



# **EESSI – CDM 4.4**

## **H - Horizontal**

### **H\_BUC\_05 - v4.4.0**

#### **Exchange of PINs**

#### ***BUC Specifications***

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## Document history

Version	Date	Short Description of Changes
v0.1	24/03/2014	Initial draft
v0.2	21/01/2015	Update of the document.
v0.3	13/04/2015	Update following AHG review meeting on 07-08/04/2015.
v0.4	23/04/2015	Corrections based on review from PL.
v0.5	24/04/2015	Corrected the implementing regulation reference.
v0.6	26/08/2015	Correction in the BPMN for the Counterparty, possibility to request ad-hoc information to the Case owner. (Branch 1)
v0.7	15/09/2015	<p>Adaptations following review by the AHG and following playground testing:</p> <ul style="list-style-type: none"> <li>- Adaptation <u>Branch 11</u>: "Remove Participant" admin function from the CP, allowed only to remove himself, according to SR2 AD-BUC-04.</li> <li>- Added step 8 of the main scenario.</li> </ul> <p>Reminder should possible until all SED's have been sent, as it does not make sense to send it after that: we will address this concern globally for all the BUC's.</p>
v0.99.0	31/03/2016	<p>Candidate for AHG Approval</p> <p>Inclusion of Request-Reply Table</p> <p>Inclusion of Attachment Allowed Table</p> <p>Inclusion of SED &amp; Sub-process Versioning Information</p>
v0.99.1	13/06/2016	Updated following comments received from AC
v1.0.0	06/07/2016	AC APPROVED VERSION
v1.0.1	29/06/2017	<p>-Updated Section 5.1 Case Owner – Counterparty – added new diagram H_BUC_05_Diagram v1.0.0.4</p> <p>-Deleted Sub-process section content</p> <p>Added Not Applicable</p>

		-Replaced the reference to the BUC on Confluence.
v1.0.2	18/12/2017	<p>Alignment to the standard description and layout of the BUC:</p> <ul style="list-style-type: none"> <li>- Section 2.1 changed title to 'Business Scenario' instead of 'Detailed description';</li> <li>- Section 2.2 changed title to 'Legal base' and rephrased introduction text;</li> <li>- Updated section 4.1 RUP Table Representation: branches 2, 2b, 10 and 11 to align forward and invalidate wording to the standard wording;</li> <li>- Removed Section 4.4 RUP UC Diagram Representation.</li> <li>- Included H_BUC_04 and H_BUC_10 (as not used for this BUC) in table "Sub processes' Table, AD_BUC_11 is used for this BUC.</li> <li>- Section 5: rephrase introduction text for this section to the standard text.</li> </ul>
v4.1.0	31/08/2018	<ul style="list-style-type: none"> <li>- Section 4.4 merged 2 tables (for SED &amp; for Subprocesses) into 1 BUC Artefact table."</li> <li>- Version adaptations to release 4.1.0</li> </ul>
v4.2.0	29/05/2019	Version adaptations to release 4.2.0.
v4.3.0	31/08/2021	Version adaptations to release 4.3.0.
v4.4.0	06/12/2024	Version adaptations to release 4.4.0

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## 1. Introduction

### 1.1. Purpose

The purpose of this document is to construct an external view of, part of, the 'EESSI business system' as described in EC Regulations 883/2004 [R1] and 987/2009 [R2]. The 'EESSI Business System' describes the business and expected business processes without consideration as to which part(s) may be realized by an IT System (i.e. the proposed EESSI IT System).

The external view comprises of models and descriptions of business use cases, the services of a business system offered to business actors: customers, business partners, or other business systems.

A business use case is described from an actor's perspective; it describes the interaction between an actor and the business system, meaning it describes the behaviours of the business system that the actor utilizes. The Business Use Case includes Use Case Diagrams and Business Process Models.

Use case diagrams show actors, business use cases, and their relationships. Use case diagrams do not describe procedures. Alternative scenarios also remain hidden. These diagrams give a good overview of the behaviours of the EESSI business system which will direct and govern part of the expected behaviours and functionality delivered by the EESSI IT System.

### 1.2. Scope

This document is limited to the external view on the horizontal sector process Exchange of Personal Identification Numbers (PINs). The different elements like use case description, actors, and business process as well as supporting UML diagrams and BPMN models pertaining to Exchange of Personal Identification Numbers.

