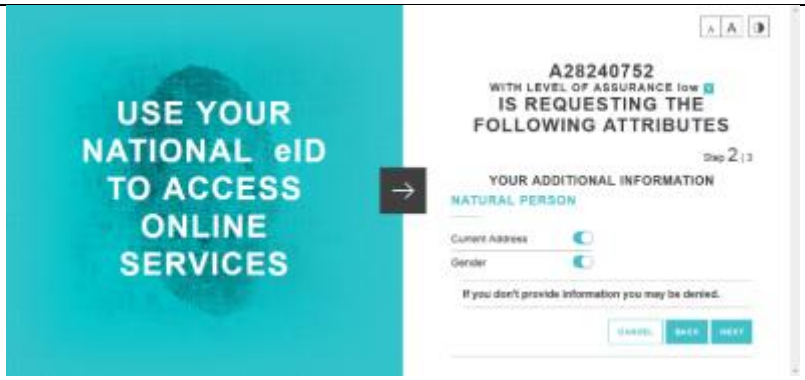
3. The user is redirected to the Spanish eIDAS node where he/she selects the country of origin (Italy). Then the user clicks the "Login" button for starting the authentication process.



4. The user is redirected to the Italian eIDAS node where the mandatory attributes to be requested are shown. The user clicks on the "Next" button.



5. The Italian eIDAS node shows the optional attributes to be disclosed and asks for user permission. User clicks on "Next" button.



6. The user is redirected to SPID initial page, the gateway to the Italian IdPs. The user clicks on "Entra con SPID" button.

7. SPID gateway presents to the user the 6 Italian IdPs to choose from. The user selects ICERT IdP.

8. SPID redirects the user to ICERT IdP, and the user enters the Italian credentials. Next the user clicks on “Entra con SPID” button.

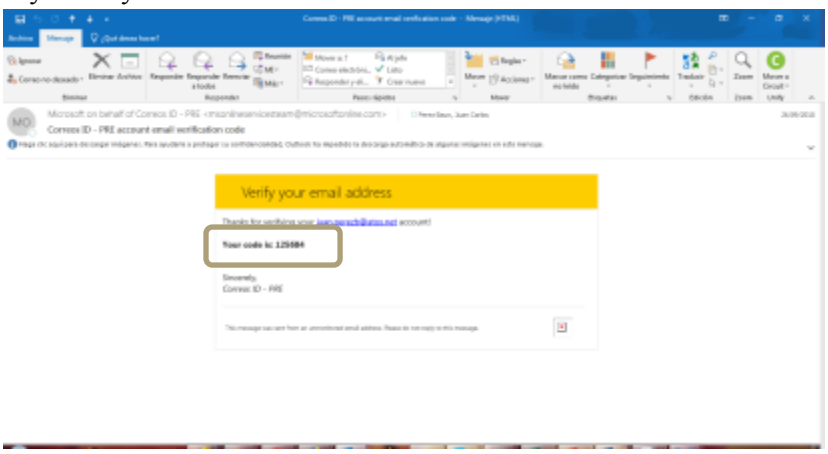
9. The Italian IdP shows the attributes to be delivered. The user clicks on “Continua” button.

10. Once the user is authenticated SPID redirects the user to the Italian eIDAS node.

11. The Italian eIDAS node shows the user the data to be delivered to the Spanish eIDAS node. The user clicks on the “Next” button.

12. The user is redirected to the Spanish eIDAS node, then to the eIDAS adapter, and finally reaches Correos MyIdentity service. MyIdentiy service detects that is the first time the user is accessing Correos and requests the user to provide an email address. The user enters the email address and clicks on “Send Verification Code” button.

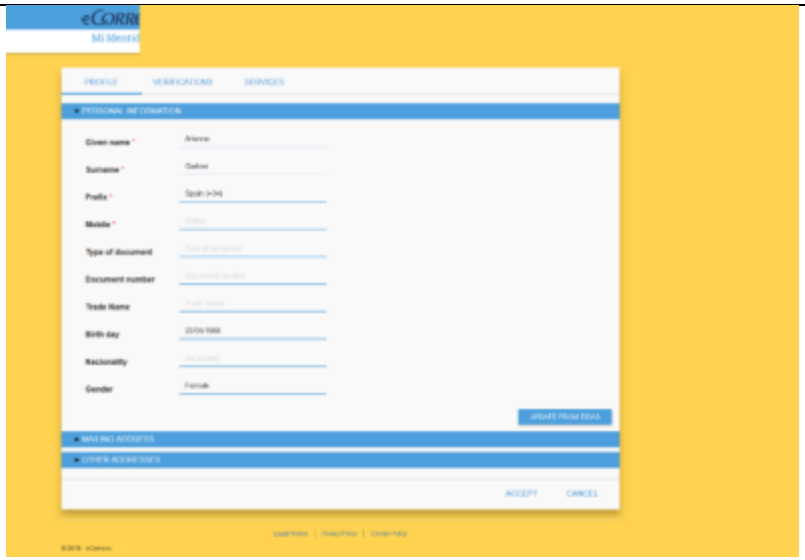
13. MyIdentity sends to the user’s email a verification code.



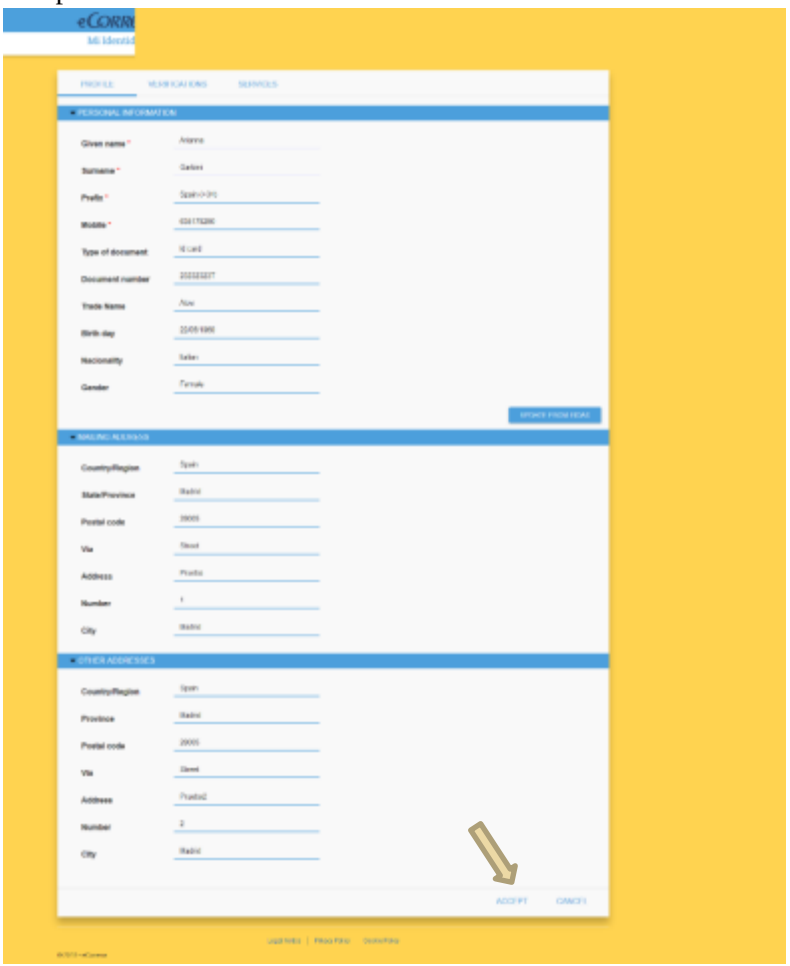
14. The user retrieves the verification code from the email and enters the code and clicks on “Verify Code” button.

15. Once MyIdentity verifies the code, the user is asked to introduce a password (needed for additional authentication process), the type of person and accept the conditions of use of MyIdentity service. Then the user clicks on "Create" button.

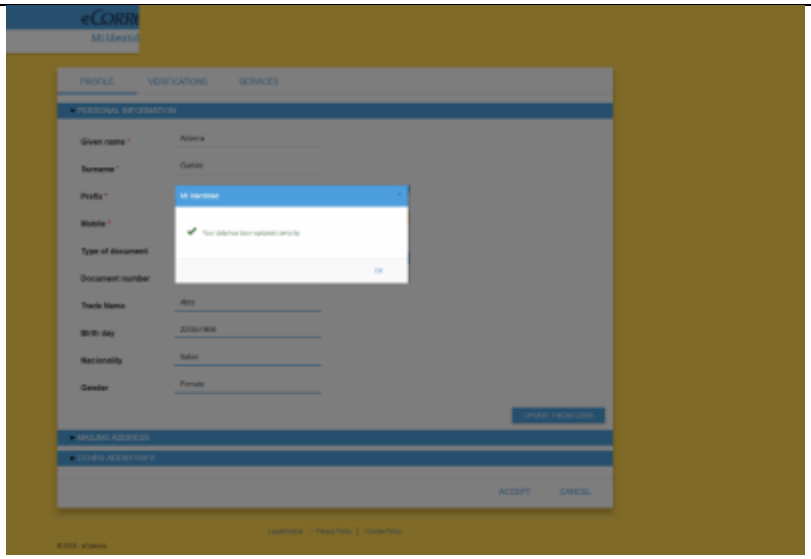
16. A form is displayed to fill in with additional data needed for accessing the different Correos' services.



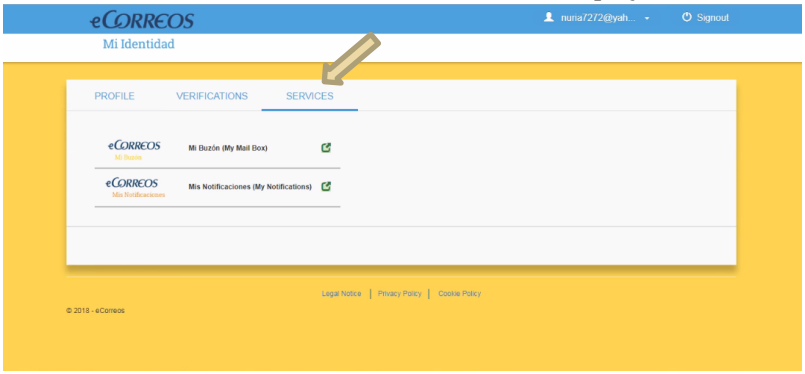
17. The user fills the complete form and clicks on the "Accept" button and accepts term and conditions.



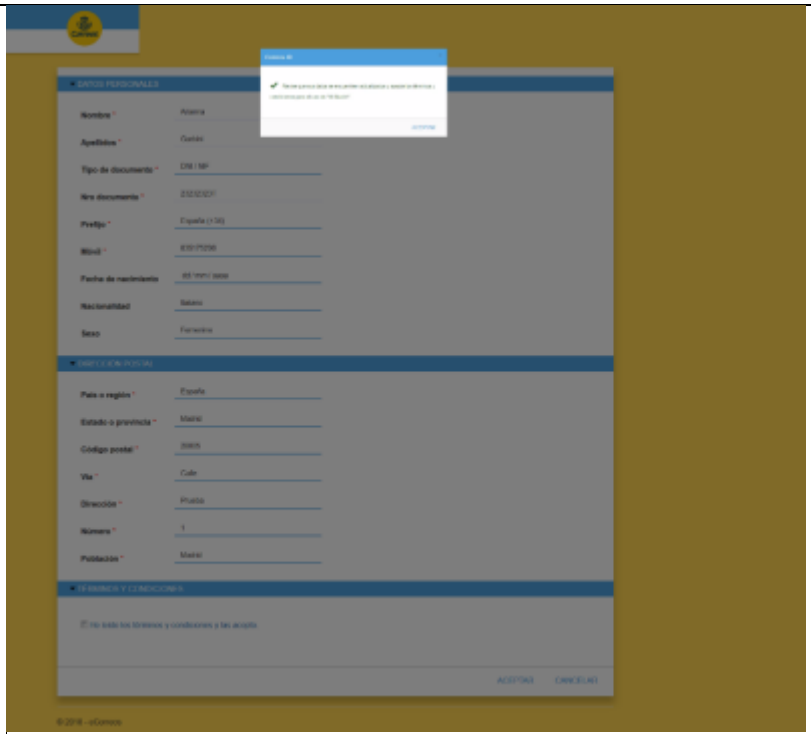
18. MyIdentity service informs the user the registration process was successful.



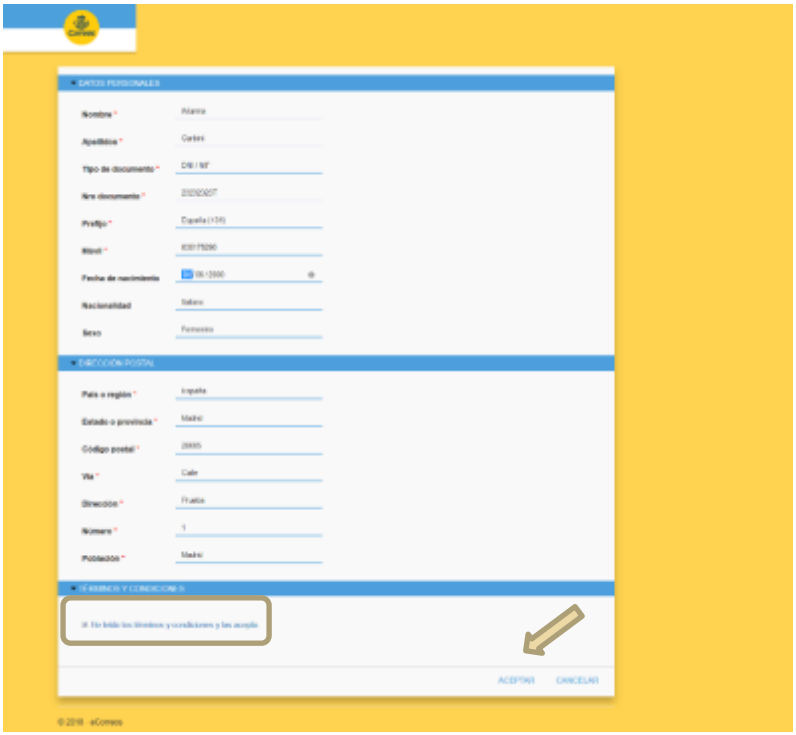
19. Now, the Italian user has access to the Correos' services. Clicking on the "Services" tab a list of available services is displayed



20. By Clicking on the MyMailbox icon, the user has access to the selected service.



Before accessing the service, the user should accept terms and conditions by checking the checkbox.



21. Finally, the user gets access to the selected MyMailbox service.

Result	Italian user is successfully authenticated and ready to register in Correos MyIdentity service. Finally, the Italian user is able to access MyMailbox service.

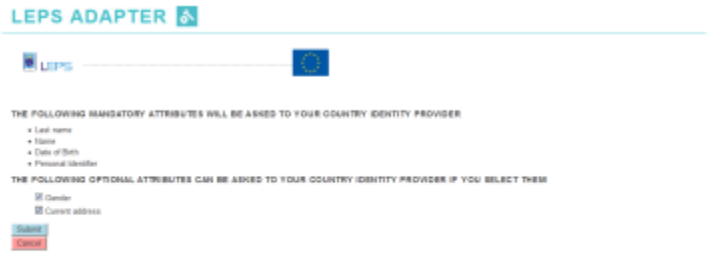
Table 4-10: A user from Italy requests access to a Service Provider of Correos (Spain).

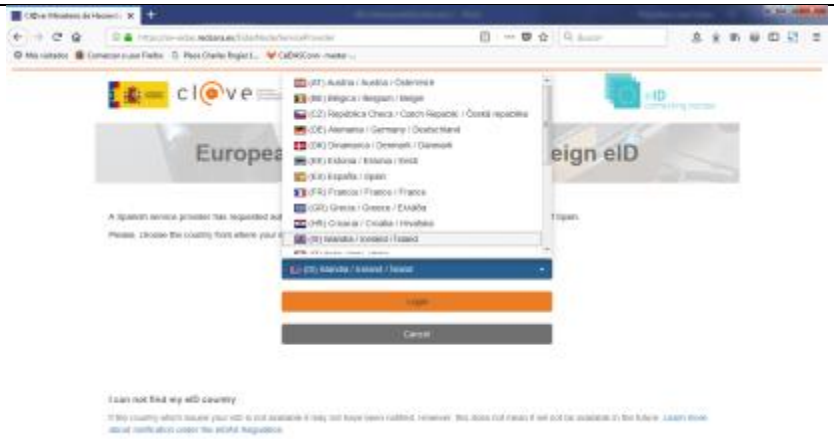
4.6.2 "Iceland"

This test case has been performed using Icelandic test credentials provided by Advania[10]. Advania, the leading IT Company in Iceland and well established in Scandinavian countries (Sweden and Norway), operates and develops the eIDAS node in Iceland. The test case tested with the Icelandic credentials is the Correos TC 1 accessing MyNotifications service.

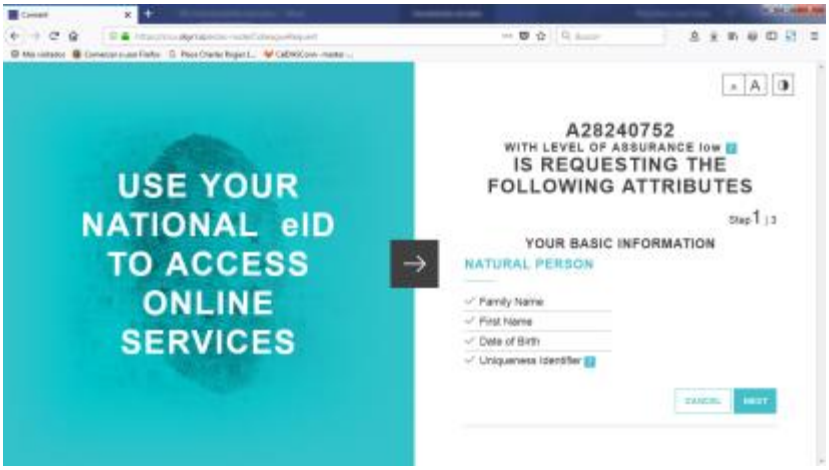
Description	A user from Iceland requests access to a Service Provider of Correos (Spain). The user wasn't previously registered in the SP. The user gets access to the SP successfully after registering in the SP and access to MyIdentity and MyNotifications.

[10] https://advania.com/

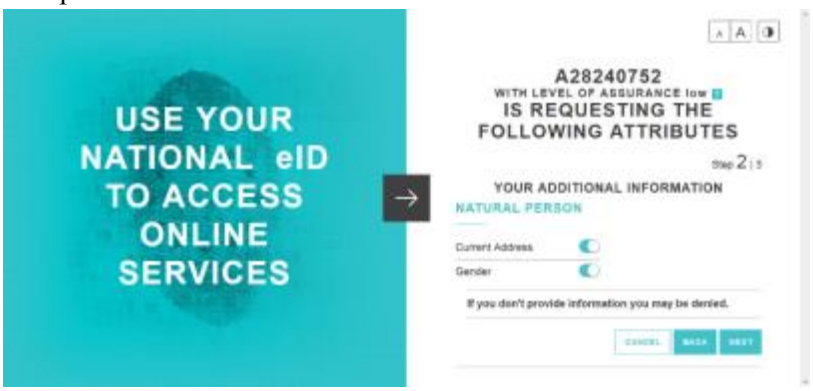
Process and Screenshots	1. An Icelandic citizen try to access to the Correos service and then is redirected to Correos ID for login or directly access to Correos ID (URL https://miidentidadpre2.azurewebsites.net) and click on "Authenticate with eIDAS" button. 2. The user is redirected to eIDAS adapter. The eIDAS adapter page is showing the mandatory and the optional requested data. The user selects the optional attributes to be disclosed and gives consent by clicking the "Submit" button.  3. The user is redirected to the Spanish eIDAS node where he/she selects the country of origin (Iceland). Then the uses clicks on "Login" button for starting the authentication process.



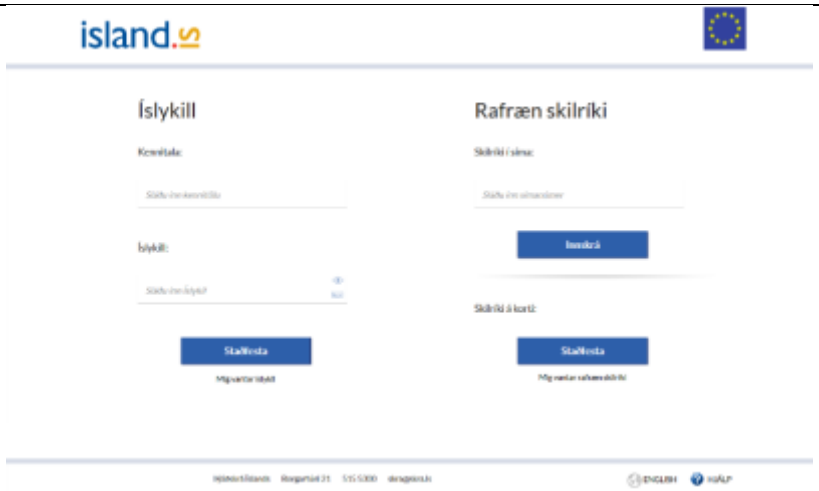
4. The user is redirected to the Icelandic eIDAS node where the mandatory attributes to be requested are shown. The user clicks on the "Next" button.



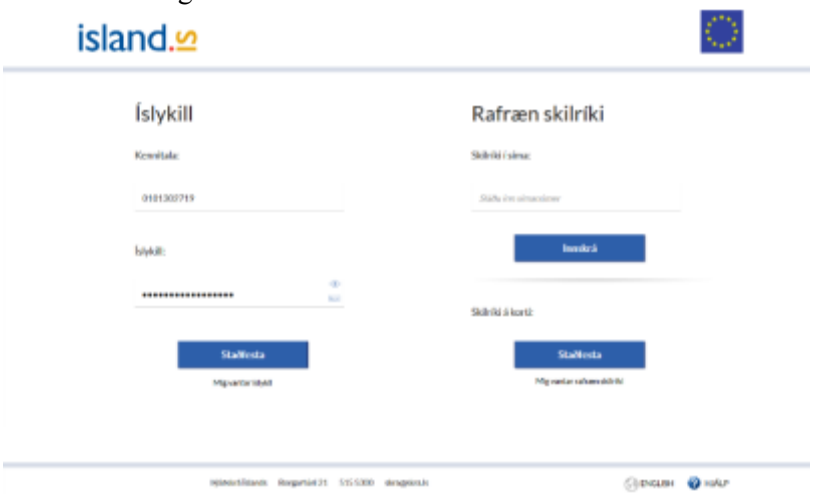
5. The Icelandic eIDAS node shows the optional attributes and asks for user permission. User clicks on "Next" button.



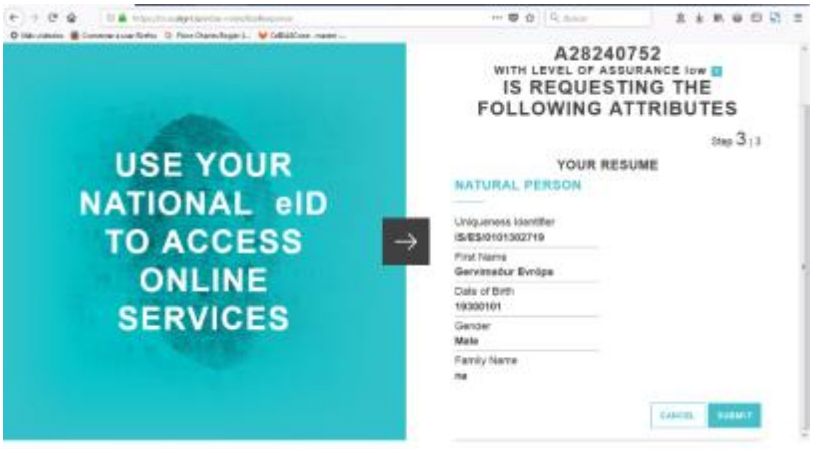
6. The user is redirected to Icelandic IdP.



7. The Icelandic user enters her/his credentials. Next the user clicks on "Estadfesta/Login" button.



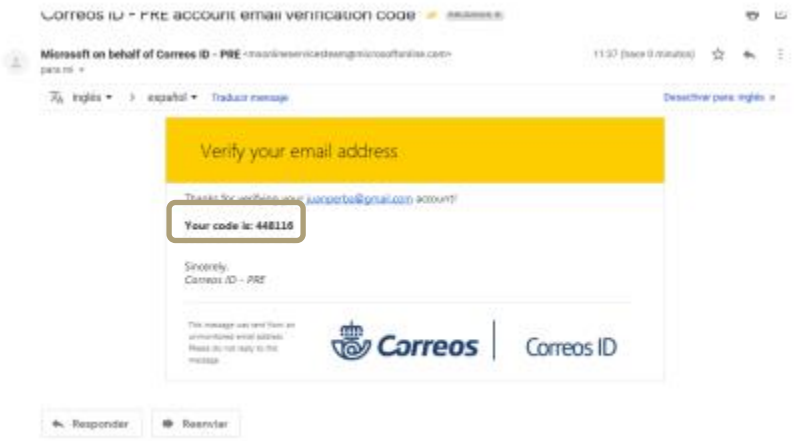
8. The Icelandic eIDAS node shows the user the data to be delivered to the Spanish eIDAS node. The user clicks on the "Submit" button.



9. The user is redirected to the Spanish eIDAS node, then to the eIDAS adapter and finally reaches Correos MyIdentity service. MyIdentiy service detects that is the first time the user is accessing Correos and requests the user to provide an email address. The user enters the email address and clicks on “Verify email” button.

10. Once the MyIdentity service verifies that the email is not registered yet asks the user to click on the “Send Verification Code” button.

11. MyIdentity sends to the user’s email a verification code.

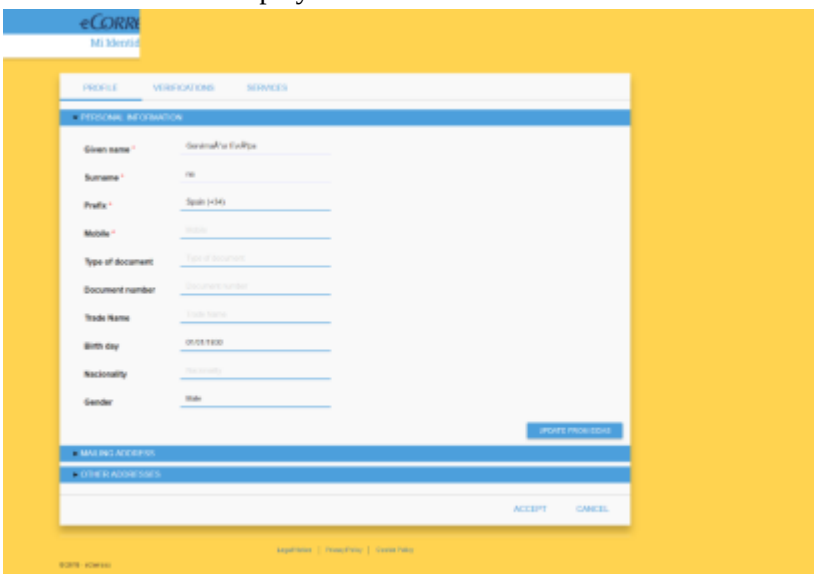


12. The user retrieves the verification code from the email and enters the

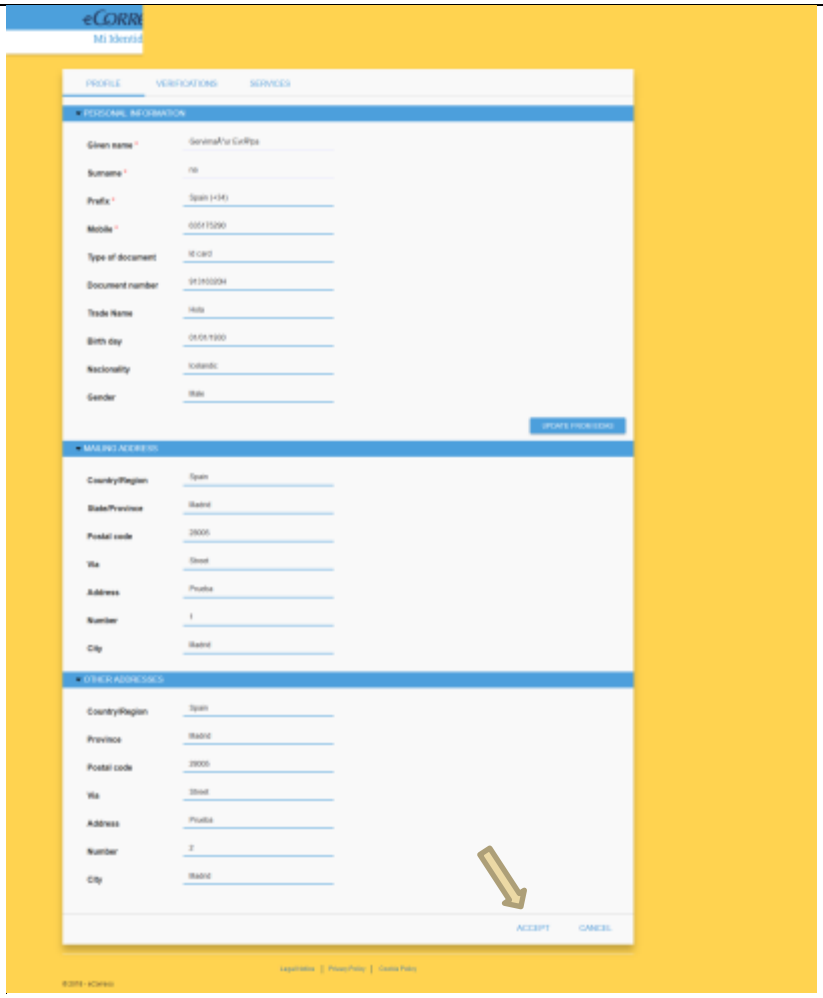
code and clicks on Verify Code button.

13. Once MyIdentity verifies the code, the user is asked to introduce a password (needed for additional authentication process), the type of person and accept the conditions of use of MyIdentity service. Then the user clicks on "Create" button.

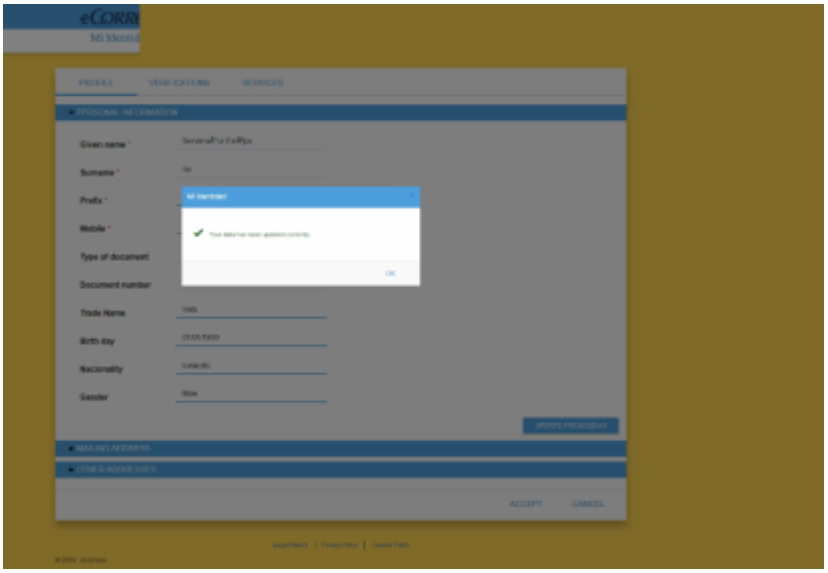
14. A form to fill in is displayed to the user



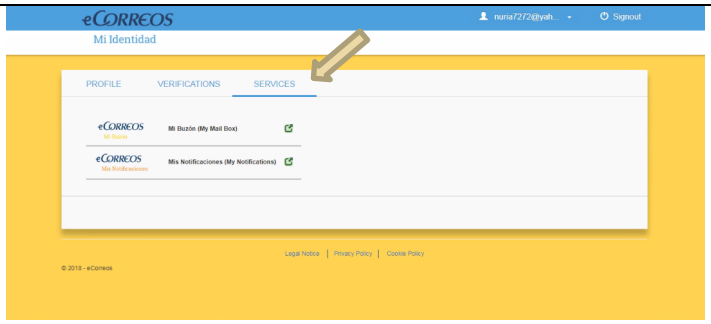
15. The user fills the form and clicks on the Accept button and accepts term and conditions.



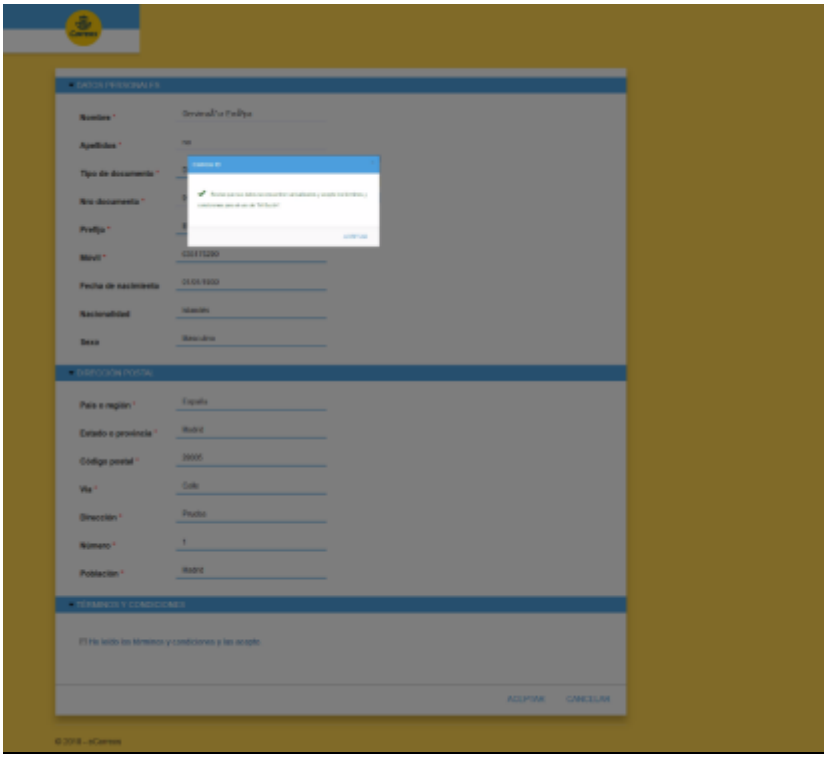
16. MyIdentity service informs the user the registration process was successful.



17. Now, the Icelandic user has access to the Correos' services. Clicking on the Services tag a list of available services is displayed



18. By Clicking on the MyNotifications icon, the user has access to the selected service.



Before accessing the service, the user should accept terms and conditions by checking the checkbox.

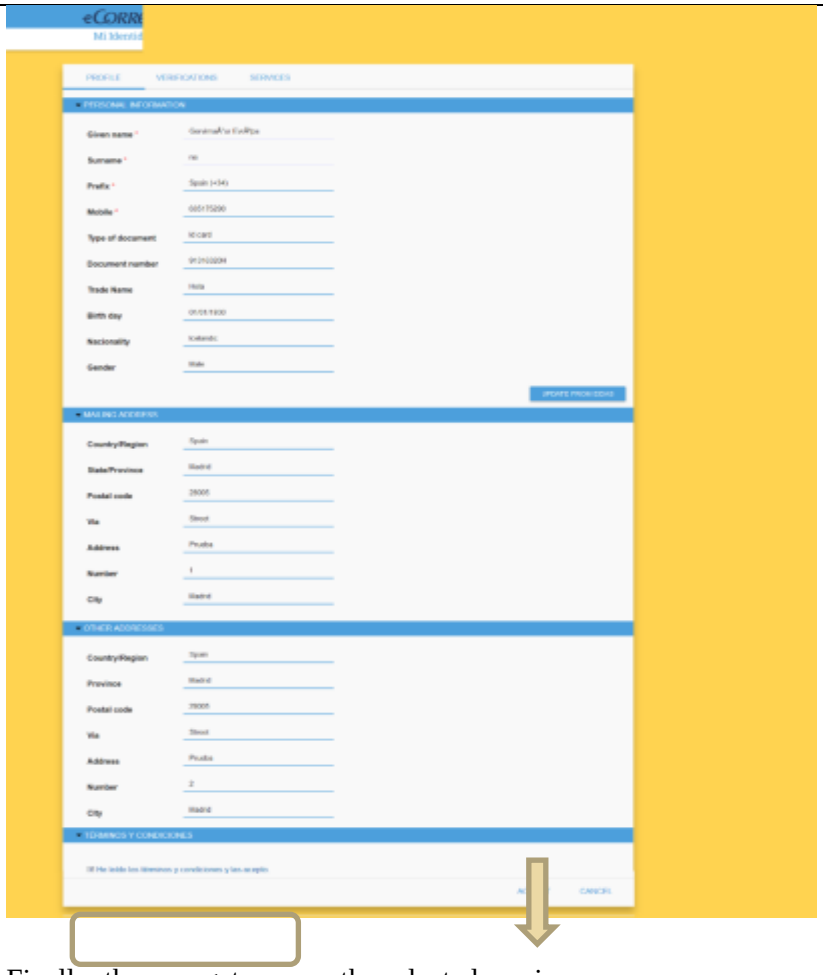
	 19. Finally, the user gets access the selected service.
Result	Icelandic user is successfully authenticated and ready to register in Correos MyIdentity service. Finally, the Icelandic user is able to access MyNotifications service.

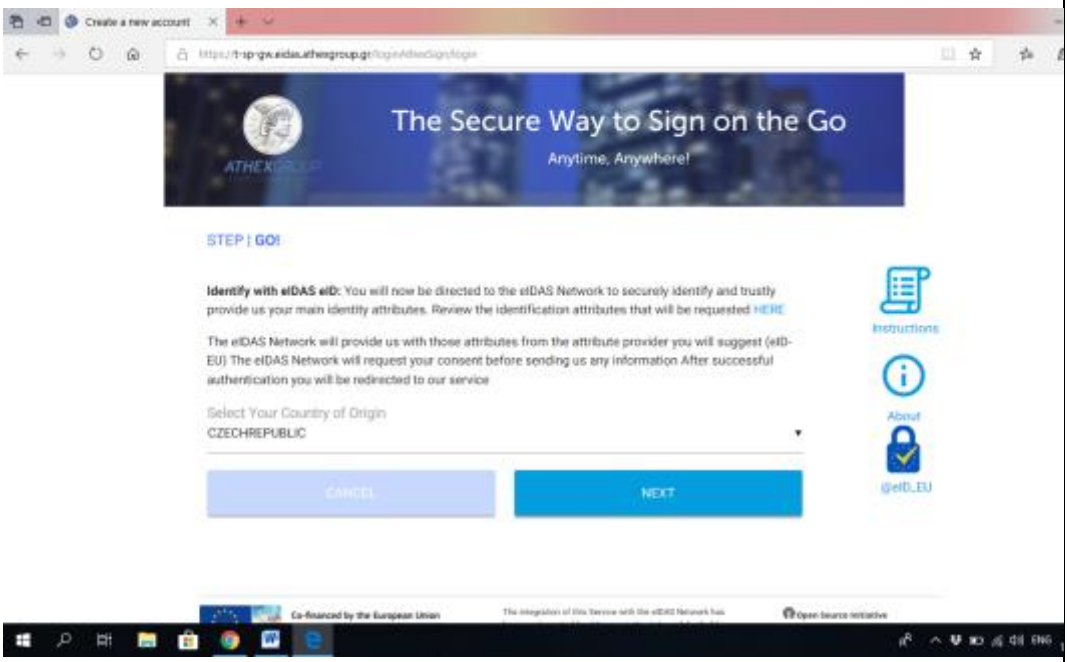
Table 4-11: A user from Iceland requests access to a Service Provider of Correos (Spain).

4.6.3 "Czech Republic"

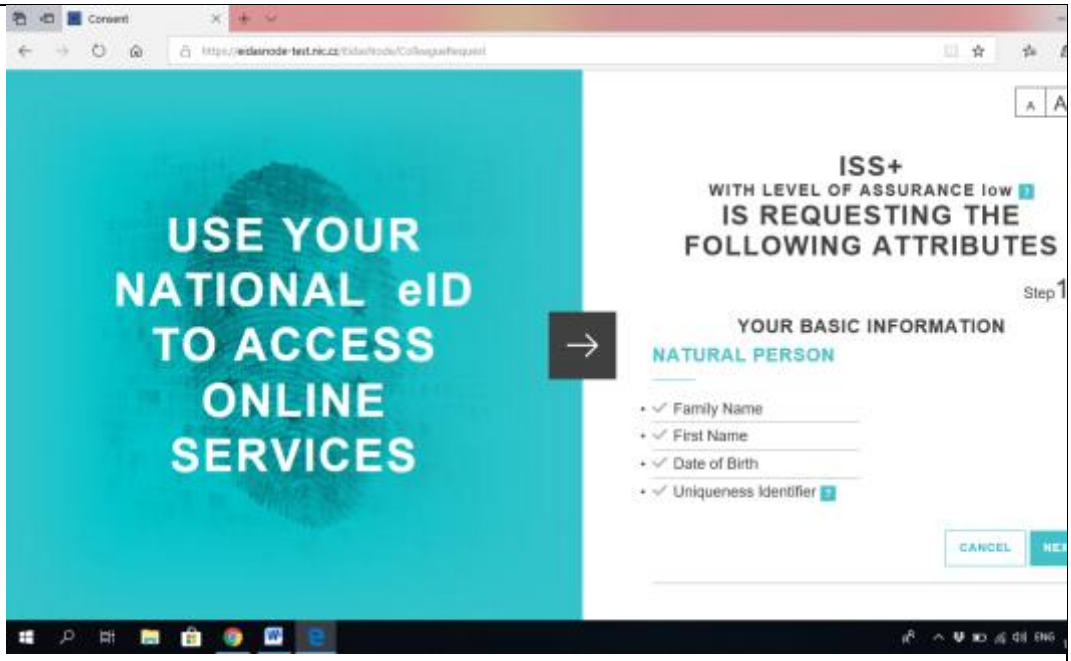
This test case has been performed using Czech Republic test credentials (test profile). The first test case tested with the Czech Republic credentials is the ATHEX TC 1 accessing ATHEX Sign service.

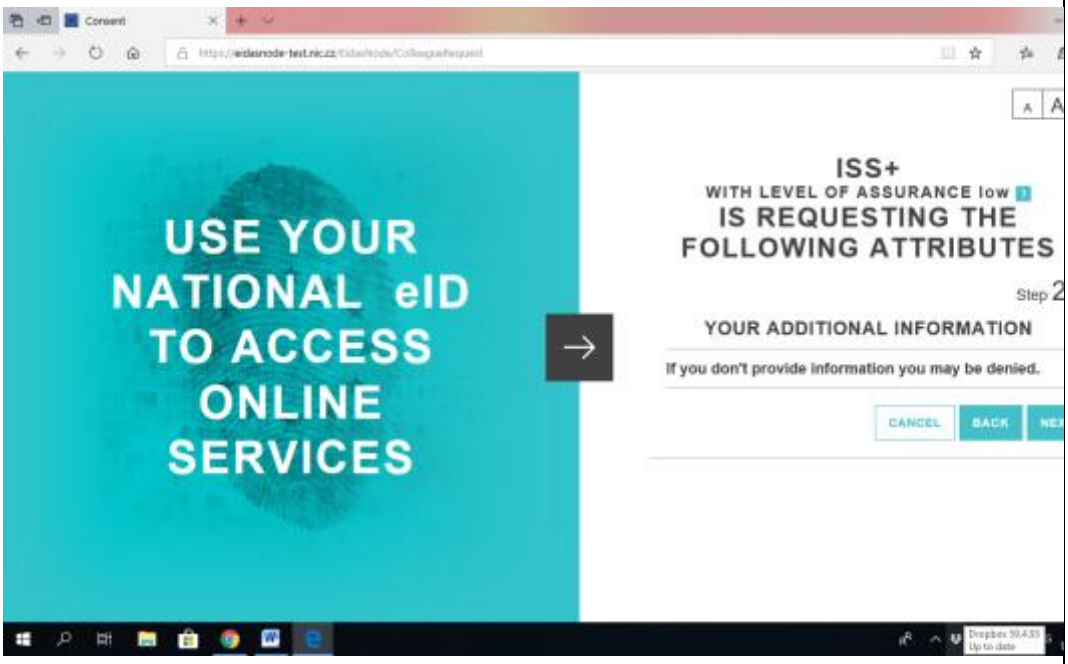
Description	A user from Czech Republic wants to register in AthexSign Service Provider. Czech Republic user will use his/her eID provided by Czech Republic Authorities in order to authenticate himself/herself against AthexSign Service Provider. AthexSign Service Provider is registered in Czech Republic eIDAS node. The user from Czech Republic is a valid user for eIDAS and holds a valid eID card.
Process and Screenshots	1. The user from Czech Republic accesses AthexSign Service Provider through the following url: https://test-athex-sign.athexgroup.gr/ 2. Czech Republic user selects to apply via eIDAS by clicking on "Sign Up" link.

3. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters). User selects country of origin "CZECHREPUBLIC" and click on "NEXT".



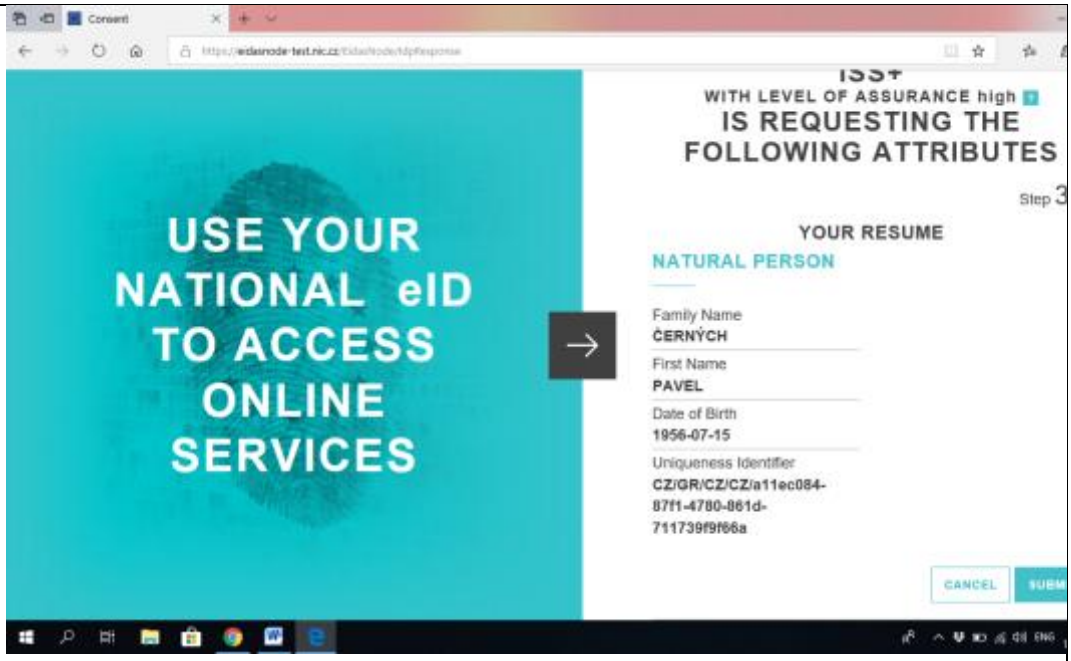
4. User is automatically redirected to Czech Republic eIDAS Node in order to provide pre-consent.



