



Leveraging eID in the Private Sector

D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization

Document Identification			
Status	Final	Due Date	28/02/2018
Version	2.0	Submission Date	28/02/2018

Related Activities	Activity 4 Activity 5	Document Reference	D4.1/5.1
Related Deliverable(s)	D4.2, D4.3 D5.2, D 5.3	Dissemination Level (*)	PU
Lead Participant	UAegean Athex Hellenic Post	Lead Author	Petros Kavassalis Katerina Ksystra
Contributors	UAegean Athex Hellenic Post	Reviewers	Correos Javier Salazar Gomez
			HMI Loukia Demiri Antonis Stasis

Keywords:

ATHEX and Hellenic Post/ELTA e-Services, eIDAS Node, Customization, Integration, eIDAS API Connectors

This document is issued within the frame and for the purpose of the *LEPS* project. This project has received funding from the European Union's Innovation and Networks Executive Agency – Connecting Europe Facility (CEF) under Grant Agreement No.INEA/CEF/ICT/A2016/1271348; Action No 2016-EU-IA-0059 The opinions expressed and arguments employed herein do not necessarily reflect the official views of the European Commission.

This document and its content are the property of the *LEPS* Consortium. All rights relevant to this document are determined by the applicable laws. Access to this document does not grant any right or license on the document or its contents. This document or its contents are not to be used or treated in any manner inconsistent with the rights or interests of the *LEP* Consortium or the Partners detriment and are not to be disclosed externally without prior written consent from the *LEPS* Partners.

Each *LEPS* Partner may use this document in conformity with the *LEPS* Consortium Grant Agreement provisions.

(*) Dissemination level.-**PU**: Public, fully open, e.g. web; **CO**: Confidential, restricted under conditions set out in Model Grant Agreement; **CI**: Classified, **Int** = Internal Working Document, information as referred to in Commission Decision 2001/844/EC.

Document Information

List of Contributors	
Name	Partner
Petros Kavassalis Katerina Ksystra Nikos Triantafyllou Harris Papadakis	UAegean
Petros Stefaneas	NTUA
Stelios Sifnaios Aris Maragakis Thomas Macheras	Hellenic Post (ELTA)
Stamatis Vamvakeris George Christakeas John Balafas	ATHEX
Sarantos Michalarias Lymperis Lymperopoulos	Unisystems

Document History			
Version	Date	Change editors	Changes
0.1	15/02/2018		Initial ToC and integration draft
0.2	20/02/2018		Updated after ATHEX feedback
0.3-0.9	23/02/2018		Updated by UAegean
1.0	27/02/2010		Pre-Final version integrating the comments of reviewers and UAegean updates
1.1	28/02/2018	UAegean	Final updates by UAegean
1.2	28/02/2018	ATOS	Quality Check
2.0			FINAL VERSION TO BE SUBMITTED

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	2 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

Table of Contents

Document Information	2
Table of Contents	3
List of Tables.....	5
List of Figures	6
List of Acronyms.....	7
1 Executive Summary	8
2 Introduction.....	9
2.1 Purpose of the document	9
2.2 Relation to other project work.....	10
2.3 Structure of the document	10
3 “Customization preparation and design”	11
3.1 “Customization preparation and design for ELTA/Hellenic Post Services”	12
3.1.1 “Services to integrate”	12
3.1.2 “Register Use Case” (generic).....	22
3.1.3 “Login Use Case” (generic).....	22
3.1.4 “Metrics”	23
3.1.5 “Services Requirements”	24
3.1.6 “Technical infrastructure preparation”	25
3.2 “Customization preparation and design of Athens Stock Exchange Services“	28
3.2.1 “Services to integrate”	28
3.2.2 “Register Use Case” (generic case)	34
3.2.3 “Login Use Case” (AXIAweb case).....	35
3.2.4 “Metrics”	36
3.2.5 “Services Requirements”	36
3.2.6 “Technical infrastructure preparation”	37
4 “Customization Implementation”	39
4.1 “Customization Implementation for ELTA/Hellenic Post services”	40
4.1.1 “Customization time-plan for ELTA services”	40
4.1.2 “Interface definition for ELTA services”	40
4.2 “Customization Implementation for Athens Stock Exchange Services”	44

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	3 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

4.2.1	“Customization time-plan for ATHEX services”	44
4.2.2	“Interface definition for ATHEX services”	44
4.3	Integration flow	48
5	“Tests preparation”	52
5.1	“ELTA Test Cases Definition”	53
5.2	“ATHEX Test Cases Definition”	57
6	Conclusions	61

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	4 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

List of Tables

<i>Table 1: ELTA & ATHEX: List of e-Services integrated with the eIDAS Network</i>	11
<i>Table 2: ELTA e-Services to integrate with the eIDAS Network – Functionality</i>	12
<i>Table 3: ELTA e-Services' attributes requirements</i>	24
<i>Table 4: ELTA Specific Requirements</i>	24
<i>Table 5: ATHEX e-Services to integrate with the eIDAS Network – Functionality</i>	28
<i>Table 6: ATHEX e-Services' attributes requirements</i>	36
<i>Table 7: ATHEX Specific Requirements</i>	36
<i>Table 8: ELTA & ATHEX: List of e-Services integrated with the eIDAS Network</i>	39
<i>Table 9: ELTA Customization Time-plan</i>	40
<i>Table 10: ELTA Services – eIDAS authentication « Launch buttons »</i>	41
<i>Table 11: ATHEX Customization Time plan</i>	44
<i>Table 12: ATHEX Services – eIDAS authentication « Launch buttons »</i>	45
<i>Table 13: ELTA & ATHEX: List of e-Services integrated with the eIDAS Network that will be the object of a case-based testing</i>	52
<i>Table 14: ELTA & ATHEX: List of Testing Cases (to verify effective functional integration with the GR eIDAS Node)</i>	53
<i>Table 15: ELTA Test Cases Description / A new User requires access to ELTA e-Services</i>	53
<i>Table 16: ELTA Test Cases Description / User login to ELTA e-Services</i>	54
<i>Table 17: ELTA Test Cases Description / Authentication Cancel Case – During Registration or Login</i>	55
<i>Table 18: ELTA Test Cases Description / Authentication Fail Case – During Registration or Login</i>	56
<i>Table 19: ATHEX Test Cases Description / A new User requires access to ATHEX e-Services</i>	57
<i>Table 20: ATHEX Test Cases Description / User login to ATHEX e-Services</i>	58
<i>Table 21: ATHEX Test Cases Description / Authentication Cancel Case – During Registration or Login</i>	59
<i>Table 22: ATHEX Test Cases Description / Authentication Fail Case – During Registration or Login</i>	59

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	5 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

List of Figures

<i>Figure 1: ELTA e-Services to integrate with the eIDAS Network – Overview.....</i>	<i>13</i>
<i>Figure 2: ELTA Document Management and Workflow System (screenshot).....</i>	<i>13</i>
<i>Figure 3: ELTA eDelivery Hybrid Service</i>	<i>15</i>
<i>Figure 4: ELTA Online Postal Services</i>	<i>15</i>
<i>Figure 5: ELTA portal</i>	<i>16</i>
<i>Figure 6: ELTA portal registration form</i>	<i>17</i>
<i>Figure 7: ELTA e-Shop</i>	<i>18</i>
<i>Figure 8: ELTA e-Shop registration form.....</i>	<i>19</i>
<i>Figure 9: Parcel Delivery Voucher e-Form (single application form)</i>	<i>20</i>
<i>Figure 10: Online Zip Codes – current process.....</i>	<i>21</i>
<i>Figure 11: Online ZipCodes – Process re-design.....</i>	<i>21</i>
<i>Figure 12: ELTA – Integration Architecture to Greek eIDAS Node.....</i>	<i>26</i>
<i>Figure 13: ATHEX e-Services to integrate with the eIDAS Network – Overview.....</i>	<i>29</i>
<i>Figure 14: Integration of ATHEX IdP with the Greek eIDAS node.....</i>	<i>30</i>
<i>Figure 15: ATHEX Sign – Pre-activation and User Operational Procedures.....</i>	<i>31</i>
<i>Figure 16: ATHEX Sign Service User Interface</i>	<i>31</i>
<i>Figure 17: ATHEX AXIAweb site User Interfaces</i>	<i>33</i>
<i>Figure 18: ATHEX – Integration Architecture to Greek eIDAS Node.....</i>	<i>38</i>
<i>Figure 19: Integration Flow (SP-API connector - eIDAS Node</i>	<i>48</i>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	6 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

List of Acronyms

Abbreviation / acronym	Description
EC	European Commission
eID	Electronic Identity
eIDAS	<u>e</u> lectronic <u>I</u> Dentification, <u>A</u> uthentication and trust <u>S</u> ervices
eID_EU	Brand name for the authentication via national eIDs and by using the eIDAS Network
JWT	JSON Web Token
SP	Service Provider under the definition of eIDAS SPs
OTP	One Time Password

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	7 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

1 Executive Summary

The main goal of this deliverable “Operational and Technical Documentation of SP (ELTA, ATHEX) customization” is to provide a precise description of the Customization preparation and design of ELTA/Hellenic Post (ELTA) and Athens Stock Exchange Services (ATHEX) during the process of integration of their e-Services with the eIDAS Network

To this end, a detailed description of the e-Services to integrate is provided first. Generic and specific requirements of the services that will be connected to eIDAS Network are described. An overview of the technical infrastructure (architecture and environment) needed for the customization and the integration with the eIDAS infrastructure is outlined – including the deployment of an API Connector for effective integration with a eIDAS Node that has been mostly developed in this Project. Design details on User Interfaces and the exact integration flow between User, SP,. API Connector(s) and eIDAS Node are finally defined.

The deliverable provides also a detailed list of customization activities and the actual time-plan for customization tasks (almost ended for ATHEX) and proposes a testing framework (test use-cases) to be used during the Integration phase that follows.

As conclusion, the e-Services of ELTA and ATHEX that have been proposed to integrate with the eIDAS Network do now have the maturity to effectively interoperate with the Greek eIDAS Node via LEPS eIDAS API Connectors. These API Connectors simplify and optimize the decision of a Service Provider to join the eIDAS infrastructure. After the final deployment of eIDAS API Connectors and the integration with the Greek eIDAS Node, ELTA and ATHEX premises and e-Services will become active parts of the paneuropean eIDAS infrastructure, offering to their EU customers a real cross-border authentication experience.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	8 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

2 Introduction

The e-commerce/service sector is booming. It is no secret that most of the growth in retail and services comes from this sector. However, in Europe it has not yet reached its full potential. Indeed today 65% of European internet users shop online but only 16% of SMEs sell online and only half of those do so cross border. For a service provider cross border ventures poses many obstacles¹.

To materialize the goal of a unified Digital Single Market in Europe, the EU has implemented regulations to provide legal guarantees for cross border ecommerce/services and additionally has dedicated resources for the development of Digital Service Infrastructure (DSI) to facilitate the easier adoption of these regulations and the realization of this unified market.

Specifically, the eIDAS regulation (Regulation (EU) No. 910/2014), is one of the actions of the European Commission to achieve the digital single market and has been established with a double objective: (a) to ensure all citizens of EU can access public services of any State of the Union using their electronic National ID number and (b) create an internal market for trust services²

Additionally, the Connection Europe Facility (CEF) DSI building blocks program has a total budget of 970 million euros (between 2014 and 2020) dedicated to building solutions for delivering networked cross-border services for citizens, businesses and public administrations³. The development of these basic digital service infrastructures will enable service providers across the EU to overcome the obstacles they encounter for providing their services cross border by: reducing costs, shortening time-to-market and enabling interoperability across the EU borders.

In the context of the LEPS project, ELTA and ATHEX will have the opportunity to customize and prepare for integration with the eIDAS Network, a selection from the e-Services they offer to their customers.

2.1 Purpose of the document

This deliverable “Operational and Technical Documentation of SP (ELTA, ATHEX) customization” is the verification of the Milestone 6 of the LEPS project, associated with the task 4.1 Customization of Athens Stock Exchange Services Portal and the task 5.1 Customization of Hellenic Post Services Portal. The document provides a technical report containing a description of the customization preparation and design for the selected ELTA/Hellenic Post and Athens Stock Exchange services for integration with CEF eID.

LEPS Activities Reference:

- Activity 4: Customization of Greek Financial Services and Integration with eIDAS Infrastructure
- Activity 5: Customization of Greek Post Electronic Services and Integration with eIDAS Infrastructure

¹ <https://www.ecommerce-europe.eu/app/uploads/2016/07/Research-Report-Cross-Border-E-commerce-Barometer-2016-FINAL.pdf>

² <https://blog.signaturit.com/en/what-is-the-eidas-regulation-and-how-does-it-benefit-companies>

³ <https://ec.europa.eu/digital-single-market/en/news/connecting-europe-facility-cef-digital-service-infrastructures>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization			Page:	9 of 61	
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

2.2 Relation to other project work

The activities described in this document have received input from:

Activity 1: Project Coordination

Activity 2: Business Requirements, Integration and Testing Planning

Activity 4: Customization of Greek Financial Services and Integration with eIDAS Infrastructure

- Task 4.2: Develop eIDAS Interconnection Supporting Service

Activity 5: Customization of Greek Post Electronic Services and Integration with eIDAS Infrastructure

- Task 5.2: Develop eIDAS Interconnection Supporting Service

The activities described in this document will provide input to:

Activity 4: Customization of Greek Financial Services and Integration with eIDAS Infrastructure

- 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 5.3: Integration to Greek PEPS/eIDAS-Node Connector
- Task 5.4: Mobile authentication

Activity 6: Testing of cross-border authentication and access to Correos electronic Services and to Hellenic (Financial and Post) electronic Services

2.3 Structure of the document

This document is structured in 5 major chapters.

Chapter 2 provides a comprehensive view of the activities related to preparation and design of the customization activities that is necessary to successfully integrate existing e-Services with the eIDAS Network. The section describes a detailed design approach that has emerged after several technical meetings achieved between the involved Service Providers (ELTA/Hellenic Post, ATHEX) and UAegean, the technical coordinator of the activity. Essentially, it provides a general overview of the SP services to be integrated. Besides, a description of the envisaged use cases and metrics are included. Finally, the specific requirements of the e-Services that will be connected to eIDAS Network are provided and a technical view of the integration architecture is outlined.

Chapter 3 describes the activities performed during the customization of the ELTA/Hellenic Post and ATHEX's services and how these services will be integrated with the eIDAS Network by using LEPS API Connectors. Interface designs from the local SP application/service and the eIDAS API Connectors are provided. Finally, a detailed flow of the authentication process is outlined.

Chapter 4 describes the test cases that will be used to verify the effective integration of SP services to eIDAS Network.

Chapter 5 concludes the document and presents lessons learnt.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	10 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

3 “Customization preparation and design”

This section provides a comprehensive view of the activities related to preparation and design of the customization activities that is necessary to successfully integrate existing e-Services with the eIDAS Network.

