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GLOSSARY AND ACRONYMS

Acronym	Definition
CA	Certificate Authority
СВ	ESCB Central Bank (ECB or NCB)
СР	Certification Policies
CPS	Certification Practice Statement
CRL	Certificate Revocation List
ECB	European Central Bank
ESCR	European System of Central Banks, including the ECB and the NCBs of all States
LJCD	member of the European Union (whatever they use the Euro or not).
ESCB-PKI	European System of Central Banks - Public Key Infrastructure
IAM	Identity and Access Management
NCB	National Central Bank
PKI	Public Key Infrastructure
RO	Registration Officer
RA	Registration Authority

1. INTRODUCTION

This document aims at providing information on how to use the ESCB-PKI Registration Authority application developed as part of the ESCB-PKI project that delivers a series of PKI services to ESCB and non-ESCB members.

1.1. THE ESCB-PKI WEBSITE

From this Website you can have access to the ESCB-PKI services and you can also find additional information connected to certificate management, token management and Public Key Infrastructures.



Figure 1 - ESCB-PKI Website

To access to the ESCB-PKI services, open your web browser and type the following URL address, http://pki.escb.eu/. You will find the following information:

-	About ESCB-PKI	Generic information with regards to the ESCB-PKI services
-	Repository	ESCB-PKI public information: Certificate Practice Statement (CPS) document, Certificate Policy (CP) documents, Certificate Authority (CA)certificates , Certificate Revocation Lists (CRLs), etc.
-	Certificate management	ESCB-PKI Registration Authority application and guidelines
_	FAQ	Frequently Asked Questions
_	Support	Software needed to manage ESCB-PKI tokens and utilities to test ESCB-PKI certificates

2. THE ESCB-PKI REGISTRATION AUTHORITY APPLICATION

2.1. SYSTEM REQUIREMENTS

The following software is required to use the ESCB Registration Authority application:

- ESCB-PKI Smartcard drivers
- <u>Native application required to manage certificates in a smart card.</u>
- One of the following <u>web extensions</u> of your choice, according to your browser preferences:
 - Mozilla Firefox ESCB-PKI Certificate Enrollment extension.
 - o <u>Chrome and Edge ESCB-PKI Certificate Enrollment extension</u>.

Instructions on the installation of the aforementioned software are available in the ESCB-PKI User guide - Browser configuration, which may be downloaded from the ESCB-PKI portal support area:

https://pki.escb.eu/epkweb/en/support.html

The following browsers have been thoroughly tested and are therefore recommended:

- Internet Explorer 11
- Google Chrome 94
- Mozilla Firefox 92
- Microsoft Edge 95

Note. - "JavaScript" and "Cookies" must be enabled in the web browser for the application to work properly.

2.2. LAYOUT

Please be aware that two different ESCB-PKI environments are reachable by ESCB-PKI customers: acceptance and production. Each environment has a different frame colour so the customer can easily tell the difference and use the one that better suits their intended usage; furthermore, the acceptance environment includes an acceptance label in the upper right position indicating that the acceptance environment is the one being accessed.



Figure 2 - Production frame



After logging into RA application the following features will always be available to the user:

- A menu will be shown on the left frame to facilitate quick access to all available options _
- A Locout option in the upper-right corner to end the user session

ESCB-PKI EUROSYSTEM	ESCB Registration Authority	
MY CERTIFICATES	Certificate Request List	🤌 esinfmpp Leonput
User Details	User Details Certificate Package List Certificate Request List	
Suspension Code	Mon User Information	

igure 4 - Certificate management

2.3. ACCESS

In the ESCB-PKI Website click on the *Certificate management* tab. This page contains the list of the ESCB-PKI services available to certificate subscribers

