



# **EESSI – CDM 4.4**


## **S - Sickness**

### **S\_BUC\_24 - v4.4.0**

**Aggregation of Periods – Insurance Risk Type:  
Sickness, Paternity and Maternity**

***BUC Specifications***

## Document Control Information

Document Control	Value
Project Title	Electronic Exchange of Social Security Information (EESSI)
Document Name	S_BUC_24_Mainproc_Specification_v4.4.0.docxx
Document Category	BUC Specifications
Document Version	v4.4.0
Revision	-
CDM Package	CDM 4.4.0 Package
Publication Date	06/12/2024
Document Status	Final
Sensitivity (TLP) Distribution terms	<p>Traffic Light Protocol (TLP) = "GREEN"</p> <div data-bbox="737 972 1171 1173" data-label="Image">  </div> <p>The distribution of this document is done strictly in line with the Traffic Light Protocol (TLP) established by the European Commission's note AC 790/15 REV for the EESSI project documentation.</p> <p>In line with the note AC 790/15 REV, this document is labelled as TLP = "Green". Therefore, it can be circulated widely within the EESSI community. However, the document or the information herein may not be published or posted on the Internet, nor released outside of the EESSI community.</p>
Connected/Embedded Files	None
Authors	European Commission, DG EMPL A4, EESSI BA
Revised by	European Commission, DG EMPL A4, EESSI BA
Approved by	European Commission, DG EMPL A4, EESSI PMO

## Document history

Version	Date	Short Description of Changes
v0.1	13/10/2015	First draft of the document
v0.2	11/12/2015	<p>Updated based on comments and remarks received from Ad Hoc Group Members</p> <p>Section 4.1: RUP Table Representation</p> <p>Branch 2 is added (H_BUC_01) available for Case Owner</p> <p>Branch 3 is added (Forward) for Counterparty</p> <p>Section 4.4: RUP UC Diagram Representation updated</p> <p>Section 5.1 Case Owner BPMN diagram updated</p> <p>Section 5.2 Counterparty BPMN diagram updated</p> <p>Document has been updated in order to be in line with presentation and content as proposed for the approval by the Administrative Commission</p> <p>Section 2.1: last sentence is removed</p> <p>Section 2.2 minor updates</p> <p>Section 4.2: Request – Reply SEDs added</p> <p>Section 4.3: Attachments allowed added</p> <p>Section 4.5: SED and Sub-process versioning added</p> <p>Section 5.4: Main scenario is removed</p> <p>Section 6.1 is removed while replaced by section 4.5</p>
v0.2.1	15/01/2016	<p>Document has been updated with remarks / questions and feedback received from Germany and Belgium.</p> <p>Minor changes which do not impact the process itself have been implemented through the document.</p> <p>Section 4.1: RUP Table Representation</p> <p>Step 2: Reference to "Residence Member State(s)" is removed see comment from Belgium in section 6.1</p> <p>Step 3: "and" has been added at the end of each sentence</p> <p>Step 6: details have been added for the periods</p> <p>Special rule: Aggregation periods type benefits in cash or benefits in kind is removed</p> <p>Section 5.3 Called sub-processes</p> <p>Identify participants diagram has been changed</p> <p>Version number of the document has been changed to be in line with the convention M.m.p where:</p> <ul style="list-style-type: none"> <li>- M = Major version (e.g. Approved by AC)</li> <li>- m = Minor version (e.g. changes in the process)</li> <li>- p = Patch version (e.g. wording...any changes without any</li> </ul>

		impact on the process itself)
v0.2.2	09/02/2016	Comments received from Germany have been implemented Section 2.1 is renamed Section 3 Actors and Roles Description for Case Owner is updated Section 4 RUP Table Representation Description is updated SR0 is updated
v0.3.0	22/06/2016	Alignment to the standard description and layout of the BUC.
v0.4.0	17/08/2016	Comments received from AC have been implemented.
v0.99.0	21/09/2016	Candidate for AC approval. Remaining AC comments will be discussed during the AHG meeting the 4 <sup>th</sup> October 2016. More details related to these comments can be found in section 6.1 of this document
v0.99.1	17/11/2016	Last comments received from Germany and agreed by AHG members have been accepted in the document. As agreed by AHG members "Reminder" has been added for Case Owner and Counterparty. Section 4.1 has been updated (Branch 4 and 5 added) Section 4.4 has been updated (Reminder is added) Section 4.5 SED and Sub-process Versioning (Reminder is added) Submitted for AC Approval
v1.0.0	15/12/2016	AC Approved Version
v1.0.1	03/07/2017	-Included BPMN picture in section 5 with the version of the diagram - removed Use Case diagram
v1.0.2	08/02/2018	Section 4.1: as requested by the AHG, removed the references to the fields or sections of the SEDs. Section 4.1: replace 'Flow' by 'Case'
v4.1.0	08/08/2018	- Section 4.4: merged 2 tables (for SED & for Subprocesses) into 1 Artefact table. - Version adaptations to release 4.1.0
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	Update Branch 2 title to allow the CO to use the H_BUC_01 sub-process also after sending S040 and before receiving the S041, according to the EESSI-7337 CR.