Table 1: ELTA & ATHEX: List of e-Services integrated with the eIDAS Network

ELTA & ATHEX: List of e-Services integrated with the eIDAS Network		
	ELTA	ATHEX
1	ELTA eDelivery Hybrid Service (cross-border exchange of electronic documents)	ATHEX IdP Identity Service Provider
2	ELTA Online Postal Services ELTA portal / eShop	ATHEX Sign Remote eSignature Service
3	ELTA Online Postal Services Parcel Delivery Voucher	ATHEX AXIAweb Receive electronic information on an Investor's positions in Greek Central Securities Repository
4	ELTA Online Postal Services Online Zip Codes for Business Users	

The section describes a detailed design approach that has emerged after several technical meetings achieved between the involved Service Providers (ELTA/Hellenic Post, ATHEX) and UAegean, the technical coordinator of the activity. Essentially, it provides a general overview of the SP services to be integrated. Besides, a description of the envisaged use cases and metrics are included. Finally, the specific requirements of the e-Services that will be connected to eIDAS Network are provided and a technical view of the integration architecture is outlined.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	11 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

3.1 “Customization preparation and design for ELTA/Hellenic Post Services”

This section presents the adaptation of ELTA/Hellenic Post e-services to the needs of integration with the eIDAS Network.

Themes:

- Integration detail plan (“total” eID-EU approach: use eID-EU for both customer registration and login to service)
- Requirements and modified service flows, eIDAS attributes to require
- Reconciliation between eIDAS identifiers and ELTA internal User identifiers (eIDAS Uniqueness Identifier and User’s email will be both used as main customer reference)
- Integration architecture (using LEPS API Connectors)

Task Reference:

- T5.1 (and T5.2)

Next Task: T5.3 – Integration of ELTA e-services to Greek eIDAS Node

- After deployment, the integrated e-service system will be ready first for tests with eIDAS test eIDs and finally with real production eIDs through the eIDAS production environment.

3.1.1 “Services to integrate”

This sub-section presents a summary of the SP services that will be integrated with the eIDAS infrastructure.

Table 2: ELTA e-Services to integrate with the eIDAS Network – Functionality

Application/Service	Functionality
ELTA eDelivery Hybrid Service (cross-border exchange of electronic documents)	(Customer) Register / Login
ELTA Online Postal Services ELTA portal / eShop	(Customer) Register / Login
ELTA Online Postal Services Parcel Delivery Voucher	(Customer) Login
ELTA Online Postal Services Online Zip Codes for Business Users	(Customer) Login / Register

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	12 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

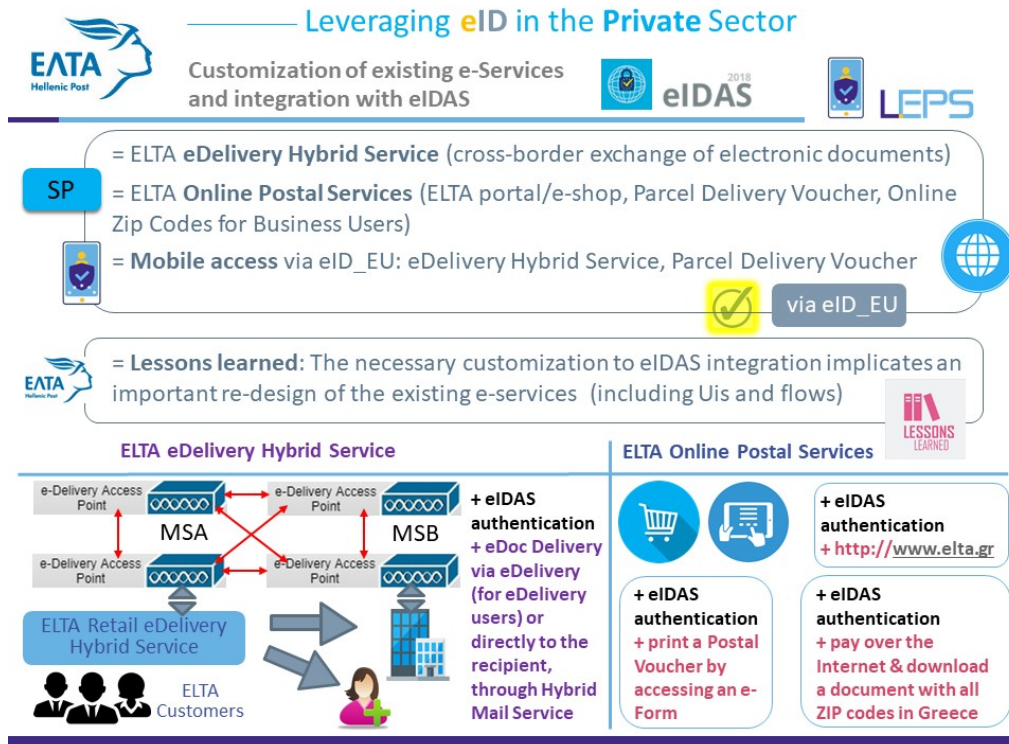


Figure 1: ELTA e-Services to integrate with the eIDAS Network – Overview

3.1.1.1 ELTA eDelivery Hybrid Service

The Document Management and Workflow System (DMWS) of ELTA supports the communication between ELTA and the various organisations that are part of the eDelivery network.

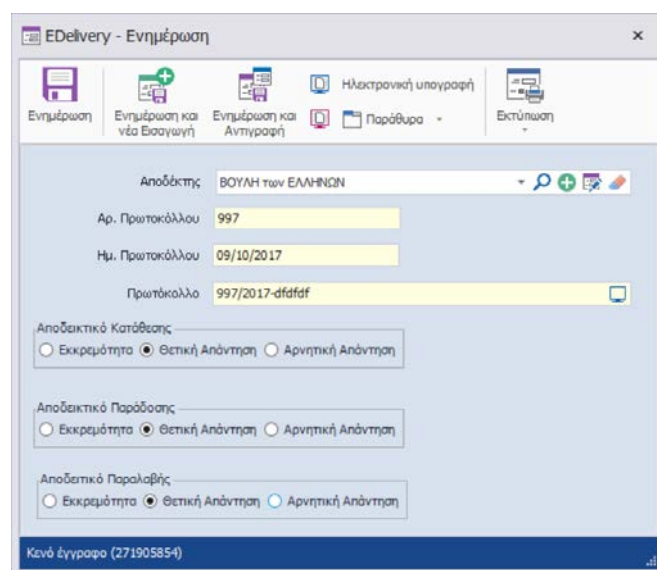


Figure 2: ELTA Document Management and Workflow System (screenshot)

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization			Page:	13 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

The application is currently used by ELTA employees, but a new market product is under implementation and testing based on this application. It targets both the consumer and business markets. The new product will merge the functionality of Document Management and Workflow System (DMWS) with the Hybrid Mail Service⁴ of ELTA. The users, after registration, will be able to:

- a. Send electronic documents using both the ELTA eDelivery network and the Hybrid Mail Service (sender functionality)
- b. Receive documents (recipient functionality)
 - 1 If customers are part of eDelivery network: receive electronic documents and manage delivery evidences through eDelivery personalized inbox
 - 2 If customers are not part of eDelivery network but they have a physical address: receive a physical letter that includes a URL link from where they can, after authentication, download the electronic document that a sender has addressed to them while the application keeping track and providing evidence on the details of both postage and reception (day and time, secure copy of the original document etc.).

The new application named “eDelivery Hybrid Service” will be “natively” integrated with the Greek eIDAS Node, in the sense that this service will require customers (senders and recipients, cross-border and “locals” users) to register and authenticate only via the eIDAS Network. Users will register with eID_EU credentials but they will also provide, during registration, extra identification attributes (not provided by the eIDAS network), such as email, postal address etc. The functionality of the application has as follows (in brief):

- Sender side (Document Submission Service): After successful authentication (Login with eID_EU), the sender of the document will use a document submission interface and suggest the recipient(s). The document gets signed using the e-Seal of ELTA, assigned a Unique Identifier and copied securely. The User pays through e-banking the required fee and the document is forwarded to the recipient(s) either via the eDelivery network or the ELTA Hybrid Mail Service.
- Recipient side (Document Delivery Service): The application discriminates the following two cases:
 - The recipient is an organization part of the ELTA eDelivery system. The documents will be delivered electronically to it through the eDelivery Network. In the case, the recipient (usually a public organization) sends back a response (for example, whenever the initial document was related to the demand for issuing s certificate), the initial sender is alerted to check his/her “inbox service”. He/she will proceed via eIDAS authentication (Login with eID_EU).
 - The recipient is not part of the eDelivery network. The documents will be delivered via the Hybrid Mail Mail. Specifically, an envelope will be mailed to the recipient containing the information of the sender and a URL where the recipient can download the document(s) sent. In the case eIDAS verification was selected by the sender, the recipient will need to “Login with eID_EU” prior to downloading the document. After

⁴ Hybrid Mail Service (HMS) can automatically transform electronic messages and documents to physical letter items, recognize the address of the recipient, printing, enveloping and physically delivering the electronic message as traditional physical letter. At ELTA, a Hybrid Mail Service is operational since 2008. This service enforces strict security rules regarding privacy, validation of recipient address and quality of service (i.e. guarantees for delivery).

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	14 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

eIDAS authentication the recipient will be able to download the document(s) and additionally, the document(s) will be added to his/her inbox. The required identification attributes of the recipient will be sent back to the sender's inbox in the form of delivery evidences.

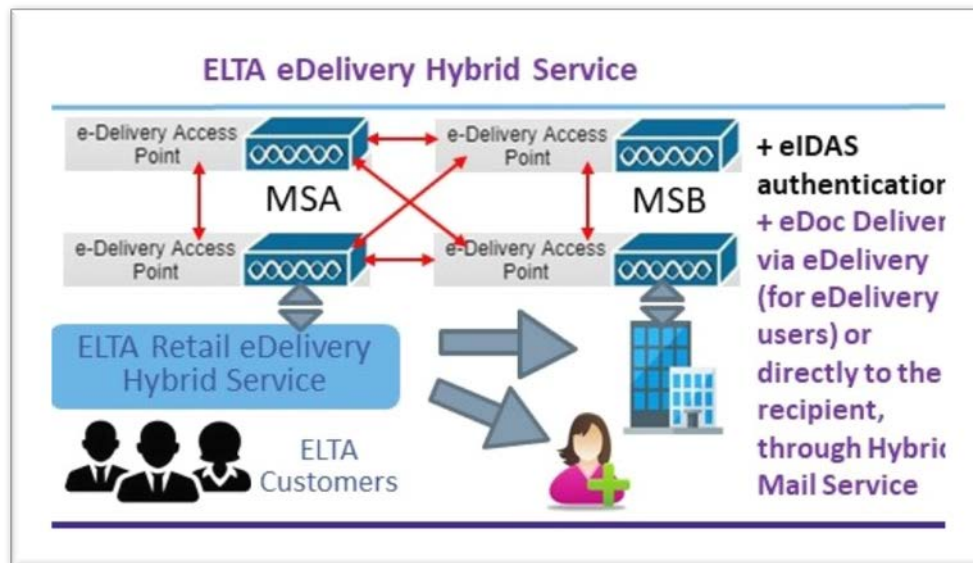


Figure 3. ELTA eDelivery Hybrid Service

Finally, the application will contain specific web signs explaining what is and how you can use eID_EU.

3.1.1.2 ELTA Online Postal Services

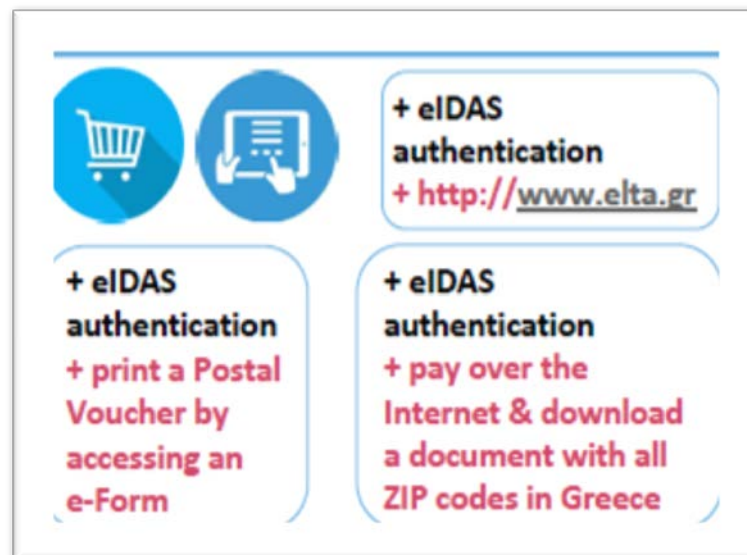


Figure 4: ELTA Online Postal Services

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	15 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

3.1.1.2.1 ELTA portal /eShop

Users can visit the website of ELTA or ELTA portal (<http://www.elta.gr/el-gr/home.aspx>) and get access to the available online postal services.



Figure 5: ELTA portal

The registration of the users in the website is performed by filling a form requesting personal information (First Name, Last Name, email, select username and password), and the access is currently allowed via the username/password selected during registration.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	16 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

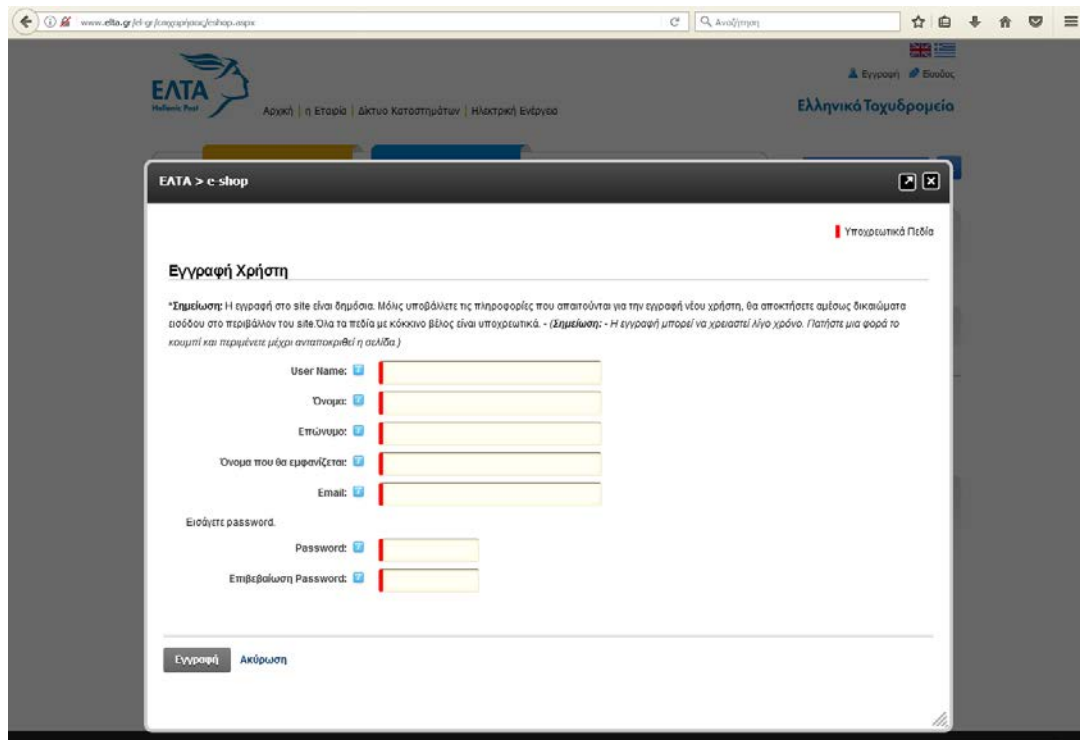


Figure 6: ELTA portal registration form

In the context of LEPS, the company will integrate its main portal with the eIDAS Network to provide an additional mode of authentication (via eID_EU). The portal infrastructure will be customized, so that the users can register and login to it via eID_EU as well.