### 1.3. Definitions, Acronyms and Abbreviations

Please see the EESSI Project Glossary [here](#)

### 1.4. References

#	Description	
R1	Basic Regulations EC (883/04)	<a href="#">Regulation EC No. 883/2004.pdf</a>
R2	Implementing Regulations EC (987/09)	<a href="#">Regulation EC No 987/2009.pdf</a>

### 1.5. Overview

Chapter 1 introduces the external view on the business system under review and lists the elements of this specification.

Chapter 2 introduces us to the Exchange of Personal Identification Numbers business process. The chapter gives a short and detailed description as well as a reference to business process' legal base.

Chapter 3 lists the actors involved in the Exchange of Personal Identification Numbers business process.

Chapter 4 describes in detail the Exchange of Personal Identification Numbers business process based on the RUP use case template, as well as the relationship to other use cases.

Chapter 5 describes the Exchange of Personal Identification Numbers business process using business process modelling notation (BPMN).

## 2. Description

### 2.1. Business Scenario

This case concerns the need of exchanging Personal Identification Numbers (PIN) of an insured person between Member States. The process is based on the general cooperation requirement found in Article 2 (2) and the exchange of information in Article 52 (1) (a) of Regulation (EC) No 987/2009 [R2].

### 2.2. Legal Base

This Business Use Case document's legal base is described in the following Regulations

1. Implementing Regulation (EC) No 987/2009 Article 2 (2) [R2]
2. Implementing Regulation (EC) No 987/2009 Article 52(1) (a) [R2]

The following matrix specifies the SEDs that are used in this Business Use Case and documents the articles that provide the legal basis for each SED.

	<b>Implementing Reg. (987/09)</b>	
	<b>2 (2)</b>	<b>52(1)(a)</b>
H061	✓	✓
H062	✓	✓

*Table 1: SED – Legal base relationship matrix*

### 3. Actors & Roles

This chapter captures details of the actors which are important to understanding the different types of system users. An actor is anyone or anything that exchanges data with the business system. An actor can be a user, external hardware, or another system.

The overarching description of each actor described in this Business Use Case can be found in the Glossary. Below you will find a short description which provides further clarity of this actor within the context of this Business Use Case.

Actor name	Description
<b>Case Owner</b>	In this BUC the Case Owner is the Competent Institution in a Member State that Exchange of/Request for confirmation of Personal Identification Number (PIN).
<b>Counterparty(ies)</b>	In this BUC the Counterparty(ies) is the Competent Institution in the (other(s)) Member State(s) that receives the Case Owner's Institution's PIN and reply confirming/not confirming the identification of the person.



## 4. Use Case

### 4.1. RUP Table Representation

<b>Use Case ID:</b>	<b>H_BUC_05</b>		
<b>Use Case Name:</b>	H_BUC_05 – Exchange of PINs		
<b>Created By:</b>	Mirko Brusca	<b>Last Updated By:</b>	Novella Bacelli
<b>Date Created:</b>	24/03/2014	<b>Last Revision Date:</b>	31/08/2021
<b>Actors:</b>	Case Owner Counterpart(y)(ies)		
<b>Description:</b>	<p>Under Article 52 (1) (a), Member States are supposed to exchange or make available the elements for identifying persons who change from one applicable national legislation to another and ensure that the personal identification number (PIN) for the purpose of social security administration should be provided with the information.</p> <p>This BUC is mainly used for the exchange of PIN's for aims of implementing Article 52 (1) (a) of Regulation (EC), meaning that in other sectors this BUC should not be used, but instead sectorial SEDs if they exist.</p> <p>Normally the goal of this BUC is not to perform exchanges of historical data.</p> <p>The Competent Institutions of Member States address the participant(s) to a Business Use Case Exchanging/Requesting Personal Identification Number for confirmation. The Counterparty(ies) confirms/do not confirms of the identification of the insured person.</p>		
<b>Trigger:</b>	The Case Owner sends the Exchange of/Request for confirmation of Personal Identification Number to the Counterparty(ies).		
<b>Preconditions:</b>	The person has been insured in more than one Member State, and PIN's should be exchanged with each other.		
<b>Post conditions:</b>	<p>These are the possible post-conditions at the end of this BUC:</p> <ul style="list-style-type: none"> <li>- The identification of the person is confirmed or could not be confirmed.</li> <li>- The identification PIN's for the purpose of social security administration has been provided or could not be provided.</li> </ul>		
<b>Main Scenario:</b>	<b>Identify Participant</b>		

