

FP7- FoF-ICT-2011.7.3 Virtual Factories and enterprises





"Innovative end-to-end management of Dynamic Manufacturing Networks"

Deliverable D3.3.2

IMAGINE Integrated Platform R1

Workpackage: 3 – Design, Development and System Integration

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CNRS, UNINOVA

Status: Final

Date: | 12/10/2012

Version: 1.0

Classification: Public

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IMAGINE Project Profile

Contract No.: FP7-ICT- 285132

Acronym: IMAGINE

Title: Innovative End-to-end Management of Dynamic Manufacturing

Networks

URL: <u>www.imagine-futurefactory.eu</u>

Start Date: 01/09/2011

Duration: 36 MONTHS



Document History

Version	Date	Author (Partner)	Remarks
0.50	17/09/2012	INTRA, SAG, ServTech, LMS/UoP, LOGO, AIDIMA, IPA, Reply, UoW, CNRS, UNINOVA	First version
0.90	25/09/2012	INTRA	Final Version
0.95	28/9/2012	INTRA	Minor Refinements
0.99	08/10/2012	INTRA, SAG, AIDIMA, LOGO,IPA	Minor Refinements, Peer Review
1.00	12/10/2012	INTRA, AIDIMA	Minor Refinements



Executive Summary

IMAGINE Platform Release 1 is a prototype of the final IMAGINE Platform developed in accordance with Section 3, "Production – Oriented Flow", of Deliverable D2.2.2 v1.0, "IMAGINE Platform Architecture V.1". The "Use Cases of the IMAGINE Platform" D2.2.1 were also considered for the prototype. The relation of the Production – Oriented Flow Phases and Steps is depicted in Deliverable D2.2.2.

This document accompanies D3.3.2 v1.0 "IMAGINE Platform Release 1" and aims to:

- Describe the functionality of the IMAGINE Platform Release 1.
- Link the presented functionality of IMAGINE Platform Release 1 with Deliverable D2.2.2 v1.0

This document is based on IMAGINE Platform Release 1, the consortium will continue and update the IMAGINE Platform regularly to reflect the latest findings and developments of the IMAGINE Project.

Based on the car door manufacturing scenario of Section 3 in Deliverable D2.2.2 v1 and the IMAGINE Use Cases of D2.2.1 the following Production-Oriented Flow Use Cases have been recorded in this document:

- 1. Client selects e-Marketplace Sector
- 2. Client selects DMN Manager
- 3. Clients submits request to DMN Manager
- 4. Client monitors request
- 5. DMN Manager receives request
- 6. DMN Manager inputs required resources
- 7. DMN Manager inputs preliminary schedule
- 8. DMN Manager long lists potential Partners
- 9. DMN Manager short lists potential Partners
- 10. DMN Manager performs Final Configuration of DMN
- 11. DMN Manager creates detailed Product Schedule
- 12. DMN Manager inputs Orchestration and Choreographies
- 13. DMN Manager validates, simulates and deploys DMN
- 14. DMN Manager views deployed DMNs
- 15. DMN Manager Monitors specific DMN
- 16. DMN Manager Monitors specific DMN Process



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1 Introduction

1.1 Purpose and Scope

This document accompanies the IMAGINE Platform Release 1 and its main objectives are to describe the demonstrated functionality of IMAGINE Platform Release 1 as well as to link the functionalities presented with the "Production-Oriented Flow" of the IMAGINE Platform Architecture V.1 (Section 3 of Deliverable D2.2.2 v1.0).

1.2 Imagine Platform Release 1

Imagine Platform Release 1 is a prototype version of IMAGINE Platform. The design of IMAGINE Platform Release 1 follows the "Production – Oriented Flow' of IMAGINE Platform Architecture V1.0 (Section 3 of Deliverable D2.2.2 v1.0). IMAGINE Platform Release 1 is coupled to the Architecture with direct references to the Phases and Steps of the "Production-Oriented Flow".

Figure 1-1 shows a screenshot from the IMAGINE Platform Release 1, the depicted component highlights the Use Case that is related with the functionality that is currently displayed in the browser. This component also directly links the displayed functionality with the Production-Oriented Flow of the IMAGINE Platform Architecture V1.0. The production- oriented flow is divided in separate phases and each phase is divided in consecutive steps. Each of the phases corresponds to one of the DMN Lifecycle phases mentioned in Deliverables D1.1.2., D2.2.1 and D2.2.2. The numbers of each phases in the rows of the table correspond to the number of the phases as appear in the D2.2.2 v1. In the same way the numbers of the steps that are assigned to each Use Case correspond to the step numbering inside each phase according to D2.2.2 v1. The names given to the Use Cases indicate the consecutive actions that have to be followed.

Use Case Name	Production Flow Phase	Production Flow Step
Client Selects eMarketPlace Sector	1	1
Client Selects DMN Manager	1	1
Clients Submits Order to DMN Manager	1	1
Client monitors order	1	1

Figure 1-1. Screenshot from IMAGINE Platform Release showing the link between Production Flow Phases, Steps and Use Case Titles.

