




Overview of the Project

ModelWriter

Text & Model-Synchronized Document Engineering Platform

The project envisions an integrated authoring environment called "ModelWriter" for Technical Authors (such as Software or Systems Engineers etc.) which will combine a Semantic Word Processor (= the "Writer" part) and a Knowledge Capture Tool (= the "Model" part).

Project information

| | |
|---------------------|---|
| Project name | 13028 ModelWriter |
| Status | Running |
| Period | Oct 2014 - Sep 2017 |
| Call | ITEA 2 Call 8 |
| Challenge | Knowledge-based society |
| Website | www.modelwriter.eu |
| Partners | 10 |
| Countries |  Belgium  France  Turkey |

Project leader














Name
 Ferhat Erata
Organisation
 UNIT Information Technologies
 R&D Ltd.
Country
 Turkey
Project involvement
 13028 ModelWriter

Project documents

Project publications

-  [ITEA Annual report 2013 published online](#)
-  [ModelWriter Posters Co-summit 2015](#) 
-  [ModelWriter Project Leaflet](#) 

Project partners

| | | | |
|---|--|---|--|
| Airbus Group SAS  France | Centre National de la Recherche Scientifique  France | Havelsan  Turkey | Hisbim Bilgi ve İletişim Teknolojileri  France |
| Katholieke Universiteit Leuven  Belgium | KoçSistem  Turkey | Mantis  Turkey | beo  France |
| Sogeti Belgium  Belgium | UNIT Information Technologies R&D Ltd.  Turkey | Ford Otosan  Turkey | |

Industrial End User. Application Lifecycle Management (ALM)

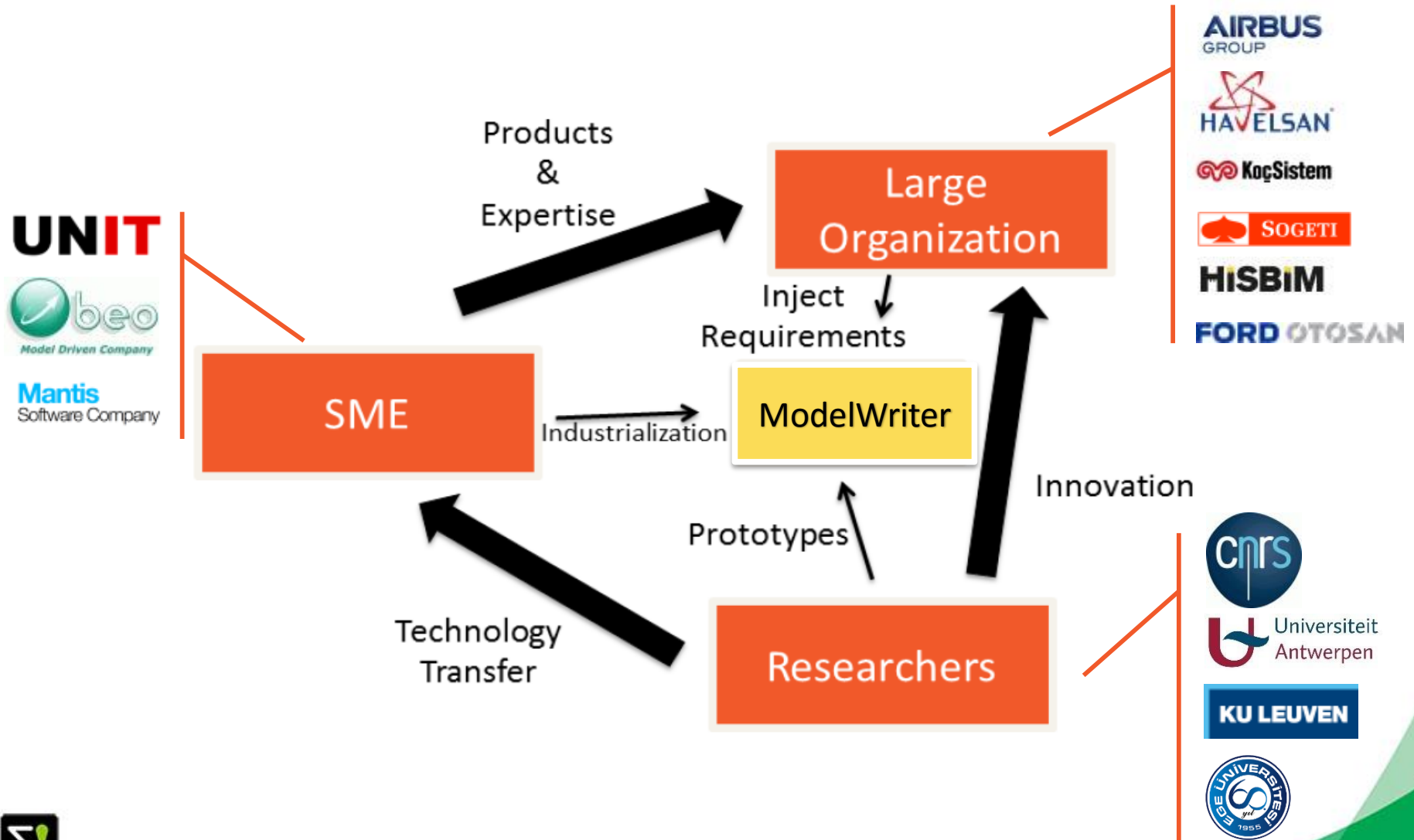
Industrial End User. Testing & Global Engineering Services

Industrial End User. Product Lifecycle Management (PLM)



Industrialization Triangle in ModelWriter

Open Source Software



ModelWriter

Project Overview

A vertical timeline graphic on the left side of the slide, consisting of five white circles connected by a blue line that starts at the top and ends at the bottom, with a small blue arrowhead pointing downwards at the end.

