



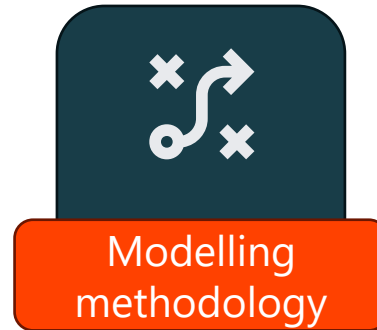
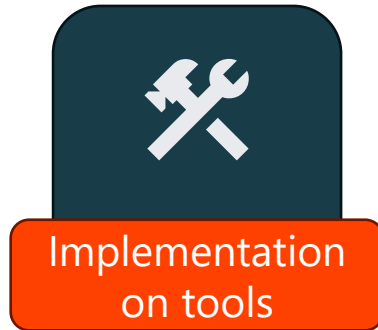
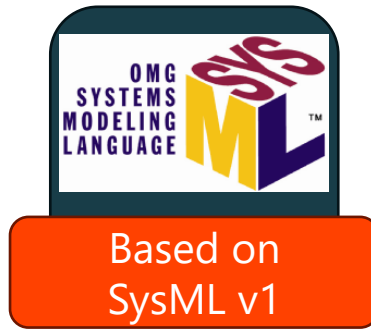
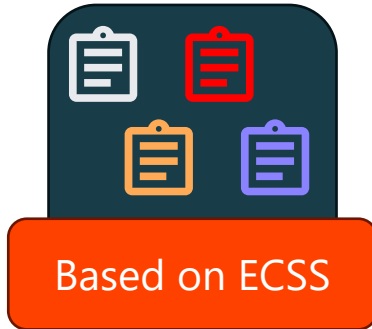
**STARION**

# The ESA SysML solution

## Interfaces and Validation management

Anh Toan Bui Long | MBSE 2024 Workshop | 29<sup>th</sup> May 2024 | Session 9

# The ESA SysML Solution



# Objective

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- Iterative process: building new concepts from the previous iteration.
  - Specification of the new elements
    - Interfaces specification
    - Validation specification
  - Implementation of the profile onto SysML v1
    - Cameo Systems Modeler
    - Enterprise Architect
  - Customisation of tool interface

# Partnership and roles



Product owner



Prime, implementation and development  
(Enterprise Architect)