The main purpose of Imagine Platform Release 1 is to visually demonstrate the initial design and allow the consortium to evaluate it. The evaluation process provides feedback to the Architects, Designers and Developers that allows for a more consolidated design and development of the future versions.

At this stage key phases and steps have been implemented as prototypes that describe the flow of events in the IMAGINE Platform. Imagine Platform Release 1 also integrates a first version of the Simulation and Evaluation building block which, as mentioned in D2.2.2 v1 section VII-C, evaluates



the different possible DMN configurations giving the DMN Manager consolidated information that would allow him to choose the appropriate configuration.

1.3 Production – Oriented Flow

The Production - Oriented Flow scenario considers the DMN lifecycle phases involved in the production flow of car door manufacturing. An assumption is made that a DMN Manager receives a request for car door manufacturing from an OEM. The manufacturing is then performed by interweaving five main car door-manufacturing processes. A detailed description of the Production-Oriented Flow can be found in Section 3 of Deliverable D2.2.2 v1.0. Figure 1-2 , is a high level view of the car door manufacturing process as presented in the Production – Oriented Flow.

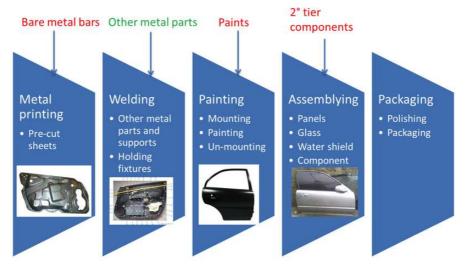


Figure 1-2. High Level view of a car door manufacturing process

1.4 Approach for Work Package and Relation to other Work Packages and Deliverables

This document accompanies the deliverable D3.3.2 v1 which is the IMAGINE Platform Release 1. It aims to indicate the provided functionality that the IMAGINE Platform Release 1 demonstrates and link it with the Production - Oriented Flow of the IMAGINE Platform Architecture v1.0.

In this context this document directly relates the work of WP2 with the work of WP3.

More specifically Deliverable D2.2.2 v1.0 "IMAGINE Platform Architecture" and Deliverable D3.3.2 v1.0 "IMAGINE Platform Release 1" are tightly coupled by this document.



1.5 Structure of the Document

In relation to the aforementioned, the deliverable follows a structure pertaining to the identified main sub-objectives. Section 2.2 presents a Production – Oriented Flow Use Cases summary, linking the various Production – Oriented Flow Use Cases with the appropriate Phases and Steps of the Production-Oriented Flow. In Section 2.3 short descriptions of the various Use Cases briefly familiarize a reader that is aware of the IMAGINE Platform Architecture v1.0 with the demonstrated functionalities of the IMAGINE Platform Release 1.



2 Production-Oriented Flow Use Cases

2.1 Introduction

This Section presents the Production – Oriented Flow Use Cases that capture the demonstrated functionality of the IMAGINE Platform Release 1 and link its functionality with the Production – Oriented Flow scenario of the IMAGINE Platform Architecture v1.0. The "Use Cases of the IMAGINE Platform", D2.2.1 have been also considered for both this the prototype and the IMAGINE Platform Architecture v1.0. The relation of the Production – Oriented Flow Phases and Steps is depicted clearly in Deliverable D2.2.2 where every Step of the flow is associated with the appropriate Use Cases of D2.2.1.

Section **Error! Reference source not found.** presents a summary of the Production-Oriented Flow Use Cases that are later described in Section 2.3.

2.2 Summary / Overview

The IMAGINE Platform Release 1 focuses on the following phases of the Production – Oriented Flow:

- Phase 1: DMN Configuration
- Phase 2: DMN Design
- Phase 3: DMN Execution, Monitoring and Management

For each of these phases some specific "Production-Oriented Flow Use Cases" have been identified. These "Use Cases" pinpoint what the users would have to perform to be able to follow the Production-Oriented Flow scenario. A detailed list of these Production-Oriented Flow Use Cases can be found in Table 2-1. These "Use Cases" stemming from the "Production-Oriented Flow" describe briefly the key actions that have been developed in the IMAGINE Platform Release 1 and their aim is to familiarize the users with the presented functionality. In addition the "Use Cases of the IMAGINE Platform", D2.2.1 have been also considered. The relation of the Production – Oriented Flow Phases and Steps is shown in Deliverable D2.2.2 where every Step of the flow is associated with the appropriate Use Cases of D2.2.1.

Every Production – Oriented Flow Use Case is directly linked to the appropriate phase and step of the Production – Oriented Flow Section of the IMAGINE Platform Architecture v1.0 allowing the users to place each functionality in the context of the scenario described in detail there. Each Production-Oriented Flow Use Case is also given a title that briefly describes its content.