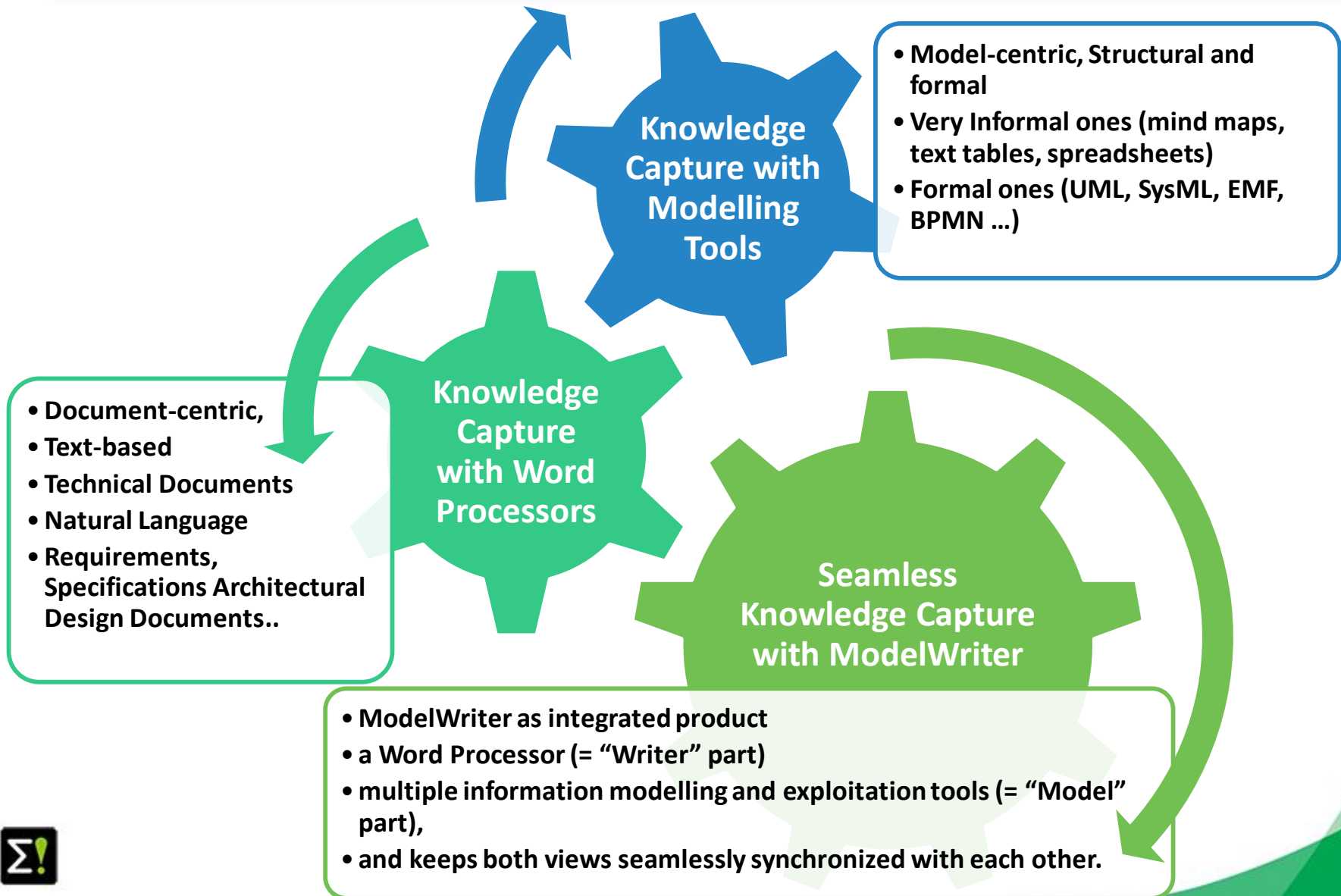
Resource Allocation: 68,71 person year

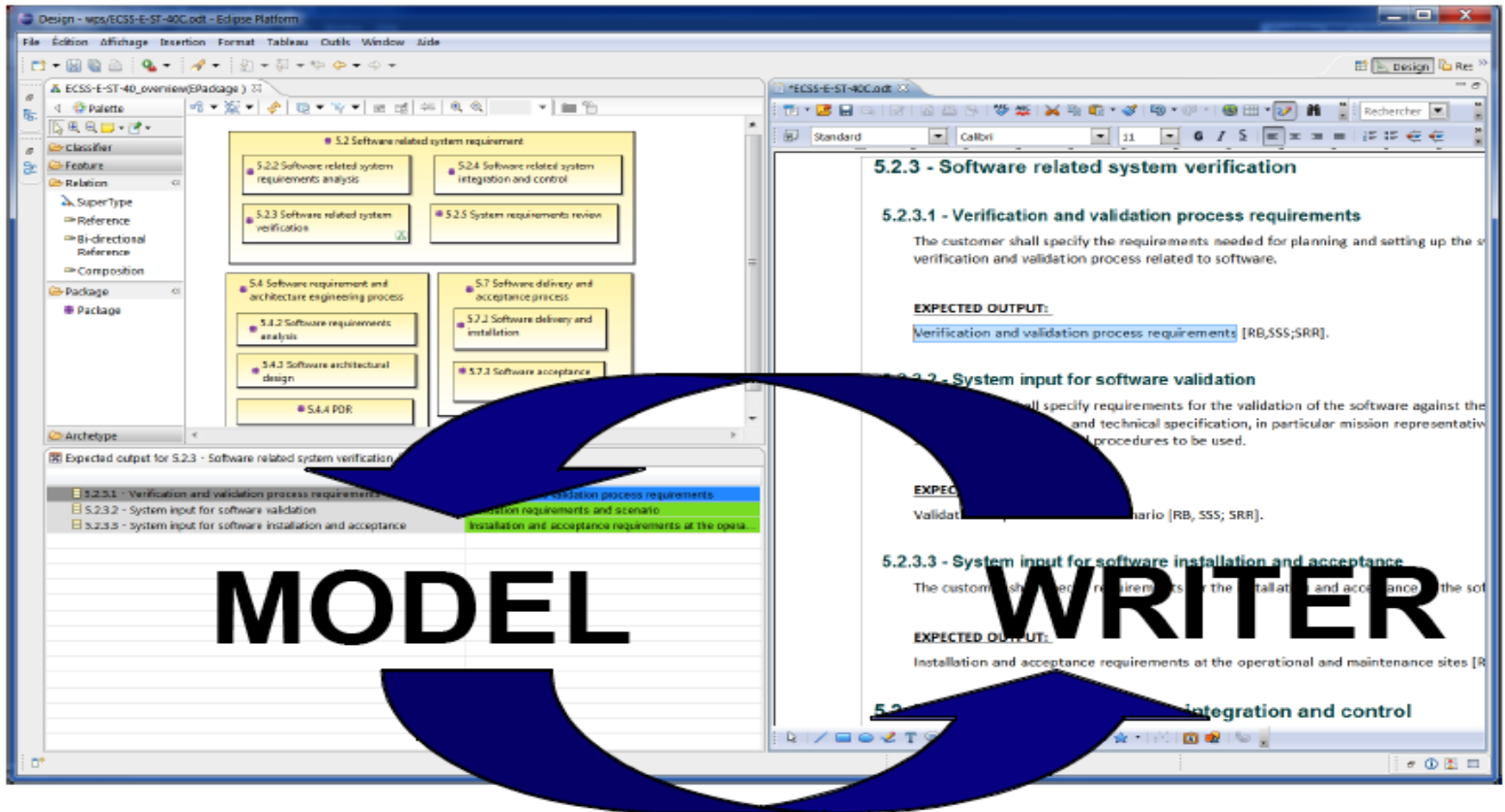
Project Duration: 36 months

Planned Budget: 5,543,000 Euro

Start and Finish Date: 01 Oct 2014 – 30 Sep 2017

Open-Source Software Platform to be submitted to Eclipse Foundation





MODEL


WRITER

Semantic Word Processor
(Text-Based Knowledge Extractor)

Understands the various textual parts of a document expressed in Natural Language

Reveals concepts and relationships between them (“Model”-part)

Consistency & Completeness Checking

A vertical sequence of four white circles connected by a blue line. The top circle is connected to the second, the second to the third, and the third to the fourth. The fourth circle is also connected to a small black square icon at the bottom left.

“Everywhere” Document Regeneration: “tell once, show everywhere”:
recycling knowledge from (1) the same document, or of (2) another related document