Analysis and  
validation

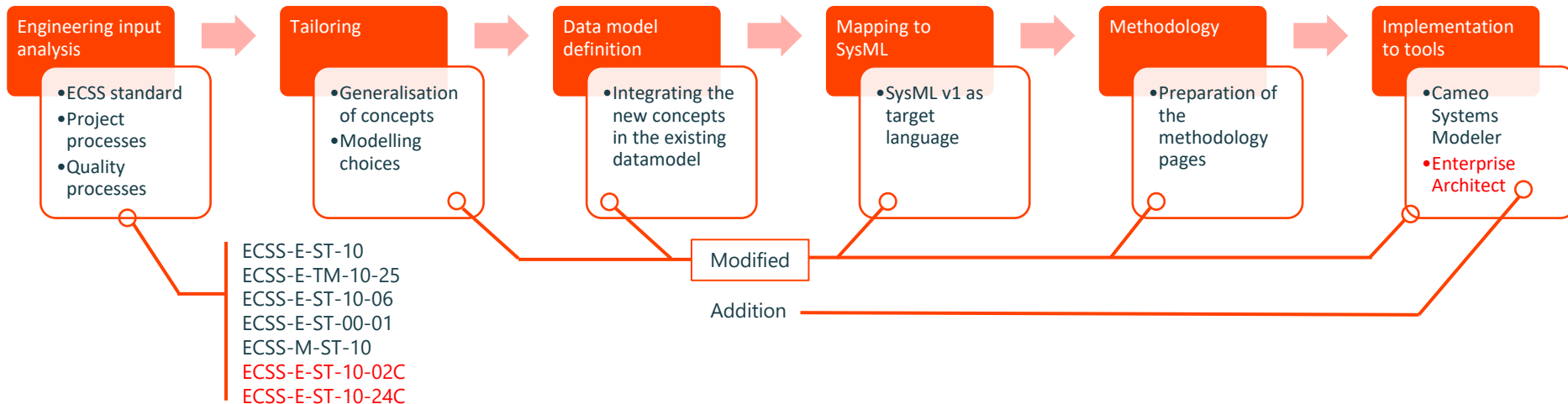


Implementation (Cameo)  
and consultancy



Consultancy

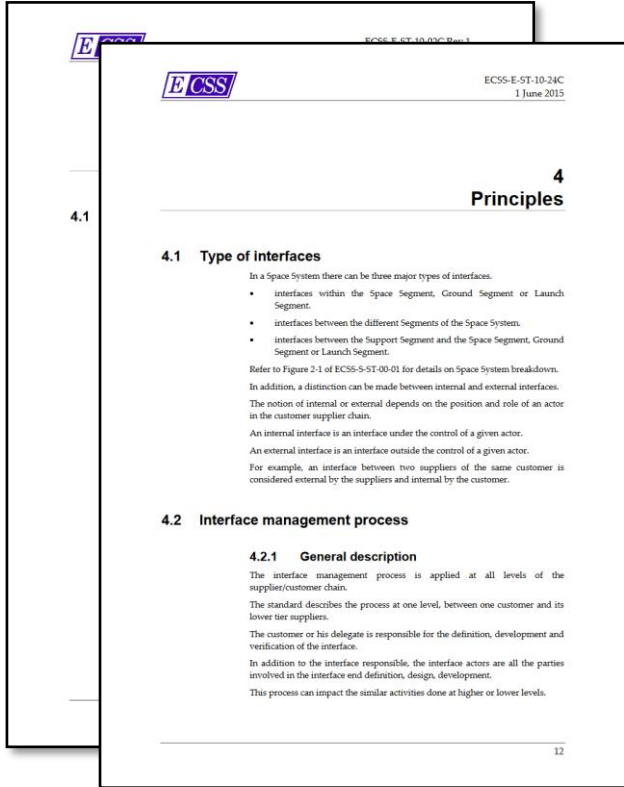
# The ESA SysML Solution process



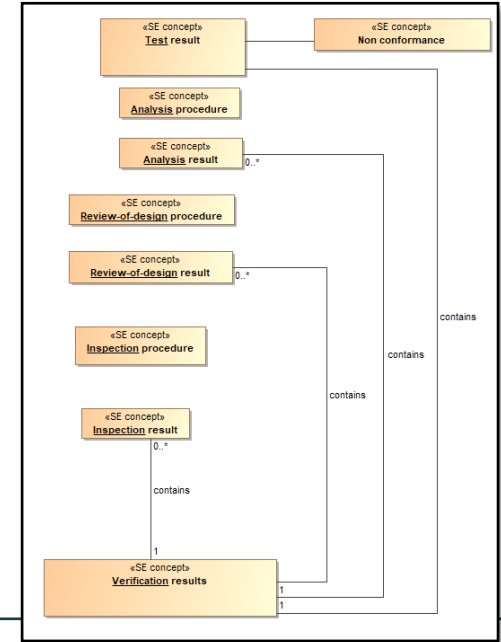
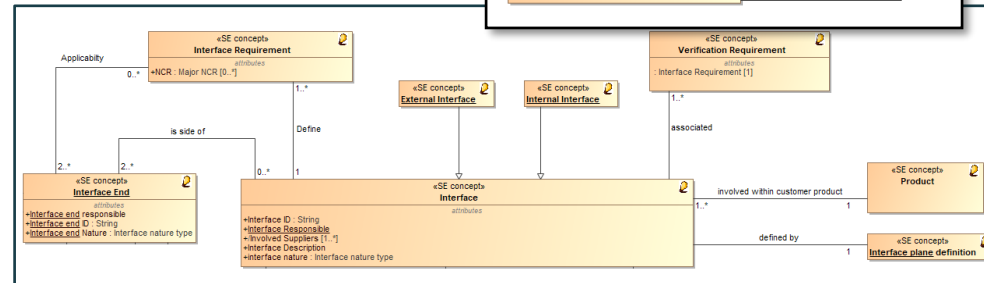
# Implementation