In IMAGINE Platform R1 it is assumed that Clients, potential DMN Managers and Suppliers have already registered and are connected in the IMAGINE Platform, have supplied all the required information in the form of Blueprints and are ESB-Compatible, being able to exchange information via the IMAGINE Service Bus. The IMAGINE Platform prototype focuses on the DMN Manager Actor,



showing also some key actions of the Client Actor. The actions of the Supplier Actors are implied but not directly demonstrated in the prototype IMAGINE Platform.

Table 2-1. Production-Oriented Flow Use Cases Summary

Title	Related Production- Oriented Flow Phase	Related Production- Oriented Flow Step	ID
Client Selects e-Marketplace Sector	1	Step-1	PF1
Client Selects DMN Manager	1	Step-1	PF2
Clients Submits request to DMN Manager	1	Step-1	PF3
Client monitors request	1	Step-1	PF4
DMN Manager receives request	1	Step-2	PF5
DMN Manager inputs required resources	1	Step-2	PF6
DMN Manager inputs preliminary schedule.	1	Step-2	PF7
DMN Manager Long Lists potential Partners	1	Step-3	PF8
DMN Manager Short Lists potential Partners	1	Step-3	PF9
DMN Manager performs Final Configuration of DMN	1	Step-3	PF10
DMN Manager Creates detailed Product Schedule	2	Step-1	PF11
DMN Manager inputs Orchestration and Choreographies	2	Steps-2,3	PF12
DMN Manager Validates, Simulates and Deploys Network	2	Step-3	PF13
DMN Manager Views Deployed DMNs	3	Step-1	PF14
DMN Manager Monitors Specific DMN	3	Step-1	PF15
DMN Manager Monitors Specific Process	3	Step-1	PF16



2.3 Use Cases Description

2.3.1 Client Selects e-Marketplace Sector

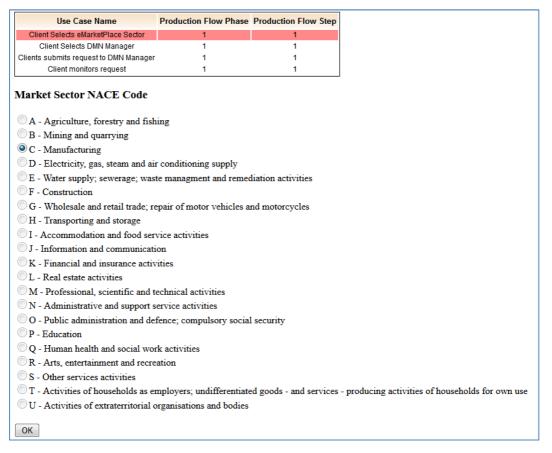


Figure 2-1. Client Selects e-Marketplace Sector Screenshot.

Table 2-2. Client Selects e-Marketplace Sector

ID	PF1	
Title	Client Selects e-Marketplace Sector	
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/eMarketPlace/eMarketPlaceHome.jsp	
Description	Client enters the e-Marketplace and chooses one of the available Market Sectors. (IMAGINE Platform Release 1 only provides a stab Car Manufacturing Market Place.)	
Phase	1	
Step	1	



2.3.2 **Client Selects DMN Manager**

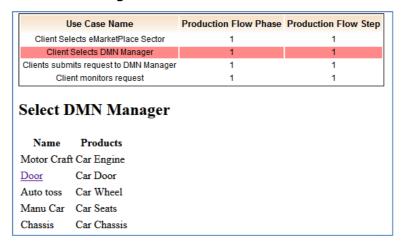


Figure 2-2. Client Selects DMN Manager Screenshot.

Table 2-3. Client Selects DMN Manager

ID	PF2
Title	Client Selects DMN Manager
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/eMarketPlace/selectDMNManager.jsp
Description	The e-Marketplace for car manufacturing sector allows the Client to choose a DMN Manager that is experienced in manufacturing Car Doors. (IMAGINE Platform Release 1 only provides a template for a car door request placement.)
Phase	1
Step	1



2.3.3 Clients submits request to DMN Manager

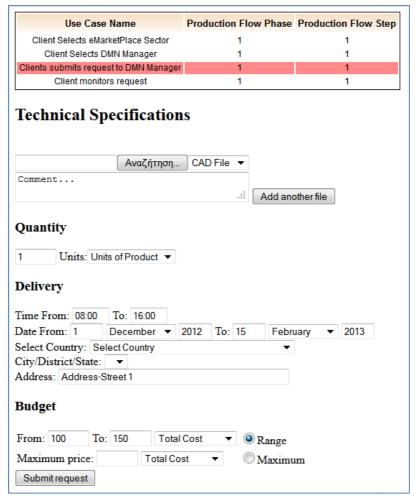


Figure 2-3. Client submits request to DMN Manager Screenshot

Table 2-4. Clients submits request to DMN Manager

ID	PF3	
Title	Clients submits request to DMN Manager	
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/configuration/CustomerRequestOrder.jsp	
Description	 The Client uploads the specifications of the desired product in one or more files using a one of the available file formats and optionally including comments. The Client defines: Delivery date Quantity and Units Delivery address Budget (Price range or maximum price) The Client submits the request. 	
Phase	1	
Step	1	



2.3.4 Client monitors request



Figure 2-4. Client Monitors request Screenshot.