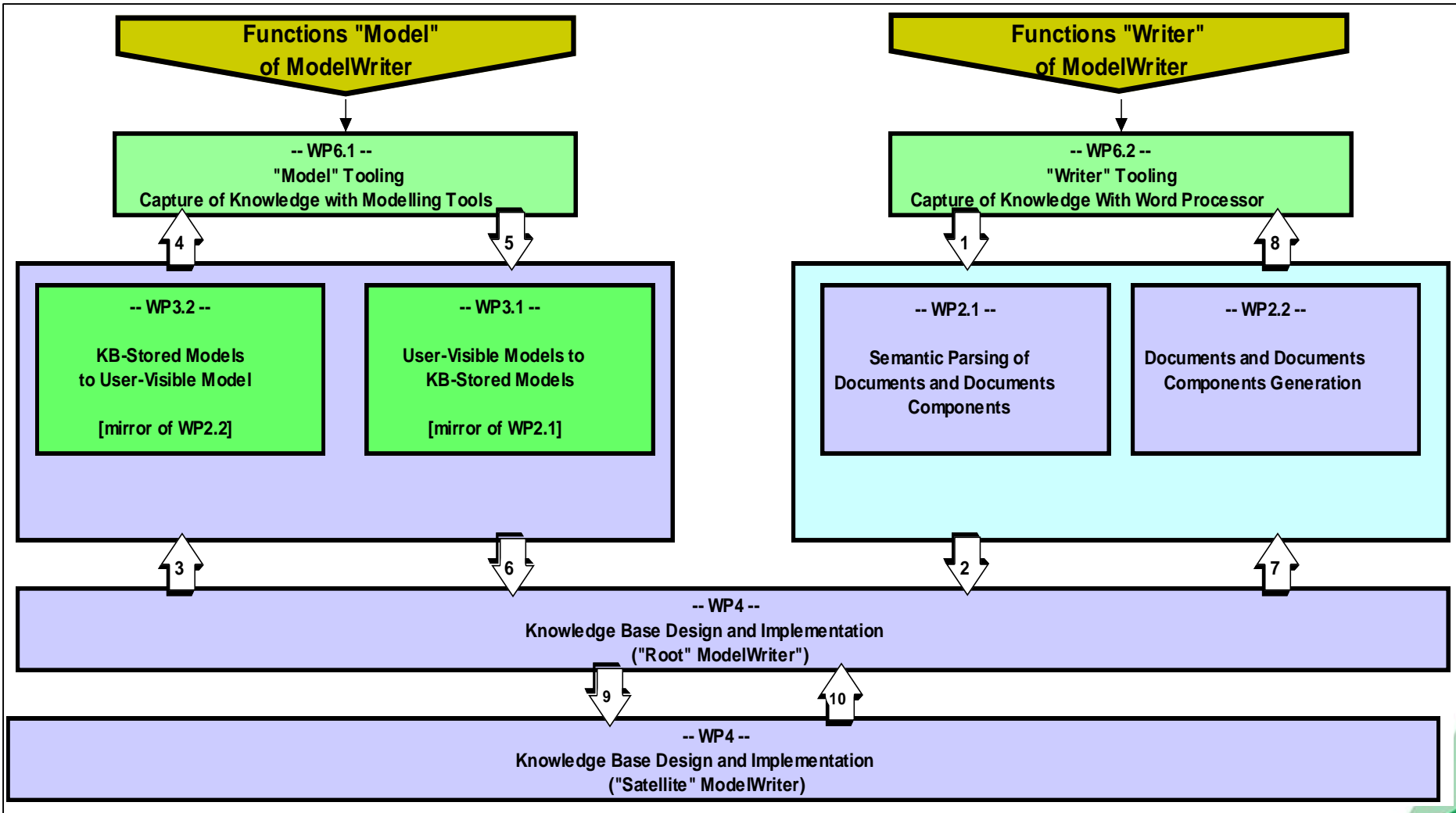
Consistency Checking: the objective to provide a Consistency Checker that
automates Quality Reviews of Requirements Engineering

Open API for Future Dissemination and Exploitation to further extend the Business
Value Chain

“MW” Knowledge Dissemination Standard (.mw ModelWriter exchange format)

