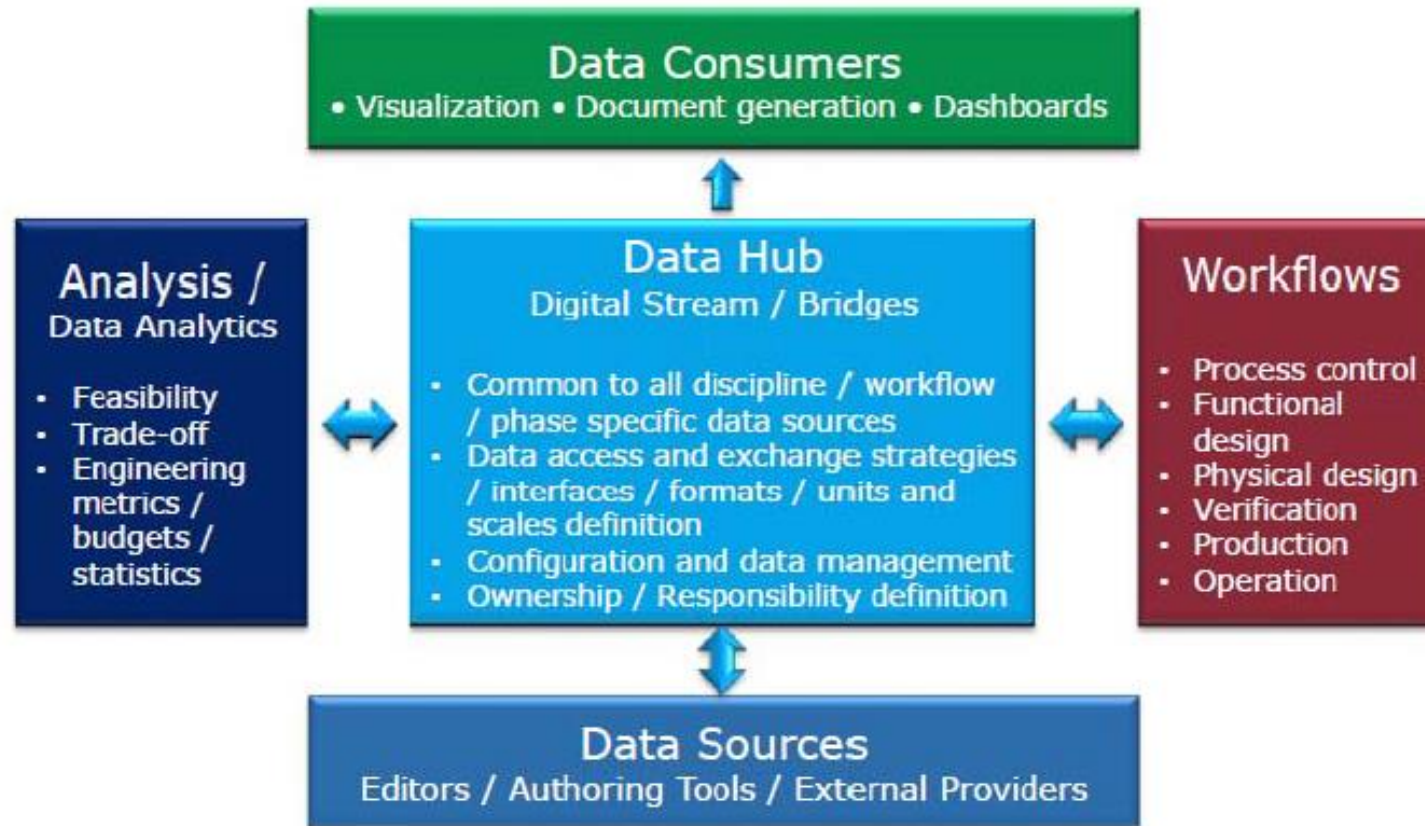DEFENCE AND SPACE

Model Based Engineering Hub

A firm foundation for a new generation of MBSE exchange

3rd Model Based Space Systems and Software Engineering workshop
MBSE 2022 - 22.-24. November 2022
Tobias Hoppe, Colin Borrett, Todor Stoitsev