The User after clicking at an appropriate “Register with eID_EU, will be re-directed to “eIDAS Country e-Form” (where additional information on how to use eID-EU will be also provided). Upon successful completion of the authentication process, the User will be registered in the database of the portal and redirected back to the website of ELTA (landing page). On subsequent sessions the User can login to the portal by clicking on an appropriate “Login with eID_EU” button.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	17 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

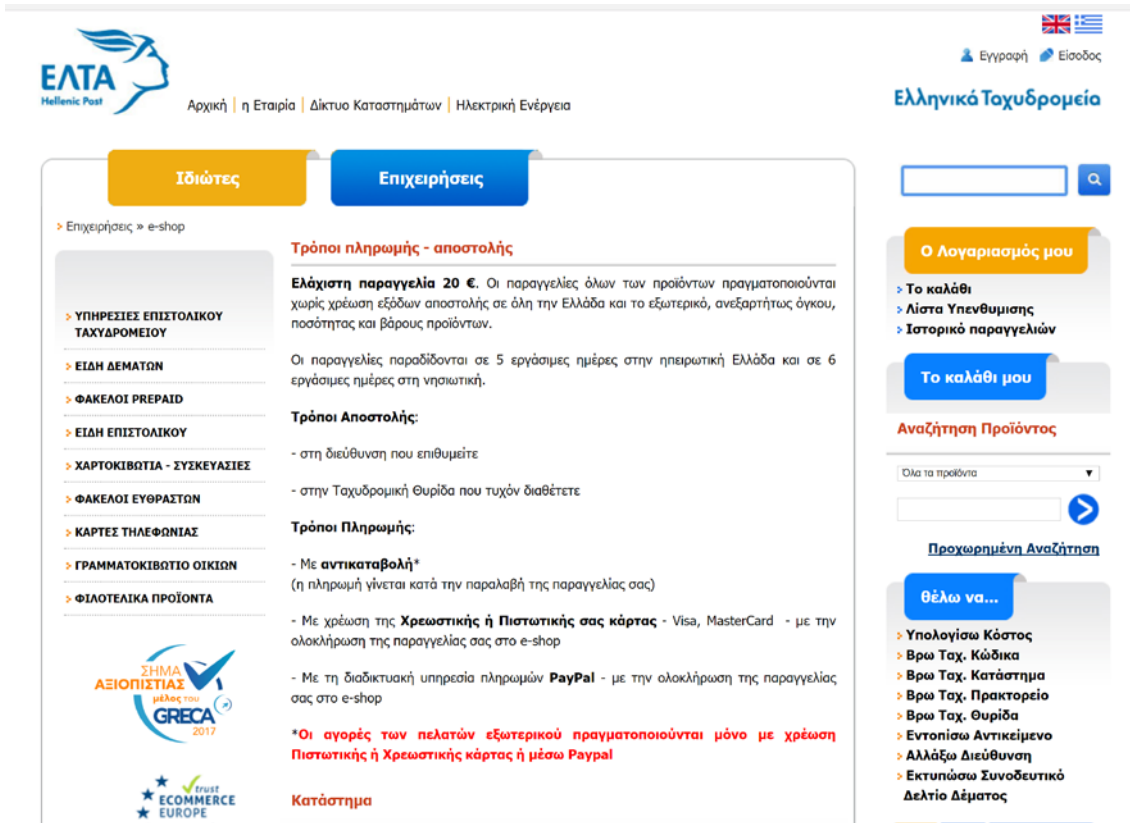


Figure 7: ELTA e-Shop

Similar will be the access to ELTA eShop (part of ELTA main portal):

<http://www.elta.gr/en-us/business.aspx>

<http://www.elta.gr/en-us/personal.aspx>

ELTA e-shop offers to both individuals and corporate customers the following functionalities: Letter mail services, Parcels, Prepaid envelopes, Letter mail products, Packaging, Fragile items envelopes, Telephony products, MailBoxes, Philatelic Products.

To move on to purchase, a User has to fill-in the information shown in the screenshot below:

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	18 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

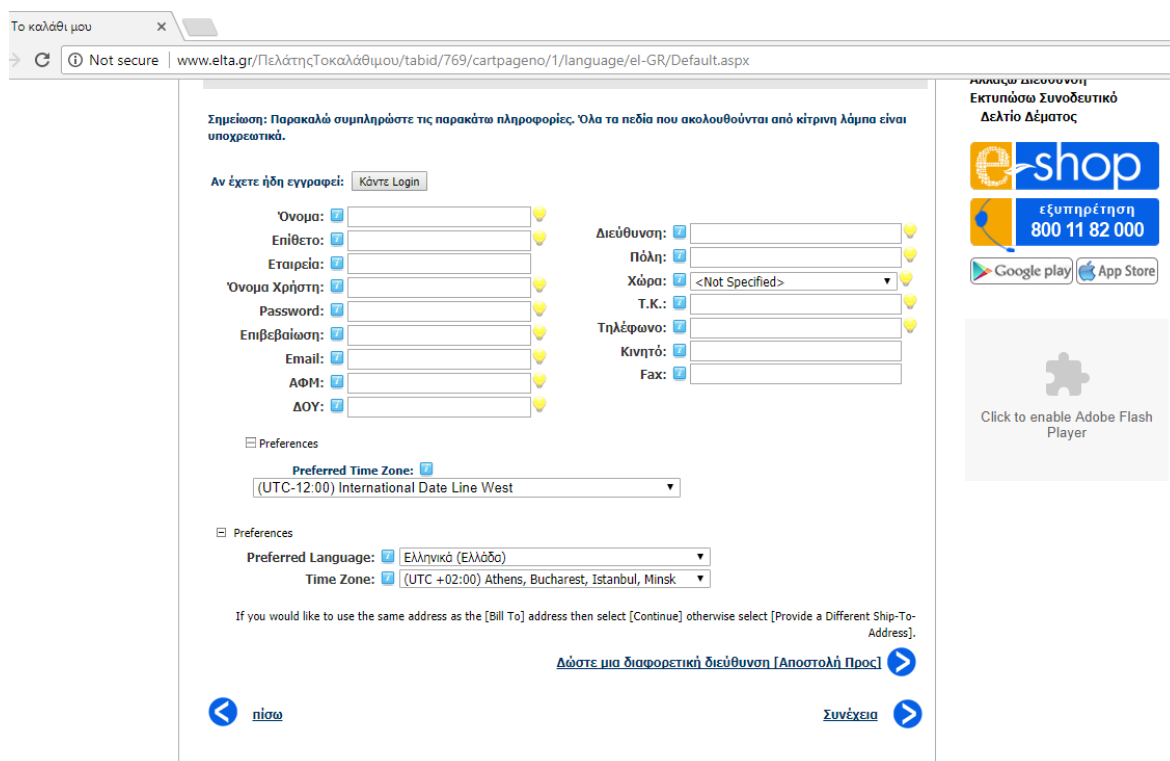


Figure 8: ELTA e-Shop registration form

- In the case the User is already registered but not logged-in in the ELTA portal he/she can login (either through local credentials or eID_EU). He/she will be redirected to the above e-Form but will have to fill-in only the information fields that are not automatically completed from the data included in the authentication response. As soon as the user completes the form, he/she can press the “Continue” button and complete the purchase.
- In the case the User is already logged-in the ELTA portal, he/she will automatically get the above form completed with the information already available from the registration process.
- In the case the User is not registered, he/she should first register with the portal via eID_EU (or through regular registration) and then get access to eShop services.

3.1.1.2.2 Parcel Delivery Voucher

Parcel Voucher is an online service provided by ELTA, available to both individual customers and business, but mostly used by SMEs as a B2C service. Users can print online the accompanying vouchers for parcels. This is especially useful for companies selling through e-Commerce.

In its current status, users are able to navigate to the service either via a link located at the ELTA portal (www.elta.gr)/“Print a Parcel Voucher” or by visiting directly the web address: ermis.elta.gr. Upon entering the service the customer must fill in the following form fields: Delivery option, Parcel info, Sender’s info, Recipient’s info and Comments,

At the end of the procedure, the respective voucher is issued by selecting “Create SYDELTA” (by clicking “Create SYDELTA” button, the User downloads the Parcel Voucher *pdf* file).

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	19 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

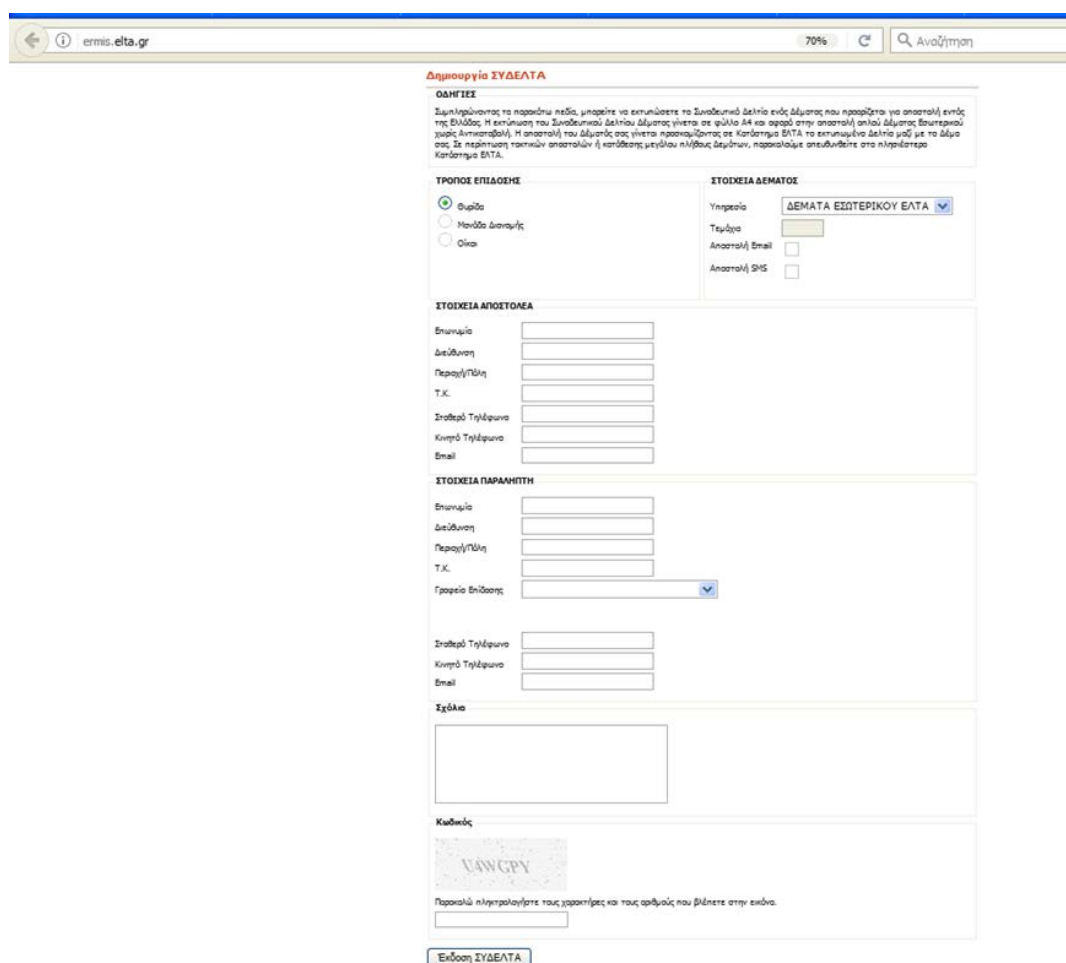


Figure 9: Parcel Delivery Voucher e-Form (single application form)

For the purposes of the project this service will be redesigned to address customer's needs (such as mobile/responsive design – version in English) and will also be integrated with the eIDAS Network. More specifically, the redesigned service will accommodate the following two cases:

1. The User has logged in to the ELTA portal via eID_EU. In this case the application will retrieve the identification attributes of the User that is already logged-in, and the corresponding fields in the Parcel Voucher form will be pre-filled. The User fills-in only the remaining fields of the form and prints the voucher.
2. The User has not logged-in to the ELTA portal, or navigates directly to the Parcel Voucher service. In this case, a “Login with eIDAS to automatically Fill-in the Application Form” button will be added to the service. After the User selects to “Login via eID_EU”, he/she will be re-directed to “eIDAS Country e-Form” (where additional information on how to use eID-EU will be also provided). Upon successful completion of the authentication process, the User will be registered in the database of the Parcel Voucher service and will be redirected back to the “Print a Parcel Voucher” e-Form in order to fill-in the non-completed from the authentication response fields of the form and, finally, print the voucher.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	20 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

3.1.1.2.3 Online Zip Codes for Business Users

This is an on-line service offered by ELTA to corporate customers, allowing them to obtain the current version of Zip codes of Greece. These codes are currently available in 2 languages (Greek and English) but can be easily extended in other languages, too. The downloadable files are updated by the Hellenic Post whenever a new version is published. To use the service in its current form, a business customer deposits a fee at an ELTA account and submits the payment receipt to an authorized ELTA facility (via email or in person). Upon receiving the receipt, within a few business days, an employee validates it and generates a new User account at the service. The credentials for the account are sent by email to the customer. After receiving the credentials (username and password), the customer can visit the service at www.zipcodes.gr, proceed through login by using the previously acquired credentials and then select the option “Zip Codes” from the options menu. From there, the User downloads an *xls* file with the official Zip Codes per region/city (in Greek or in English).

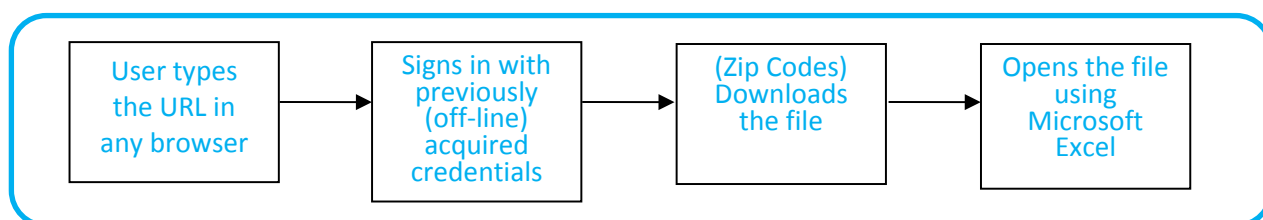


Figure 10: Online Zip Codes – current process

In the context of LEPS, ELTA will complement the existing functionality of the service by integrating it with the eIDAS Network while simplifying the application logic to create a “fast-track” e-shop and improving service customer experience. In the redesigned application, the User will be able to login via the eIDAS Network (as well as through local credentials). After clicking at an appropriate “Login with eID+EU” button, he/she will be re-directed to “eIDAS Country e-Form” (where additional information on how to use eID-EU will be also provided). Upon successful completion of the authentication process, the User will be registered in the database of the Zipcodes service (if he/she is not previously registered in the system) and redirected back to www.zipcodes.gr, to access an e-payments page. After verification of the payment, the User will be able to download the Zipcodes file.