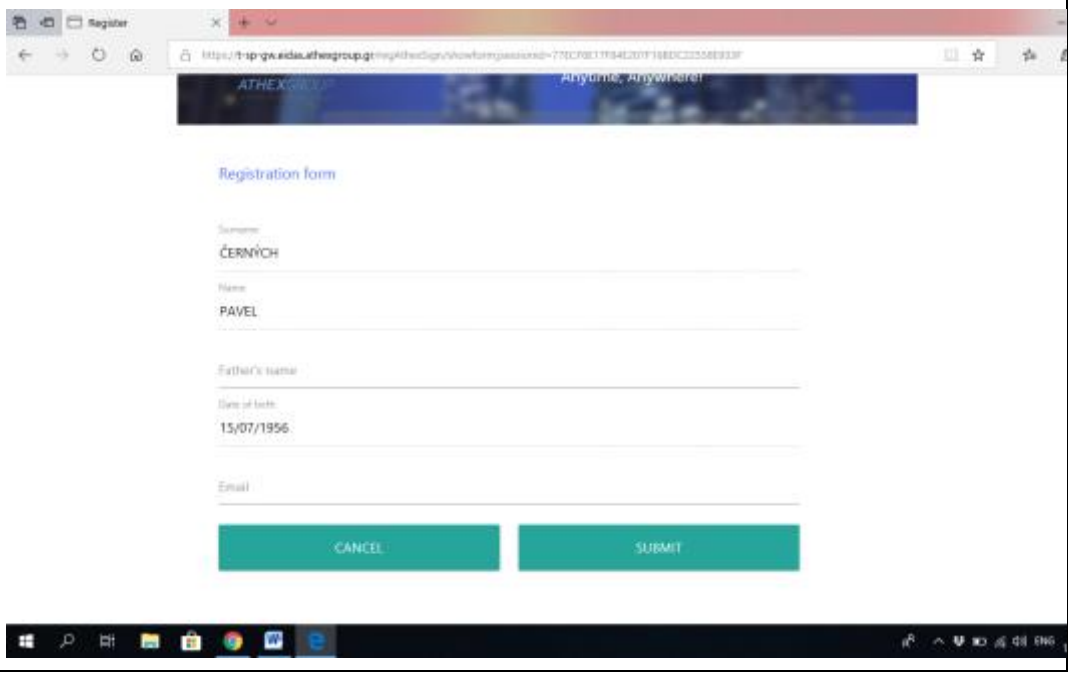


5. User is automatically redirected to Czech Republic Idp. In this test case we select "Test Profile" and the test user we want to use (here we select the test user Kacha1).

6. User is redirected to the Czech Republic eIDAS Node in order to provide consent.



7. Upon successful authentication, user is redirected to AthexSign registration form where he/has to fill in only the email and father's name fields. The fields name, surname, birth date are already filled in.



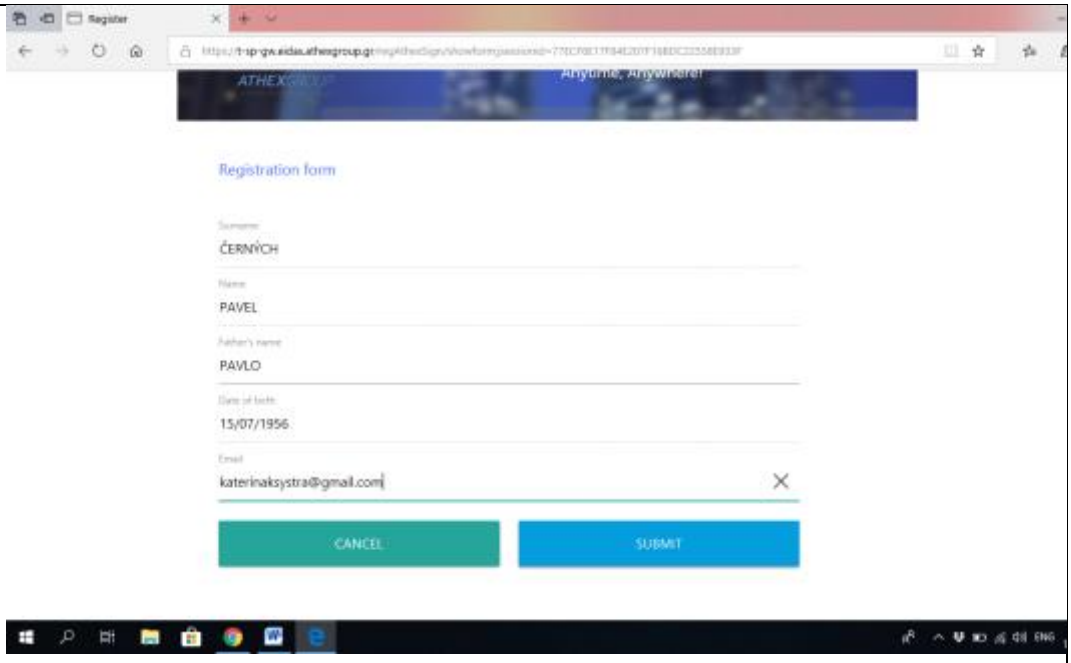
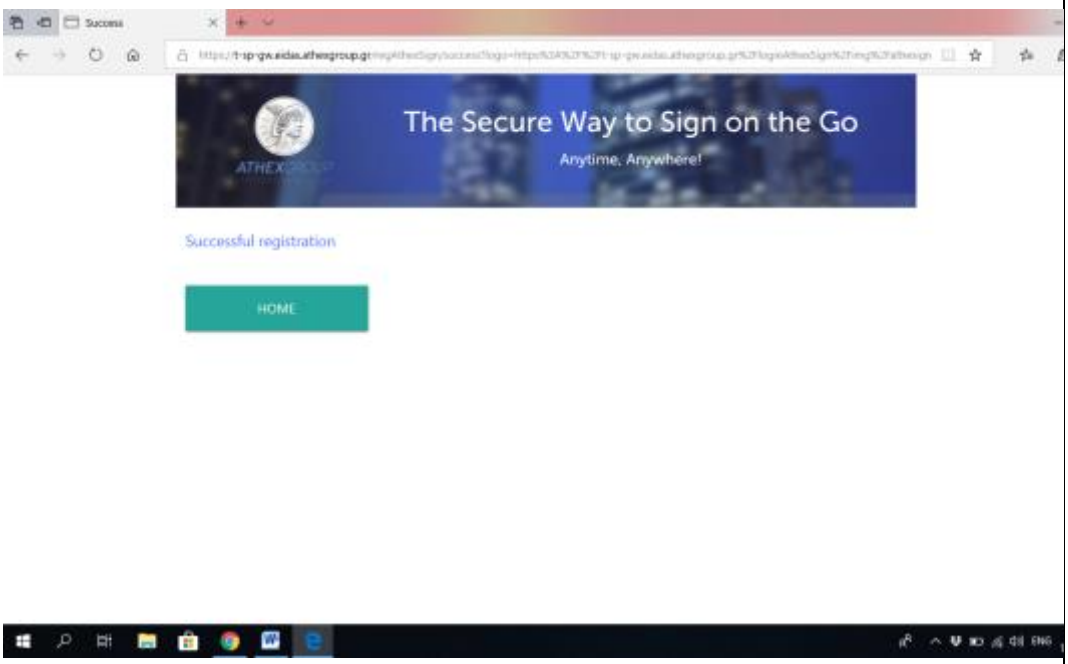
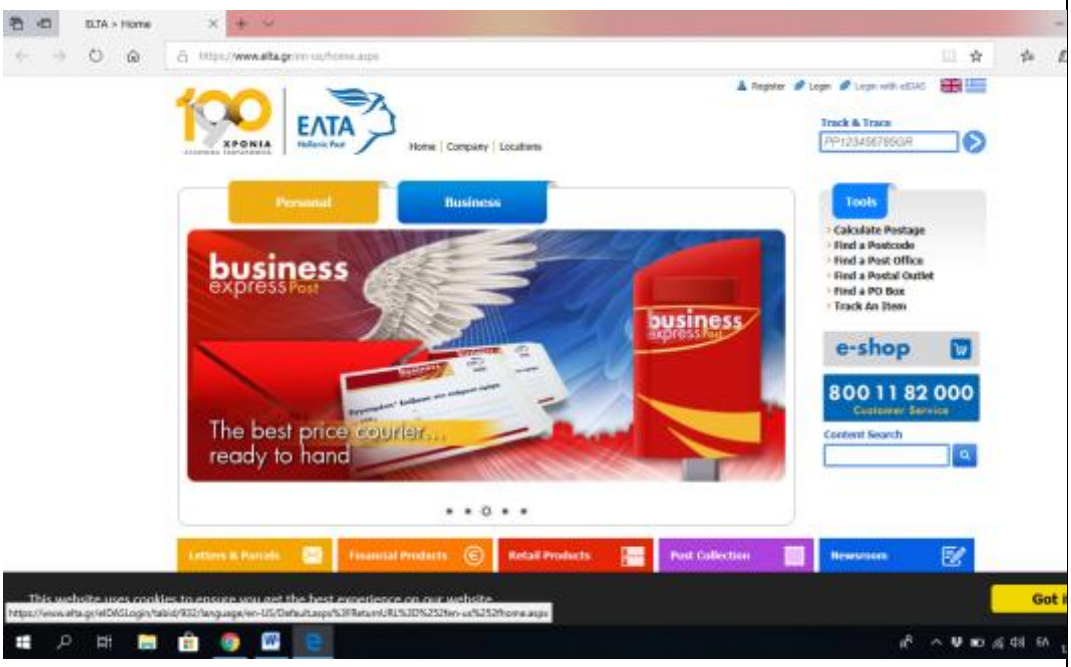
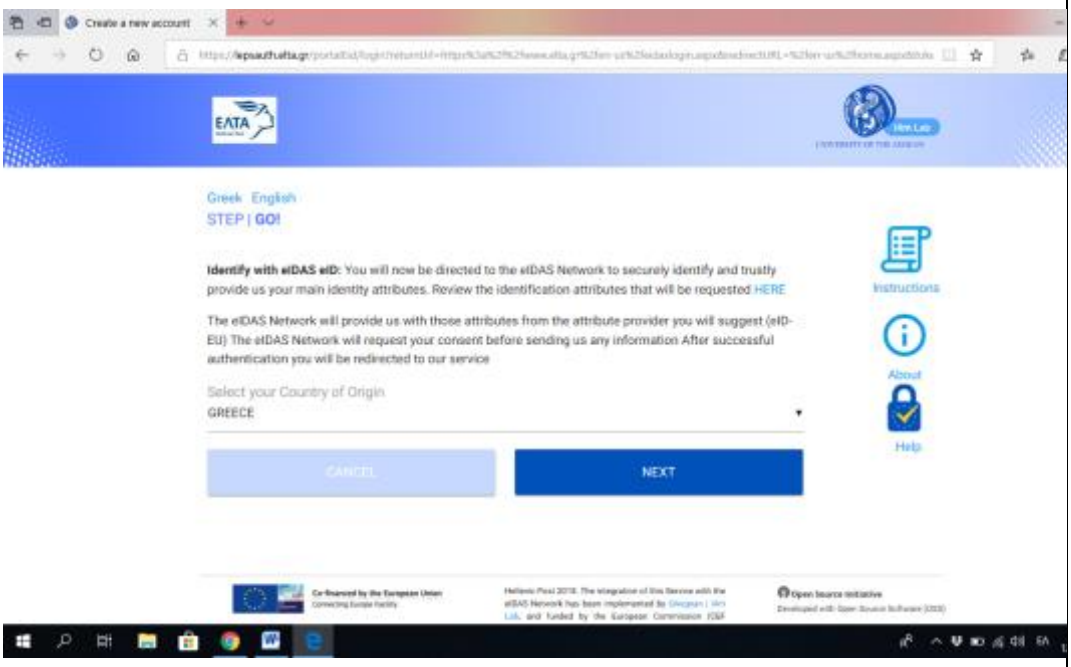
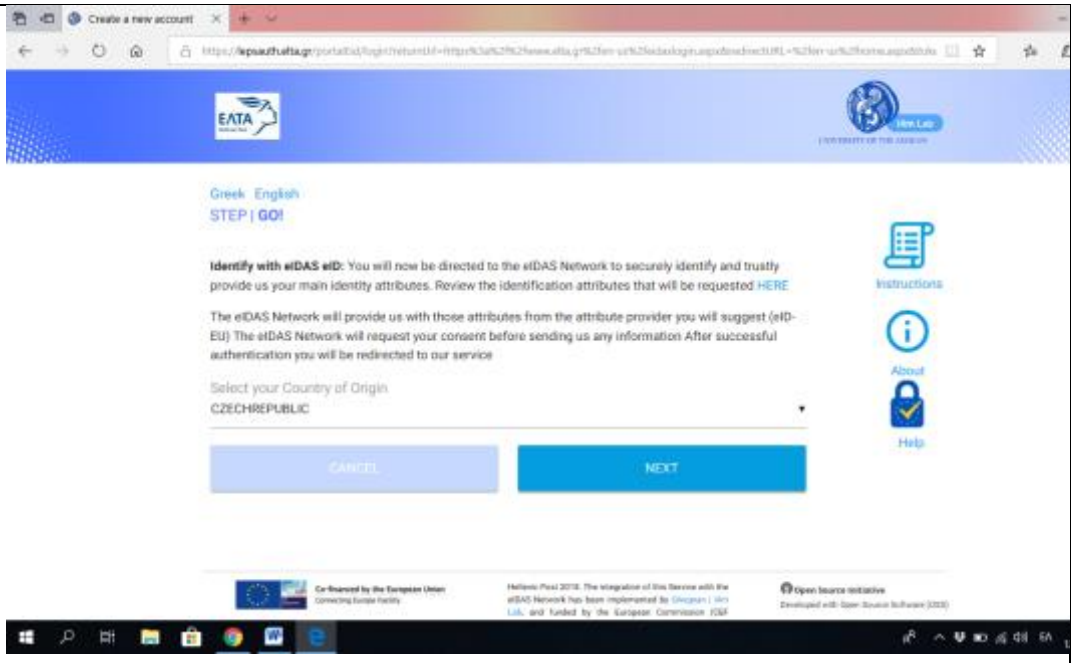
	 8. User is successfully registered to the service. 
Result	Czech Republic user is successfully authenticated and ready to register in AthexSign service

Table 4-12: A user from Czech Republic wants to register in AthexSign Service Provider.

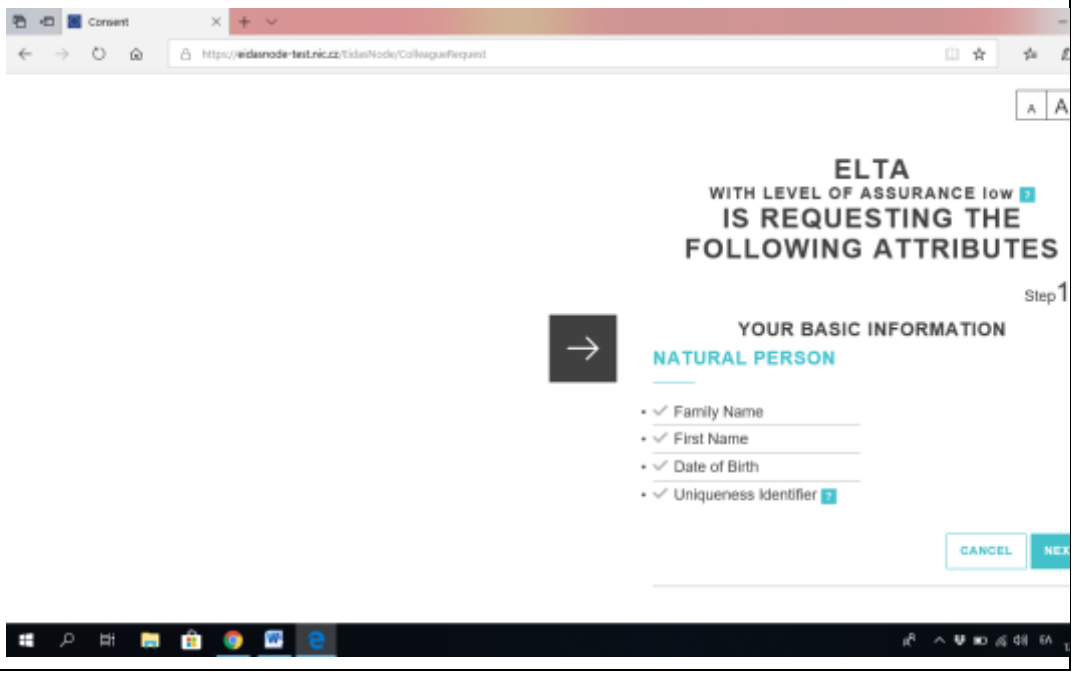
This test case has been performed using Czech Republic test credentials (test profile). The second test case tested with the Czech Republic credentials is the ELTAPORTAL-TR1 accessing ELTA Portal service.

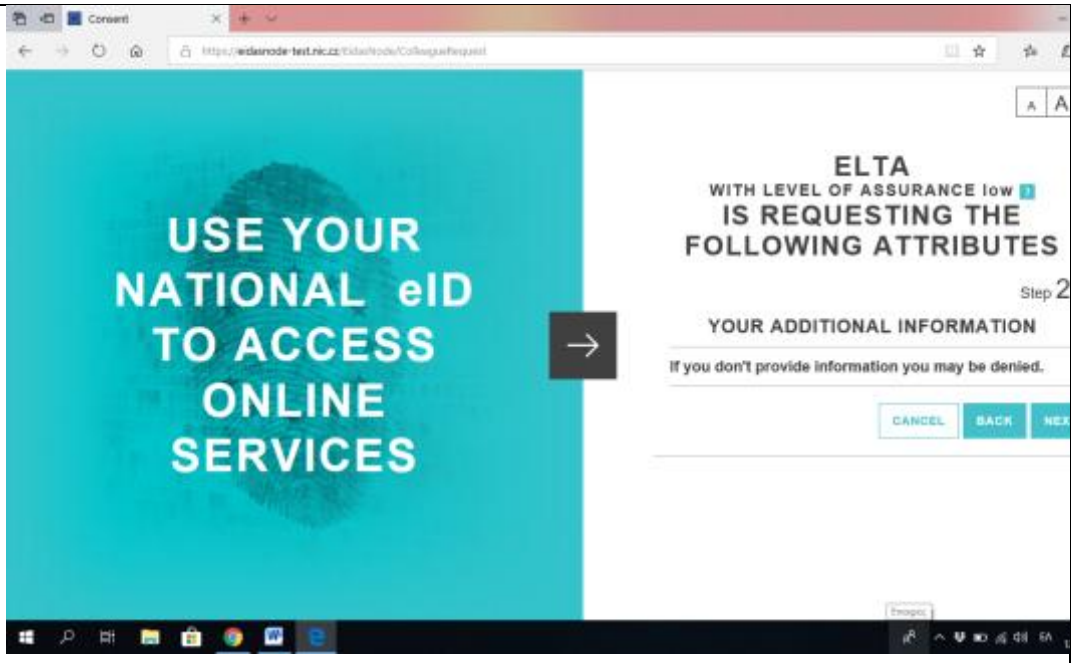
Description	A Czech User successfully registers to ELTA portal / e-Shop (Service: registration via eIDAS eID). The user was not previously registered in the Portal or e-Shop.

Process and screenshots	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS"  2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)  3. User selects country of origin "CZECHREPUBLIC" and click on "NEXT".

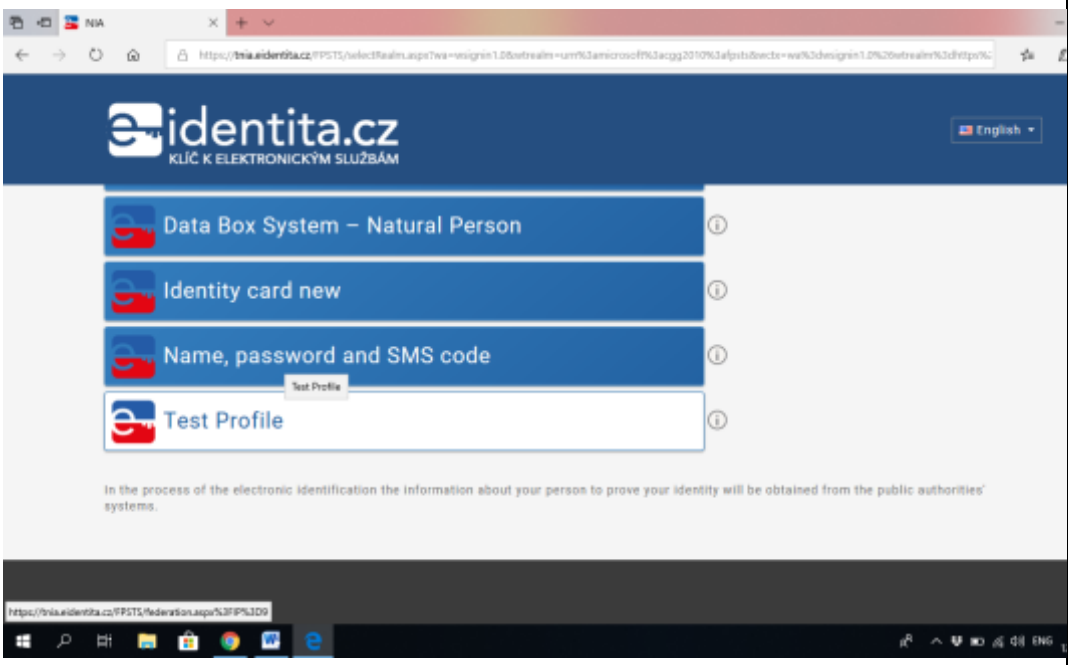


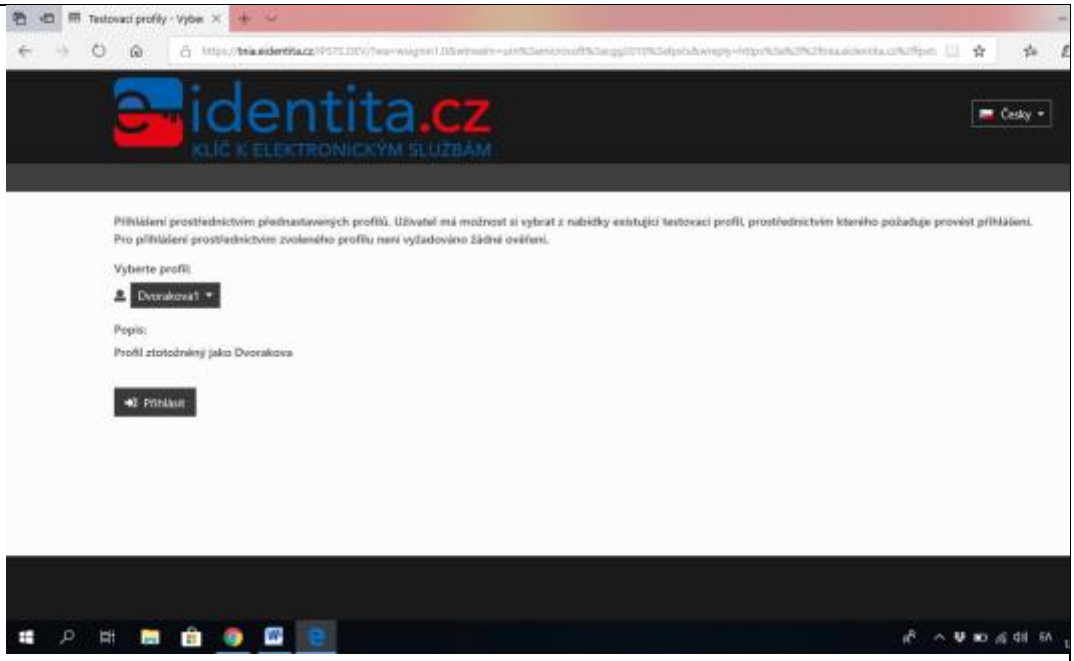
4. User is automatically redirected to Czech Republic eIDAS Node in order to provide pre-consent.



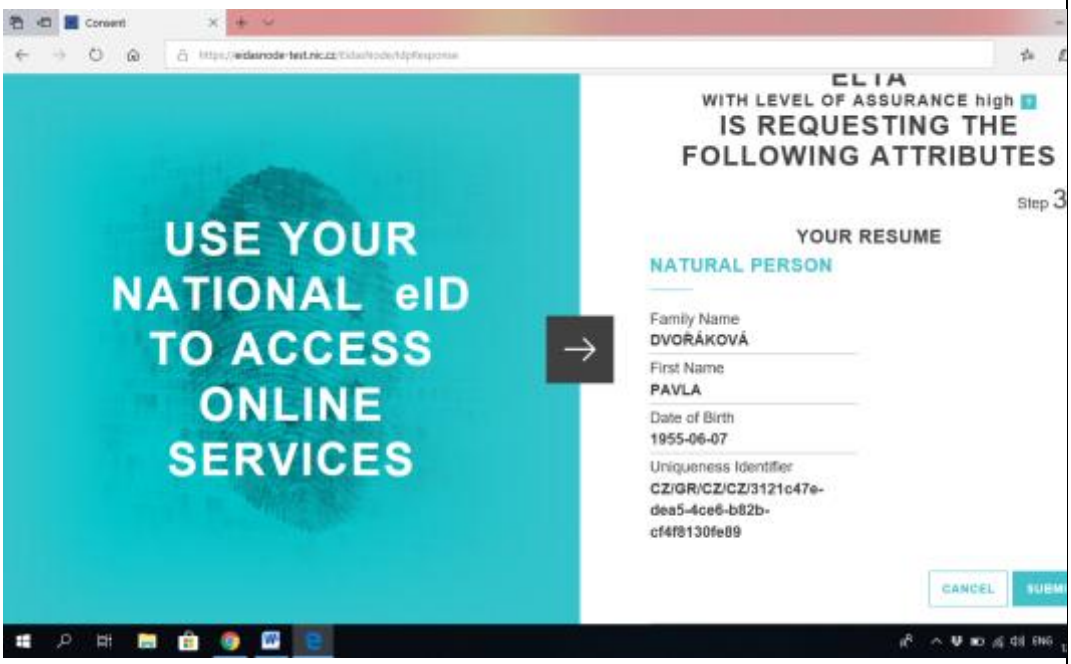


5. User is automatically redirected to Czech Republic Idp. In this test case we select "Test Profile" and the test user we want to use (here we select the test user DVOŘÁKOVÁ)

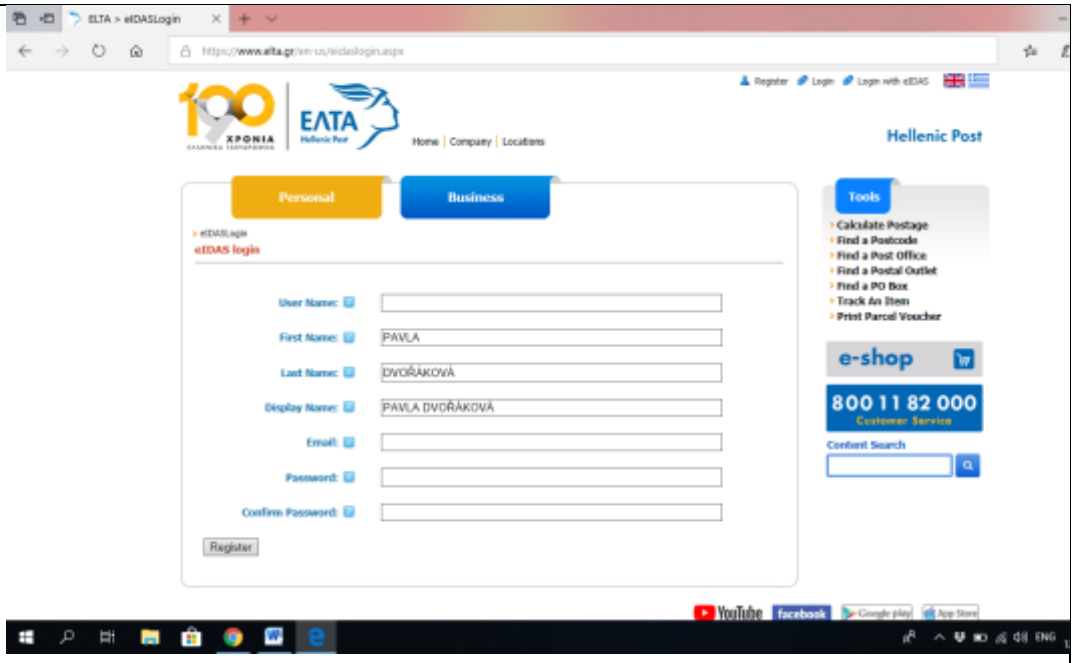


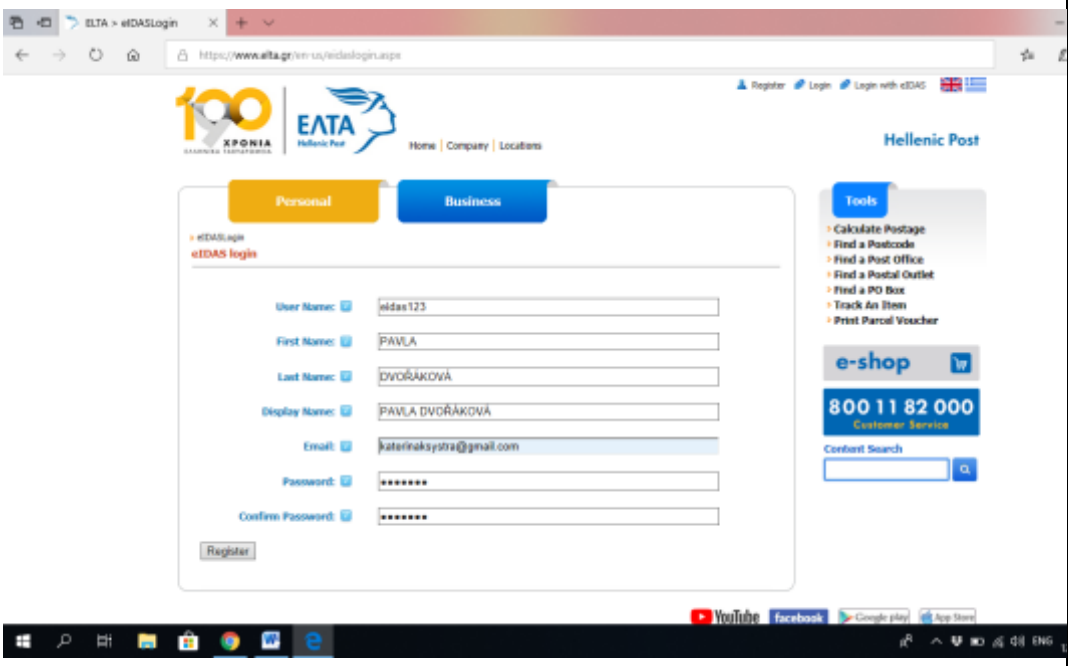


6. User is redirected to the Czech Republic eIDAS Node in order to provide consent.



7. User is automatically redirected to the ELTA Register Form URL https://www.elta.gr/en-us/eidaslogin.aspx (User must complete the necessary information, for example username, email, password, confirm password) and click on "Register"





8. User is redirected to the ELTA home page of Portal or eShop (English version) http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx (depending on the starting point) - The page shows the name of the User

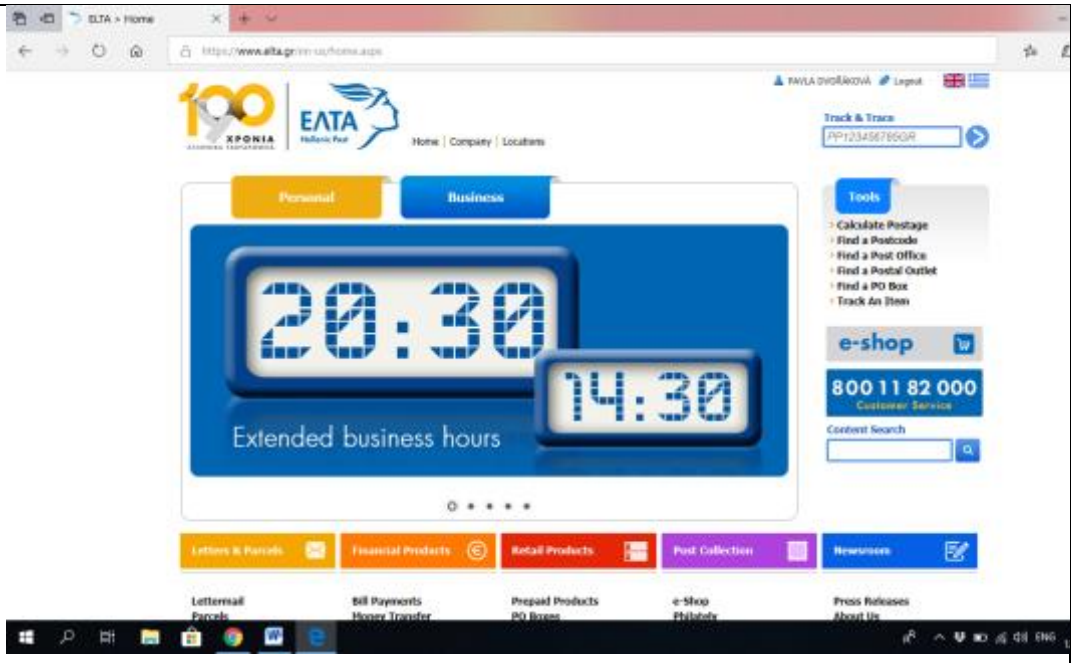
	
Result	The SP grants User access to ELTA Portal and eShop (after registration) Ending Event: The User accesses the ELTA Home Page (or e-Shop Home Page)

Table 4-13: A Czech User successfully registers to ELTA portal / e-Shop (Service.

4.7 Evaluation & Lessons learnt

The automated test cases performance has been made through the eCATS tool developed by UAEGEAN [4]. eCATS provides a helpful instrument for checking the appropriate operation of the different elements participating during the authentication process using the eIDAS infrastructure.
As indicated in section 3.1.4 the use of eCATS tool implies the participation of different actors and the execution of different tasks for developing the automated tests as follows:

- Installation of eCATS tool;
- eCATS configuration;
- Identification of the page elements to interact with;
- Implementation of automated scripts, following the planned test cases;
- Obtain the right data to be included into the script. This includes identifiers, names, and test credentials, among other data;
- Analyse the logs created after running the automated tool.

After running the eCATS tool on the integrated services with eIDAS network in pre-production environment from ATHEX, Correos and ELTA, the following aspects must be taken into account in order to obtain the adequate results.

1. Regarding the eCATS installation and the following configuration, some partners had some issues during the process. The provided guidelines and instructions for eCATS installation and use provided by UAEGEAN were very helpful. This guide will be included on the D2.1 Business and Technical Design for the effective use of eID DSI (to be submitted in November 2018) [5].
2. As the eCATS tool has external dependencies like Firefox Nightly, it is very important to check the installed version and control the automated update, because can cause unexpected problems. These recommendations will also be included into the guidelines.

3. Due to the wide variety of elements a page can include, it is important that all the elements in the page, to be manipulated by the tool, must have an "id". Also, the page element to be manipulated must be supported by the tool.
4. In some cases, not all the page elements were available to use in the scripts. For instance, the use of OTP sent to the mobile phone must be included manually during the automated flow. Also, a verification code can be sent to an email address and must be manually included in the page. With the aim to have enough time for receiving the OTP or the code, and entering this input in the page, a configurable delay was included for each page. This give the sufficient time for receiving and entering the code.
5. As the automated tool is intended to be used in pre-production environment, this means that not only the services tested, but the eIDAS node can be updated and modified, it means that the sstability of eIDAS nodes and services can lead to misleading error reports from automated test.
6. In relation with the analysis of the automated test results, currently the logs are checked manually. As a good improvement of the eCATS tool would be to provide a graphic admin interface in order to extracting results from the log file and display these results in a friendly way.

For a future use of the eCATS tool in production environments is worth to remark the following:

- The automated tool eCATS is proved to be very useful as a monitoring tool when changes to the services were made or even when the services or the nodes are down.
- For checking the authentication flow using this tool in production environment, it would be needed to have a “testing” credential accepted by production IdPs, which would be difficult in most of the cases.
- In the other hand, the use of this tool in production environment will increase the traffic load on the eIDAS network, which can be a drawback for using this tool. Run the tool on daily basis or on low traffic slots could be a solution.

As a summary of this section can be concluded that the delivery of a eCATS tool guide is a must, and the proof that this automated tool will be useful for monitoring services and nodes operation.

5 "Preparation of tests in production"

This section contains the description of the tests used in the production environment in order to check the successful integration of Correos, ATHEX and ELTA services with the eIDAS Node. These tests are the same with to those used in pre-production which are presented in section 3 "Preparation of tests in pre-production". The differences are that in production environment we only test success test cases and real credentials will be used, as shown in the tables below.

5.1 CORREOS Test Cases

This table presents the test cases used in order to check the services of Correos.

Test id	Description
Test Case 1 - SP registration in My Identity	A user from MS A (Greece) requests access to My Identity service of Correos SP in MS B (Spain). The user wasn't previously registered in the SP.
Test Case 2 – Basic login and access to My Identity	A user from MS A (Greece) requests access to My Identity service of Correos SP in MS B (Spain). User was pre-registered in the SP.
Test Case 6 – Access to My Mailbox service	A user from MS A (Greece) which is logged in My Identity of Correos SP click to the tag "Services". The user selects My Mailbox service.
Test Case 7 – Access to My Notifications service	A user from MS A (Greece) which is logged in My Identity of Correos SP click to the tag "Services". The user selects My Notifications service.

Table 5-1: Tests used in production for Correos services.

5.2 ATHEX Test Cases

This table presents the test cases used in order to check the services of ATHEX.

Test id	Description
Test Case 1 - ATHEX Sign Successful	A user from Spain wants to register in AthexSign Service Provider. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against AthexSign Service Provider.

Authentication	
Test Case 3 – ATHEX AXIAweb Successful Authentication and logon	A user from Spain wants to register in AthexSign Service Provider. Spanish user will use his/her eID provided by Spanish Authorities in order to authenticate himself/herself against AthexSign Service Provider.
Test Case 5 – ATHEX IDP Successful Authentication	A user from Greece requests access to a Spanish Service Provider. Greek user will use ATHEX IDP in order to authenticate himself/herself against Spanish Service Provider.

Table 5-2: Tests used in production for ATHEX services.

5.3 ELTA Test Cases

This table presents the test cases used in order to check the services of ELTA.

Elta Portal/ e-shop/Test id	**Description**
Test Case 1 - Registered User Normal Login Flow to Elta portal [ELTAPORTAL-TR1]	A User successfully registers to ELTA portal / e-Shop (Service: registration via eIDAS eID).
Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAPORTAL-TL1]	A Registered User requires access to ELTA portal (Service: authentication via eIDAS eID).
Test Case 9 - Registered User Normal Login Flow [ELTAESHOP-TL1]	A Registered User requires access to ELTA e-Shop (Service: authentication via eIDAS eID).
Elta Parcel Delivery Voucher/Test id	
Test Case 1 - User	A User successfully registers to ELTA BUSINESS APPLICATIONS

Registration Normal Flow (eIDAS eID)[ELTAVOUCHER-TR1]	(Parcel Delivery Voucher) (Service: registration via eIDAS eID)
Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAVOUCHER-TL1]	A Registered User requires access to ELTA BUSINESS APPLICATIONS (Parcel Delivery Voucher) (Service: authentication via eIDAS eID)
Elta Zip Codes/Test id	
	A User successfully registers to ELTA BUSINESS APPLICATIONS (Zip Codes) (Service: registration via eIDAS eID)
Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAZIPCODES-TL1]	A Registered User requires access to ELTA BUSINESS APPLICATIONS (Zip Codes) (Service: authentication via eIDAS eID)
ELTA eDelivery Hybrid Mail Service /Test id	
Test Case 1 - User Registration Normal Flow (eIDAS eID) [ELTAHYBRID-TL1]	A User successfully registers to ELTA eDelivery Hybrid Mail Service (Service: registration via eIDAS eID)

Table 5-3: Tests used in production for ELTA services.

5.4 Mobile Test Cases

The mobile test cases used in production environment are presented in the tables below.

5.4.1 Test Case 1 – Access ELTA BUSINESS APPLICATIONS (Buy Online Zip Codes) Services via eIDASBrowser Android APP with NFC DNIe authentication

Description	A Spanish user with NFC enabled Android Phone and NFC enabled DNIe wants to purchase Zip Codes from ELTA
Preconditions	The user has a valid Spanish eID credential with NFC. The user has an Android Mobile phone with NFC support. The user has previously installed the eIDASbrowser app.
Process	1. The user introduces the URL https://eltab2b.gr/en/zip-codes and click on "START BROWSING" button. Alternatively, the user can press the ELTA logo button and the press on "ZIP-Codes" button just to fill the url field. 2. The user is redirected to Elta's zip-codes page where a "Login with eIDAS eID" button needs to be pressed to start the authentication process. 3. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 4. User selects country of origin "SPAIN" and click on "NEXT". 5. User is automatically redirected to Spanish IdP to authenticate via her/his eID card 6. Pop-up appears asking the user for authenticating with software certificate or DNIe 3.0 (Spain). The user selects the last 7. The user is requested to associate the identity card by inserting the CAN number, printed on the id card. 8. The system reads the data from the card and creates the association. 9. The user can then select that card to be part of the authentication process. The association is stored for future processes, avoiding repeating steps 7 and 8. 10. The user is requested for the password of the card. 11. User is redirected to the buy codes page where the "Add to Cart" button appears to add Zip-Codes to the shopping cart. The "Check Out Now" button proceeds with the purchase. A new page is loaded. The "Confirm Purchase" button allows the user to proceed to the payment process.
Result	The SP grants User access to My Basket (after login) The user is presented with the "Confirm Purchase" page.

Table 5-4: Test Case 1 – Access ELTA BUSINESS APPLICATIONS (Buy Online Zip Codes) Services via eIDASBrowser Android APP with NFC DNIe authentication

5.4.2 Test Case 2 – Access ATHEX Corporate Applications (AthexSign) Services via eIDASBrowser Android APP with NFC DNIe authentication

Description	A Spanish user with NFC enabled Android Phone and NFC enabled DNIe wants to access Athex Sign Service
Preconditions	The user has a valid Spanish eID credential with NFC. The user has an Android Mobile phone with NFC support. The user has previously installed the eIDASbrowser app.
Process	1. The user introduces the URL https://athex-sign.athexgroup.gr and click on "START BROWSING" button. Alternatively the user can press the ATHEX logo button and the press on "ZIP-Athex Sign" button just to fill the url field. 2. The user is redirected to Athex's Login page where a "Apply via eIDAS – Sing Up" button needs to be pressed to start the authentication process. 3. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 4. User selects country of origin "SPAIN" and click on "NEXT". 5. User is automatically redirected to Spanish IdP to authenticate via her/his eID card 6. Pop-up appears asking the user for authenticating with software certificate or DNIe 3.0 (Spain). The user selects the last 7. The user is requested to associate the identity card by inserting the CAN number, printed on the id card. 8. The system reads the data from the card and creates the association. 9. The user can then select that card to be part of the authentication process. The association is stored for future processes, avoiding to repeat steps 7 and 8. 10. The user is requested for the password of the card. 11. User is redirected to the Registration form. 12. When SUBMIT button is pressed the user is registered and an email with the subject "Qualified Digital Certificate Economic Offer" is received in the user's email account. 13. The "Confirm Purchase" button allows the user to proceed to the payment process.
Result	The user receives the "Qualified Digital Certificate Economic Offer" email.

Table 5-5: Test Case 2 – Access ATHEX Corporate Applications (AthexSign) Services via eIDASBrowser Android APP with NFC DNIe authentication

6 "Execution and documentation of production tests"

This section is intended to provide the results of the production tests of Correos, ATHEX and ELTA services, performed during T6.4: Execution and documentation of production tests. Section 5.1 contains the description of the production environment for performing the tests execution of SP services and sections 6.2, 6.3and 6.4present the execution results of the tests of Correos, ATHEX and ELTA services respectively. Section 6.5 provides the mobile execution test results while section 6.6presents lessons learnt.

6.1 "Production environment features for test execution"

This subsection will provide an overview of the production environment and the elements involved and particularities for performing the test execution on the different infrastructures.

The deployment of the required software modules for the production environment of Correos, ATHEX and ELTA services (besides the Spanish and Greek eIDAS Nodes in production and pre-production) took place in hosts with the following characteristics:

Component	Deployment features
eIDAS Adapter	Memory 15GB CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) Web Server: Tomcat 8.0.46-jre8
ELTA Services eIDAS ISS 2.0	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Web Server: Tomcat 8.0.46-jre8 Memory 8GB
ELTA TWA (Portal, Zipcodes)	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Memory 8GB
ELTA eIDAS WebApp	Operating system: Ubuntu 16.04.4 LTS (GNU/Linux 4.4.0-121-generic x86_64) CPU: Intel(R) Xeon(R) CPU E5645

	@ 2.40GHz Memory 8GB
ATHEX eIDAS ISS 2.0	CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Memory: 8GB Operating system: RED HAT Enterprise Linux 6 Web Server: Tomcat 8.0.46-jre8
ATHEX TWA (ATHEXSig, AxiaWeb)	CPU: Intel(R) Xeon(R) CPU E5645 @ 2.40GHz Memory: 8GB Operating system: RED HAT Enterprise Linux 6 Web Server: Tomcat 8.0.46-jre8

Table 6-1: Deployment features of production components for eIDAS infrastructure.

The manual tests have been executed in computers with the following features:

Component	Deployment features
Correos services	Processor Intel(R) core(TM) i7-8550U CPU @ 1.80GHz RAM 16GB Windows 10 Home (64bit) 13.3' 4K Screen Chrome (69.0.3497.100 (64 bit))
ATHEX services	
- ATHEX Sign	Windows 7 (64 bits) Processor: Intel® Core(TM) i5-5300U CPU @ 2.30GHz 2,30 GHz RAM: 8 GB Hard Disk: 500 GB Chrome Version: 69.0.3497.100 (Build official) (64 bits)
- AxiaWeb	Windows 7 (64 bits) Processor: Intel® Core(TM) i5-5300U CPU @ 2.30GHz 2,30 GHz RAM: 8 GB Hard Disk: 500 GB Chrome Version: 69.0.3497.100 (Build official) (64 bits)
ELTA services	
- ELTA Portal	Intel (R) Pentium (R)

	CPU G2030 @ 3.00GHz. RAM 4GB Windows 7 Professional (32 bit) Chrome (69.0.3497.100 (32 bit))
- ELTA eShop	Intel (R) Pentium (R) CPU G2030 @ 3.00GHz. RAM 4GB Windows 7 Professional (32 bit) Chrome (69.0.3497.100 (32 bit))
- ELTA Parcel Voucher	Intel (R) Pentium (R) CPU G2030 @ 3.00GHz. RAM 4GB Windows 7 Professional (32 bit) Chrome (69.0.3497.100 (32 bit))
- ELTA ZipCodes	Intel® Core(TM) i5-6300U CPU @ 2.40GHz 2,50 GHz Hard Disk: 256 GB SSD RAM 16 GB Windows 7 (64 bits) Internet explorer 11.0.9600.19129
- ELTA e-Delivery Hybrid Service	Intel® Core(TM) i5-6300U CPU @ 2.40GHz 2,50 GHz Hard Disk: 256 GB SSD RAM 16 GB Windows 7 (64 bits) Internet explorer 11.0.9600.19129

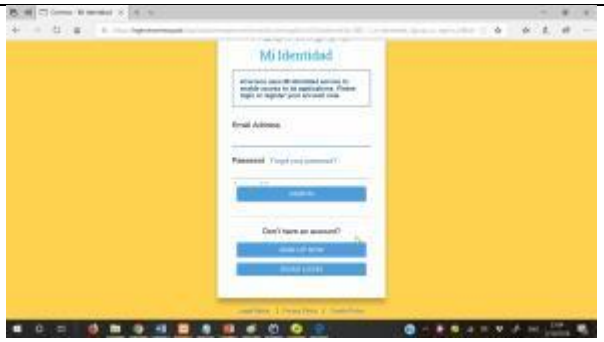
Table 6-2: Deployment features of production components for SP services.

6.2 Correos execution tests results

This section contains a set of production tests for the Correos services.

6.2.1 Test Case 1 – SP registration in My Identity

Process and screenshots	1.	Access to the service and then is redirected to Correos ID for login or directly access to Correos ID (URL https://miidentidadpre2.azurewebsites.net) and click on “authenticate with eIDAS”.