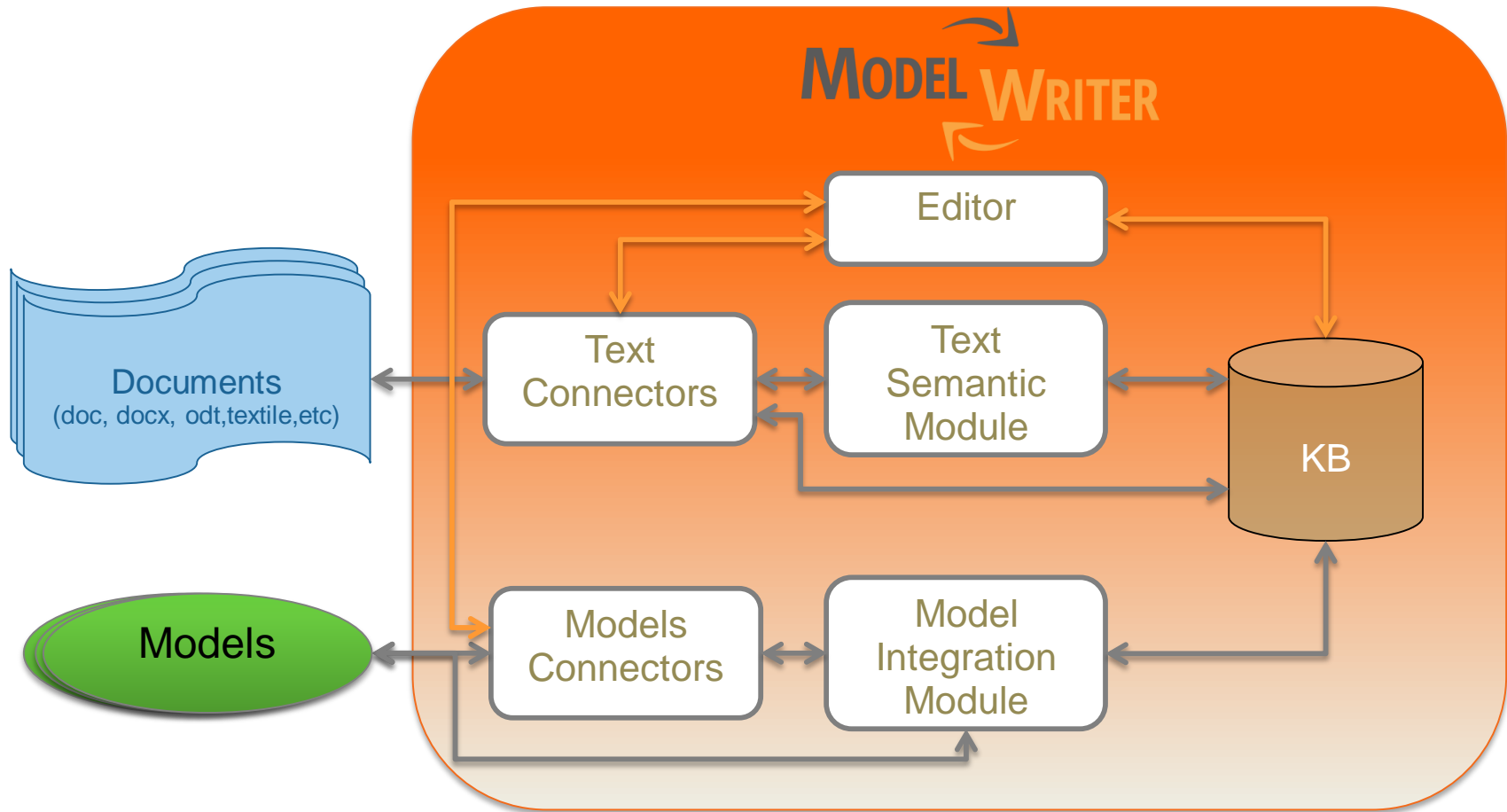


Technological components & interactions



ModelWriter

Conceptual Architecture



Work Packages & Technical Innovations

WP1 Industrial Use Cases and Requirements (AIRBUS)

WP2 (LORIA)

- Semantic Parser
- Document Generation
- bi-directional transformation between text and formal knowledge representation

WP3 (UNIT)

- Bi-directional synchronization mechanism between texts and models
- Configuration & Traceability Components
- Consistency checker plug-in for consistency

WP4 (MANTIS)

- A federated Knowledge Base and its API
- Synchronization mechanism between texts/models & knowledge base

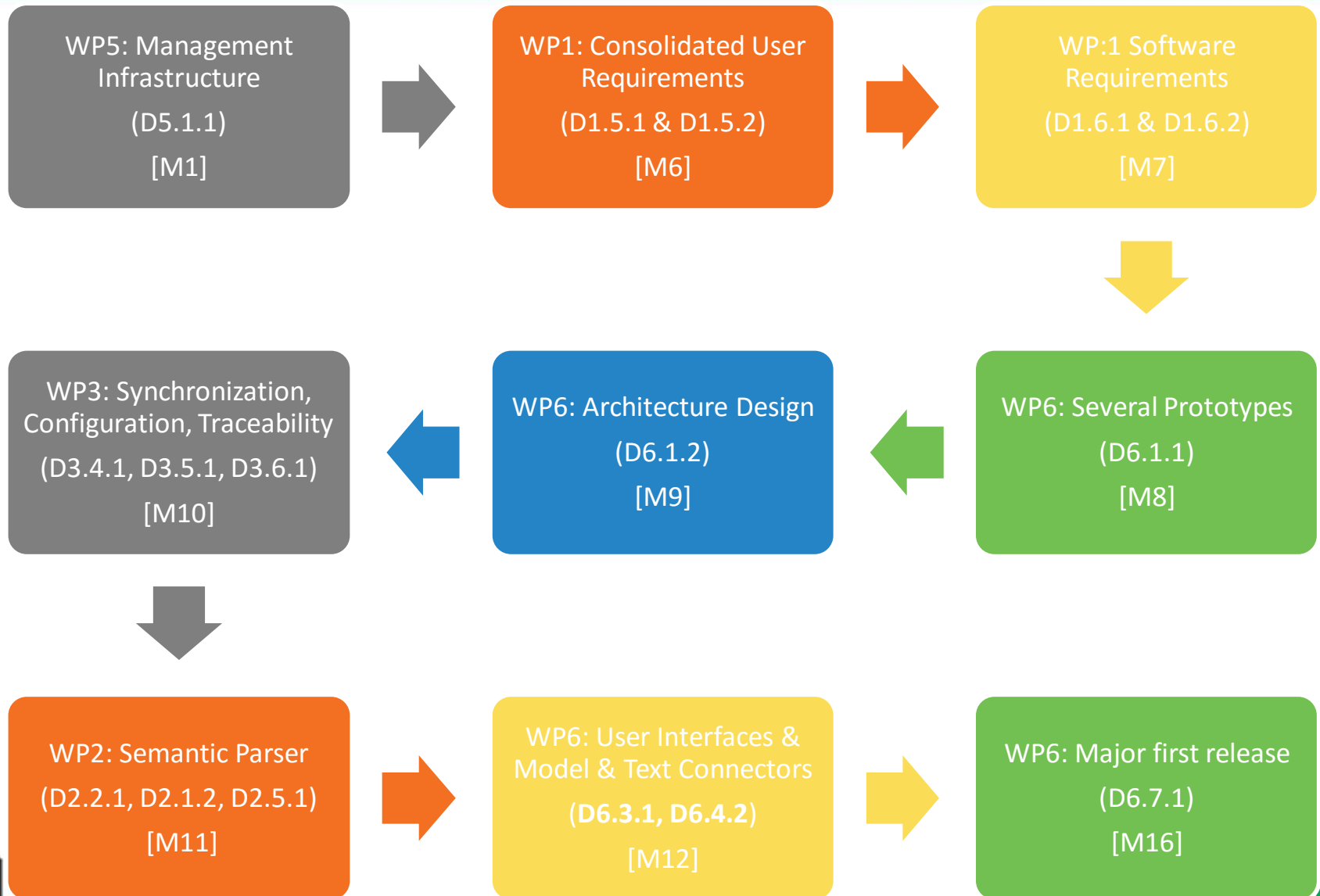
WP6 (OBEO)