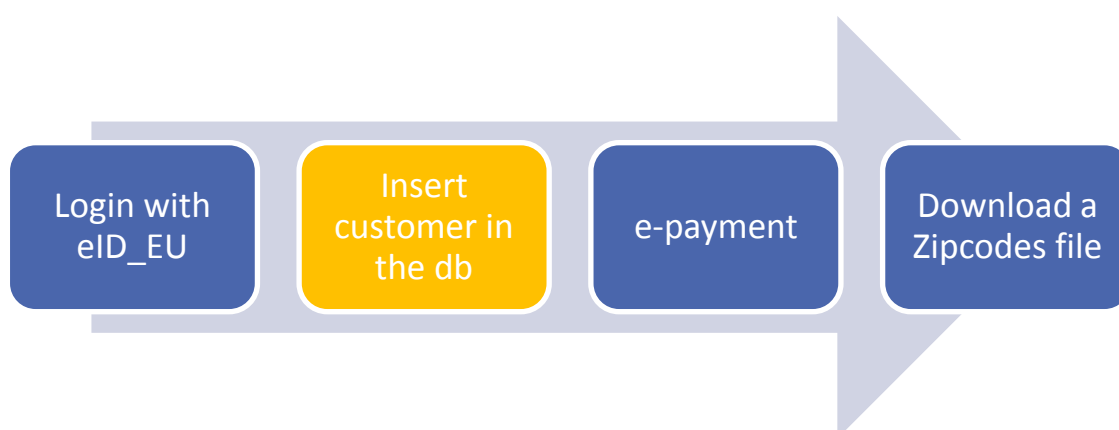


Figure 11: Online ZipCodes – Process re-design

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	21 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

3.1.2 “Register Use Case” (generic)

This section describes the registration process of the users to the ELTA services.

1. An unknown customer (not registered yet) visits an ELTA e-Service available over the web. ELTA offers the users the possibility to register with eID-EU for a more secure and stronger authentication.
 2. The user selects “Register with eID_EU”.
 3. The User is asked to select his/her country of origin and is informed on the requested by ELTA e-Service identity attributes. The “Country e-Form” may request from the User to provide additional data that will complete the information obtained through the eIDAS network (for example, an email address).
 4. An authentication request is submitted by the application supporting an ELTA e-Service to the Greek eIDAS Node.
-
5. The Greek eIDAS Node forwards the request and re-directs the User to User’s country of origin eIDAS Node (MSuser).
 6. The MSuser eIDAS Node redirects the user to an Identity Provider (IdP).
 7. The User proceeds with her credentials to authenticate to IdP. Upon successful authentication, the IdP forwards the values of the requested identity attributes to the MSuser eIDAS Node – otherwise the IdP signifies an authentication failure.
 8. In the case of success, the User is asked to provide permission to the transfer of his/her identity data to ELTA.
 9. The MSuser eIDAS Node forwards an authentication response to the Greek eIDAS Node.
 10. The Greek eIDAS Node forwards the authentication response, to ELTA.
-
11. The ELTA infrastructure receives, process the authentication response and (upon successful authentication) registers the User in the system.
 12. The User is redirected to an ELTA web page depending on the e-Service:
 - ELTA eDelivery Hybrid Service: Inbox page (with link to Document Submission page)
 - ELTA portal / eShop:
 - ELTA main Portal page
 - ELTA e-Shop registration e-Form
 - The user fills-in the non-completed fields of the e-Form
 - Online Zip Codes for Business Users: e-payments page

eIDAS Network, steps 5-10

3.1.3 “Login Use Case” (generic)

This section describes the login process of the users to the ELTA services.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	22 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

1. A user selects “Register with eID_EU”.
 - We assume that the User has registered before (with the exception of “Parcel Delivery Voucher” e-Service, where such a pre-registration is not necessary).
 2. The User is asked to select his/her country of origin and is informed on the requested by ELTA e-Service identity attributes.
 3. An authentication request is submitted by the application supporting an ELTA e-Service to the Greek eIDAS Node.
-
4. The Greek eIDAS Node forwards the request and re-directs the User to User’s country of origin eIDAS Node (MSuser).
 5. The MSuser eIDAS Node redirects the user to an Identity Provider (IdP). eIDAS Network, steps 4-9
 6. The User proceeds with his/her credentials to authenticate to IdP. Upon successful authentication, the IdP forwards the values of the requested identity attributes to the MSuser eIDAS Node – otherwise the IdP signifies an authentication failure.
 7. In the case of success, the User is asked to provide permission to the transfer of his/her identity data to ELTA.
 8. The MSuser eIDAS Node forwards an authentication response to the Greek eIDAS Node.
 9. The Greek eIDAS Node forwards the authentication response to ELTA.
-
10. The ELTA infrastructure receives and processes the authentication response. (Upon successful authentication) The User is redirected to an ELTA web page depending on the e-Service:
 - ELTA eDelivery Hybrid Service: Inbox page (with link to Document Submission page)
 - ELTA portal / eShop:
 - ELTA main Portal page
 - ELTA main e-Shop page
 - Parcel Delivery Voucher: e-Form page (single application form)
 - Online Zip Codes for Business Users: Download page

3.1.4 “Metrics”

During the customization phase, some metrics has been established:

- The number of users testing the integration (more than 10 people, taking into account the developers and testers from ELTA and UAegean).
- The number of successful “automated login with eID_EU” tests in a period of time (for example, a week)⁵.

⁵ An automated testing infrastructure for successful integration of an SP e-Service with an eIDAS Node will be developed in the connect of LEPS Activity 6.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	23 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

We should notice that: a) Test credentials will be used initially. b) Real credentials must be used for the second phase.

3.1.5 “Services Requirements”

The following general requirements, as the Activity 2 “Business Requirements, Integration and Testing Planning” document describes, are included in ELTA services customization:

Table 3: ELTA e-Services' attributes requirements

ELTA e-Service	eIDAS attributes (Mandatory - Optional)	Additional attributes (requested in the “Country e-Form during Registration)
ELTA eDelivery Hybrid Service	a) Current Family Name (M), b) Current First Names (M), c) Date of Birth (M), d) Unique Identifier (M) e) Current Address (O) f) Gender (O)	g) email h) mobile phone
ELTA Online Postal Services ELTA portal / eShop	a) Current Family Name (M), b) Current First Names (M), c) Date of Birth (M), d) Unique Identifier (M) e) Current Address (O) f) Gender (O)	g) email
ELTA Online Postal Services Parcel Delivery Voucher	a) Current Family Name (M), b) Current First Names (M), c) Date of Birth (M), d) Unique Identifier (M) e) Current Address (O) f) Gender (O)	g) email
ELTA Online Postal Services Online Zip Codes for Business Users	a) Current Family Name (M), b) Current First Names (M), c) Date of Birth (M), d) Unique Identifier (M) e) Current Address (O) f) Gender (O)	h) email i) Represented Company Legal Name j) VAT Registration number for the Represented Company

The specific requirements of ELTA services for successful and functional integration with the Greek eIDAS node are:

Table 4: ELTA Specific Requirements

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	24 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

Number	Name	Description
SPR-1	Attributes	eIDAS infrastructure MUST provide name, surname, person identifier, and date of birth as attributes to complete the register and the login processes. eIDAS infrastructure MAY provide additional user data such as address if a User gives consent and the eIDAS platform is able to provide. The Country e-Form MAY request additional attributes (see Table above – column 3) that the User agrees to provide voluntarily.
SPR-2	Local and eIDAS based Customer profiles: Reconciliation	eIDAS Unique Identifier and User email SHOULD be jointly used as main customer reference
SPR-3	API Connector	LEPS eIDAS API Connectors SHOULD be used for integration with the eIDAS Node and seamless retrieval of user attributes.
SPR-4	Authentication request	SP MUST agree with the LEPS eIDAS API Connector implementer partner the content of the structure of the information provided by ELTA services to the API Connector and the structure of JWT message sent-back to ELTA by the API Connector. This interaction is the base of the trust chain for triggering the authentication process.

3.1.6 “Technical infrastructure preparation”

The two following subsections describe the architecture of ELTA e-Services with the eIDAS infrastructure and give technical details about the infrastructure preparation of the SP environment to host this integration.

3.1.6.1 “Architecture”

The following Figure shows a general view of the service portal architecture containing the different components involved, mainly how LEPS eIDAS API Connectors⁶ simplify the integration of ELTA e-Services with the eIDAS Network.

⁶ (ML8) D4.2/5.2 eIDAS Interconnection Supporting Service

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	25 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

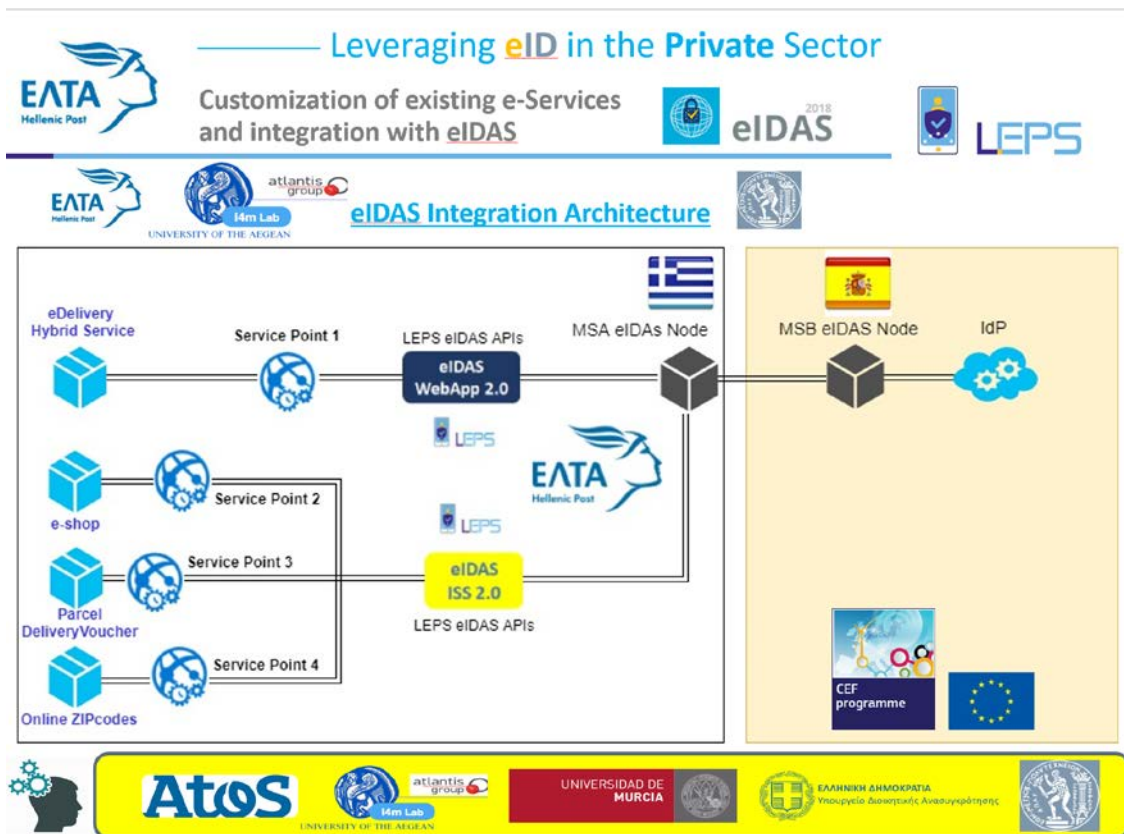


Figure 12: ELTA – Integration Architecture to Greek eIDAS Node

- eIDAS SP WebApp 2.0: LEPS eIDAS API Connector (eIDAS Interconnection Supporting Service 2.0) – see footnote 6 and next section for details.
- eIDAS ISS 2.0: LEPS eIDAS API Connector (eIDAS Interconnection Supporting Service 2.0) – see footnote 6 and next section for details.
- Service Point: We define a Service Point as
 - The minimal SP configuration that redirects a user’s login request to an API (Connector), when the user selects “register/login via eID_EU”
 - The sum of endpoints where the API (Connector) will forward to SP application/service the authResponse data received from the eIDAS Node (auth success or failure report).

3.1.6.2 “Environment” (SP infrastructure to be deployed for integration)

The required component **eIDAS ISS 2.0** will be deployed in VM Ware virtual machines, Java 1.8+ with Tomcat application server 8.5+.

- VM properties: 4 core, 4 GB of RAM, 50-100 GB of available disk space

The VM machine will be visible from the Internet on a public IP address.

Hosting requirements for **eIDAS SP WebApp 2.0** (VM properties):

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	26 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

- 4GB of RAM
- 50-100 GB of available disk space
- (Preferably) Linux Server
- Docker Community edition version 17+
- (For ease of use, Docker Compose version 1.14, and above, is recommended as well)

The VM machine will be visible from the Internet on a public IP address.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	27 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

3.2 “Customization preparation and design of Athens Stock Exchange Services“

This section presents the adaptation of ATHEX e-services to the needs of integration with the eIDAS Network.

Themes:

- Integration detail plan (ATHEX Sign: eID-EU for customer registration – ATHEX AXIA web: eID-EU for both customer registration and login to service)
- Requirements and modified service flows, eIDAS attributes to require
- Reconciliation between eIDAS identifiers and ATHEX internal User identifiers (eIDAS Uniqueness Identifier and User’s email will be both used as main customer reference)
- Integration architecture (using LEPS API Connectors)
- Specifications for IdP connector (based on CEF IdP Specific Module), Level of Assurance strategies

Task Reference:

- T4.1 (and T4.2)

Next Task: T4.3 – Integration of ELTA e-services to Greek eIDAS Node

- After deployment, the integrated e-service system will be ready first for tests with eIDAS test eIDs and finally with real production eIDs through the eIDAS production environment.

3.2.1 “Services to integrate”

This sub-section presents a summary of the SP services that will be integrated with the eIDAS infrastructure.

Table 5: ATHEX e-Services to integrate with the eIDAS Network – Functionality

Application/Service	Functionality
ATHEX Identity Service Provider (ATHEX IdP)	Integrate with GR eIDAS Node
ATHEX Sign (Remote eSignature Service)	(Customer) Registration
ATHEX AXIAweb (Receive electronic information on an Investor’s positions in Greek Central Securities Repository)	(Customer) Registration / Login

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	28 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final



Figure 13: ATHEX e-Services to integrate with the eIDAS Network – Overview

3.2.1.1 ATHEX Identity Service Provider (ATHEX IdP)

ATHEX Identity Service Provider (ATHEX IdP) will provide an eIDAS compliant identity provision service for all customers of Athens Stock Exchange (ATHEX) who have issued a qualified digital certificate from its certificate authority infrastructure⁷. ATHEX IdP will be integrated with Greek eIDAS node. As a result, Athex IDP will be available to every Service Provider (both in Greece and cross-border) using the eIDAS authentication infrastructure. To integrate with the eIDAS Network, ATHEX IdP will make use of the reference IdP implementation software provided by CEF (CEF IdP Specific Module⁸).

⁷ Customers get ATHEX IdP credentials (username/password or digital certificate) when they complete successfully the physical identification process against the ATHEX Certificate Authority.

⁸Version 1.1 of CEF eID Sample Implementation:

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/2016/06/30/Version+1.1+of+CEF+eID+Sample+Implementation>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	29 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

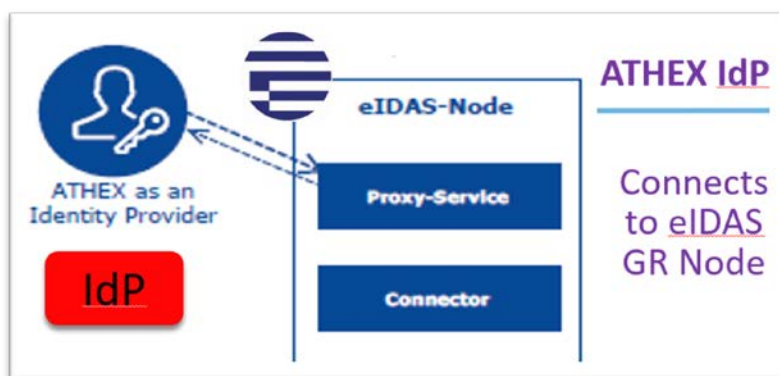


Figure 14: Integration of ATHEX IdP with the Greek eIDAS node

ATHEX IdP will provide support for all mandatory attribute fields:

- Uniqueness Identifier
- Current Family Name
- Current First Name
- Date of Birth
- A validated e-mail address (additional attribute).