	<ol style="list-style-type: none"> <li>1. The Case Owner identifies the EU Member State(s) where the person concerned was previously insured.</li> <li>2. The Case Owner identifies the Competent Institution (the Counterparty(y)(ies)) in each Member State where the person was previously insured;</li> </ol> <p><b>Send Request/confirmation of PIN</b></p> <ol style="list-style-type: none"> <li>3. The Case Owner fills in a Notification/Request of Personal Identification Number (<b>H061</b>) by entering as many information as possible about the concerned person;</li> <li>4. The Case Owner sends the <b>H061</b> SED to the Counterparty(ies);</li> </ol> <p><b>Process Request</b></p> <ol style="list-style-type: none"> <li>5. The Counterparty(y)(ies) will receive the Notification/Request of Personal Identification Number (<b>H061</b>) SED, after which the investigation will start;</li> <li>6. The Counterparty(y)(ies) fills in a Confirmation/Reply to Request of Personal Identification Number (<b>H062</b>) SED by entering all known information about the concerned person.</li> <li>7. The Counterparty(y)(ies) sends the <b>H062</b> to the Case Owner ad to all other participants.</li> <li>8. The Case Owner and all other participants receive <b>H062</b> SED.</li> <li>9. The use case ends here</li> </ol>
<p><b>Alternative Scenarios:</b></p>	<p><b><u>The Following Branches determine the use of Horizontally Defined Processes within this Business Process</u></b></p> <p><b><u>Branch 1: At any step after step [4], the Counterparty identifies that more information is needed to process the Notification/ to process the request</u></b></p> <ol style="list-style-type: none"> <li>1. The Counterparty starts H_BUC_01 – Ad-hoc Exchange of Information;</li> <li>2. This Use Case resumes at [step 6].</li> <li>3. [This Branch] Ends</li> </ol> <p><b><u>The Following Branches Determine the use of Administrative Processes within this Business Process</u></b></p> <p><b><u>Branch 2: at any step after step [4] the Case Owner may choose to advise all recipients of their H061 that it is invalid under Art 5 of 987/09</u></b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes business use case AD_BUC_06_Invalidate SED;</li> <li>2. Optionally, the Case Owner fills a Notification/Request of Personal Identification Number (H061) by entering all the required data;</li> <li>3. Optionally, the Case Owner sends the H061, including any attachments, to all Counterparties;</li> <li>4. [This Branch] Ends</li> </ol>

	<p><b><u>Branch 2b:</u> at any step after step [7], the Counterparty may choose to advise all recipients of their H062 that it is invalid under Art 5 of 987/09</b></p> <ol style="list-style-type: none"> <li>1. The Counterparty executes business use case AD_BUC_06_Invalidate SED;</li> <li>2. Optionally, the Counterparty fills a Confirmation/Reply to Request of Personal Identification Number (H062) by entering all the required data;</li> <li>3. Optionally, the Counterparty sends the H062, including any attachments, to all participants;</li> <li>4. [This Branch] Ends</li> </ol> <p><b><u>Branch 3:</u> at any step after step [4] the Case Owner chooses to send an update version of H061</b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes business use case AD_BUC_10_Update SED;</li> <li>2. [This Branch] Ends</li> </ol> <p><b><u>Branch 3b:</u> at any step after step [7] the Counterparty chooses to send an update version of H062</b></p> <ol style="list-style-type: none"> <li>1. The Counterparty executes business use case AD_BUC_10_Update SED;</li> <li>2. [This Branch] Ends</li> </ol> <p><b><u>Branch 4:</u> from step [5] the Case Owner optionally chooses to send a Reminder to another Participant for the return of the information he was expecting but did not receive yet</b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes Business Use Case AD_BUC_07_Reminder;</li> <li>2. [This Branch] Ends</li> </ol> <p><b><u>Branch 5:</u> at any step after step [4], any Participant may optionally choose to Request another Participant who previously sent him information to provide clarification about the data that they have sent.</b></p> <ol style="list-style-type: none"> <li>1. The Participant executes Business Use Case AD_BUC_08_Clarify Content;</li> <li>2. [This Branch] Ends</li> </ol> <p><b><u>Branch 6:</u> At any step after step [2], the Case Owner may choose to add another Participant in the case:</b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes Business Use Case AD_BUC_03_Add Participant;</li> <li>2. [This Branch] Ends</li> </ol> <p><b><u>Branch 7:</u> At any step after step [4], the Counterparty may choose to add another Participant in the case:</b></p> <ol style="list-style-type: none"> <li>1. The Counterparty executes Business Use Case AD_BUC_03_Add Participant;</li> <li>2. [This Branch] Ends</li> </ol> <p><b><u>Branch 8:</u> At any step after step [2], the Case Owner may choose to remove another participant in the case:</b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes Business Use Case AD_BUC_04_Remove Participant;</li> <li>2. [This Branch] Ends</li> </ol>
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	<p><b>Branch 9: At any step after step [4], any Counterparty may choose to remove himself in the case</b></p> <ol style="list-style-type: none"> <li>1. The Counterparty executes Business Use Case AD_BUC_04_Remove Participant;</li> <li>2. [This Branch] Ends</li> </ol>
	<p><b>Branch 10: At any step after step [2], the Case Owner may choose to forward this Business Process to a new Case Owner within their MS who assumes responsibility for handling it:</b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes Business Use Case AD_BUC_05_Forward Case;</li> <li>2. [This Branch] Ends</li> </ol>
	<p><b>Branch 11: At any step after step [4], any counterparty may choose to forward this Business Process to a new participant within their MS who assumes responsibility for handling it:</b></p> <ol style="list-style-type: none"> <li>1. The Counterparty executes Business Use Case AD_BUC_05_Forward Case;</li> <li>2. [This Branch] Ends</li> </ol>
<b>Includes:</b>	See section 4.4
<b>Special Requirements:</b>	<p><b>SR1:</b> H061 can be sent only once (even though updates can be created for this SED).</p> <p><b>SR2:</b> Rules about the invoking of Branches:</p> <p><u>Administrative</u></p> <p>[Branch 1] – May be invoked more than once</p> <p>[Branch 2] – May be invoked more than once</p> <p>[Branch 2b] – May be invoked more than once</p> <p>[Branch 3] – May be invoked more than once</p> <p>[Branch 3b] – May be invoked more than once</p> <p>-[Branch 4] – May be invoked more than once</p> <p>[Branch 5] – May be invoked more than once</p> <p>-[Branch 6] – May be invoked more than once</p> <p>[Branch 7] – May be invoked more than once</p> <p>[Branch 8] – May be invoked more than once</p> <p>[Branch 9] – May be invoked more than once</p> <p>[Branch 10] – May be invoked more than once</p>