- A complete “ModelWriter” tool integrating of all these in a consistent way
- User Interfaces

WP5 Project Management (UNIT)

WP7 Standardization, Dissemination and Exploitation (OBEO)

Overall Progress in the first year



ModelWriter Workshops in the First Year

<https://github.com/modelwriter/workshops>



Project Kick-off in Istanbul, Turkey (Nov 08, 2014) [M1]

Initial Architectural Design, Industrial Use Cases, Technical WP discussions

Collaboration Infrastructure

The 1st International ModelWriter Workshop in Izmir, Turkey (Jan 15-17, 2015) [M4]

Exploitation: Havelsan's participation

The 1st International Eureka Project Exhibition in Berlin, Germany (Mar 10-11, 2015) [M6]

Consolidated User Requirements & Review

The 2nd International ModelWriter Workshop in Brussels, Belgium (Apr 30, 2015) [M7]

Software Requirements Review & Architecture

The 3rd International ModelWriter Workshop in Toulouse, France (Jun 22-23, 2015) [M10]

Rehearsal & Review

The 4th International ModelWriter Workshop in Brussels, Belgium (Sep 23-24, 2015) [M12]

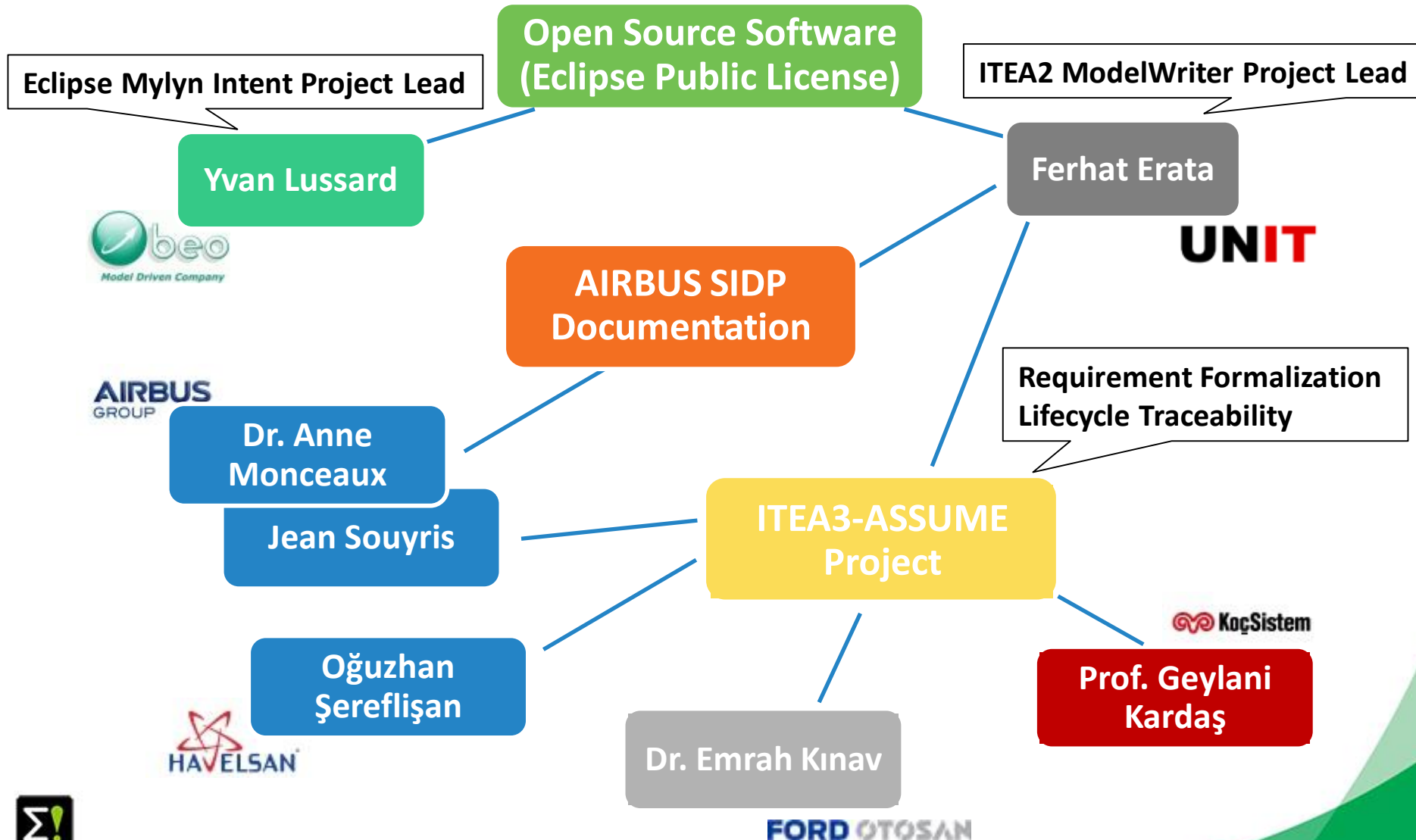
Integration of software components

The 5th International ModelWriter Workshop in Ludwigsburg, Germany (Nov 2-5, 2015) [M16]



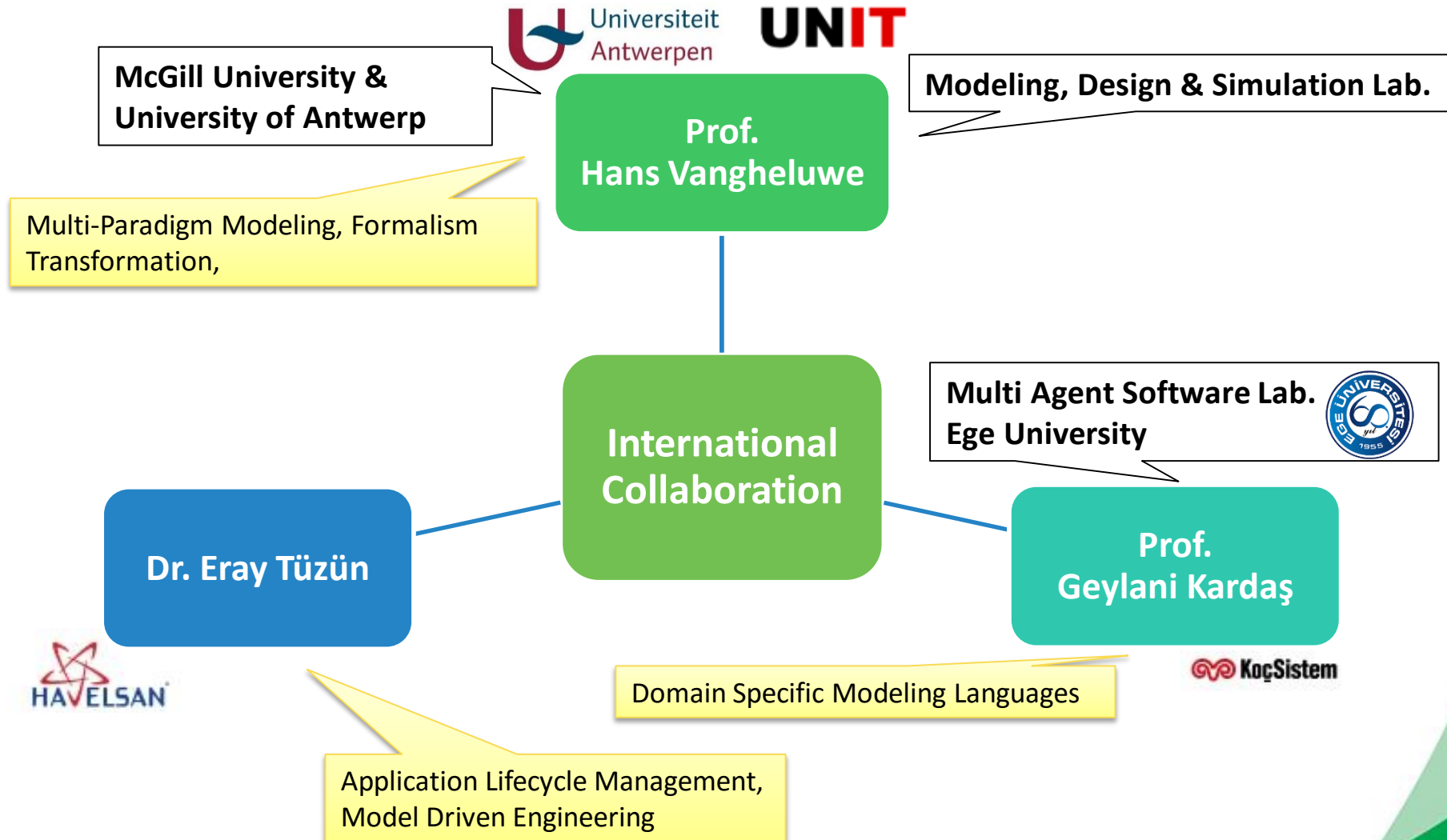
Level of Collaboration within ModelWriter