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## 1. Introduction

### 1.1. Purpose

The purpose of this document is to construct an external view 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 realised 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 utilises. 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 of the Sickness' sector process concerning the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity. The different elements like use case description, business actors, and business process as well as supporting UML diagrams and BPMN models pertaining to the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity.

### 1.3. Definitions, Acronyms and Abbreviations

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

### 1.4. References

#	Document Type	Document Name
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 the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity business process. This chapter gives a short and detailed description as well as a reference to the business process' legal base.

Chapter 3 lists the actors involved in the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity business process.

Chapter 4 describes in detail the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity business process based on the RUP use case template, as well as the relationship to other use cases.

Chapter 5 describes the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity business process using business process modelling notation (BPMN).

## 2. Description

### 2.1. Business Scenario

As the regulation dictates (Art. 6 of 883/04 [R1] and Art. 12 of 987/09 [R2]), the Competent Institution of a Member State should take into account periods of insurance, employment, self-employment or residence completed under the legislation of any other Member States as though they were periods completed under the legislation it applies.

In this particular case, the Competent Institution of a Member State shall contact the institutions of Member States to whose legislation the person concerned has also been subject in order to determine all the periods completed under their legislation.

In accordance with the new regulations, information about relevant periods of insurance, employment, self-employment or residence can only be requested by the Competent Institution. There is no portable document which could be issued directly to the person concerned.

### 2.2. Legal Base

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

- basic Regulation (EC) No 883/2004 [R1];
- implementing Regulation (EC) No 987/2009 [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.

SED	Basic Reg. (883/04)	Implementing Reg. (987/09)
	6	12(1)
S040	✓	✓
S041	✓	✓

Table 1: SED – Legal base relationship matrix



### 3. Actors & Roles

This chapter captures details of the actors which are important to understand 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 of a Member State where the person is insured. The Case Owner contacts the institution of another Member State to determine all the periods completed under its legislation.
<b>Counterparty</b>	In this BUC the Counterparty is the Institution of another Member State whose legislation the insured person has also been subject to.

Table 2: Actors & Roles

## 4. Use Case

### 4.1. RUP Table Representation

<b>Use Case ID:</b>	<b>S_BUC_24</b>		
<b>Use Case Name:</b>	Aggregation of Periods – Insurance Risk Type: Sickness, Paternity and Maternity		
<b>Created By:</b>	EESSI BA Team	<b>Last Updated By:</b>	EESSI BA Team
<b>Date Created:</b>	13/10/2015	<b>Publication Date:</b>	06/12/2024
<b>Actors:</b>	Case Owner Counterparty		
<b>Description:</b>	<p>This case aims at exchanging information needed for the aggregation of periods of insurance, employment, self-employment or residence completed under the legislation of another Member State other than the Competent Member State.</p> <p>In this particular case, the Competent Institution of a Member State shall contact the institution of a Member State to whose legislation the person concerned has also been subject in order to determine all the periods completed under its legislation.</p> <p>The periods completed in another Member State should be taken into account in the Competent Member State as though they were completed under its legislation.</p> <p>This case concerns only one insurance risk type at a time (i.e. sickness, maternity or paternity) and one Member State at a time.</p>		
<b>Trigger:</b>	The Competent Institution whose legislation makes the acquisition, retention, duration or recovery of the right to sickness, maternity and equivalent paternity benefits conditional upon the completion of periods, needs a confirmation of relevant periods that the person concerned claims to have completed under the legislation of another Member State.		
<b>Preconditions:</b>	<p>The insured person claims to have completed periods of insurance, employment, self-employment or residence under the legislation of (a) Member State(s) other than the Competent Member State.</p> <p>These periods should be taken into account as though they were completed under the legislation of the Competent Member State.</p>		
<b>Post Conditions:</b>	<p>The Competent Member State is informed that the person concerned did not complete any periods or, that the person concerned completed the requested periods under legislation of (a) Member State(s) other than the Competent one.</p> <p>If the insured person has completed the requested periods, they can be aggregated.</p>		
<b>Main Scenario:</b>	<p><b>Identify Participants</b></p> <ol style="list-style-type: none"> <li>1. The Case Owner (Competent Member State's Institution) identifies the Member State(s) where the person has completed periods of insurance, employment, self-employment or residence;</li> <li>2. The Case Owner then identifies the correct institution (Counterparty). There will be only one Counterparty. The Case Owner and the Counterparty are herein collectively referred to as the Participants.</li> </ol> <p><b>Process to Request for Insurance Periods: Sickness, Maternity or Paternity</b></p> <ol style="list-style-type: none"> <li>3. The Case Owner fills in the Request for Periods – Insurance Risk</li> </ol>		

