EDM FRAMEWORK DEFINITION

(FIRST RELEASE)

Executive Summary

The main objective of the Engineering Data Management (EDM) framework is to develop inter-discipline data management mechanisms to reach a whole simulation framework based on Product Lifecycle Management (PLM). This objective implies:

- To deliver management mechanisms required for different and heterogeneous sets of data, such as requirements, context information (knowledge, process, decisions), CAD data, Design Mock-Up (DMU) data and simulation data (including all the data that does not participate to the definition of the product but necessary for its simulation and analysis).
- To build an environment including the required data converters to translate data from a CAD representation to a simulation representation (with translation quality aspects).
- To develop inter-discipline Configuration Management, especially to manage the consistency between CAD/DMU data and simulation data.
- To implement rules on managed data, such as maturity rules for data exchange.
- To manage design and simulation data in a coherent way.

The task 3.4.3 (EDM Framework Development) contributes to this objective during the first iteration of VIVACE:

- By leading the specification able to support the requirements gathered across SP1 and SP2 by the EDM Framework Architecture task (3.4.2). The latter specification includes a life cycle data structure coupled with maturity model and rules relying on a specialised standard data model to represent business ontology layers and objects.
- By leading a demonstrator development in order to investigate implementation modes and consolidate Use Cases definition. Early feedback from end users provides an efficient pragmatic approach to validate and refine, if necessary, the functional model and its operational deployment.
- By finalising the UML representation of the textual requirements and UC in order to ensure relevance of specification for the second iteration of the project.