ESCB-PKI		73	Home Site map	Contact
About ESCB-PKI	Repository	Certificate management	FAQ's	Support
Certificate ma	anagement	SEARCH	ESCB IDENT MANAGEME Access to the A many A many A many	ITTY AND ACCESS NT (IAM) Interface for IAM Actors
Inicio > Certificate management				
Certificate management a	nd other role-based operation	ons		
Access with certificate .	л 			
Registration Officer's use	r manual 🔁 (1.5 MB).			
Key Recovery Officer's us	er manual 🔁 (1.4 MB).			
 Shared Mailbox Administr Operating Strends 	rator's user manual 🖾 (1.47 MB	i) a		
Security Officers user ma	(2.2 MB)			
 Technical certificates mar 	nagement 🕏 (1.19 MB).			
Certificate subscriber oper	ations			
> Certificate delivery for rem	note users			
> Access with ESCB IA	AM user and password 🛈 A M and	la -		
> Access with certificat	te 🗟.,			
> Personal certificate mana	agement 🔒 🖕			
> Certificate suspension .				
> Certificate subscriber's us	ser manual 😒 (1.17 MB).			

Figure 5 - ESCB-PKI Website - Registration Authority Application

There are three different links available to ESCB-PKI subscribers:

Link	Use this option when you	Credentials required
Certificate delivery for remote users	do not have any CAF-compliant certificate to authenticate, for example, the first time you request a certificate or when your personal secure token is lost or stolen	IAM user-id and password OR ESCB accepted certificate (CAF compliant)
Personal certificate management	have an advanced CAF-compliant certificate (i.e. your token based ESCB-PKI certificate) to authenticate	ESCB accepted advanced certificate (CAF compliant)
Certificate suspension	want to suspend your certificates and you do not have any CAF-compliant certificate to authenticate (i.e. token lost or stolen) and you do not remember your IAM password	IAM user-id and your personal ESCB-PKI suspension code

Next chapters of this document provide step by step instructions and background information on how to use the Registration Authority application.

2.3.1. CERTIFICATE DELIVERY FOR REMOTE USERS

You will use this link to manage your certificates and certificate requests when you do not have any CAF-compliant certificate to authenticate. This link will initially display all certificate requests currently associated with you and their status:

etails	User Deta	ils Certificate Package List	Certificate Request I	.ist		
ite Requests			Userl	nformation		
ites		Name ESPANOL C	DNE, Fulanito			
	© Ce	rtificate Request List				
	Detail	Certificate Package Type	Request Status	Request Date	IssuanceType	Operation Type
	٩	ADVANCED	CANCELLED	26-01-2012 15:30:17	REMOTE	KEYCOMPROMISE
	١	ADVANCED	CANCELLED	26-01-2012 15:29:26	REMOTE	KEYCOMPROMISE
	١	STANDARD	CANCELLED	26-01-2012 15:14:11	PRESENTIAL	KEYCOMPROMISE
	٩	ADVANCED	CANCELLED	26-01-2012 14:55:40	PRESENTIAL	KEYCOMPROMISE
	٩	STANDARD	COMPLETED	25-01-2012 16:07:58	PRESENTIAL	KEYCOMPROMISE
	٩	ADVANCED	COMPLETED	25-01-2012 15:50:49	PRESENTIAL	KEYCOMPROMISE
	٩	ADVANCED	COMPLETED	25-01-2012 15:12:29	PRESENTIAL	KEYCOMPROMISE
	٩	ADVANCED	COMPLETED	24-01-2012 18:20:45	REMOTE	KEYCOMPROMISE
	١	ADVANCED	COMPLETED	24-01-2012 17:55:40	REMOTE	KEYCOMPROMISE
	۲	ADVANCED	COMPLETED	24-01-2012 17:48:32	PRESENTIAL	KEYCOMPROMISE

Figure 6 - Certificate request list

The following options will be available from the left frame menu (or from the tabs):

– User Details

Selecting this option you will be able to check your personal information and manage your personal certificates and certificate requests

- *Certificate requests* Selecting this option you will be able to check your certificate requests and perform the following operations
 - \circ $\,$ Cancel the request
 - Obtain a copy of the Terms and Conditions form associated to your certificate requests
 - $\circ\;$ Download your certificates provided an RO has authorised you the remote download
- *Certificates* Selecting this option you will be able to check your certificates and perform the following operations
 - $\circ\,$ Suspend your certificates in case you suspect they have been compromised

Next chapters will further elaborate on these three options.