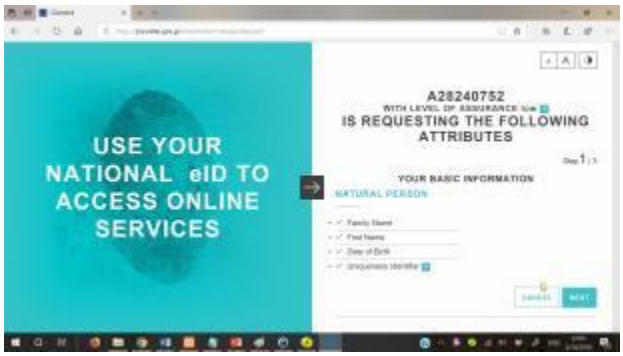


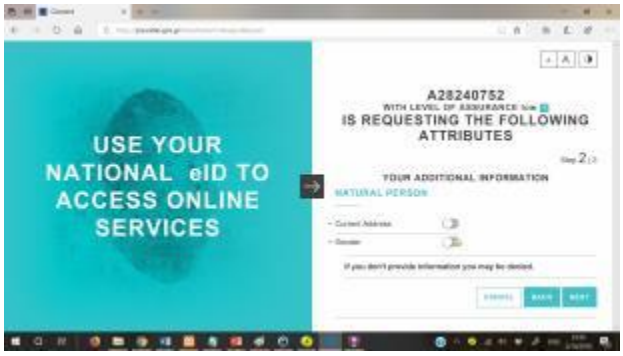
2. The user is redirected to eIDAS adapter.

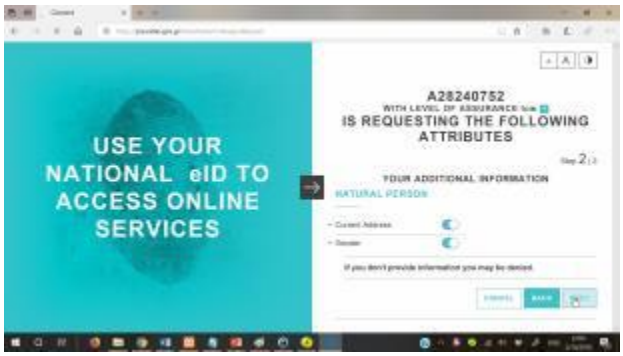
3. The eIDAS adapter page asks the user for the country and user consent. The page is showing the right requested data and the user performs the selection correctly and clicks submit.

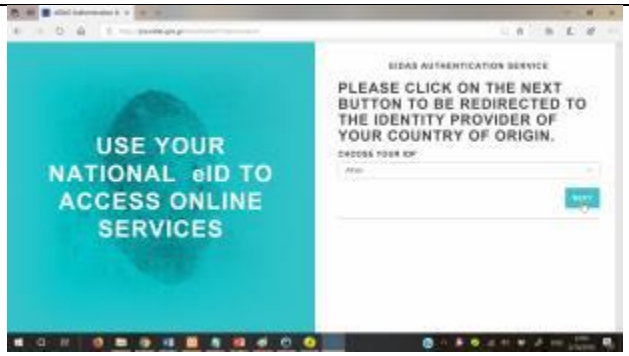
4. The user is redirected to the eIDAS network.

5. The user authenticates with his electronic identity.
   a. The MS A (Greece) IdP asks for credentials,

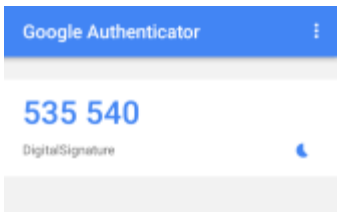


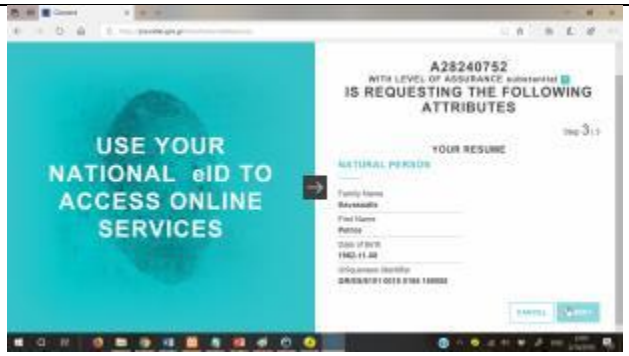




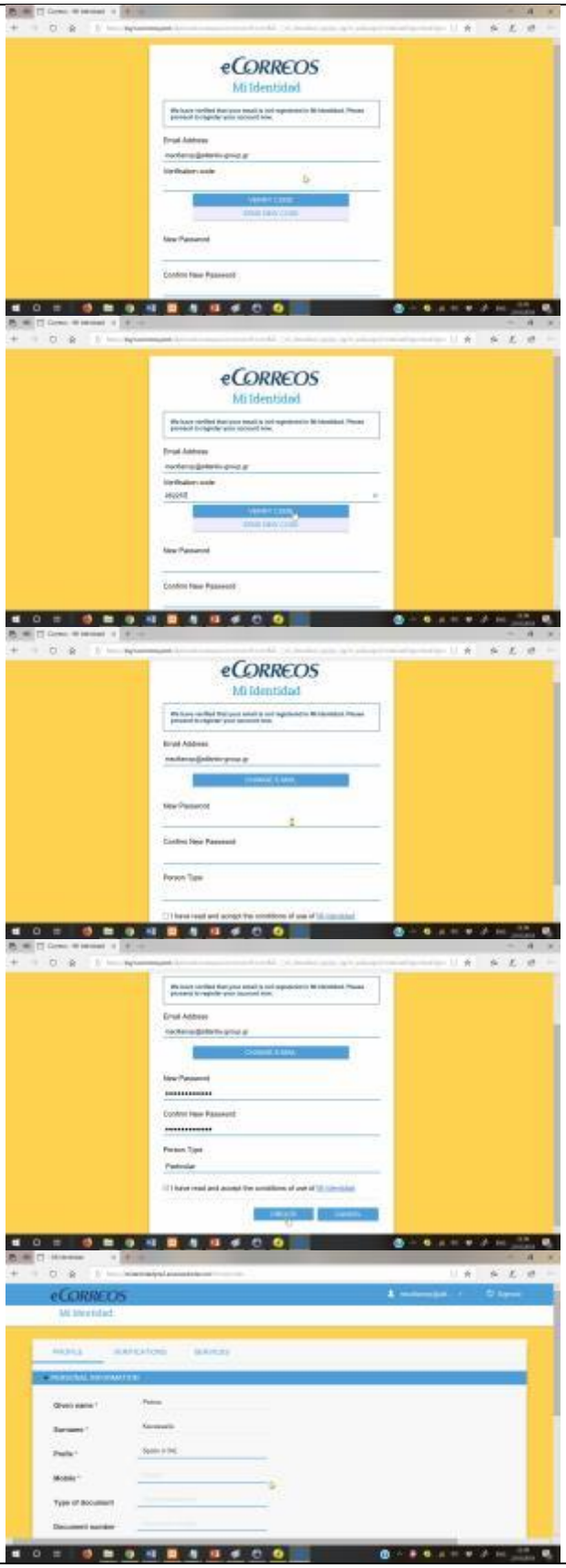


b. The user provides right credentials.





6. The user is redirected to eIDAS network and so to eIDAS adapter which validates the response. SP checks that the user was not previously registered in the specific service and asks for registration; once is done successfully, SP grants access to the service My Identity.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Mi Identidad
eCORREOS
Mi Identidad
eCORREOS
Mi Identidad

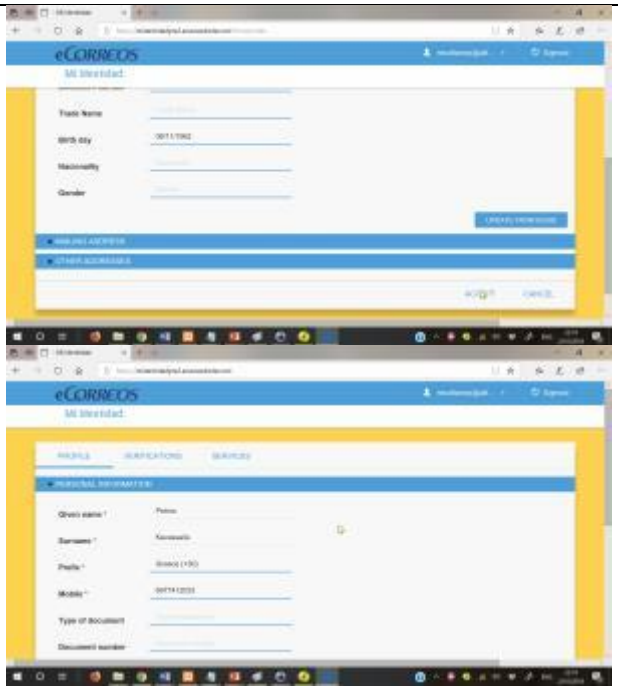
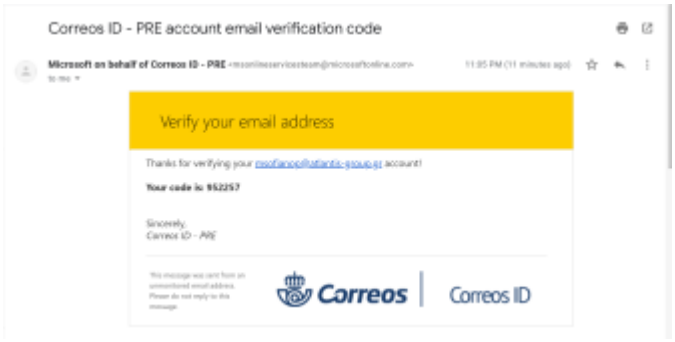
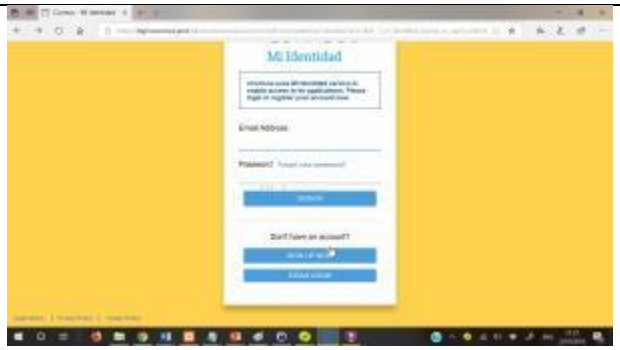
	 
Result	The SP grants user access to My Identity after registration

Table 6-3: SP registration in My Identity.

6.2.2 Test Case 2 – Basic login and access to My Identity

Process and screenshots	1. The user accesses to My Identity in Correos SP in the URL https://miidentidadpre2.azurewebsites.net) and clicks on "authenticate with eIDAS" correctly.

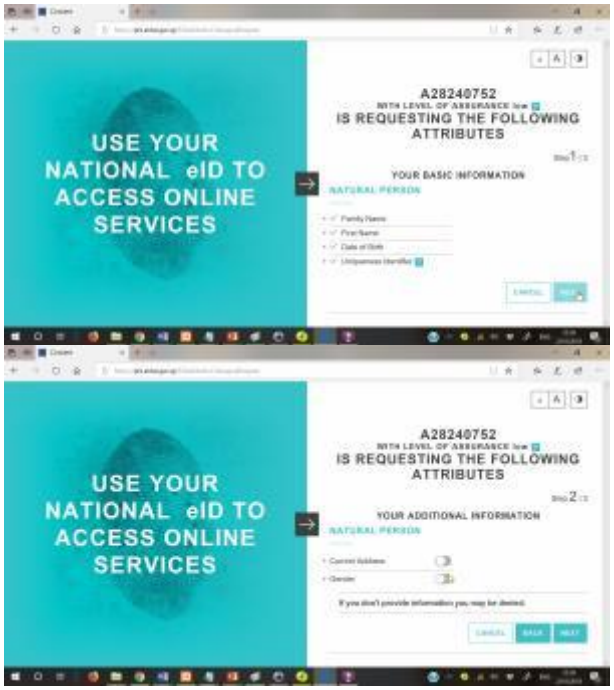


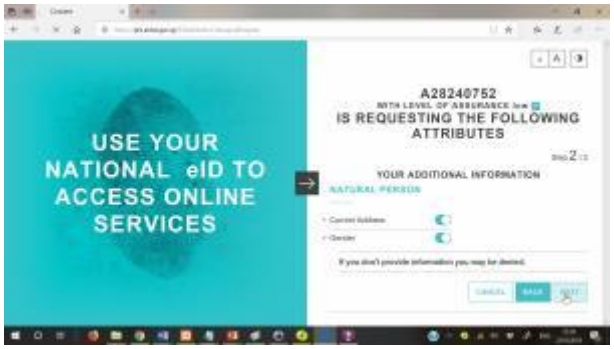
2. The user is redirected to eIDAS adapter.

3. The eIDAS adapter page asks the user to select the data he/she allows to take from the IdP and clicks submit button.

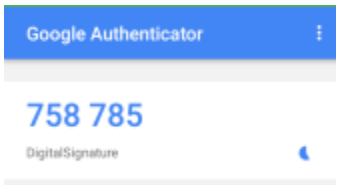
4. The user is redirected to the eIDAS network

5. The user authenticates with his electronic identity
   a. The MS A (Greece) IdP asks for credentials,





a. the user provides right credentials.



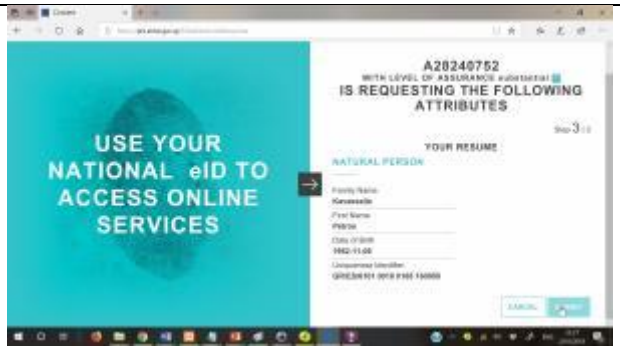
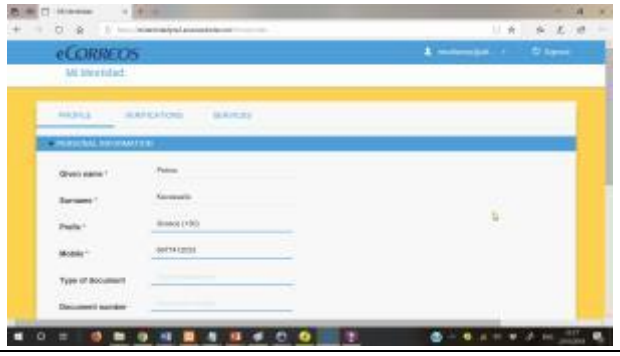
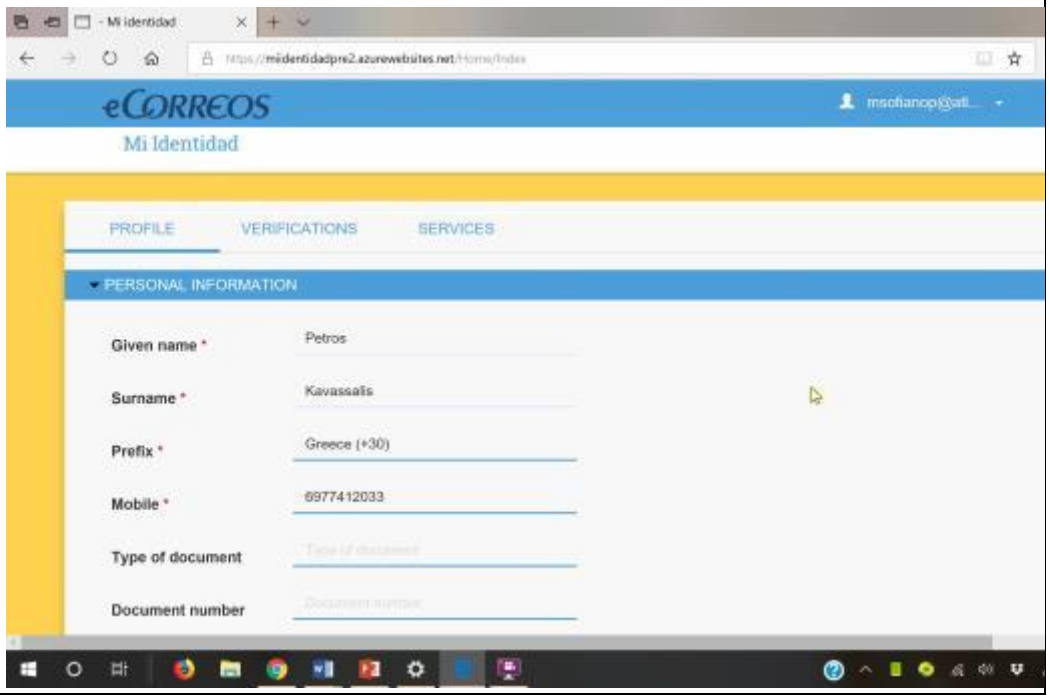
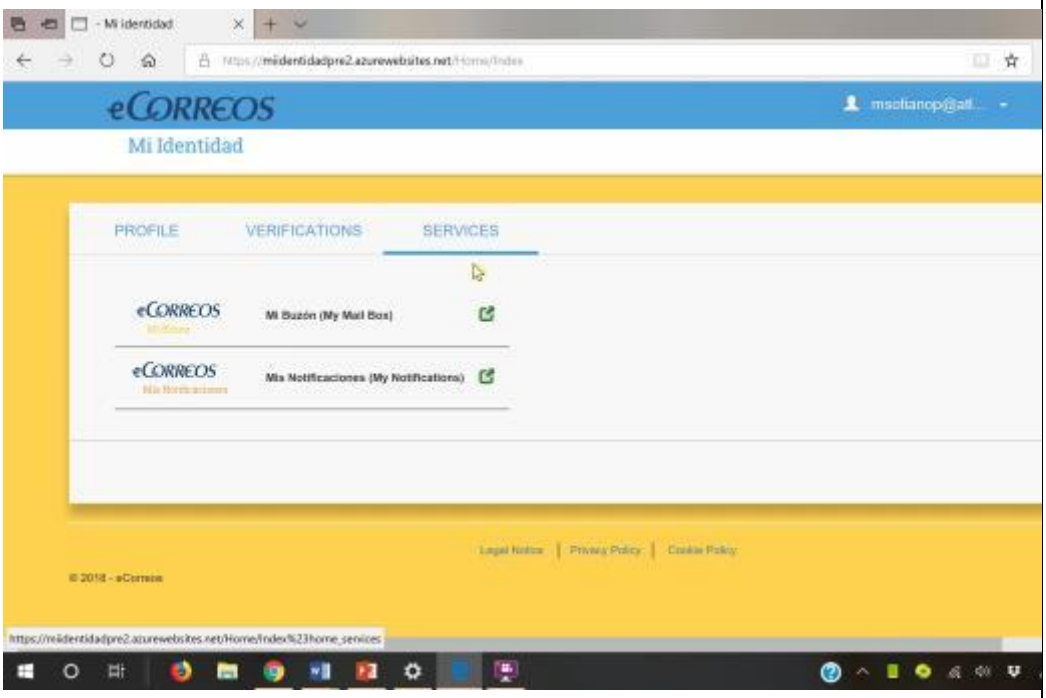
	 6. The user is redirected to eIDAS network and eIDAS adapter which validates the response and the SP checks that the user was previously registered in the service My Identity of Correos SP and grants access to the user. 
Result	Correos SP grants access to My Identity service to the user.

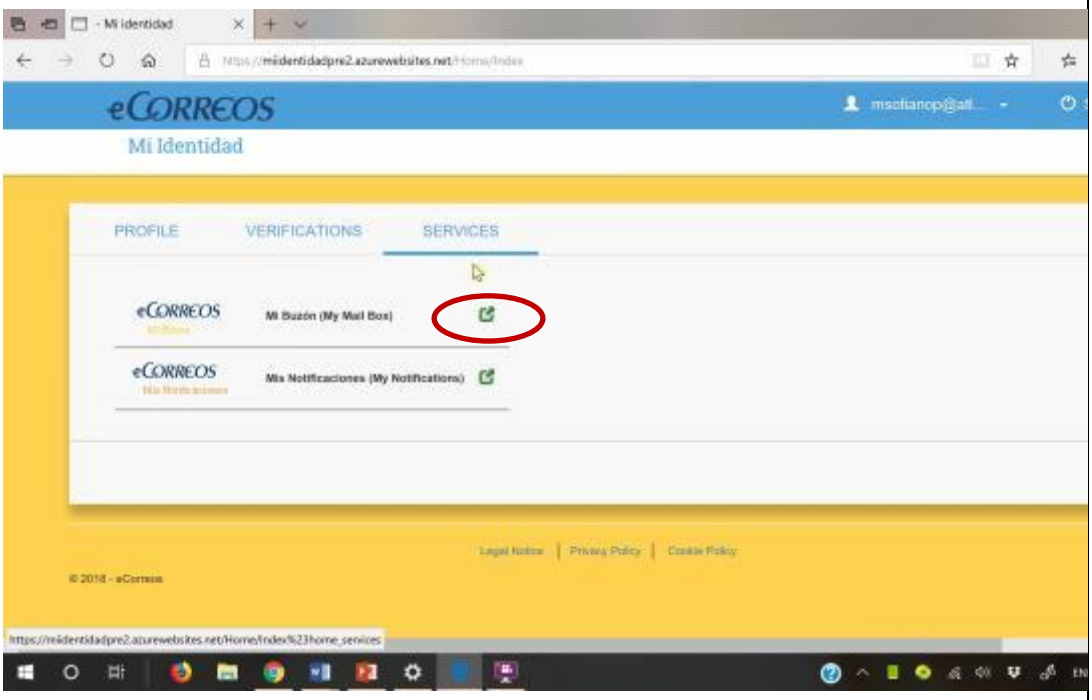
Table 6-4: Basic login and access to My Identity.

6.2.3 Test Case 6 – Access to My Mailbox service

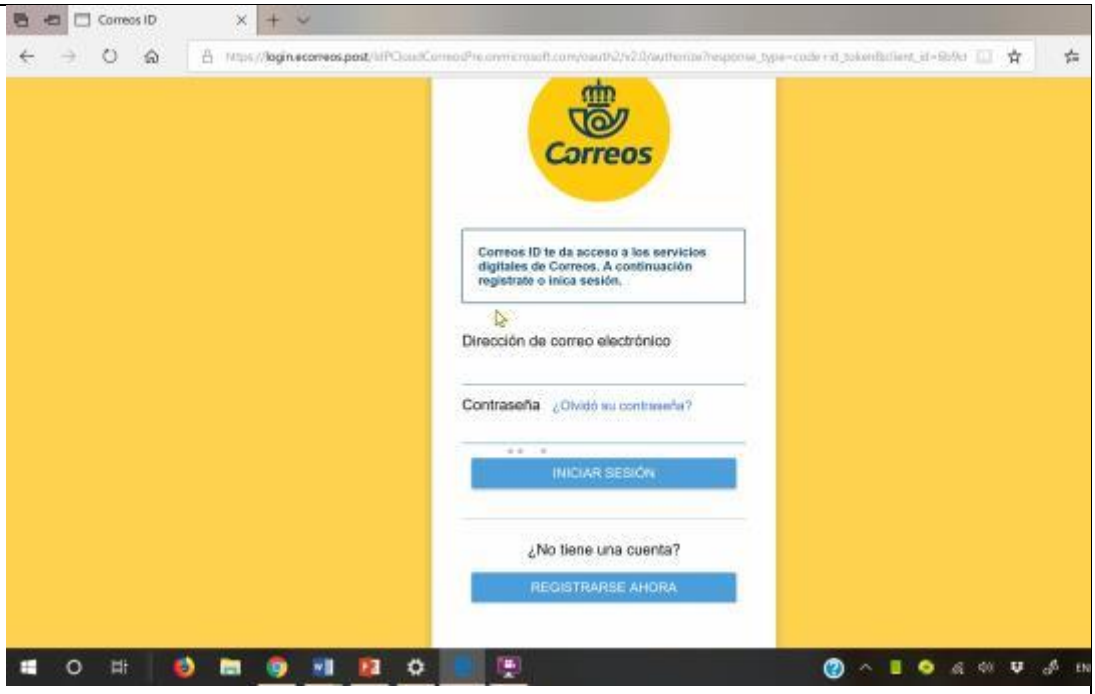
Process and screenshots	1. The user clicks on folder “services”. 

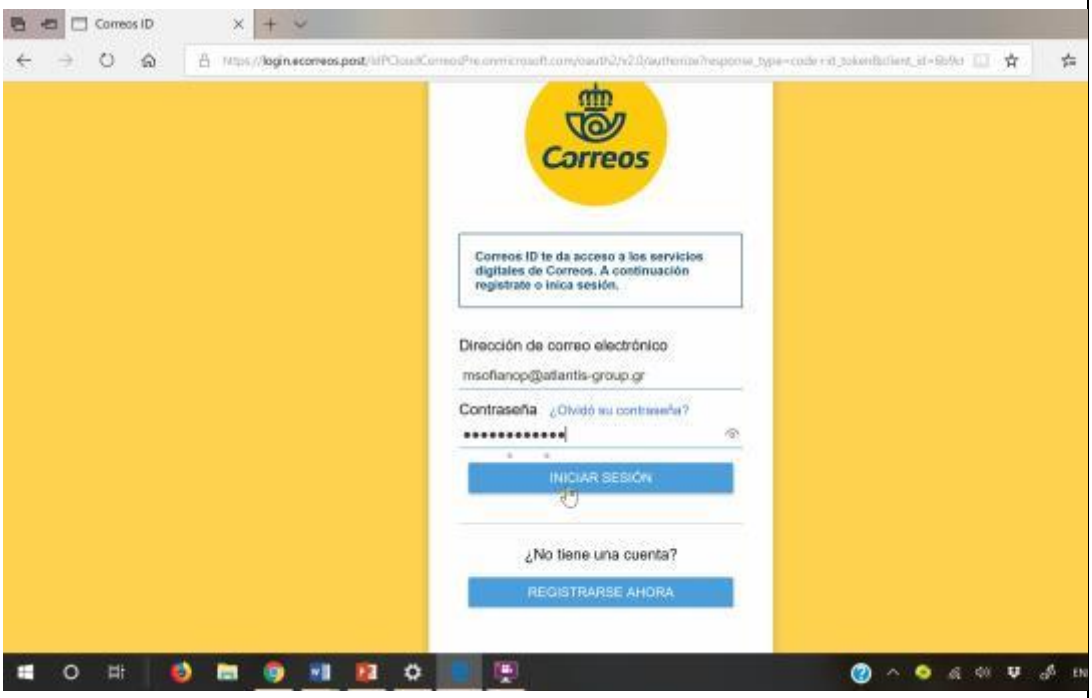


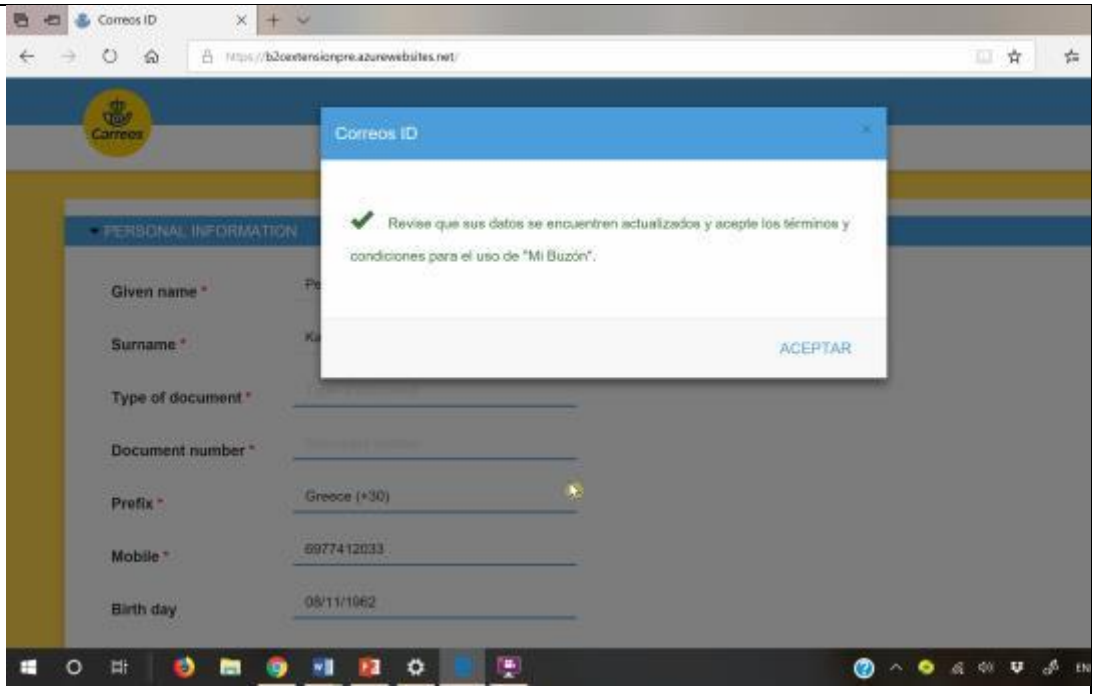
2. The user selects “My Mailbox” (Mi Buzon) from the list of services.

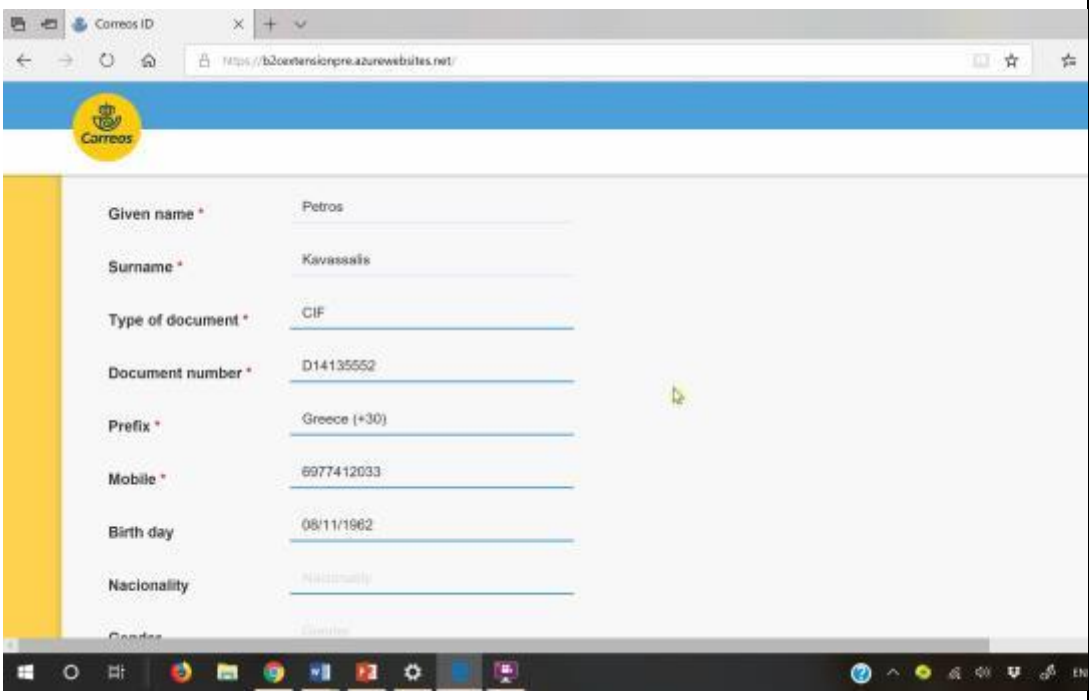


3. The user can see the list of documents (folders, files, etc).


Correos ID
Correos
Correos ID te da acceso a los servicios digitales de Correos. A continuación regístrate o inicia sesión.
Dirección de correo electrónico
Contraseña ¿Olvidó su contraseña?
INICIAR SESIÓN
¿No tiene una cuenta?
REGISTRARSE AHORA


Correos ID
Correos
Correos ID te da acceso a los servicios digitales de Correos. A continuación regístrate o inicia sesión.
Dirección de correo electrónico
msofianop@atlantis-group.gr
Contraseña ¿Olvidó su contraseña?
INICIAR SESIÓN
¿No tiene una cuenta?
REGISTRARSE AHORA


Correos ID
Correos ID
Revise que sus datos se encuentren actualizados y acepte los términos y condiciones para el uso de "Mi Buzón".
ACEPTAR
PERSONAL INFORMATION
Given name *
Surname *
Type of document *
Document number *
Prefix *
Greece (+30)
Mobile *
6977412033
Birth day
08/11/1962


Correos ID
Given name *
Petros
Surname *
Kavassalis
Type of document *
CIF
Document number *
D14135552
Prefix *
Greece (+30)
Mobile *
6977412033
Birth day
08/11/1962
Nacionality

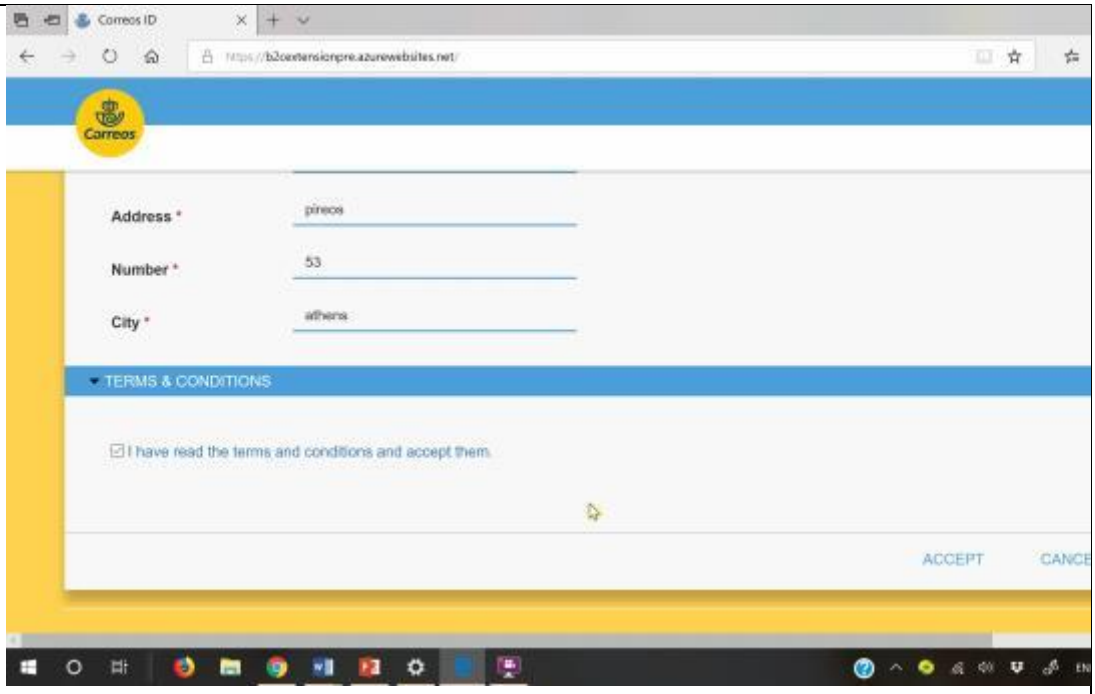
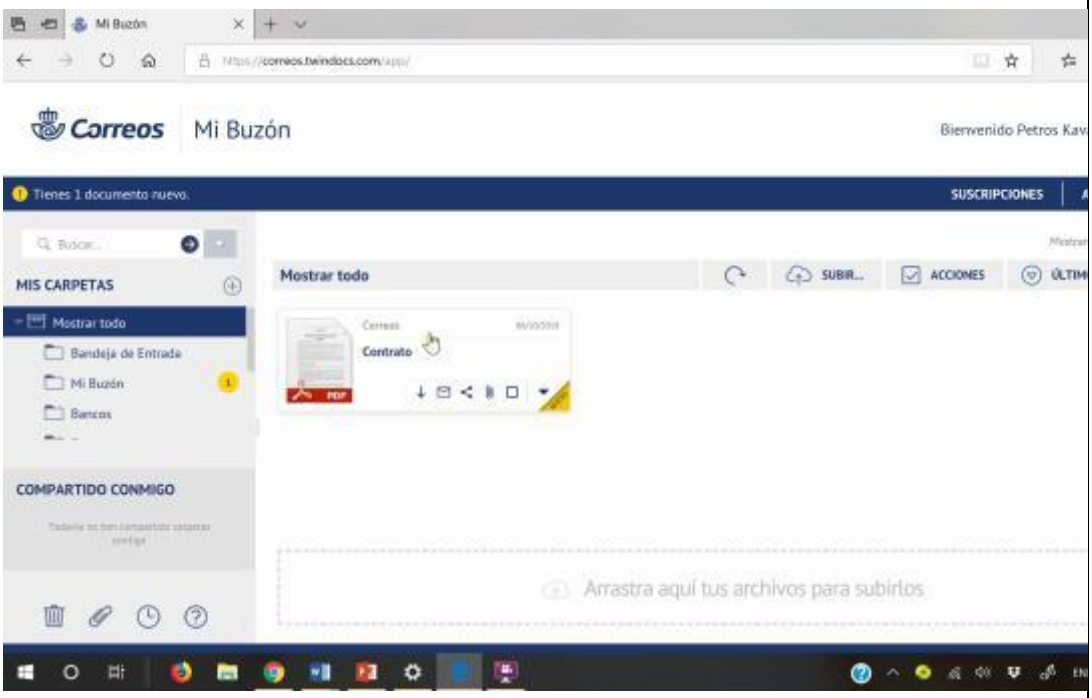
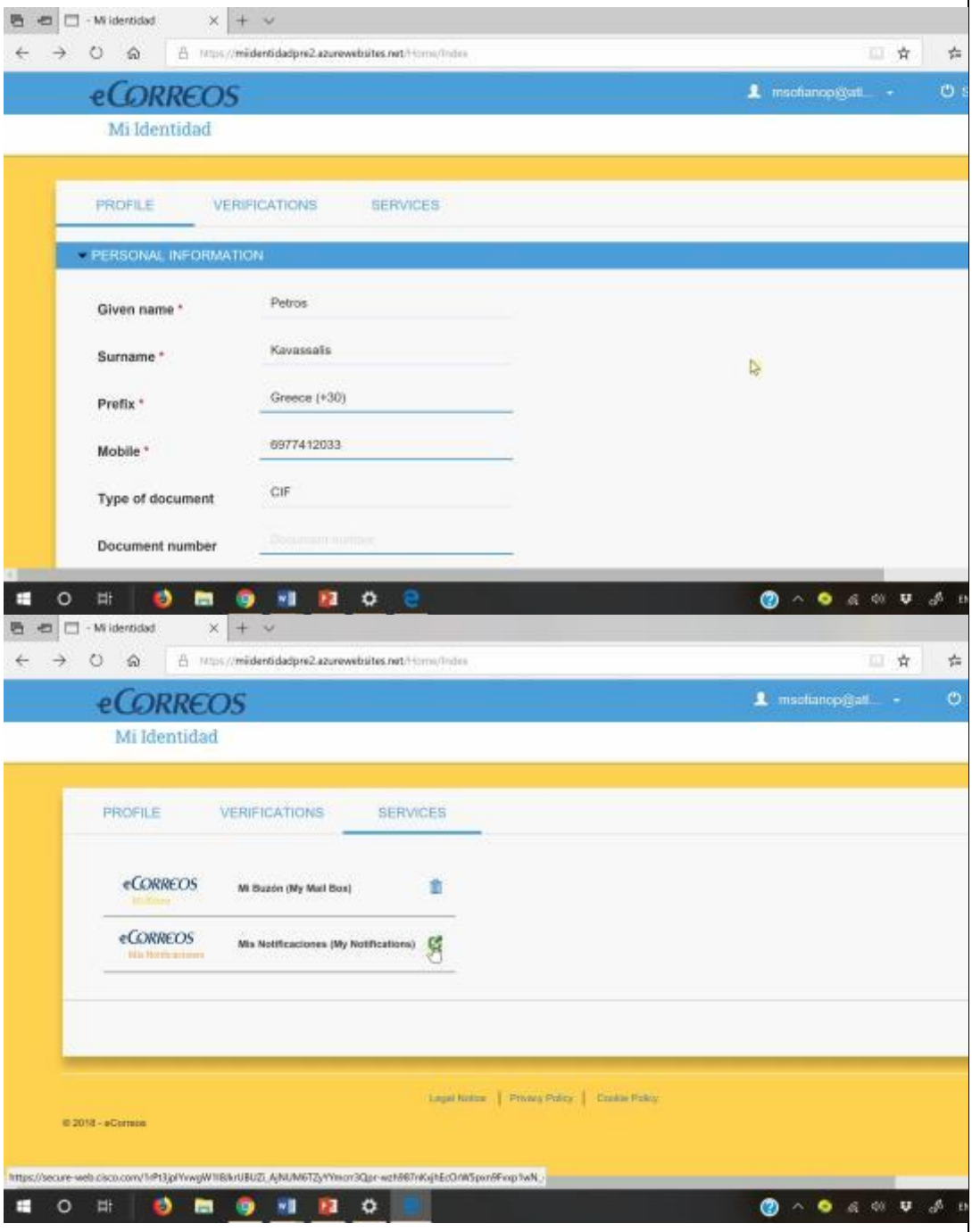
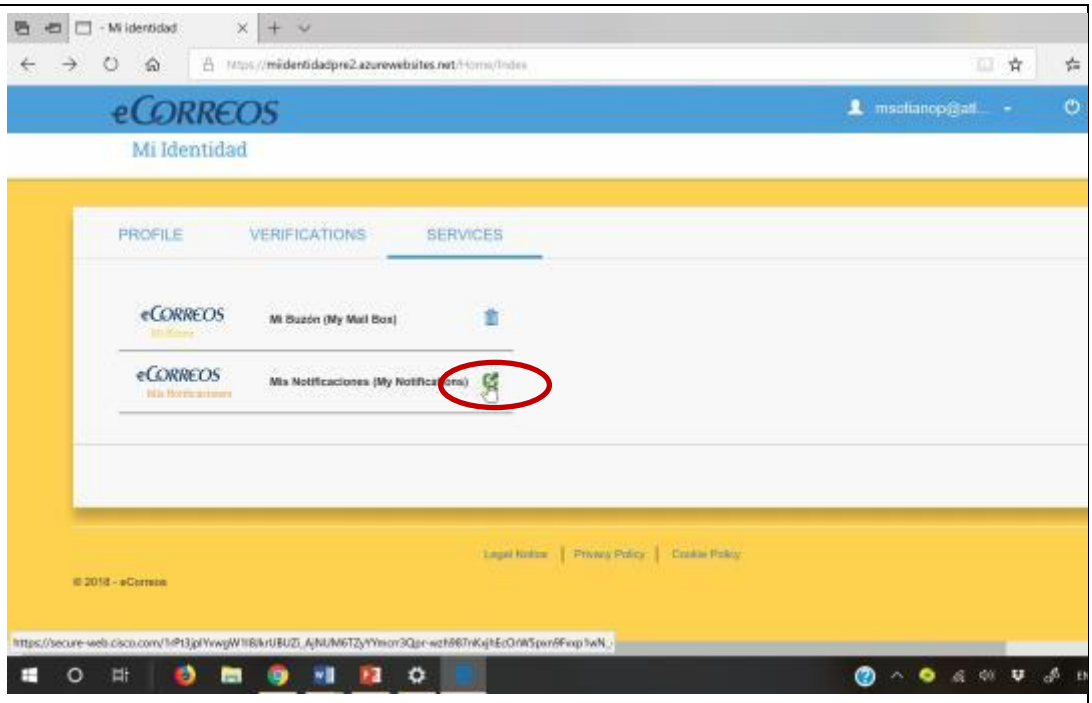
	 
Result	The user accesses to the folders in which he/she can see the documents.

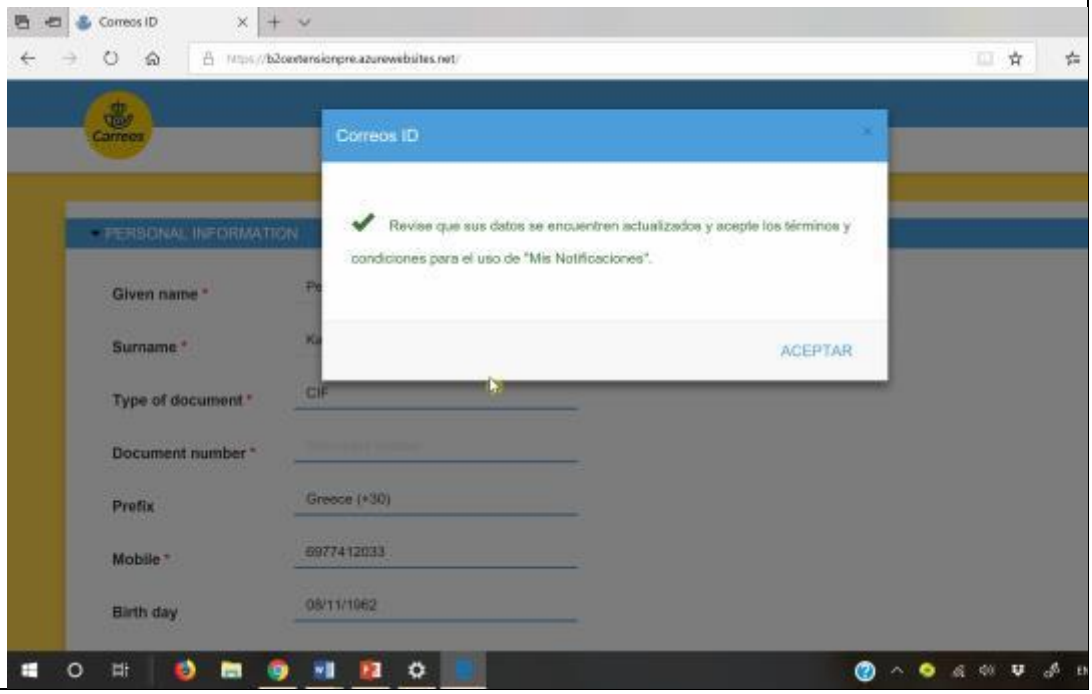
Table 6-5: Access to My Mailbox service.

6.2.4 Test Case 7 – Access to My Notifications service

Process and screenshots	1. The user clicks on folder “services”.  2. The user selects “My Notifications” from the list of services.



3. The user can see the notifications



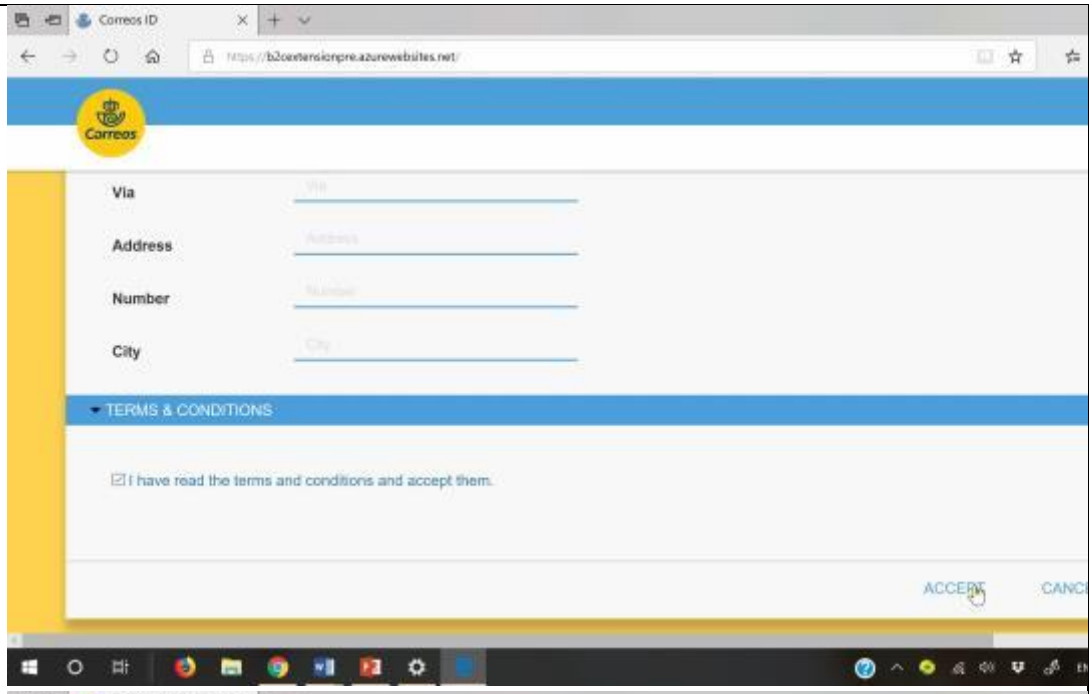
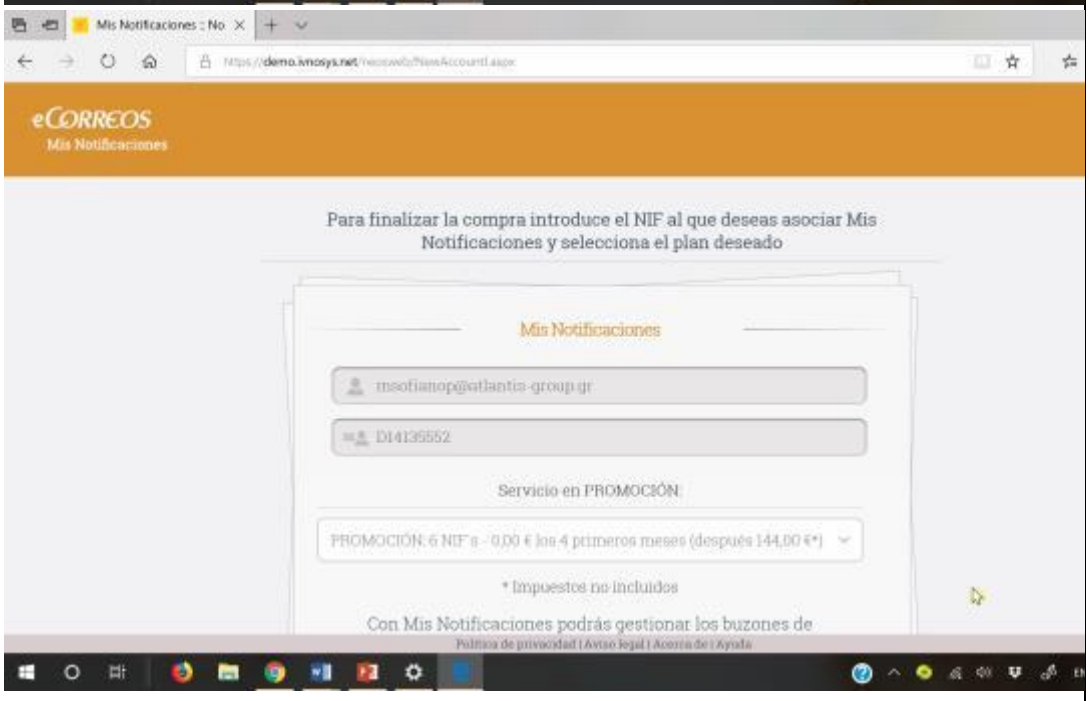
	 
Result	The user accesses to the folders in which he/she can see the notifications.