AIRBUS

Central Data Hub for Information Exchange


System Factory

Data exchange

- Disciplines

- Project phases

- Stakeholders

AIRBUS

Model Based Engineering Hub - MBEH

- ESA Study split into 2 Phases
- Phase 1: Scoping
  - Develop MBEH system architecture
  - Define scope of functionality
  - Define Interfaces with external Tools
  - Analyse Operation (OPS) Processes and data exchanges
  - Analyse Reliability, Availability, Maintainability and Safety, (RAMS) Processes and data exchanges
  - Specify demonstration scenarios for OPS and RAMS data exchanges

- Phase 2: Development and Demonstration
  - Implement MBEH as specified in Phase 1
  - Develop Space System Ontology (SSO) extension for OPS and RAMS
  - Implement demonstration scenarios

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Semantics of MBEH Conceptual Data Model
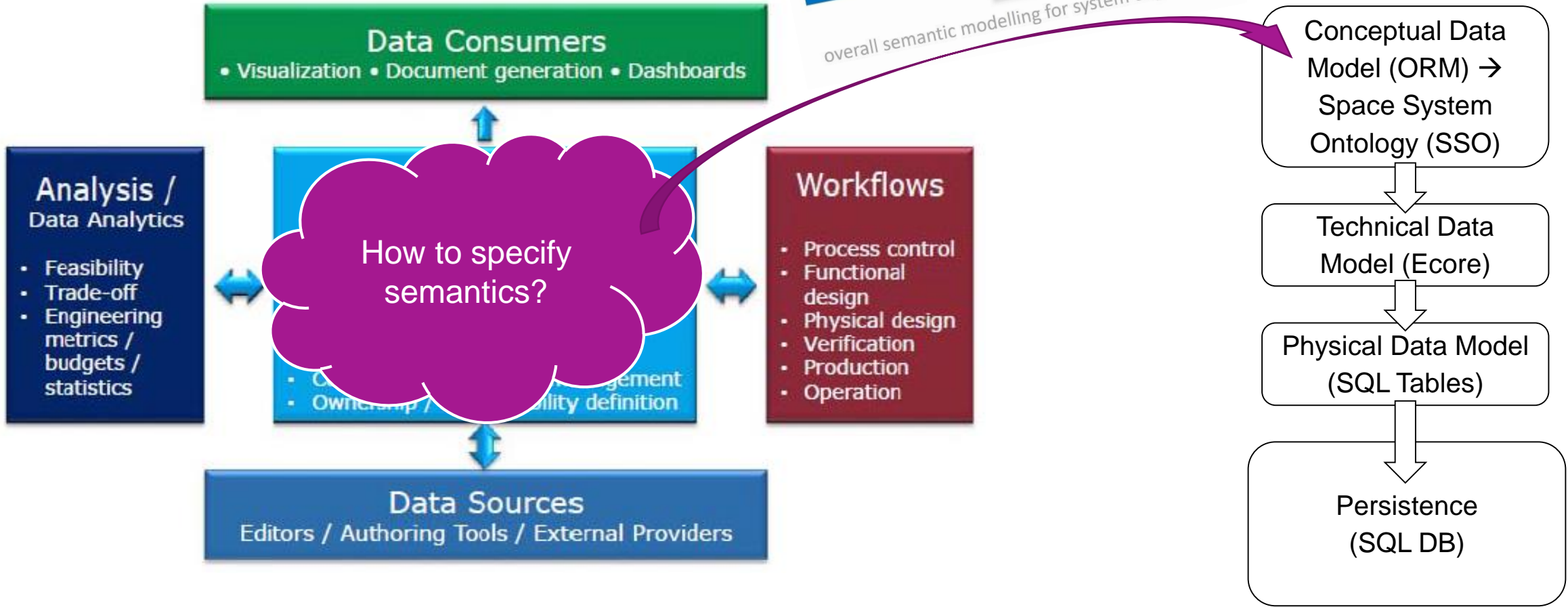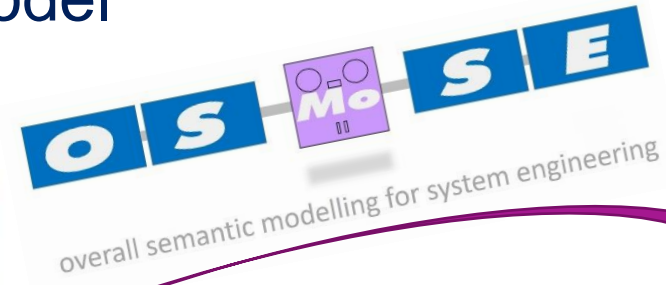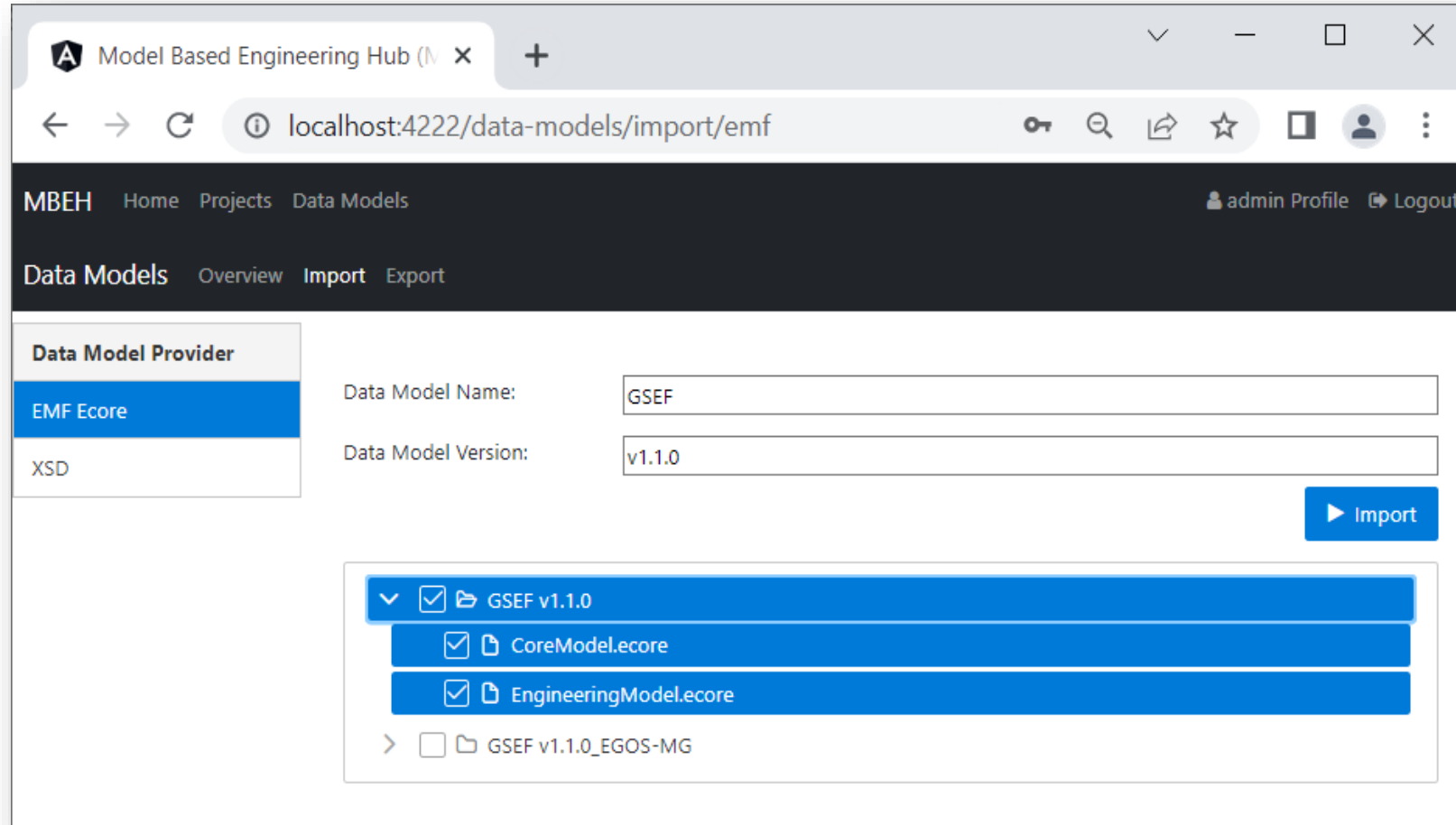
MBEH - Architecture
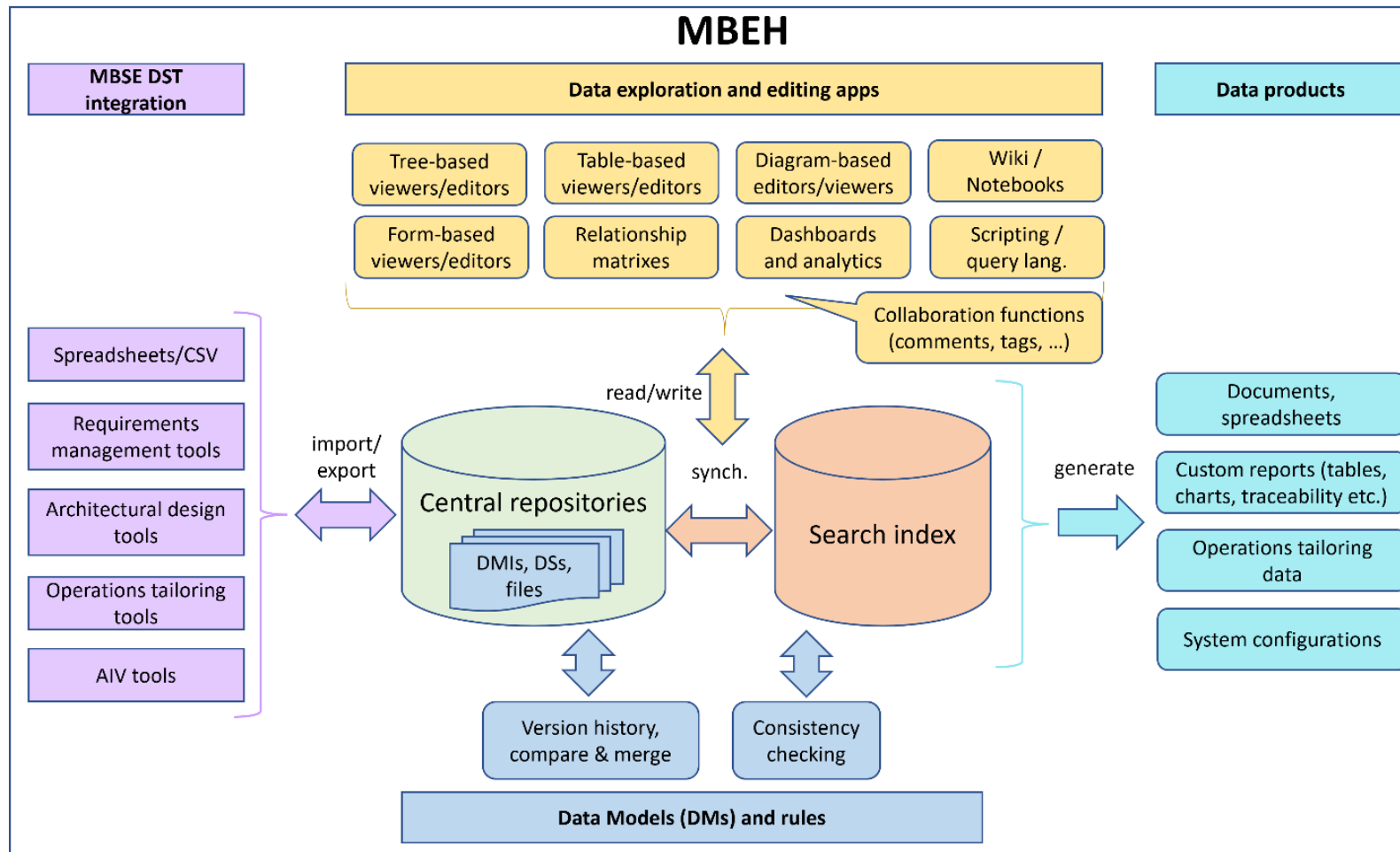