2.3.2. PERSONAL CERTIFICATE MANAGEMENT

You will use this link to manage your certificates and certificate requests when you have a CAFcompliant certificate to authenticate. This link will initially display your personal data:

User Details	User Details Certificate Pa	ackage List Certificate Request List
Suspension Code		Personal Data
Certificate Requests	Escb User ID	t-esinfppr2
	First Name	Fulanito Dos
Certificates	Middle name	
	Surname	ESPANOL DOS
	National Identity Number	
	Birth Date	20/01/1965
	Birth Place	Peteliños de abaixo Orense
		ESCB Data
	Escb User ID	t-esinfppr2
	Email Address	micorreoelectron @bde.es
	Employee Number	NFPPR2
	Domestic UID	
	Suffix	
	Organisation	Banco de España(ES)

Figure 7 - Personal certificates management

Four options will be available from the left frame menu (or form the tabs):

– User Details	Selecting this option you will be able to check your personal information and manage your personal certificates and certificate requests
 Certificate requests 	 Selecting this option you will be able to check your certificate requests and perform the following operations Cancel the request Obtain a copy of the Terms and Conditions form associated to your certificate requests Download your certificates provided an RO has authorised you the remote download
– Certificates	Selecting this option you will be able to check your certificates and perform the following operations

- $\circ\,$ Suspend your certificates in case you suspect they have been compromised
- \circ $\,$ Recover your old encryption keys
- Suspension code This option will allow you to set your personal suspension code

Next chapters will further elaborate on these four options.

2.3.3. CERTIFICATE SUSPENSION

You will use this link to suspend your ESCB-PKI certificates when you do not have any CAF-compliant certificate to authenticate (i.e. token lost or stolen) and you do not remember your IAM password. This link will display ESCB-PKI certificates currently associated with your user-id and their status:

e Package List				
	User Information			
Name ESPANOL ONE, Fulanito				
tificate Package List				
Policy Name	Cryptographic Device	State	Initial Date	Expiration Date
ADVANCED_ARCHIVED_ESCB_POLICY	42430F5172A36495	ACTIVE	10-02-2012	10-02-2015
ADVANCED_ARCHIVED_ESCB_POLICY	42430F5172A36495	REVOKED	09-02-2012	09-02-2015
STANDARD_ESCB_POLICY		REVOKED	08-02-2012	08-02-2015
ST	ANDARD_ESCB_POLICY Figure 8 - Certi	ANDARD_ESCB_POLICY Figure 8 - Certificate List	ANDARD_ESCB_POLICY REVOKED Figure 8 - Certificate List	ANDARD_ESCB_POLICY REVOKED 08-02-2012 Figure 8 - Certificate List

One option will be available from the left frame menu

- Certificates

- Check your certificates and perform the following operations
- $\circ\,$ Suspend your certificates in case you suspect they have been compromised

Next chapters will further elaborate on this option.

3. USER DETAILS

Displays the user attributes (first name, surname, user-id, etc.) and the information of the organisation you belong to.

UserDetails	
User Details Certificate Pa	sckage List Certificate Request List
\smile	Personal Data
Escb User ID	uid200
First Name	name
Middle name	middlename
Surname	surname
National Identity Number	
Birth Date	
Birth Place	
	ESCB Data
Escb User ID	uid200
Email Address	qtamomx@correo.interno
Employee Number	
Local Upn	
Organisation	Banco de España (ES)

Figure 9 - User details

NOTE: User attributes not completed

Before issuing any certificate the RA application must ensure that all the personal information required to uniquely identify you is registered in the system.

In particular the place and date of birth and/or the number of your identification document (i.e. national identity number, passport number, driver license number, etc.) could be missing, as this information is not registered in the IAM directory and therefore not imported by ESCB-PKI system.

In this event, the application will prompt you to introduce either your national identity number or your place and date of birth.