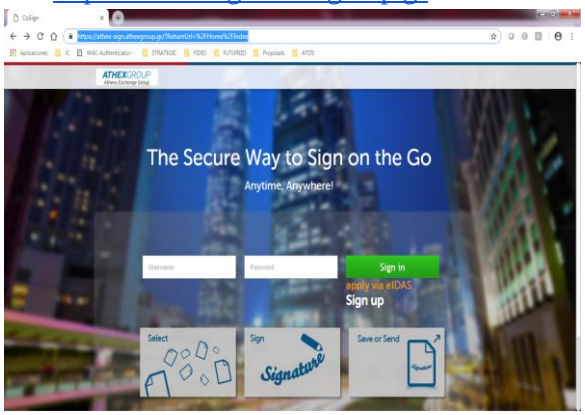
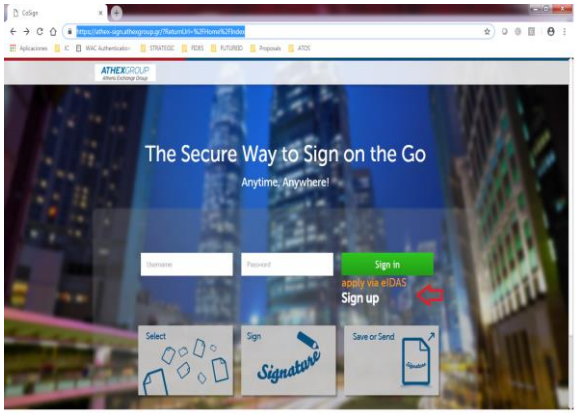
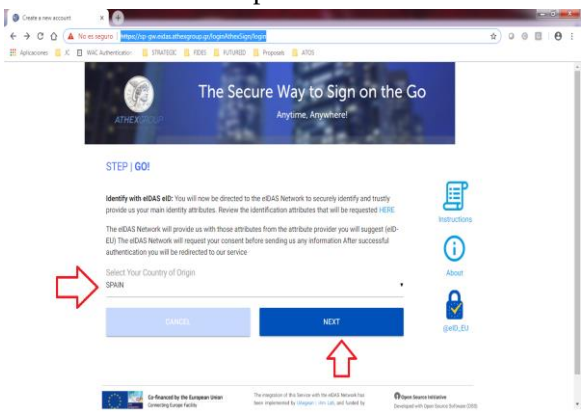
Table 6-6: Access to My Notifications service

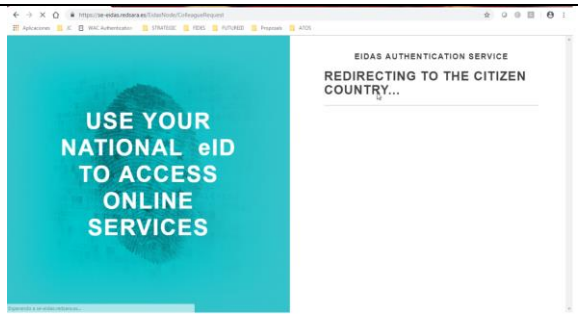
6.3 ATHEX execution tests results

This section contains a set of production tests for the ATHEX services.

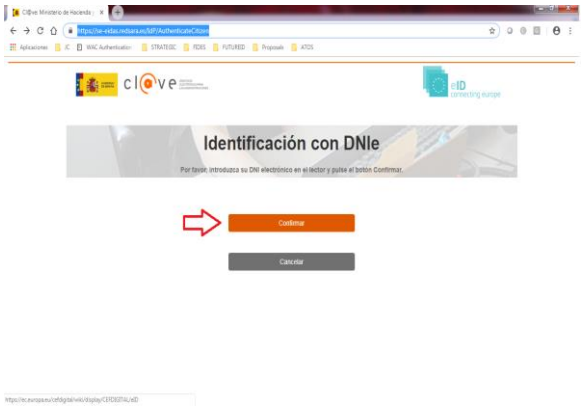
6.3.1 Test Case 1 - ATHEX Sign Successful Authentication

This test case has been performed using a real Spanish eID card (DNIe).

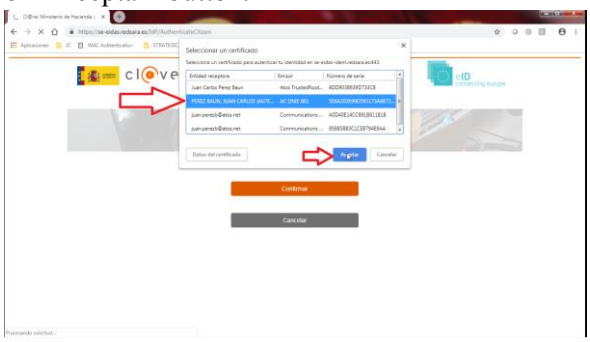
Process and Screenshots	1. The user from Spain accesses AthexSign Service Provider through the following url: https://athex-sign.athexgroup.gr.  2. Spanish user selects to apply via eIDAS by clicking on "Sign Up" link.  3. AthexSign service asks to the Spanish user to select the origin country. Spain is selected from the dropdown menu and Next button is clicked next.  4. Spanish user is redirected to Spanish IdP.



5. eIDAS Spanish node asks the user to confirm the use of the DNIe as credentials. The user clicks on “Confirmar” button.



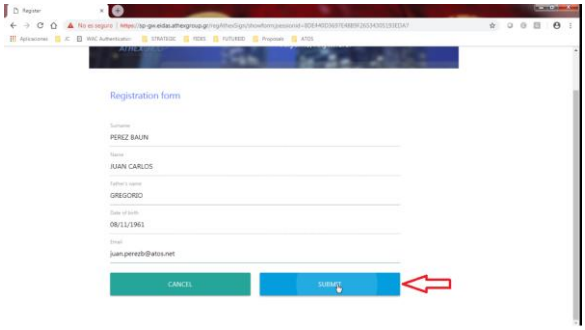
6. The user inserts her/his Spanish eID card into the smart card reader. Once the eID card is detected, the browser displays a pop-up asking the user to select the electronic identity to use for authentication. The user selects the DNIe and clicks on “Aceptar” button.



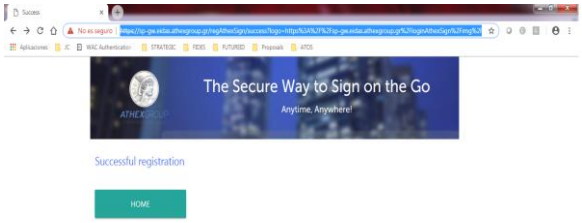
7. A new pop-up is displayed asking the Spanish user to enter the PIN code. Once the PIN is typed the user click on “Aceptar” button.

8. Once the user is authenticated, Spanish user is redirected to the Spanish eIDAS Node, which redirects to the AthexSign service Provider.

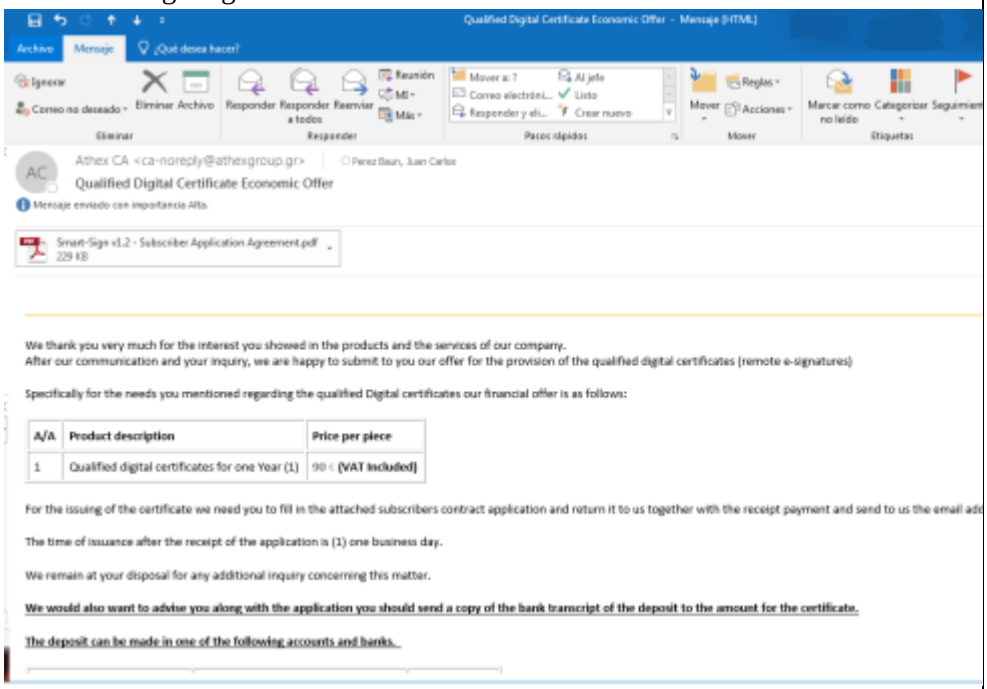
9. Upon successful authentication, Spanish user is redirected to AthexSign registration form where her/he has to fill in only the email and father's name fields. The fields name, surname, birth date are already filled in. The user clicks on the Submit button.



10. The AthexSign service authenticates the user and shows a successful message.



On the background an email is sent to the Spanish citizen, containing a form for final AthexSign registration.



Result	Spanish user is successfully authenticated and ready to register in AthexSign Service

	Provider

Table 6-7: ATHEX Sign Successful Authentication.

6.3.2 Test Case 3 - ATHEX AXIAweb Successful Authentication and logon

In the production test of AXIAweb, a Spanish user with an electronic NID should already be present in CSD in order for the full workflow to be shown. This was not feasible due to regulatory reasons. For this reason, this test case has been performed using a test Spanish user.

Process and Screenshots	1. Type URL https://www.axiaweb.gr/AXIAWeb/gr/login.htm and click eIDAS Login. 2. User accesses Service Provider (Axia Web) and selects "SPAIN" as his/ her Country of Origin and clicks "NEXT" button.

3. User is redirected to Spanish Service Provider Spanish user is redirected to Spanish IdP and is asked to confirm the use of the DNIe as credentials. The user clicks on “Confirmar” button.

4. The browser displays a pop-up asking the user to select the digital certificate to ue for authentication. The user selects the certificate and clicks on “Aceptar” button. Once the user is authenticated, Spanish user is redirected to the Spanish eIDAS Node, which redirects to the AXIA Web service Provider, by selecting Proceed to AXIAWeb

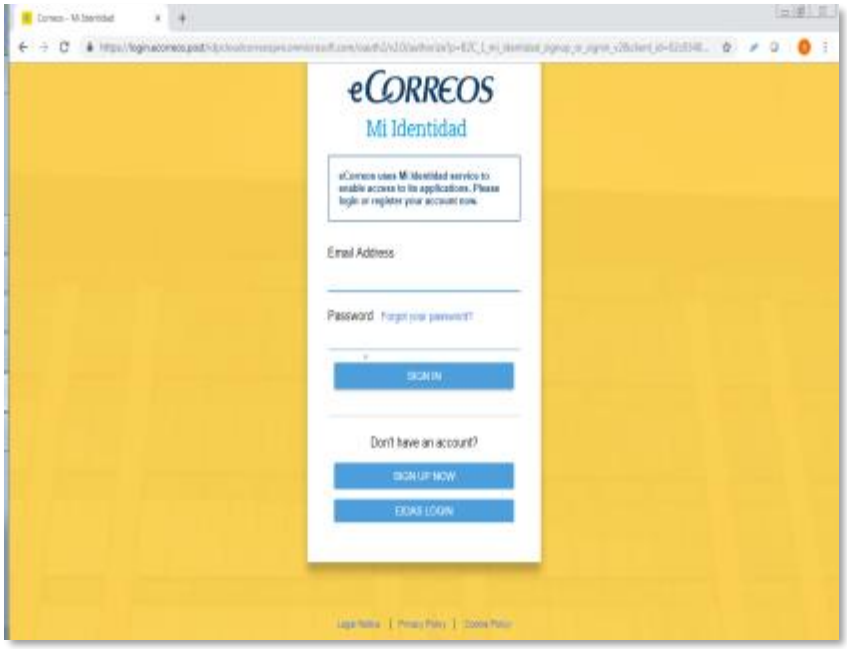
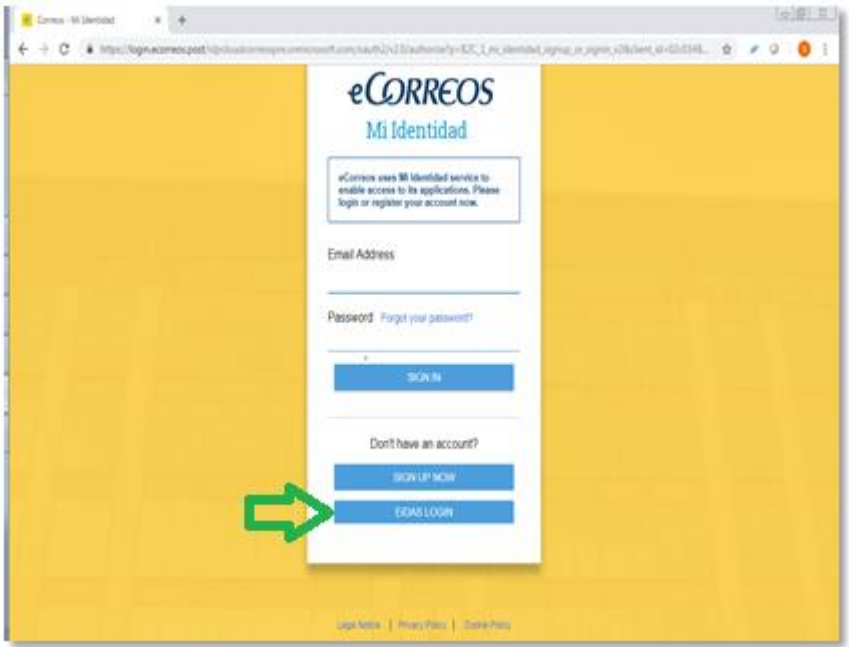
5. Upon successful authentication, Spanish user is redirected to Athex AXIAWeb main menu page, from where he can navigate to the service individual pages.

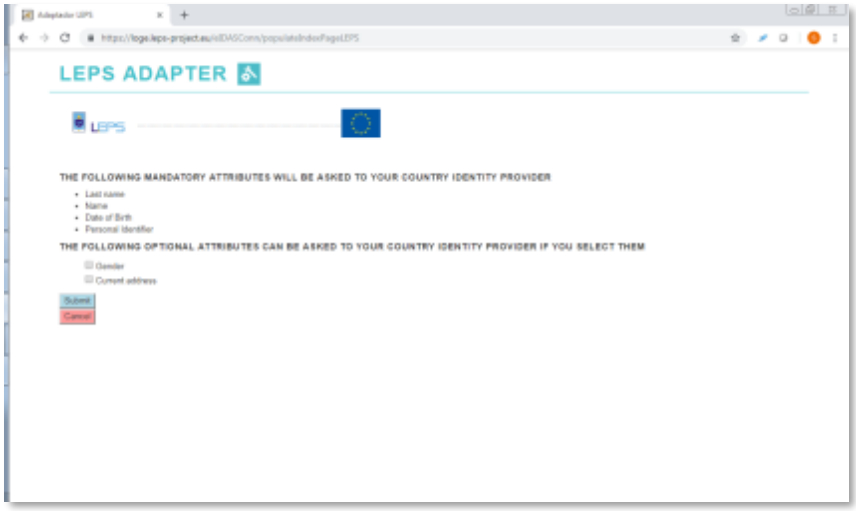
Result	Let us note here that when an investor wants to invest to Greek Securities (stocks, derivatives, bonds etc), he has to sign an agreement as a client, with one (or more) brokerage firms, to authorize them to accept and process his orders with the Exchange. The first time the investor signs with a brokerage firm, the firm create for him a unique account ("investor share") in the "Central Securities Depository (CSD)" so that his securities possessions are kept and tracked in a central place. AxiaWEB is independent of the brokerage firms and is the front end to the centralized depository. In order for an investor to be able to see his centralized "investor share" state, he must already have an "investor share" in the CSD and then apply directly to ATHEX for an account for AxiaWEB. Until now this application was possible to be done only with the personal physical presence of the investor to prove his identity and to fill out the application forms. Now with the use of eID the latter is not required. After the eIDAS authentication is successful, his attributes are sought in CSD and IF FOUND, an activation procedure is initiated. In the production tests of the service for the LEPS project, a Spanish user with an electronic NID should already be present in CSD in order for the full workflow to be shown. This was not feasible due to regulatory reasons. Nevertheless, the interoperability with eIDAS nodes can be demonstrated with a Spanish user who, after a successful authentication is not found in CSD and with a Greek user authenticated with the Greek IDP who exists in CSD.

Table 6-8: ATHEX AXIAweb Successful Authentication and logon.

6.3.3 Test Case 5 – ATHEX IDP Successful Authentication

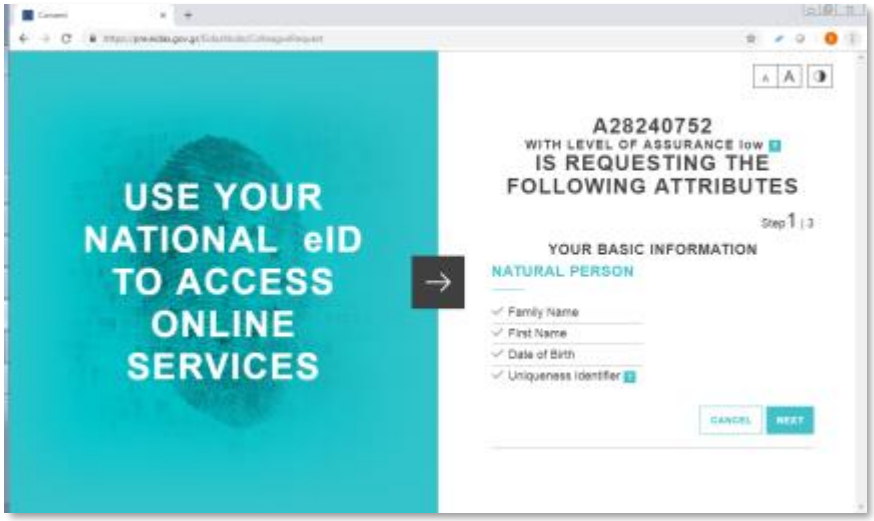
Process and	

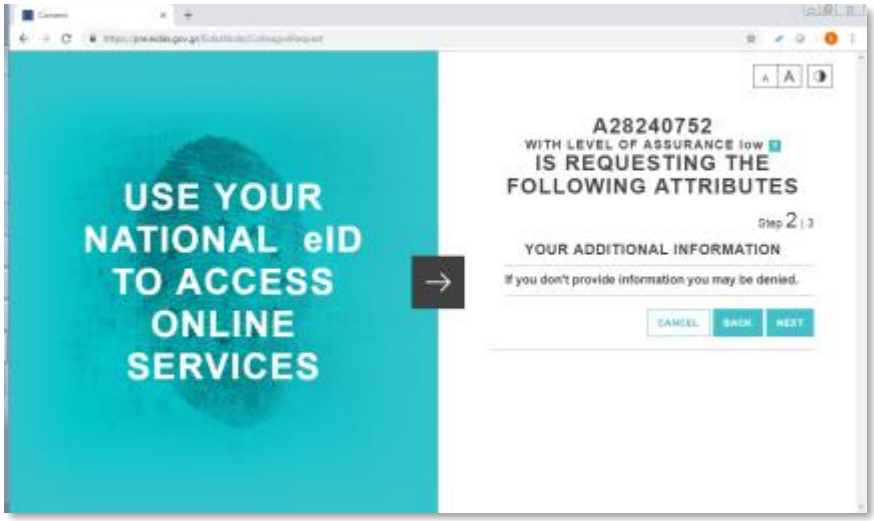
Screenshots	1. Greek user accesses Spanish Service Provider through the following url: https://miidentidadpre2.azurewebsites.net  2. Greek user clicks "EIDAS login" button.  3. Greek user is informed about the mandatory attributes (Name, Last name, Birth date, Personal Identifier) that will be asked by ATHEX IDP and is also given an option to provide two more optional attributes (Gender, Cureent Address) if he/she wishes to. Greek user clicks "SUBMIT" button.



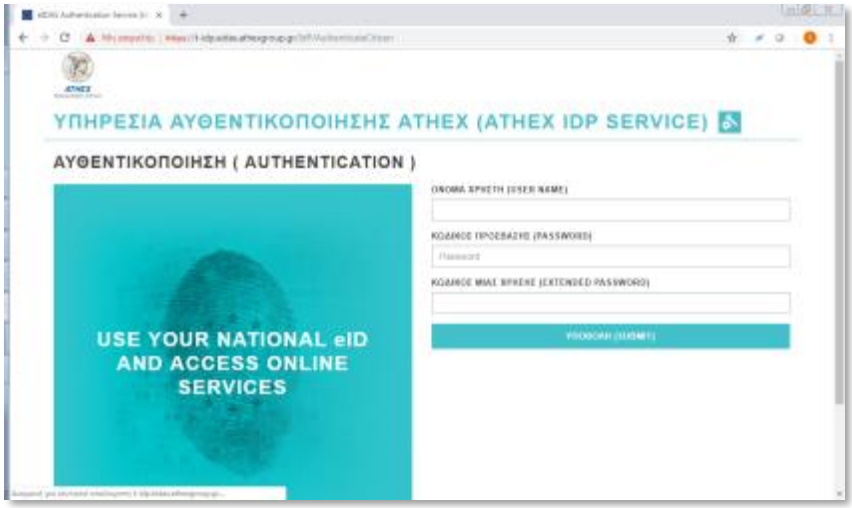
4. Greek user is asked to choose the country from where his/her eID was issued. He/she selects “Greece” and clicks “Login” button.

5. Greek user is redirected to Greek EIDAS node and he/she is informed about the attributes that will be provided to Spanish Service Provider upon successful authentication. User clicks the “NEXT” in the following two screens.

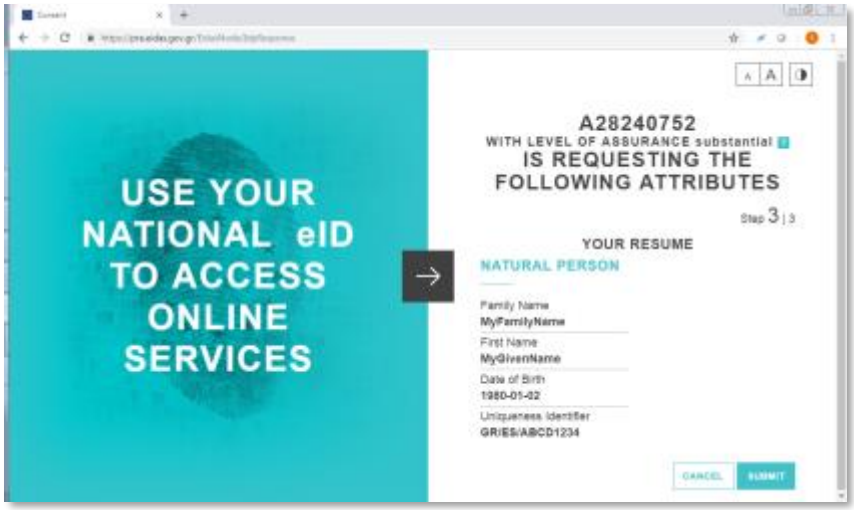




6. Greek user is redirected to ATHEX IdP and he/she is asked to provide his/her credentials. (Username, password, One Time Password) in order to authenticate him/herself.
    a. Greek user fills in his/her username and password.
    b. Greek user retrieves the One time Password (OTP) from his/her smartphone, by opening Google Authenticator Application which is already installed in his/her smartphone and fills in the "Extended Password" field.
    c. Greek user clicks "Submit" button.



7. Upon successful authentication, Greek user is asked to give his/her consent in order his/her personal information to be forwarded to Spanish Service Provider. User clicks "SUBMIT" button.



8. Greek user is redirected back to Spanish Service Provider.

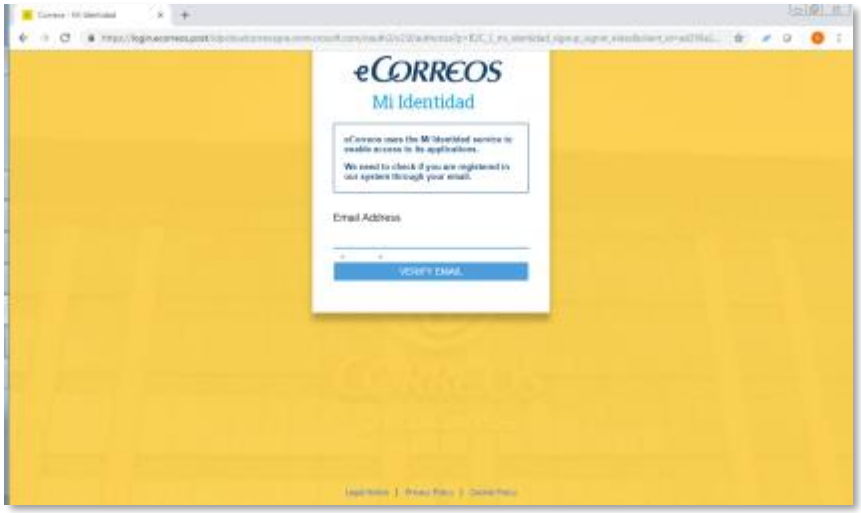
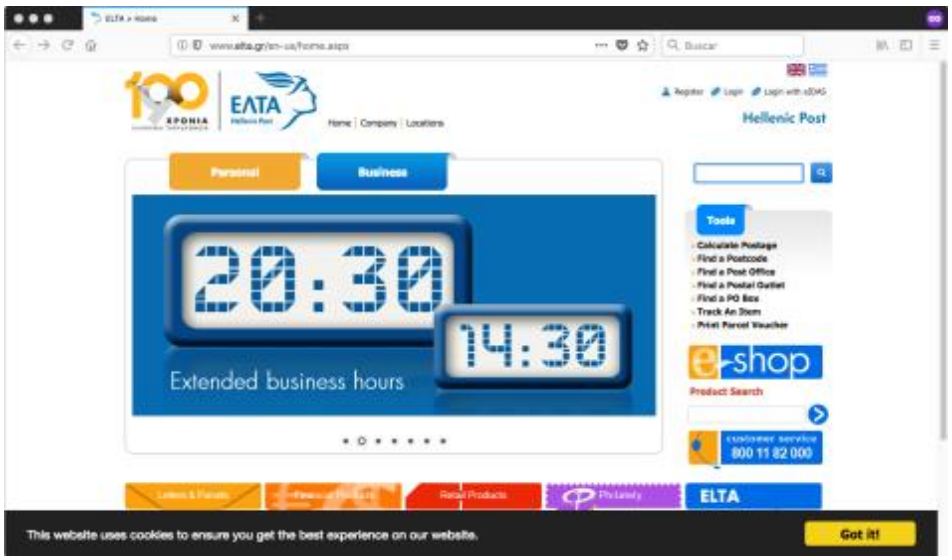
	
Result	Greek user is successfully authenticated against ATHEX IDP and ready to use Spanish Service Provider

Table 6-9: ATHEX IDP Successful Authentication.

6.4 ELTA execution tests results

This section contains a set of production tests for the ELTA services.

6.4.1 ELTAPORTAL-TR1 User Registration Normal Flow (eIDAS eID)

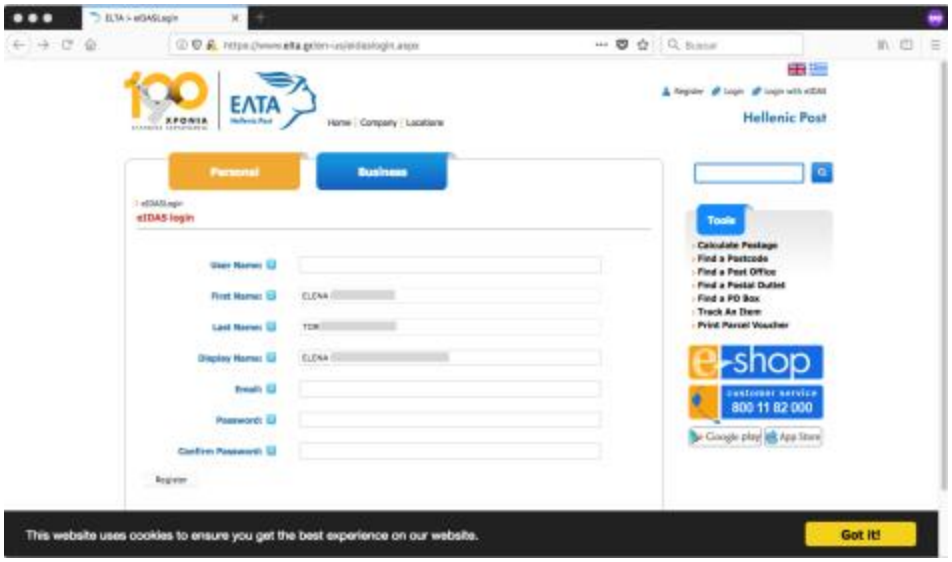
Process and screenshots	1. Access to the URL http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS"  2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)

3. User selects country of origin “SPAIN” and click on “NEXT”.

4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

5. User authenticates with his electronic identity (eID card)

6. User is automatically redirected to the ELTA Register Form URL https://www.elta.gr/en-us/eidaslogin.aspx (User must complete the necessary information, for example username, email, password, confirm password) and click on "Register"



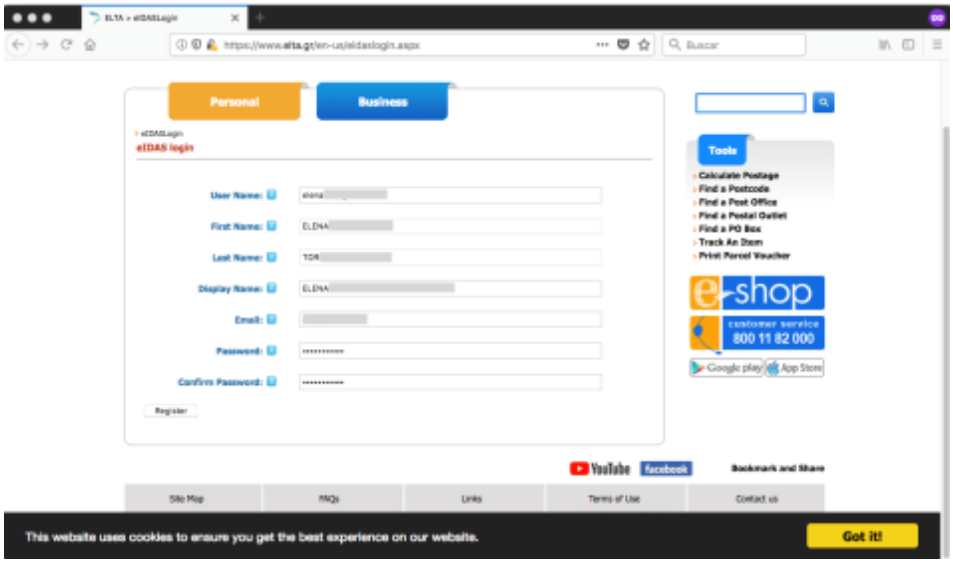
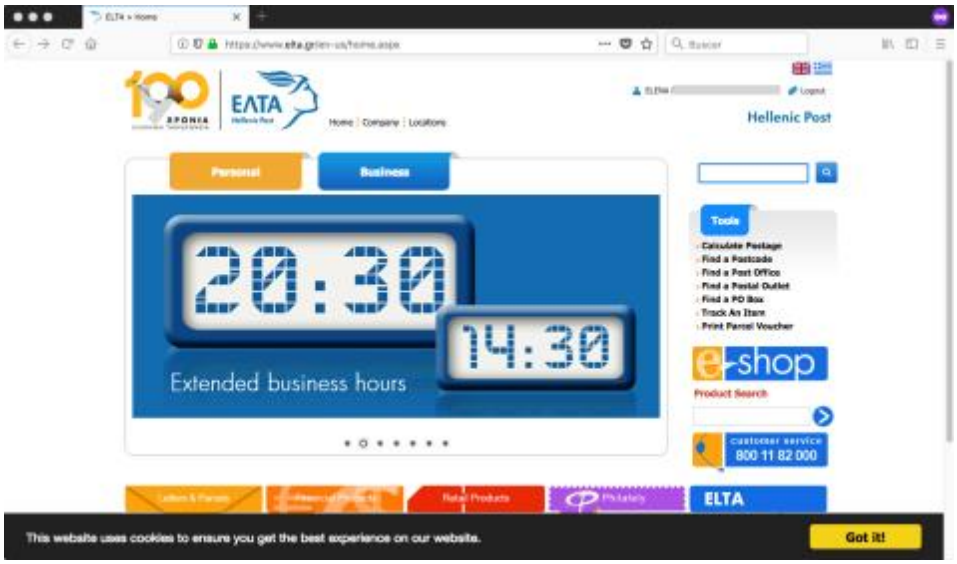
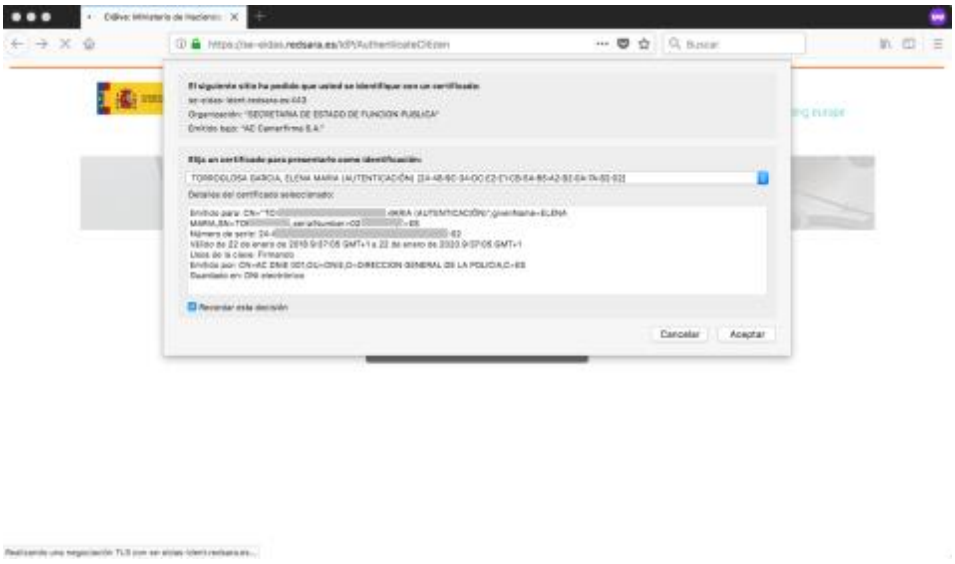
	 7. User is redirected to the ELTA home page of Portal or e-Shop (English version) http://www.elta.gr/en-us/home.aspx or http://www.elta.gr/en-us/business/eshop.aspx (depending on the starting point) - The page shows the name of the User 
Result	The SP grants User access to ELTA Portal and eShop (after registration) Ending Event: The User accesses the ELTA Home Page (or e-Shop Home Page)

Table 6-10: User Registration Normal Flow to ELTA Portal.

6.4.2 ELTAPORTAL-TL1 Registered User Normal Login Flow (eIDAS eID)

Process and screenshots	1. Access to the URL http://www.elta.gr/en-us/home.aspx and click on "Login with eIDAS" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 3. User selects country of origin "SPAIN" and click on "NEXT". 4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card 5. User authenticates with his electronic identity (eID card)



6. User is redirected to the ELTA home page of Portal http://www.elta.gr/en-us/home.aspx (depending on the starting point) - The page shows the name of the User

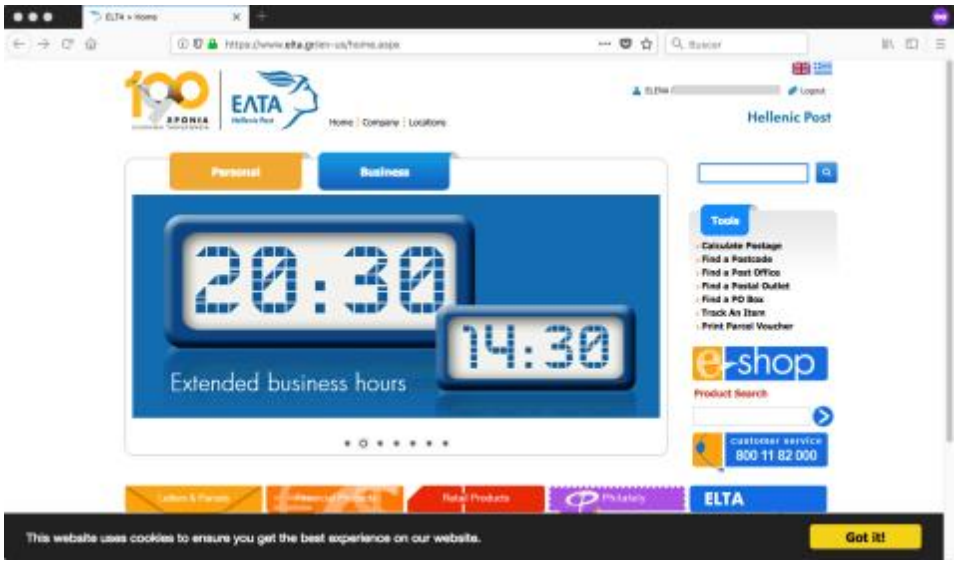
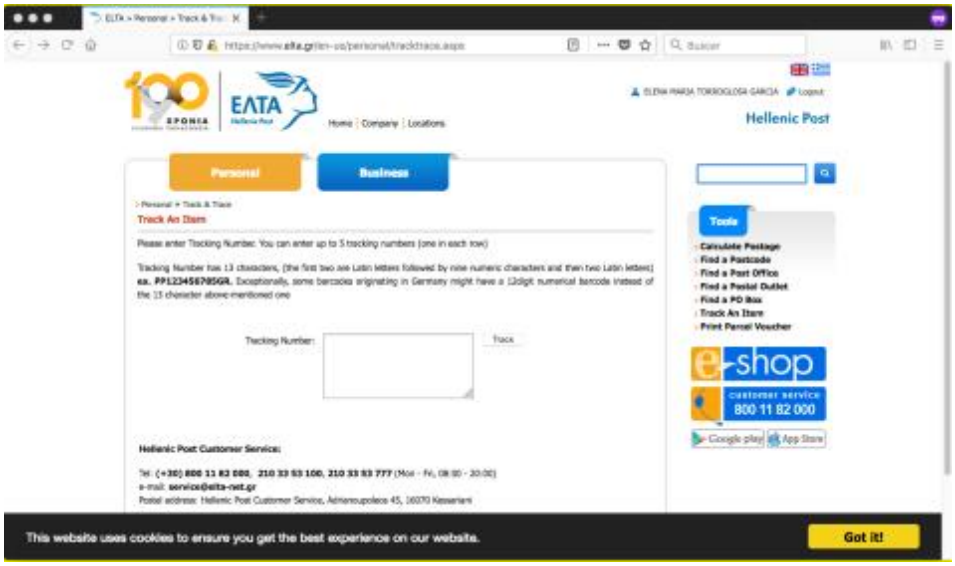
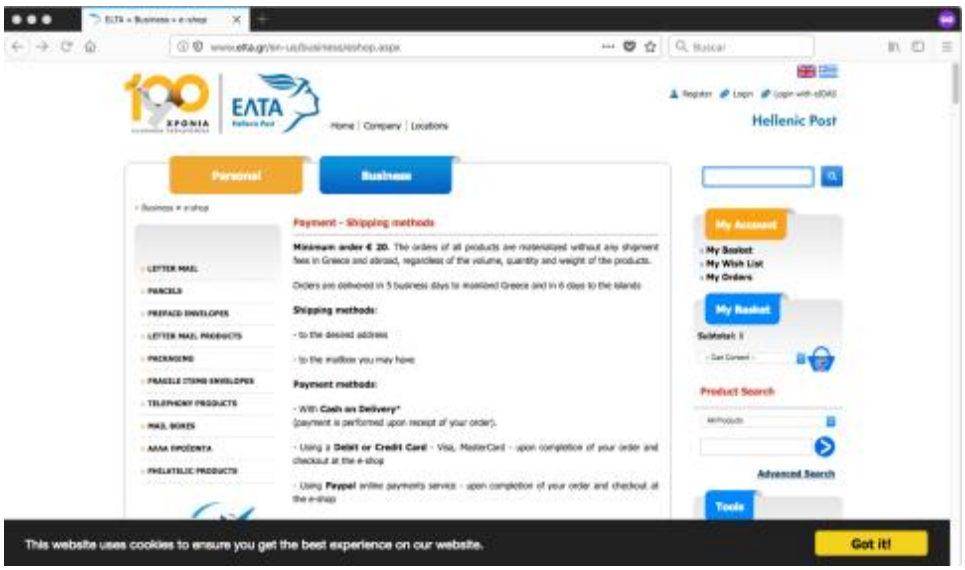
	 7. User click on "Track An Item" on right sidebar menu named tools 8. User is redirected to the ELTA track an item page http://www.elta.gr/en-us/personal/tracktrace.aspx 
Result	The SP grants User access to ELTA Track & Trace page (after login) Ending Event: The User accesses the ELTA Track & Trace page

Table 6-11: Registered User Normal Login Flow to ELTA Portal.

6.4.3 ELTAESHOP-TL1 Registered User Normal Login Flow (eIDAS eID)

Process and screenshots	1. Access to the URL http://www.elta.gr/en-us/business/eshop.aspx and click on "Login with eIDAS"

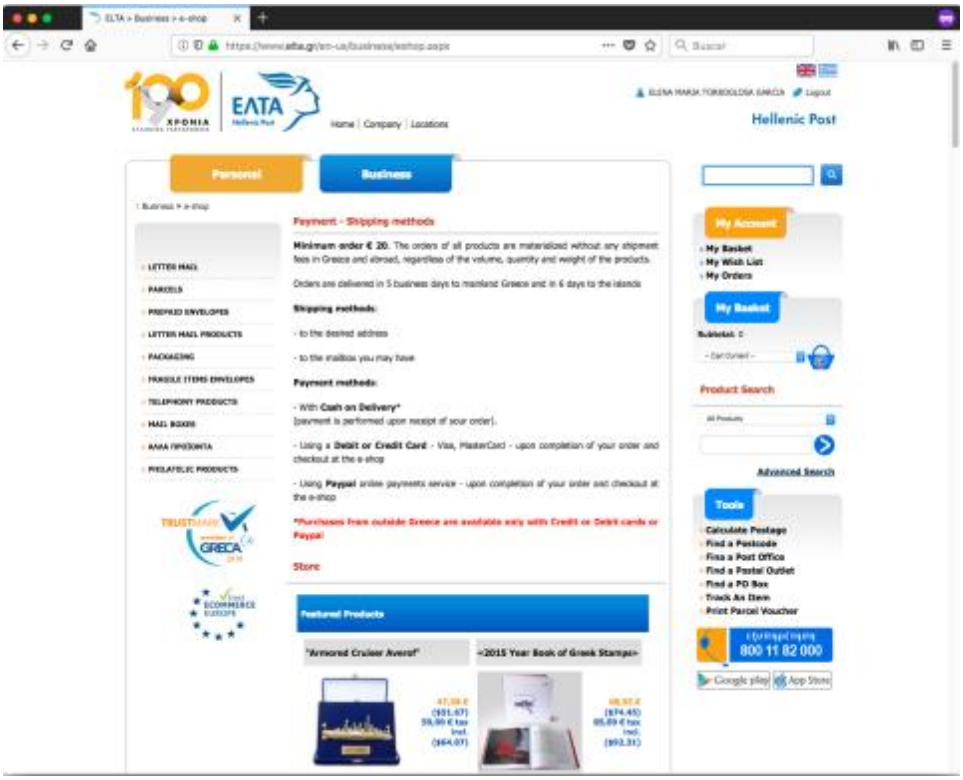


2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)
3. User selects country of origin "SPAIN" and click on "NEXT".