	<p>Type: Sickness and Maternity (S040) by entering the required information;</p> <p>S040 is filled-in for one type of benefits, one category of benefits, one insured person, one Member State and one institution. The Case Owner will possibly execute this case multiple times to request all completed periods in different Member States for each type of benefits and by category for an insured person. This way of working promotes smooth communication and clearly defines the scope of responsibility of the institutions involved;</p> <p>4. The Case Owner sends the S040 to the Counterparty.</p> <p><b>Process for the Reply to Request for Periods: Sickness, Paternity and Maternity</b></p> <p>5. The Counterparty receives the S040;</p> <p>6. The Counterparty fills in the Reply to Request for Periods – Insurance Risk Type: Sickness, Paternity and Maternity (S041) to inform the Competent Institution that the person concerned did not complete any periods under its legislation or to confirm the requested periods completed by the insured person under its legislation. The information provided in the Section 4 is linked to periods that strictly correspond to the nature (benefits in kind or in cash) and to the type (sickness, maternity or paternity benefits) requested in the S040.</p> <p>7. The Counterparty sends the S041 to the Case Owner;</p> <p>8. The Case Owner receives the S041;</p> <p>9. This use case ends here.</p>
<p><b>Alternative Scenarios:</b></p>	<p><b><i>The Following Branches determine the use of Horizontally Defined Processes within this Business Process</i></b></p>
	<p><b><i>Branch 1: between [step 5] and [step 6], in case of ambiguities, the Counterparty may optionally choose to request AdHoc Information from the Case Owner</i></b></p> <p>1. The Counterparty executes business use case <b><i>H_BUC_01 – Adhoc Exchange of Info;</i></b></p> <p>2. [This Branch] Ends.</p>
	<p><b><i>Branch 2: After [step 4] the Case Owner may optionally choose to request AdHoc Information from the Counterparty</i></b></p> <p>1. The Case Owner executes business use case <b><i>H_BUC_01 – Adhoc Exchange of Info;</i></b></p> <p>2. [This Branch] Ends.</p>
	<p><b><i>The Following Branches determine the use of Administrative Defined Sub-Processes within this Business Process</i></b></p> <p><b><i>Branch 3: At [step 5] the Counterparty may optionally choose to Forward this Business Process to another Competent Institution within its MS who assumes responsibility for handling it</i></b></p> <p>1. The participant executes business use <b><i>AD_BUC_05 – Forward Case;</i></b></p>

	2. [This Branch] Ends.
	<p><b><i>Branch 4: After Branch 1 [step 1] Counterparty may optionally choose to send a reminder in order to receive the answer to Ad Hoc Information expected and not yet received.</i></b></p> <ol style="list-style-type: none"> <li>1. The Counterparty executes business use case <b>AD_BUC_07_ - _Reminder;</b></li> <li>2. [This Branch] Ends</li> </ol>
	<p><b><i>Branch 5: At any step after [step 4] Case Owner may optionally choose to send a reminder in order to receive Information expected and not yet received.</i></b></p> <ol style="list-style-type: none"> <li>1. The Case Owner executes business use case <b>AD_BUC_07_ - _Reminder;</b></li> <li>2. [This Branch] Ends</li> </ol>
<b>Exceptions:</b>	None
<b>Includes:</b>	See diagram at part 4.4
<b>Special Requirements:</b>	<p><b>SR0:</b> General Rule The case can concern only one person.</p> <p>The case can concern, only one</p> <ul style="list-style-type: none"> <li>• Other Member State than the Competent Member State;</li> <li>• Categories of benefits: sickness, maternity or paternity</li> </ul> <p>Each case can be handled by separate institutions.</p> <p><b>SR1:</b> Rules about the invoking of Branches:</p> <p><u>Horizontal</u> [Branch 1] – May be invoked more than once [Branch 2] – May be invoked more than once</p> <p><u>Administrative</u> [Branch 3] – May be invoked once only when the first SED is received by Counterparty and before sending the answer [Branch 4] – May be invoked more than once [Branch 5] – May be invoked more than once</p>
<b>Assumptions:</b>	N/A
<b>Notes and Issues:</b>	N/A