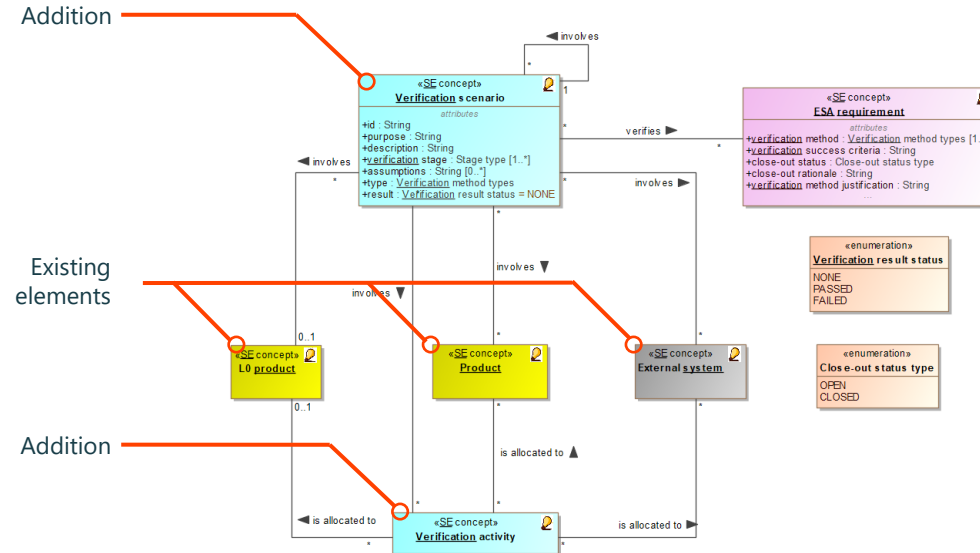
# Data model inputs



## ECSS-E-ST-10-24C analysis extract



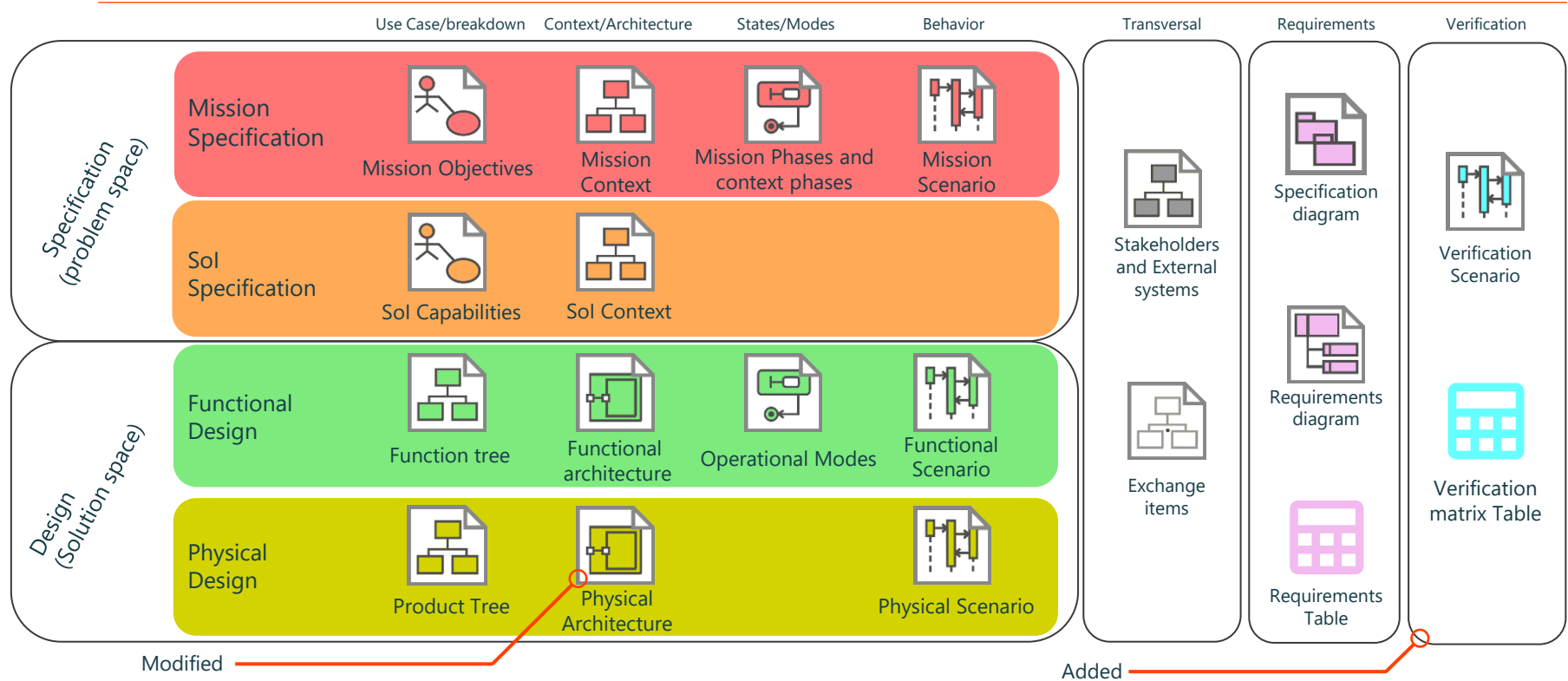
# Nexus - Representation of verification