4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

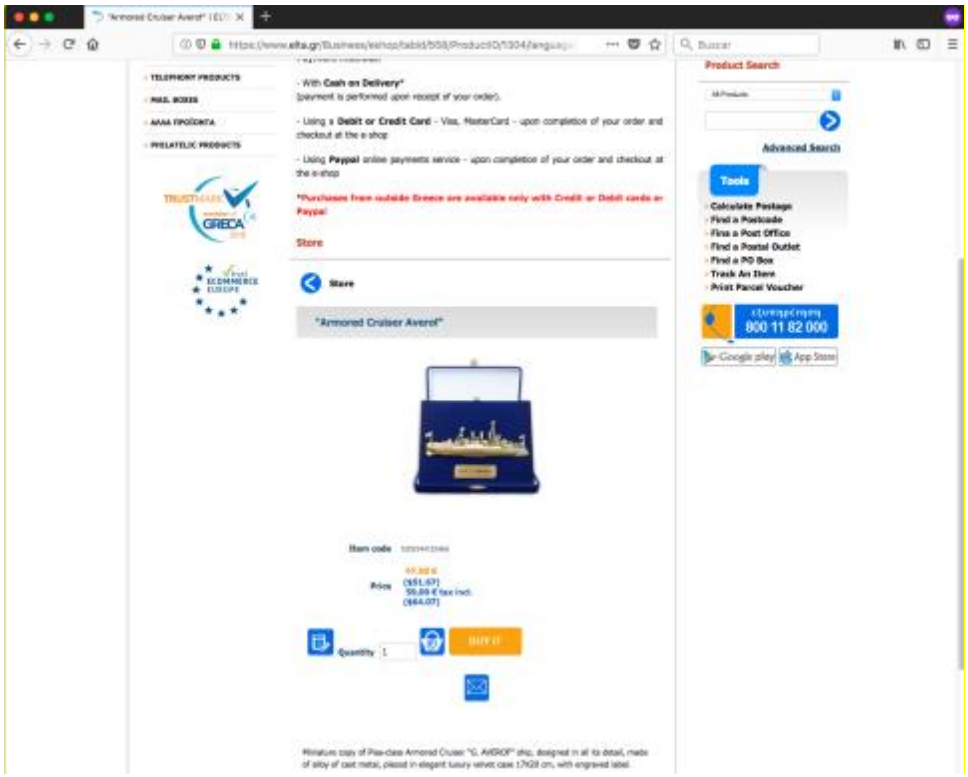
5. User authenticates with his electronic identity (eID card)

6. User is redirected to the ELTA home page of e-shop http://www.elta.gr/en-us/business/eshop.aspx (depending on the starting point) - The page shows the name of the User

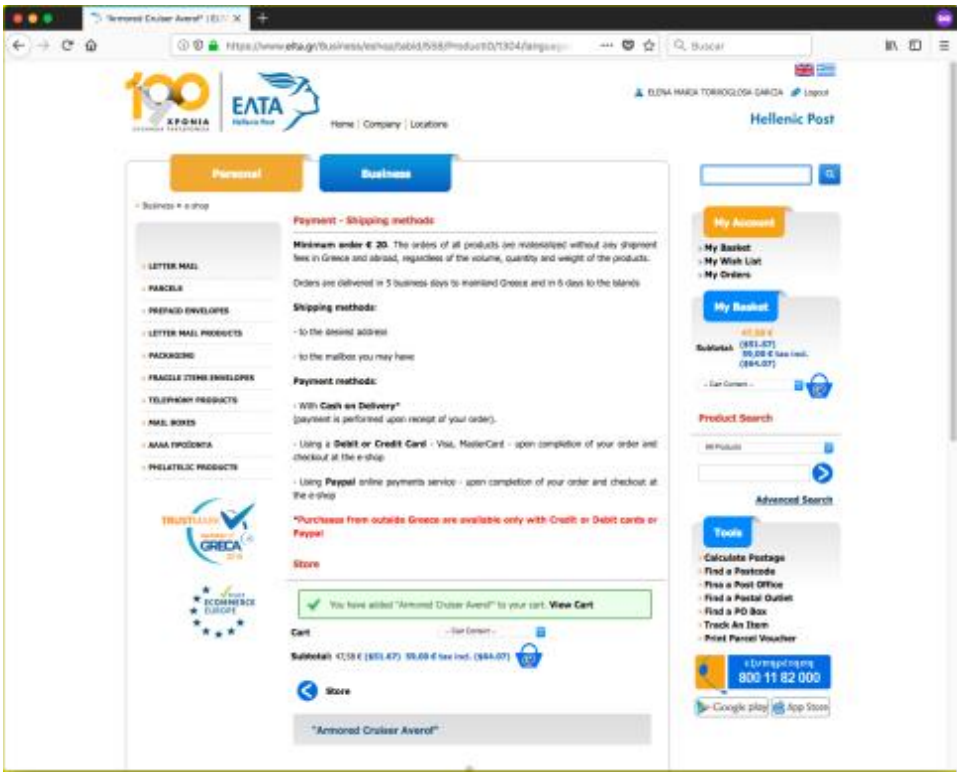


7. User click on item "Armored Cruiser Averof"

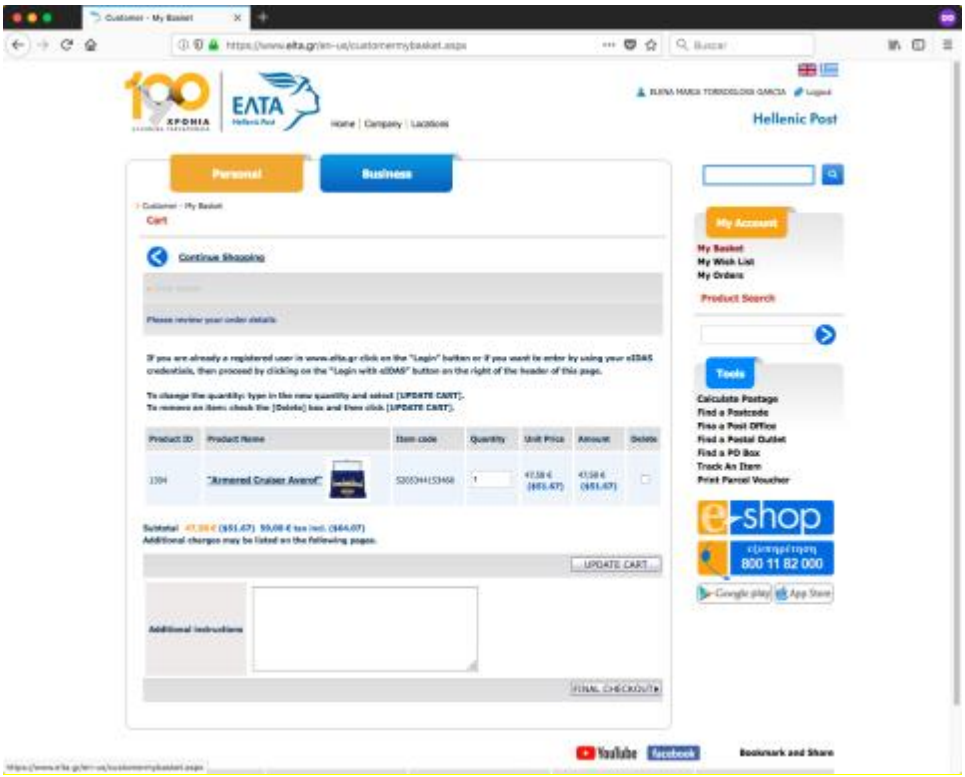
8. User is redirected to the "Armored Cruiser Averof" desciption page https://www.elta.gr/Business/eshop/tabid/558/ProductID/1304/language/en-US/Default.aspx



9. User click on Add to Cart button
10. User is redirected to the page https://www.elta.gr/Business/eshop/tabid/558/ProductID/1304/language/en-US/Default.aspx?addmessage=success_c_%22Armored+Cruiser+Averof%22



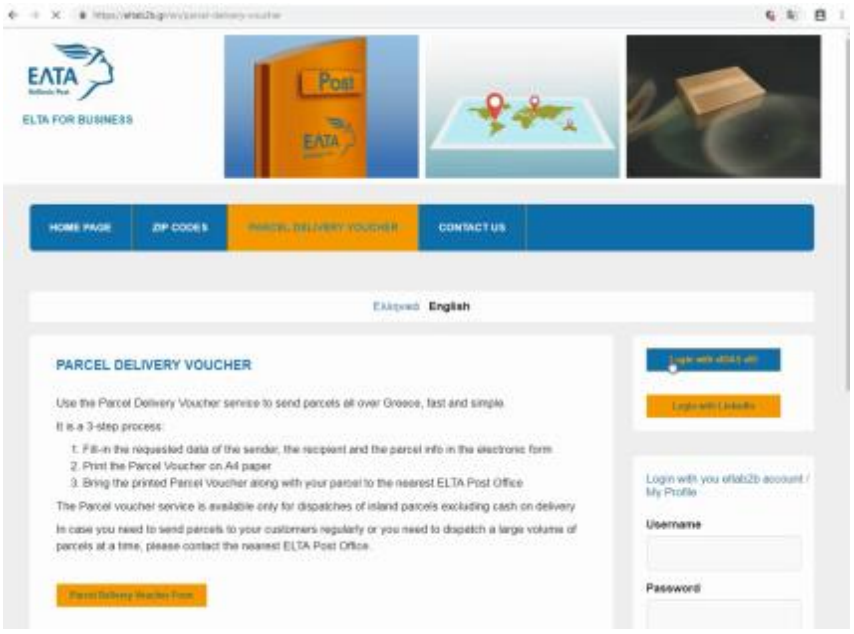
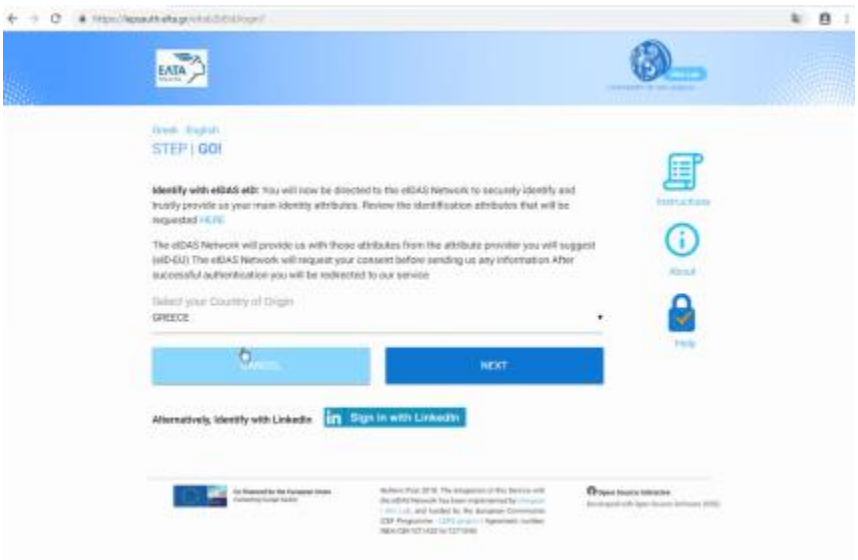
11. User click on “My Basket” on right sidebar menu named my account
12. User is redirected to the customer basket page https://www.elta.gr/en-us/customermybasket.aspx



Result	The SP grants User access to My Basket (after login) Ending Event: The User accesses the ELTA My Basket page where can find an item named "Armored Cruiser Averof"

Table 6-12: Registered User Normal Login Flow to ELTA e-Shop.

6.4.4 ELTAVOUCHER-TR1 User Registration Normal Flow (eIDAS eID)

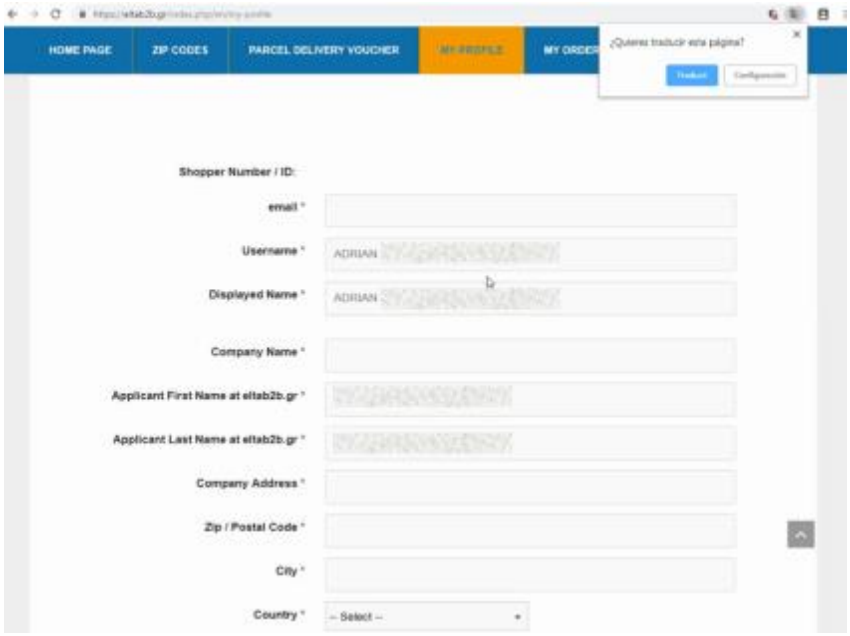
Process and screenshots	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID"  2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters) 

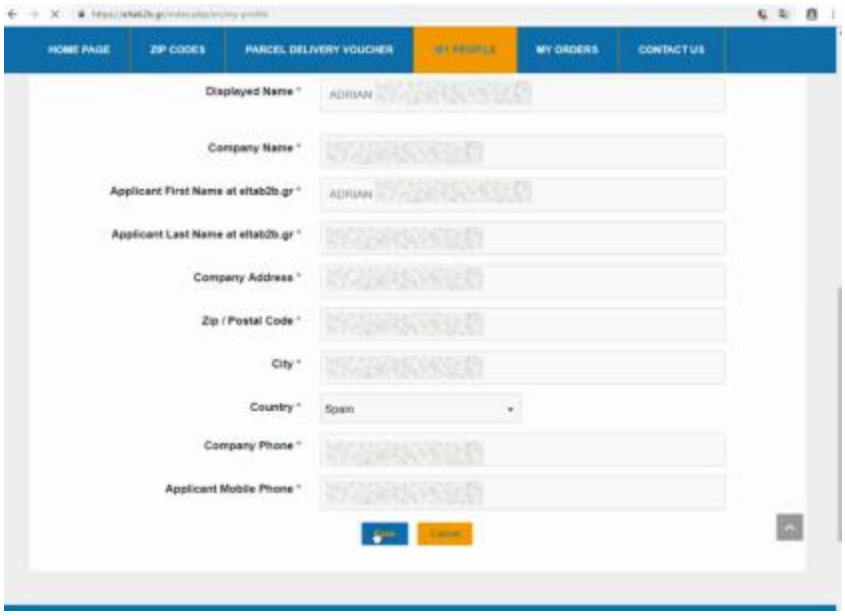
3. User selects country of origin “SPAIN” and clicks on “NEXT”.

4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card.

5. User authenticates with his electronic identity (eID card)

6. User is automatically redirected to the ELTA my profile page https://eltab2b.gr/index.php/en/my-profile (User must complete the necessary information, for example email, company name, company address, zip/postal code, city, country, company phone and applicant mobile phone) and click on “Save”





7. User is redirected to the ELTA BUSINESS APPLICATIONS home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User

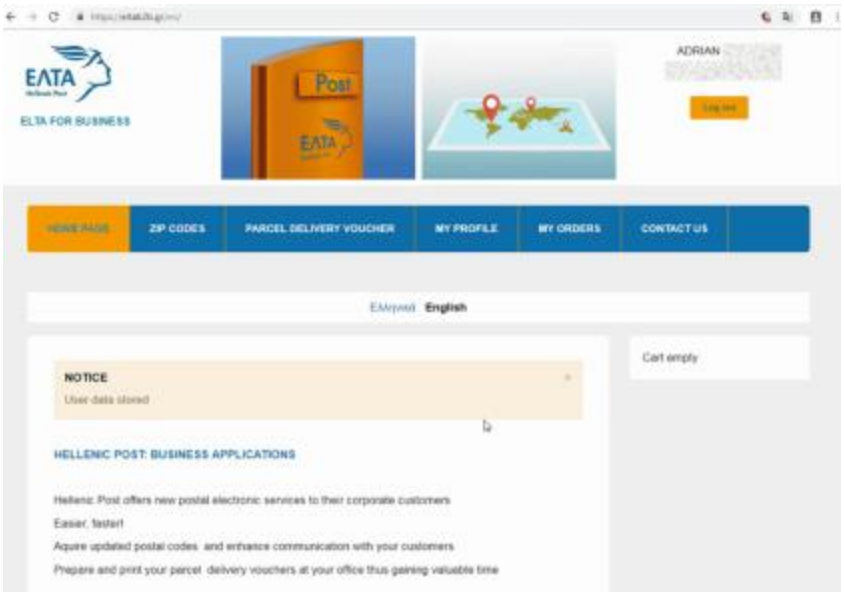
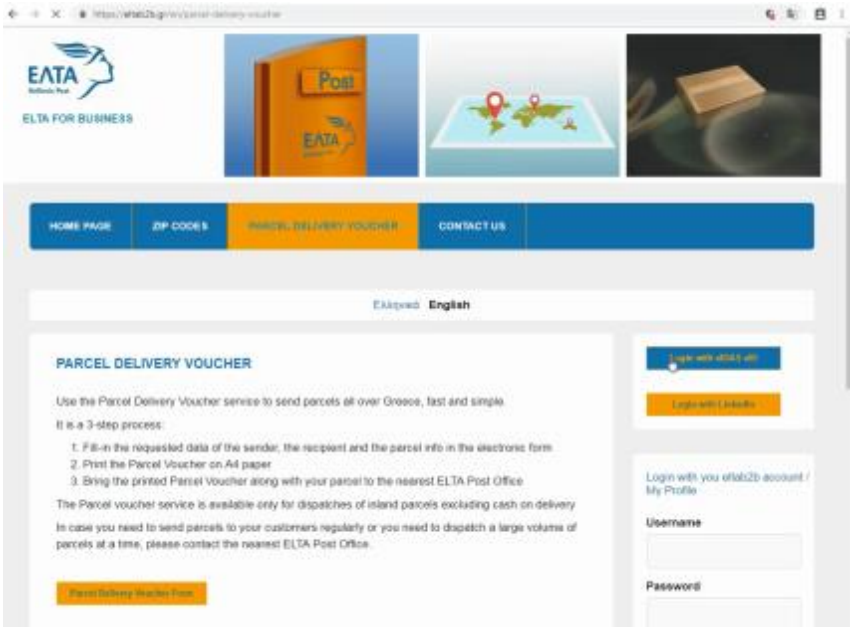
	
Result	The SP grants User access to ELTA BUSINESS APPLICATIONS (after registration) Ending Event: The User accesses the ELTA BUSINESS APPLICATIONS Home Page

Table 6-13: User Registration Normal Flow to ELTA Parcel Voucher.

6.4.5 ELTAVOUCHER-TL1 Registered User Normal Login Flow (eIDAS eID)

Process and screenshots	1. Access to the URL https://eltab2b.gr/en/parcel-delivery-voucher and click on "Login with eIDAS eID"  2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API

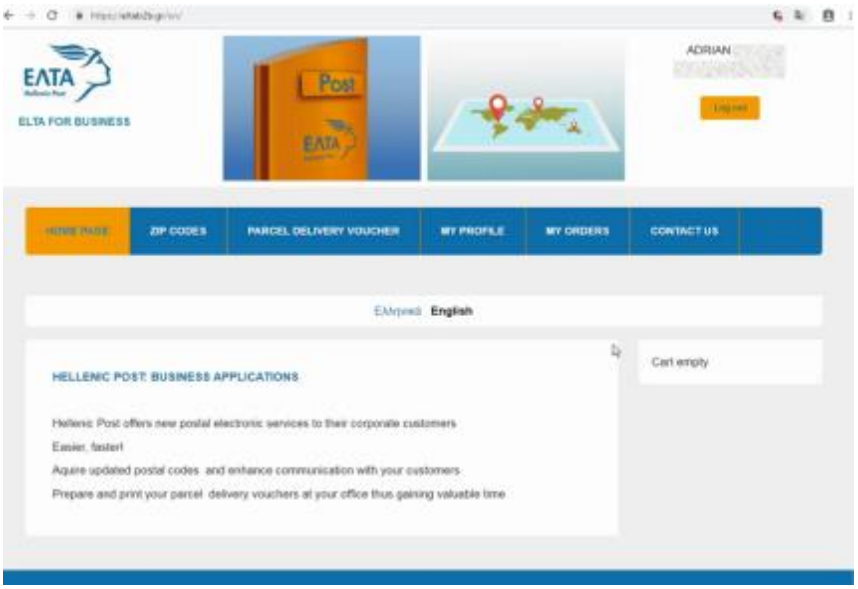
adapters)

3. User selects country of origin “SPAIN” and click on “NEXT”.

4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card.

5. User authenticates with his electronic identity (eID card)

6. User is redirected to the ELTA BUSINESS APPLICATIONS (Zip Codes) home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User



7. User selects and click on "Parcel Delivery Voucher Form" from PARCEL DELIVERY VOUCHER menu

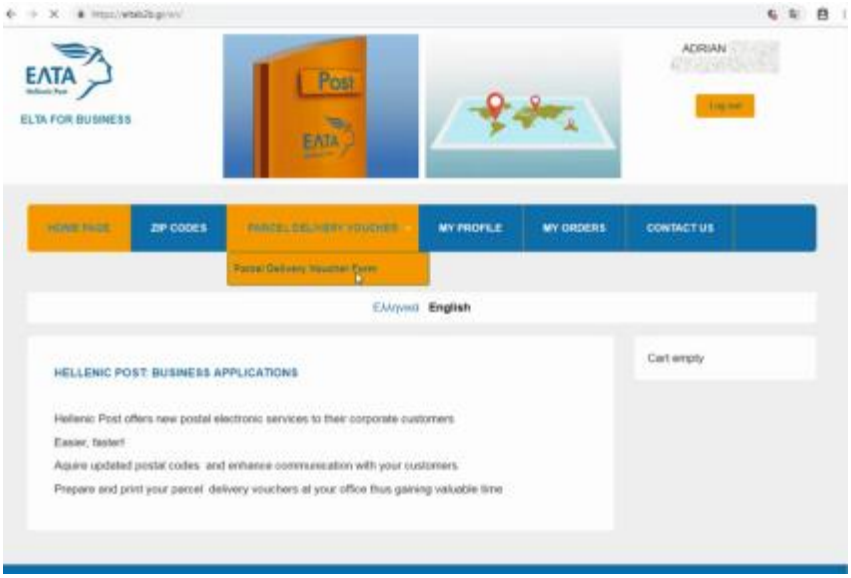
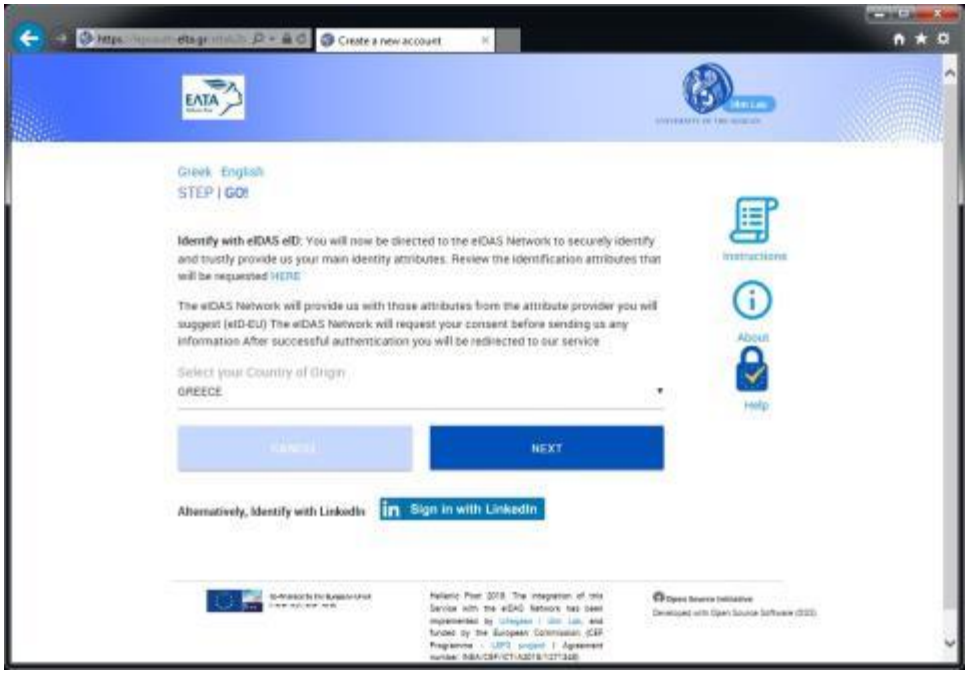
	 8. User is automatically redirected to ELTA BUSINESS APPLICATIONS Parcel Delivery Voucher Form page https://eltab2b.gr/en/parcel-delivery-voucher/parcel-delivery-voucher-form
Result	The SP grants User access to ELTA BUSINESS APPLICATIONS (after login) Ending Event: The User accesses the ELTA BUSINESS APPLICATIONS Parcel Delivery Voucher Form page

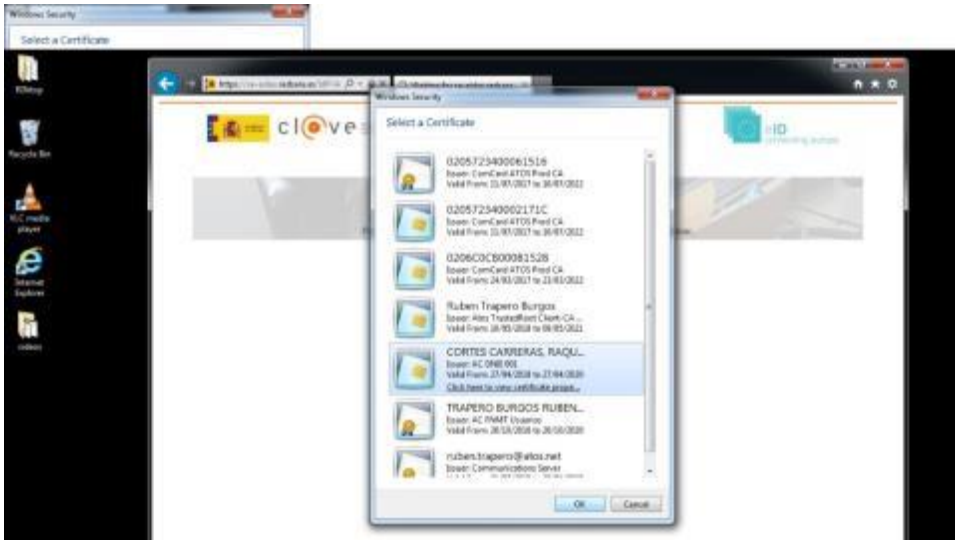
Table 6-14: Registered User Normal Login Flow to ELTA Parcel Voucher.

6.4.6 ELTAZIPCODES-TR1 User Registration Normal Flow (eIDAS eID)

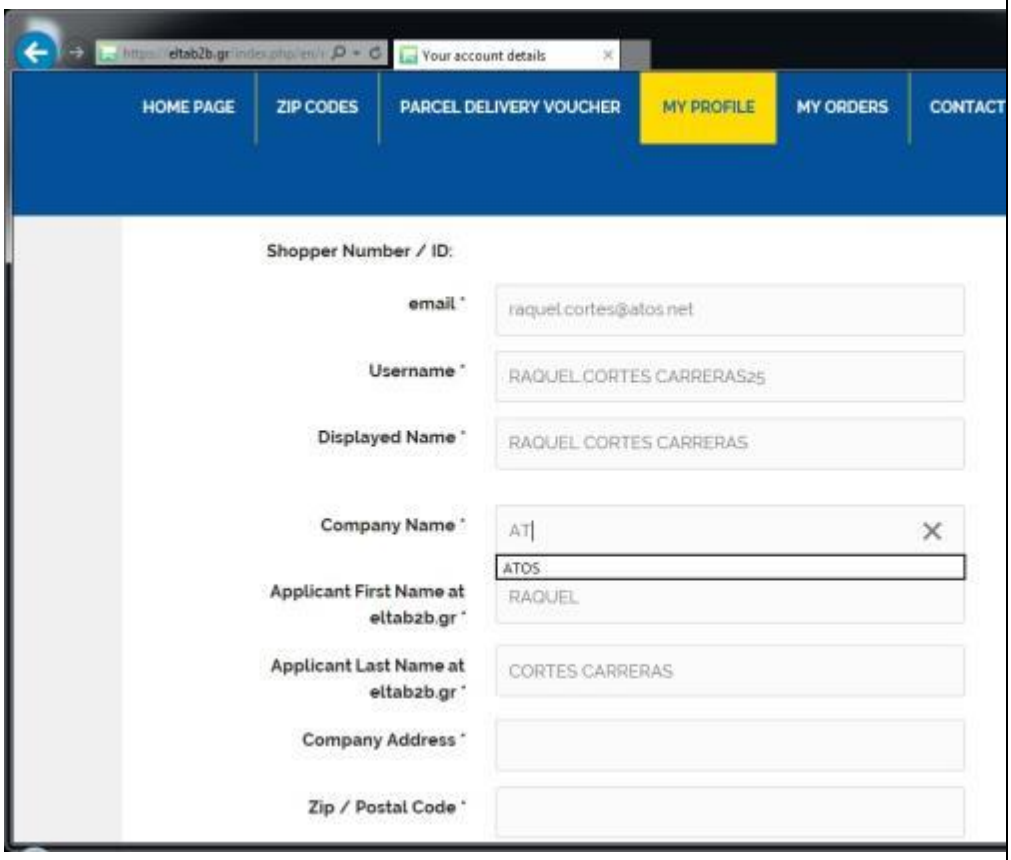
Process and screenshots	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID" 2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)  4. User selects country of origin "SPAIN" and click on "NEXT".

5. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

6. User authenticates with his electronic identity (eID card)



7. User is automatically redirected to the ELTA my profile page https://eltab2b.gr/index.php/en/my-profile (User must complete the necessary information, for example email, company name, company address, zip/postal code, city, country, company phone and applicant mobile phone) and click on "Save"



8. User is redirected to the ELTA BUSINESS APPLICATIONS home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User

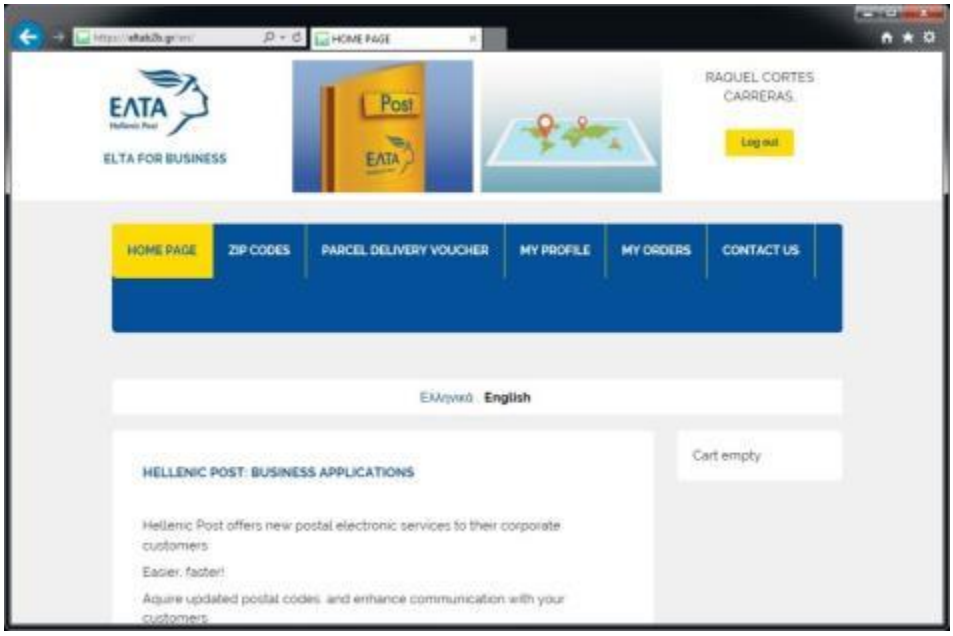
	
Result	The SP grants User access to ELTA BUSINESS APPLICATIONS (after registration) Ending Event: The User accesses the ELTA BUSINESS APPLICATIONS Home Page

Table 6-15: User Registration Normal Flow to ELTA Zipcodes.

6.4.7 ELTAZIPCODES-TL1 Registered User Normal Login Flow (eIDAS eID)

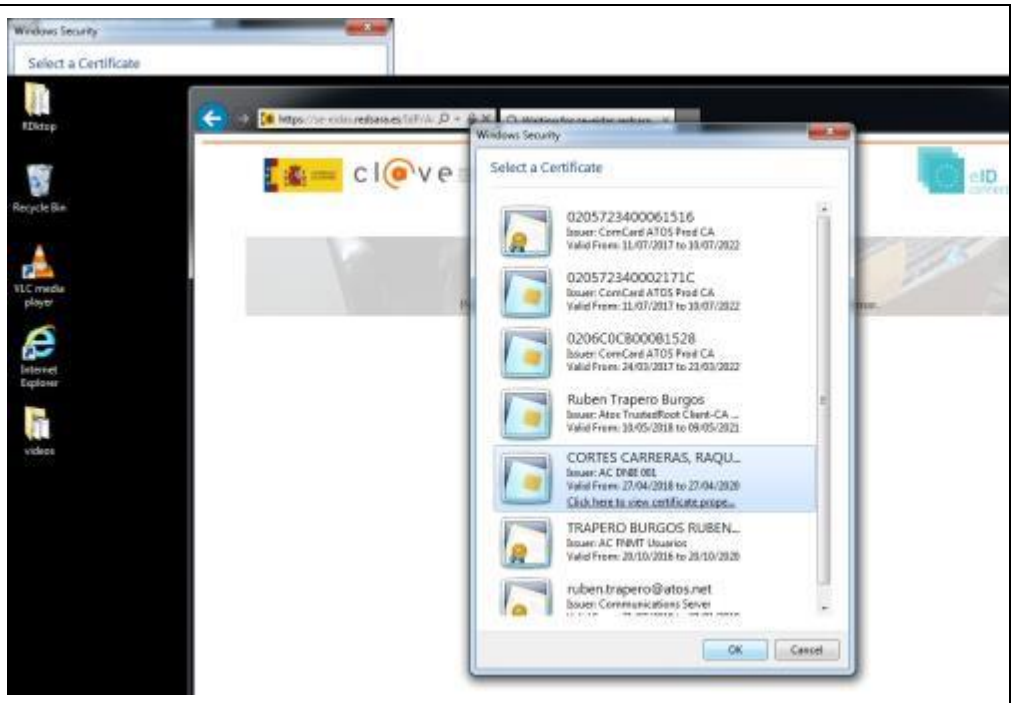
Process and screenshots	1. Access to the URL https://eltab2b.gr/en/zip-codes and click on "Login with eIDAS eID"

2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)

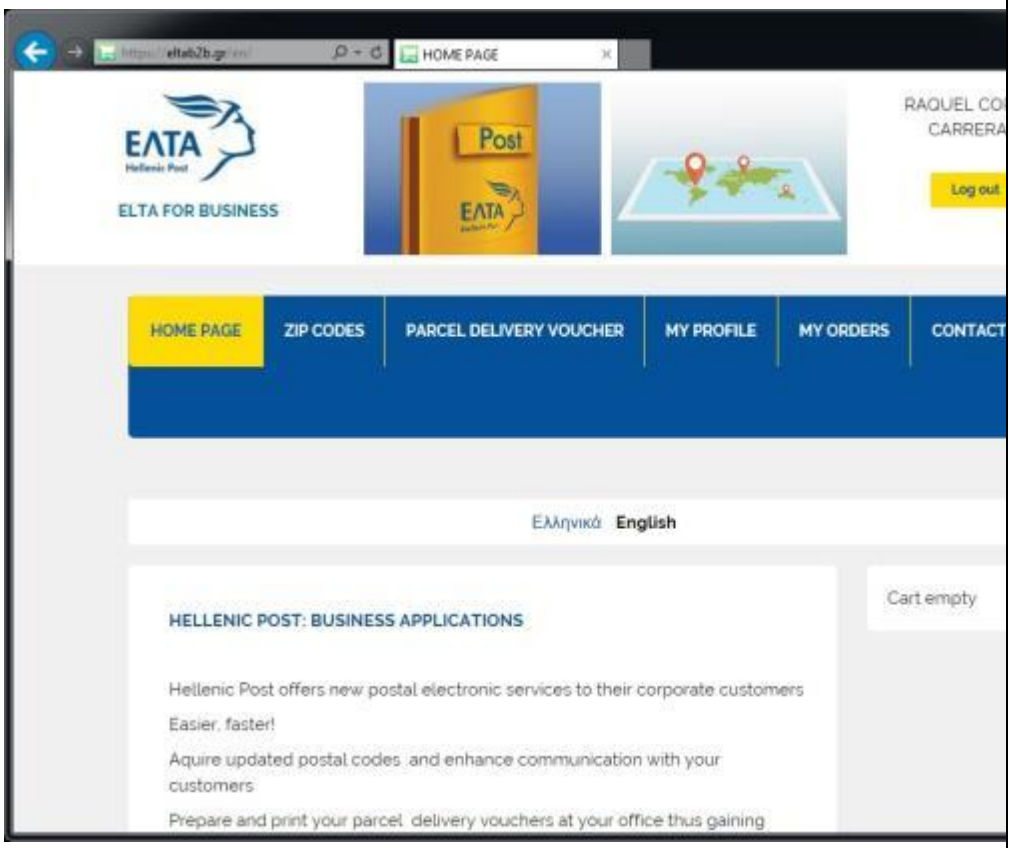
3. User selects country of origin "SPAIN" and click on "NEXT".

4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

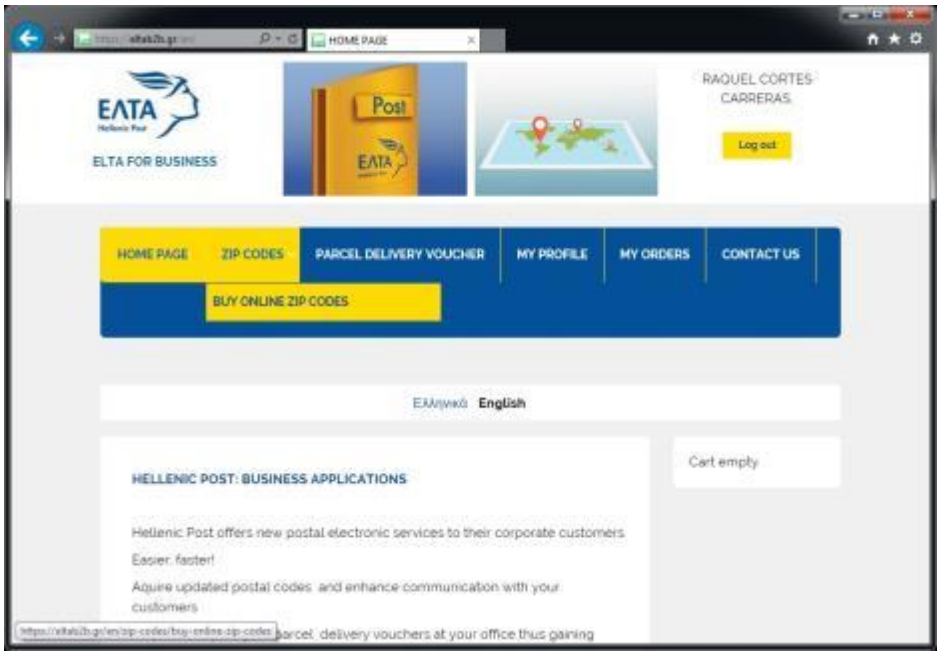
5. User authenticates with his electronic identity (eID card)



6. User is redirected to the ELTA BUSINESS APPLICATIONS home page (English version) https://eltab2b.gr/en/ - The page shows the name of the User



7. User selects and click on “BUY ONLINE ZIP CODES” from ZIP CODES menu



8. User is automatically redirected to ELTA BUSINESS APPLICATIONS Buy Online Zip Codes page https://eltab2b.gr/en/zip-codes/buy-online-zip-codes

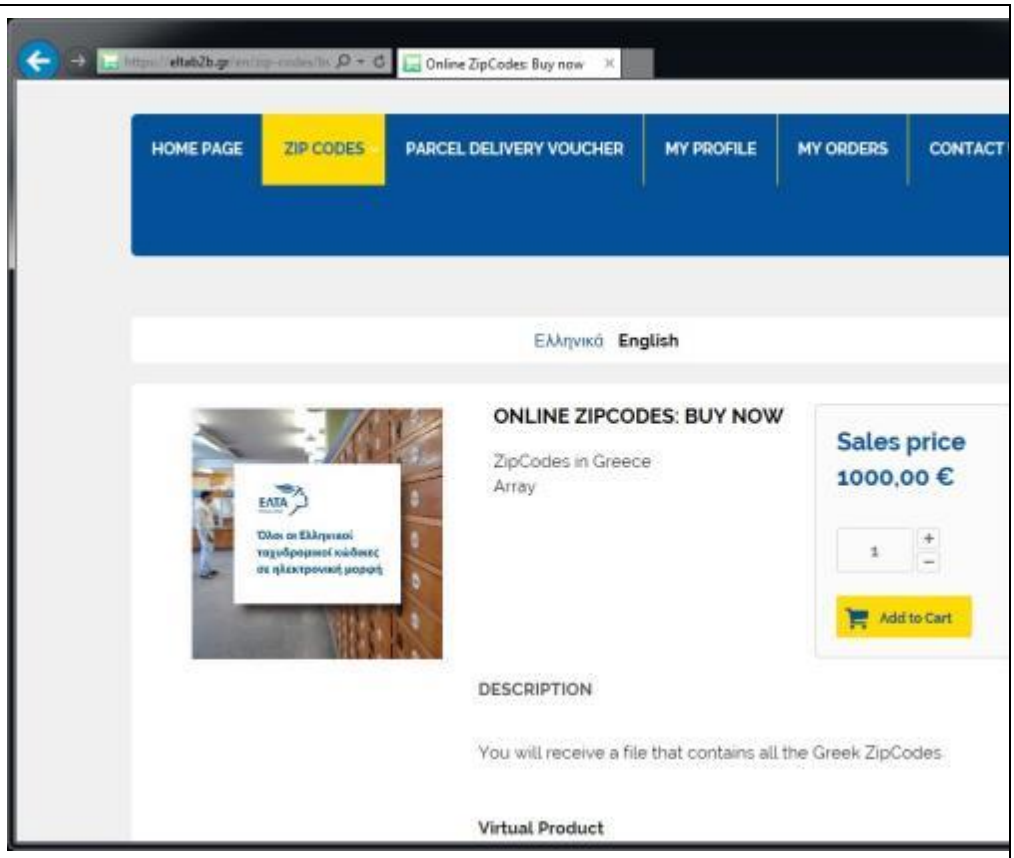
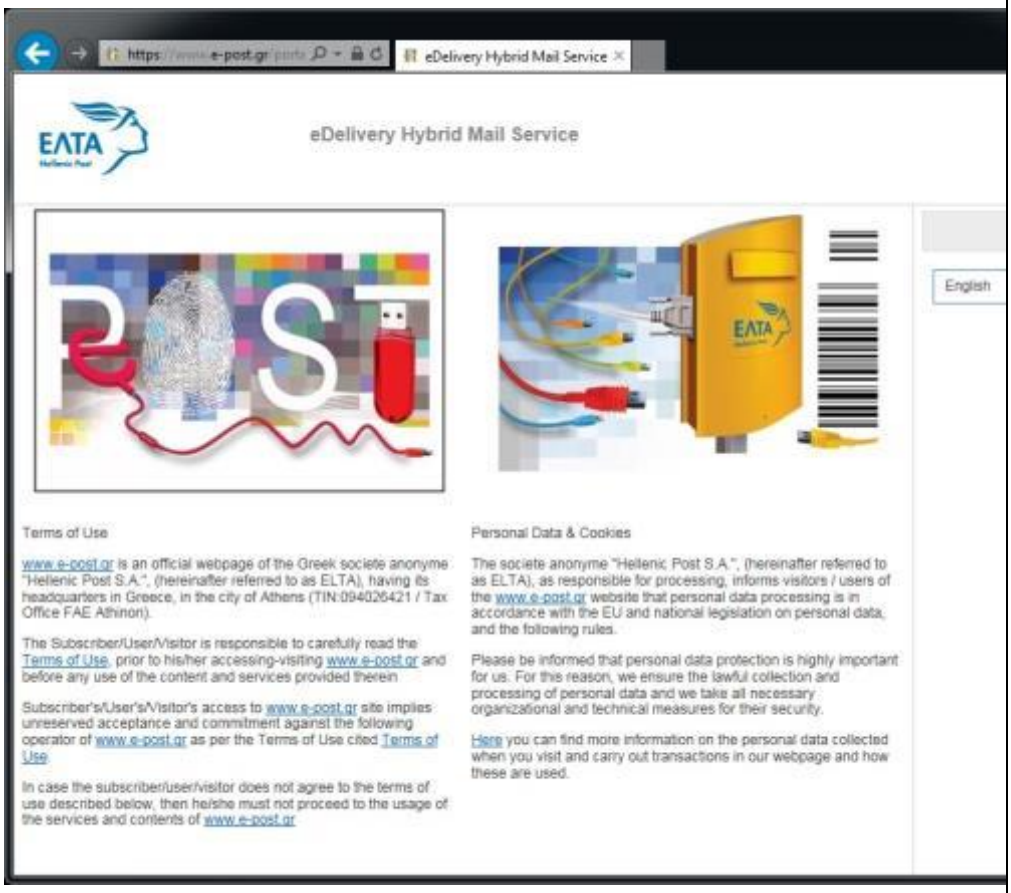
	
Result	The SP grants User access to ELTA BUSINESS APPLICATIONS (after login) Ending Event: The User accesses the ELTA BUSINESS APPLICATIONS Buy Online Zip Codes page

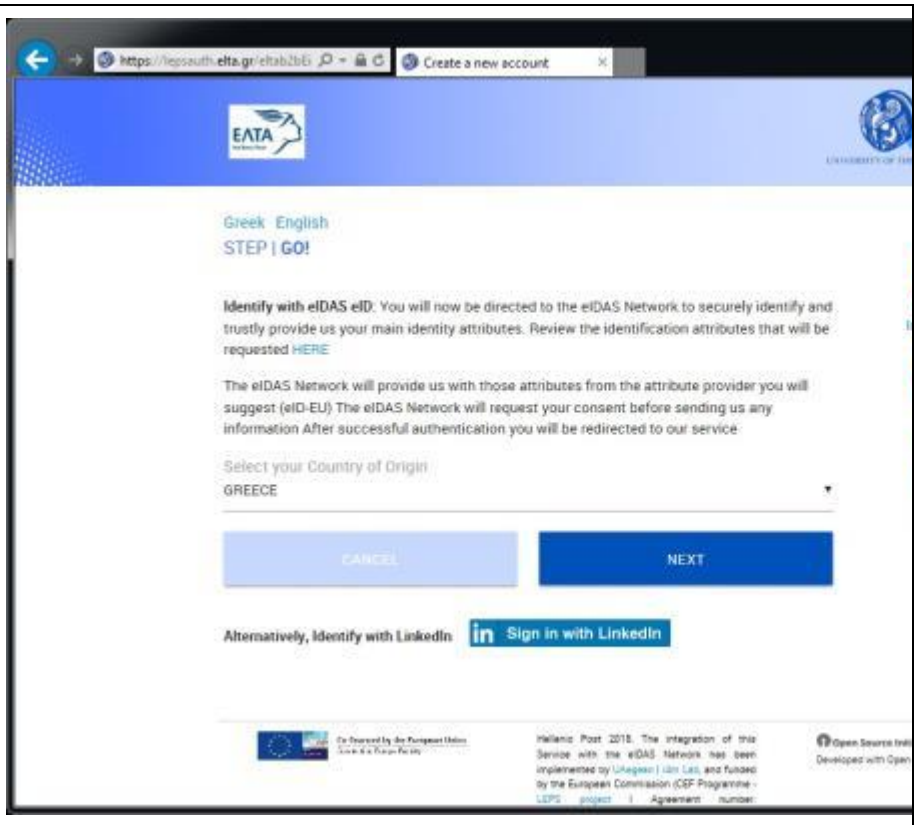
Table 6-16: Registered User Normal Login Flow to ELTA Zipcodes.