Table 2-5. Client monitors request

ID	PF4	
Title	Client monitors request	
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/monitor/ClientOrder.jsp	
Description	After request submission the Client will be able to monitor the process of his request by using the Request ID. (IMAGINE Platform Release 1 shows a single snapshot of a prototype request monitoring screen.)	
Phase	1	
Step	1	



2.3.5 **DMN Manager receives request**

Use Case Name	Production Flow Phase	Production Flow Ste
DMN Manager receives order	1	2
DMN Manager inputs required resources	1	2
DMN Manager inputs preliminary schedule	1	2
DMN Manager Long Lists potential Partners	1	3
DMN Manager Short Lists potential Partners	1	3
DMN Manager performs Final Configuration of DMN	1	3
DMN Manager Creates detailed Production Schedule	2	1
DMN Manager Orchestration Choreographies	2	2,3
OMN Manager Validates Simulates and Deploys Network	2	3
New Orders	mitted	
045 Automotive Industry Tue Sep 25 15:05:		

Figure 2-5. DMN Manager Receives request Screenshot.

Table 2-6. DMN Manager receives request

ID	PF5
Title	DMN Manager receives request
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/DMNManagerConsole/ /DMNreceivedOrders.jsp
Description	The DMN Manager is notified about the new request.The new request is visible in the "New requests menu".
Phase	1
Step	2



2.3.6 DMN Manager inputs required resources

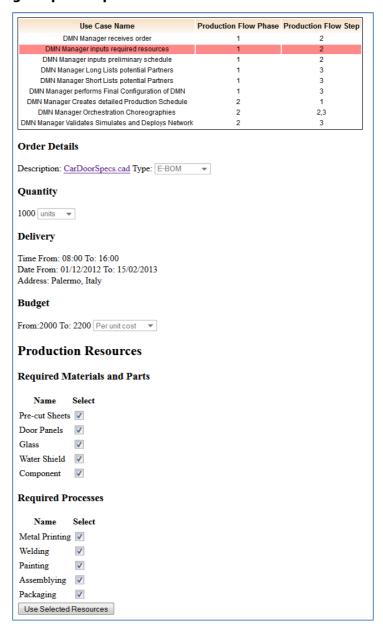


Figure 2-6. DMN Manager inputs requested resources Screenshot.



Table 2-7. DMN Manager inputs required resources

ID	PF6
Title	DMN Manager inputs required resources
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/configuration/OrderD MNconfiguration.jsp
Description	The DMN Manager consults Production Planner and Production Engineers in order to create a High Level Work Plan and Associated Schedule. Initially the required parts, materials and processes are identified and selected. We assume in that stage that the required resources (Parts, Materials and Processes) that appear selected in this screen have been specified by a Product Blueprint containing the BOM or have been selected by appropriate menus in the platform. The Product Blueprint containing the BOM could have been provided via file upload or by connection to another system such as an ERP through the IMAGINE ESB via an appropriate adapter. It is also assumed that the DMN Manager validates and confirms the order; in general the DMN Manager could also reject a Client request.
Phase	1
Step	2



2.3.7 **DMN Manager inputs preliminary schedule**

Use Case Name	Production Flow Phase	Production Flow Step
DMN Manager receives order	1	2
DMN Manager inputs required resources	1	2
DMN Manager inputs preliminary schedule	1	2
DMN Manager Long Lists potential Partners	1	3
DMN Manager Short Lists potential Partners	1	3
DMN Manager performs Final Configuration of DMN	1	3
DMN Manager Creates detailed Production Schedule	2	1
DMN Manager Orchestration Choreographies	2	2,3
DMN Manager Validates Simulates and Deploys Network	2	3

Request Details

Description: <u>CarDoorSpecs.cad</u> Type: E-BOM ▼

Quantity

1000 units ▼

Delivery

Time From: 08:00 To: 16:00 Date From: 01/12/2012 To: 15/02/2013 Address: Palermo, Italy

Budget

From:2000 To: 2200 Per unit cost

Production Resources

Required Materials and Parts

Name	Quantity	Units	Process Used In	Max Delivery Date
Pre-cut Sheets	2000	Units of Product ▼	Metal Printing	01.01.2013
Door Panels	1000	Units of Product ▼	Assemblying	01.01.2013
Glass	1000	Units of Product ▼	Assemblying	01.01.2013
Water Shield	1000	Units of Product ▼	Assemblying	01.01.2013
Component	1000	Units of Product ▼	Assemblying	01.01.2013

Required Processes

Name	Capacity	Units	Sequence	Max Delivery Date	Average Process Time per Unit
Metal Printing	45	Units of Product ▼	1	01.01.2013	45
Welding	21	Units of Product ▼	2	01.01.2013	45
Painting	14	Units of Product ▼	3	01.01.2013	45
Assemblying	44	Units of Product ▼	4	01.01.2013	45
Packaging	33	Units of Product ▼	5	01.01.2013	45
Confirm Prelim	inary Sche	dule			

Figure 2-7. DMN Manager inputs preliminary schedule Screenshot.