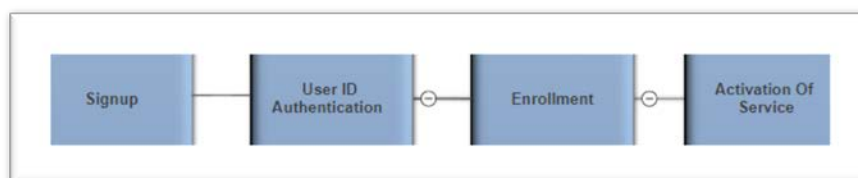
There will be two ways of authentication, Low and Substantial:

- Level 1 Authentication (eIDAS low level): Username/Password
- Level 3 Authentication (eIDAS substantial level): Username/Password & OTP (One Time Password / 2 Factors Authentication).

When a customer requires from the Greek eIDAS Node to select ATHEX IdP, the designated for the selection UI of the Greek eIDAS Node will prompt the user to ATHEX IdP. Getting there, he/she will be authenticated on the basis of the credentials she possessed (username/password or digital certificate). In the case of successful authentication, he/she will be re-directed to the Greek eIDAS node, where he/she will be asked to provide consent for transferring the obtained personal attributed as well as the related Level of Assurance (LoA) to the (authentication request) initiator SP.

3.2.1.2 ATHEX Sign (Remote eSignature Service)

ATHEX Sign is the service of remote e-signature⁹ provided by the Athens Exchange Group (ATHEX Group). The service requires a pre-activation procedure, a sort of customer registration. Upon successful registration, a User can process with the main service and digitally sign documents “on the go”.



⁹ For a short presentation of the concept of remote e-signature, see <http://www.cyberstream.gr/blog/146-digital-signatures-remote-signing>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	30 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final



Figure 15: ATHEX Sign – Pre-activation and User Operational Procedures

In this project, ATHEX will automate the pre-activation procedure with support from the eIDAS Network. This procedure, as explained in the previous diagram, includes the following steps:

- 1 The User downloads the Subscriber Agreement, from ATHEX web site (<https://www.athexgroup.gr/>)
- 2 The User fills-in the Subscriber Agreement and delivers it to ATHEX administration services together with a copy of his/her identity card validated by a competent authority
- 3 The ATHEX services activate a user profile based on the provided data from the User data and informs him/her via e-mail about the activation procedure of the service
- 4 The User receives the necessary credentials (username/password or OTP)
- 5 Upon activation, the User acquires the capability to use ATHEX remote e-signature service (ATHEX Sign) to digitally sign documents “on the go”.

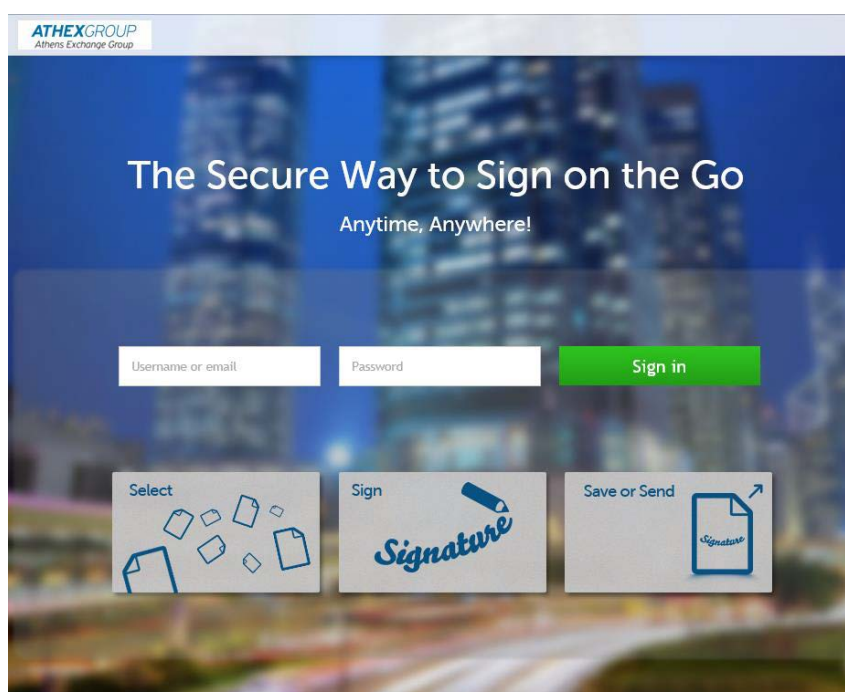


Figure 16: ATHEX Sign Service User Interface

ATHEX will integrate the pre-activation procedure of Sign service with the eIDAS Network. To this end, the service will be customized¹⁰ to allow users with eID_EU to register automatically to the

¹⁰ Including complete translation in English

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	31 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

service. As a result, the users will not be requested to deliver the Subscriber Agreement together with a validated copy of their identity card, but to authenticate via eID_EU (with obvious benefits from both the users and the company).

In more details, an eventual customer of ATHEX Sign service has to visit the service web site and select “Apply Now with eID-EU” option. He/she will be next re-directed to “eIDAS Country e-Form” (where additional information on how to use eID-EU will be also provided). Upon successful completion of the authentication process, the User will be redirected back to the web site of the ATHEX Sign service in order to continue the online application process by filling a form. The fields “Family name”, “First Name” and “Date of Birth” of the application form will be auto filled based on the values returned from the authentication process (via the eIDAS Network) – the User will not be allowed to modify these fields. The user will have to fill-in the fields “Father Name”, “Citizenship”, “Mobile Phone Number”, “e-mail”, “Postal Address”, as well as to select a username. As soon as the user completes the fulfillment of the application form, a "Save Application" Button will be activated. After clicking this button, ATHEX Sign service “saves” the application data and sends an email to the User with detailed information on the actions he/she has to do in order to complete the enrolment phase and finally issue, if this is his/her choice, the qualified digital certificates¹¹. At the same time, the User is re-directed to a “What is Next” page.

3.2.1.3 ATHEX AXIAweb (Receive electronic information on an Investor’s positions in Greek Central Securities Repository)

ATHEX AXIAweb is the service providing information on the positions of an investor in the Greek Central Repository Group (<https://www.axiaweb.gr/AXIAWeb/gr/login.htm>). Currently, the functionality of AxiaWEB service can be briefly described as follows:

- 1 The User downloads the Subscriber Agreement
- 2 The User fills-in the Subscriber Agreement and delivers it to ATHEX administration services together with copy of his/her identity card validated by a competent authority
- 3 The ATHEX services activate a user profile based on the provided data from the User data and informs him/her via e-mail about the activation procedure of the service
- 4 ATHEX forwards to the User via courier the necessary credentials (username/password) to access AXIAweb
- 5 Upon activation, the User acquires the capability to login and view the possessed securities in ATHEX system.

¹¹ Subscribers to ATHEX Sign Service are automatically register also with ATHEX IdP (see previous sub-section)

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	32 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final



ΑΞΙΑweb - Είσοδος - Mozilla Firefox

ΑΞΙΑweb - Είσοδος

https://www.axiaweb.gr/AXIAWeb/gr/login

ΑΞΙΑweb

ATHEXGROUP
Ομίλος Χρηματιστηρίου Αθηνών
Υπηρεσίες Μητρώου AXIAweb

Έχετε εισέλθει σε προσωπική περιοχή που προϋποθέτει την χρήση των κωδικών πρόσβασης που σας έχουν χορηγηθεί.

Παρακαλούμε πληκτρολογήσετε τον κωδικό πρόσβασης Α (10 ψηφία) και τον κωδικό πρόσβασης Β (7 ψηφία) για την εισαγωγή σας στο σύστημα:

Κωδικός Πρόσβασης Α: 1212314445

Κωδικός Πρόσβασης Β: *****

Είσοδος Ακύρωση

Το ΕΛΛΗΝΙΚΟ ΚΕΝΤΡΙΚΟ ΑΠΟΘΕΤΗΡΙΟ ΤΙΤΛΩΝ Α.Ε. υποστηρίζεται από την ΕΧΑΕ - ΧΡΗΜΑΤΙΣΤΗΡΙΟ ΑΘΗΝΩΝ ΑΕ για την ασφάλεια των δεδομένων που καταχωρείται στις ιστοσελίδες του www.axiaweb.gr, με τους ακόλουθους τρόπους:

1. Το Site είναι πιστοποιημένο από την ΕΧΑΕ - ΧΡΗΜΑΤΙΣΤΗΡΙΟ ΑΘΗΝΩΝ ΑΕ με βάση τις διεθνείς προδιαγραφές πιστοποίησης του προτύπου AICPA/CICA WebTrust Program for Certification Authorities. Η πιστοποίηση αυτή σας αποδεικνύει ότι έχετε επεκταθεί τη σωστή αποστολή και σας επιτρέπει να καταχωρήσετε με ασφάλεια τα προσωπικά σας στοιχεία.

2. Τα προσωπικά σας δεδομένα κρυπτογραφούνται αυτόματα για τη διασφάλιση της προστασίας σας, έτσι ώστε να μπορούν να διαβαστούν μόνο από το ΕΛΛΗΝΙΚΟ ΚΕΝΤΡΙΚΟ ΑΠΟΘΕΤΗΡΙΟ ΤΙΤΛΩΝ ΑΕ.

3. Η ΕΧΑΕ - ΧΡΗΜΑΤΙΣΤΗΡΙΟ ΑΘΗΝΩΝ ΑΕ έχει εγκαταστήσει σύστημα «Υποδομής Δημόσιου Κλειδιού» (Public Key Infrastructure - PKI) προκειμένου να λειτουργήσει ως πάροχος υπηρεσιών πιστοποίησης (Certification Authority - CA) σύμφωνα με το Π.Δ. 150/2001.

4. Η ΕΧΑΕ - ΧΡΗΜΑΤΙΣΤΗΡΙΟ ΑΘΗΝΩΝ ΑΕ είναι καταχωρημένη στα Μητρώα που τηρεί η ΕΕΤΤ σύμφωνα με τον Κανονισμό ΕΕΤΤ 248/71/2002, ως «Πάροχος Υπηρεσιών Πιστοποίησης Ηλεκτρονικής Υπογραφής που εκδίδει Αναγνωρισμένα Πιστοποιητικά» (βλ. τον Άρθρο 10, παρ.3) και ως «Πάροχος Υπηρεσιών Πιστοποίησης Ηλεκτρονικής Υπογραφής» (βλ. τον Άρθρο 10, παρ. 2).

HELEX secured
powered by HELEX

Όροι Χρήσης

ΑΞΙΑweb Επιλογές - Mozilla Firefox

ΑΞΙΑweb Επιλογές

https://www.axiaweb.gr/AXIAWeb/gr/menu

ΑΞΙΑweb

ATHEXGROUP
Ομίλος Χρηματιστηρίου Αθηνών
Υπηρεσίες Μητρώου AXIAweb

Όνομα Χρήστη: [Redacted]

Καλώς ήλθατε στις υπηρεσίες Ηλεκτρονικής Ενημέρωσης Επενδυτών

Τελευταία επιτυχημένη πρόσβαση 14/09/17 14:50
Τελευταία αποτυχημένη πρόσβαση 12/03/13 20:44

Παρακαλούμε επιλέξτε το είδος της πληροφόρησης που επιθυμείτε:

Στοιχεία της Μερίδας και του Λογαριασμού Αξιών

Υπόλοιπα Αξιών

Αποτίμηση Χαρτοφυλακίου

Κινήσεις

Αλλαγή Κωδικού Πρόσβασης

Χάρτης

Βοήθεια

Αναζήτηση

Επικοινωνία

ΕΛΛΗΝΙΚΟ ΚΕΝΤΡΙΚΟ ΑΠΟΘΕΤΗΡΙΟ ΤΙΤΛΩΝ Α.Ε.

Figure 17: ATHEX AXIAweb site User Interfaces

ATHEX will integrate the AXIAweb service with the eIDAS Network. To this end, the service will be customized¹² to allow users with eID_EU to register automatically to the service. As a result, the users will not be requested to deliver the Subscriber Agreement together with a validated copy of their

¹² Including complete translation in English

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	33 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

identity card, but to authenticate via eID_EU (with obvious benefits from both the users and the company).

In more details, an eventual customer of ATHEX AXIAweb service has to visit the service web site and select “Sign-up with eID-EU” option. He/she will be next re-directed to “eIDAS Country e-Form” (where additional information on how to use eID-EU will be also provided). Upon successful completion of the authentication process, the User will be redirected back to the web site of the ATHEX AXIAweb site in order to continue the online application process by filling a form. The fields “Family name”, “First Name” and “Date of Birth” of the application form will be auto filled based on the values returned from the authentication process (via the eIDAS Network) – the User will not be allowed to modify these fields. The user will have to fill-in only the fields “Father Name” and “Identification Document number” (e.g. Passport Number).

As soon as the user completes the fulfillment of the application form, a "Find my Portfolio" button will be activated. By clicking this button, the user allows ATHEX to search the database of Greek Stock Exchange Market if the User owns shares in the Greek Stock Exchange Market. If the search returns a positive result, a new user account will be automatically generated. Next, local credentials will be forwarded to the User via email or SMS.

By using eID_EU or local credentials, a registered User will be able to login AXIAweb site and review his/her portfolio in the Greek Stock Exchange Market (“Portfolio Access” page).

3.2.2 “Register Use Case” (generic case)

This section describes the registration process of the users to the ATHEX services.

1. An unknown customer (not registered yet) visits an ATHEX e-Service available over the web. ATHEX offers the users the possibility to register with eID-EU for a more secure and stronger authentication.
2. The user selects “Register with eID_EU”.
3. The User is asked to select his/her country of origin and is informed on the requested by ATHEX e-Service identity attributes. The “Country e-Form” may request from the User to provide additional data that will complete the information obtained through the eIDAS network (for example, an email address).
4. An authentication request is submitted by the application supporting an ATHEX e-Service to the Greek eIDAS Node.
5. The Greek eIDAS Node forwards the request and re-directs the User to User’s country of origin eIDAS Node (MSuser).
6. The MSuser eIDAS Node redirects the user to an Identity Provider (IdP).
7. The User proceeds with his/her credentials to authenticate to IdP. Upon successful authentication, the IdP forwards the values of the requested identity attributes to the MSuser eIDAS Node – otherwise the IdP signifies an authentication failure.

eIDAS Network, steps 5-10

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	34 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

8. In the case of success, the User is asked to provide permission to the transfer of his/her identity data to ATHEX.
 9. The MSuser eIDAS Node forwards an authentication response to the Greek eIDAS Node.
 10. The Greek eIDAS Node forwards the authentication response to ATHEX.
-
11. The ATHEX infrastructure receives, process the authentication response and (upon successful authentication) registers the User in the system.
 12. The User is redirected to an ATHEX web page depending on the e-Service:
 - ATHEX Sign: “Save Application” Button – “What is Next” page
 - ATHEX AXIAweb: “Find My Portfolio” Button – “Portfolio Access” page

3.2.3 “Login Use Case” (AXIAweb case)

This section describes the login process of the users to the ATHEX services.