6.4.8 ELTAHYBRID-TL1 User Registration /Login Normal Flow (eIDAS eID)

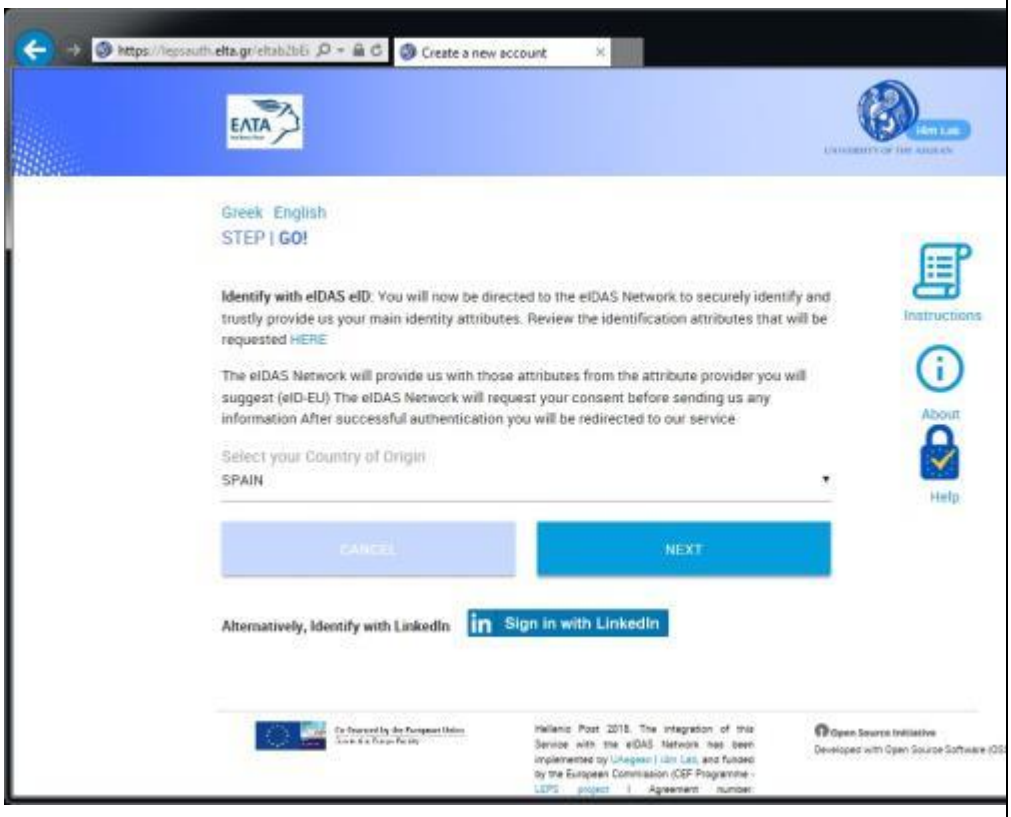
Process and screenshots	1. Access to the URL https://www.e-post.gr/portalLogin.jsp and click on "Login"



2. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)

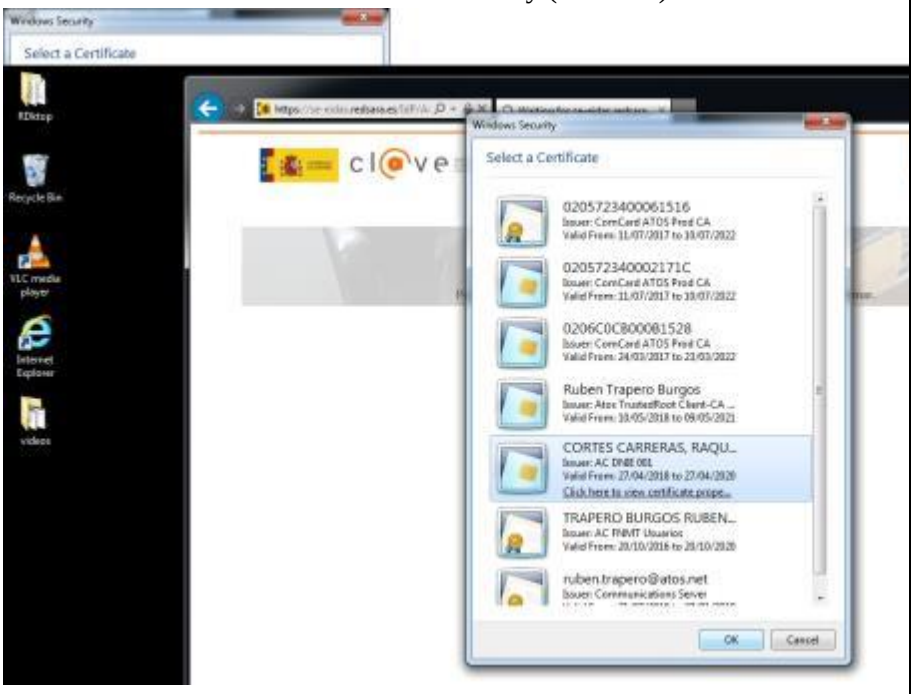


3. User selects country of origin “SPAIN” and click on “NEXT”.

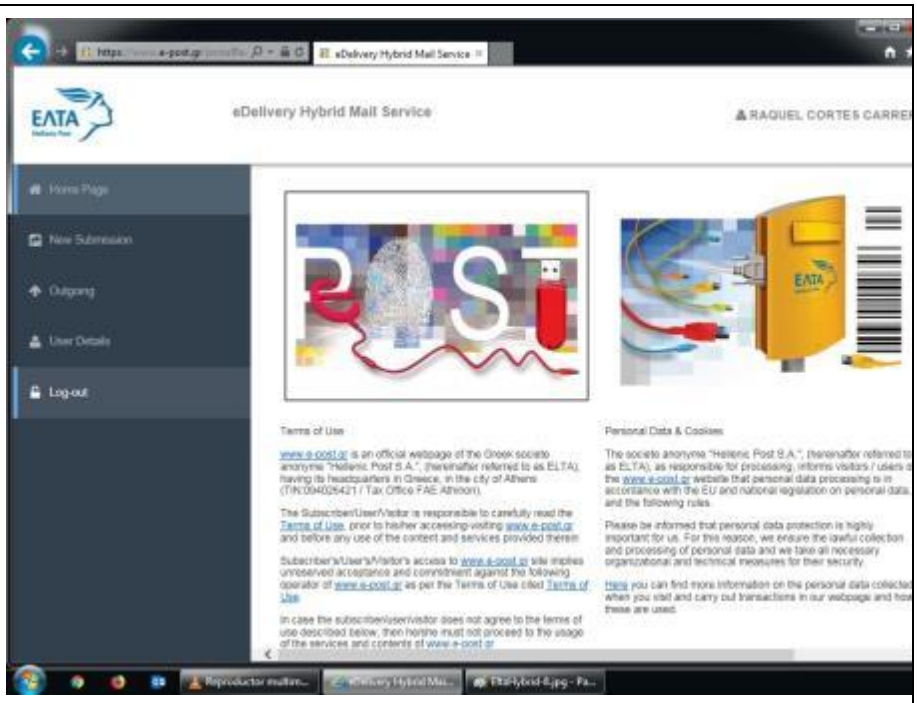


4. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

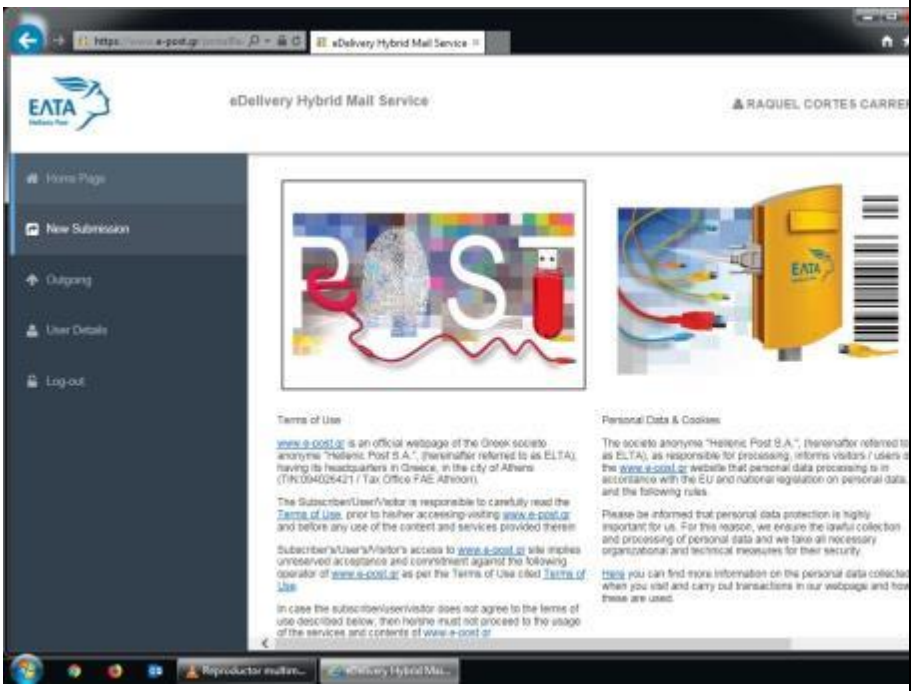
5. User authenticates with his electronic identity (eID card)



6. User is automatically redirected to the ELTA e-Delivery Hybrid Service home page - The page shows the Logout button



7. User selects New Submission



8. User is automatically redirected to the new submission form where insert details about the document and the receiver

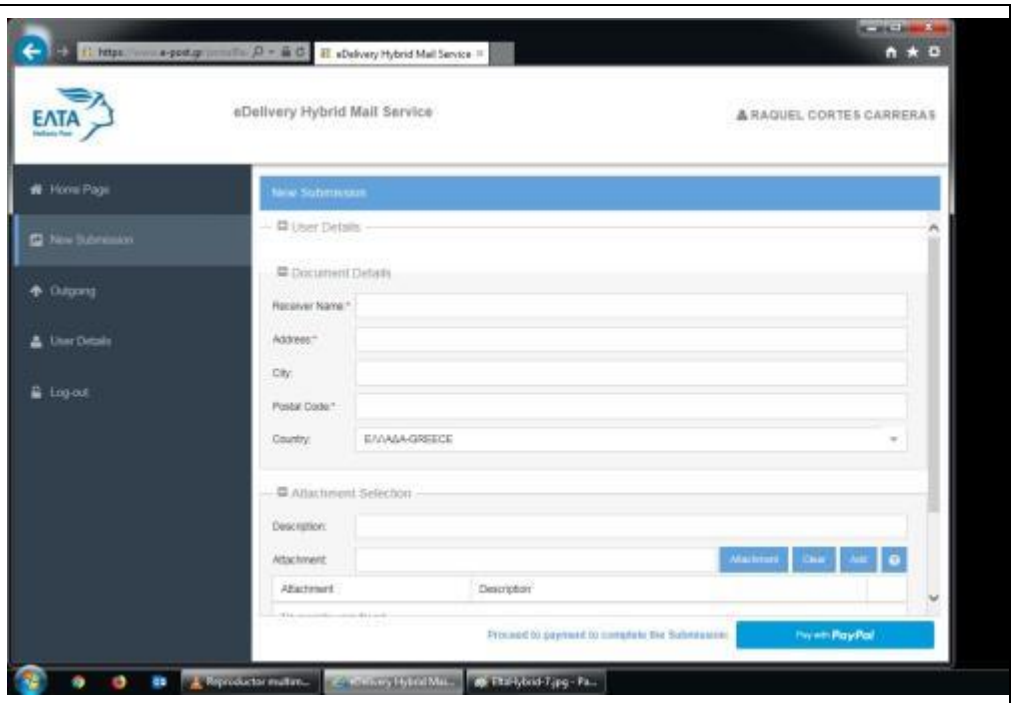
	
Result	The SP grants User access to ELTA e-Delivery Hybrid Service (after Login) Ending Event: The User accesses the ELTA New Submission Form Page

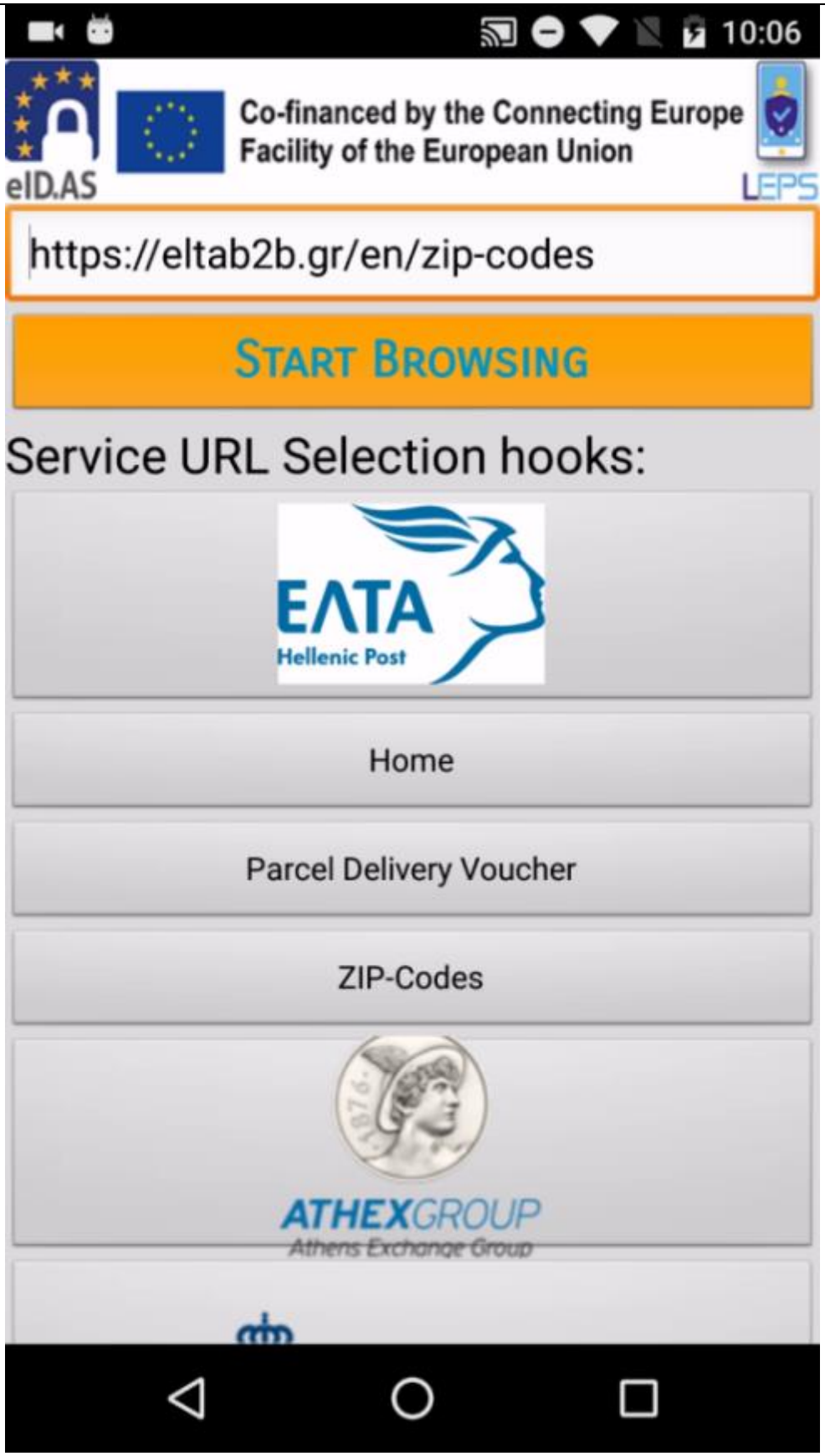
Table 6-17: User Registration /Login Normal Flow to ELTA Hybrid Mail Service.

6.5 Mobile execution tests results

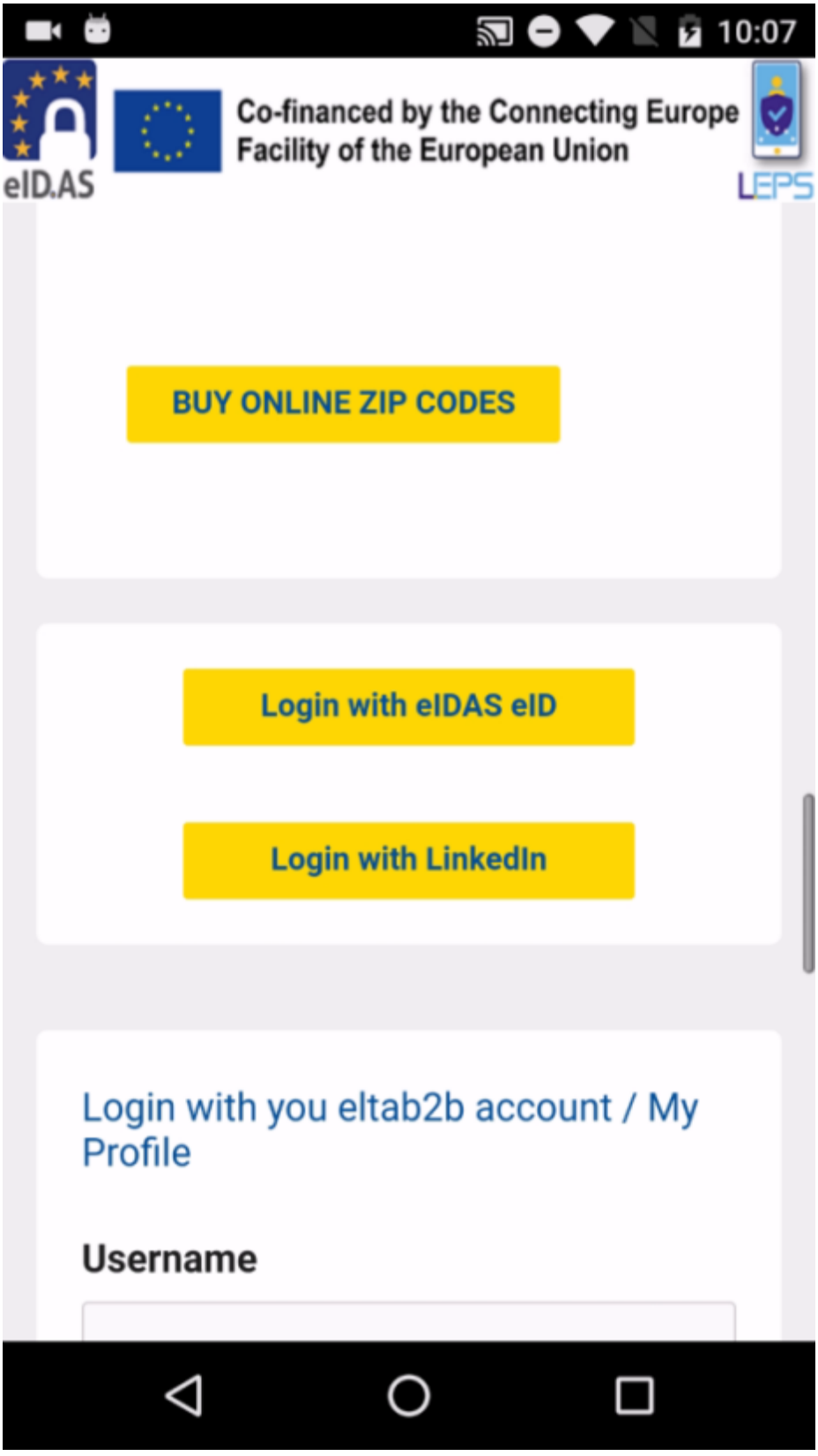
This section contains a set of mobile production tests (one service for ATHEX and one for ELTA).

6.5.1 Test Case 1 – Access ELTA BUSINESS APPLICATIONS (Buy Online Zip Codes) Services via eIDASBrowser Android APP with NFC DNIe authentication

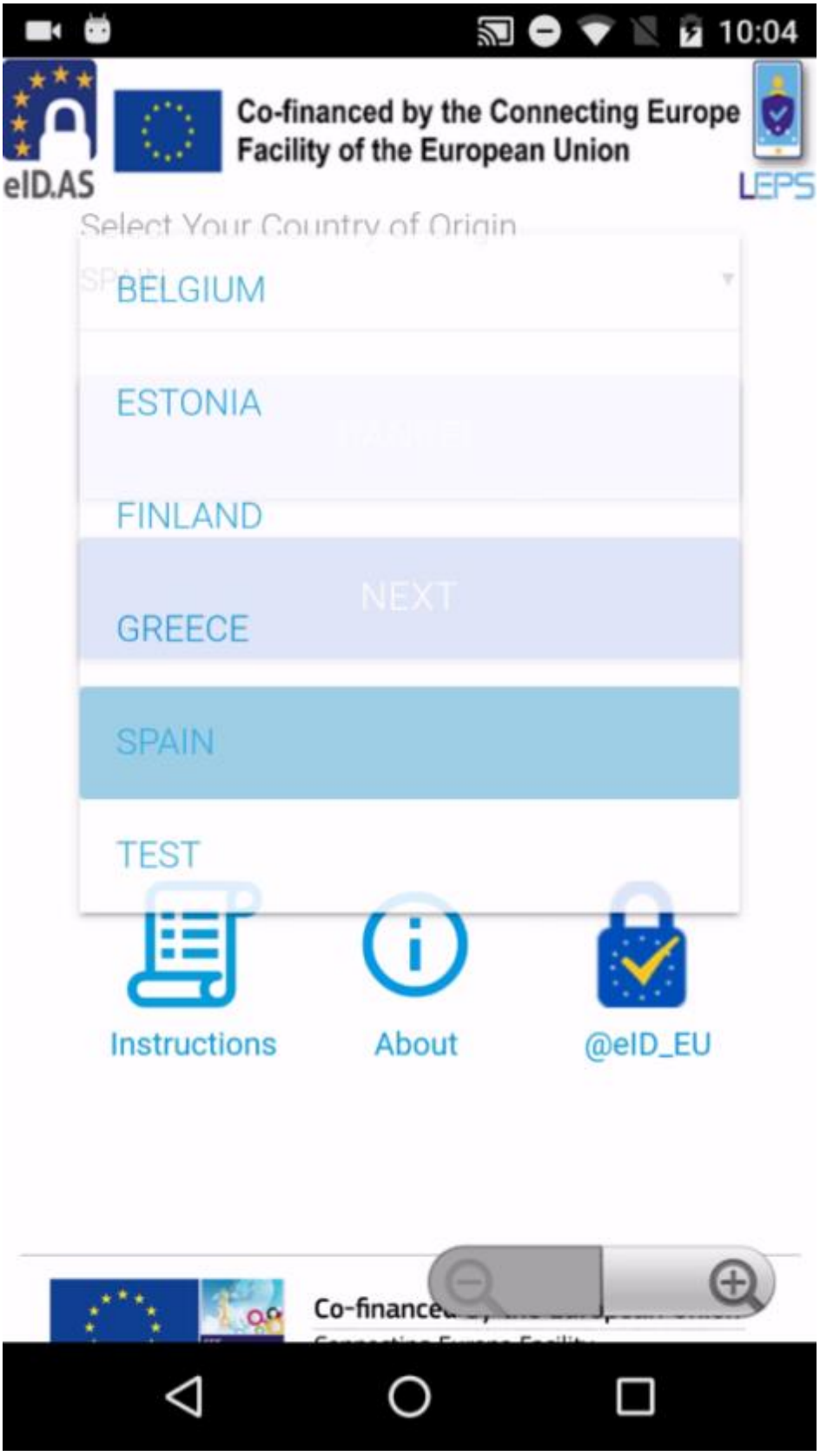
Process and screenshots	1. The user introduces the URL https://eltab2b.gr/en/zip-codes and click on "START BROWSING" button. Alternatively, the user can press the ELTA logo button and the press on "ZIP-Codes" button just to fill the url field.


10:06
eIDAS
Co-financed by the Connecting Europe Facility of the European Union
LEPS
https://eltab2b.gr/en/zip-codes
START BROWSING
Service URL Selection hooks:
ΕΛΤΑ
Hellenic Post
Home
Parcel Delivery Voucher
ZIP-Codes
ATHEXGROUP
Athens Exchange Group

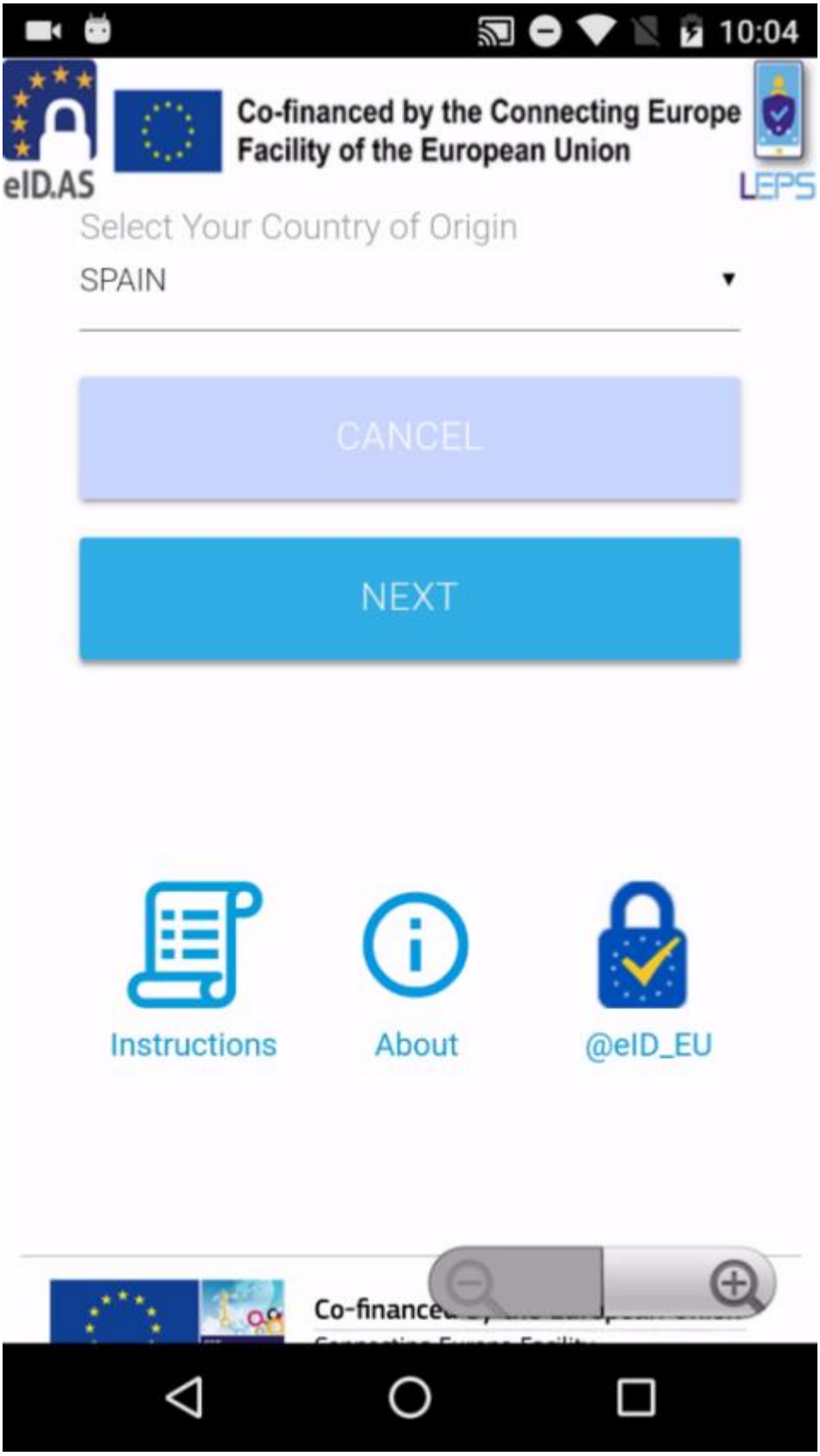
2. The user is redirected to Elta's zip-codes page where a "Login with eIDAS eID" button needs to be pressed to start the authentication process.



3. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)



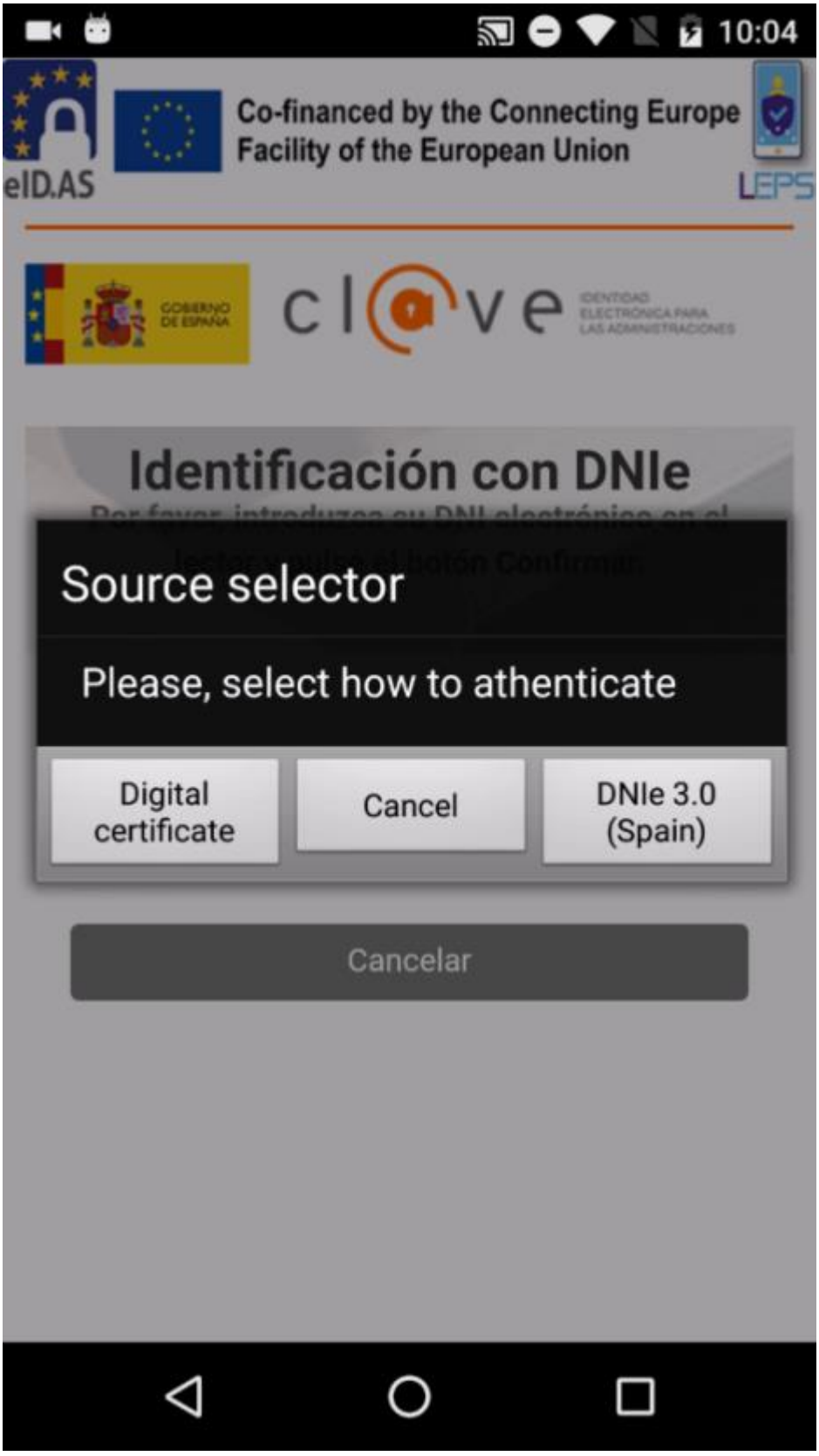
4. User selects country of origin “SPAIN” and click on “NEXT”.



5. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

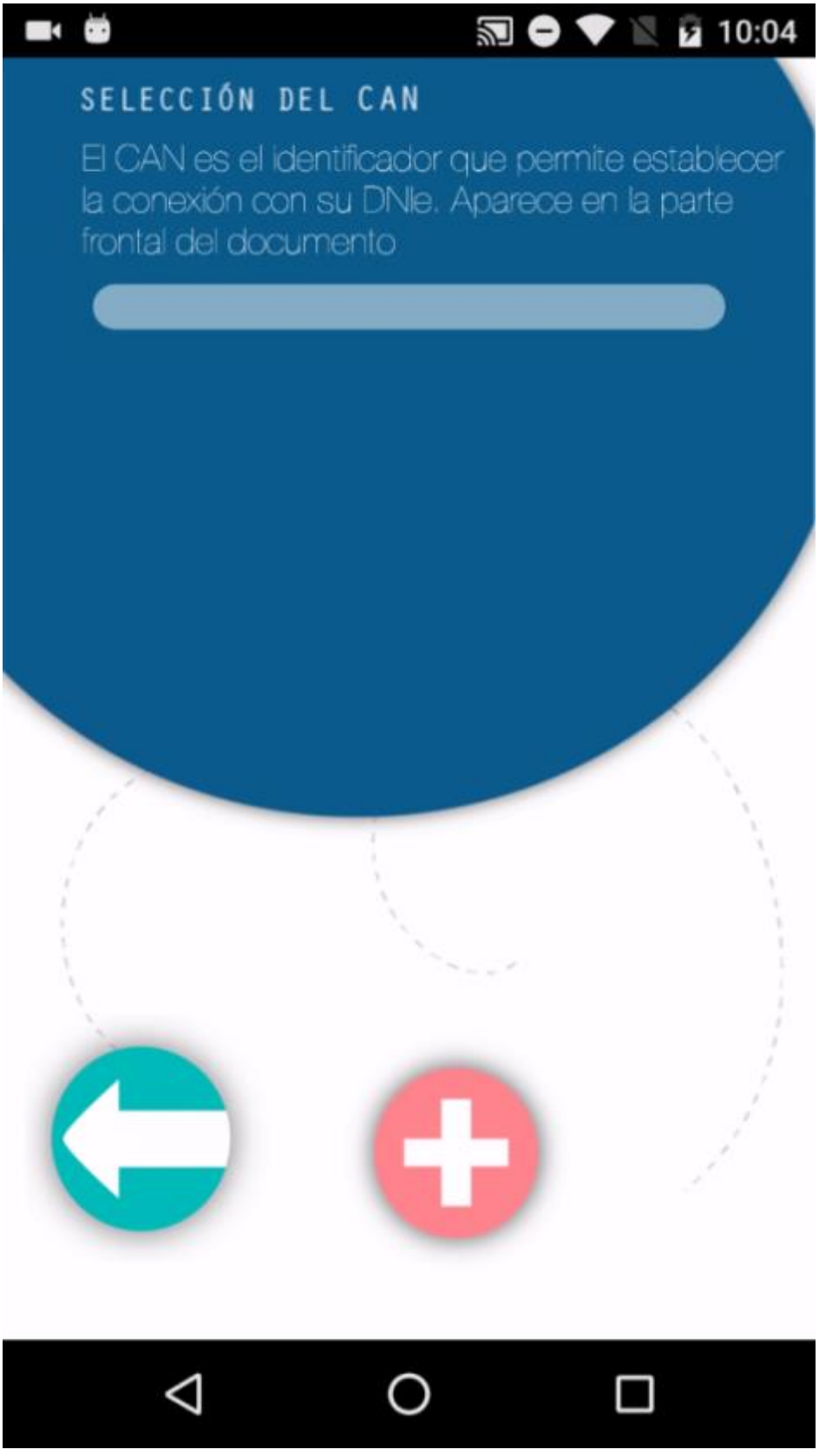
6. Pop-up appears asking the user for authenticating with software certificate or DNIe

3.0 (Spain). The user selects the last



7. The user is requested to associate the identity card by inserting the CAN number via

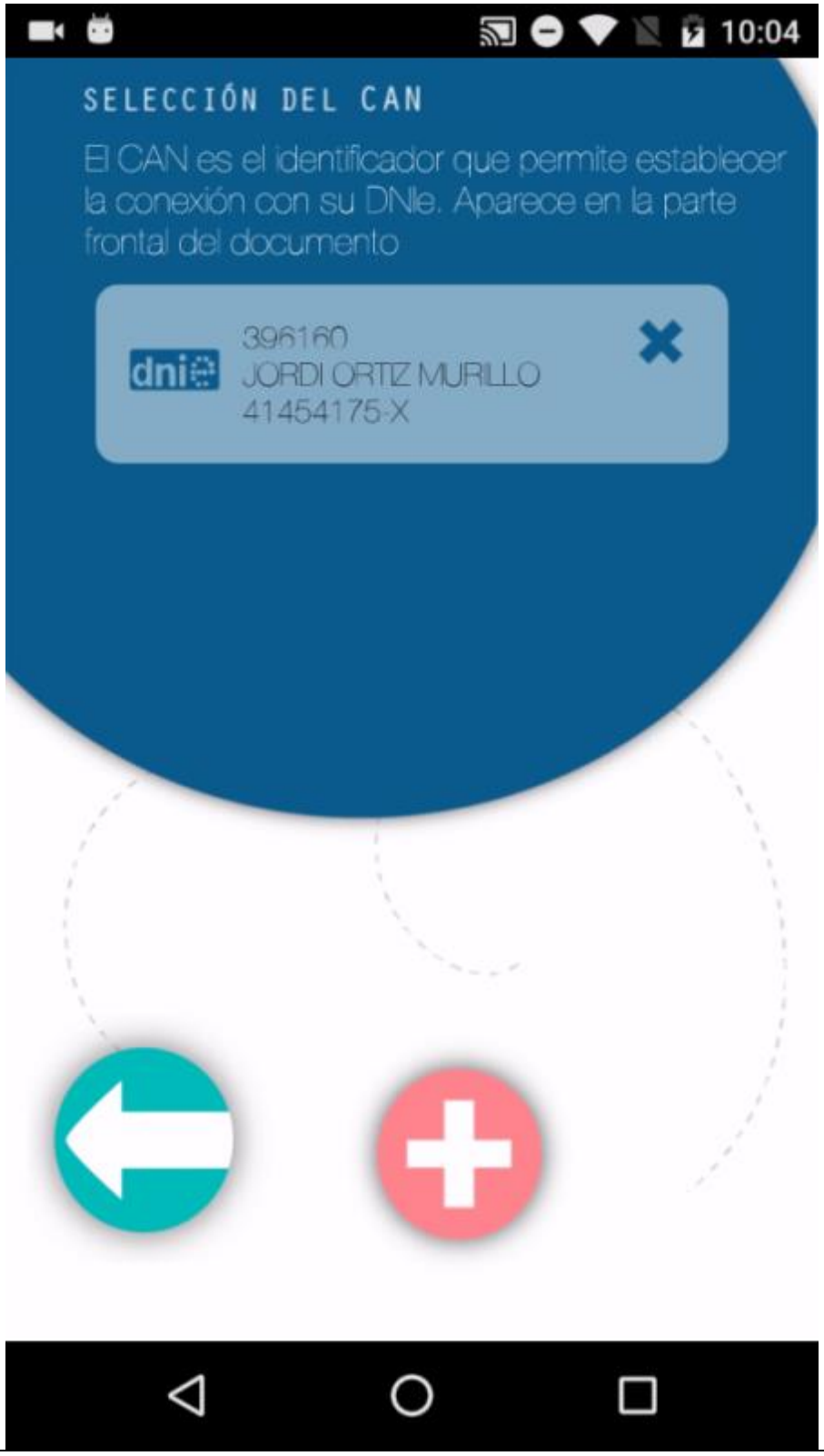
the “+” button, printed on the id card.



8. The system reads the data from the card and creates the association.

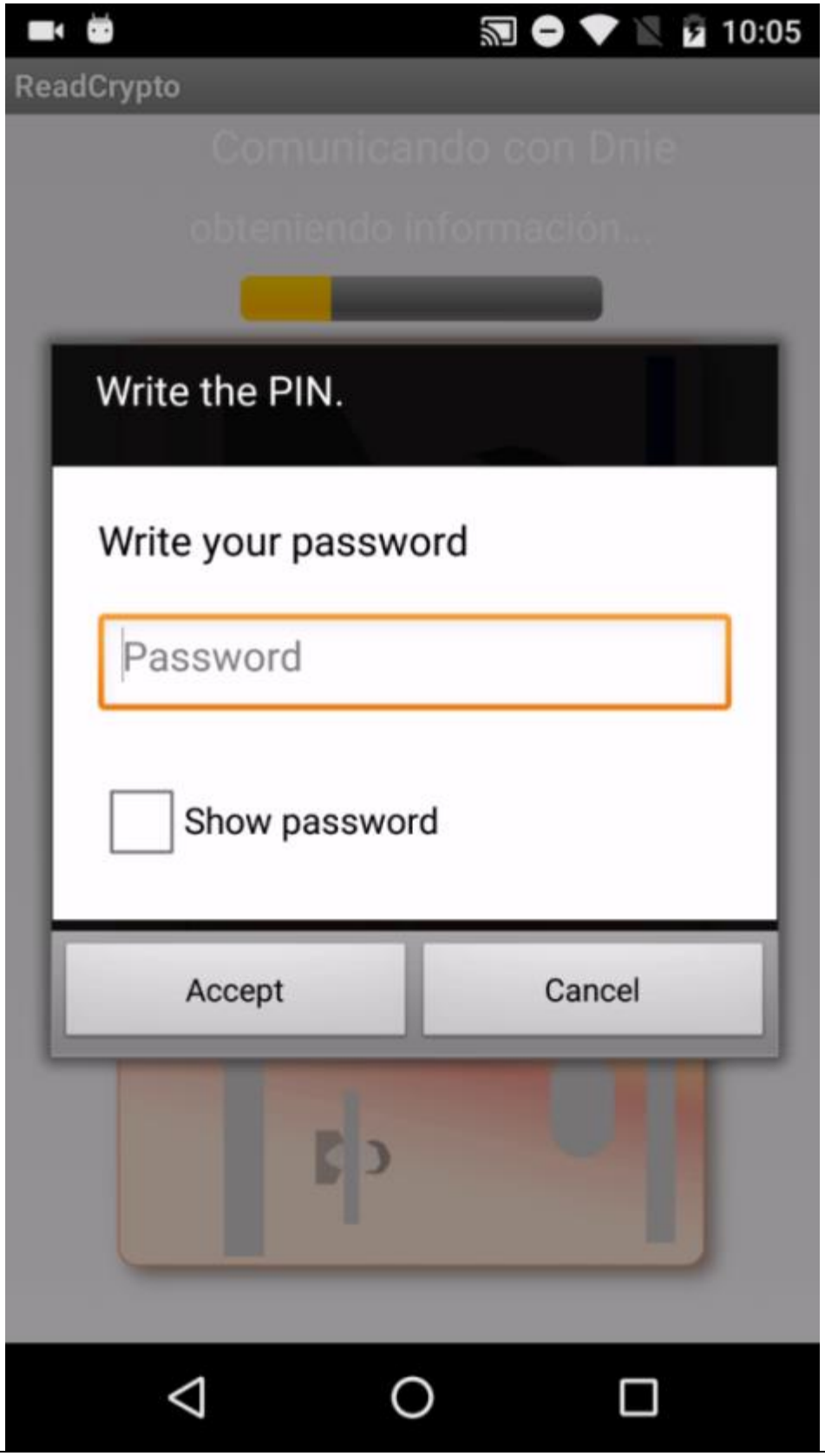
10:04
Aproxime DNIe al dispositivo
Esperando DNIe...

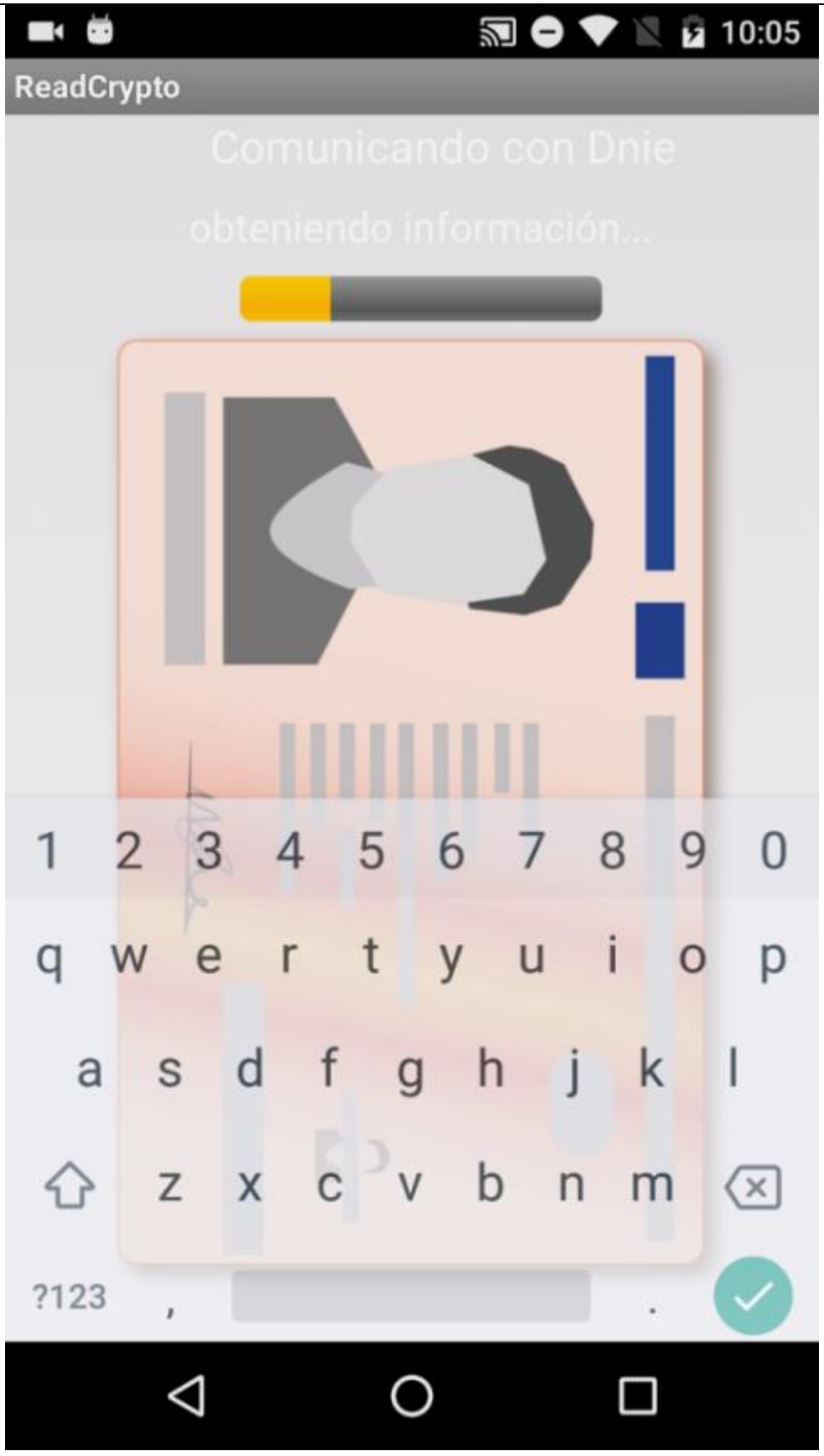
9. The user can then select that card to be part of the authentication process. The association is stored for future processes, avoiding repeating steps 7 and 8.



