ModelWriter

WP1 – Airbus Industrial Use Cases

Project meeting 15-17/01/2015, Izmir

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15 01 2015

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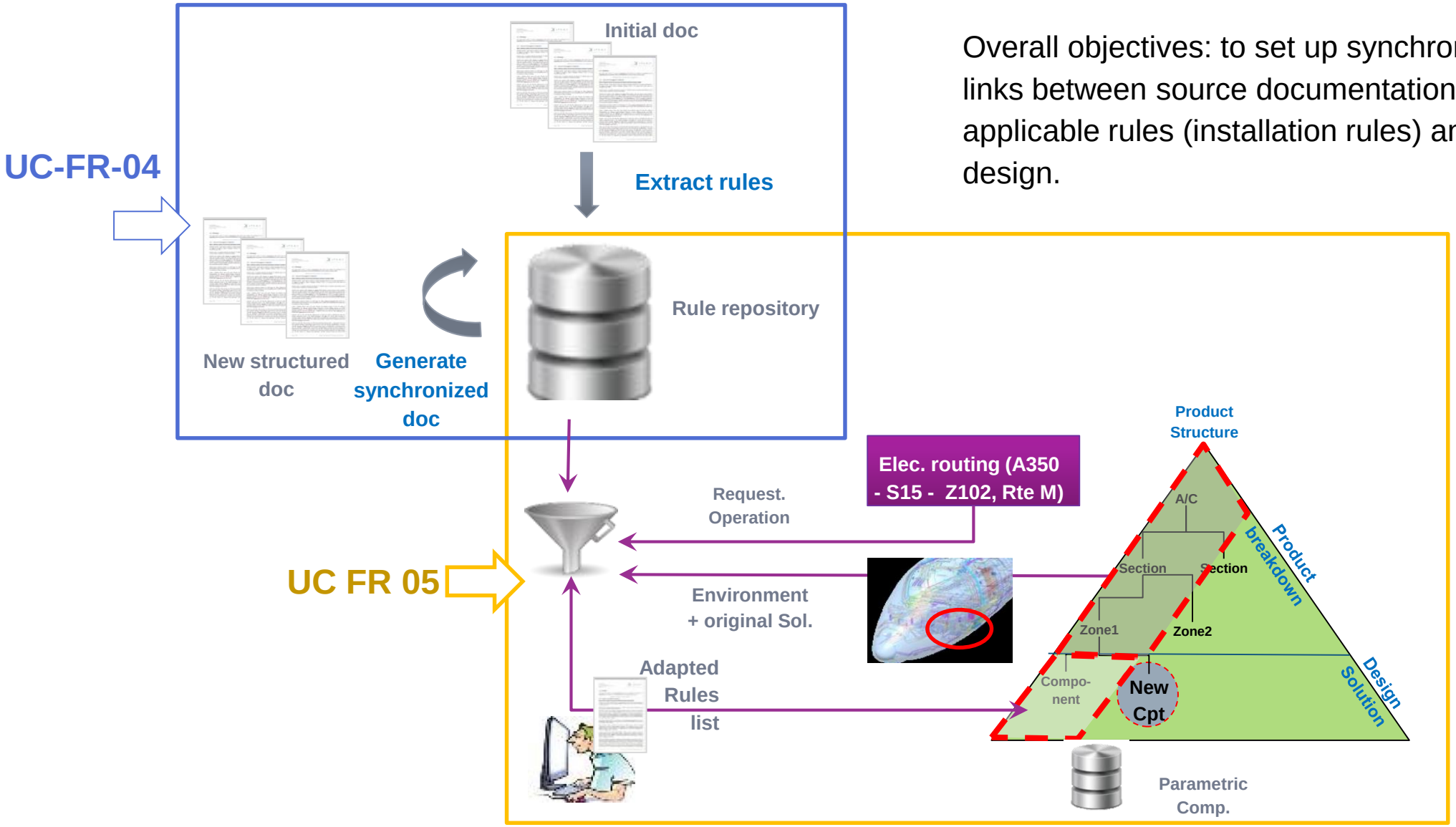
Outline

