European Commission

EU Customs BPM in ARIS

User Guide

UCC
SIMPLICITY SERVICE SPEED
A MODERN FRAMEWORK
FOR CUSTOMS AND TRADE

Taxation and

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1 INTRODUCTION

This document provides the reader with an overview of the management techniques and tools, existing content of the EU Customs business process models (BPM), how this content is structured and what the principles are behind this. It is intented to help the involved stakeholders to understand the scope of the EU Customs Business Process Models in the context of DG Taxud. The document also describes in detail the basic functionalities enabling the user to access and handle the required models.

1.1 Target Audience

The target audience for this document or parties involved includes:

- All National Administration staff that are requested to review EU Customs BPM in ARIS;
- DG TAXUD Business and IT units;
- Staff from other DGs and members of the Trade community;
- It may also be read by project managers, team members and stakeholders to understand the EU Customs BPM implementation in the ARIS tool.

1.2 Scope of the Document

This document contains the descriptions of the use of all the functionalities to be used in the ARIS Publisher tool without taking into account the modelling techniques.

1.3 Structure of this Document

This document is structured as follows:

- Chapter 2: An introduction to EU Customs BPM in ARIS explaining on the one hand what BPM is and on the other hand elaborating on the ARIS modelling tool that is being used;
- Chapter 3: An overview of EU Customs BPM explaining how the levelling approach for the EU Customs BPM looks like;
- Chapter 4: An explanation of the EU Customs BPM Folder Structure which provides insights in how the different diagrams and levels are organised and reflected in ARIS;
- Chapter 5: Basic functionalities of ARIS Publisher providing the user the right skills to access, open, navigate in and between models in the Publisher tool;
- Chapter 6: An overview of the associated ARIS diagrams per EU Customs BPM Level. The different diagrams are divided per level and for each diagram specific guidelines are given on how to access them via clicking through the models or via the navigation tree. A third section shows which information can be found on each diagram;

Due to the modular build of this User Guide, all chapters can be consulted separately. It is however strongly encouraged to read the User Guide in the aforementioned order as this will enhance the value for the user significantly.

1.4 Acronyms and Abbreviations

Abbreviation or Acronym	Description
BPM	Business Process Model
BPMN	Business Process Modelling Notation
CCC	Customs Code Committee
CIRCA	Communication and Information Resource Centre for Administrations, Businesses and Citizens
ECAS	European Commission Authentication Service
DG	Directorate General
ECG	Electronic Customs Group
EU	European Union
FAD	Function Allocation Diagram
HL	High-Level
IE	Information Exchange
IT	Information Technology
IS	Information System
L1	Level 1
L2	Level 2
L3	Level 3
L4	Level 4
MAD	Message Allocation Diagram
MCCIP	Modernised Customs Code – Implementing Provisions
MS	Member State(s)
NFR	Non Functional Requirement
POCS	Proof of Community Status
SOA	Service Oriented Architecture
STD	State Transition Diagram
UCC	Union Customs Code
VACD	Value-Added Chain Diagram
XML	Extensible Markup Language

Table 1: Acronyms and Abbreviations

1.5 Glossary

In the table below you will find the definition of the specific terms used throughout this document:

Area	Term	Description	Example
BPM	Business Requirement	Business Requirements highlight the main functionalities that must be performed to successfully complete a task, logical grouping of tasks or process.	"Register Application": The customs officer must register the application received somewhere, this includes the steps to assign a unique identifier and to establish the time limit for the application. Other examples: "Manage Additional Information", "Perform Controls"
BPM	Functional Requirement	A Functional Requirement describes a specific behaviour or function of the system. It describes what the system is supposed to accomplish.	The system must identify if the application concerns more than one Member State.
BPM	Non-Functional Requirement	A Non-Functional Requirement describes a criteria that can be used to judge the operation of a system. It specifies overall characteristics of a system.	Availability, Performance, Scalability, Installability, Volumetrics
Gen	Business process Area	A business area is a non-overlapping high-level group of business processes with characteristic skills, capabilities and requirements.	Import, Export
BPM	Business Process	A defined set of business activities that represent the steps required to achieve a business objective. It includes the flow and use of information and resources. This can be represented by a Business Process Model/Diagram or a Value Adding Chain Diagram.	
Gen	Core Process Area	Processes related to the movement of goods.	Core Process Area
Gen	Enabling Process Area	Processes related to the facilitation of the way of working of the processes in the core process area. The enabling process area covers the processes related to Economic Operator management, Risk & Fraud, Post-Clearance Controls and Supporting Services.	Enabling Process Area
ARIS	Task	A task is an activity that is included within a process. This can be high level task or	Perform Risk Analysis

Area	Term	Description	Example
		more specified. It is unspecified by whom (system or user) the task is to be performed.	
ARIS	Sub process	A sub process is a set of activities that have a logical sequence that meet a clear purpose. A sub process is a process in itself, whose functionality is part of a larger process. It is often used to clarify a (business) function in more detail.	Register Proof

Table 2: Glossary

2 EU CUSTOMS BPM IN ARIS

2.1 BPM

Experience over time has taught us that a lot of different interpretations and perceptions exists when we talk about BPM. Therefore we start by giving some general definitions of terms that are related to BPM.

Business Process Modelling is the practice whereby business processes of an organisation are graphically represented in process flows or process models. The benefit of graphically depicting process models is to enable common understanding and analysis.

A **Business Process** or flow should be considered as a collection or a set of activities, structured according to their logical order and dependence whose objective is to produce a specific result.

On a more organisational level, **Business Process Management** has become a major practice to integrate and manage all of their process efforts in a systematic manner. It can be defined as an approach according to which business processes are defined, documented, implemented and measured. Processes can then be improved in a structured way to become more client focused.

Applying the BPM practice has a positive impact in several business perspectives. The impact on the management perspective is a better structure and governance for key operational, management, and governance processes. In a strategic perspective, BPM is an enabler for businesses in defining strategic goals, and then measuring and managing performance against those goals. Concerning the holistic perspective, it employs methods, policies, metrics, management practices, and software tools to manage and optimize an organisation's activities and processes, providing a link between strategy, people, and enabling technology. Finally in a change perspective, it is about changing your organisation to become more customer focused.

Throughout the document the term BPM will be used to refer to the output of a Business Processing Modelling activity, namely a Business Process Model.

2.2 ARIS

To effectively create and manage the EU Customs BPM, the ARIS software suite has been selected. ARIS is a tool that is suitable for modelling and organising business processes in a collaborative manner.

This document will provide more detail about one of the software programs of the ARIS modelling suite, notably ARIS Publisher.

The ARIS Publisher is a process tool that guarantees availability of process information or IT architectures. More specifically, publications can be created from the modelling environment. In brief, a publication can be considered as a snapshot of the database taken at a particular moment in time. The models can then be viewed in a read-only mode using the ARIS Publisher software via easy accessible portals. Furthermore, via access rights it can easily be managed who gets access to what.[1]

The next chapter describes how the EU Customs BPM Levelling is used to organise models in ARIS.

[1] Read access can be requested at the relevant authorities.

3 EU CUSTOMS BPM OVERVIEW

Processes can be modelled on different levels of granularity (more or less details). You can compare this with a satellite that takes pictures from the earth. On the highest level (lowest level of detail) you can see a picture of the earth. When the satellite zooms in on the earth, you can see on the next level different pictures from the different continents: Europe, America, Asia. Each of these pictures contains more detail in comparison to the initial picture of the earth. Next, the satellite can further zoom in, and for example take a picture of Belgium. Again there is more detail shown.

A process hierarchy or process levelling works in the same way. On the highest level, you can see the general context (cfr. Earth). When you go to a lower level, you'll see more detail. The parent level is further elaborated.

Hierarchical modelling enables the development of a holistic view of the customs business. Each level consists of other models which presents more or less details according to the purpose it is trying to serve. A model that shows how a process should be implemented will be more detailed than a model showing how different processes are related to each other.

ARIS provides functionalities and model types that make it possible to organise business process models in such a hierarchical way.

The approach for the ARIS BPM levelling guidelines that was created for DG TAXUD encompasses four levels; the levels present both horizontal and vertical views of the customs business from the less detailed level of models (Level 1) to the most detailed level of models from a functional point of view (Level 4).

- **BPM Level 1**: This level is the highest level of abstractions and gives an overview of all business domains. The business domains are classified as enabling or core. The business process model on this level is called L1 Global BPM;
- **BPM Level 2**: This level provides 2 types of models for each business domain: an interaction diagram showing the interaction between the different business domains and a high level process model (called L2 High Level BPM) which provides the end-to-end overview of a domain with links to Level 3 processes;
- **BPM Level 3**: This level provides more detailed steps looking at how to achieve a specific business objective, via a more detailed business process model. It examines the steps taken and the interaction between actors in a process as inscribed in the customs legislation and international agreements. At this level requirements are linked to the tasks. The business process model on this level is called L3 Business Requirements BPM and aims to specify legal and business steps;
- **BPM Level 4**: This level provides more details of a Level 3 process model, explaining the process from a system point of view. BPM Level 4 shows which part of the (L3) process is automated and which part is not. The business process model on this level is called L4 Functional Requirements BPM and per each system there is a master process showing the standard flow of the Functional Requirements processes. Additionally at Level 4, the data models and (non-)functional requirements are added. The models on this level replace the existing functional specification documentation of DG TAXUD.

The detailed description of the different levels, their content and how they are linked altogether is given in chapter 6: EU Customs BPM Levels and Associated Diagrams.

The picture below illustrates which business process models are used at which level.

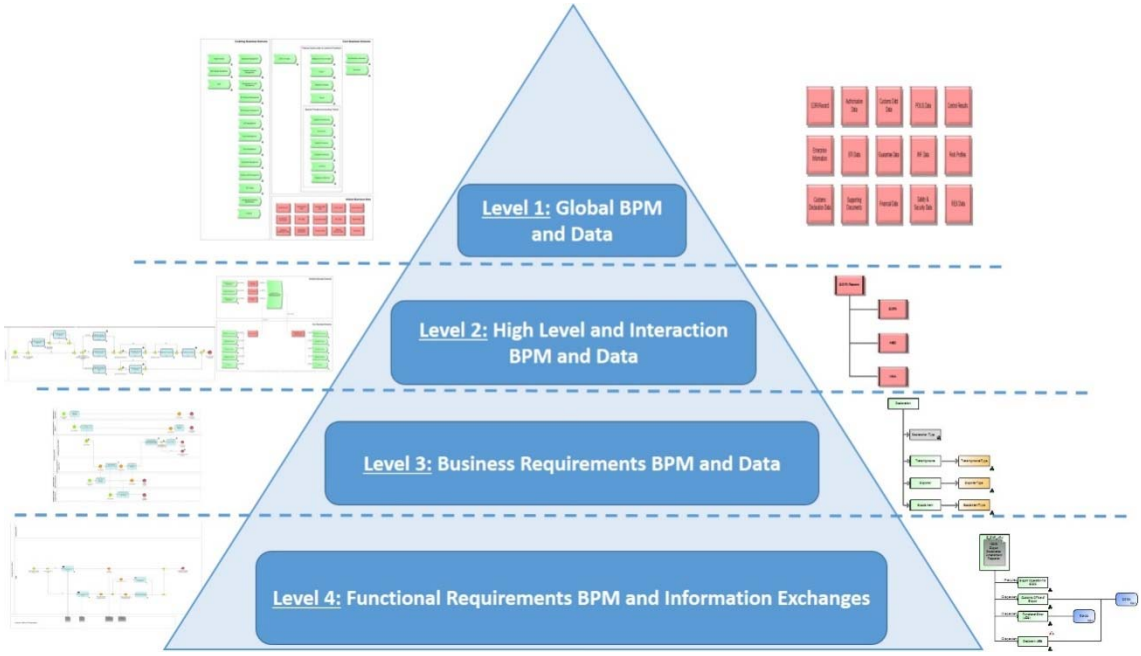

Figure 1: EU Customs BPM Levelling

The next chapter will elaborate on the EU Customs BPM Folder Structure and show how the different levels are organised in the folder structure of ARIS.

4 EU CUSTOMS BPM FOLDER STRUCTURE

The Customs Business Processes folder consists of five folders, each with a specific content and a specific objective.

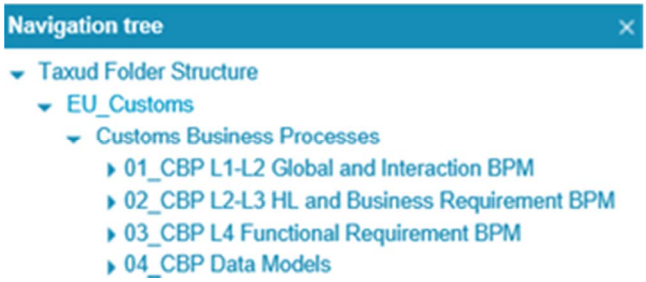

Figure 2: EU Customs BPM Folder Structure

Table 3 gives an overview of the content of each folder:

Folder Name	**Content**
01_CBP L1-L2 Global and Interaction BPM	This folder contains the models which give a high level overview of EU Customs Business Domains. In this folder is the L1 EU Customs Global BPM as well as all L2 Interaction BPMs. The content of this folder is generated in the "EU Customs Global and Interaction BPM Report".
02_CBP L2-L3 HL and Business Requirement BPM	This folder contains the models which give a specific overview of a business domain. It is subdivided in Core and Enabling business domains (as specified on Level 1) and consists of all L2 High Level BPMs that represent the end-to end flow of each domain and all L3 Business Requirement BPMs. Core business domains are: - Entry of Goods; - Export and Exit; - Release for Free Circulation; - Special Procedures Excluding Transit; - Temporary Storage; - Transit. Enabling business domains are: - AEO Management; - AEO Mutual Recognition; - Authorisations / Decisions Management;

	- BOI Management; - BTI Management; - BTI Usage; - Customs Debts Management; - Customs Valuation; - Guarantee Management; - INF Management; - PoUS Management; - Risk Management; - SW-CVED. The content of this folder is generated in the "EU Customs HL and Business Requirement BPM Report" per business domain.
03_CBP L4 Functional Requirement BPM	This folder contains the models which give a detailed overview of a system (under development). It is subdivided per system and consists of all L4 master processes per system and corresponding functional requirement BPMs. Each system folder is divided in five subfolders: - 01_Processes: containing the BPMs; - 02_Task Details: containing the FADs; - 03_Data: containing the Information Exchanges Data Model and Data Map; - 04_Requirements: containing the functional and non-functional requirement trees and the requirement map; - 06_States: containing state transition diagrams for the products of the system. The content of this folder is generated in the "EU Customs Functional Requirement BPM Report" per system.
04_CBP Data Models	This folder is a library of data models. It contains: - L2 High Level Data; - L3 Conceptual Data; - L4 Data Group Models organised per system - L4 Business Code List Models.