1. A user selects “Register with eID_EU”.
 - a. We assume that the User has registered before.
 2. The User is asked to select his/her country of origin and is informed on the requested by ATHEX e-Service identity attributes.
 3. An authentication request is submitted by the application supporting an ATHEX e-Service to the Greek eIDAS Node.
 4. The Greek eIDAS Node forwards the request and re-directs the User to User’s country of origin eIDAS Node (MSuser).
-
5. The MSuser eIDAS Node redirects the user to an Identity Provider (IdP). eIDAS Network, steps 4-9
 6. The User proceeds with her credentials to authenticate to IdP. Upon successful authentication, the IdP forwards the values of the requested identity attributes to the MSuser eIDAS Node – otherwise the IdP signifies an authentication failure.
 7. In the case of success, the User is asked to provide permission to the transfer of her identity data to ATHEX.
 8. The MSuser eIDAS Node forwards an authentication response to the Greek eIDAS Node.
 9. The Greek eIDAS Node forwards the authentication response to ATHEX.
-
10. The ATHEX infrastructure receives and processes the authentication response. (Upon successful authentication) The User is redirected to an AXIAweb page:
 - a. AXIAweb “Portfolio Access” page

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	35 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

3.2.4 “Metrics”

During the customization phase, some metrics has been established:

- The number of users testing the integration (more than 10 people, taking into account the developers and testers from ELTA and UAegean).
- The number of successful “automated login with eID_EU” tests in a period of time (for example, a week)¹³.

We should notice that: a) Test credentials will be used initially. b) Real credentials must be used for the second phase.

3.2.5 “Services Requirements”

The following general requirements, as the Activity 2 “Business Requirements, Integration and Testing Planning” document describes, are included in ATHEX services customization:

Table 6: ATHEX e-Services' attributes requirements

ATHEX e-Services	eIDAS attributes (Mandatory - Optional)	Additional attributes (requested in the “Country e-Form during Registration)
ATHEX Sign	a) Current Family Name (M), b) Current First Names (M), c) Date of Birth (M), d) Unique Identifier(M)	a) Parent Name, b) Citizenship, c) Mobile Phone Number, d) E-mail, e) Postal Address
ATHEX AXIAweb	a) Current Family Name (M), b) Current First Names (M), c) Date of Birth (M), d) Unique Identifier(M)	a) Parent Name b) Identification Document number

The specific requirements of ATHEX services for successful and functional integration with the Greek eIDAS node are:

Table 7: ATHEX Specific Requirements

Number	Name	Description
SPR-1	Attributes	eIDAS infrastructure MUST provide name, surname, person identifier, and

¹³ An automated testing infrastructure for successful integration of an SP e-Service with a eIDAS Node will be developed in the connect of LEPS Activity 6.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	36 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

		date of birth as attributes to complete the register and the login processes. eIDAS infrastructure MAY provide additional user data such as address if a User gives consent and the eIDAS platform is able to provide. The Country e-Form MAY request additional attributes (see Table above – column 3) that the User agrees to provide voluntarily.
SPR-2	Local and eIDAS based Customer profiles: Reconciliation	eIDAS Unique Identifier and User email SHOULD be jointly used as main customer reference
SPR-3	API Connector	LEPS eIDAS API Connectors SHOULD be used for integration with the eIDAS Node and seamless retrieval of user attributes.
SPR-4	Authentication request	SP MUST agree with the LEPS eIDAS API Connector implementer partner the content of the structure of the information provided by ATHEX services to the API Connector and the structure of JWT message sent-back to ATHEX by the API Connector. This interaction is the base of the trust chain for triggering the authentication process.
SPR-5	IdP	<p>ATHEX IdP MUST provide both low level and substantial level of assurance authentication mechanism.</p> <ul style="list-style-type: none"> • ATHEX IdP low level of assurance Authentication mechanism will be based in username/password authentication. • ATHEX IdP substantial level of assurance Authentication mechanism will be based in username /password and One Time Password (OTP) authentication. <p>ATHEX IdP WILL provide the following attributes for every user:</p> <ul style="list-style-type: none"> • First Name • Last Name • Date of Birth • Personal Identifier • Email <p>ATHEX IdP SHOULD be secured through https protocol</p>

3.2.6 “Technical infrastructure preparation”

The two following subsections describe the architecture of ATHEX e-Services with the eIDAS infrastructure and give technical details about the infrastructure preparation of the SP environment to host this integration.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	37 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

3.2.6.1 “Architecture”

The following Figure shows a general view of the service portal architecture containing the different components involved, mainly how LEPS eIDAS API Connectors¹⁴ simplify the integration of ELTA e-Services with the eIDAS Network.

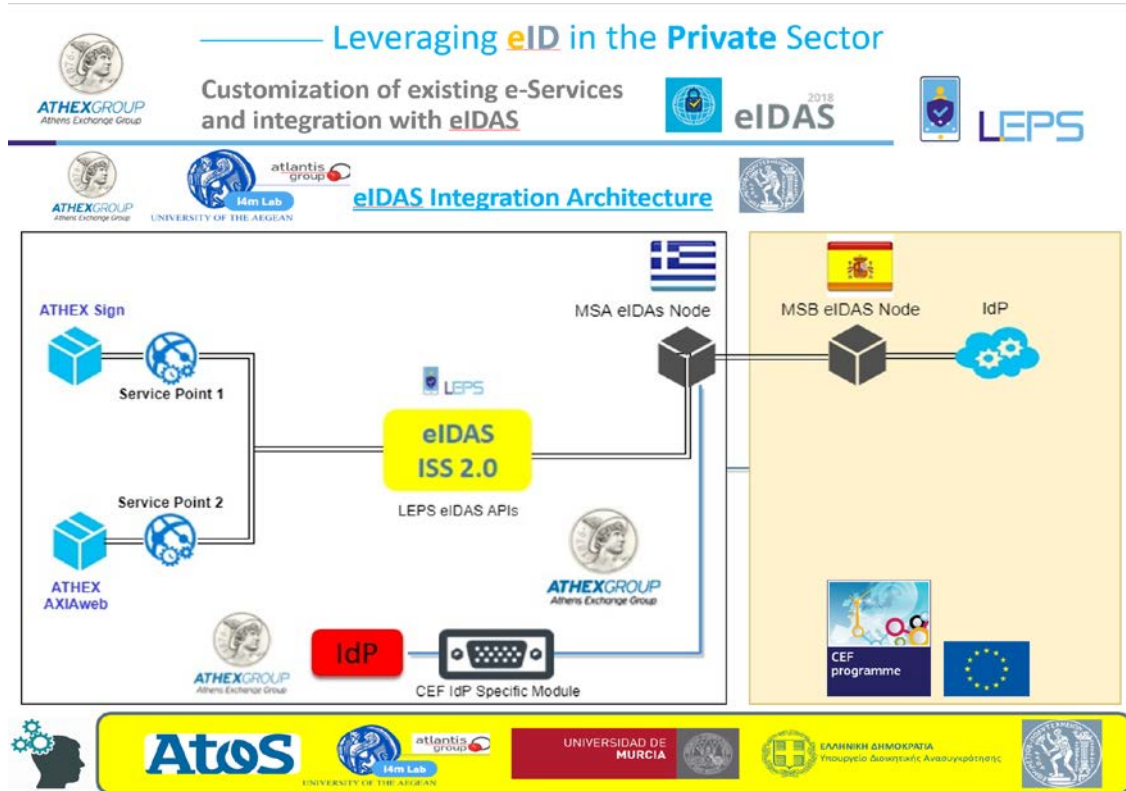


Figure 18: ATHEX – Integration Architecture to Greek eIDAS Node

- b. eIDAS ISS 2.0: LEPS eIDAS API Connector (eIDAS Interconnection Supporting Service 2.0) – see footnote 14 and next section for details.
- c. Service Point: We define a Service Point as
 - i. The minimal SP configuration that redirects a user’s login request to an API (Connector), when the user selects “register/login via eID_EU”
 - ii. The sum of endpoints where the API (Connector) will forward to SP application/service the authResponse data received from the eIDAS Node (auth success or failure report).

3.2.6.2 “Environment” (SP infrastructure to be deployed for integration)

The required component **eIDAS ISS 2.0** will be deployed in VM Ware virtual machines, Java 1.8+ with Tomcat application server 8.5+.

- VM properties: 4 core, 4 GB of RAM, 50-100 GB of available disk space

The VM machine will be visible from the Internet on a public IP address.

¹⁴ (ML8) D4.2/5.2 eIDAS Interconnection Supporting Service

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization			Page:	38 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

4 “Customization Implementation”

This section describes a time plan for the implementation of customization work, as described in the previous section, towards the integration of a ELTA and ATHEX e-Services with the eIDAS Network.

Table 8: ELTA & ATHEX: List of e-Services integrated with the eIDAS Network

ELTA & ATHEX: List of e-Services integrated with the eIDAS Network		
	ELTA	ATHEX
1	ELTA eDelivery Hybrid Service (cross-border exchange of electronic documents)	ATHEX IdP Identity Service Provider
2	ELTA Online Postal Services ELTA portal / eShop	ATHEX Sign Remote eSignature Service
3	ELTA Online Postal Services Parcel Delivery Voucher	ATHEX AXIAweb Receive electronic information on an Investor's positions in Greek Central Securities Repository
4	ELTA Online Postal Services Online Zip Codes for Business Users	

It also presents a first-approximation design approach for the interfaces that will be developed for the integration of ELTA and ATHEX e-Services with the Greek eIDAS Node. Finally, the last sub-section outlines the workflow of this integration, enabled by the use of LEPS eIDAS API Connectors¹⁵.

¹⁵ (ML8) D4.2/5.2 eIDAS Interconnection Supporting Service

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	39 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

4.1 “Customization Implementation for ELTA/Hellenic Post services”

4.1.1 “Customization time-plan for ELTA services”

For the development of the customization of the services, the activities needed were scheduled and the following time plan depicted was created.

Table 9: ELTA Customization Time-plan

Phase	Task	Deadline
T 5.1. Customization of Hellenic Post Services Portal	Started but customization needs more effort than expected	June 2018
	<ul style="list-style-type: none"> Estimated time plan for Customization: <ul style="list-style-type: none"> E-Delivery System ELTA portal/e-shop Parcel Delivery Voucher Online Zipcodes for Business Users 	June 2018 April 2018 April 2018 May 2018
	<ul style="list-style-type: none"> Integration Customization detail plan (“total” eID-EU approach: use eID-EU for both customer registration and login to service) 	Feb 2018
	<ul style="list-style-type: none"> Requirements and modified service flow, attributes to exchange & format 	Feb 2018
	<ul style="list-style-type: none"> Design for seamless integration at UI level and reconciliation between eIDAS identifiers and ELTA user identifiers (mostly, eIDAS Identifier and user email will be both used as main customer reference) 	May 2018
	<ul style="list-style-type: none"> Final customization requirements. planning and customization tasks deployment 	June 2018
Future Plans	Integration with the eIDAS Node	June 2018
Future Plans	Pre-production Environment	July 2018
Future Plans	Production Environment	Oct 2018

4.1.2 “Interface definition for ELTA services”

A Service Provider in the eIDAS Network, such as ELTA, needs to deploy, at minimum, three e-Forms:

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	40 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

1. A “Launch e-Form”, or a button on an existing e-Form, which denotes the possibility “registering/login with eID_EU.
2. A “Country Selection e-Form” (which may require from the User, in the case of Registration, to provide additional data, such email, mobile phone etc.).
3. An “Authentication Terminate e-Form” where the User is redirected when:
 - a. The User voluntarily cancels the process
 - b. There is an authentication failure in the case of a User has not successfully authenticated to IdP or refused to provide consent in the transferring of her personal data from the IdP to SP.

The first e-Form should be part of the UI of the SP application/service. The other two forms are included in LEPS eIDAS API Connector(s), which provides to ELTA application/service effective integration with the eIDAS node.

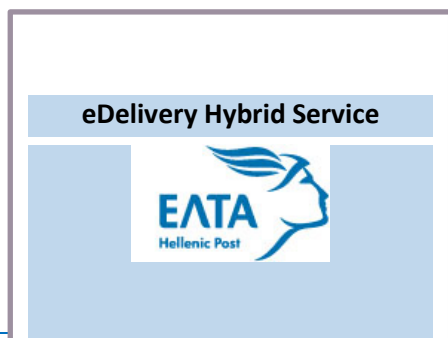
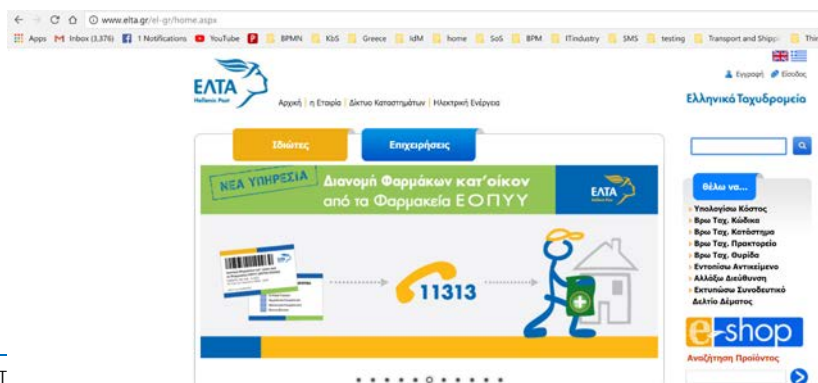
4.1.2.1 ELTA Launch e-Forms (eID-EU)

In the existing e-Forms of ELTA e-Services, the following buttons will be added:

Table 10: ELTA Services – eIDAS authentication « Launch buttons”

	ELTA e-Service	Launch button		
1	ELTA eDelivery Hybrid Service	Register with eID-EU	Login with eID_EU	eID_EU: How it works
2	ELTA Online Postal Services ELTA portal / eShop	Register with eID-EU	Login with eID_EU	eID_EU: How it works
3	ELTA Online Postal Services Parcel Delivery Voucher		Login with eID_EU	eID_EU: How it works
4	ELTA Online Postal Services Online Zip Codes for Business Users	Register with eID-EU	Login with eID_EU	eID_EU: How it works



							
Document name:	D4.1 Operational and T (ELTA, ATHEX) customization						
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final



Κεντρικό Μενού

Αρχική
Ταχυδρομικοί Κώδικες

70% 🔍 Αναζήτηση

Δημοσίευση ΣΥΔΕΛΤΑ

ΟΔΗΓΙΕΣ

Συμπληρώνοντας το παρακάτω πεδίο, μπορείτε να εκτυπώσετε το Συνδυαστικό Δελτίο ενός Δέματος που προορίζεται για αποστολή εντός της Ελλάδας. Η εκτύπωση του Συνδυαστικού Δελτίου Δέματος γίνεται σε φύλλο Α4 και αφορά στην αποστολή οποιού Δέματος θεωρητικού χωρίς Αντικαταβολή. Η αποστολή του Δέματος σας γίνεται πραγματοποιώντας σε Κατάστημα ΕΛΤΑ το εκτυπωμένο Δελτίο μαζί με το Δέμα σας. Σε περίπτωση τραπεζικών αποστολών ή κατάθεσης μεγάλου πλήθους Δεμάτων, παρακαλούμε απευθυνθείτε στο πλησιέστερο Κατάστημα ΕΛΤΑ.