Table 2-8. DMN Manager inputs preliminary schedule

ID	PF7
Title	DMN Manager inputs preliminary schedule
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/configuration/OrderD MNconfigurationProcesses.jsp
Description	 Provides estimation regarding the required quantities as well as measurement units of Parts and Materials Specifies the processes that Parts and Materials are Used in and Max Delivery Date Provides estimation regarding the required Capacity and Units for the processes Selects appropriate measurement units Indicates the process execution order (sequence). Specifies the processes in which parts and materials are used Defines maximum delivery dates
Phase	1
Step	2



2.3.8 **DMN Manager Long Lists potential Partners**

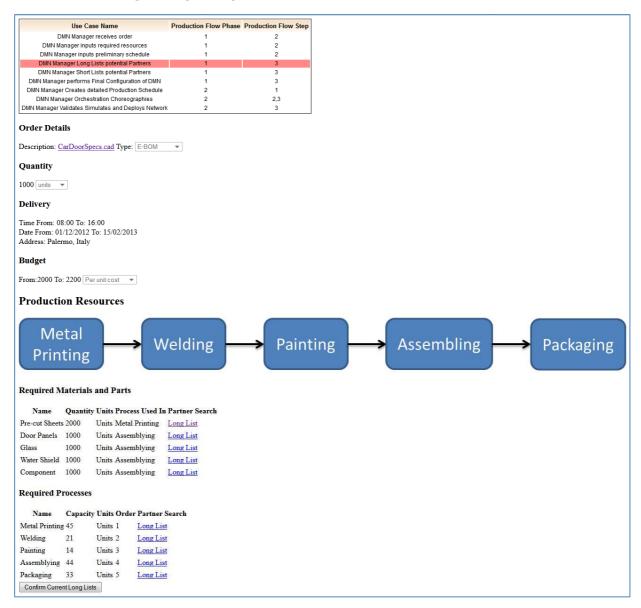


Figure 2-8. DMN Manager Long Lists Potential Partners Screenshot.



Table 2-9. DMN Manager long-lists potential Partners

ID	PF8
Title	DMN Manager long-lists potential Partners
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/configuration/OrderD MNconfigurationLongList.jsp
Description	 DMN Manager long-lists potential Suppliers for each process, part and selected material. For each process, part or material appropriate suppliers are identified automatically by matching the required resources with the Partner Blueprints that is provided by Suppliers. Long list is based on available information for partners such: Industry Sector, Number of employees, Annual Turnover, Supported Standards, Available Processes or Manufacturing Equipment and the Geographical region, Process Skills, Core manufacturing processes, Average Price per Unit, Customer References, Awards, and Patents. DMN Manager can select the criteria that will be used. Imagine platform recommends some Suppliers to be selected based on appropriate algorithms.
Phase	1
Step	3



2.3.9 **DMN Manager Short Lists potential Partners**

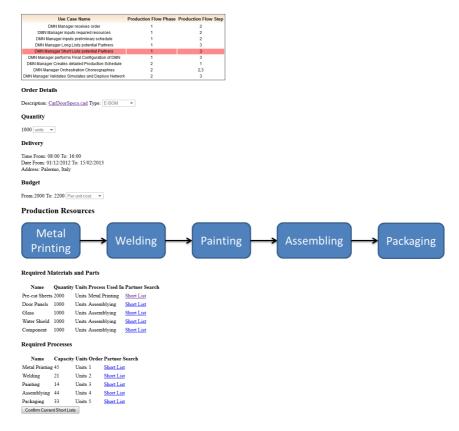


Figure 2-9. DMN Manager Short Lists Potential Partners Screenshot.