Table 3: EU Customs BPM Folder Structure

5 BASIC ARIS PUBLISHER FUNCTIONALITIES

5.1 How to Open a Model

*It is required to be logged in the ARIS Publisher (see **Error! Reference source not found.**).*

1. Click on the "Contents" tab;

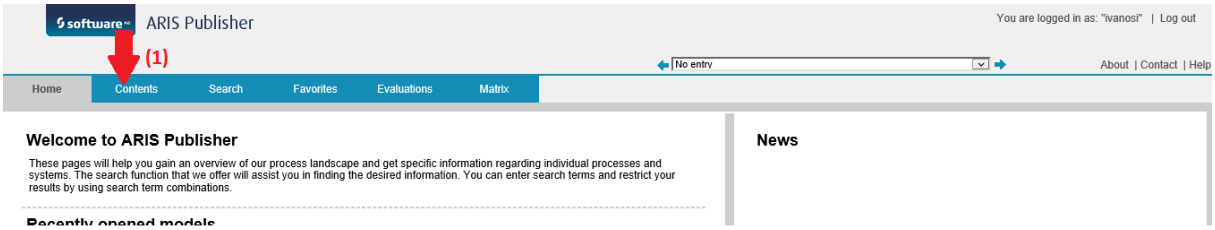

Figure 3: How to Open Models – Contents

2. Expand the relevant sub-folders by clicking on the corresponding folder name;

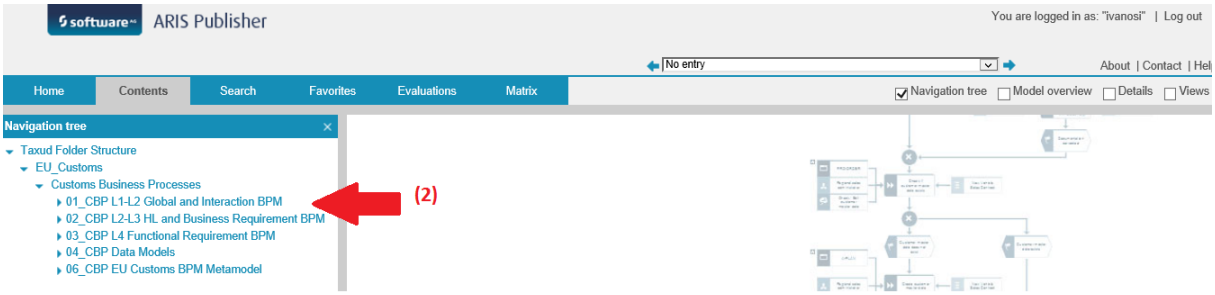

Figure 4: How to Open Models – Navigation Tree

TIP: *In section 4 the EU Customs BPM Folder Structure is explained in detail. This section can be helpful when searching for a particular diagram.*

3. Click the name of the desired model to open the related diagram;

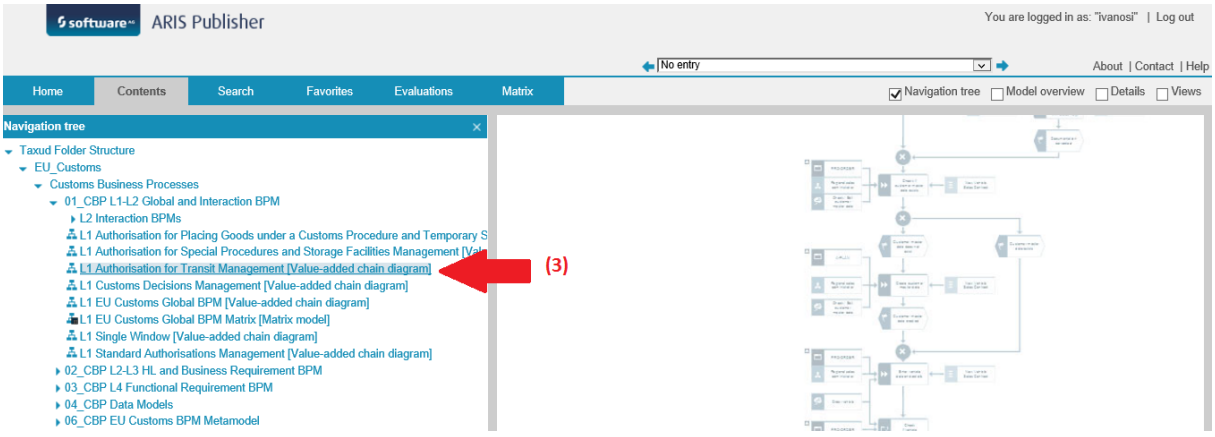

Figure 5: How to Open Models

TIP: *To adjust the size of the pane for the navigation tree, simply hold the mouse on the outmost right side and drag the pane to the right (or left to make it smaller).*

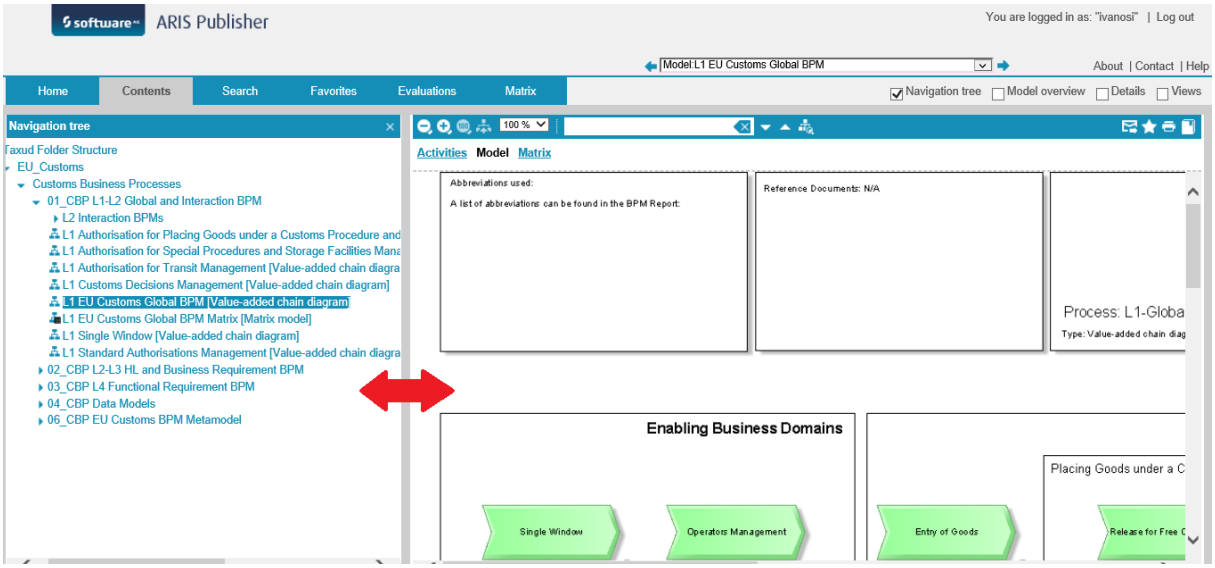

Figure 6: Expanding/Collapsing the Navigation Tree

TIP: *When you have opened the model, you can add the model to your favourites by clicking on the star icon.*

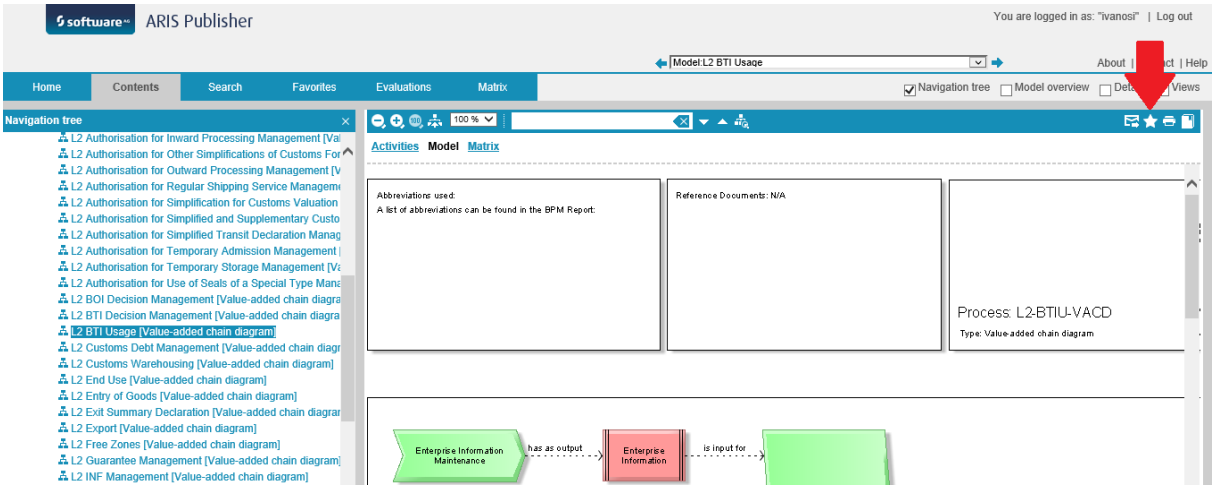

Figure 7: Adding a Model to Favourites

The model will now appear under the favourites tab of the ARIS Business Publisher (See 5.2 to learn more on how to open the saved favourites).

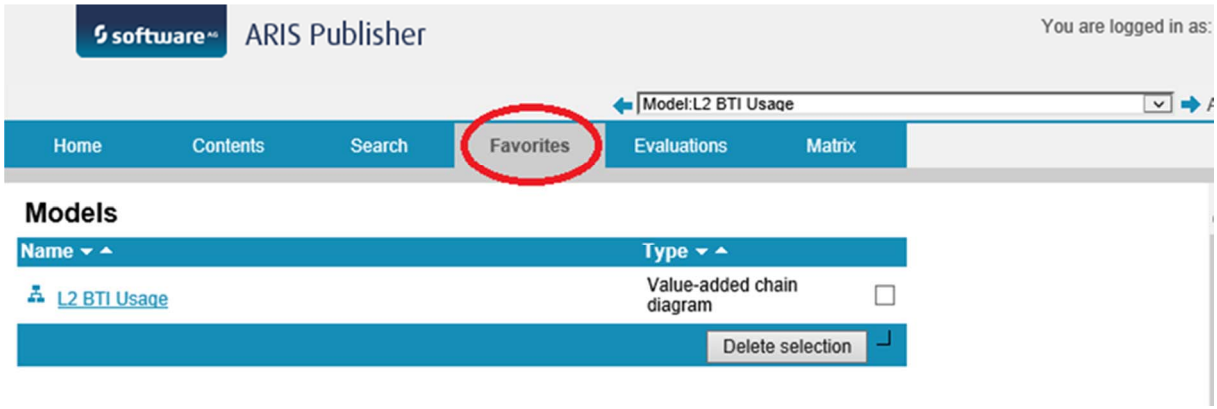

Figure 8: Accessing Favourites

5.2 How to Open a Favourite

*It is required to be logged in the ARIS Publisher (see **Error! Reference source not found.**).*

1. Click on the "Favorites"[2] tab;
2. Click on the relevant favourite to be opened;

***TIP 1:** Click on the arrows to sort the favourites list;*

***TIP 2:** Mark the checkbox and click on the button "delete selection" in order to remove an item from the favourites list.*

Figure 9: Favourites List

[2] The interface language of ARIS Publisher is English (United States)

5.3 How to Navigate in a Model

It is required to have the desired model open (see How to Open a Model).

1. Open the "Model Overview" by clicking the checkbox "Model overview";
2. A new pane called "Model Overview" will appear in the bottom left corner of the application;
3. Click and drag the transparent blue rectangle to navigate in the model.

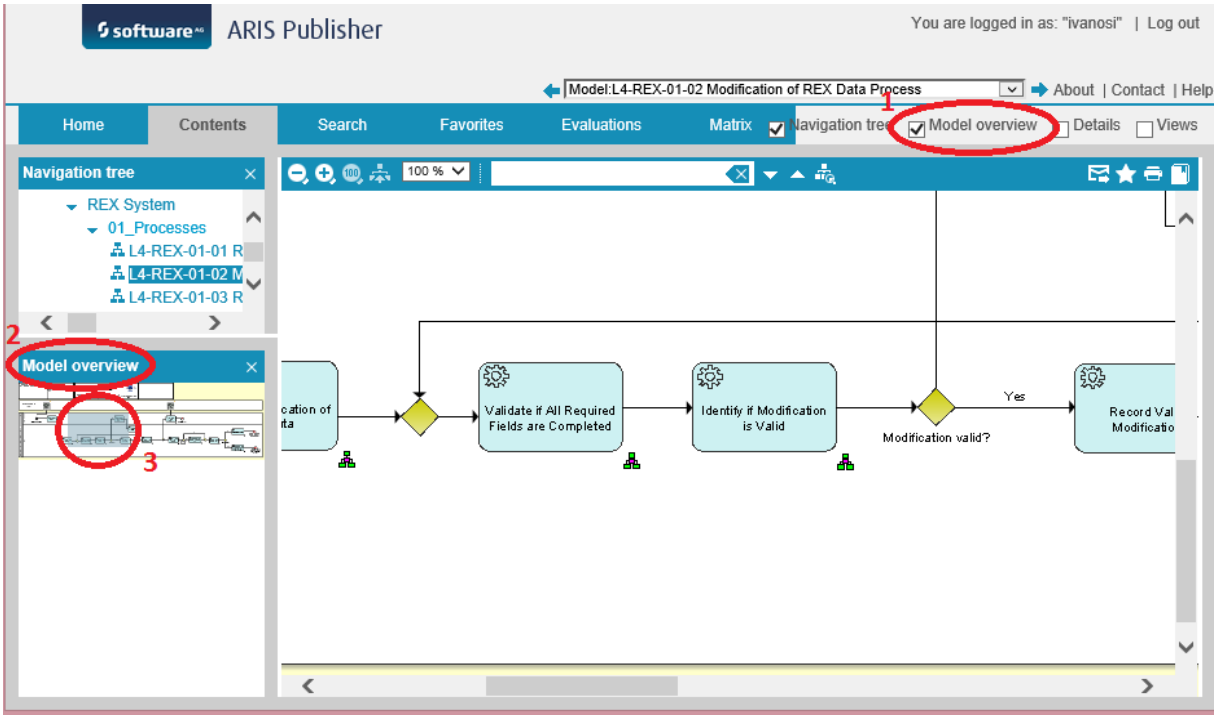

Figure 10: Model Overview

TIP: *Use the zoom in / zoom out buttons and dropdown list to adjust the zoom level of the model. You can reset to the original size by clicking on the "100%" button.*

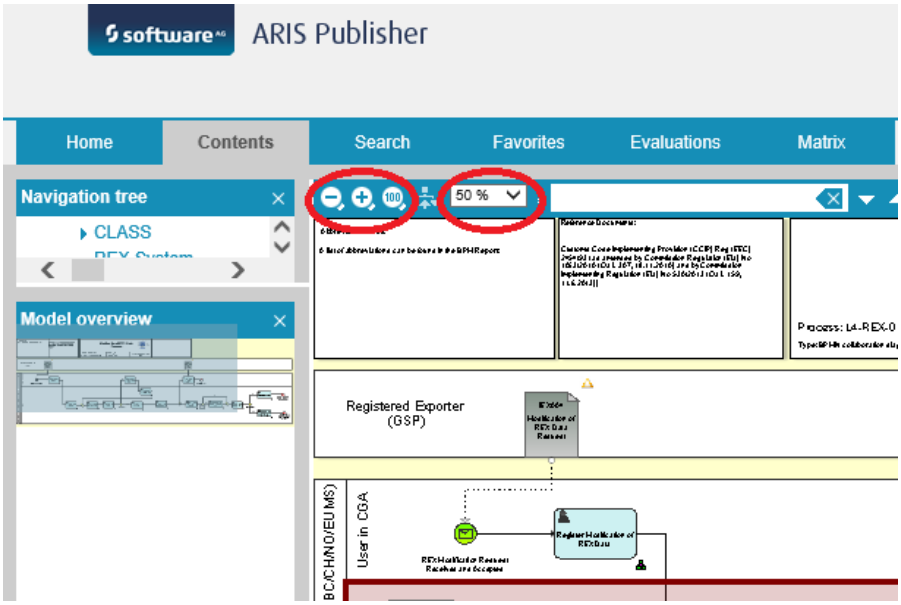

Figure 11: Zoom In/Out

TIP: *You can look for a certain object in a model by entering the name of the object in the search field and click the white down arrow ( ).*