	<p>[Branch 11] – May be invoked more than once</p> <p><b>SR3:</b> Rules about the destination for each SED Type:</p> <p>- H062 has <b>multiple destination recipients</b>, the Case Owner + all other Counterparties and it is sent only as reply of H061.</p>
<b>Assumptions:</b>	N/A
<b>Notes and Issues:</b>	N/A

## 4.2. Request – Reply SEDs

The following table specifies and SED that have a logical pairing to one another, usually this is known as a request-reply pair.

REQUEST SED	REPLY SED(s)
H061	H062

## 4.3. Attachments Allowed

The following table specifies whether attachments are permitted to be included when sending a SED type.

SED	Attachments
<b>H061</b>	Allowed
<b>H062</b>	Allowed

## 4.4. Artefacts used

The following table specifies the artefacts that are used in this Business Use Case.

Artefact name	Artefact type
<b>H061</b>	<b>SED</b>
<b>H062</b>	<b>SED</b>
<b>H_BUC_01_Subprocess</b>	<b>BUC spec</b>
<b>AD_BUC_03_Subprocess – Add Participant</b>	<b>BUC spec</b>
<b>AD_BUC_04_Subprocess – Remove Participant</b>	<b>BUC spec</b>
<b>AD_BUC_05_Subprocess – Forward Case</b>	<b>BUC spec</b>
<b>AD_BUC_06_Subprocess – Invalidate SED</b>	<b>BUC spec</b>
<b>AD_BUC_07_Subprocess – Reminder</b>	<b>BUC spec</b>
<b>AD_BUC_08_Subprocess – Clarify Content</b>	<b>BUC spec</b>
<b>AD_BUC_10_Subprocess – Update SED</b>	<b>BUC spec</b>
<b>AD_BUC_11_Subprocess – Business Exception</b>	<b>BUC spec</b>

Artefact name	Artefact type
<b>AD_BUC_12_Subprocess – Change of Participant</b>	<b>BUC spec</b>

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## **5. Business Processes**

This chapter describes the Business Use Case Exchange of Pins, using BPMN 2.0.