Architecture simplified for readability

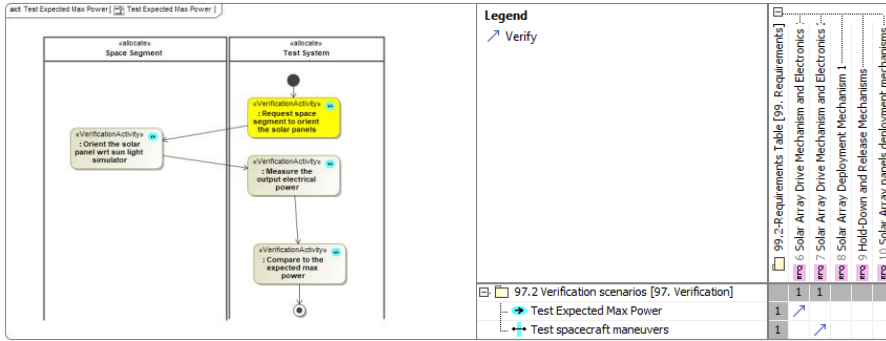


# Integration in the current methodology

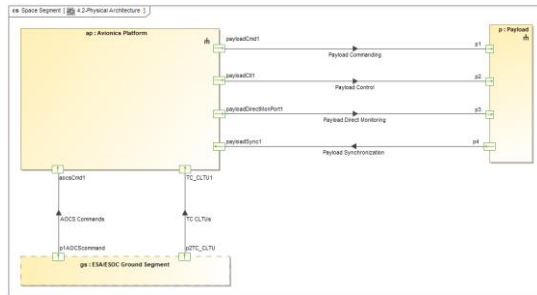


# Implementation and demonstration

## Cameo System Modeler

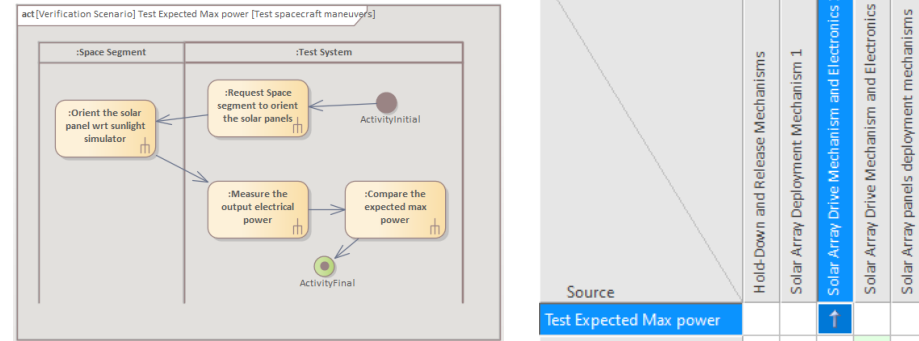


Verification layer

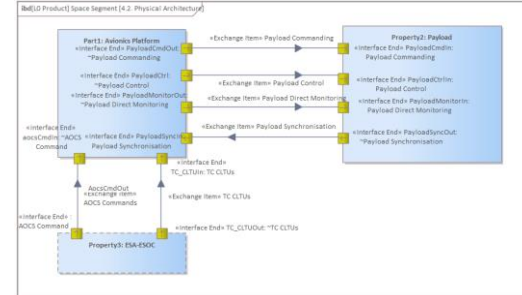


Physical Architecture

## Enterprise Architect



Verification layer



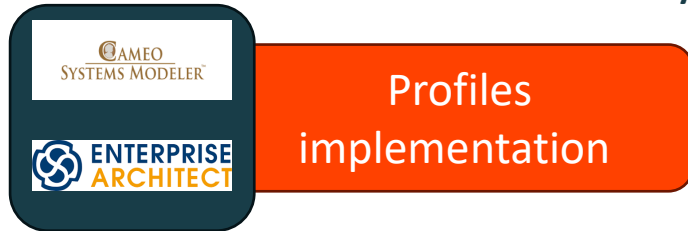