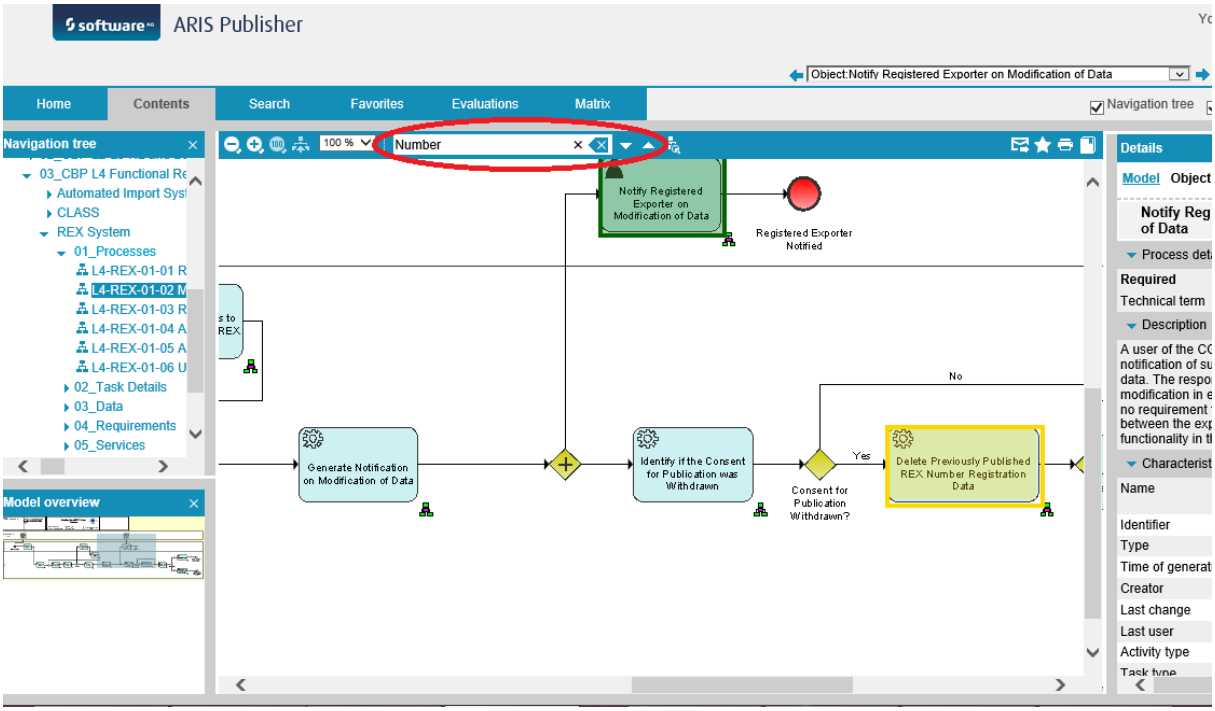

Figure 12: Searching for an Object in a Model

5.4 How to Navigate between Models

The ARIS Publisher tool provides functionality to navigate easily between the models you have opened during a session.

The arrows and drop-down list indicated in the figure below facilitate easy navigation through the recently opened models:

- The arrow to the left opens the previous model, while the arrow to the right goes to the next model (similar to the 'Previous page' and 'Next page' arrows in your Internet Browser);
- The drop-down list gives you an overview of the models you opened during a session. You can open a model by clicking on it in the list.

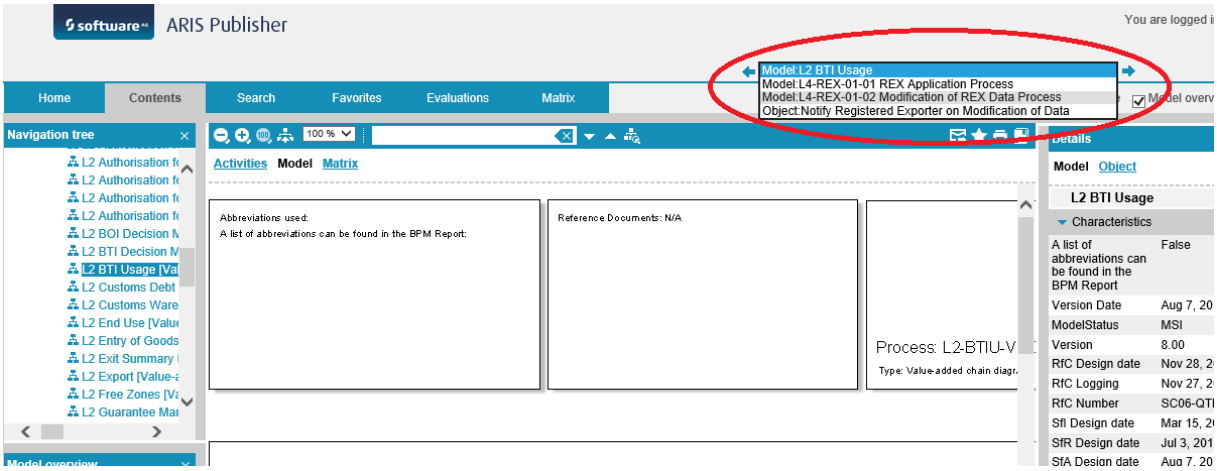

Figure 13: Navigate Between Models

TIP: *In case the opened model is assigned to another model, you can click the "Superior model" icon to open the superior model;*

In case the opened model has been assigned to only one model, clicking the "Superior model" icon will directly open the related model;

In case more than one model is in relationship with the opened model, clicking the "Superior model" icon will open a list with all the linked models; click then on the superior model you want to open.

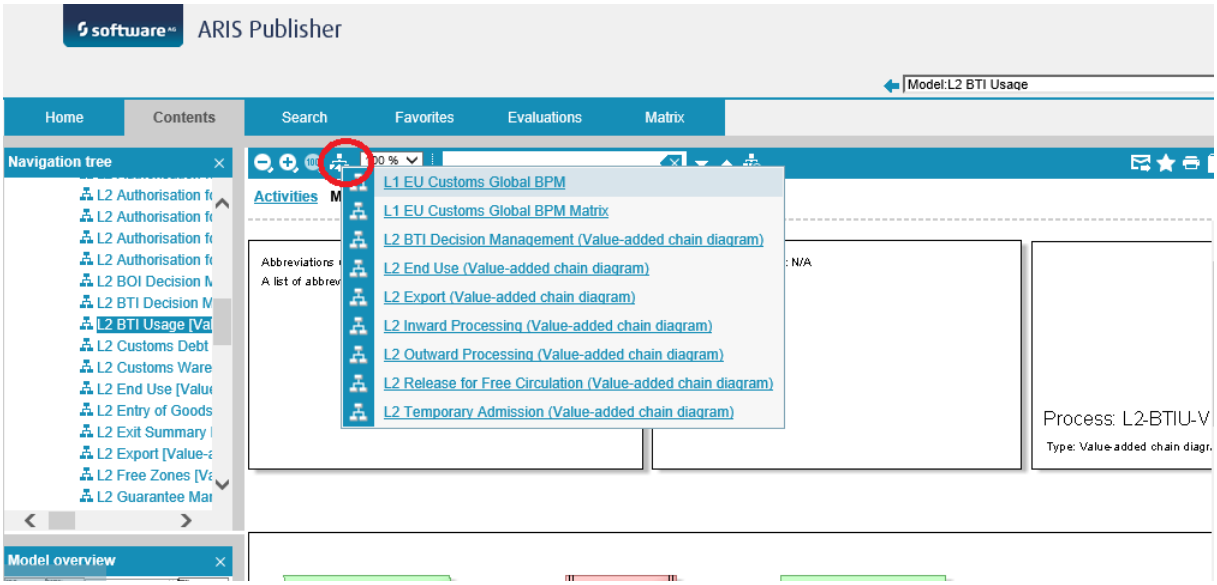

Figure 14: Superior Model

5.5 How to Search for an ARIS Item

*It is required to be logged in the ARIS Publisher (see **Error! Reference source not found.**).*

1. Click on the "Search" tab;
2. Fill in the desired text of the ARIS item you want to find;
3. Refine the search by selecting the type of the ARIS item to be found;
4. Click on the desired object in the result list;

TIP:

You can add a specific "search" result to your favourites list by clicking on the star icon. You will have to enter a name for the "search". After clicking the OK-button, the "find result" will be saved under the favourites tab.

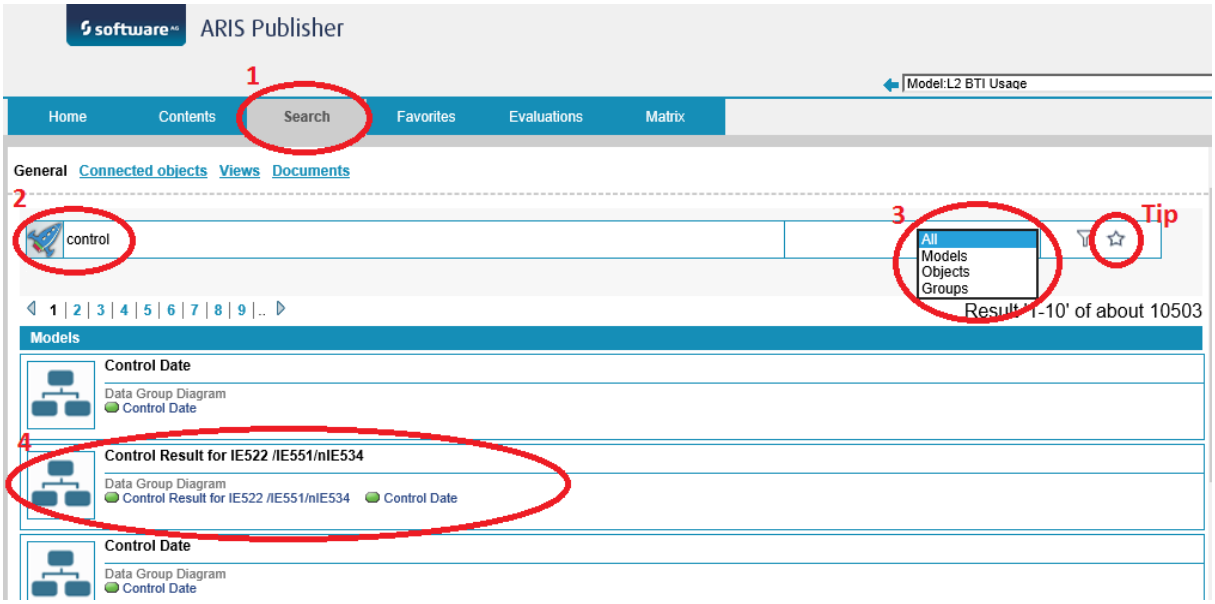

Figure 15: How to Search for an ARIS Item

5.6 How to Open the Details of an Object/Model

It is required to have the desired model open (see How to Open a Model).

1. Select an object of the opened model, a new pane on the right part of the application will appear containing all object information;
2. Similarly, when left-clicking in the model without selecting an object, you can access the details of a model;
3. Make sure 'Details' is check-marked.

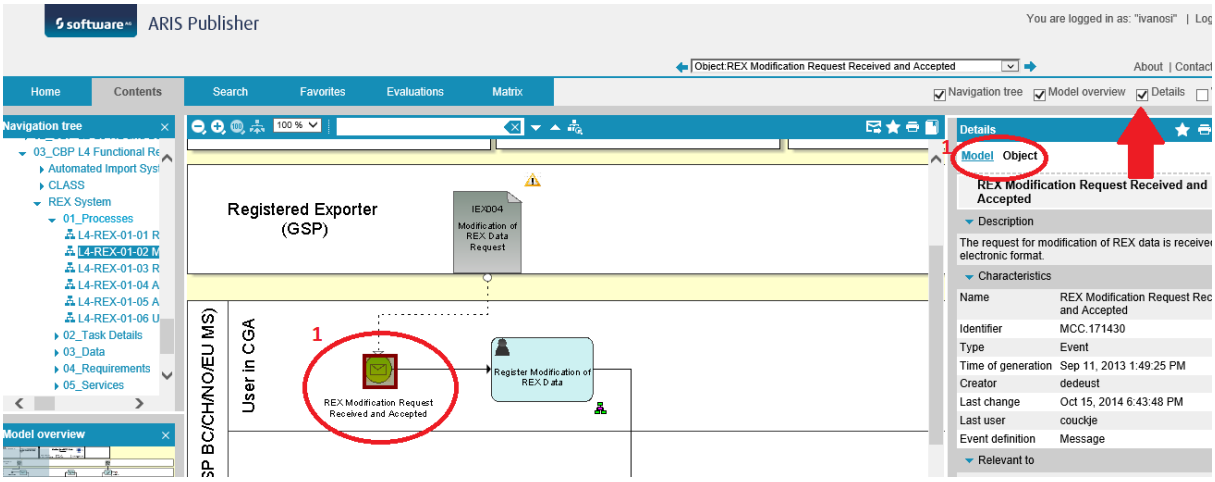

Figure 16: How to Open Details of an Object/Model

When the details pane of a model or object is displayed on the right side of the screen, following information can be found:

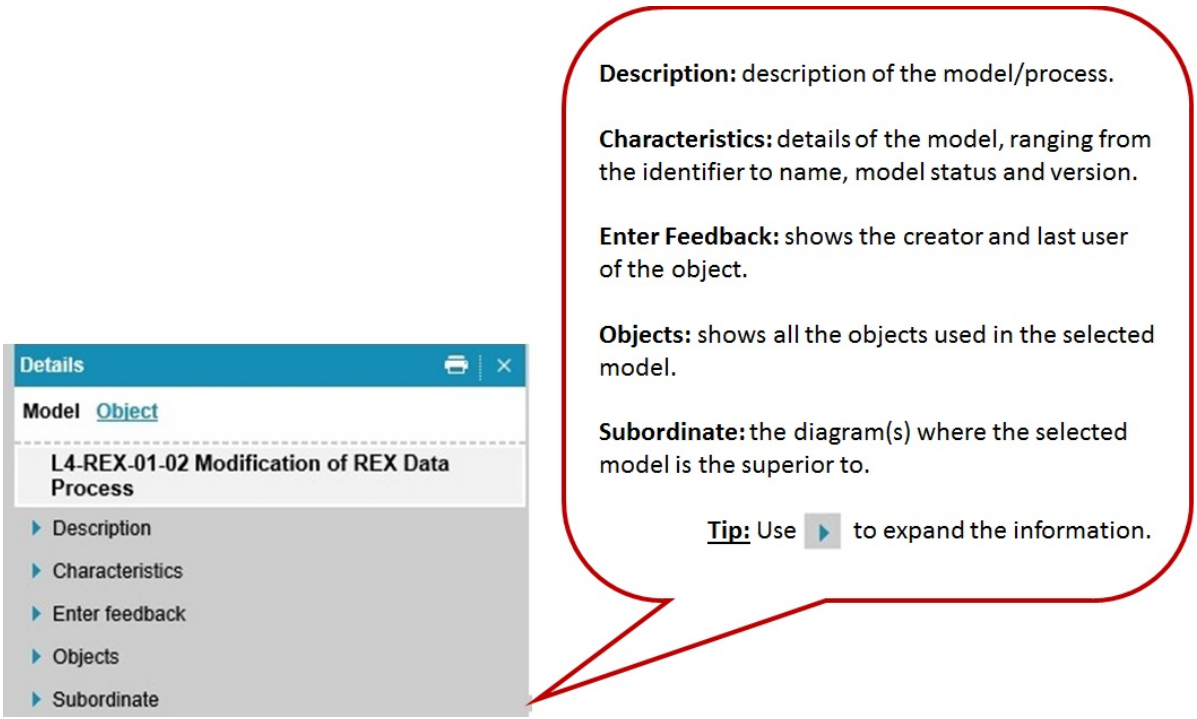

Figure 17: Details Pane – Model

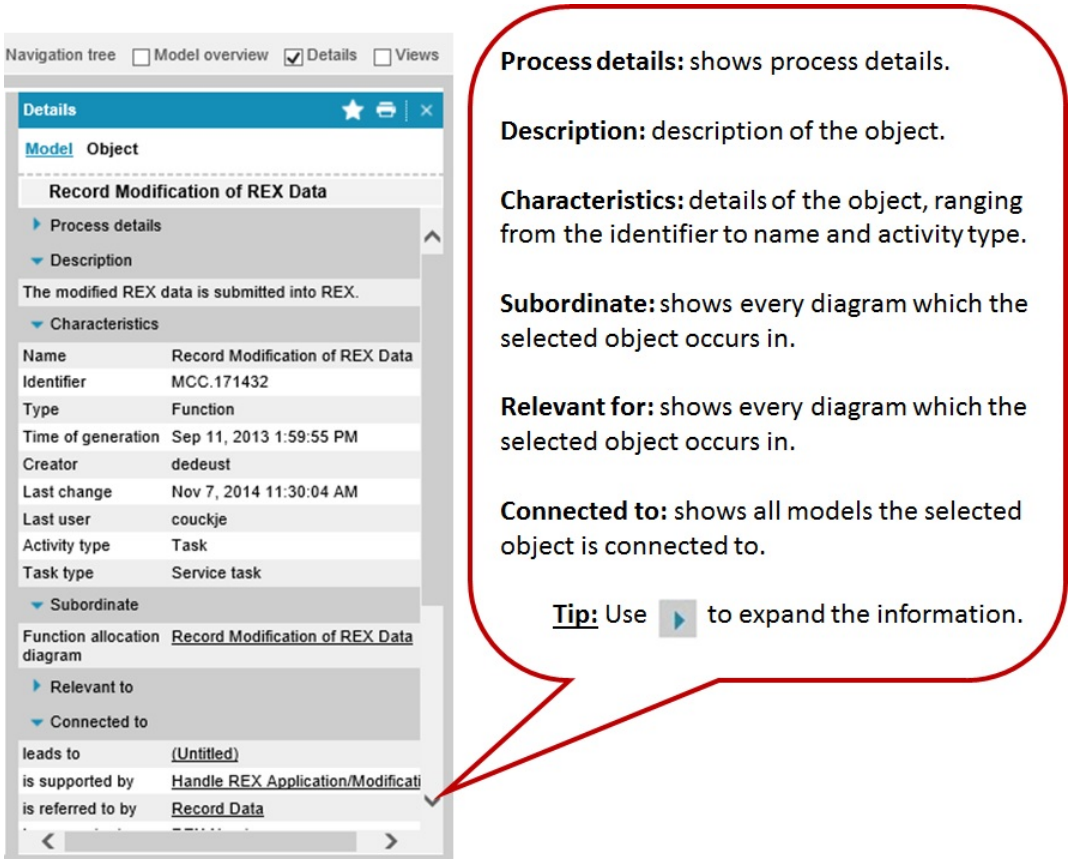

Figure 18: Details Pane – Object

TIP 1: *By clicking on model or object in the details pane, you can switch between information that is linked to the model and information that is linked to an object;*

TIP 2: *By clicking on the hyperlinks in the details pane, you can navigate to another model.*

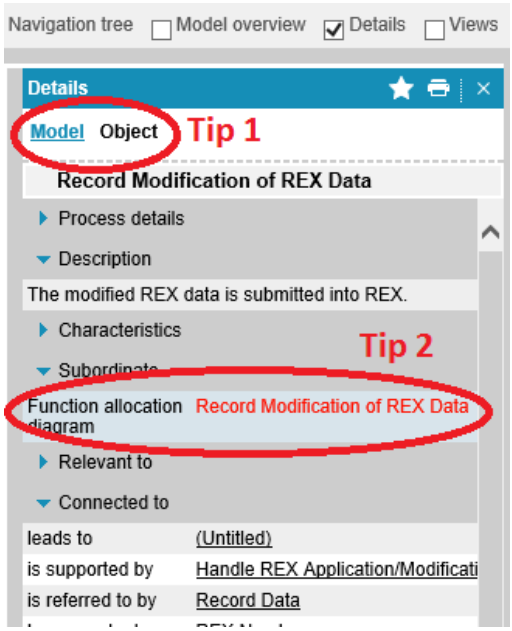

Figure 19: Details Pane – Tips

5.7 How to Print a Model

It is required to have the desired model open (see How to Open a Model).

1. Click on the print button. Since this action will open another window, it is required to have turned off any pop-up blocker;

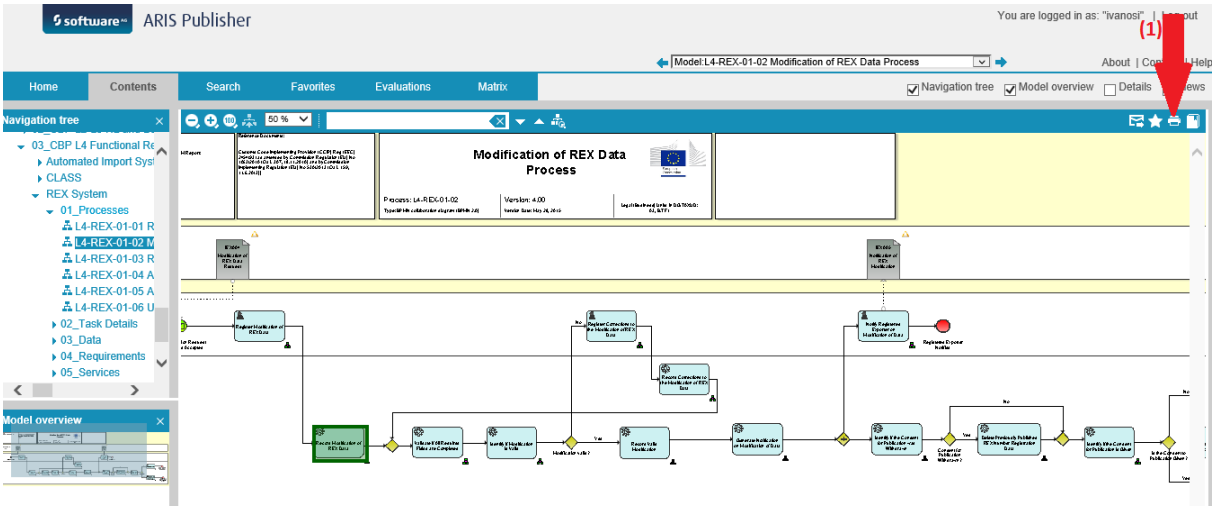

Figure 20: Print a Model

2. Specify page size, format and orientation.

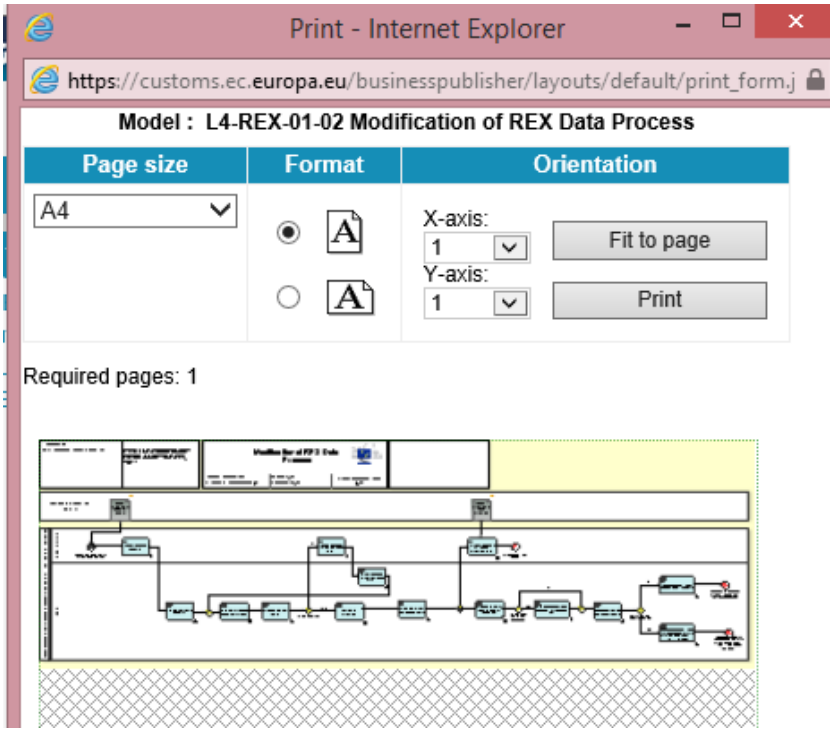

Figure 21: Print Settings

TIP:To make the print out of a model readable, it is advised to print across multiple A3s. These steps should be followed:

1. Set the paper setting to A3;
2. Depending on the dimensions of the model, select the appropriate orientation;
3. For long and narrow models, select landscape;
4. For short and broad models, select orientation.
5. Augment the number of pages on the X-axis as long as the Y-axis remains 1 (the tool will automatically adjust the ratio depending on the model). In this case 5 pages fit on the X-axis while the Y-axis remains 1 page;
6. The preview will show how the model is divided;
7. Click 'Print', a PDF will be created.

5.8 How to Log Out

1. Click the "Log out" button.

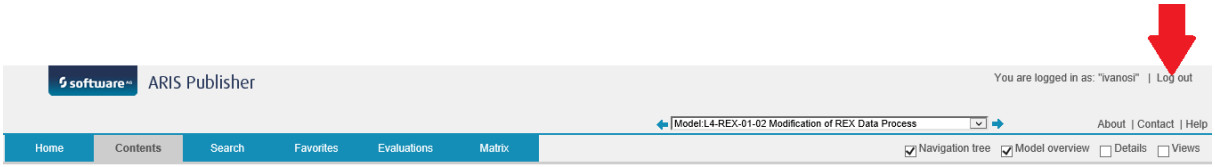

Figure 22: How to Log Out

6 EU CUSTOMS BPM LEVELS AND ASSOCIATED DIAGRAMS

In this section all diagrams, models and documents associated with the different levels are listed with a short description of what they are and how they look like. The diagrams are organised per level, starting with Level 1.

Every sub-section of a model will show how to access the desired diagram via clicking through the models (using the levelling approach) or via the navigation tree (using the folder structure). A third part will give some more explanation on what information you can find when the diagram is open.

This section can be read separately from the other sections due to the modular build of this document. However, it is strongly recommended to see section 5 on the basic ARIS Publisher functionalities before reading section 6. This will enhance the understanding significantly.

6.1 BPM Level 1

The Level 1 BPM consists of two model types that are linked via a Level 1 model. The two model types are:

- An **EU Customs Global BPM** of the type value-added chain diagram. All other L1 value-added chain diagrams are linked to the main L1 EU Customs Global BPM. Those value-added chain diagrams contain more details but are not considered as a lower level of modelling granularity;
- An **EU Customs Global BPM Matrix**[3] of the type matrix model. This model shows all possible interactions between Core and Enabling business domains.

The **L1 EU Customs Global BPM** is grouped around 2 types of processes: one group containing the Enabling business domains and a second group containing the Core business domains.

- The Core business domains group consists of business domains that are directly related to the movement of goods;
- The Enabling business domains group consists of business domains that facilitate the Core business domains. More precisely: an Enabling business domain delivers output that can be used in a later phase by a Core business domain to effectively execute the process

When a business domain can be further detailed into smaller business domain, this is not visualized on the L1 model in order to keep a clear overview on the L1. However, an assignment can be created to another VACD model to show this additional information. These models are still considered as part of the L1 model, as they provide more detailed information.

When Global Business Data is visualized on the L1 BPM, this is categorized into a single category "Data". This Global Business Data shows the data that can be exchanged between EU customs business domain depicted on L1. The specific interactions are part of the L2 Interaction BPM (see 6.2.1).

[3] The L1 Global BPM Matrix is based upon the L2 Interaction BPMs.

6.1.1 EU Customs Global BPM

6.1.1.1 How to access the L1 EU Customs Global BPM using the folder structure

The L1 models are stored in a database that can be browsed and consulted via the ARIS Publisher application. See section 5 “Basic ARIS Publisher Functionalities” to learn how to log in and use the ARIS Publisher application.

1. Under the “Contents” tab, open the folder “01_CBP L1-L2 Global and Interaction BPM”;
2. Open the model “L1 EU Customs Global BPM [Value-added chain diagram]”.

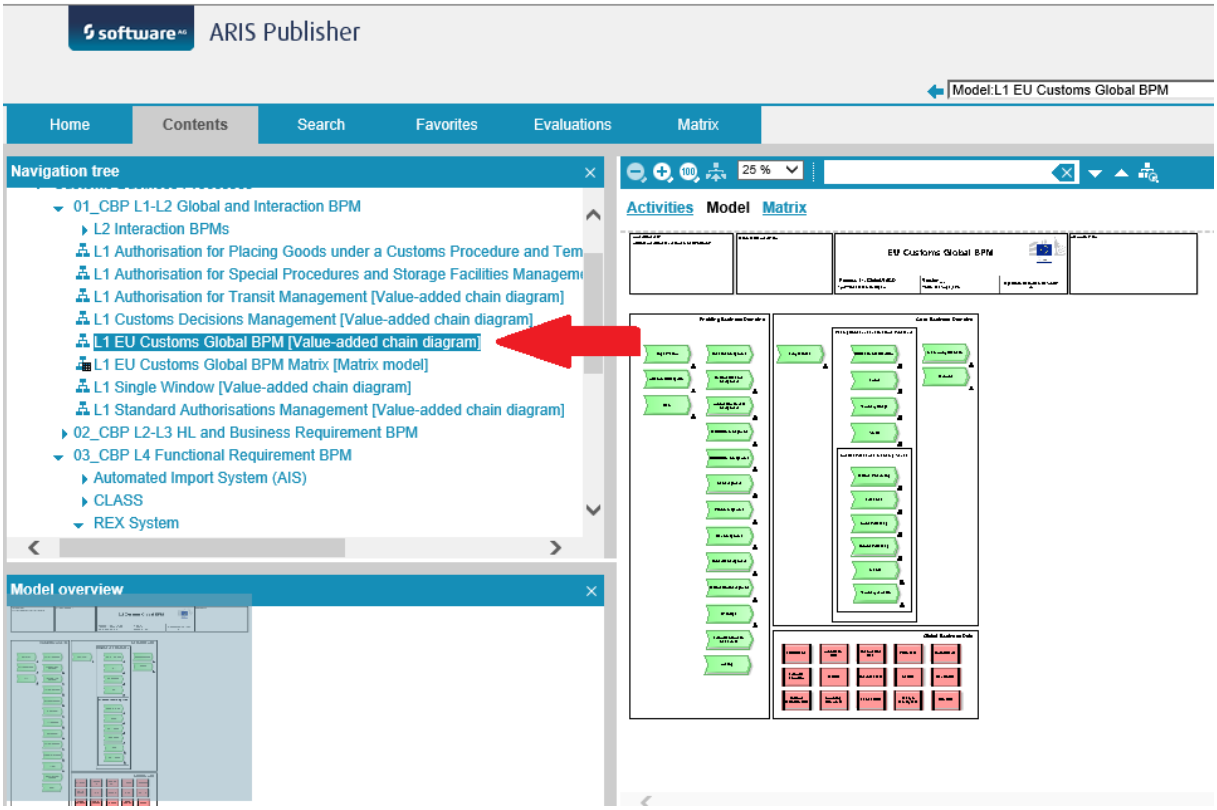

Figure 23: L1 EU Global Customs BPM – Folder Structure

6.1.1.2 What information can you find on a L1 EU Customs Global BPM

1. The L1 EU Customs Global BPM gives a high level overview of all the business domains in EU Customs, both enabling (1) and core (2) (see Figure 24);
2. There is only one EU Customs Global BPM as it forms the highest level of hierarchy in the process modelling;
3. Additionally, the EU Customs Global BPM gives an overview of all the Global Business Data (3).