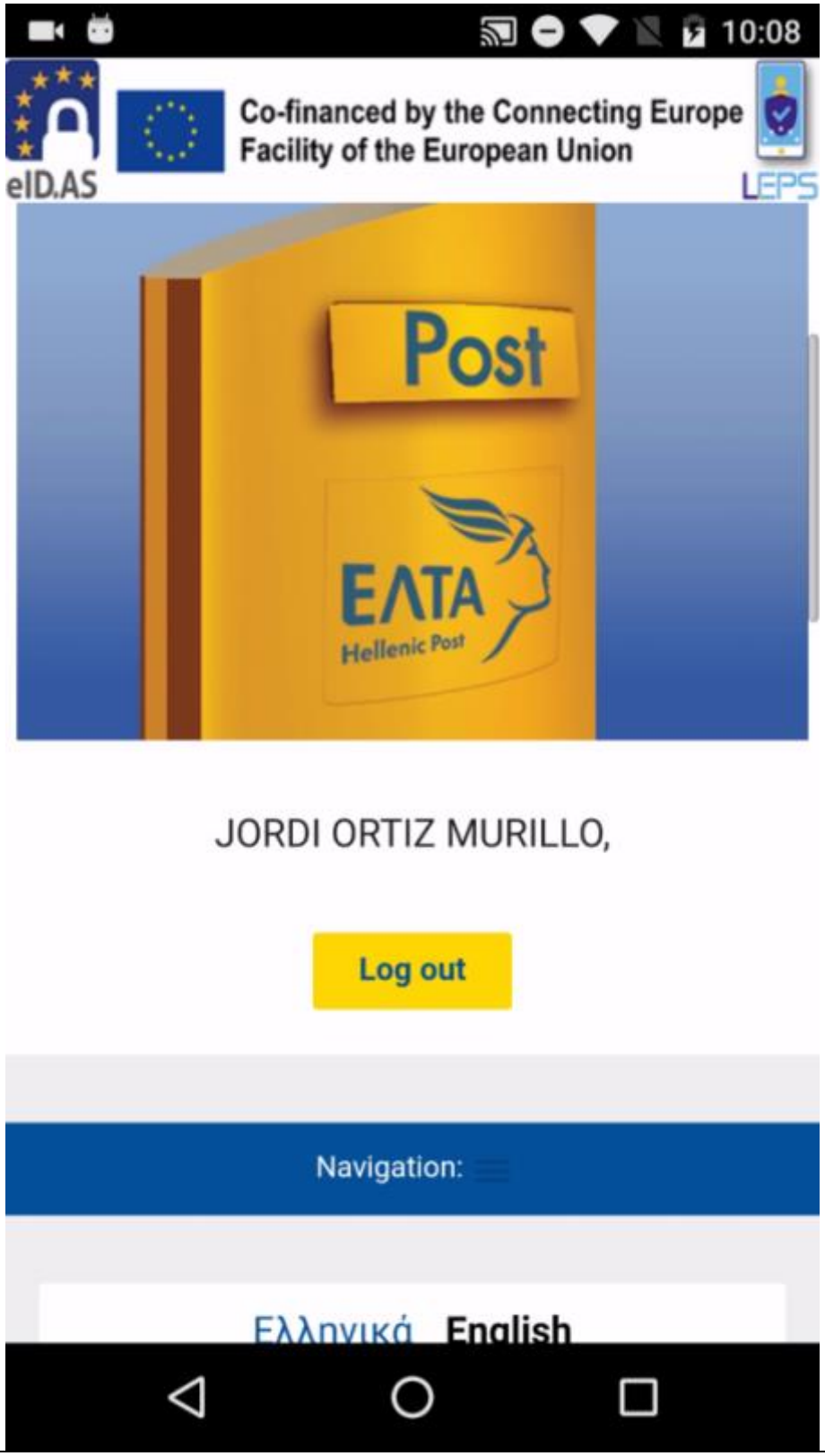
10:05
ReadCrypto

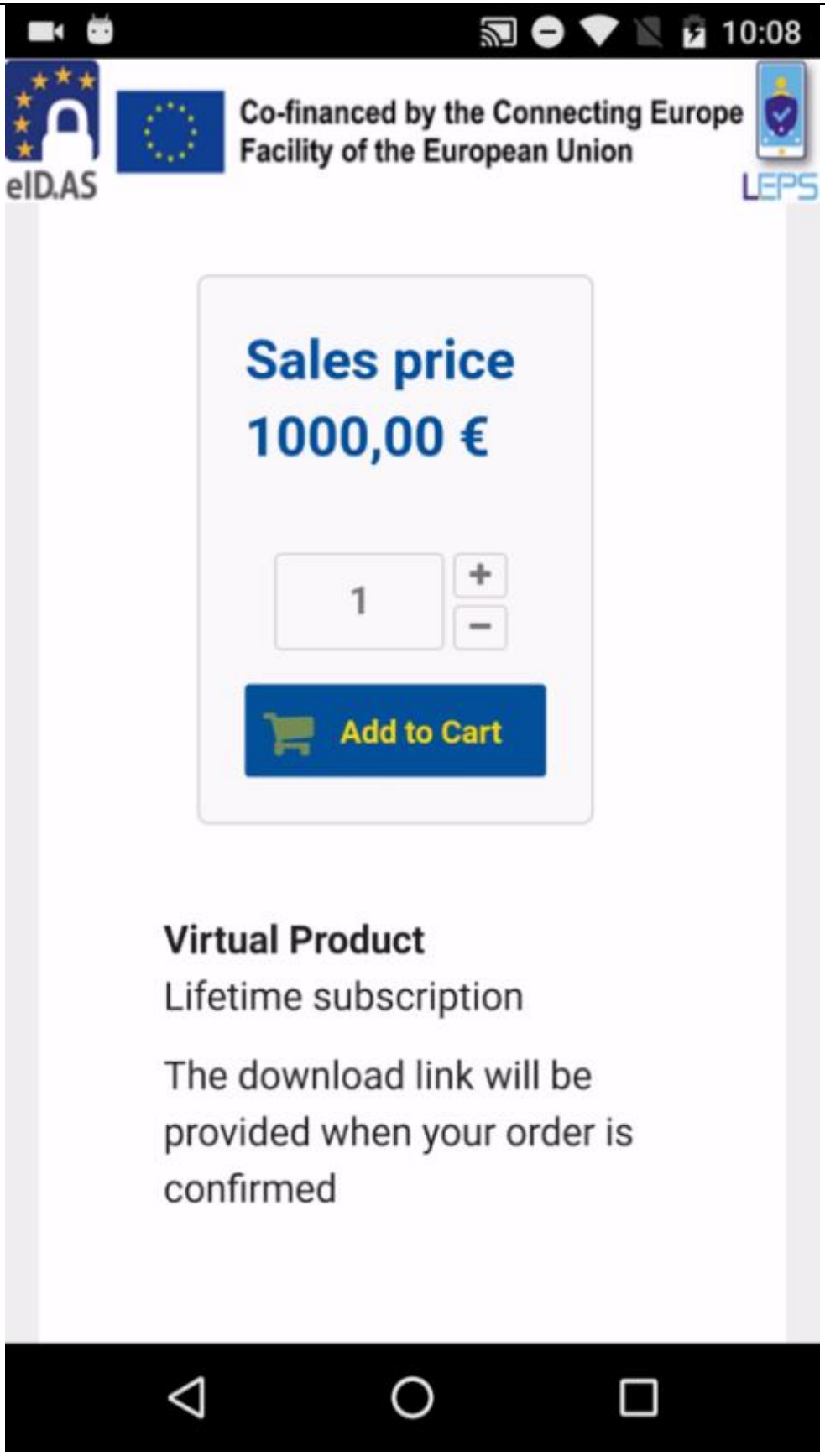
10. When the card is put together to the back of the phone, the user is requested for the password of the card.



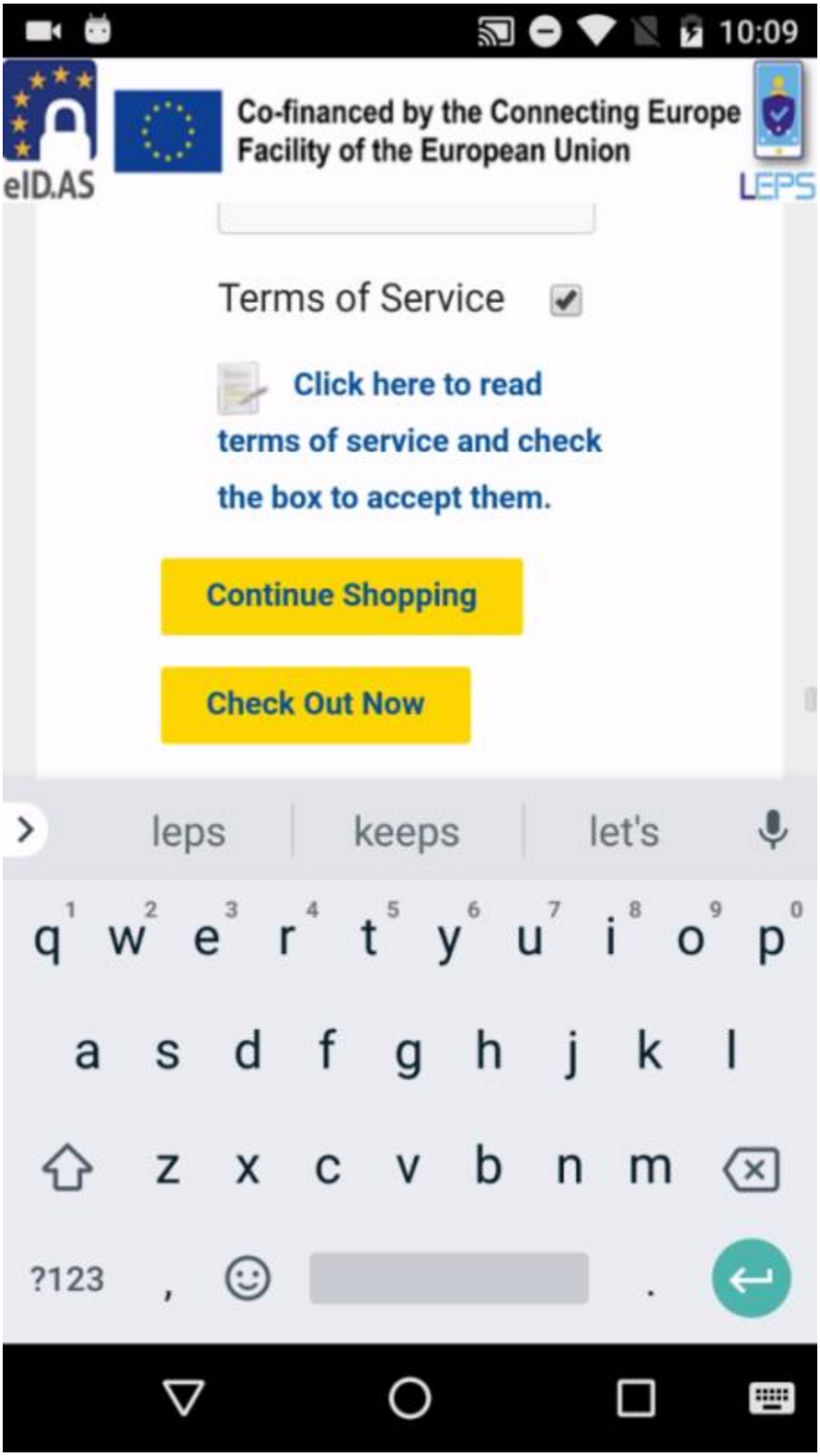

10:05
ReadCrypto
Comunicando con Dnie
obteniendo información...
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123 ,
.

11. User is redirected to the buy codes page where the “Add to Cart” button appears to add Zip-Codes to the shopping cart.




10:08
Co-financed by the Connecting Europe Facility of the European Union
eIDAS
LEPS
Sales price
1000,00 €
1
Add to Cart
Virtual Product
Lifetime subscription
The download link will be provided when your order is confirmed

12. The “Check Out Now” button proceeds with the purchase. A new page is loaded.



13. The “Confirm Purchase” button allows the user to proceed to the payment process.

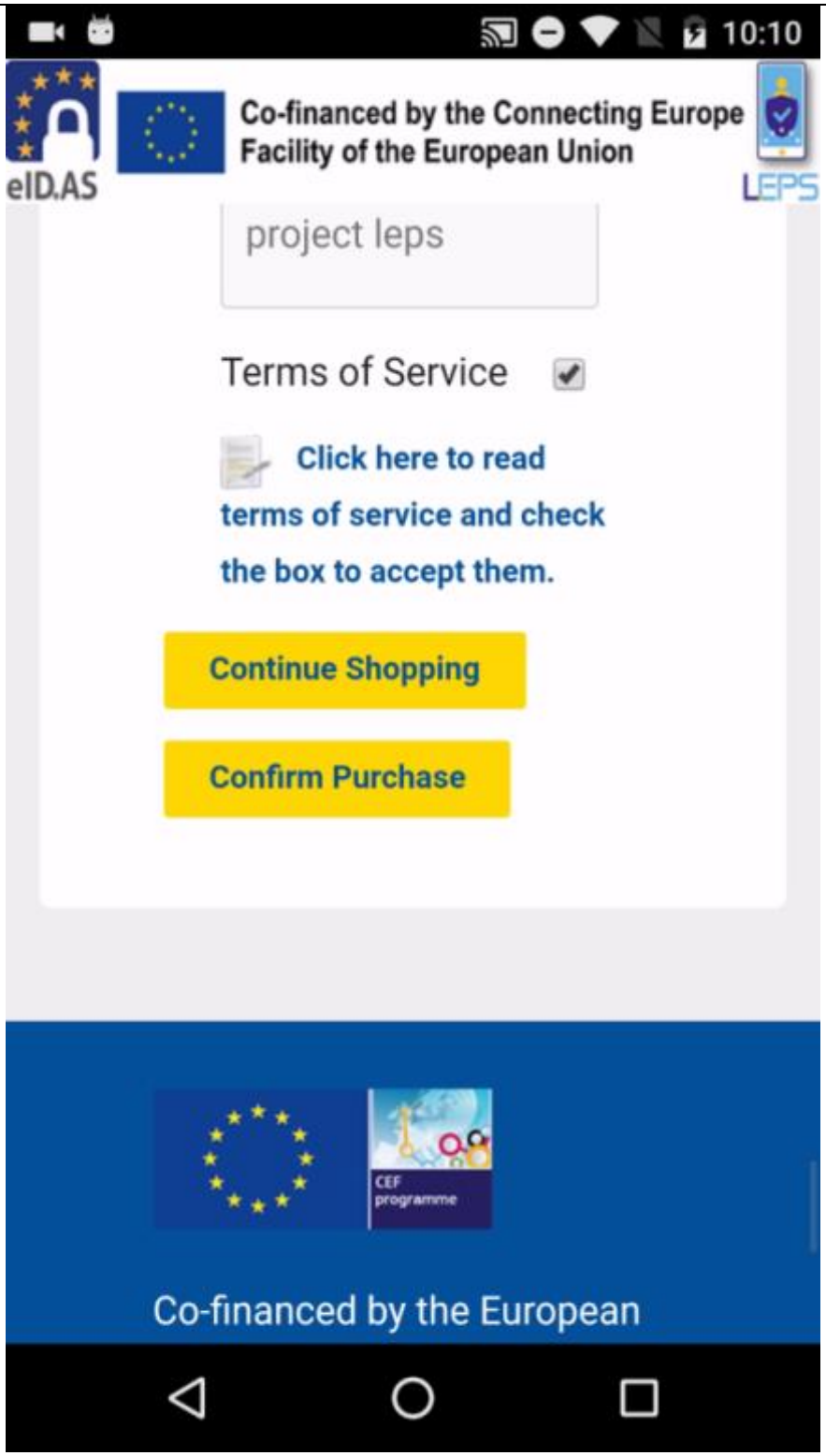
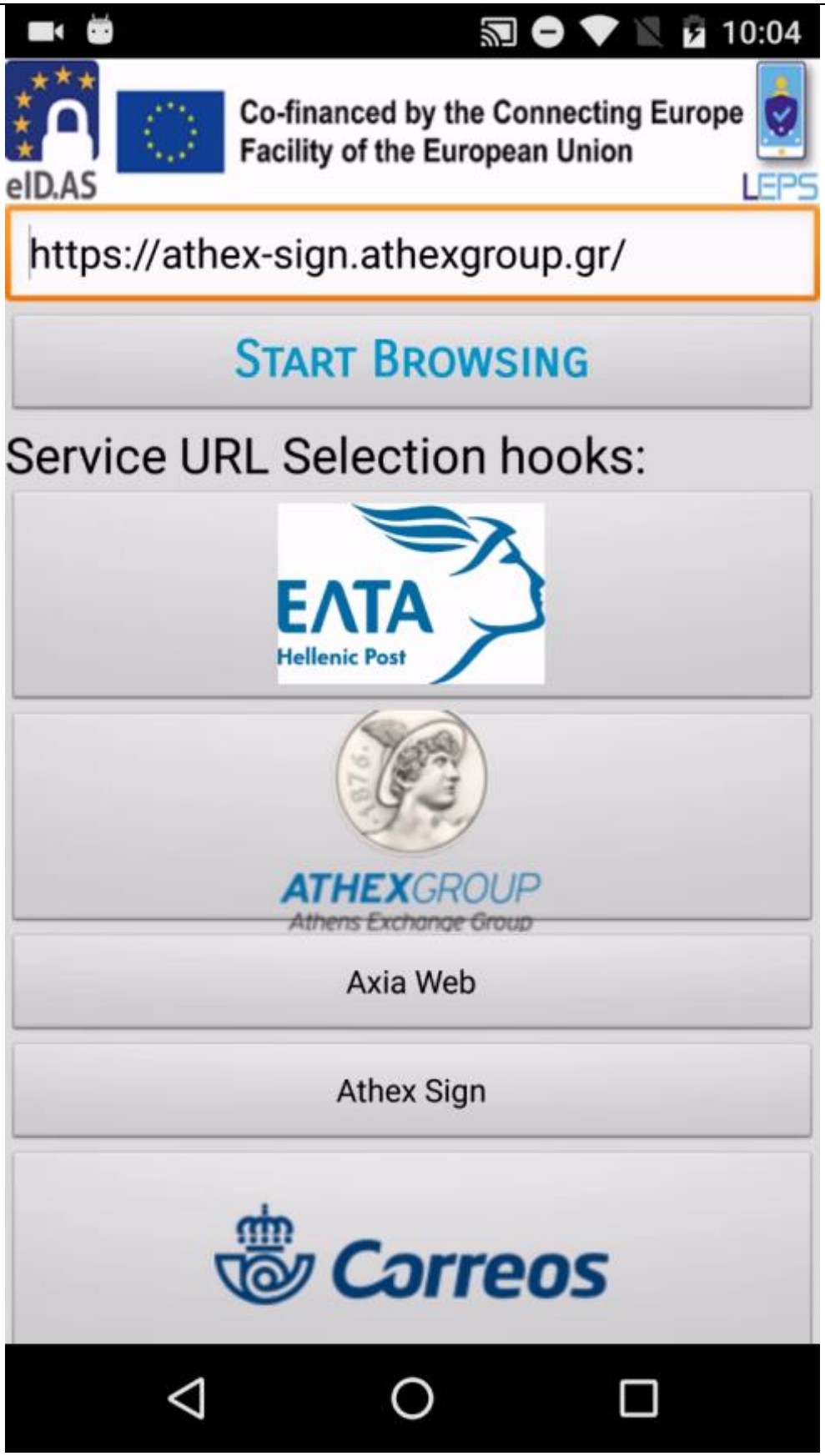
	
Result	The SP grants User access to My Basket (after login) The user is presented with the "Confirm Purchase" page.

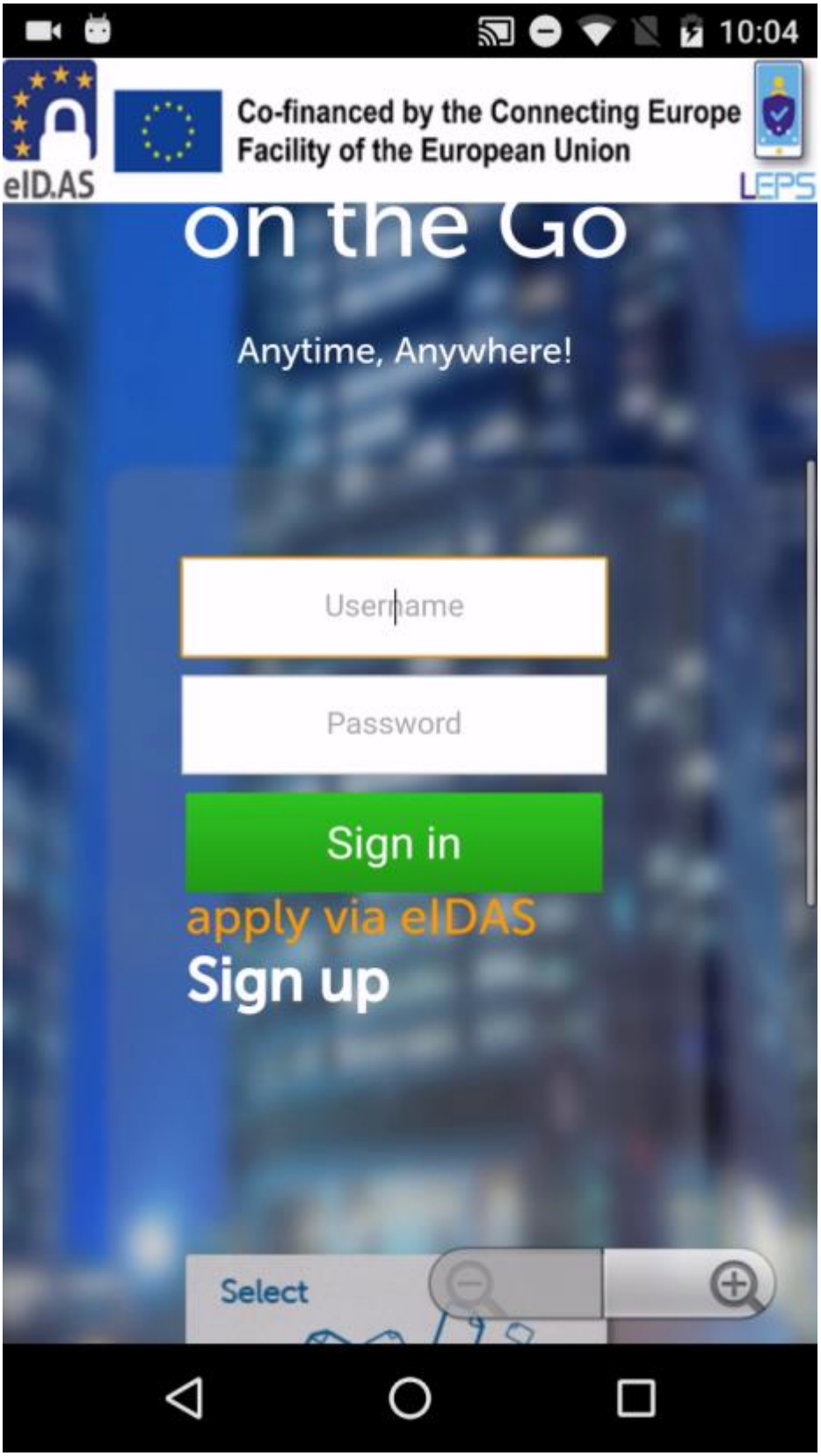
Table 6-18: Access ELTA Online Zip Codes Service via eIDAS Browser Android APP with NFC DNIe authentication.

6.5.2 Test Case 2 – Access ATHEX Corporate Applications (AthexSign) Services via eIDASBrowser Android APP with NFC DNIe authentication

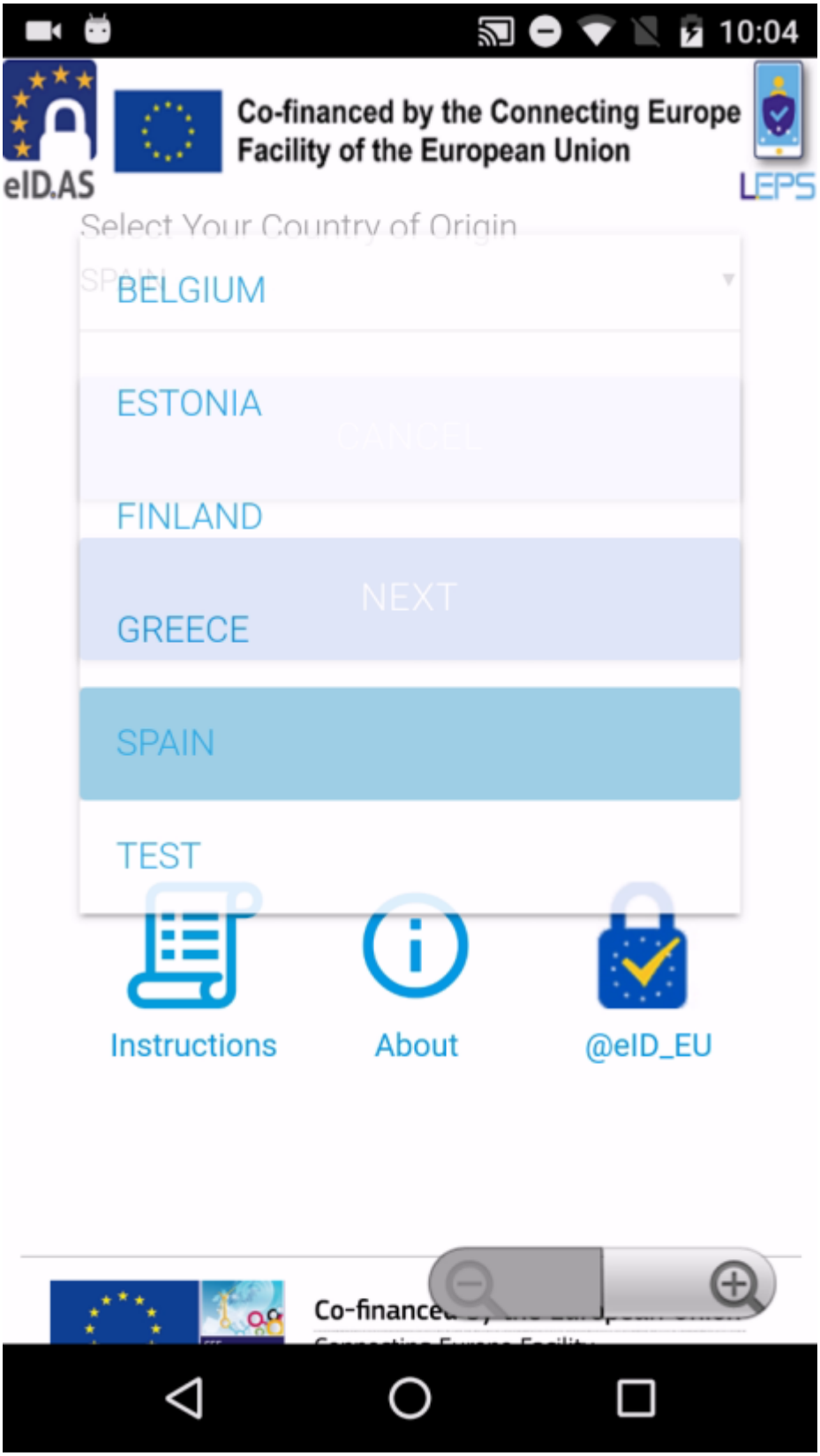
Process and Screesnshots	1. The user introduces the URL https://athex-sign.athexgroup.gr and click on “START BROWSING” button. Alternatively the user can press the ATHEX logo button and the press on “Athex Sign” button just to fill the url field.


10:04
eIDAS
Co-financed by the Connecting Europe Facility of the European Union
LEPS
https://athex-sign.athexgroup.gr/
START BROWSING
Service URL Selection hooks:
ΕΛΤΑ
Hellenic Post
ATHEXGROUP
Athens Exchange Group
Axia Web
Athex Sign
Correos

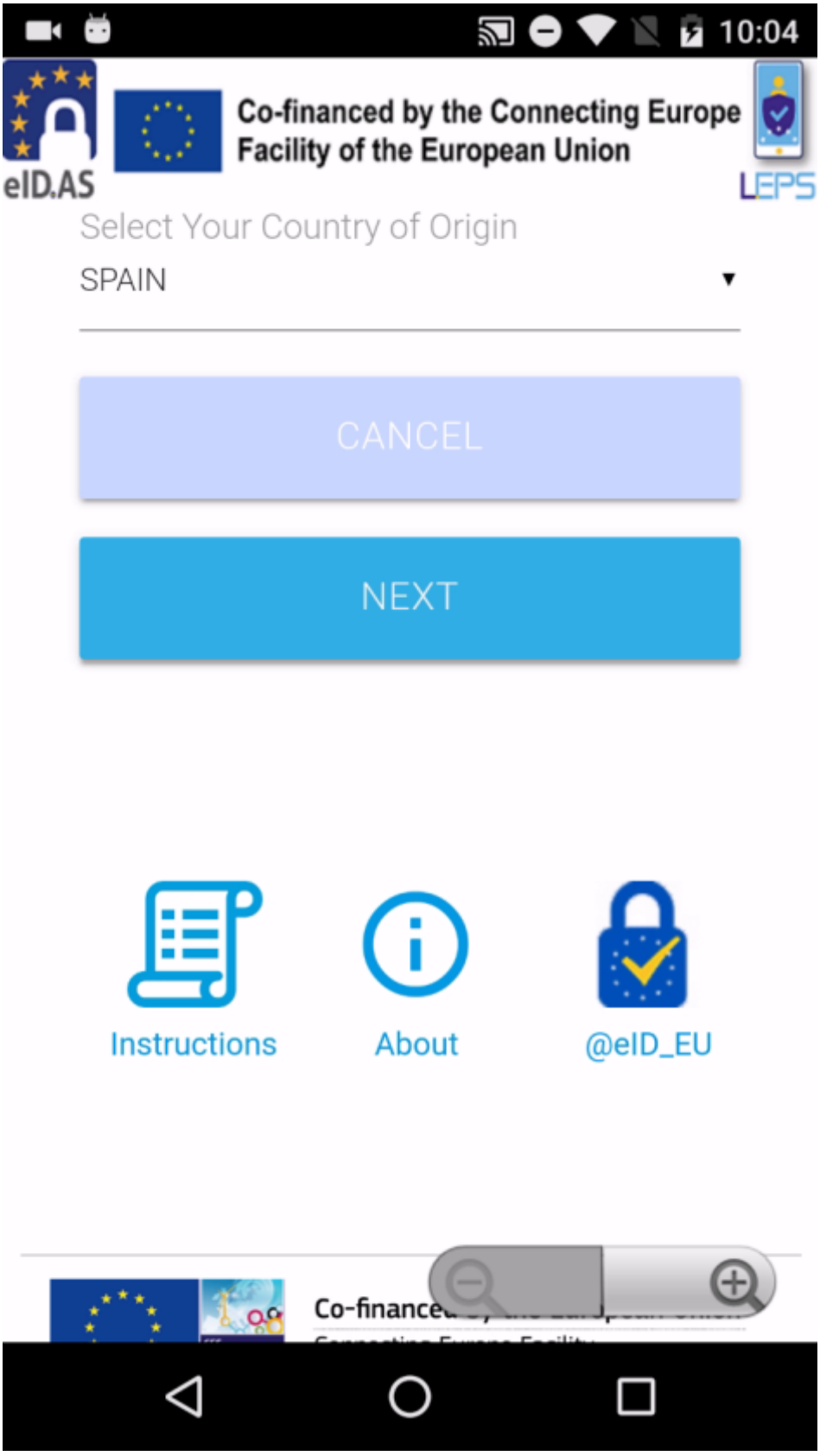
2. The user is redirected to Athex's Login page where a "Apply via eIDAS – Sing Up" button needs to be pressed to start the authentication process.



3. User is redirected to eIDAS Country/Requested Attributes page (LEPS eIDAS API adapters)



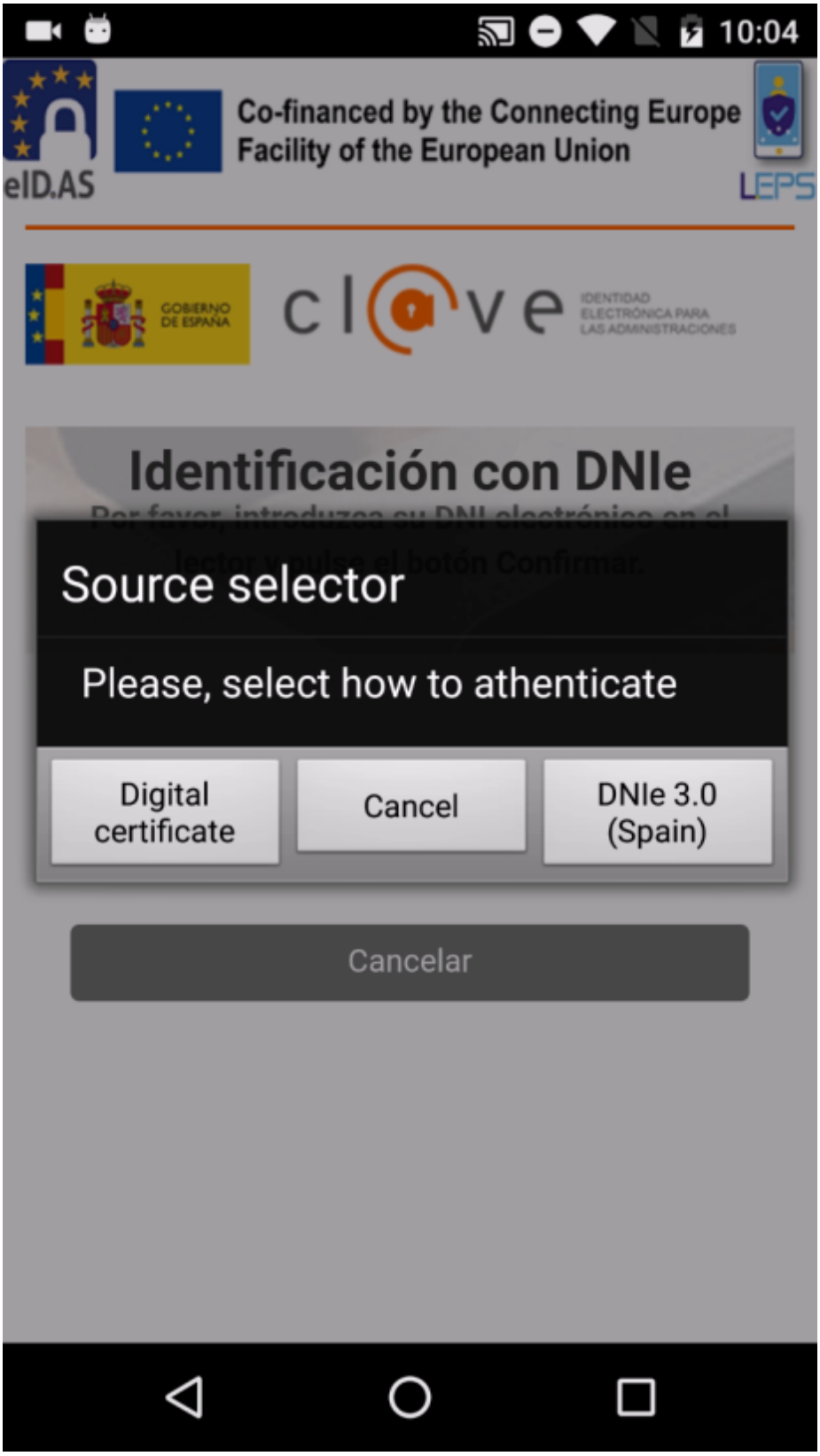
4. User selects country of origin “SPAIN” and click on “NEXT”.



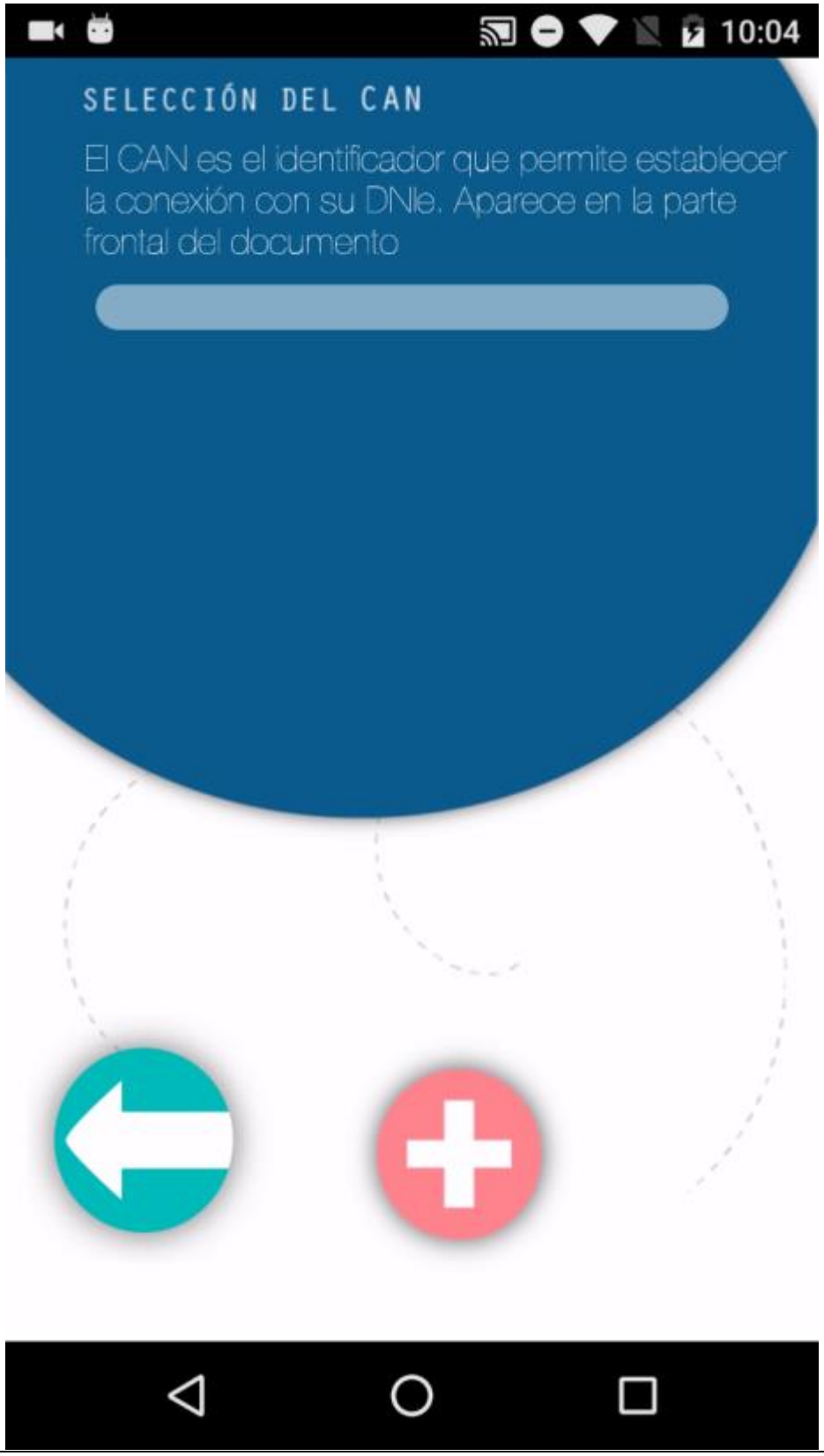
5. User is automatically redirected to Spanish IdP to authenticate via her/his eID card

6. Pop-up appears asking the user for authenticating with software certificate or DNIe

3.0 (Spain). The user selects the last



7. The user is requested to associate the identity card by inserting the CAN number printed on the id card.



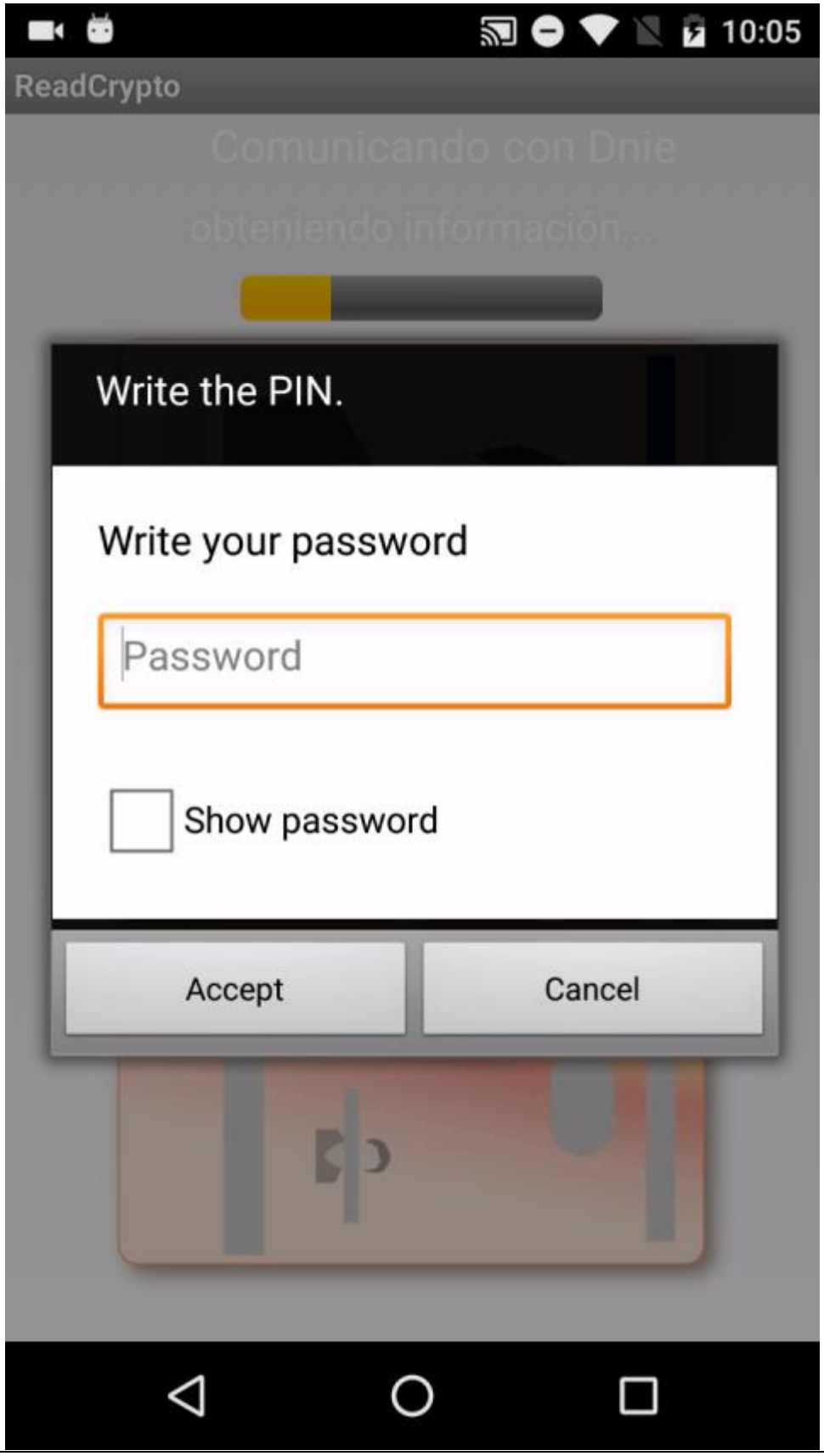
10:04
SELECCIÓN DEL CAN
Nuevo DNIe
AÑADIR NUEVO DNIE
Introduzca el CAN de su documento de identidad.
Número CAN
Aceptar
Cancelar

8. The system reads the data from the card and creates the association.

9. The user can then select that card to be part of the authentication process. The association is stored for future processes, avoiding to repeat steps 7 and 8.

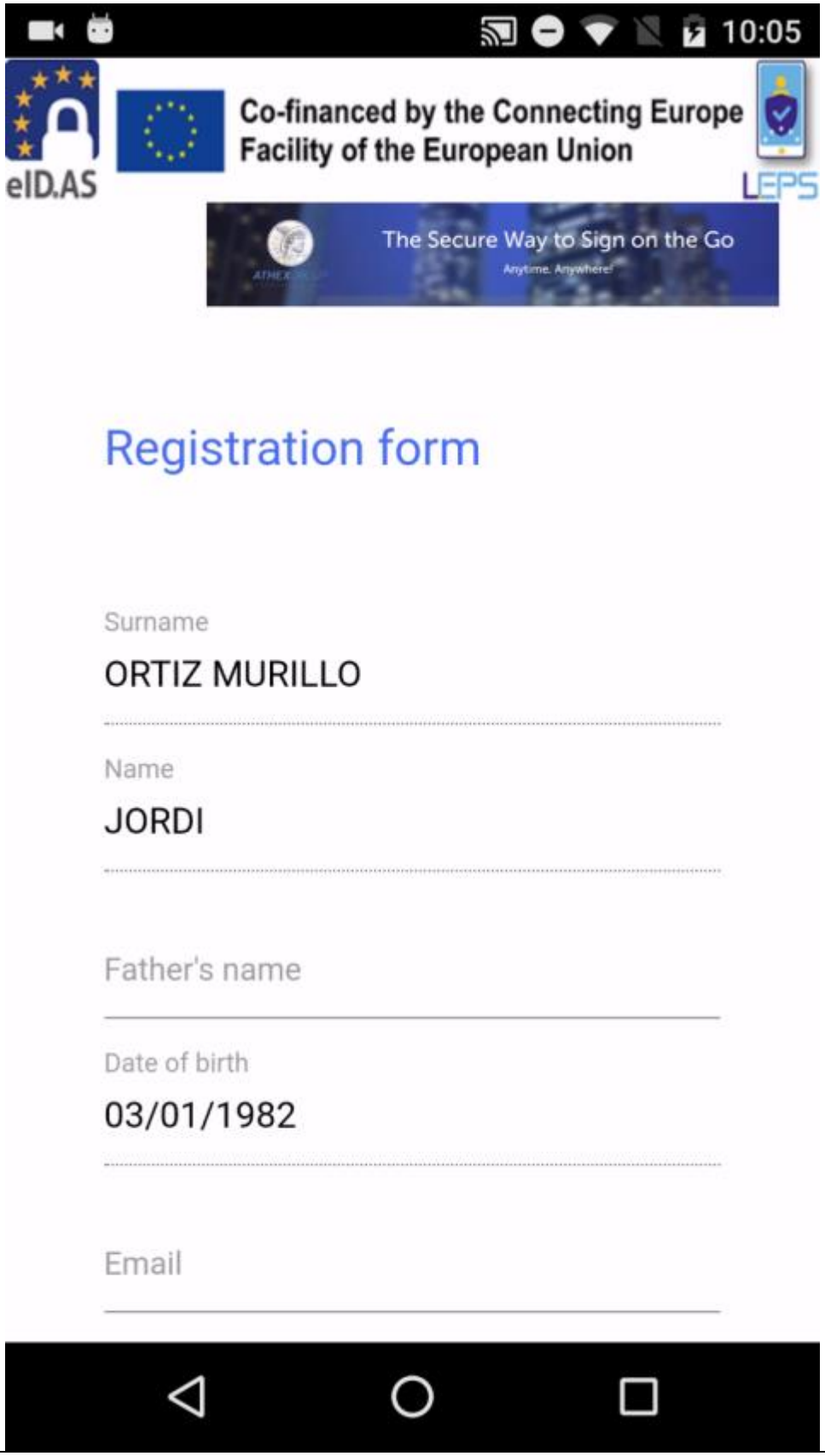
10:05
ReadCrypto

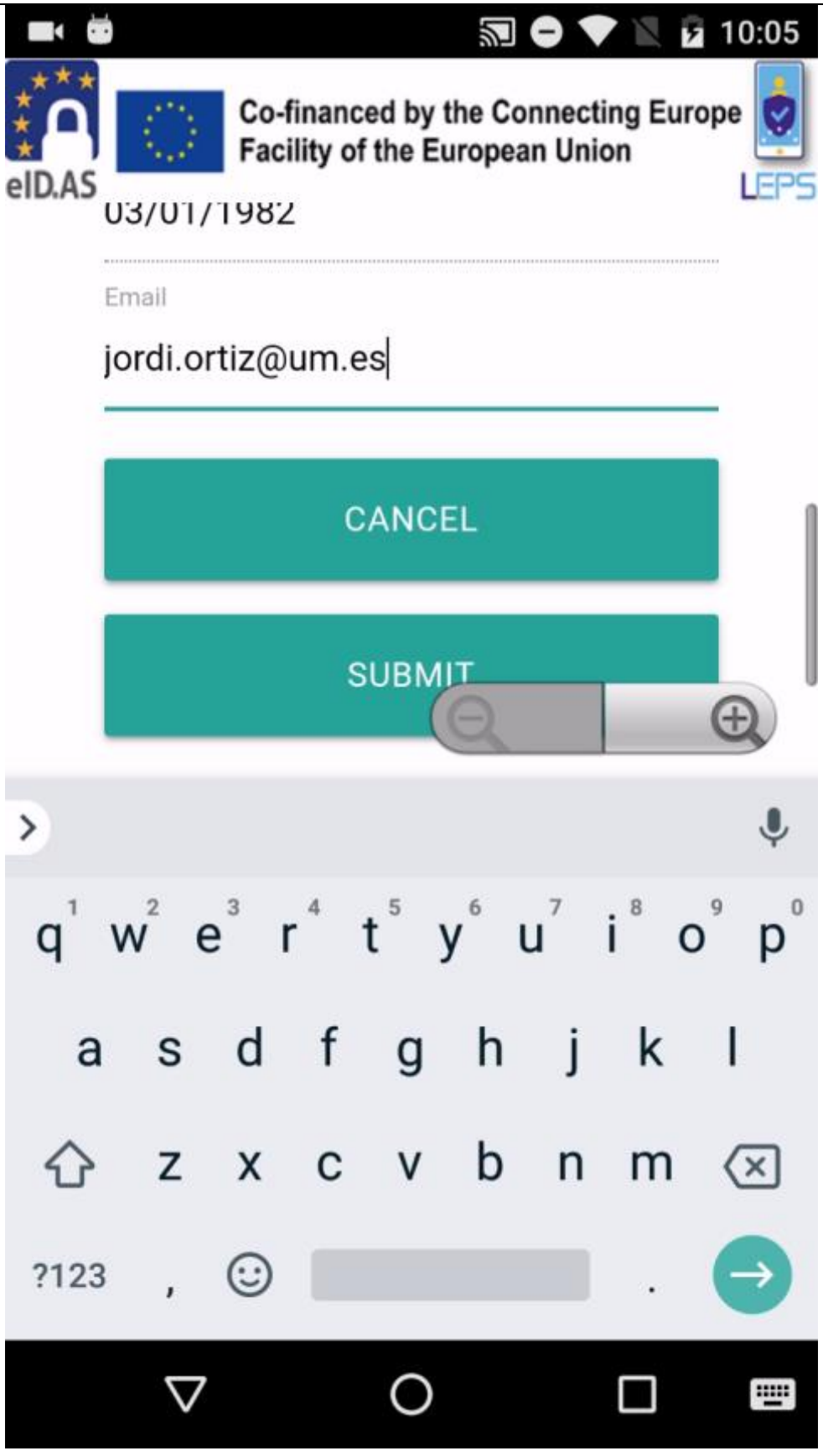
10. The user is requested for the password of the card.