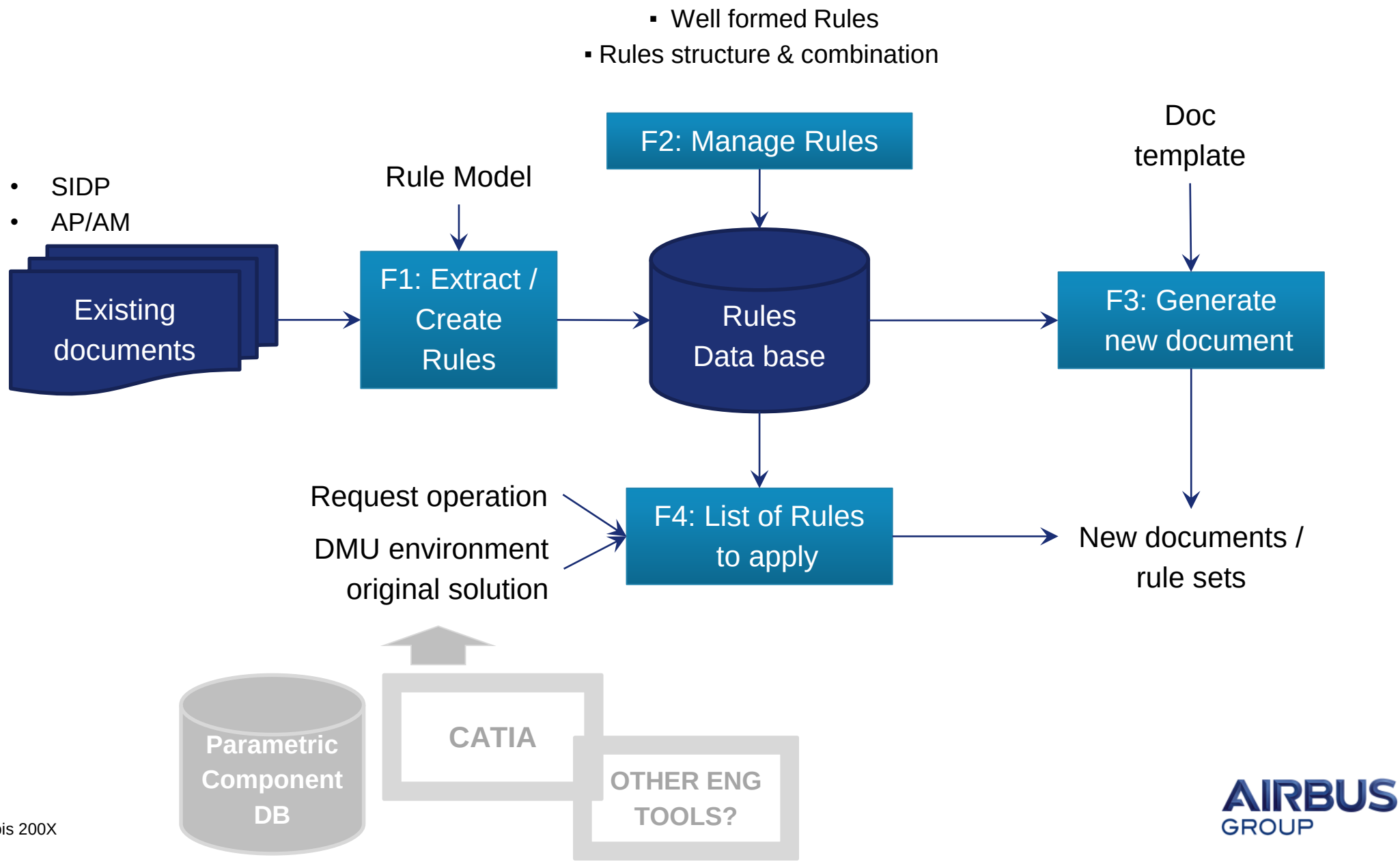
ID	TITLE	Owner	Status
UC-FR-01	Synchronization between Models and Documentation	OBEO	Confirmed
UC-FR-02	Enterprise Architecture	OBEO	
UC-FR-03	Requirements Engineering with SysML Designer	OBEO	Replaced
UC-FR-03 (NEW)	Synchronization between operational Requirements and architecture Model	AIRBUS	On going definition
UC-FR-04	Synchronization of regulation documentation with a design rule repository	AIRBUS	Confirmed
UC-FR-05	Production of a context specific design document	AIRBUS	Confirmed

UC-FR-04 + UC-FR-05 common context



Overall objectives: to set up synchronized links between source documentation, applicable rules (installation rules) and design.