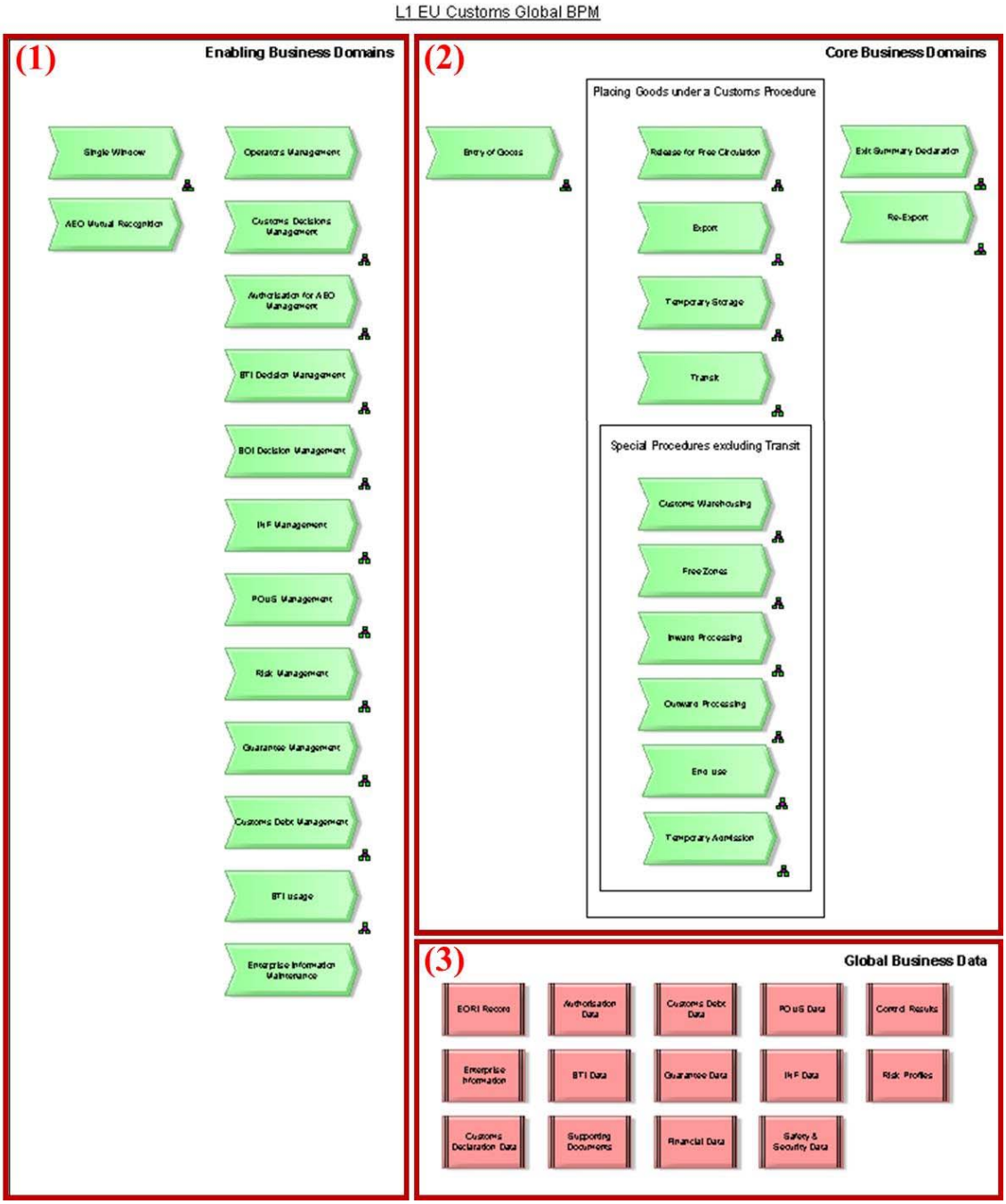

Figure 24: L1 EU Customs Global BPM

4. Via the assignment icons (at the right-bottom corner of the object), you can drill-down to view the details of a L1 business domains (see Figure 25). For the L1 business domains 'Customs Decisions Management' and 'Single Window' the drill-down will access a model with more details but with a granularity that corresponds to the BPM Level 1. The drill-down for all other L1 business domains will access the level 2 business models which correspond with the granularity of the BPM Level 2 (see 0

5. BPM Level 2).

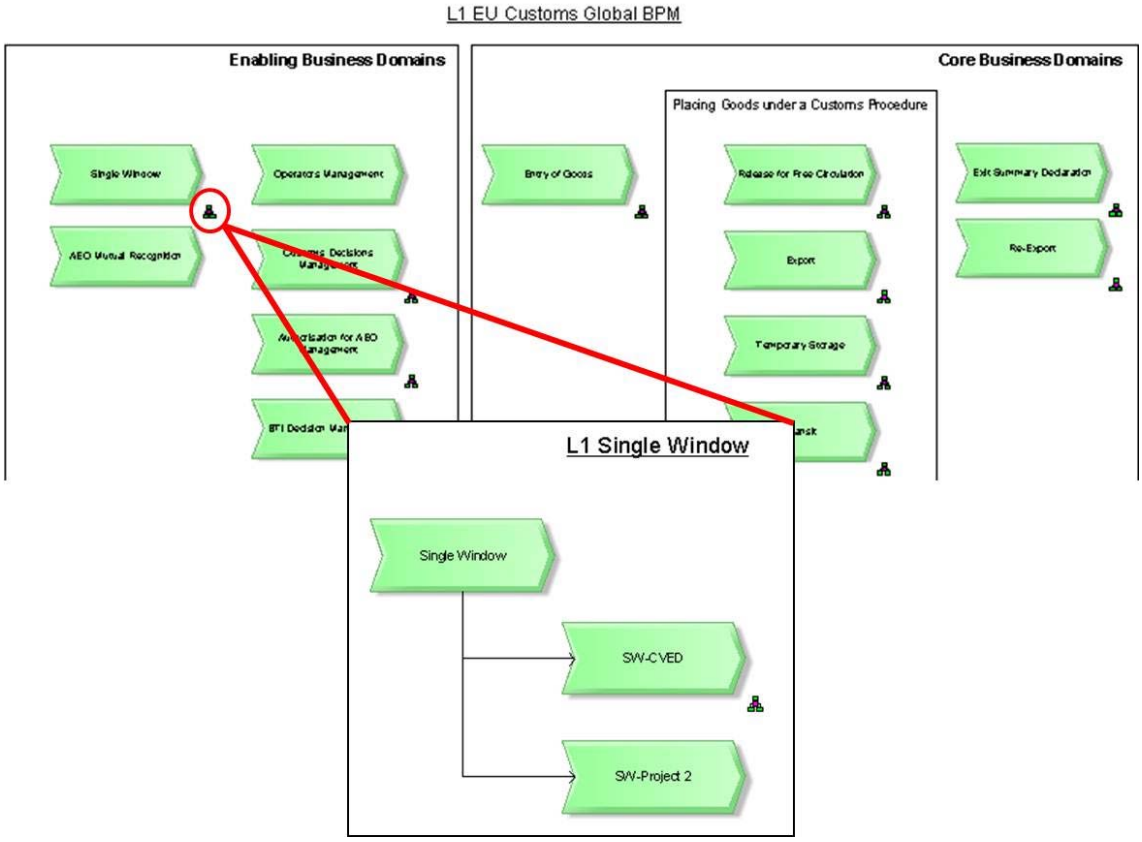

Figure 25: Details of a L1 Business Domain

6.1.2 EU Customs Global Matrix

6.1.2.1 How to access the L1 EU Customs Global Matrix using the folder structure

The L1 models are stored in a database that can be browsed and consulted via the ARIS Publisher application. See section 5 "Basic ARIS Publisher Functionalities" to learn how to log in and use the ARIS Publisher application.

1. Under the "Contents" tab, open the folder "01_CBP L1-L2 Global and Interaction BPM";
2. Open the model "L1 EU Customs Global BPM [Matrix model]".

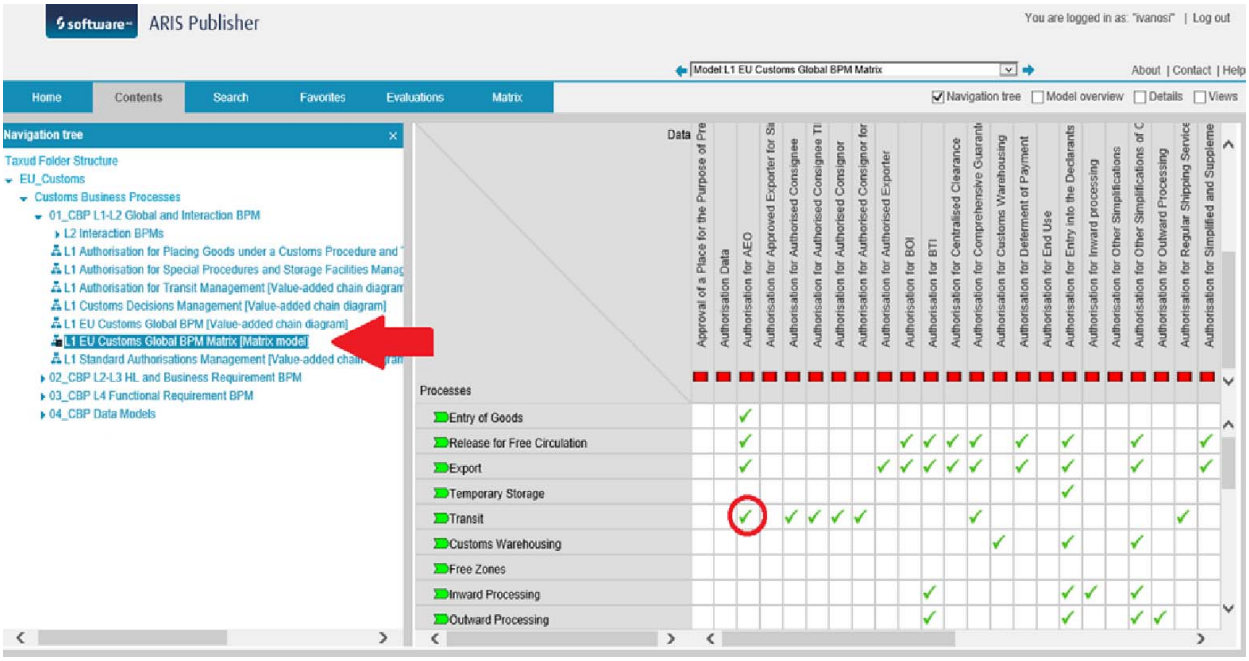

Figure 26: L1 EU Customs Global BPM Matrix – Folder Structure

6.1.2.2 What information can you find on a L1 EU Customs Global BPM Matrix

1. Summary of the input and output global business data for core and enabling business domains;
2. The core and business domains are listed on the vertical axis, while the global business data is listed on the horizontal axis;
3. The checkmark indicates that this global business data element is linked with that business domain.

6.2 BPM Level 2

The Level 2 BPMs consist of two model types that are linked to the Level 1 EU Customs Global BPM Business Domains. The two model types are:

1. L2 Interaction BPM – this model defines the relationships/connections between the EU Customs Business Domains;
2. L2 High Level BPM – these models define the main business processes within each business domain. The main goal is to visualize the end-to-end flow within one business domain, the relationship between the Level 3 processes, how and where they link to each other and in which sequence. Each sub-process will be linked to a Level 3 model.

For the **Interaction BPMs**, it is important to note that there are two types of Interaction BPM: one type for Core Business Domains and one type for the Enabling Business Domains. The difference between these types will be made clear in section 6.2.1.3. However, the goal of showing the relationships and connections between the different EU Customs Business Domains remains the same.

The main goal of the **L2 High Level BPMs** is:

- To present the high level end to end scenarios;
- To illustrate what BPMs are needed to achieve goals and objectives;
- To facilitate a link to the level 3 BPM. Each step in the process could potentially have a level 3 BPM attached to it.

6.2.1 Interaction BPMs

6.2.1.1 How to access a L2 Interaction BPM using the levelling approach

Since L2 Interaction BPMs describe the relationships between business domains depicted in the L1 Global BPM, a L2 Interaction BPM is linked to the business domain for which it provides the relationships. The screenshot below shows how the L2 Interaction BPM “Entry of goods” is linked to the business domain “Entry of Goods” presented in the L1 Global BPM.

1. Open the L1 Global BPM (see section 6.1.1) and click on the assignment icon to access the level 2 interaction model;

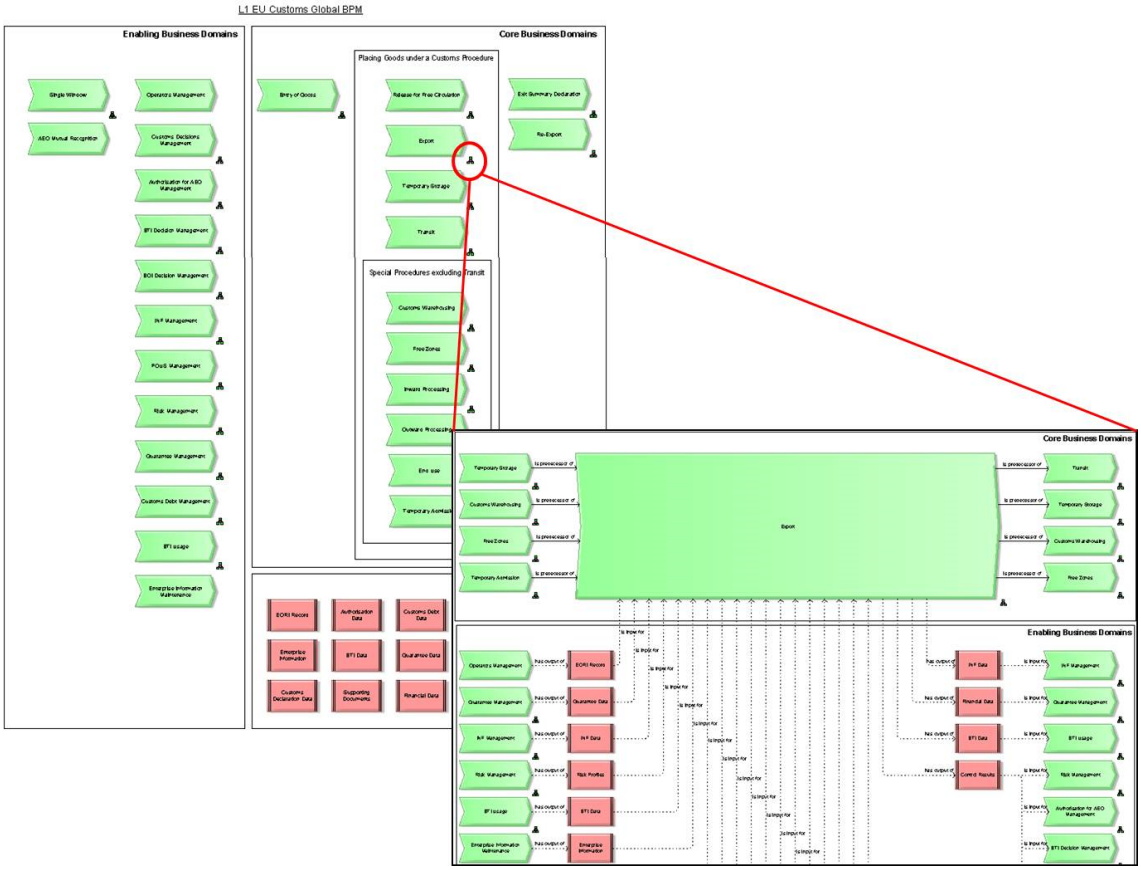

Figure 27: L2 Interaction BPM - Levelling Approach

2. When a L2 High Level BPM and a L2 Interaction BPM are linked to a business domain in the L1 Global BPM, a popup will appear. Select the model of the type 'Valued-added chain diagram' to open the L2 Interaction BPM.