## 4.2. Request – Reply SEDs

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

REQUEST SED	REPLY SED(s)
<b>S040</b>	S041

### 4.3. Attachments Allowed

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

SED	Attachments
<b>S040</b>	Allowed
<b>S041</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>S040</b>	SED
<b>S041</b>	SED
<b>H_BUC_01_Subprocess</b>	BUC
<b>AD_BUC_05_Subprocess – Forward Case</b>	BUC
<b>AD_BUC_07_Subprocess – Reminder</b>	BUC
<b>AD_BUC_11_Subprocess – Business Exception</b>	BUC
<b>AD_BUC_12_Subprocess – Change of Participant</b>	BUC

## 5. Business Processes

This chapter describes the Business Use Case the Aggregations of Periods – Insurance Risk Type: Sickness, Paternity and Maternity using BPMN 2.0.

### 5.1. Case Owner and Counterparty

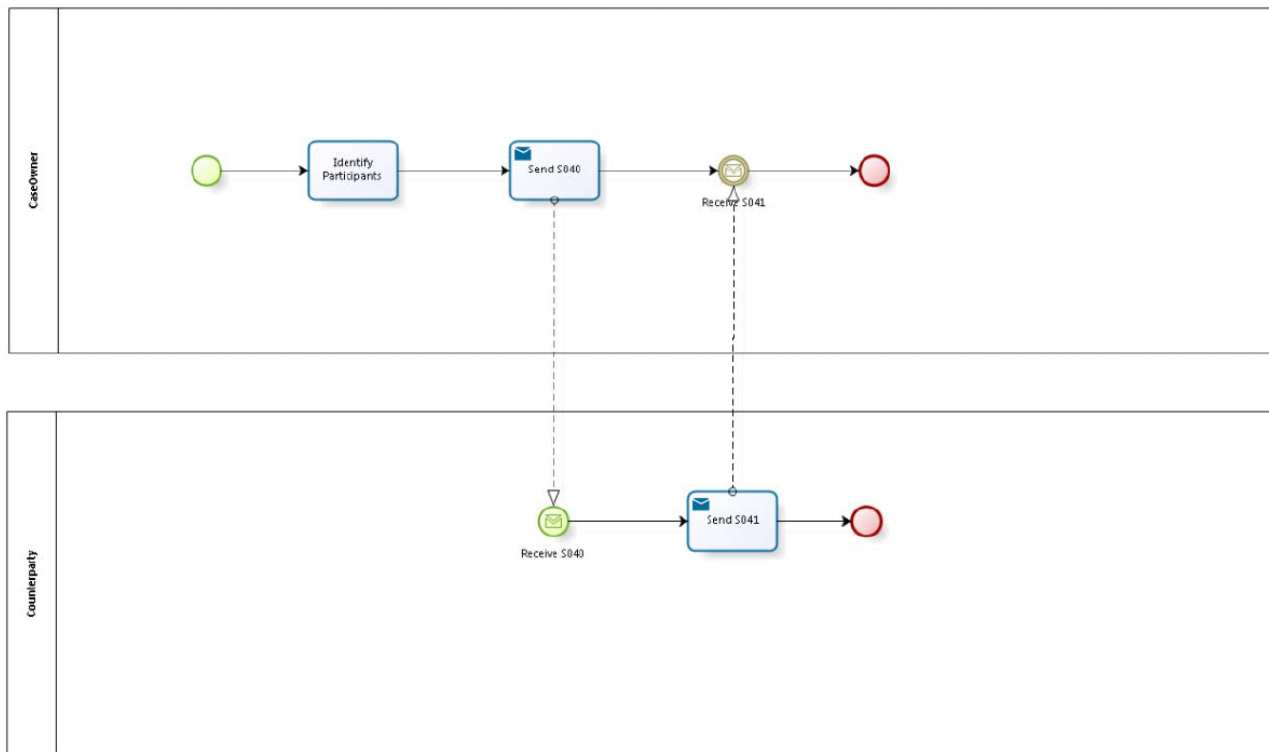


Figure 1: depicts the use case end-to-end, from a high level, using the BPMN 2.0 collaboration diagram

### 5.2. Sub Processes

Not applicable.