MBEH – Multiple Domain Data Models Handling
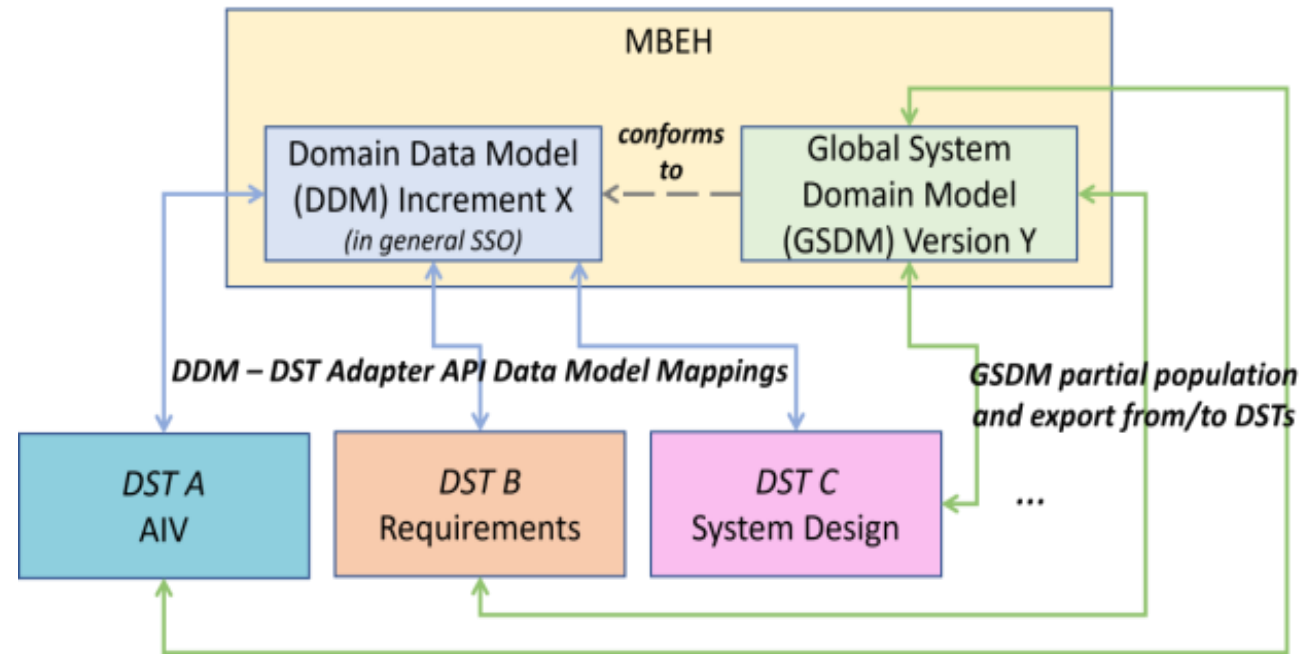
MBEH – Data Model Import

MBEH – Data Model Exploration

MBEH – CSV Data Import 1/3

MBEH – CSV Data Import 2/3

MBEH - Model Based Engineering Hub | MBSE 2022

MBEH – CSV Data Import 3/3

MBEH – EMF Data Import

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MBEH – EMF Data Export

MBEH – Data Exploration based on Configured Views

MBEH – Data Versioning in History View

MBEH – Data Object Comparison

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MBEH – Open Search Interface

MBEH – Matrix View

Points of Contact

ESA Contact

- ESA Technical Officer
  - Marcel Verhoef (marcel.verhoef@esa.int)

MBEH Team

- Airbus Project Manager
  - Colin Borrett (colin.borrett@airbus.com)
- Airbus Technical Lead
  - Tobias Hoppe (tobias.hoppe@airbus.com)
- Space Cube Project Manager
  - Todor Stoitsev (t.stoitsev@space-cube.de)

Thank you for your attention

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