Figure 28: L2 Interaction BPM - Levelling Approach

Note that the L2 Interaction BPMs are not connected to a BPM level with a higher granularity (more details). If you click on the assignment icons, you can access another level 2 interaction model or a High Level BPM (also on L2).

6.2.1.2 How to access a L2 Interaction BPM using the folder structure

The L2 models are stored in a database that can be browsed and consulted via the ARIS Publisher application. See section 5 "Basic ARIS Publisher Functionalities" to learn how to log in and use the ARIS Publisher application.

1. Under the "Contents" tab, open the folder "01_CBP L1-L2 Global and Interaction BPM";

2. Open the folder “L2 Interaction BPMs”;
3. Select the Interaction BPM of the desired business domain.

6.2.1.3 What information can you find on a L2 Interaction BPM

As mentioned before, there are two different types of Interaction BPM, one for the Core Business Domains and one for the Enabling Business Domains.

A L2 Interaction BPM for Core Business Domain (Figure 29) has two parts:

The top part shows:

- The interaction between the domain analysed in the L2 BPM with other business domains;
- The possible flow of the goods throughout the business domains.
    - On the left side are the business domains that are ‘predecessors of’ the domain analysed in the L2 BPM;
    - In the middle is the domain analysed in the L2 BPM for which all interactions are shown in this model;
    - And on the right side, the subsequent business domains.

The bottom part shows:

- The interaction between the domain analysed in the L2 BPM and the enabling business domains
- The possible information flow throughout the business domains.
    - On the left side are the enabling business domains, these domains modelled provide output data to the main core business domain;
    - And on the right side are the enabling business domains modelled that receive input data from the domain analysed in the L2 BPM.

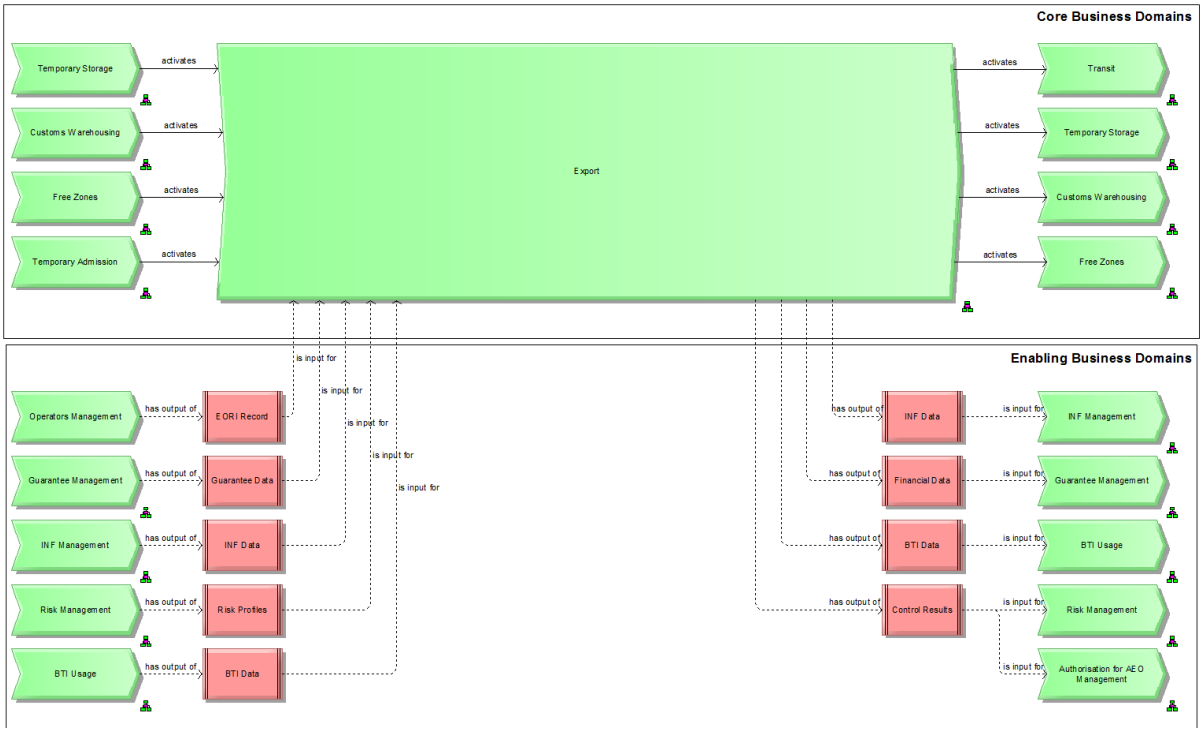

Figure 29: L2 Interaction BPM for a Core Business Domain

L2 Interaction BPM for Enabling Business Domain (Figure 30) similarly has two parts. However, they are not built in the same way as for the Core Business Domains:

The top part shows:

- The interaction between the enabling domains analysed in the L2 BPM are shown through the exchange of data.
    - On the left side are the enabling business domains that provide output data for the domain analysed in the L2 BPM;
    - In the middle the main enabling business domain for which all interactions are shown;
    - On the right the enabling business domain that receive input from the domain analysed in the L2 BPM, if applicable.

The bottom part shows:

- The interaction between the enabling domains analysed in the L2 BPM and the core business domains are shown through the exchange of data objects.
    - On the left side the core business domains are modelled that provide output data the domain analysed in the L2 BPM;
    - And on the right side the core business domains are modelled that receive input data from the domain analysed in the L2 BPM.

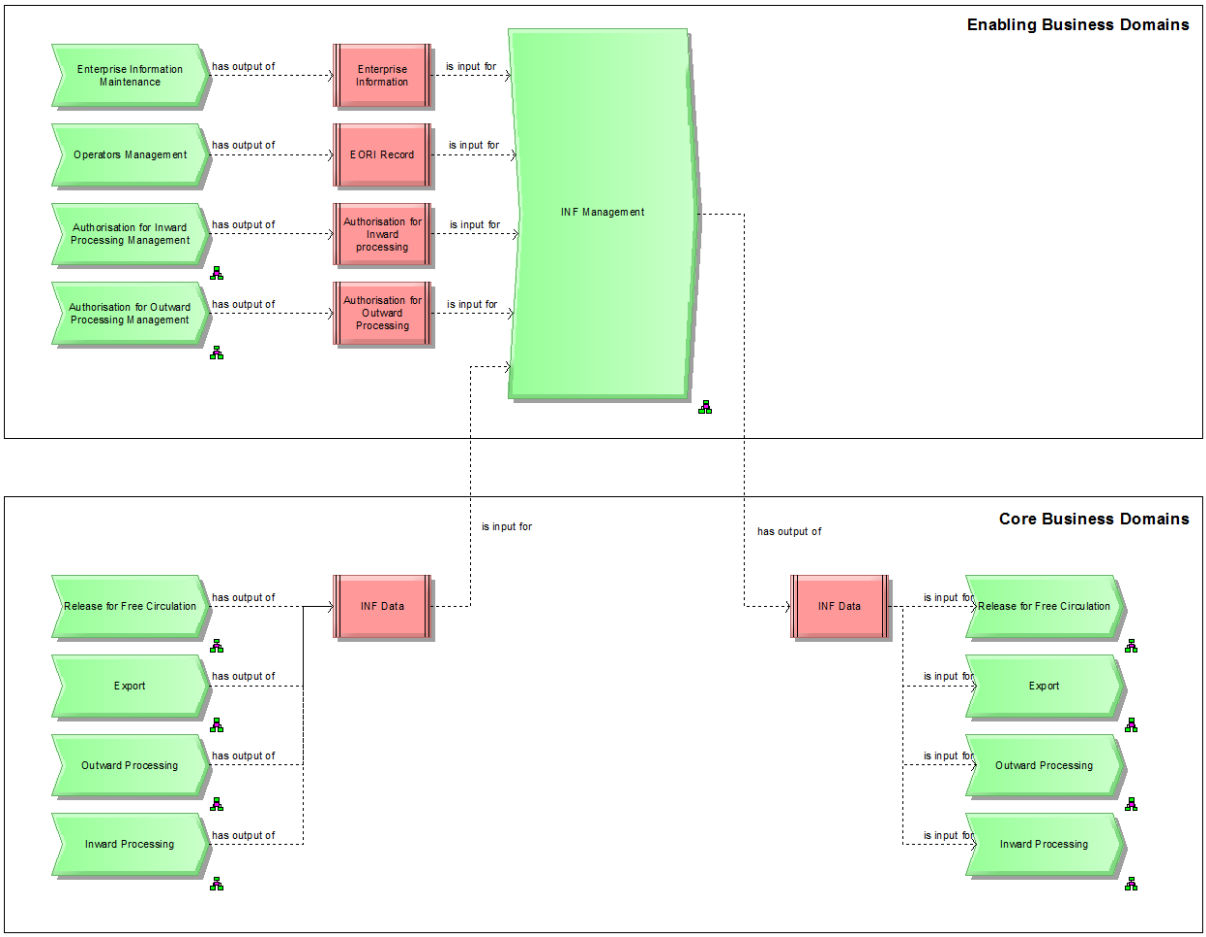

Figure 30: L2 Interaction BPM for an Enabling Business Domain

6.2.2 High Level BPMs

6.2.2.1 How to access a L2 High Level BPM using the levelling approach

When a L2 High Level BPMs has been developed to detail a specific business domain, it is linked to the related business domain. The screenshot below shows how the L2 High Level BPM "Export" is linked to the business domain "Export" presented in the L1 Global BPM.

1. Open the L1 EU Customs Global BPM (see section 6.1.1) and click on the assignment icon to access the level 2 high level model;

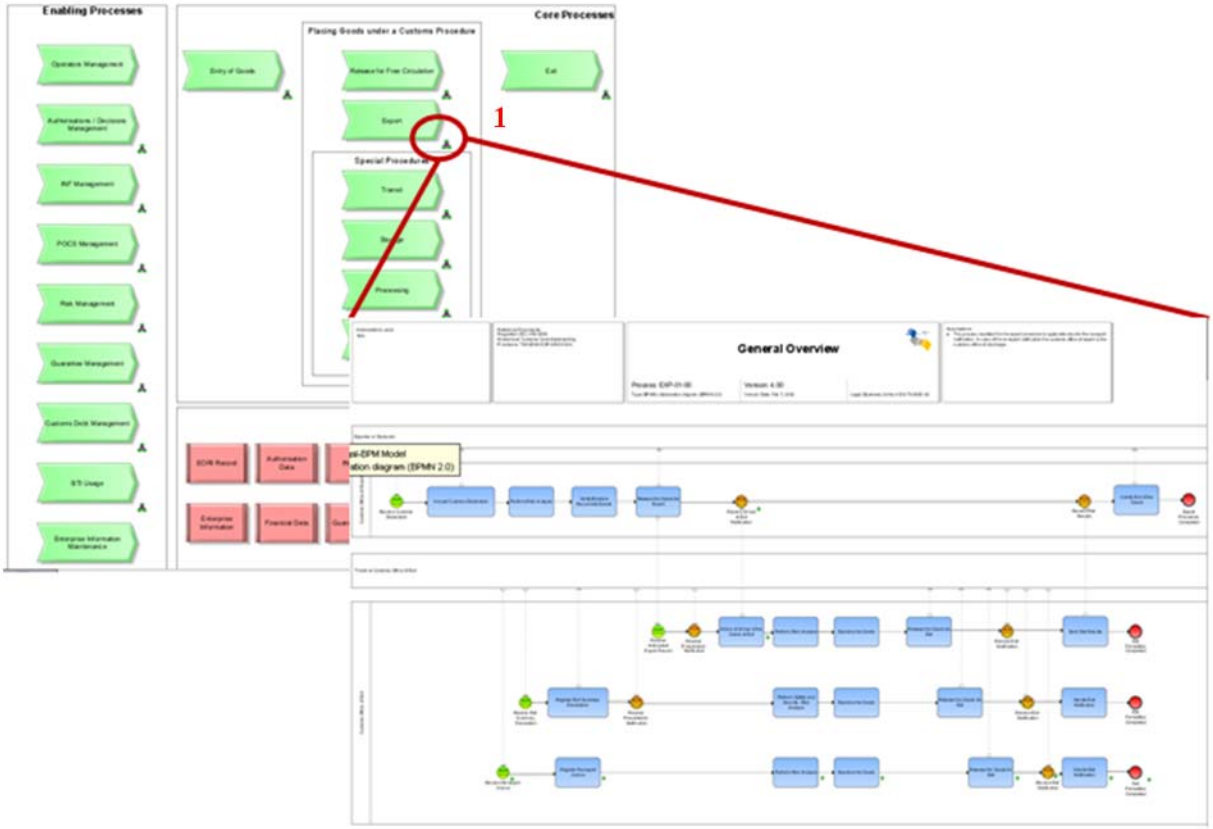

Figure 31: L2 High Level BPM - Levelling Approach

2. When a L2 High Level BPM and a L2 Interaction BPM are linked to a business domain in the L1 Global BPM, a popup will appear. Select the model of the type 'BPMN 2.0' to open the L2 High Level BPM.

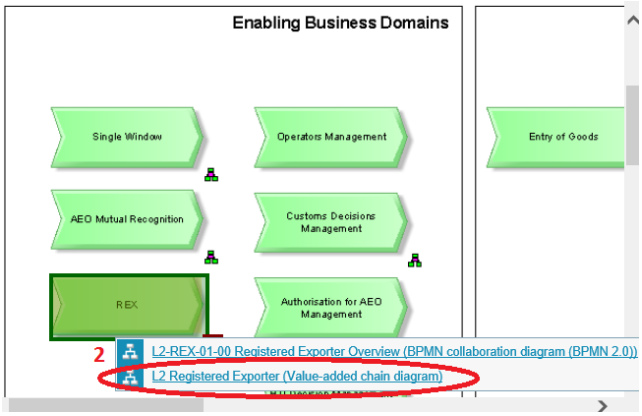

Figure 32: L2 High Level BPM - Levelling Approach

6.2.2.2 How to access a L2 High Level BPM using the folder structure

The Level 2 diagrams can also be accessed from the ARIS navigation tree instead of using the L1 Global BPM. The Customs Business Processes are divided into folders per level and in the folder '02_CBP L2-L3 HL and Business Requirement BPM' there is a folder for the Enabling Business Domains and a folder for the Core Business Domains.