10:05
ReadCrypto
Comunicando con Dnie
obteniendo información...
1 2 3 4 5 6 7 8 9 0
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123 ,
.

11. User is redirected to the Registration form.




10:05
eIDAS
Co-financed by the Connecting Europe Facility of the European Union
LEPS
03/01/1982
Email
jordi.ortiz@um.es
CANCEL
SUBMIT
q w e r t y u i o p
a s d f g h j k l
z x c v b n m
?123

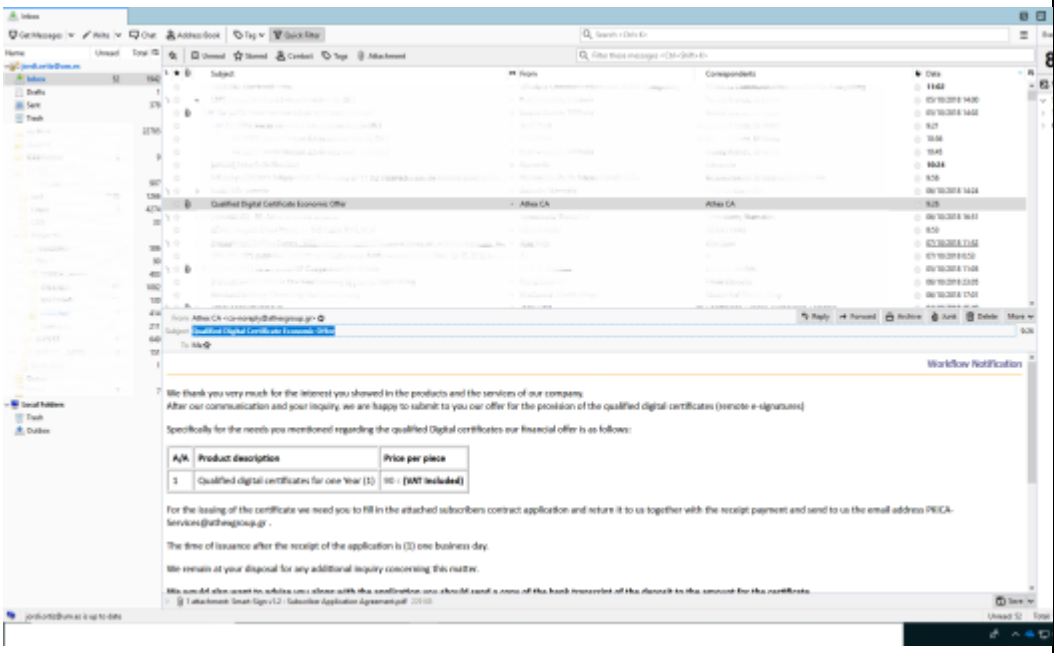
	12. When SUBMIT button is pressed the user is registered and an email with the subject "Qualified Digital Certificate Economic Offer" is received in the user's email account. 
Result	The user receives the "Qualified Digital Certificate Economic Offer" email.

Table 6-19: Access AthexSign Service via eIDAS Browser Android APP with NFC DNIe authentication.

6.6 Evaluation & Lessons learnt

This section summarizes the main results of the execution of the production tests performed in the context of Activity 6 "Testing of cross-border authentication and access to Correos electronic Services and to Hellenic (Financial and Post) electronic Services" and presents some lessons learnt.

As already mentioned in the deliverable, the integration of Correos, ATHEX and ELTA services with the eIDAS Network has met the challenges and requirements that have been initially defined and has been successful as shown by the performed tests. Furthermore:

- Production services should be ready for cross-border testing with real credentials or at least admit the use of some "fake" credentials used by the admin person to test the service in production.
- Testing with real credentials cannot be performed for all the services due to specific requirements of the business logic of the SP (e.g. in the case of Athex Axia web service).

7 Conclusions

The testing phase of the successful integration of Correos, ATHEX and ELTA services with the Greek and the Spanish eIDAS Node has undertaken the following steps:

a) Pre-production tests preparation: Creation of the necessary tests for the SP services integration verification in pre-production environment.

b) Pre-production tests execution and documentation: Testing of the integration of SP services with the SP (for Correos) and GR (for Athex and ELTA) eIDAS Node using test credentials.

c) Production tests preparation: Creation of the necessary tests for the SP services integration verification in production environment.

d) Production tests execution and documentation: Testing of the integration of SP services with the SP (for Correos) and GR (for Athex and ELTA) eIDAS Node using real users.

All of these tests were executed across borders (using Spanish users to access Greek services and vice versa) against the eIDAS core service platform production environment. Additional interoperability tests were executed to verify the correct behaviour of the services across borders using users from other countries based on the connections available to the Greek and Spanish eIDAS nodes. A list of these connections can be found on section 4.6 Interoperability tests. It was obvious, from the tests conducted, that the developed APIs that allow the connection of the services to their respective eIDAS nodes scale well and only minor configurations are required for their extension to other countries (when connections to those countries become available via the eIDAS nodes).

As a conclusion, we report that Correos, ELTA and ATHEX services which are part of LEPS project have been successfully integrated with the eIDAS Network. They do now interoperate with the Spanish and Greek eIDAS Node via LEPS eIDAS API Connectors and, therefore, can provide their functionality to both local and cross-border users, with cross-border users being able to automatically access them via their national eID credentials. After the detailed tests conducted in the context of Activity 6 “Testing of cross-border authentication and access to Correos electronic Services and to Hellenic (Financial and Post) electronic Services” and the necessary final adjustments and service business logic modifications, these services are functional parts of the pan European eIDAS infrastructure.

References

[1] European Commission, How does it work: Proxy to Proxy, https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/How+does+it+work+-+Proxy+to+proxy, retrieved date 2018/05/23, p 14

[2] LEPS deliverable lead author: Elena Torroglosa, D4.4. Mobile ID App and its integration results with the Industrial Partners, Deliverable of the LEPS project, 2018. http://leps-project.eu/node/349

[3] LEPS deliverable lead author: Juan Carlos Pérez Baún, D3.3 Operational and Technical Documentation of SP Integration. Deliverable of the LEPS project, 2018. https://leps-project.eu/node/345

[4] LEPS deliverable lead authors: Petros Kavassalis, Katerina Ksystra, D4.3. Integration to Greek PEPS/eIDAS-Node Connector. Deliverable of the LEPS project, 2018. https://leps-project.eu/node/348

[5] LEPS deliverable lead authors: Petros Kavassalis, Katerina Ksystra, D2.1 Business and Technical Design for the effective use of elD DSI. Deliverable of the LEPS project, 2018. To be submitted in November 2018

Annexes

Annex I. Scripts used in automatic testing tool eCATS

Correos Scripts

Test Case 1 – SP Registration in My Identity

CorreosTestCase1.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
firefox.profile=default
firefox.headless=false
```

CorreosTestCase1.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

CorreosTestCase1.2.txt

```
events.nr=3
event1.type=checkbox
event1.id=gender
event1.value=
event2.type=checkbox
event2.id=address
event2.value=
event3.type=jsbutton
event3.id=btSubmit
event3.value=
```

CorreosTestCase1.3.txt

```
events.nr=2
event1.type=selectByVal
event1.id=countryBox
event1.value=GR
event2.type=jsbutton
```

```
event2.id=submit_button
event2.value=
```

CorreosTestCase1.4.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide1
event1.value=
```

CorreosTestCase1.5.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide2
event1.value=
```

CorreosTestCase1.6.txt

```
events.nr=2
event1.type=selectByVal
event1.id=idpList
event1.value=Athex
event2.type=jsbutton
event2.id=submit_idp_choice
event2.value=
```

CorreosTestCase1.7.txt

```
events.nr=3
event1.type=text
event1.id=username
event1.value=xavi
event2.type=text
event2.id=password
event2.value=creus
event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

CorreosTestCase1.8.txt

```
events.nr=1
```

```
event1.type=button
event1.id=buttonNext
event1.value=
```

Test Case 2 – Basic login and access to My Identity

CorreosTestCase2.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
firefox.profile=default
firefox.headless=false
```

CorreosTestCase2.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

CorreosTestCase2.2.txt

```
events.nr=3
event1.type=checkbox
event1.id=gender
event1.value=
event2.type=checkbox
event2.id=address
event2.value=
event3.type=jsbutton
event3.id=btSubmit
event3.value=
```

CorreosTestCase2.3.txt

```
events.nr=2
event1.type=selectByVal
event1.id=countryBox
event1.value=GR
event2.type=jsbutton
event2.id=submit_button
event2.value=
```

CorreosTestCase2.4.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide1
event1.value=
```

CorreosTestCase2.5.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide2
event1.value=
```

CorreosTestCase2.6.txt

```
events.nr=2
event1.type=selectByVal
event1.id=idpList
event1.value=Athex
event2.type=jsbutton
event2.id=submit_idp_choice
event2.value=
```

CorreosTestCase2.7.txt

```
events.nr=3
event1.type=text
event1.id=username
event1.value=xavi
event2.type=text
event2.id=password
event2.value=creus
event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

CorreosTestCase2.8.txt

```
events.nr=1
event1.type=button
event1.id=buttonNext
event1.value=
```

Test Case 3 – Failed My Identity login (eIDAS authentication failed)

CorreosTestCase3.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
firefox.profile=default
firefox.headless=false
```

CorreosTestCase3.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

CorreosTestCase3.2.txt

```
events.nr=3
event1.type=checkbox
event1.id=gender
event1.value=
event2.type=checkbox
event2.id=address
event2.value=
event3.type=jsbutton
event3.id=btSubmit
event3.value=
```

CorreosTestCase3.3.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countryBox
event1.value=GR

event2.type=jsbutton
event2.id=submit_button
event2.value=
```

CorreosTestCase3.4.txt

```
events.nr=1

event1.type=button
event1.id=buttonNextSlide1
event1.value=
```

CorreosTestCase3.5.txt

```
events.nr=1

event1.type=button
event1.id=buttonNextSlide2
event1.value=
```

CorreosTestCase3.6.txt

```
events.nr=2
event1.type=selectByVal
event1.id=idpList
event1.value=Athex
event2.type=jsbutton
event2.id=submit_idp_choice
event2.value=
```

CorreosTestCase3.7.txt

```
events.nr=3
event1.type=text
event1.id=username
event1.value=stork2test1bgr
event2.type=text
event2.id=password
event2.value=aaaaa
event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

Test Case 4 – eIDAS adapter fails (no connection)

CorreosTestCase4.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
```

```
firefox.profile=default
firefox.headless=false
```

CorreosTestCase4.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

Test Case 5 – User cancels in eIDAS adapter

CorreosTestCase5.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
firefox.profile=default
firefox.headless=false
```

CorreosTestCase5.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

CorreosTestCase5.2.txt

```
events.nr=3
event1.type=checkbox
event1.id=gender
event1.value=
event2.type=checkbox
event2.id=address
event2.value=
event3.type=jsbutton
event3.id=btCancel
event3.value=
```

Test Case 6 – Access to My Mailbox service

CorreosTestCase6.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
```

```
firefox.profile=default
firefox.headless=false
waitPeriod.ms=8000
```

CorreosTestCase6.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

CorreosTestCase6.2.txt

```
events.nr=3
event1.type=checkbox
event1.id=gender
event1.value=
event2.type=checkbox
event2.id=address
event2.value=
event3.type=jsbutton
event3.id=btSubmit
event3.value=
```

CorreosTestCase6.3.txt

```
events.nr=2
event1.type=selectByVal
event1.id=countryBox
event1.value=GR
event2.type=jsbutton
event2.id=submit_button
event2.value=
```

CorreosTestCase6.4.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide1
event1.value=
```

CorreosTestCase6.5.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide2
event1.value=
```

CorreosTestCase6.6.txt

```
events.nr=2
event1.type=selectByVal
event1.id=idpList
event1.value=Athex
event2.type=jsbutton
event2.id=submit_idp_choice
event2.value=
```

CorreosTestCase6.7.txt

```
events.nr=3

event1.type=text
event1.id=username
event1.value=stork2test1bgr

event2.type=text
event2.id=password
event2.value=stork2test1

event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

CorreosTestCase6.8.txt

```
events.nr=1

event1.type=button
event1.id=buttonNext
event1.value=
```

CorreosTestCase6.9.txt

```
events.nr=1
```

```
event1.type=linkByText
event1.id=SERVICES
event1.value=
```

CorreosTestCase6.10.txt

```
events.nr=1

event1.type=link
event1.id=app_mi_buzon
event1.value=
```

CorreosTestCase6.11.txt

```
events.nr=0
```

Test Case 7 – Access to My Notifications service

CorreosTestCase7.txt

```
start.url=https://miidentidadpre2.azurewebsites.net
firefox.profile=default
firefox.headless=false
waitPeriod.ms=8000
```

CorreosTestCase7.1.txt

```
events.nr=1
event1.type=jsbutton
event1.id=eidas_sign_in_btn
event1.value=
```

CorreosTestCase7.2.txt

```
events.nr=3
event1.type=checkbox
event1.id=gender
event1.value=
event2.type=checkbox
event2.id=address
event2.value=
event3.type=jsbutton
event3.id=btSubmit
```

```
event3.value=
```

CorreosTestCase7.3.txt

```
events.nr=2
event1.type=selectByVal
event1.id=countryBox
event1.value=GR
event2.type=jsbutton
event2.id=submit_button
event2.value=
```

CorreosTestCase7.4.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide1
event1.value=
```

CorreosTestCase7.5.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide2
event1.value=
```

CorreosTestCase7.6.txt

```
events.nr=2
event1.type=selectByVal
event1.id=idpList
event1.value=Athex
event2.type=jsbutton
event2.id=submit_idp_choice
event2.value=
```

CorreosTestCase7.7.txt

```
events.nr=3

event1.type=text
event1.id=username
event1.value=stork2test1bgr
```

```
event2.type=text
event2.id=password
event2.value=stork2test1

event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

CorreosTestCase7.8.txt

```
events.nr=1

event1.type=button
event1.id=buttonNext
event1.value=
```

CorreosTestCase7.9.txt

```
events.nr=1

event1.type=linkByText
event1.id=SERVICES
event1.value=
```

CorreosTestCase7.10.txt

```
events.nr=1

event1.type=link
event1.id=app_mis_notificaciones
event1.value=
```

CorreosTestCase7.11.txt

```
events.nr=0
```

ATHEX Scripts

ATHEX Sign (Successful Authentication)

athsign1.txt

```
start.url=https://test-athex-sign.athexgroup.gr/

firefox.profile=spain
firefox.headless=false
```

athsign1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=lnkSignUp
```

athsign1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

athsign1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

athsign1.4.txt

```
events.nr=3

event1.type=text
event1.id=fatherName
event1.value=Ioannis

event2.type=text
event2.id=email
event2.value=someone@somewhere.com

event3.type=jsbutton
event3.id=butSubmitForm
event3.value=
```

athsign1.5.txt

```
events.nr=0
```

Test Case 2 - ATHEX Sign (Unsuccessful Authentication)

athsign2.txt

```
#start.url=http://t-sp-gw.eidas.athexgroup.gr/loginAthexSign/login
start.url=https://test-athex-sign.athexgroup.gr/

firefox.profile=default
firefox.headless=false
```

athsign2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=lnkSignUp
```

athsign2.2.txt

```
events.nr=2
```

```
event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

athsign2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

Test Case 3 - ATHEX AXIAweb (Successful Authentication and logon)

axiaWEB1.txt

```
start.url=https://test-axiaweb.athexgroup.gr

firefox.profile=spain
firefox.headless=false
```

axiaWEB1.1.txt

```
events.nr=1

event1.type=link
event1.id=eidaslogin
```

axiaWEB1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES
```

```
event2.type=jsbutton
event2.id=next
event2.value=
```

axiaWEB1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

axiaWEB1.4.txt

```
events.nr=0
```

Test Case 4 - ATHEX AXIAweb (Unsuccessful Authentication)

axiaWEB2.txt

```
start.url=https://test-axiaweb.athexgroup.gr

firefox.profile=default
firefox.headless=false
```

axiaWEB2.1.txt

```
events.nr=1

event1.type=link
event1.id=eidaslogin
```

axiaWEB2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES
```

```
event2.type=jsbutton
event2.id=next
event2.value=
```

axiaWEB2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

axiaWEB2.4.txt

```
events.nr=0
```

Test Case 5 - ATHEX IDP (Successful Authentication)

athexidp1.txt

```
start.url=https://se-eidas.redsara.es/SP/populateIndexPage
firefox.profile=default
firefox.headless=false
```

athexidp1.1.txt

```
events.nr=6
event1.type=selectByVal
event1.id=citizeneidas
event1.value=GR

event2.type=text
event2.id=inputEidas
event2.value=https://se-
eidas.redsara.es/EidasNode/ConnectorResponderMetadata

event3.type=selectByVal
event3.id=eidasconnector
```

```
event3.value=https://se-
eidas.redsara.es/EidasNode/ConnectorResponderMetadata

event4.type=jsbutton
event4.id=tab2_toggle1
event4.value=

event5.type=jsbutton
event5.id=tab2_toggle2
event5.value=

event6.type=jsbutton
event6.id=submit_tab2
event6.value=
```

athexidp1.2.txt

```
events.nr=1
event1.type=button
event1.id=submit_saml
event1.value=
```

athexidp1.3.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countryBox
event1.value=GR

event2.type=jsbutton
event2.id=submit_button
event2.value=
```

athexidp1.4.txt

```
events.nr=1
event1.type=button
```

```
event1.id=buttonNextSlide1
event1.value=
```

athexidp1.5.txt

```
events.nr=1

event1.type=button
event1.id=buttonNextSlide2
event1.value=
```

athexidp1.6.txt

```
events.nr=3

event1.type=text
event1.id=username
event1.value=stork2test1bgr

event2.type=text
event2.id=password
event2.value=stork2test1

event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

athexidp1.7.txt

```
events.nr=1
event1.type=jsbutton
event1.id=buttonNext
event1.value=
```

athexidp1.8.txt

```
events.nr=1
event1.type=button
```

```
event1.id=submit_saml
event1.value=
```

athexidp1.9.txt

```
events.nr=0
```

Test Case 6 - ATHEX IDP (Successful Authentication)

athexidp2.txt

```
start.url=https://se-eidas.redsara.es/SP/populateIndexPage
firefox.profile=default
firefox.headless=false
```

athexidp2.1.txt

```
events.nr=6

event1.type=selectByVal
event1.id=citizeneidas
event1.value=GR

event2.type=text
event2.id=inputEidas
event2.value=https://se-
eidas.redsara.es/EidasNode/ConnectorResponderMetadata

event3.type=selectByVal
event3.id=eidasconnector
event3.value=https://se-
eidas.redsara.es/EidasNode/ConnectorResponderMetadata

event4.type=jsbutton
event4.id=tab2_toggle1
event4.value=

event5.type=jsbutton
```

```
event5.id=tab2_toggle2
event5.value=

event6.type=jsbutton
event6.id=submit_tab2
event6.value=
```

athexidp2.2.txt

```
events.nr=1

event1.type=button
event1.id=submit_saml
event1.value=
```

athexidp2.3.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countryBox
event1.value=GR

event2.type=jsbutton
event2.id=submit_button
event2.value=
```

athexidp2.4.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide1
event1.value=
```

athexidp2.5.txt

```
events.nr=1
event1.type=button
event1.id=buttonNextSlide2
```

```
event1.value=
```

athexidp2.6.txt

```
events.nr=3

event1.type=text
event1.id=username
event1.value=stork2test1bgr

event2.type=text
event2.id=password
event2.value=stork2test111

event3.type=button
event3.id=idpSubmitbutton
event3.value=
```

athexidp2.7.txt

```
events.nr=1
event1.type=button
event1.id=submit_saml
event1.value=
```

athexidp2.8.txt

```
events.nr=0
```

ELTA Scripts

ELTA Portal

Test Case 1 - Registered User Normal Login Flow to Elta portal [ELTAPORTAL-TR1]

ELTAPORTAL-TR1.1.txt

```
event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TR1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TR1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAPORTAL-TR1.4.txt

```
events.nr=5

event1.type=text
event1.id=dnn_ctr1628_View_txtUserName
event1.value=testusernametest

event2.type=text
event2.id=dnn_ctr1628_View_txtEmail
event2.value=testuser@gmail.com

event3.type=text
event3.id=dnn_ctr1628_View_txtPassword
event3.value=pass1@#4

event4.type=text
```

```
event4.id=dnn_ctr1628_View_txtConfirmPassword
event4.value=pass1@#4

event5.type=jsbutton
event5.id=dnn_ctr1628_View_btnRegister
event5.value=
```

ELTAPORTAL-TR1.5.txt

```
events.nr=0
```

ELTAPORTAL-TR1.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 2 – User Registration Invalid Credentials Flow [ELTAPORTAL-TR2]

ELTAPORTAL-TR2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TR2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TR2.3.txt

```
events.nr=1
```

```
event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAPORTAL-TR2.4.txt

```
events.nr=0
```

ELTAPORTAL-TR2.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 3 - User Cancels Registration Flow on Country Page [ELTAPORTAL-TR3]

ELTAPORTAL-TR3.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TR3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAPORTAL-TR3.3.txt

```
events.nr=0
```

ELTAPORTAL-TR3.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
```

```
firefox.headless=false
```

Test Case 4 - User Registration IdP Cancel Flow [ELTAPORTAL-TR4]

ELTAPORTAL-TR4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TR4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAPORTAL-TR4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAPORTAL-TR4.4.txt

```
events.nr=0
```

ELTAPORTAL-TR4.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

ELTAPORTAL-TL1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TL1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TL1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAPORTAL-TL1.4.txt

```
events.nr=1

event1.type=linkByText
event1.id=Track An Item
event1.value=
```

ELTAPORTAL-TL1.5.txt

```
events.nr=0
```

ELTAPORTAL-TL1.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 6 - Registered User Invalid Credentials Flow [ELTAPORTAL-TL2]

ELTAPORTAL-TL2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TL2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TL2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAPORTAL-TL2.4.txt

```
events.nr=0
```

ELTAPORTAL-TL2.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
```

```
firefox.profile=default
firefox.headless=false
```

Test Case 7 - Registered User Cancels Registration Flow on Country Page [ELTAPORTAL-TL3]

ELTAPORTAL-TL3.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TL3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAPORTAL-TL3.3.txt

```
events.nr=0
```

ELTAPORTAL-TL3.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 8 - Registered User IdP Cancel Flow [ELTAPORTAL-TL4]

ELTAPORTAL-TL4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAPORTAL-TL4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TL4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAPORTAL-TL4.4.txt

```
events.nr=0
```

ELTAPORTAL-TL4.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 9 - Registered User Normal Login Flow [ELTAESHOP-TL1]

ELTAESHOP-TL1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAESHOP-TL1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES
```

```
event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAESHOP-TL1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAESHOP-TL1.4.txt

```
events.nr=1

event1.type=linkByText
event1.id="Armored Cruiser Averof"
event1.value=
```

ELTAESHOP-TL1.5.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_ctr1596_ProductPage_btnAddItem
event1.value=
```

ELTAESHOP-TL1.6.txt

```
events.nr=1

event1.type=linkByText
event1.id=My Basket
event1.value=
```

ELTAESHOP-TL1.7.txt

```
events.nr=0
```

```
ELTAESHOP-TL1.txt
start.url=http://www.elta.gr/en-us/business/eshop.aspx
firefox.profile=default
```

```
firefox.headless=false
```

Test Case 10 – Registered User Invalid Credentials Flow [ELTAESHOP-TL2]

ELTAESHOP-TL2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAESHOP-TL2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAESHOP-TL2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
ELTAESHOP-TL2.4.txt
events.nr=0
```

ELTAESHOP-TL2.txt

```
start.url=http://www.elta.gr/en-us/business/eshop.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 11 - Registered User Cancels Registration Flow on Country Page [ELTAESHOP-TL3]

ELTAESHOP-TL3.1

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAESHOP-TL3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAESHOP-TL3.3.txt

```
events.nr=0
```

ELTAESHOP-TL3.txt

```
start.url=http://www.elta.gr/en-us/business/eshop.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 12 - Registered User IdP Cancel Flow [ELTAESHOP-TL4]

ELTAESHOP-TL4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=dnn_dnnLOGIN_logineIDASLink
event1.value=
```

ELTAESHOP-TL4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
```

```
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAESHOP-TL4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAESHOP-TL4.4.txt

```
events.nr=0
```

ELTAESHOP-TL4.txt

```
start.url=http://www.elta.gr/en-us/business/eshop.aspx
firefox.profile=default
firefox.headless=false
```

Test Case 13 - Unregistered User Access Attempt Flow [ELTAPORTAL-TRL]

ELTAPORTAL-TRL.txt

```
start.url=http://www.elta.gr/en-us/home.aspx
firefox.profile=default
firefox.headless=false
```

ELTAPORTAL-TRL.1.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TRL.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAPORTAL-TRL.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAPORTAL-TRL.4.txt

```
events.nr=0
```

ELTA – Parcel Delivery Voucher

Test Case 1 - User Registration Normal Flow (eIDAS eID)[ELTAVOUCHER-TR1]

ELTAVOUCHER-TR1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TR1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
```

```
event2.id=next
event2.value=
```

ELTAVOUCHER-TR1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAVOUCHER-TR1.4.txt

```
events.nr=9

event1.type=text
event1.id=email_field
event1.value=testuser@gmail.com

event2.type=text
event2.id=company_field
event2.value=testcompanyname

event3.type=text
event3.id=address_1_field
event3.value=test_avenue

event4.type=text
event4.id=zip_field
event4.value=12345

event5.type=text
event5.id=city_field
event5.value=Piraeus

event6.type=selectByVal
event6.id=virtuemart_country_id_field
event6.value=84

event7.type=text
```

```
event7.id=phone_1_field
event7.value=00302104111111

event8.type=text
event8.id=phone_2_field
event8.value=00306977777777

event9.type=jsbutton
event9.id=user-vm-register
event9.value=
```

ELTAVOUCHER-TR1.5.txt

```
events.nr=0
```

ELTAVOUCHER-TR1.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 2 - User Registration Invalid Credentials Flow [ELTAVOUCHER-TR2]

ELTAVOUCHER-TR2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TR2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAVOUCHER-TR2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
ELTAVOUCHER-TR2.4.txt
events.nr=0
```

ELTAVOUCHER-TR2.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 3 - User Cancels Registration Flow on Country Page [ELTAVOUCHER-TR3]

ELTAVOUCHER-TR3.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TR3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAVOUCHER-TR3.3.txt

```
events.nr=0
```

ELTAVOUCHER-TR3.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 4 - User Registration IdP Cancel Flow [ELTAVOUCHER-TR4]

ELTAVOUCHER-TR4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TR4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAVOUCHER-TR4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAVOUCHER-TR4.4.txt

```
events.nr=0
```

ELTAVOUCHER-TR4.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAVOUCHER-TL1]

ELTAVOUCHER-TL1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TL1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAVOUCHER-TL1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAVOUCHER-TL1.4.txt

```
events.nr=1

event1.type=linkByText
event1.id=PARCEL DELIVERY VOUCHER
event1.value=
```

ELTAVOUCHER-TL1.5.txt

```
events.nr=1

event1.type=jsbutton
```

```
event1.id=parcel-delivery-form
event1.value=
```

ELTAVOUCHER-TL1.6.txt

```
events.nr=0
```

ELTAVOUCHER-TL1.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 6 - Registered User Invalid Credentials Flow [ELTAVOUCHER-TL2]

ELTAVOUCHER-TL2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TL2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAVOUCHER-TL2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAVOUCHER-TL2.4.txt

```
events.nr=0
```

ELTAVOUCHER-TL2.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 7 - Registered User Cancels Registration Flow on Country Page [ELTAVOUCHER-TL3]

ELTAVOUCHER-TL3.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TL3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAVOUCHER-TL3.3.txt

```
events.nr=0
```

ELTAVOUCHER-TL3.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 8 - Registered User IdP Cancel Flow [ELTAVOUCHER-TL4]

ELTAVOUCHER-TL4.1.txt

```
events.nr=1
```

```
event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TL4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAVOUCHER-TL4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAVOUCHER-TL4.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

Test Case 9 - Unregistered User Access Attempt Flow [ELTAVOUCHER-TRL]

ELTAVOUCHER-TRL.txt

```
start.url=https://eltab2b.gr/en/parcel-delivery-voucher
firefox.profile=default
firefox.headless=false
```

ELTAVOUCHER-TRL.1.txt

```
events.nr=1

event1.type=jsbutton
```

```
event1.id=eIDAS-button
event1.value=
```

ELTAVOUCHER-TRL.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAVOUCHER-TRL.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAVOUCHER-TRL.4.txt

```
events.nr=0
```

ELTA Zip Codes

Test Case 1 – User Registration Normal Flow (eIDAS eID) [ELTAZIPCODES-TR1]

ELTAZIPCODES-TR1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TR1.2.txt

```
events.nr=2
```

```
event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TR1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAZIPCODES-TR1.4.txt

```
events.nr=9

event1.type=text
event1.id=email_field
event1.value=testuser@gmail.com

event2.type=text
event2.id=company_field
event2.value=testcompanyname

event3.type=text
event3.id=address_1_field
event3.value=test_avenue

event4.type=text
event4.id=zip_field
event4.value=12345

event5.type=text
event5.id=city_field
event5.value=Piraeus
```

```
event6.type=selectByVal
event6.id=virtuemart_country_id_field
event6.value=84

event7.type=text
event7.id=phone_1_field
event7.value=00302104111111

event8.type=text
event8.id=phone_2_field
event8.value=00306977777777

event9.type=jsbutton
event9.id=user-vm-register
event9.value=
```

ELTAZIPCODES-TR1.5.txt

```
events.nr=0
```

ELTAZIPCODES-TR1.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 2 - User Registration Invalid Credentials Flow [ELTAZIPCODES-TR2]

ELTAZIPCODES-TR2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TR2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
```

```
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TR2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAZIPCODES-TR2.4.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAZIPCODES-TR2.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 3 - User Cancels Registration Flow on Country Page [ELTAZIPCODES-TR3]

ELTAZIPCODES-TR3.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TR3.2.txt

```
events.nr=2

event1.type=selectByVal
```

```
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAZIPCODES-TR3.3.txt

```
events.nr=0
```

ELTAZIPCODES-TR3.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 4 - User Registration IdP Cancel Flow [ELTAZIPCODES-TR4]

ELTAZIPCODES-TR4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TR4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TR4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
```

```
event1.value=
```

ELTAZIPCODES-TR4.4.txt

```
events.nr=0
```

ELTAZIPCODES-TR4.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 5 - Registered User Normal Login Flow (eIDAS eID) [ELTAZIPCODES-TL1]

ELTAZIPCODES-TL1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TL1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TL1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAZIPCODES-TL1.4.txt

```
events.nr=1
```

```
event1.type=linkByText
event1.id=ZIP CODES
event1.value=
```

ELTAZIPCODES-TL1.5.txt

```
events.nr=1

event1.type=jsbutton
event1.id=online-zipcodes
event1.value=
ELTAZIPCODES-TL1.6.txt
events.nr=0
```

ELTAZIPCODES-TL1.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 6 - Registered User Invalid Credentials Flow [ELTAZIPCODES-TL2]

ELTAZIPCODES-TL2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TL2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TL2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAZIPCODES-TL2.4.txt

```
events.nr=0
```

ELTAZIPCODES-TL2.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 7 - Registered User Cancels Registration Flow on Country Page [ELTAZIPCODES-TL3]

ELTAZIPCODES-TL3.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TL3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAZIPCODES-TL3.3.txt

```
events.nr=0
```

ELTAZIPCODES-TL3.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 8 - Registered User IdP Cancel Flow [ELTAZIPCODES-TL4]

ELTAZIPCODES-TL4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TL4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TL4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAZIPCODES-TL4.4.txt

```
events.nr=0
```

ELTAZIPCODES-TL4.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

Test Case 9 - Unregistered User Access Attempt Flow [ELTAZIPCODES-TRL]

ELTAZIPCODES-TRL.txt

```
start.url=https://eltab2b.gr/en/zip-codes
firefox.profile=default
firefox.headless=false
```

ELTAZIPCODES-TRL.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=eIDAS-button
event1.value=
```

ELTAZIPCODES-TRL.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAZIPCODES-TRL.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAZIPCODES-TRL.4.txt

```
events.nr=0
```

ELTA – eDelivery Hybrid Service

Test Case 1 - User Registration Normal Flow (eIDAS eID) [ELTAHYBRID-TL1]

ELTAHYBRID-TL1.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=button-1024-btnInnerEl
event1.value=
```

ELTAHYBRID-TL1.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAHYBRID-TL1.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAHYBRID-TL1.4.txt

```
events.nr=0
```

ELTAHYBRID-TL1.txt

```
start.url=https://www.e-post.gr/portalLogin.jsp
firefox.profile=default
firefox.headless=false
```

Test Case 2 - User Registration Invalid Credentials Flow [ELTAHYBRID-TL2]

ELTAHYBRID-TL2.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=button-1024-btnInnerEl
event1.value=
```

ELTAHYBRID-TL2.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAHYBRID-TL2.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=submit_button
event1.value=
```

ELTAHYBRID-TL2.4.txt

```
events.nr=0
```

ELTAHYBRID-TL2.txt

```
start.url=https://www.e-post.gr/portalLogin.jsp
firefox.profile=default
firefox.headless=false
```

Test Case 3 - User Cancels Registration Flow on Country Page [ELTAHYBRID-TL3]

ELTAHYBRID-TL3.1.txt

```
events.nr=1
```

```
event1.type=jsbutton
event1.id=button-1024-btnInnerEl
event1.value=
```

ELTAHYBRID-TL3.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES

event2.type=jsbutton
event2.id=cancel
event2.value=
```

ELTAHYBRID-TL3.3.txt

```
events.nr=0
```

ELTAHYBRID-TL3.txt

```
start.url=https://www.e-post.gr/portalLogin.jsp
firefox.profile=default
firefox.headless=false
```

Test Case 4 - User Registration IdP Cancel Flow [ELTAHYBRID-TL4]

ELTAHYBRID-TL4.1.txt

```
events.nr=1

event1.type=jsbutton
event1.id=button-1024-btnInnerEl
event1.value=
```

ELTAHYBRID-TL4.2.txt

```
events.nr=2

event1.type=selectByVal
event1.id=countrySelection2
event1.value=ES
```

```
event2.type=jsbutton
event2.id=next
event2.value=
```

ELTAHYBRID-TL4.3.txt

```
events.nr=1

event1.type=jsbutton
event1.id=cancel_button
event1.value=
```

ELTAHYBRID-TL4.4.txt

```
start.url=https://www.e-post.gr/portalLogin.jsp
firefox.profile=default
firefox.headless=false
```

Annex II. Interoperability Tests Extension

During the finalization of this document the access to The Netherlands node and IdP was approved. Leveraging this opportunity, the interoperability test has been developed at the last moment for the sake of the project.

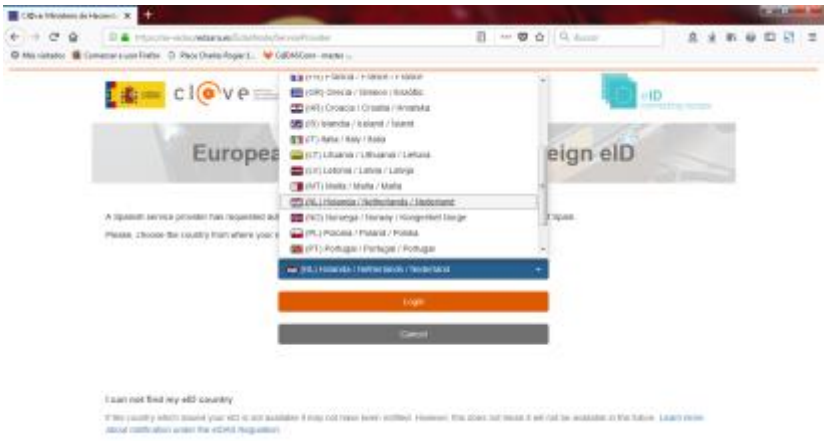
The Netherlands

This test case has been performed using The Netherlands test credentials provided by the e-Government for Enterprises department belonging to The Netherland Enterprise Agency[11]. This Agency is a government agency which operates under the auspices of the Ministry of Economic Affairs and Climate Policy. Beside the credentials (username/password) a e-Recognition eID token is provided to be used to logon as "Dutch" citizen. This token generates a OTP to be provided to the pre-production IdP (Z login AD 1.9). The test case tested with the Dutch credentials is the Correos TC 1 accessing MyIdentity service.

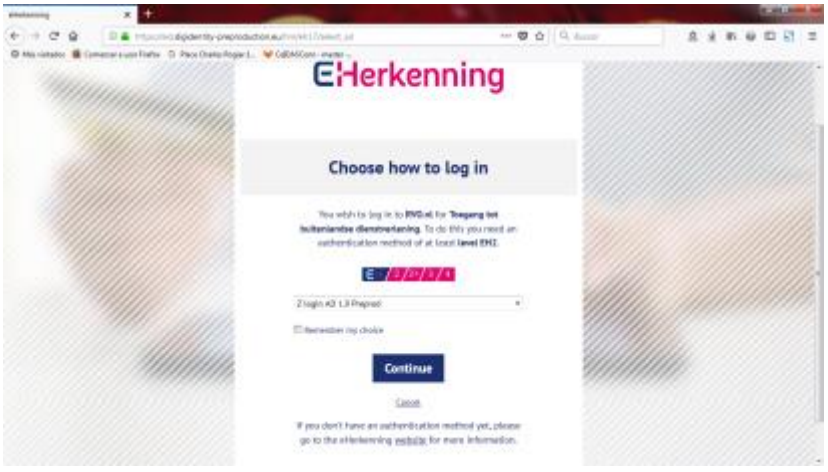
Description	A user from The Netherlands requests access to a MyIdentity Correos service (Spain). The user wasn't previously registered in the SP. The user gets access to the SP successfully after registering in the Correos SP..
Process and Screenshots	1. A Dutch citizen try to access to the Correos service and then is redirected to Correos ID for login or directly access to Correos ID (URL https://miidentidadpre2.azurewebsites.net) and click on "Authenticate with eIDAS" button. 2. The user is redirected to eIDAS adapter. The eIDAS adapter page is showing the mandatory and the optional requested data. The user selects the optional attributes to be disclosed and gives consent by clicking the "Submit" button.

[11] https://english.rvo.nl/

3. The user is redirected to the Spanish eIDAS node where he/she selects the country of origin (The Netherlands). Then the user clicks on "Login" button for starting the authentication process.

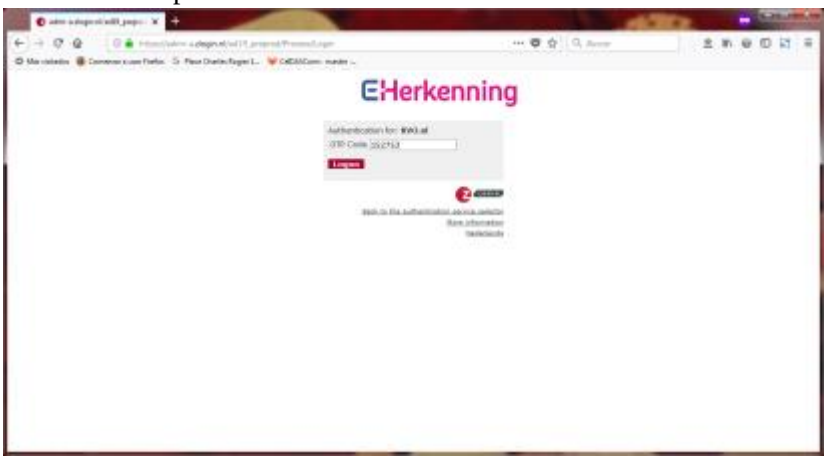


4. The user is redirected to the preproduction Dutch eIDAS node. where a list of available IdPs are displayed. The user selects the Z login AD 1.9 (Preprod) and clicks on the "Continue" button.

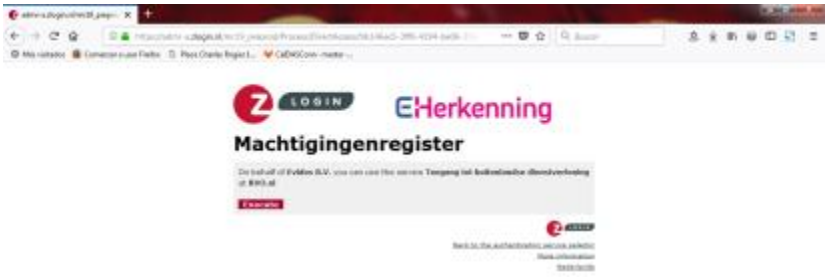


5. The Dutch IdP asks for credentials. The user provides user and password and press the "Logon" button.

6. The Dutch IdP asks for an OTP code. The user retrieves the OTP code (a six-digit code generated at that moment) from the eID token, and enter it on the provided text area.



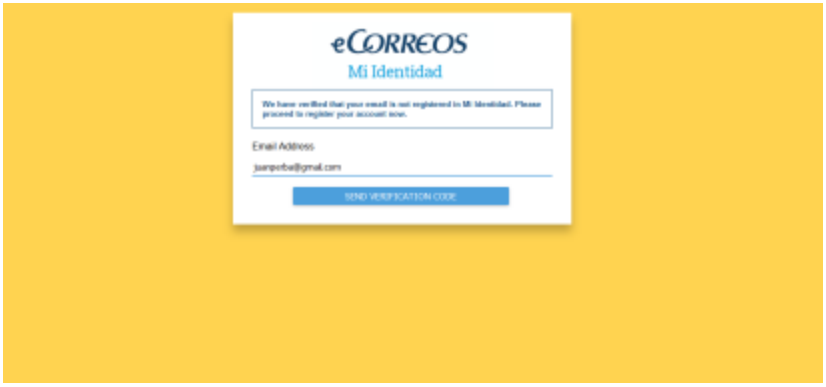
7. The Dutch IdP informs the user has been authenticated. The user press "Execute" button for delivering the user data.



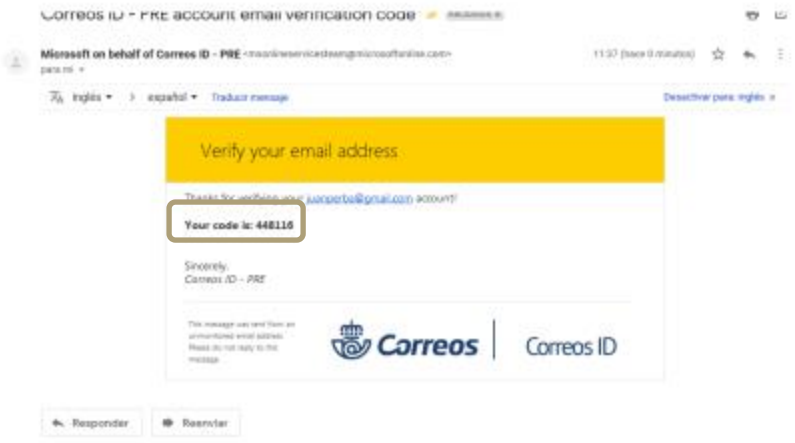
8. The user is redirected to the Spanish eIDAS node, then to the eIDAS adapter and finally reaches Correos MyIdentity service. MyIdentiy

service detects that is the first time the user is accessing Correos and requests the user to provide an email address. The user enters the email address and clicks on “Verify email” button.

9. Once the MyIdentity service verifies that the email is not registered yet asks the user to click on the “Send Verification Code” button.



10. MyIdentity sends to the user’s email a verification code.



11. The user retrieves the verification code from the email and enters the code and clicks on Verify Code button.

12. Once MyIdentity verifies the code, the user is asked to introduce a password (needed for additional authentication process), the type of person and accept the conditions of use of MyIdentity service. Then the user clicks on “Create” button.

13. A form to fill in is displayed to the user. The user fills the form and clicks on the Accept button and accepts term and conditions.

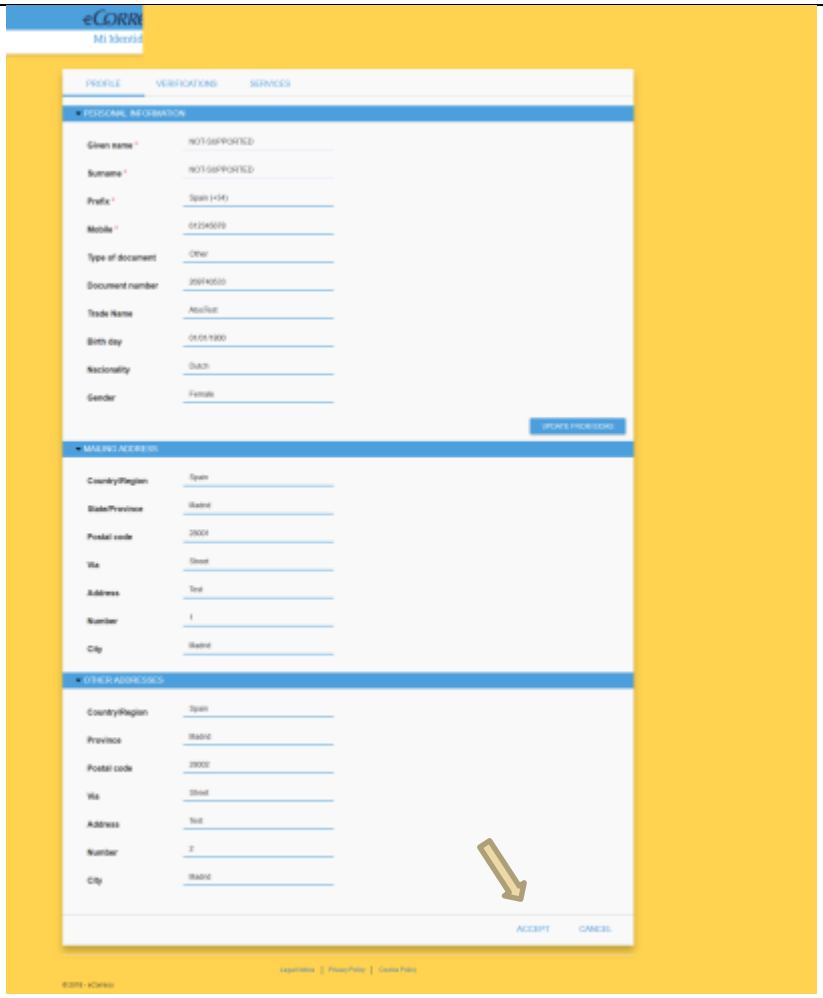
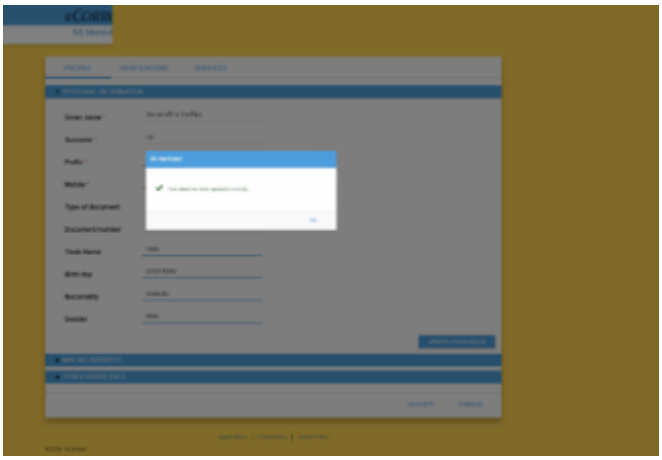
	 14. MyIdentity service informs the user the registration process was successful. 
Result	Dutch citizen is successfully authenticated and registered in Correos MyIdentity service.

Table 0-1: A Dutch citizen requests access to the Spanish MyIdentity service in Correos.