User birth informa The following formation of the following forma	tion register
- National iden	lification number
At least one of these field information to continue.	Is is required to identify an user before issuing ESCB-PKI certificates. Please, complete the
	User information
Name	F name, Surname
	Pending information
National Identity Number	
National Identity Number 🔍	
Birth Date and Birth Place	
Birth Date 🔍	
Birth Place 🔍	
	Register

Figure 10 - Register personal information

4. CERTIFICATE REQUESTS

This option displays all certificate requests currently associated with you

ser Det	ails Certificate Package List	Certificate Request L	ist		
		Userli	nformation		
	Name APELLIDOS	TRES, Usuariotres			
Ce	rtificate Request List				
Detail	Certificate Package Type	Request Status	Request Date	IssuanceType	Operation Type
۲	STANDARD	USER PENDING	15-02-2012 10:49:34	REMOTE	KEYCOMPROMISE
۲	ADVANCED	COMPLETED	15-02-2012 10:48:54	REMOTE	KEYCOMPROMISE
۲	ADVANCED	CANCELLED	13-02-2012 16:57:19	PRESENTIAL	KEYCOMPROMISE
۲	STANDARD	CANCELLED	13-02-2012 16:39:59	PRESENTIAL	KEYCOMPROMISE
۲	ADVANCED	COMPLETED	10-02-2012 10:36:00	PRESENTIAL	KEYCOMPROMISE
۲	ADVANCED	COMPLETED	08-02-2012 15:59:43	PRESENTIAL	KEYCOMPROMISE
۲	STANDARD	COMPLETED	08-02-2012 15:35:44	PRESENTIAL	KEYCOMPROMISE
۲	ADVANCED	CANCELLED	26-01-2012 15:27:50	REMOTE	KEYCOMPROMISE
۲	ADVANCED	COMPLETED	26-01-2012 15:07:06	PRESENTIAL	KEYCOMPROMISE
3	STANDARD	COMPLETED	26-01-2012 14:53:23	PRESENTIAL	KEYCOMPROMISE

Figure 11 - Certificate request list

and their status:

- *Completed* The request has been processed and certificates have been generated
- *Cancelled* The request has been cancelled
- *Expired* The request has expired
- **RO-Pending** The RO shall still process the request
- User-Pending The user can generate and download the certificates. The RO has already handled the request and has allowed a remote download

Clicking the *initial* button the details of the certificate request are displayed

	llear Information
Norma	
Name	APELLIDOS TRES, Usuariotres
	Requestor details
Requestor name	Apellido1 Apellido2, Nombre
Requestor mail	nombre.aplellido1@bde.es
	Certificate Package Request Detail
Certificate Package Type	STANDARD
Request Status	USER PENDING
Issuance Type	REMOTE
Operation Type	KEYCOMPROMISE
Request Date	15/02/2012

Figure 12 - Certificate request details

You may choose from the following operations:

- Terms and Conditions download

If the request is still pending the *Terms and Conditions* button will be available in order to obtain a copy of the Terms and Conditions document

Certificate generation/download If the status of the request is *User-Pending* a *Download* button will be available to generate and download the certificates
 Modify device To update the serial number of the device if necessary (this button will be only available for advanced certificate requests when the status of the request is Ro-pending)
 Cancel request If the status of the request is *RO-Pending* the *Cancel request* button will be available to cancel this request

4.1. DOWNLOAD TERMS AND CONDITIONS

You must formally accept your responsibilities by signing the Terms and Conditions document. This option will permit you to download a copy of the Terms and Conditions document. The next figure shows a sample of the form.