Physical Architecture

# Conclusion

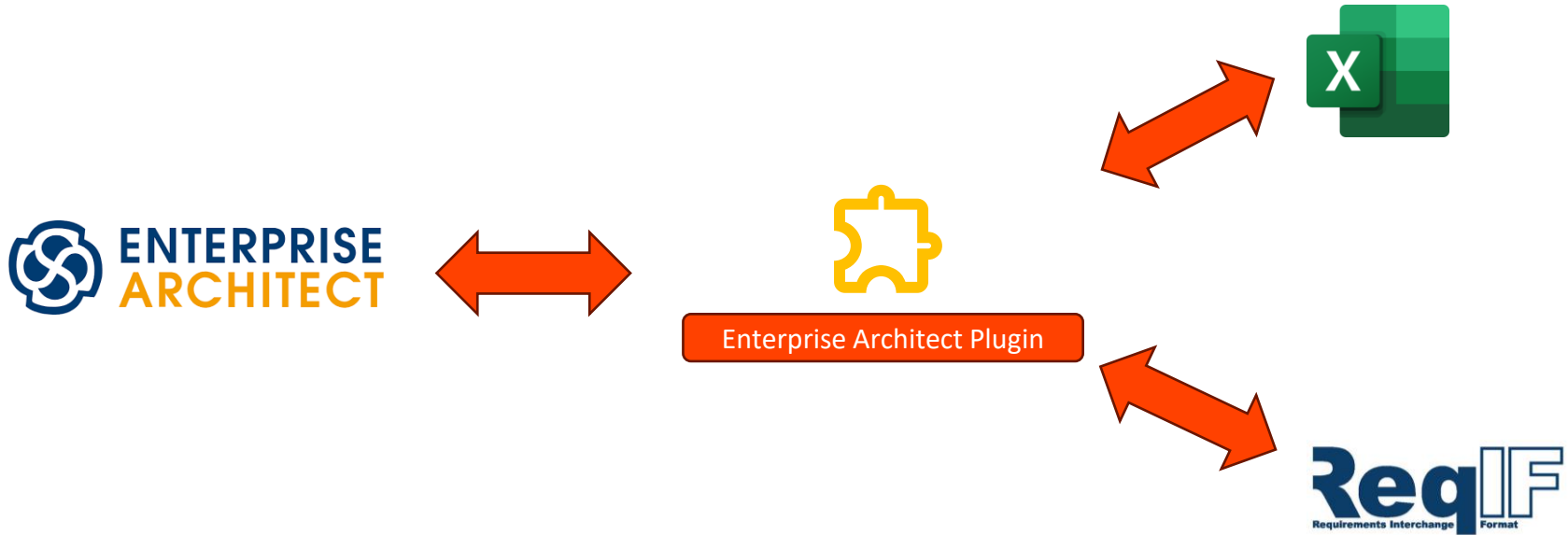


# The ESA SysML Solution – Package composition

Available at: <https://essr.esa.int/project/esa-sysml-solution>  
ESA Software Community Licence Weak Copyleft (Type 2) – v2.4



# Enterprise Architect Plugin for ESA SysML solution



# Thank you

<https://essr.esa.int/project/esa-sysml-solution>

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