ΤΡΟΠΟΣ ΕΠΙΔΟΣΗΣ

☒ Φυλάδα

☐ Μονόδρομο Διανομής

☐ Οίκος

ΣΤΟΙΧΕΙΑ ΔΕΜΑΤΟΣ


Υπηρεσία: ΔΕΜΑΤΑ ΕΣΩΤΕΡΙΚΟΥ ΕΛΤΑ

Τεμάχια:

Αποστολή Email: ☐

Αποστολή SMS: ☐

4.1.2.2 “Country e-Form” for ELTA e-Services (eID_EU)



STEP | GO!

Thank you for applying with us!

You will now be directed to the eID_EU Network to securely identify and trustfully provide us your identity attributes such as name, address, etc.

The eID_EU Network will provide us with those attributes from the attribute providers you suggest.

The eID_EU Network will request your consent before sending us any information.

After authorization you will be redirected to our service.

To review the identification attributes that will be requested by eID_EU click [HERE](#)

First however, please provide your email in the following field to proceed with the registration to the service.


Select Your Country of Origin

GREECE ▼


Email

Retype Email


CANCEL
NEXT



Instructions



About



@eID_EU

(*) This is the “Country e-Form” for the Registration with eID-EU process. The “Country e-Form” for Login with eID_EU does not include the email request...

4.1.2.3 “Authentication Terminated e-Forms” for ELTA e-Services (eID_EU)

Your application has been canceled

202007 - Citizen consent is missing

HOME

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	42 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

Authentication failure

202002 - The SAML Request received by the eIDAS node proxy service is invalidThe SAML Request received by the eIDAS node proxy service is invalid

[HOME](#)

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	43 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

4.2 “Customization Implementation for Athens Stock Exchange Services”

4.2.1 “Customization time-plan for ATHEX services”

For the development of the customization of the services, the activities needed were scheduled and the following time plan depicted was created.

Table 11. ATHEX Customization Time plan.

Phase	Task	Deadline
T 4.1. Customization of Athens Stock Exchange Services Portal	Started and globally follows the time plan (almost ended)	Feb-March 2018
	<ul style="list-style-type: none"> Integration detail plan (ATHEX Sign: eID-EU for customer registration – ATHEX AXIA web: eID-EU for both customer registration and login to service) 	Feb 2018
	<ul style="list-style-type: none"> Requirements and modified service flow, attributes to exchange & format 	Feb 2018
	<ul style="list-style-type: none"> Design for seamless integration at UI level and reconciliation between eIDAS identifiers and ATHEX user identifiers (eIDAS Identifier and user email will be both used as main customer reference) 	Feb 2018
	<ul style="list-style-type: none"> Specifications for IdP connector (based on CEF IdP Specific Module), Level of Assurance strategies 	Feb 2018
	<ul style="list-style-type: none"> Final customization requirements. planning and customization tasks deployment 	March 2018
Future Plans	Integration with the eIDAS Node	April 2018
Future Plans	Pre-production Environment	April 2018
Future Plans	Production Environment	June 2018

4.2.2 “Interface definition for ATHEX services”

A Service Provider in the eIDAS Network, such as ATHEX, needs to deploy, at minimum, three e-Forms:

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	44 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

4. A “Launch e-Form”, or a button on an existing e-Form, which denotes the possibility “registering/login with eID_EU.
5. A “Country Selection e-Form” (which may require from the User, in the case of Registration, to provide additional data, such email, mobile phone etc.).
6. An “Authentication Terminate e-Form” where the User is redirected when:
 - a. The User voluntarily cancels the process
 - b. There is an authentication failure in the case of a User has not successfully authenticated to IdP or refused to provide consent in the transferring of her personal data from the IdP to SP.

The first e-Form should be part of the UI of the SP application/service. The other two forms are included in LEPS eIDAS API Connector(s), which provides to ATHEX application/service effective integration with the eIDAS node.

4.2.2.1 ATHEX Launch e-Forms (eID-EU)

In the existing e-Forms of ATHEX, the following buttons will be added:

Table 12: ATHEX Services – eIDAS authentication « Launch buttons”

	ATHEX e-Service	Launch button		
1	ATHEX Sign	Register with eID-EU	Login with eID_EU	eID_EU: How it works
2	ATHEX AXIAweb	Register with eID-EU	Login with eID_EU	eID_EU: How it works



4.2.2.2 “Country e-Form” for ATHEX e-Services (eID-EU)

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	45 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final



STEP | GO!

Thank you for applying with us!

You will now be directed to the eID_EU Network to securely identify and trustly provide us your identity attributes such as name, address, etc.

The eID_EU Network will provide us with those attributes from the attribute providers you suggest.

The eID_EU Network will request your consent before sending us any information.

After authorization you will be redirected to our service.

To review the identification attributes that will be requested by eID_EU click [HERE](#)

First however, please provide your email in the following field to proceed with the registration to the service.

Select Your Country of Origin

GREECE

Email

Retype Email

CANCEL

NEXT



Instructions



About



@eID_EU

(*) This is the “Country e-Form” for the Registration with eID-EU process. The “Country e-Form” for Login with eID_EU does not include the email request...

4.2.2.3 “Authentication Termination e-Forms” for ATHEX e-Services (eID_EU)

Your application has been canceled

202007 - Citizen consent is missing

HOME

Authentication failure

202002 - The SAML Request received by the eIDAS node proxy service is invalidThe SAML Request received by the eIDAS node proxy service is invalid

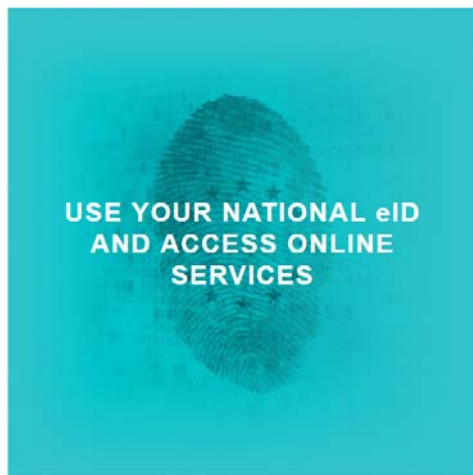
HOME

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	46 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

4.2.2.4 (additionally) ATHEX IdP e-Forms

EIDAS AUTHENTICATION SERVICE (IDP)

AUTHENTICATION



USERNAME

PASSWORD

LEVEL OF ASSURANCE

☒ IP ADDRESS FOR SUBJECTCONFIRMATIONDATA

SUBMIT

Πατήστε το **F11** για να εσθλάβετε από την πλήρη οθόνη

ISS+
WITH LEVEL OF ASSURANCE low **1**
IS REQUESTING THE FOLLOWING ATTRIBUTES

Step 3 | 3

YOUR RESUME

NATURAL PERSON

Family Name

First Name

Date of Birth

Uniqueness Identifier

CANCEL **SUBMIT**

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	47 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

4.3 Integration flow

Figure displays the complete flow for the integration process. This flow is based on the registration use case and login use case as described in section 2, the screens displayed to the user can be seen in section 3.2.1 and section 3.2.2.

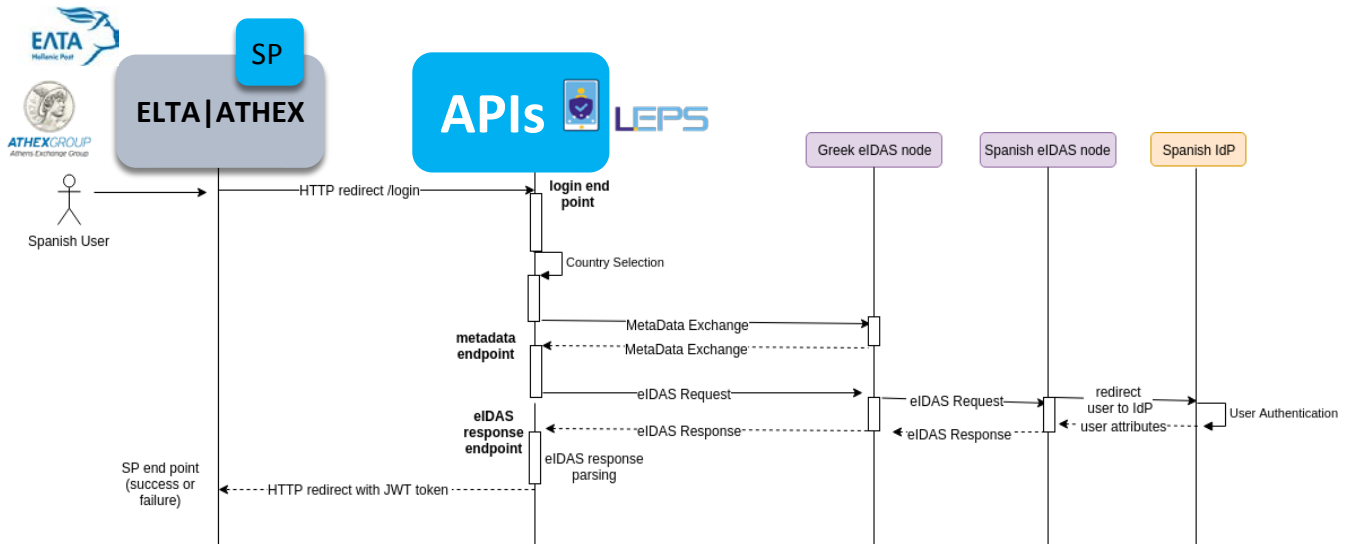
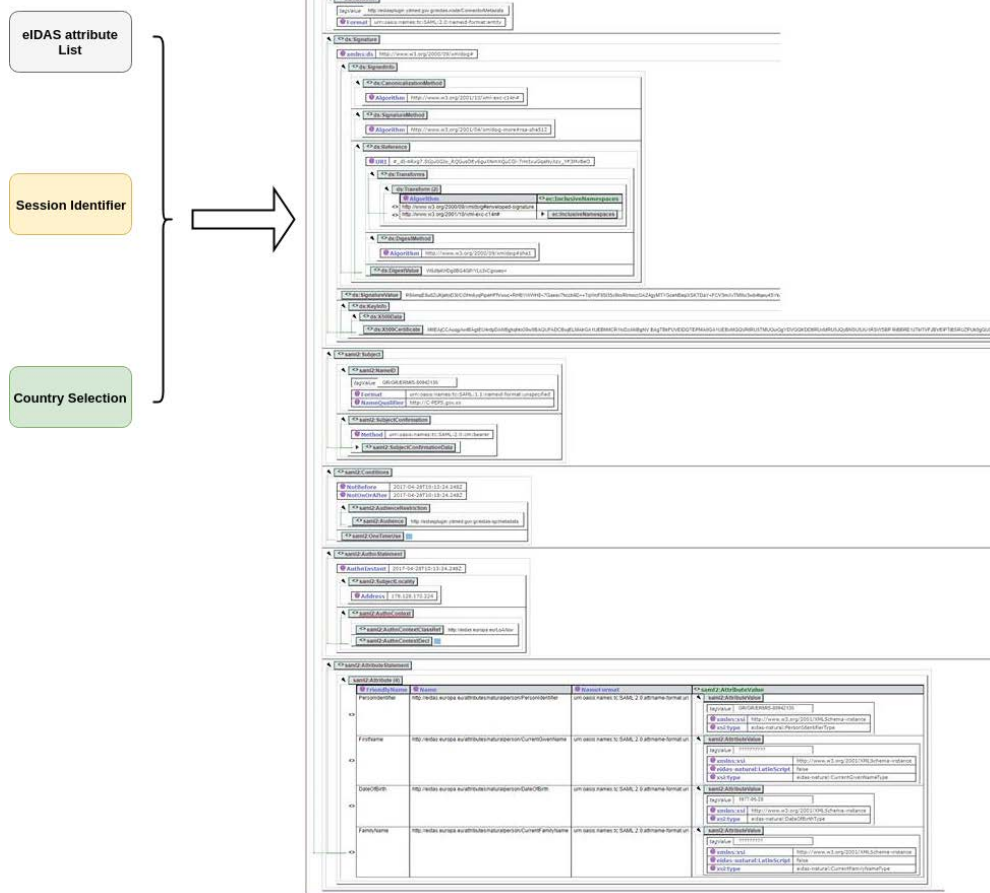


Figure 19: Integration Flow (SP-API connector - eIDAS Node)

- The **Service Provider** configures and deploys a (API Connector) UI instance (SP e-Forms)
 - The configuration requires the definition of which attributes will be requested from the eIDAS Network
- The **Service Provider** redirects authentication requests from the application login page (Login with eID_EU) to the deployed **API Connector/UI**.
 - Redirection is a simple browser redirection to the “Country e-Form” (no parameters are required)
 - The User selects “Country”
- The **API Connector/UI** transfer to the **API Connector**: <listOfRequestedAttributes> and the <selectedCountry> with a freshly generated UUID string (that will be used as a unique identifier of the eIDAS authentication session).
- The **API Connector** takes as input what it receives and formulates as output an appropriate eIDAS SAML authentication request

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	48 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final



User's Country

- The SAML authentication request is next transmitted to the near (proxy) **eIDAS Node** (GR in occurrence) and, then to the eIDAS infrastructure of the Country the User has dispatched the authentication process (ES in occurrence)
- The User is authenticated using the eIDAS flow (eIDAS Node – IdP – back to eIDAS Node); the output of the eIDAS authentication flow an eIDAS SAML authentication response
- The eIDAS Node of the Country the User has dispatched the process (ES in occurrence) forwards the eIDAS SAML authentication response to the eIDAS Node that has initiated the authentication request (GR in occurrence).

Back to SP's Country

- The **eIDAS Node** which receives the authentication response (GR in occurrence) forwards it to the **API Connector**
- The **API Connector** process and decrypts the authentication response and asks from the **API Connector/UI** to generate a JWT token that contains all the retrieved eIDAS

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	49 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

- The JWT token is forwarded to **Service Provider's** Service Point¹⁷, to the Service Point "success endpoint" if the authentication was successful, or to the Service Point "failure endpoint" in case an error occurred. This is again a simple redirection; no parameters are required (the JWT token is added as an http Only cookie). The Service Provider retrieves the JWT cookie from the http request and acts accordingly (verifies its signature, and authenticates the User or handles the error).
 - The User is redirected to the SP application/service, where she had submitted a "Login with eID_EU" request (or to an "Authentication Terminate" page, in the case of an authentication error).

¹⁷ We define a Service Point as: a) the minimal SP configuration that redirects a user's login request to an API (Connector), when the user selects "register/login via eID_EU" and, b) the sum of endpoints where the API (Connector) will forward to SP application/service the authResponse data received from the eIDAS Node (auth success or failure report).

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	51 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

5 “Tests preparation”

This section gives a description of tests that will be performed during the integration process. Two phases have been scheduled, an initial test phase in pre-production environment and a second one on a production environment. Test cases are being described for this purpose in this document as part of the Customization effort. The execution of Testing Tasks will take place during the Integration phase (Tasks 4.3 and 5.3)

Testing of the integration will be done within 3 frameworks:

- Internally with a self-created mockup simulating the eIDAS answer (either the adaptor or the nodes themselves) – already achieved.
- Internally with a demoSP to test the functionality of API Connector(s) – already achieved.
- Real tests with the API Connector(s), sending the communication request and processing the reception of the token (testing the bilateral communication between SP applications/services and API Connector).
- Once the nodes are integrated with the LEPS eIDAS API Connector(s), further and more realistic tests will be done.

Furthermore, to precisely test the functional integration of ELTA and ATHEX services with the eIDAS infrastructure, a set of four (4) test cases has been defined. They involve a User that is navigating through ELTA/ATHEX web sites to register/login to a specific e-Service that provides the opportunity to use eID-EU for authentication.