ECE-RESTRICTED PERSONAL Certification services provided by ESCB-PKI's Certification Authority Application form for ESCB users Certificate Applicant's Data	Terms and Conditions: The result of conditions: The result of conditions: Environment of the European Count Basis, its supersentation of the ECG-FXG. For the preventation of the ECG-FXG Services in detections in the OFG and its composing (OF The manus used in the ECG-FXG Therman of Conditions II have the memory proves them in the CFG and its composing (OF The manus used in the the ECG-FXG Therman of Conditions II have the memory proves them in the CFG and its of the usets sense theorem of the environment of the theorem
Personal Data	1. Obligation:
First name ² Juan Middle name (if any) ² Surname ² Surname ² ESPAÑOL ESPAÑOL [National identity number ³] [Birth date ³] [Birth date ³] [Birth place ³] [Birth place ³] Central Bank Related Data	 The Centrices ApplicantY'es toll: 11. Provide screen, fill and verball information when filling the application form. 12. Bitters in Central Bank Descatther (37) of any modification of Prevanal Data collected in this form. 13. Bitters in Central Bank Descatther (37) of any modification of Prevanal Data collected in this form. 14. Take the accessity screently measures within in scenario in a role in world any low, modification or mandmental use of the cryptographic cent. 15. Bit representation for the score: coundwy of the TN and FTC score tumbers for activation and modeling the cryptographic cent. 16. Beguent the revocation of the centrification is can the data specified in the central central or to a two baseling that the private symplex turbule of the score. 17. The the accessition of the central data to a standing order centre, box, then, it anticipates for the score centre of the TN and FTC. 18. Provide the transfer of the centre of the centre of the centre of the transfer of the transf
Central Bank ² BANCO DE ESPAÑA	
ESCB User ID ² ESUUUUUU	Personal data provided in this application form are deem to be personal data purparant to Directive 95/46/EC of the European
E-mail address ² Juan Espa@bde.es	Parliament and of the Council of 24 October 1994 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (hereinafter "Data Protection Directive") and Regulation 45/2001 of the European Parliament
Employee number ³ 99.999	and of the Council of 18 December 2000 on the protection of minimum with regard to the processing or personal data by the Community institutions and bodies and of free movement of such data (hereinafter 'Data Protection Regulation').
Technical Data	The Eurosystem Central Banks (or the owner of the ESC49-ME) and Banco de Expands (or the Service Provide) are co-controllent for ESC4-Picit data protection puppees and shall comply with and apply the length technical and management measures required by the respective national legislation transporting the Data Protection Directive. The ECB processes personal data in accordance with the Data Devection Resmittion
Token serial mmber a downard and the Cardforder, You Gerstauffer "You" or "Certificus Applicas") agree to be following turns and contacts, and schooledap the Cardforder Potent Statemant ("CPP) and the Certificus Applicas") agree to be following turns and contacts, and schooledap the Cardforder Potent Statemant ("CPP) and the Certificus Applicas") communicate any charge tuber documents. In the Cardforder Potent Statemant ("CPP) and the Certificus Applicas ("CPP) and the Certificus Applications of the Cerificus Applications of the Cerificus Applications	The Gettines Applicant is indicated and genes that the prevents that provided that insplications from that the resolution of the second approximation of the second approx
In	SERVICE PROVIDER Name Basics of Equals Information Systems Departments de Sistemas de Información EXCENTION Address CAbraís, 322, 28027. Madrid (Span) CENTRAL BANK ACTING AS REGISTRATION AUTHORITY
Name and signature of the Certificate Applicant Cartificate Applicant is identity. ¹ Is has with Sectors 9.4.3 of the CPK, set CP shall enabled the present data to be activate in the appoint of the certificate application is identity. Sector 2000 (Sector 2000) (Sector 20	E-mail address Address 3. Limitations of liability The Europyseen C-canal Basis and the European C-canal Basis do not accept say liability values:over for the constant of documents signed using its centificants, say for any other use of its centificates, such as massing or communication encipherment processes.

Figure 13 - Terms and Conditions acceptance form

4.2. GENERATE AND DOWNLOAD SOFTWARE-BASED CERTIFICATES

This option will only be available if the status of the request is *User-Pending*. The next figure shows the information displayed when you select the download button for standard certificates.