UC-FR-04 + UC-FR-05 – Main functions



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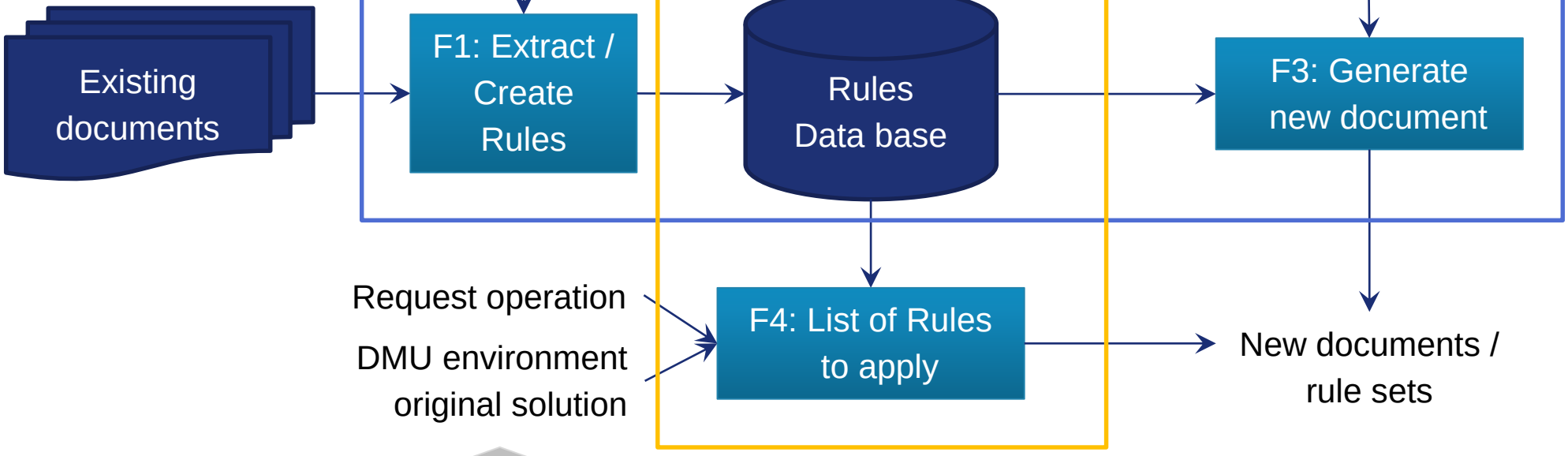
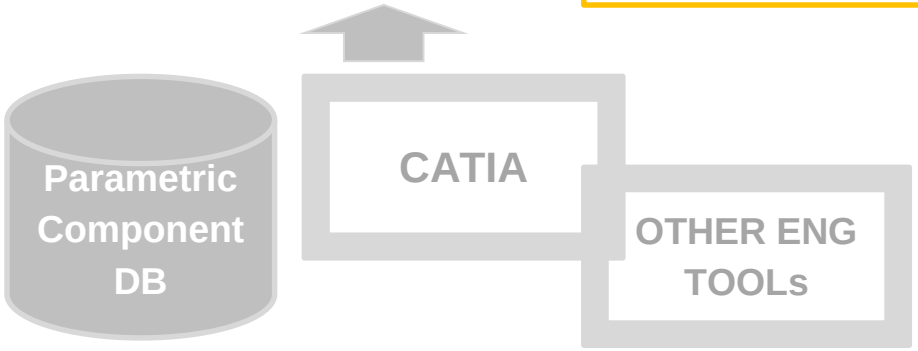
UC-FR-04 + UC-FR-05 – Main functions

UC-FR-04: retrieve rules from document and synchronize a rule DB with the documents

- Well formed Rules
- Rules structure & combination

- SIDP
- AP/AM





UC FR 05: enable queries and reasoning on rules for synchronizing them with other engineering models

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UC-FR-04 + UC-FR-05 Corpora status

- **Source documents**
  - SIDP – available for NDA (.doc)
  - AP/AM – (To be Confirmed)

- **Models**
  - SIDP documents are “composite” documents that contains text referring to visual models: mainly tables, diagrams and 2D drawings…

  ➔ These models can be treated as document-external models: they are (considered) authored and managed apart the textual parts of the documents

  - A SQL DB is built and contains part of the installation req written in a semi-structured format

  ➔ ER model available (to be confirmed)

“A space provision will be provided in order to insert a heater strip, if required.