International Collaboration



Level of Collaboration within ModelWriter

International Collaboration



Open Source Campaign


Open Call for Industrial User Stories

- *Shape the future ModelWriter*
- *Early adaptation of the technology*
- *Long Term Support*




ModelWriter Open Source Campaign

<https://github.com/modelwriter>





[Pull requests](#) [Issues](#) [Gist](#)



ITEA2-ModelWriter Project

Text & Model-Synchronized Document Engineering Platform

 Europa  <http://www.modelwriter.eu>  project@modelwriter.eu

[Repositories](#) [People 25](#) [Teams 27](#) [Settings](#)

[Filters](#)

[+ New repository](#)

WP5

Work Package 5 - Project Management (UNIT)

Updated 2 hours ago



CSS ★ 0 🍴 0

WP3

Work Package 3 - Model to/from Knowledge Base (UNIT)

Updated 3 days ago



Java ★ 0 🍴 1

Workshops

Repository dedicated to workshops

Updated 3 days ago



★ 0 🍴 0

Deliverables

Project Monitoring, Tracking, Communication Management and Infrastructure

Updated 5 days ago



Java ★ 1 🍴 0

People

25 >



[Invite someone](#)



ModelWriter Requirements & User Stories

<https://waffle.io/modelwriter/requirements>



The screenshot shows a Kanban board for the project 'modelwriter/requirements'. The board is organized into four columns: 'User Stories' (13 items), 'Confirmed' (3 items), 'In Progress' (0 items), and 'Done' (2 items). Each item is a card with a title, description, and associated documents. The 'In Progress' column is currently empty and contains a message: 'Let others know you're working on an issue by dragging it to In Progress.' The 'User Stories' column contains items 10 through 14, all related to the 'Software Requirements Document (SRD)' and 'WP3 - Model to/from Knowledge Base'. The 'Confirmed' column contains items 15 through 17, all related to the 'User Requirements Document (URD)' and 'UC-TR-03 Generation and management of feature models'. The 'Done' column contains items 18 and 19, related to 'readme folder added' and 'Fe'.

modelwriter/requirements

+ Add Issue

Filter Board

User Stories 13

Confirmed 3

In Progress 0

Done 2

14

The TRAM will be able to compose transformations.

Software Requirements Document (SRD)

WP3 - Model to/from Knowledge Base

13

The TRAM validates such parameters and also the input models before a transformation takes place.

Software Requirements Document (SRD)

WP3 - Model to/from Knowledge Base

12

A mechanism is needed to register the available transformations in ModelWriter

Software Requirements Document (SRD)

WP3 - Model to/from Knowledge Base

11

M2M Transformation Framework must synchronize the output models after its input models or configurations have been modified.

Software Requirements Document (SRD)

WP3 - Model to/from Knowledge Base

10

M2M Transformation Framework must keep traces between transformed models and its source models.

17

The system must support an open requirement authoring tools (such as RMF)

UC-TR-03 Generation and management of feature models

User Requirements Document (URD)

16

The system should support ReqIF standard.

UC-TR-03 Generation and management of feature models

User Requirements Document (URD)

15

BPMN 2.X shall be supported as the Business Process Modeling Language in the tool.

UC-TR-05 Synchronous Business Process Design with Use Cases

User Requirements Document (URD)

In Progress

Let others know you're working on an issue by dragging it to In Progress.

19

Fe

18

readme folder added

UC-TR-03

IBM Rational Doors Plug-in and Eclipse Requirement Frameworks Sub-component which supports OMG's ReqIF Standard.

Sync between Requirement Documentation and Feature Models

KoçSistem, UNIT, HAVELSAN, AIRBUS

UC-TR-04

Demonstrate that the ModelWriter concept can be usefully applied on ALM

Integration with Application Lifecycle Management (ALM) Tools

UNIT, HAVELSAN KoçSistem

UC-TR-05

Integration with Product Lifecycle Management (PLM), Technical Engineering Documents

UNIT, KoçSistem, Ford Otosan

Integration with Siemens Workspace

UC-FR-02

Help determining the impacts of a change in the Enterprise Architecture

Enterprise Architecture

[CEISAR - Center of Excellence in Enterprise Architecture](#)

**OBEO, TOTAL,
AIR France, AXA**

UC-FR-03

This use case will explore the use of ModelWriter concept to structure and manage a repository of system installation rules.

Synchronization of regulation documentation with a design rule repository

**OBEO, AIRBUS,
LORIA**

UC-FR-04

Focus on building synchronized links between regulation documents in natural language and rules (as models).

Production of a context specific design document

**OBEO, AIRBUS,
LORIA**

**Thank you for your attention
We value your opinion and
questions.**