Download Certific	ate Package			
		USER INFORMA	TION	
Name	APELLIDOS TRES, Usuario	tres		
Harrie				
CERTIFICATES TO I	SSUE Key Size	SSCD	Token Delivery	Key Recovery

Figure 14 - Software-based certificate download

- 1. To initiate the process you must click the *Accept* button.
- 2. You will be requested to set a PIN code to protect the certificate and the keys generated.

Download Certific	ates
	Download information
Certificate PIN 🔍	
Confirm Certificate PIN 🔍	
	Download Back to request list Back to User Details

Figure 15 - File protection PIN

Type your selected PIN:

- PIN length must be between 15 and 25 characters
- PIN is a combination of capital and non-capital letters, numbers and special characters (special characters are: @ % + / ! # \$ ^ ? . () { } [] ~ ` _)
- 3. Click the *Download* button. The certificate will be generated.



4. Click the *Download certificate* button to store the certificate.

Important notice!

5. A File Download dialog box will pop up. Click the SAVE button to download the keys.

If you select the **OPEN** option (instead of **SAVE**) Windows will automatically start the installation of the certificate in your PC.

The recommended procedure is to save this file, keep it as a backup copy and, afterwards, start the installation process (opening the file). Detailed information for the installation process is available at "User guide: importing and exporting standard certificates" document which is available in the ESCB-PKI Website.

The certificate will be saved, protected by the PIN, to ensure that only you and no one else can have access to the private key.

6. Keep this file as a backup copy of the certificate. This will permit you to recover the certificate in the future, in case it gets damaged.

4.3. GENERATE AND DOWNLOAD TOKEN-BASED CERTIFICATES

This option will only be available if the status is *User-Pending*.

	User information
Name	APELLIDOS TRES, Usuariotres
	Requestor details
Requestor name	Apellido1 Apellido2, Peticionario
Requestor mail	peticionario.apellido1@bde.es
	Certificate Package Request Detail
Certificate Package Type	ADVANCED
Cryptographic Device	0000481555AF131E
Request Status	USER PENDING
Issuance Type	REMOTE
Operation Type	KEYCOMPROMISE
Request Date	15/02/2012

Figure 17 - Token-based certificate request

 Insert your personal secure token in the reader and click the *Download* button. If the serial number of the token is not the one indicated in the request an error pop-up window will be displayed.

Mensaje d	le página web	×
	There is not a token with the serial number specified in	the request.
		Aceptar
	Figure 18 - Invalid token	

If the right token has been used the information about the certificates to be issued will be shown.

Bowmoud Certimodie Public	lage			
	USER INFOR	RMATION		
Name APELLIDO	S TRES, Usuariotres			
CERTIFICATES TO ISSUE				
Template Name	Key Size	SSCD	Token Delivery	Key Recovery
ESCB ARCHIVED ENCIPHERMENT	2048			1
ESCB AUTHENTICATION	2048		V	
ESCB NONSSCD SIGNATURE	2048		V	

Figure 19 - Token-based certificates download

2. In order to initiate the process, click the *Accept* button. The whole process will take a few minutes because, in the case of the advanced certificate package, three key-pairs will be generated (authentication, encryption and signing) and stored in your token.

The advanced certificate package is going This process will take several minutes.	to be generated.
Very important notice! - Please, insert the smart card has been completed.	and do not remove it until you see a message describing that the process
Click on the Start button to initiate the pro	CBSS.
Click on the Start button to initiate the pro	CESS. Status
Click on the Start button to initiate the pro	Status
Click on the Start button to initiate the pro- Step 0 - Preliminary verifications Step 1 - Public/Private key generation	Status
Click on the Start button to initiate the pro- Step 0 - Preliminary verifications Step 1 - Public/Private key generation Step 2 - Certificate generation	Status
Click on the Start button to initiate the pro- Step 0 - Preliminary verifications Step 1 - Public/Private key generation Step 2 - Certificate generation Step 3 - Certificate storage	Status

Figure 20 - Token-based certificates generation

- 3. Click the *Start* button.
- 4. The system will prompt you to enter the PIN of the token.