Table 13: ELTA & ATHEX: List of e-Services integrated with the eIDAS Network that will be the object of a case-based testing

ELTA & ATHEX: List of e-Services integrated with the eIDAS Network		
	ELTA	ATHEX
1	ELTA eDelivery Hybrid Service (cross-border exchange of electronic documents)	ATHEX Sign Remote eSignature Service
2	ELTA Online Postal Services ELTA portal / eShop	ATHEX AXIAweb Receive electronic information on an Investor's positions in Greek Central Securities Repository
3	ELTA Online Postal Services Parcel Delivery Voucher	ATHEX IdP Identity Service Provider (*) a specific testing procedure is designed see: note at the end of the section
4	ELTA Online Postal Services Online Zip Codes for Business Users	

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization			Page:	52 of 61	
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status: Final

Table 14: ELTA & ATHEX: List of Testing Cases (to verify effective functional integration with the GR eIDAS Node)

List of Testing Cases (to verify effective functional integration with the GR eIDAS Node)		
	ELTA	ATHEX
1	ELTA Test Cases Description A new User requires access to ELTA e-Services	ATHEX Test Cases Description A new User requires access to ATHEX e-Services
2	ELTA Test Cases Description User login to ELTA e-Services	ATHEX Test Cases Description User login to ATHEX e-Services
3	ELTA Test Cases Description Authentication Cancel Case – During Registration or Login	ATHEX Test Cases Description Authentication Cancel Case – During Registration or Login
4	ELTA Test Cases Description Authentication Fail Case – During Registration or Login	ATHEX Test Cases Description Authentication Fail Case – During Registration or Login

5.1 “ELTA Test Cases Definition”

Table 15: ELTA Test Cases Description | A new User requires access to ELTA e-Services

Description	Expected Response	Remarks
<p>A non-registered User visits a web page to require access to an e-Service provided by ELTA. No access has been granted previously, so there are no data stored in ELTA IT systems for this User. ELTA e-Services offer the User the possibility of authenticating with her national eID, by using the eIDAS Network (eID-EU). The User proceeds to Register with the e-</p>	<p>1/ The User clicks on the “Register with eID_EU” button.</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI).</p> <p>3/ In this page, the User selects the EU “country of origin”. The same page also shows to the User, on a pop-up window, the list of personal attributes (mandatory and optional) requested by ELTA e-Service and it eventually requires him/her to provide additional personal information (for example, email, mobile phone etc.). Additionally, instructions on how to use eIDAS for authentication and information on the privacy policy of ELTA and LEPS project are provided in the margins of this page.</p> <p>3/ The User clicks on the “Next” button of the “Country Selection e-Form”.</p>	<p>The eIDAS API Connector provides a JWT to ELTA e-Service with the User attributes (attribute, value / LoA).</p>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	53 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

Description	Expected Response	Remarks
Service.	<p>4/ The User is redirected to the ISP of his/her country of origin (or, before getting there, to other pages that show in detail the requested attributes).</p> <p>5/ The User successfully authenticates to this IdP (IdP e-Form).</p> <p>6/ The User provides consent on transferring the attributes obtained by this IdP to ELTA (Consent e-Form).</p> <p>7/ (Upon authentication processing, operated by the eIDAS API Connector, transferring of data from the Connector to ELTA, and information validation by the ELTA application/service) The User is registered in the e-Service Database redirected to the requested protected resource.</p> <p>8/ End of Test.</p> <p>(*) Protected resource:</p> <ul style="list-style-type: none"> • ELTA eDelivery Hybrid Service: Inbox page • ELTA portal / eShop: <ul style="list-style-type: none"> ○ ELTA main Portal page ○ ELTA e-Shop registration e-Form • Online Zip Codes for Business Users: e-payments page 	

Table 16: ELTA Test Cases Description | User login to ELTA e-Services

Description	Expected Response	Remarks
<p>An already registered User with an ELTA e-Service wants to login. ELTA e-Services offer the User the possibility of authenticating with her national eID, by using the eIDAS Network (eID-EU). The User proceeds to Login with the e-Service.</p>	<p>1/ The User clicks on the “Login with eID_EU” button.</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI).</p> <p>3/ In this page, the User selects the EU “country of origin”. The same page also shows to the User, on a pop-up window, the list of personal attributes (mandatory and optional) requested by ELTA e-Service. Instructions on how to use eIDAS for authentication and information on the privacy policy of ELTA and LEPS project are provided in the margins of this page.</p> <p>3/ The User clicks on the “Next” button of the</p>	<p>The eIDAS API Connector provides a JWT to ELTA e-Service with the User attributes (attribute, value / LoA).</p>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	54 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

Description	Expected Response	Remarks
	<p>“Country Selection e-Form”.</p> <p>4/ The User is redirected to the ISP of his/her country of origin (or, before getting there, to other pages that show in detail the requested attributes).</p> <p>5/ The User successfully authenticates to this IdP (IdP e-Form).</p> <p>6/ The User provides consent on transferring the attributes obtained by this IdP to ELTA (Consent e-Form).</p> <p>7/ (Upon authentication processing, operated by the eIDAS API Connector, transferring of data from the Connector to ELTA, and information validation by the ELTA application/service) The User is redirected to the requested protected resource.</p> <p>8/ End of Test.</p> <p>(*) Protected resource:</p> <ul style="list-style-type: none"> • ELTA eDelivery Hybrid Service: Inbox page • ELTA portal / eShop: <ul style="list-style-type: none"> ○ ELTA main Portal page ○ ELTA main e-Shop page • Parcel Delivery Voucher: e-Form page (single application form) • Online Zip Codes for Business Users: Download page 	

Table 17: ELTA Test Cases Description | Authentication Cancel Case – During Registration or Login

Description	Expected Response	Remarks
A User quits the authentication process (during Registration or Login).	<p>1/ The User clicks on the “Register or Login with eID_EU” button (ELTA e-Service).</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI).</p> <p>3/ The User decides to stop the authentication process by clicking on the “Cancel” button of the “Country Selection e-Form”.</p> <p>4/ (Upon authentication failure information processing, operated by the eIDAS API Connector) The User is redirected to an</p>	The eIDAS API Connector provides a JWT to ELTA e-Service with the “authentication cancel” information (and manages the “Authentication Cancelled” e-Form).

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	55 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

Description	Expected Response	Remarks
	<p>“Authentication Cancelled” e-Form.</p> <p>5/ End of Test.</p> <p>(*) The User is redirected to the same “Authentication Cancelled” e-Form if he/she cancels the authentication process on any eIDAS Node e-Form preceding the form where the User authenticates to IdP.</p>	

Table 18: ELTA Test Cases Description | Authentication Fail Case – During Registration or Login

Description	Expected Response	Remarks
<p>A User fails to authenticate (during the Registration or Login process), because of:</p> <p>a/ a non-successful authentication to IdP</p> <p>b/ User’s refusal to provide consent for transferring of attributes to ELTA (after successful authentication to IdP)</p>	<p>1/ The User clicks on the “Register or Login with eID_EU” button (ELTA e-Service).</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI)...</p> <p>3/ The User clicks on the “Next” button of the “Country Selection e-Form”.</p> <p>4/ The User is redirected to the ISP of her country of origin (or, before getting there, to other pages that show in detail the requested attributes).</p> <p>5/ The User does not successfully authenticates to this IdP (IdP e-Form), or he/she refuses to provide consent for transferring the attributes obtained by this IdP to ELTA (Consent e-Form).</p> <p>6/ (Upon authentication failure information processing, operated by the eIDAS API Connector, transferring of authentication fail data from the Connector to ELTA, and information validation by the ELTA application/service) The User is redirected to an “Authentication Fail” e-Form.</p> <p>7/ End of Test.</p>	<p>The eIDAS API Connector provides a JWT to ELTA e-Service with the “authentication failure” information (and manages the “Authentication Fail” e-Form).</p>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	56 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

5.2 “ATHEX Test Cases Definition”

Table 19: ATHEX Test Cases Description | A new User requires access to ATHEX e-Services

Description	Expected Response	Remarks
<p>A non-registered User visits a web page to require access to an e-Service provided by ATHEX. No access has been granted previously, so there are no data stored in ATHEX IT systems for this User. ATHEX e-Services offer the User the possibility of authenticating with her national eID, by using the eIDAS Network (eID-EU). The User proceeds to Register with the e-Service.</p>	<p>1/ The User clicks on the “Register with eID_EU” button.</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI).</p> <p>3/ In this page, the User selects the EU “country of origin”. The same page also shows to the User, on a pop-up window, the list of personal attributes (mandatory and optional) requested by ATHEX e-Service and it eventually requires her to provide additional personal information (for example, email, mobile phone etc.). Additionally, instructions on how to use eIDAS for authentication and information on the privacy policy of ATHEX and LEPS project are provided in the margins of this page.</p> <p>3/ The User clicks on the “Next” button of the “Country Selection e-Form”.</p> <p>4/ The User is redirected to the ISP of his/her country of origin (or, before getting there, to other pages that show in detail the requested attributes).</p> <p>5/ The User successfully authenticates to this IdP (IdP e-Form).</p> <p>6/ The User provides consent on transferring the attributes obtained by this IdP to ATHEX (Consent e-Form).</p> <p>7/ (Upon authentication processing, operated by the eIDAS API Connector, transferring of data from the Connector to ATHEX, and information validation by the ATHEX application/service) The User is registered in the e-Service Database redirected to the requested protected resource.</p> <p>8/ End of Test.</p> <p>(*) Protected resource:</p> <ul style="list-style-type: none"> • ATHEX Sign: “Save Application” Button – “What is Next” page • ATHEX AXIAweb: “Find My Portfolio” 	<p>The eIDAS API Connector provides a JWT to ATHEX e-Service with the User attributes (attribute, value / LoA).</p>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	57 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final

Description	Expected Response	Remarks
	Button – “Portfolio Access” page	

Table 20: ATHEX Test Cases Description | User login to ATHEX e-Services

Description	Expected Response	Remarks
<p>An already registered User with an ATHEX e-Service wants to login. ATHEX e-Services offer the User the possibility of authenticating with her national eID, by using the eIDAS Network (eID-EU). The User proceeds to Login with the e-Service.</p>	<p>1/ The User clicks on the “Login with eID_EU” button.</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI).</p> <p>3/ In this page, the User selects the EU “country of origin”. The same page also shows to the User, on a pop-up window, the list of personal attributes (mandatory and optional) requested by ATHEX e-Service. Instructions on how to use eIDAS for authentication and information on the privacy policy of ATHEX and LEPS project are provided in the margins of this page.</p> <p>3/ The User clicks on the “Next” button of the “Country Selection e-Form”.</p> <p>4/ The User is redirected to the ISP of her country of origin (or, before getting there, to other pages that show in detail the requested attributes).</p> <p>5/ The User successfully authenticates to this IdP (IdP e-Form).</p> <p>6/ The User provides consent on transferring the attributes obtained by this IdP to ATHEX (Consent e-Form).</p> <p>7/ (Upon authentication processing, operated by the eIDAS API Connector, transferring of data from the Connector to ATHEX, and information validation by the ATHEX application/service) The Use is redirected to the requested protected resource.</p> <p>8/ End of Test.</p> <p>(*) Protected resource:</p> <ul style="list-style-type: none"> • ATHEX AXIAweb: “Portfolio Access” page 	<p>The eIDAS API Connector provides a JWT to ATHEX e-Service with the User attributes (attribute, value / LoA).</p>

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	58 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

Table 21: ATHEX Test Cases Description | Authentication Cancel Case – During Registration or Login

Description	Expected Response	Remarks
A User quits the authentication process (during Registration or Login).	<p>1/ The User clicks on the “Register or Login with eID_EU” button (ATHEX e-Service).</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI).</p> <p>3/ The User decides to stop the authentication process by clicking on the “Cancel” button of the “Country Selection e-Form”.</p> <p>4/ (Upon authentication failure information processing, operated by the eIDAS API Connector) The User is redirected to an “Authentication Cancelled” e-Form.</p> <p>5/ End of Test.</p> <p>(*) The User is redirected to the same “Authentication Cancelled” e-Form if he/she cancels the authentication process on any eIDAS Node e-Form preceding the form where the User authenticates to IdP.</p>	The eIDAS API Connector provides a JWT to ATHEX e-Service with the “authentication cancel” information (and manages the “Authentication Cancelled” e-Form).

Table 22: ATHEX Test Cases Description | Authentication Fail Case – During Registration or Login

Description	Expected Response	Remarks
A User fails to authenticate (during the Registration or Login process), because of: a/ a non-successful authentication to IdP b/ User’s refusal to provide consent for transferring of attributes to ATHEX (after successful authentication to IdP)	<p>1/ The User clicks on the “Register or Login with eID_EU” button (ATHEX e-Service).</p> <p>2/ The User is redirected to “Country Selection e-Form” (eIDAS API Connector UI)...</p> <p>3/ The User clicks on the “Next” button of the “Country Selection e-Form”.</p> <p>4/ The User is redirected to the ISP of her country of origin (or, before getting there, to other pages that show in detail the requested attributes).</p> <p>5/ The User does not successfully authenticates to this IdP (IdP e-Form), or he/she refuses to provide consent for transferring the attributes obtained by this IdP to ATHEX (Consent e-Form).</p> <p>6/ (Upon authentication failure information processing, operated by the eIDAS API Connector, transferring of authentication fail data from the Connector to ATHEX, and information</p>	The eIDAS API Connector provides a JWT to ATHEX e-Service with the “authentication failure” information (and manages the “Authentication Fail” e-Form).

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	59 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

Description	Expected Response	Remarks
	validation by the ATHEX application/service) The User is redirected to an “Authentication Fail” e-Form. 7/ End of Test.	

Note: An additional test case will be deployed to test effective integration of ATHEX IdP with the GR eIDAS Node. It will involve a User from Spain, registered with ATHEX IdP Services, who uses this particular IdP to access an e-Service provided by Correos.

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization				Page:	60 of 61
Reference: D4.1		Dissemination:	PU	Version:	2.0	Status: Final

6 Conclusions

ELTA and ATHEX have successfully designed the integration of their e-Services to the eIDAS Network and prepared the necessary customization tasks. In the case of ELTA, this customization to eIDAS integration implicates an important re-design of the existing e-services (including UIs and flows) and collaboration with third-party providers to achieve this. As a result, some delays in the initial time-plan should be expected. They are documented in the section 3 of this Deliverable.

Besides, both operators:

- Have designed and now implement the web pages to show to a User which selects “Register or Login with eID_EU” (including the eIDAS button option for authentication) – including a responsive version of these pages for a use adapted to the specificities of mobile phones and tablets.
- Adapted the registration process based on the minimum data set eIDAS infrastructure provides and completing the additional information with various types of e-Forms filling
- Have designed and now perform the reconciliation of the profiles of Users registering “locally” and via eID_EU, by creating a common reference {eIDAS UI, email} for every customer
- Have designed the architecture of the integration with the Greek eIDAS Node by using LEPS eIDAS API Connectors
- Have designed and internally tested the interoperability with LEPS eIDAS API Connectors

Lessons learnt:

- ATHEX: The authentication via eIDAS simplifies the registration to an e-Service (pre-activation procedure) and reduces customer registration costs.
- ELTA: The necessary customization and preparation to integrate with the eIDAS Network may implicate an important re-design of the existing e-services (including UIs and flows).

Document name:	D4.1 Operational and Technical Documentation of SP (ELTA, ATHEX) customization					Page:	61 of 61
Reference:D4.1		Dissemination:	PU	Version:	2.0	Status:	Final