## 6. Appendices

### 6.1. Issues

#	Issue date	Description	Replies	Action/Resolution	Close date
1	11/12/2015	Forward option	Should be available as agreed at the beginning of the process	Document is updated	16/12/2015
2	11/12/2015	H_BUC_01 should be added for the Case Owner  <b>Comment received from CZ:</b> It should be possible to start the horizontal process or sub process anytime throughout the whole BUC by every party. This allows counterparty to inform about its incompetence for proceeding of SED, or about probably more suitable institution. No other admin messages are needed.	H_BUC_01 should be added for the Case Owner	Document is updated	16/12/2015
3	11/12/2015	What about reject option?	We do not support this option, because this "rejection" SED in fact provides nothing more than horizontal information. H001 can serve the same purpose.	No action required	11/12/2015
4	15/01/2016	Section 4.1 – step 1  Reference to "Residence Member State(s)" is removed.  Comment received from Belgium  Not necessarily: e.g. if insured person was a frontier worker and lives in FR but worked in LU, then a request for information on the insurance periods should be sent to LU			

#	Issue date	Description	Replies	Action/Resolution	Close date
		and not FR. <b>Proposal:</b> delete "Residence Member State)"			
5	15/01/2016	Section 4.1 – Step 3 Comment received from Belgium: Title of SED S040 should be modified by adding reference to paternity, cf. texts of the Regulations and box 4.2 of SED S040. <b>Proposal:</b> title of SED S040 to be adapted by adding reference to Paternity			
6	21/09/2016	AD_BUC_06_Subprocesses – Invalidate SED should be added for the case owner - if the S040 was sent by mistake it have to be possible to invalidate such message. If there is no such option, the case is pending and stays active. This AD_BUC_06 should be used only before the reply on S041 is received. Because after that there is no point of invalidation.	AHG members suggest adding an additional refusal code in the S041. If this additional refusal code is part of the SED, Admin BUC "Reject" is not needed anymore.	No change in the document	25/11/2016
7	21/09/2016	title (and all places it is mentioned) Please change into: Aggregation of Periods - Insurance Risk Type: Sickness, Maternity/Paternity - in accordance with Article 3 of BR we have sickness benefits, maternity benefits and equivalent paternity benefits	AHG members agreed on the suggestion.	The title of the BUC has been changed in the document.	25/11/2016
8	21/09/2016	12 / 4.1 / Alternative scenarios	During the AHG meeting	"Reminder" is added for	25/11/2016



#	Issue date	Description	Replies	Action/Resolution	Close date
		<p>If it is true that Reminder field will be deleted from the SED H001, then the AD_BUC_07_Subprocesses – Reminder should be added both to allow the Case Owner to send a reminder after S040 and the Counterparty to send a reminder after H001 (request for ad hoc info).</p> <p>If it is not true, we have some doubts towards the fact that 2 types of exchange of information have been put together in branch 1, i.e. ad hoc exchange of information and reminder using the same H_BUC_01. It is worth to note that reminder has its own dedicated AD BUC.</p>	<p>November, AHG members agreed to introduce the Admin sub-process "Reminder" in all the "Request - Answer" BUCs and in BUCs in which H_BUC_01 is used</p>	Case Owner and Counterparty	
9	21/09/2016	<p>Please, add AD_BUC_09_Subprocesses – Reject SED for situations when the SED S040 is sent to a wrong institution which cannot forward it within the MS (the AHG proposes to use H001 instead which is a longer one to be filled in)</p>	<p>AHG members suggest handling this remark when reviewing the SED. They will foresee in the SED a similar function that the "Reject".</p>	No change in the document	25/11/2016
10	21/09/2016	<p>Please consider adding AD_BUC_10_Subprocesses – Update SED at least for Case Owner after sending S040. The possibility to update S040 should be limited by the receipt of a reply on S041.</p>	<p>AHG members suggest starting a new case instead of updating the SED previously sent.</p>	No change in the document	25/11/2016
11	21/09/2016	<p>Page 11/Par. 3/line 14 of par. 3</p> <p>Please consider: Instead of sending</p>	<p>There is no need to have multilateral BUCs. In principle, the Case Owner contacts the</p>	No change in the document	25/11/2016

#	Issue date	Description	Replies	Action/Re solution	Close date
		(executing) this BUC multiple times, improvement may be done by making this SED (S040) multilateral, i.e. A clerk prepares only 1 SED but sends it to several MSs. Replies should be received only by the sender of S040.	previous Member State. It is only if the period is not covered, that the Member State just before will be contacted.		
12	25/11/2016	BPMN diagrams will be updated.  "Reminder" will be added for Case Owner and Counterparty		Scheduled for update.	