To ensure the fixation of foam **ABS0616**, it is recommended to use self adhesive tape **ABS5662B02** along the longitudinal foam slot.

In the same way, this adhesive tape shall surround the insulation at junction positions as shown in **Figure 7-57** below. If insulation parts are twisted or bent on assembly, the ends are required to be cut straight. During assembly, cut the insulation to the correct length as required.”

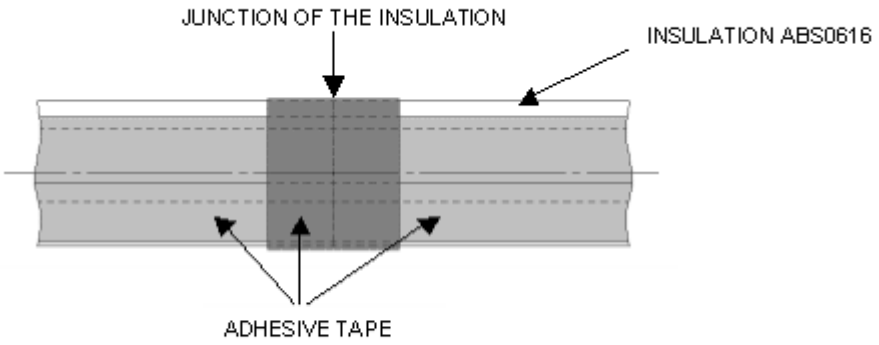
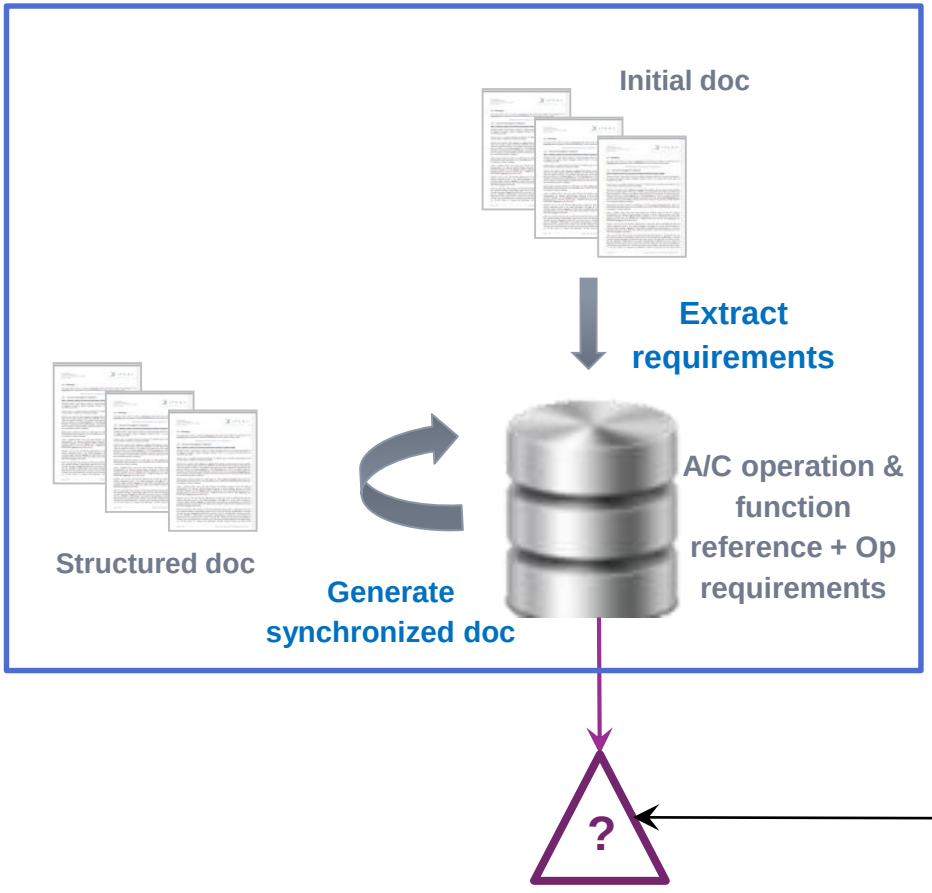


Figure 7-57: Pipe insulation

UC FR 03 (NEW) context

This UC is still under discussion. It will replace the foreseen OBEO UC03. The intent is to refine it and address an Airbus UC instead. We are currently considering the providing of a synchronized mechanism between text and operational requirements FFBD models.