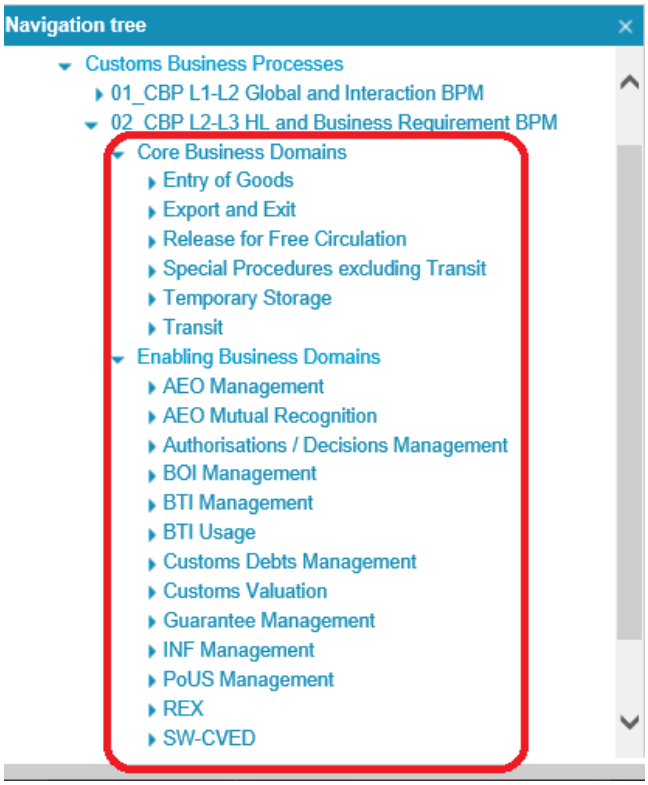

Figure 33: L2 High Level BPM - Folder Structure

Within each business domain folder there are three sub-folders. In the folder '01_Processes', both the L2 High Level BPM and the L3 Business Requirements BPM are stored. Click on the diagrams which name starts with L2 to access the L2 High Level BPM.

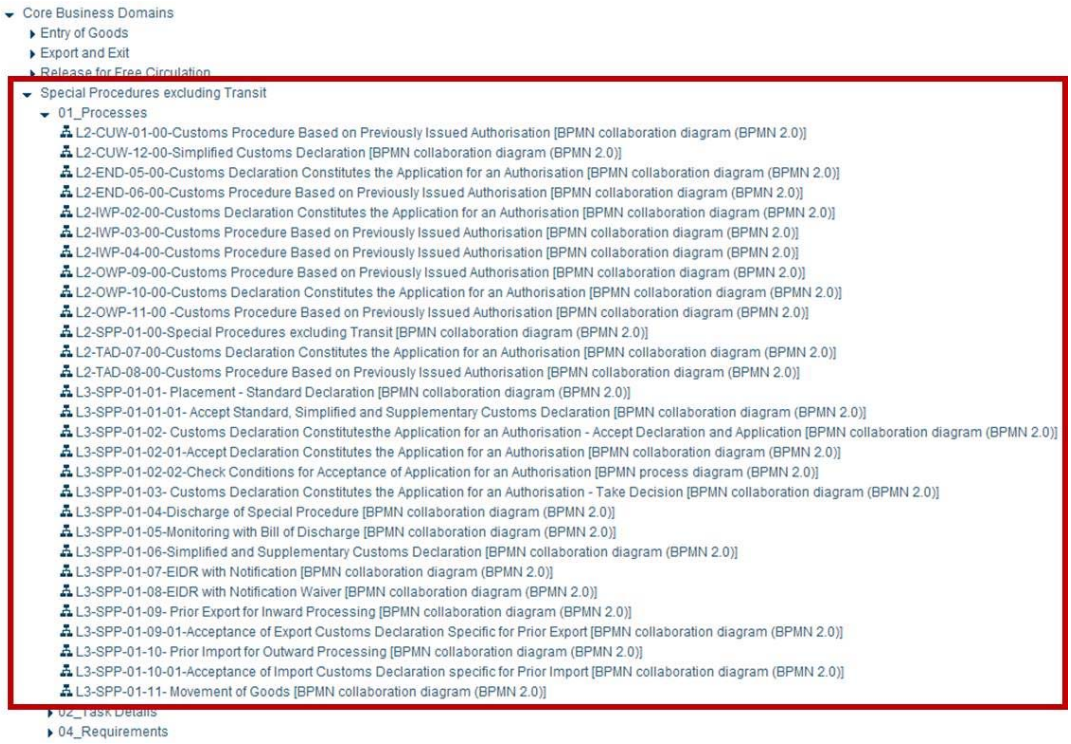

Figure 34: L2 High Level BPM – Folder Structure

6.2.2.3 What information can you find on a L2 High Level BPM

A L2 High Level BPM is divided into two parts depicting respectively the model (shown as number "5" in the screenshot below) and the information on the model ("1", "2", "3" and "4"). The top-left corner gives references to the abbreviations used in the opened model. Next to the abbreviation box is presented the list of all reference document. The third box provides the basic model information such as name, version and issue date. Finally, the top-right box lists the modelling assumptions that must be taken into account while reading the model.

The main goal of this level is to visualize the main processes within one business domain and their relation with each other how and where they link to each other; and what the sequence is.

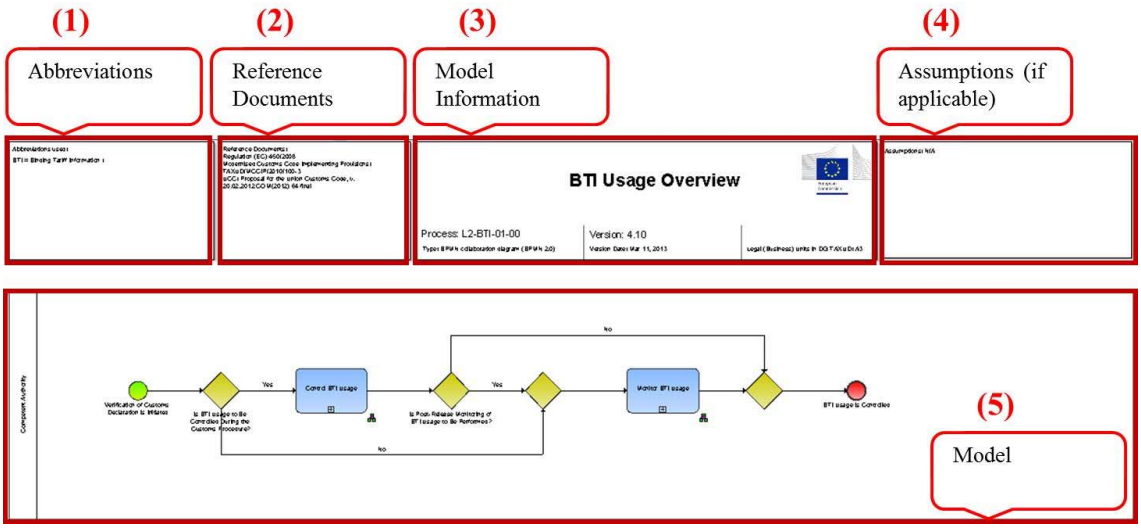

Figure 35: L2 High Level BPM

6.3 BPM Level 3

At this level, we begin to provide more detailed steps looking at how to achieve a specific business objective, via a more detailed business process model. It examines the steps taken and the interaction between actors in a process.

The Level 3 BPM consists of three diagram types and a document outside of ARIS. The three model types are:

- Business Requirements BPM;
- L3 Functional Allocation Diagrams (FADs);
- Business Requirement Matrix.

The main goals of a **L3 Business Requirements BPM** are:

- To interpret and visualize the To-Be scenarios as inscribed in the customs legislation and international agreements. These models are driven by the legal text, and are focused on the business objectives and how these can be realized in the various EU Customs business domains;

- To specify the legal and business steps, which are agreed with the legal department, and to be a baseline for the evaluation of which tasks or steps should be automated and modelled in a L4 BPM in order to define the functional requirements.

This includes the following:

- Illustrating the involved business organisations and responsibilities through a series of process models which include actors, their roles and associated activities. This can be achieved using pools where interactions and all information exchanges can be illustrated;

- Showing all information exchanges and involved actors on the model;

- Clearly and logically providing the steps to achieve a defined business objective(s). It should be clear what the trigger for the process is (i.e. why do it?) and what the outcomes are (i.e. what are the intended results?).

The purpose of the **L3 Function Allocation Diagrams** is to link business requirements to a task. Business requirements describe

- A specific behaviour or function of the business process;
- What the process is supposed to accomplish.

The **Business Requirement Matrix** provides an overview of the business requirements of a business domain and to which tasks they are attached.

6.3.1 Business Requirements BPM

6.3.1.1 How to access a L3 Business Requirements BPM using the levelling approach

Upon need for a detailed business procedure description, a L3 Business Requirement BPM is developed and included in the relevant place of the related L2 High Level BPM flow. The screenshot below shows how the L3 Business Requirement BPM "Perform Section B: Outward Processing (EX/IM)" is depicted in the L2 High Level BPM "INF" and how it can be accessed.

1. Open a L2 High Level BPM (see section 6.2.2) and click on the assignment icon to access the L3 Business Requirements BPM.

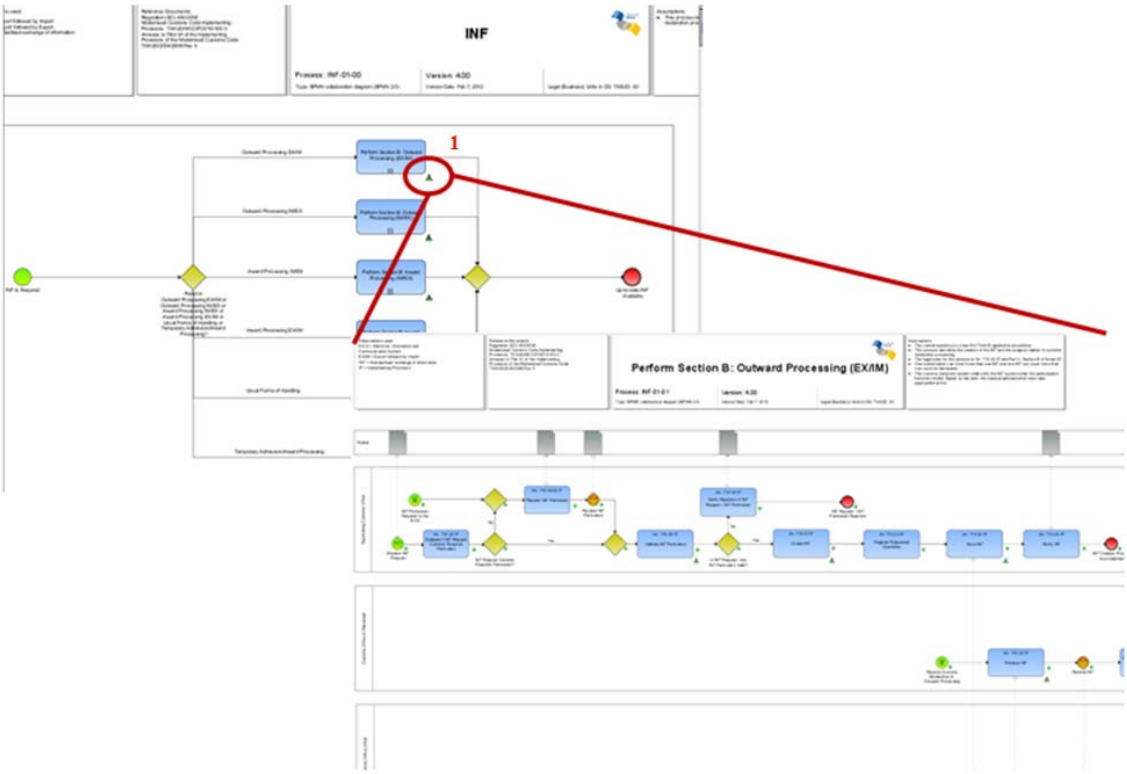

Figure 36: L3 Business Requirements BPM – Levelling Approach

6.3.1.2 How to access a L3 Business Requirements BPM using the folder structure

The Level 3 diagrams can also be accessed from the ARIS navigation tree instead of using the L2 High Level BPM. The Customs Business Processes are divided into folders per level and in the folder '02_CBP L2-L3 HL and Business Requirement BPM' there is a folder for the Enabling Business Domains and a folder for the Core Business Domains.

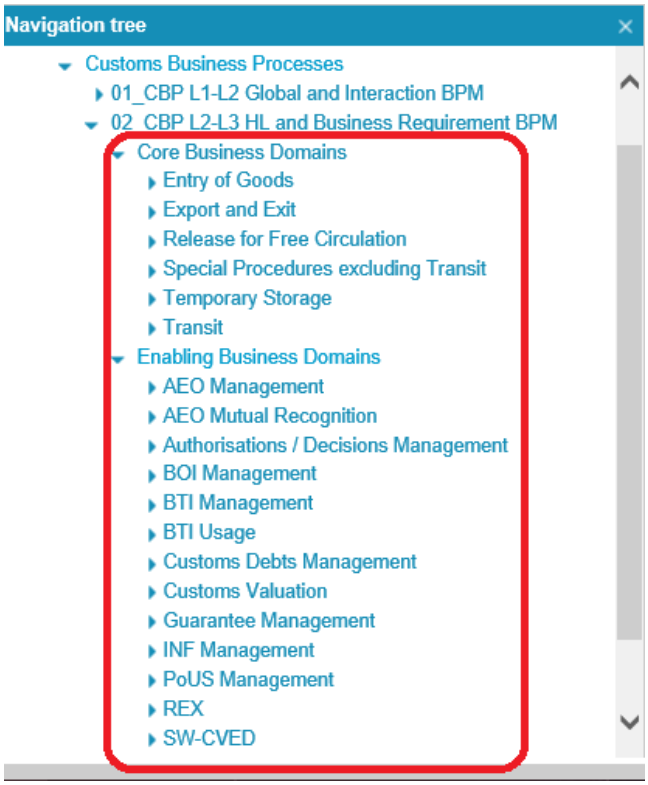

Figure 37: L3 Business Requirements BPM - Folder Structure

Within each business domain folder there are three sub-folders. In the folder '01_Processes', both the L2 High Level BPM and the L3 Business Requirements BPM are stored. Click on the diagrams which name starts with L3 to access the L3 Business Requirements BPM.

6.3.1.3 What information can you find on a L3 Business Requirements BPM

A L3 Business Requirements BPM is divided into two parts depicting respectively the model (shown as number "5" in the screenshot below) and the information on the model ("1", "2", "3" and "4"). The top-left corner gives references to the abbreviations used in the opened model. Next to the abbreviation box is presented the list of all reference document. The third box provides the basic model information such as name, version and issue date. Finally, the top-right box lists the modelling assumptions that must be taken into account while reading the model.