	Status	
Step 0 - Pre Verificación de PIN	Preliminary verifications successfully completed	I
Step 1 - Pub Introduzca PIN: ******	Generating keys	
Step 2 - Cer Aceptar Cancelar		
Step 3 - Cer		
Step 4 - Token verification		
PLEASE WAIT UNTIL	THE WHOLE PROCESS IS COMPLETED	

Figure 21 - Introduce PIN code

The key-pair will be generated into the secure token.

The advanced cer This process will	tificate package is going to be generated. take several minutes.	
Very in - Pleas has be	nportant notice! e, insert the smart card and do not remove it until you see a message describing tha en completed.	at the process
Click on the Star	button to initiate the process.	
	Generating key-pair	
Step 0 - Preliminar Step 1 - Public/Priv	Generating key-pair, please wait	Ø
Step 2 - Certificate		
Step 3 - Certificate	storage	
Step 4 - Token veri	ïcation	
	PLEASE WAIT UNTIL THE WHOLE PROCESS IS COMPLETED	

Figure 22 - Public/private keys generation

You will be informed when the keys have already been generated.

This process will take several minutes.	be generated.	
Very important noticel - Please, insert the smart card and been completed. Click on the Start button to initiate the process	I do not remove it until you see a message describing that the p s.	rocess has
	Status	
	Preliminary verifications successfully completed	
Step 0 - Preliminary verifications		
Step 0 - Preliminary verifications Step 1 - Public/Private key generation	Keys successfully generated	Ø
Step 0 - Preliminary verifications Step 1 - Public/Private key generation Step 2 - Certificate generation	Keys successfully generated Generating certificates	Ø
Step 0 - Preliminary verifications Step 1 - Public/Private key generation Step 2 - Certificate generation Step 3 - Certificate storage	Keys successfully generated Generating certificates	Ø

Figure 23 - Token-based certificates successfully generated

The system will generate the certificates and will store them in the token.

The advanced certificate package is goir This process will take several minutes.	ng to be generated.	
Very important noticel - Please, in been compl Amacenand: Each on the Start butto	u see a message describing that t	he process has
ep 0 - Preliminary verifications	Status Preliminary verifications successfully completed	0
tep 1 - Public/Private key generation	Keys successfully generated	<
ep 2 - Certificate generation	Certificates successfully generated	0
tep 3 - Certificate storage	Storing certificates	
and A. Walana and Manadan		

Figure 24 - Storing certificates

The keys and the certificates will then be available in the token.

THE ADVANCED CERTIFICATE	S HAVE BEEN ISSUED SUCCESFULLY	
	Status	
Step 0 - Preliminary verifications	Preliminary verifications successfully completed	I
Step 1 - Public/Private key generation	Keys successfully generated	Ø
Step 2 - Certificate generation	Certificates successfully generated	Ø
Step 3 - Certificate storage	Certificates successfully stored	
Step 4 - Token verification	Token successfully verified	

Figure 25 - Token-based certificates successfully stored

5. CERTIFICATES

Displays all ESCB-PKI certificates currently associated with your user-id

User Information							
	Name ESPANOL ONE, Fulanito						
Certificate Package List							
Detail	Policy Name	Cryptographic Device	State	$\hat{\mathbf{v}}$ Initial Date	Expiration Date		
۲	ADVANCED_ARCHIVED_ESCB_POLICY	42430F5172A36495	ACTIVE	09-02-2012	09-02-2015		
۲	STANDARD_ESCB_POLICY		ACTIVE	08-02-2012	08-02-2015		
۲	ADVANCED_ARCHIVED_ESCB_POLICY	42430F5172A36495	REVOKED	08-02-2012	08-02-2015		
۲	ADVANCED_ARCHIVED_ESCB_POLICY	42430F5172A36495	REVOKED	07-02-2012	07-02-2015		



and their status:

- Active Certificates are valid
 Revoked Certificates cannot be used any more
 Suspended Certificates have been temporarily invalidated
 Damaged Certificates have been replaced due to damage (e.g. broken token)
- *Renewed* Certificates have been replaced due to expiration

Certificates are grouped into "packages". A certificate package is a collection of certificates defined by a Certificate Policy; for instance, the "*advanced_archived*" certificate package will contain the following certificates: advanced authentication, advanced signature and advanced encryption (with key recovery) certificates.