Overall objective: Synchronization between Operational Requirements and Design

Sub-objective in ModelWriter: focus on Operational cases and Conditions and estimation and measurement expressions

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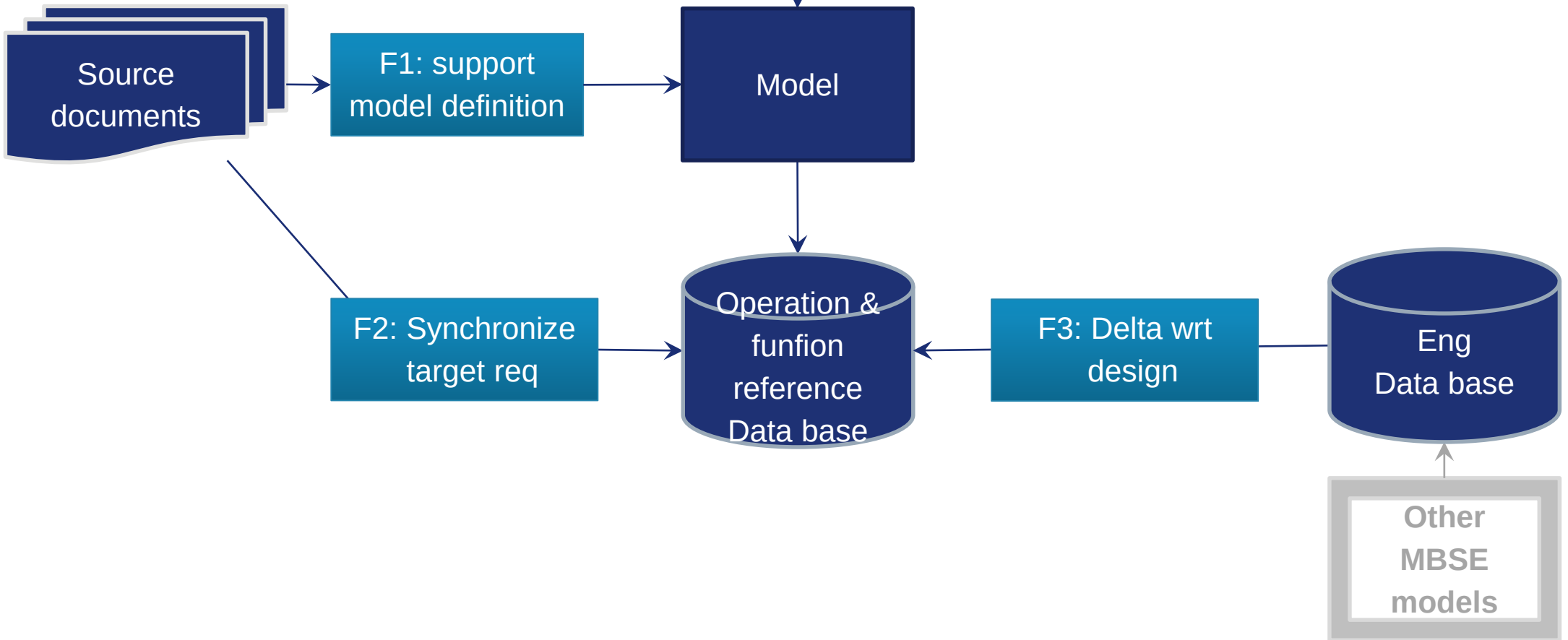
UC FR 06 (NEW) main functions

Overall objective: Synchronization between Operational Requirements and design

- Certification documents
- A/C Functions / Operations reference
- A/C performances handbook
- …

▪ Operational conditions
▪ Measurement



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UC-FR-06 (NEW) Corpora status

- **Source documents** – on going collection - Most probably some ad-hoc public sources will have to be built
  - A/C Operation requirements
  - Safety recommendations
  - Performances book
  - Certification CS-25 document (format TBC)

- Models
  - eFFBD models for Aircraft operation (CORE Vitech tool)
  - ProGreSQL DB and existing architecture ER model (to be extended)
  - Preliminary QUDT based tables for description of Quantities, Units, etc.