Table 2-10. DMN Manager Short Lists potential Partners

ID	PF9
Title	DMN Manager Short Lists potential Partners
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/design/OrderPartnerSelect.js p?type=Product&name=Pre-cut%20Sheets
Description	DMN Manager Short List potential suppliers for each process, part and material based on restricted information criteria. • Max Capacity • Price range • Quality • Average Lead Time • Expected Delivery Date • Expected Manufacturing Time • Available Stock IMAGINE Platform provides recommendations based on appropriate algorithms and DMN Manager makes the final decision.
Phase	1
Step	3



2.3.10 DMN Manager performs Final Configuration of DMN

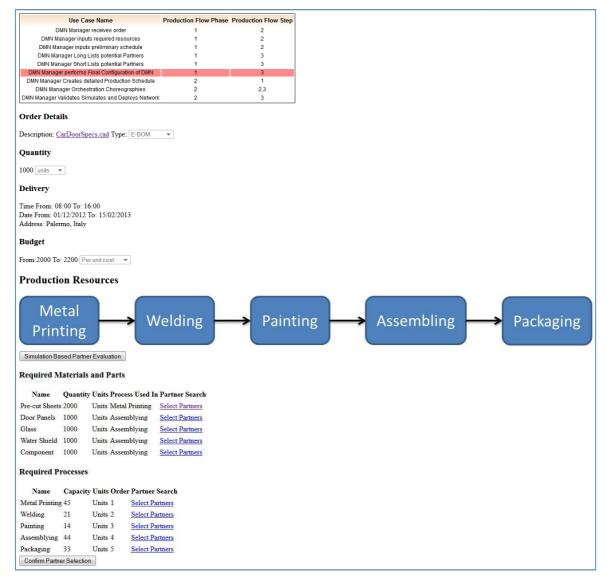


Figure 2-10. DMN Manager Performs Final Configuration of DMN Screenshot.



Processes	i									
Process	Supplier Name	Min Lead Time	Max Lead Time	Mean Lead Time	Variable Cost		ixed Cost			
Ietal Printing	Super Metal Printing	7.0	12.0	10.0	10.0	2.0				
Ietal Printing	Good Metal Printing	8.0	13.0	10.0	7.0	5.0				
elding	Super Welding	10.0	14.0	12.0	6.0	1.0				
elding	Good Welding	9.0	12.0	11.0	4.0	3.0				
ainting	Super Painting	12.0	14.0	13.0	15.0	2.0				
ainting	Good Painting	10.0	16.0	15.0	14.0	2.0				
_	Super Assemblying	17.0	25.0	20.0	10.0	7.0				
ssemblying	Good Assemblying	15.0	30.0	22.0	13.0	7.0				
ackaging	Super Packaging	8.0	19.0	15.0	10.0	9.0				
ackaging	Good Packaging	9.0	21.0	14.0	11.0	5.0				
Metal Prin		_	semblying Pack	0 0	me Mean Lead Time					st
-			Assemblying Super Pa		70.0	84.0	581.0	738.0	84.0	
-			Assemblying Good Pa		69.0	86.0	596.0	738.0	86.0	
•			Assemblying Super Pa		72.0	89.0	606.0	824.0	89.0	
•			Assemblying Good Pa		71.0	91.0	621.0	824.0	91.0	
•			Assemblying Super Pa		72.0	86.0	541.0	753.0	86.0	
-			Assemblying Good Pa		71.0	88.0	556.0	753.0	88.0	
-		_	Assemblying Super Pa		74.0	91.0	566.0	839.0	91.0	
•		_	Assemblying Good Pa		73.0	93.0	581.0	839.0	93.0	
•			Assemblying Super Pa	0 0	69.0	82.0	559.0	712.0	82.0	
•			Assemblying Good Pa	0 0	68.0	84.0	574.0	712.0	84.0	
			Assemblying Super Pa		71.0	87.0	584.0	798.0	87.0	
-	-	-	Assemblying Good Pa		70.0	89.0	599.0	798.0	89.0	
-	-		Assemblying Super Pa		71.0	84.0	519.0	727.0	84.0	
-	-		Assemblying Good Pa		70.0	86.0	534.0	727.0	86.0	
-		_	Assemblying Super Pa		73.0	89.0	544.0	813.0	89.0	
•		_	Assemblying Good Pa	0 0	72.0	91.0	559.0	813.0	91.0	
			Assemblying Super Pa		70.0	85.0	570.0	711.0	85.0	
			Assemblying Good Pa		69.0	87.0	585.0	711.0	87.0	
		-	Assemblying Super Pa		72.0	90.0	595.0	797.0	90.0	
			Assemblying Good Pa		71.0	92.0	610.0	797.0	92.0	
			Assemblying Super Pa		72.0	87.0	530.0	726.0	87.0	
			Assemblying Good Pa		71.0	89.0	545.0	726.0	89.0	
		_	Assemblying Super Pa		74.0	92.0	555.0	812.0	92.0	
		_	Assemblying Good Pa		73.0	94.0	570.0	812.0	94.0	
			Assemblying Super Pa		69.0	83.0	548.0	685.0	83.0	
			Assemblying Good Pa		68.0	85.0	563.0	685.0	85.0	
	-		Assemblying Super Pa		71.0	88.0	573.0	771.0	88.0	
			Assemblying Good Pa		70.0	90.0	588.0	771.0	90.0	
		0 1	Assemblying Super Pa		71.0	85.0	508.0	700.0	85.0	
			Assemblying Good Pa		70.0	87.0	523.0	700.0	87.0	
		_	Assemblying Super Pa		73.0	90.0	533.0	786.0	90.0	
	-	Good Painting Good	Assemblying Good Pa		72.0	92.0	548.0	786.0	92.0	
Metal Prin	-	_			ne Mean Lead Time			st Mean C	ost Max Co	st Evaluation
ood Metal Pr			Assemblying Super Pa		69.0	83.0	548.0	685.0	83.0	Minimum Mean Cost
		0 0 0	Assemblying Good Pa	1 . 540	68.0	84.0	574.0	712.0	84.0	Minimum Mean Dura