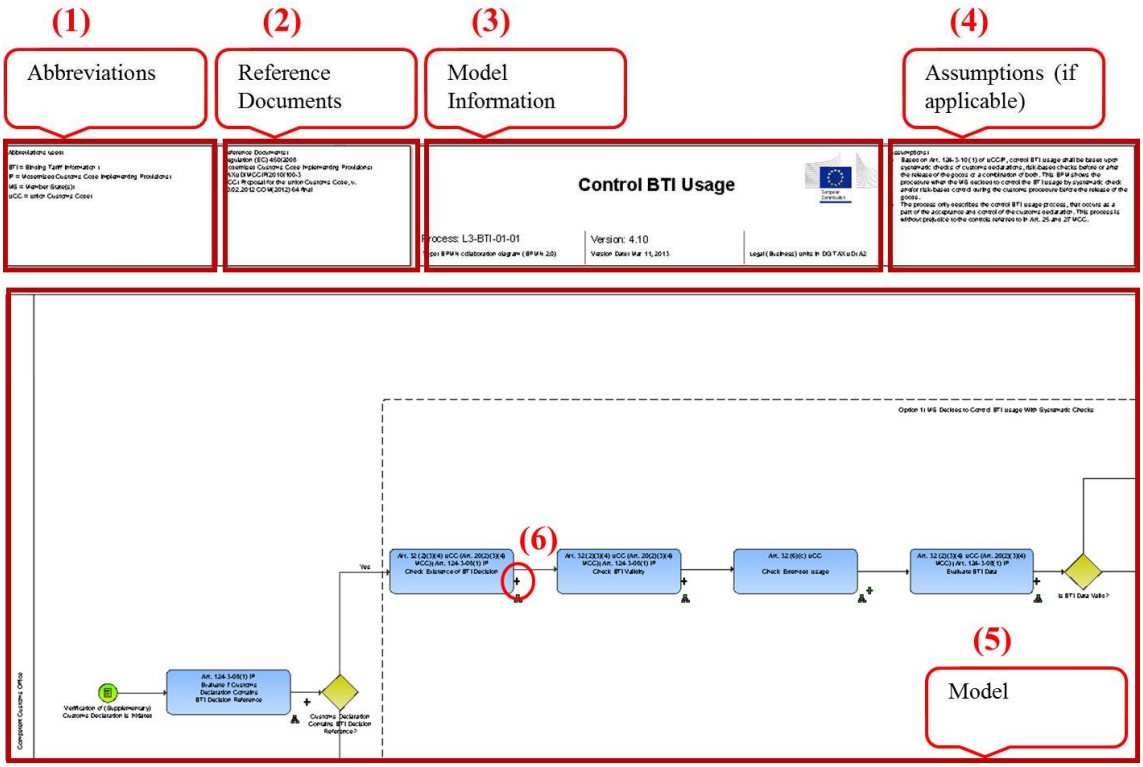

Figure 38: L3 Business Requirements BPM

In a L3 Business Requirements BPM, it is possible that a new requirement is introduced in the model. This new requirement is indicated with a plus-mark (number "6" in Figure 38)

There are two main situations when to include a 'new requirement' using the requirements marker attribute to a task or an event:

- There is new functionality described in the legal text;
- There is a new functionality that will be expected in an existing system.

6.3.2 Function Allocation Diagram

6.3.2.1 How to access a L3 Function Allocation Diagram using the levelling approach

A Function Allocation Diagrams is assigned to each task of a L3 Business Requirement BPM. These FADs provide extra information for the related task in term of associated business requirement.

1. A L3 Function Allocation Diagram can be accessed via the assignment icon. Click on the icon to open the model;
2. One or more business requirements (visualised with a capital [B] in the upper-right corner) are linked to the task in the L3 Function Allocation Diagram.
3. One or more legal references are also linked to the task containing the legal text in the object description.

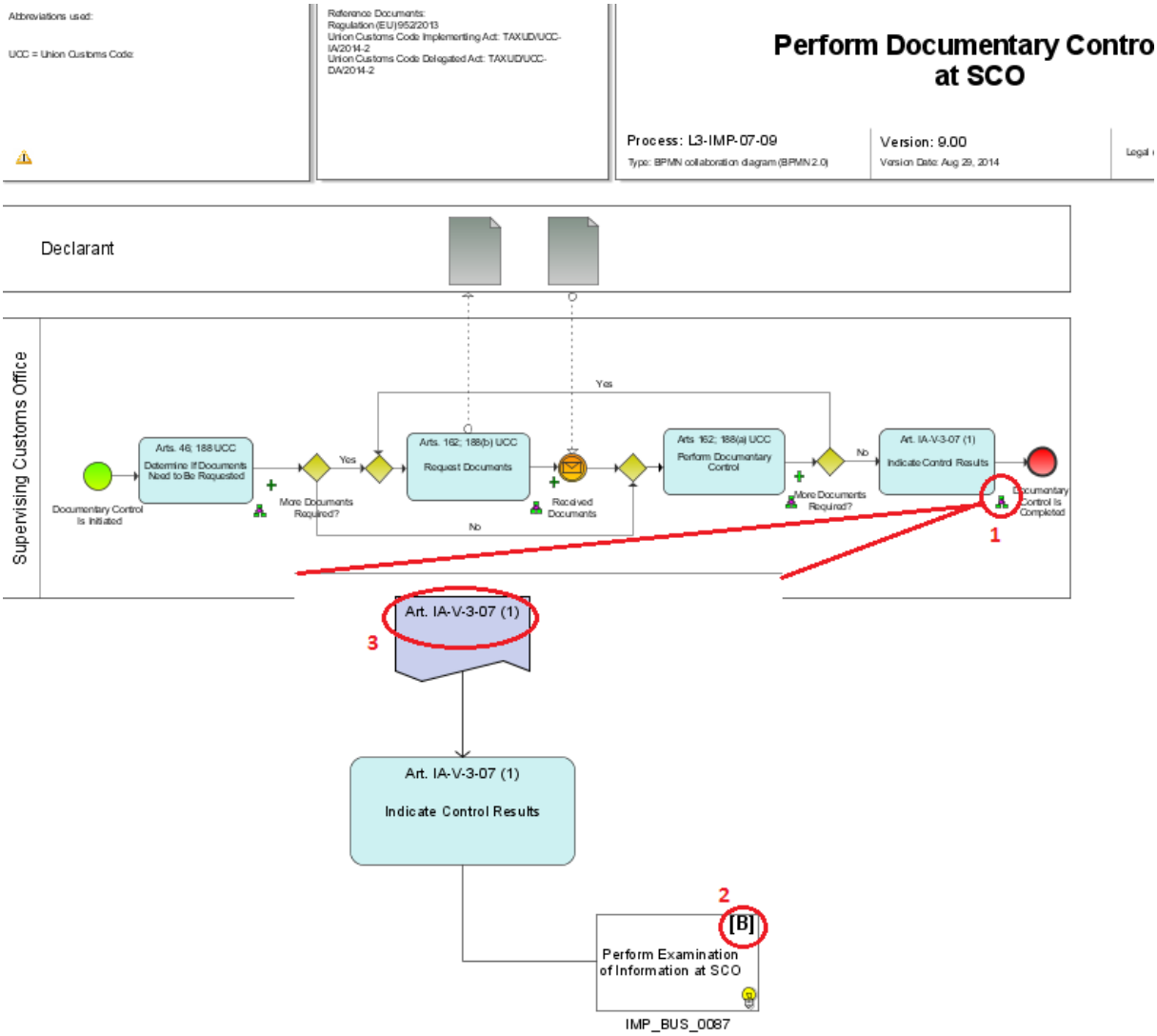

Figure 39: L3 Function Allocation Diagram - Levelling Approach

6.3.2.2 How to access a L3 Function Allocation Diagram using the folder structure

The Level 3 diagrams can also be accessed from the ARIS navigation tree instead of using the L2 High Level BPM. The Customs Business Processes are divided into folders per level and in the folder '02_CBP L2-L3 HL and Business Requirement BPM' there is a folder for the Enabling Business Domains and a folder for the Core Business Domains.

Within each business domain folder there are three sub-folders. In the folder '02_Task Details', all the Function Allocation Diagrams (L3) of a particular business domain are stored.

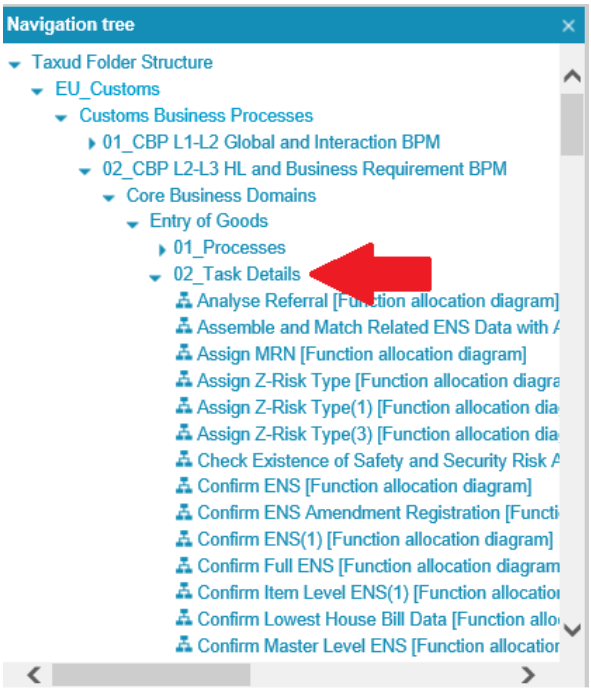

Figure 40: L3 Function Allocation Diagram - Folder Structure

6.3.2.3 What information can you find on a L3 Function Allocation Diagram

A L3 Function Allocation Diagram has two main components:

1. A task of the L3 Business Requirements BPM;
2. One or more business requirements attached to that task with a unique identifier (EXP_BUS_0021).
3. Applicable legal references attached to that task **with the exact legal text.**

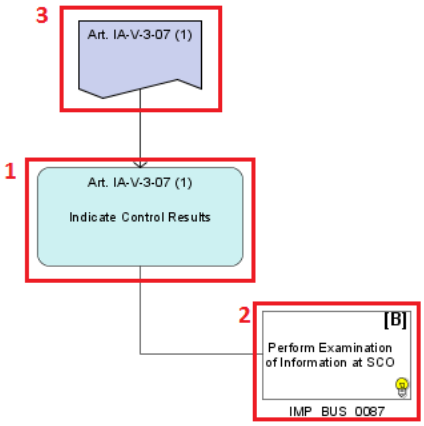

Figure 41: L3 Function Allocation Diagram

6.3.3 Business Requirements Matrix

6.3.3.1 How to access a Business Requirements Matrix using the levelling approach

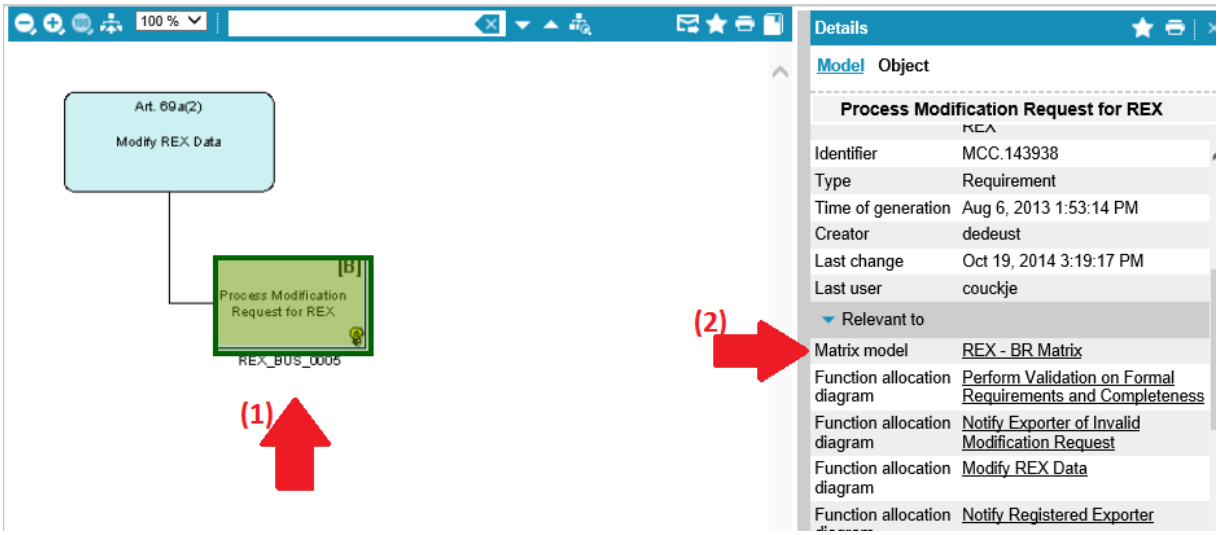

Figure 42: L3 Business Requirement Matrix - Levelling Approach

The Business Requirement Matrix can be accessed through the occurrence of a business requirement in both the Matrix and an FAD.

1. Open a L3 FAD (see section 0) and select the business requirement by left-clicking on it;
2. In the details pane (see section 0) on the right side of your screen under the section 'Relevant for', all occurrences of this business requirement are shown. By clicking on the link of the Matrix Model, the Business Requirement Matrix can be accessed.

6.3.3.2 How to access using the folder structure

Alternatively, the Business Requirement Matrix can be accessed by used the EU Customs BPM folder structure in the navigation pane. The Customs Business Processes are divided into folders per level and in the folder '02_CBP L2-L3 HL and Business Requirement BPM' there is a folder for the Enabling Business Domains and a folder for the Core Business Domains.

Within each business domain folder there are four sub-folders. In the folder '04_Requirements', the Business Requirement Matrix of a particular business domain is stored.

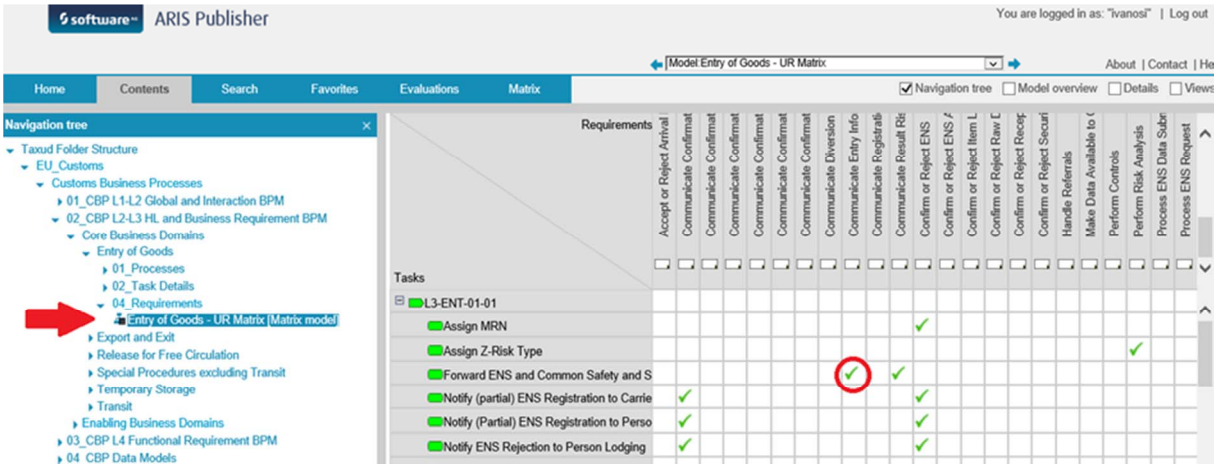

Figure 43: L3 Business Requirement Matrix - Folder Structure

6.3.3.3 What information can you find on a Business Requirement Matrix

The Business Requirement Matrix provides an overview of the business requirements of a business domain and to which tasks they are attached.

When a task refers to a business requirement, the box is check marked as indicated by the red circle in the figure.