### **5.1. Case Owner – Counterparty**

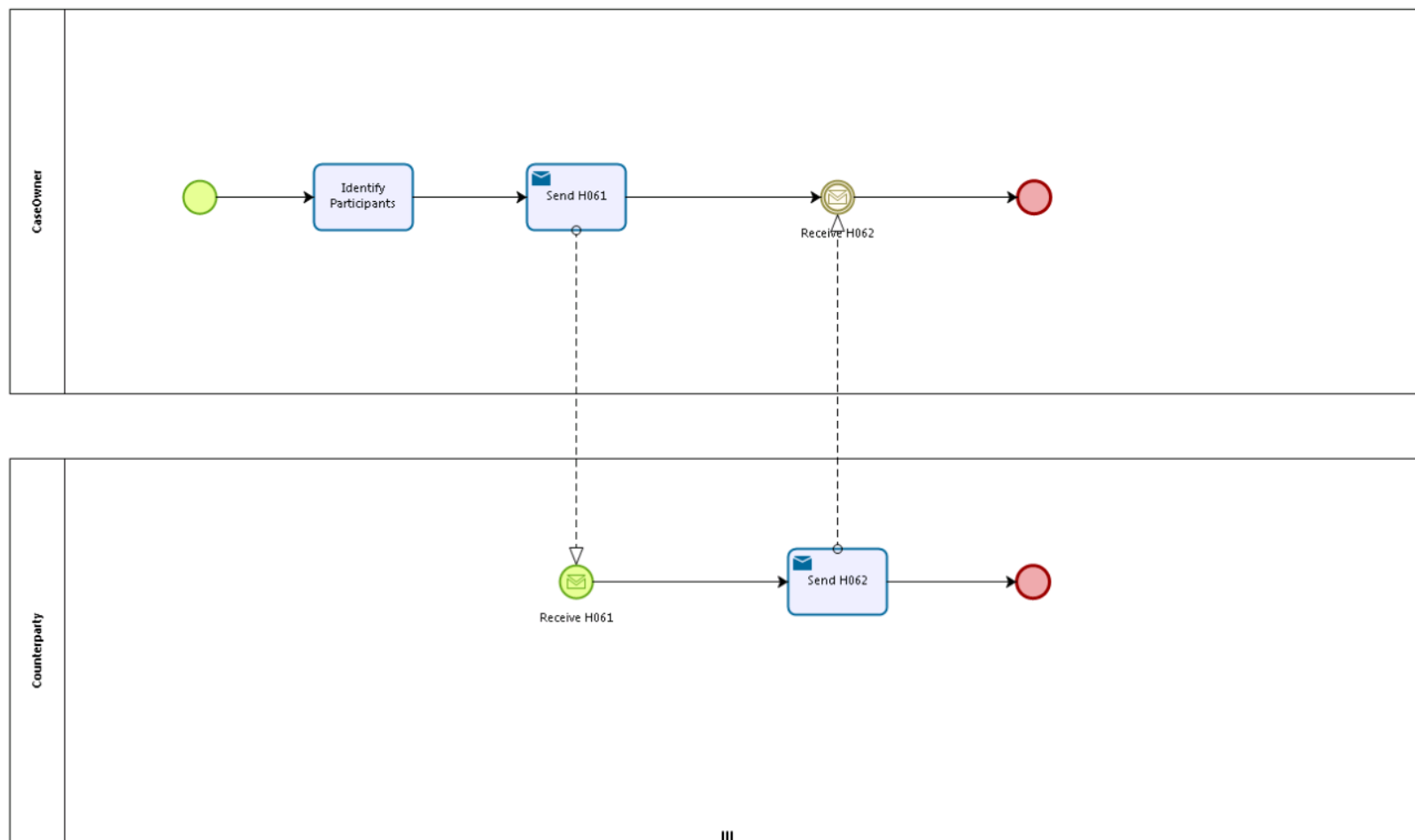


Figure 1: depicts the use case end-to-end, from a high level, using the BPMN 2.0 collaboration diagram.



## 5.2. Sub Processes

Not Applicable.

## 6. Appendices

### 6.1. Issues

The issues listed below need to be added to the issue log and discussed at the proper communication level.

#	Issue date	Description	Solution	Close date
1	26/05/2015	Even though the following administrative SED's are possible to be used in the specification of the BUC, they ought to be tested during the Dry-run activities in order to later decide/evaluate their relevance inside this BUC:  - Clarify SED - Invalidate SED - Reminder SED	Usage of Administrative BUCs seems to be supported by testing of the Dry run activities.	31/03/2016
2	26/08/2015	Should the exchange of PINs remain in the Horizontal sector or should it be integrated within the pension sector, as it is initially designed to accelerate the pension calculation process according to Article 52 of Regulation 987/2009.	AHGs decided to include this process inside the Horizontal sector.	