Figure 2-11. Simulation based Evaluation



Table 2-11. DMN Manager performs Final Configuration of DMN

ID	PF10				
Title	DMN Manager performs Final Configuration of DMN				
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/configuration/OrderDMNconfigurationSelectPartners.jsp				
Description	 DMN Manager finally chooses the suppliers for materials, parts and processes based on confidential real time data from suppliers regarding their expected capacity in specified dates. (In IMAGINE Platform Release 1 values are stored internally and not retrieved from external systems.) IMAGINE Platform may simulate and evaluate the available Suppliers providing more sophisticated recommendations. The simulation and evaluation functionality has been implemented and IMAGINE Platform Release 1 allows the editing of the existing values and getting different results. In the current version the Minimum Lead Time, Maximum Lead Time, Fixed and Variable Costs are taken into account by the "DMN Simulation and Evaluation building block". We assume that the required information is provided by all Suppliers via the IMAGINE ESB and Partner Blueprints. The IMAGINE Platform R1 utilizes the "DMN Simulation and Evaluation building block" to calculate and simulate the available configurations and provide recommendations. In this version of the platform the DMN configuration with the minimum Mean Lead Time and the DMN configuration with the minimum Mean Total Cost are identified. The "DMN Simulation and Evaluation building block" is described in D2.2.2 v1 section VII-C. 				
Phase	1				
Step	3				



2.3.11 DMN Manager Creates detailed Production Schedule

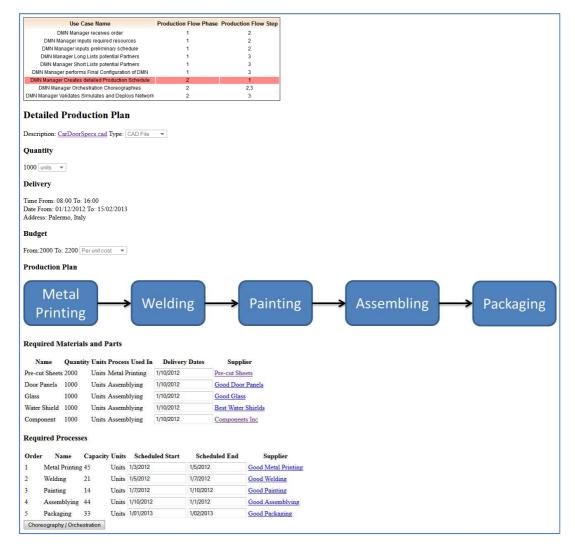


Figure 2-12. DMN Manager Creates Detailed Production Schedule Screenshot.

Table 2-12. DMN Manager Creates detailed Production Schedule

ID	PF11
Title	DMN Manager Creates detailed Production Schedule
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/design/OrderDMNEndToEnd Design.jsp
Description	DMN Manager completes the detailed production schedule by providing the exact dates for Materials, Parts and Processes.
Phase	2
Step	1



2.3.12 DMN Manager inputs Orchestration and Choreographies



Figure 2-13. DMN Manager inputs Orchestration and Choreographies Screenshot.



Table 2-13. DMN Manager inputs Orchestration and Choreographies

ID	PF12
Title	DMN Manager inputs Orchestration and Choreographies
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/design/OrderDMNChoreographyOrchestration.jsp
Description	DMN Manager specifies the interaction of different Suppliers and uploads detailed instructions to each one. (In IMAGINE Platform Release 1 we assume that all the detailed instructions can be included in a file of appropriate format. That could be a zip file containing multiple files or a process-specific file with appropriate format.)
Phase	2
Step	2, 3

2.3.13 DMN Manager Validates, Simulates and Deploys Network



Figure 2-14. DMN Manager Validates, Simulates and Deploys Network Screenshot.



Table 2-14. DMN Manager Validates, Simulates and Deploys Network

ID	PF13
Title	DMN Manager Validates, Simulates and Deploys Network
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/design/OrderDMNSimulateValidate.jsp
Description	 DMN Manager may validate the overall network against different simulated scenarios. DMN Manager may select various simulation scenarios depending on his expectations for the DMN. The IMAGINE Platform then simulates the overall network configuration and provides an indication regarding the ability of each partner to work effectively in the selected scenario. In this version, the IMAGINE Platform will indicate that all partners are able to perform effectively in all possible scenarios. DMN Manager provides a name to be able to identify the network and deploys the DMN.
Phase	2
Step	3

2.3.14 DMN Manager Views Deployed DMNs

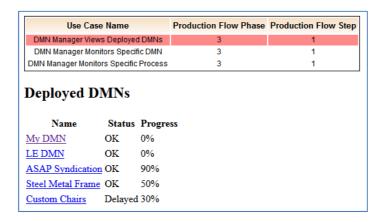


Figure 2-15. DMN Manager Views Deployed DMNS Screenshot.