After clicking a certificate package the certificate details will be displayed:

		Certificate Package Information		
Policy	QUALIFIED_ARCI	HIVED_ESCB_POLICY		
Cryptographic Device	0210298880121	A1A		
Expiration Date	23/01/2015			
Request Date	23/01/2012			
Certificate Package Status	ACTIVE		<u> </u>	
Certificate Package Status Certificate List Serial Nur	nber	Download certifica	Downlo	ad Recover Ke
Certificate List Certificate List Serial Nur 2555eb1e0fb47eab4f1da0180	nber 0f1d6fb	Download certifica resplate liame ESCB AUTHENTICATION	at Downlo.	ad Recover Ke
Certificate Package Status Certificate List Serial Nur 2555eb1e0fb47eab4f1da0180 4cc8034b7632a4a34f1da0190	nber 0f1d6fb 1943a6b2	Download certific: Template Name ESCB AUTHENTICATION ESCB SSCD SIGNATURE	Downlo.	ad Recover Ke

And you may request the following operations:

- Certificate download

Clicking the button a copy of the certificate (only public information) will be downloaded to be locally stored in a file (a .cer file containing your certificate). It is important to notice that the private key will not be provided

Key recovery
 This option will only be activated (blue color) for encryption certificates if the key recovery option has been authorised by your Central Bank

NOTE. - <u>Only available</u> from the **Personal Certificate management** link

 Certificate suspension
 Clicking this button you will suspend all the certificates contained in this package. When the action is processed the certificate validity is suspended temporarily

> NOTE. - Certificate reactivation must be requested by an ESCB-PKI Registration Officer

6. SUSPENSION CODE

Bear in mind that the suspension code will be the only way to identify you if your personal secure token is lost or stolen and you do not remember your IAM password. You will use this code to request the suspension of your certificates.

From the Suspension Code option you can set your personal suspension code.

Suspension Code	
	New Suspension Code
*Suspension Code	
*Suspension Code Confirmation	
	Accept

Figure 28 - Set the suspension code

- Type your suspension code and then click the *Accept* button.
 - Length must be between 8 and 15 characters.
 - Must be a combination of capital and non-capital letters, numbers and special characters (special characters are: @ % + / ! # \$ ^ ? . () { } [] ~ ` _)

7. MORE INFORMATION ABOUT ESCB-PKI

For further information see the ESCB-PKI Website, <u>http://pki.escb.eu</u> (you may want to bookmark this site for future references). The Frequently Asked Questions (FAQ) section will be your best source of support information.



Figure 29 - ESCB-PKI Website

In the ESCB-PKI Website you will find the following information:

-	About ESCB-PKI	Generic information with regards to the ESCB-PKI services.
-	Repository	ESCB-PKI public information: Certificate Practice Statement (CPS) document, Certificate Policy (CP) documents, Certificate Authority certificates, CRLs, etc.
_	Certificate management	ESCB-PKI Registration Authority tool.
_	FAQ	Frequently asked questions.
_	Support	Software needed to manage ESCB-PKI tokens and utilities to test ESCB-PKI certificates.

Note: The last version of this document can be found in the ESCB-PKI Website, along with other ESCB-PKI guides and manuals.

8. ANNEX 1. TABLE OF OPERATIONS

		RA application links		
		Certificate delivery	Personal certificate	Certificate
Menu options		for remote users	management	suspension
User Details		✓	✓	
	Term and conditions	\checkmark	\checkmark	
Certificate	Certificate generation and download	✓	✓	
Request	Modify device	\checkmark	\checkmark	
	Cancel request	\checkmark	\checkmark	
Suspension Code			\checkmark	
	Certificate download	\checkmark	\checkmark	~
Certificates	Certificate suspension	\checkmark	\checkmark	✓
	Key recovery		\checkmark	