Table 2-15. DMN Manager Views Deployed DMNs

ID	PF14
Title	DMN Manager Views Deployed DMNs
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/monitor/DeployedDMNList.jsp
Description	DMN Manager may see the deployed DMNs that he manages.
Phase	3
Step	1



2.3.15 **DMN Manager Monitors Specific DMN**

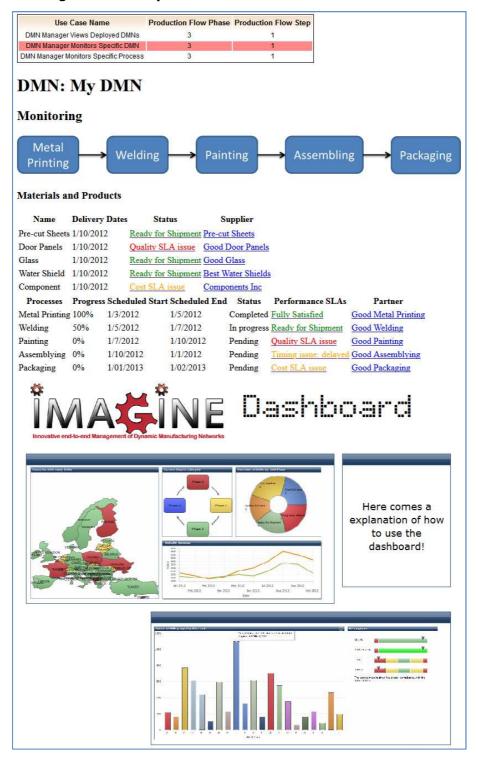


Figure 2-16. DMN Manager Monitors Specific DMN Screenshot.



Table 2-16.DMN Manager Monitors Specific DMN

ID	PF15
Title	DMN Manager Monitors Specific DMN
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/monitor/OrderDM NDeployed.jsp?name=My%20DMN
Description	By clicking a DMN the DMN Manager may see detailed information about the DMN network as a whole. (In IMAGINE Platform Release 1 "My DMN" network is the network that the DMN Manager creates in the other use cases, and it is the one with the most information.)
Phase	3
Step	1

2.3.16 **DMN Manager Monitors Specific Process**

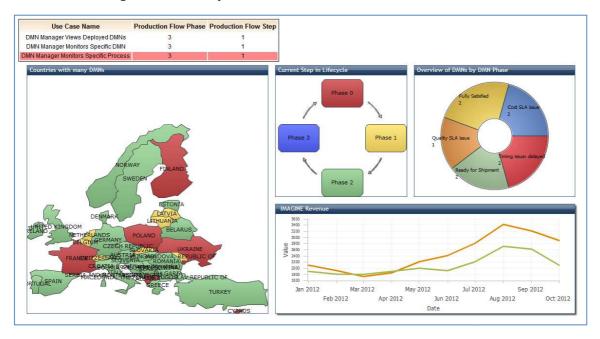


Figure 2-17. DMN Manager Monitors Specific Process Screenshot.



Table 2-17. DMN Manager Monitors Specific Process

ID	PF16
Title	DMN Manager Monitors Specific Process
Page	http://syrios.mech.upatras.gr:7080/IMAGINE%20R1/pages/monitor/monitoring.jsp
Description	DMN Manager can click on a specific process status to see a detailed dashboard with in depth information.
Phase	3
Step	1



3 Conclusions and Next Steps

3.1 Conclusions and Next Steps

The main aims of Deliverable D3.3.2 v1 were the following:

- To develop a prototype in order to allow evaluation by the Living Lab partners and serve as a starting point for discussions and further development of IMAGINE Platform.
- To merge the Use Cases of D2.2.1 and the Production-Oriented Flow section of D2.2.2 v1 into a unified context.
- To provide a first understanding on how the different steps and phases of the processes flow can be best visualized and illustrated.

It is expected that these aims have been addressed and the evaluation process has provided the consortium with useful feedback that will be taken into account by the Tasks that are responsible for the IMAGINE Platform Architecture, Design and Development. More specifically in Task 2.2 of WP2 which is responsible for the IMAGINE Platform Architecture the received comments will be incorporated within the next version of the IMAGINE Platform Architecture, while at the same time the Tasks of WP3 will utilize the gathered experience for designing, implementing and integrating a new consolidated version of the IMAGINE Platform.