

SAVOIR Electronic Data Sheet Definition: Overview and Status

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European Space Agency

SAVOIR Electronic Data Sheet Definition



- **GSTP activity**
- **Kicked off June 2018**
- **Consortium:**
 - SciSys (Prime)
 - Airbus DS (Toulouse)
 - OHB System (Bremen)
 - TAS (Cannes)



- **Duration: 18 months**



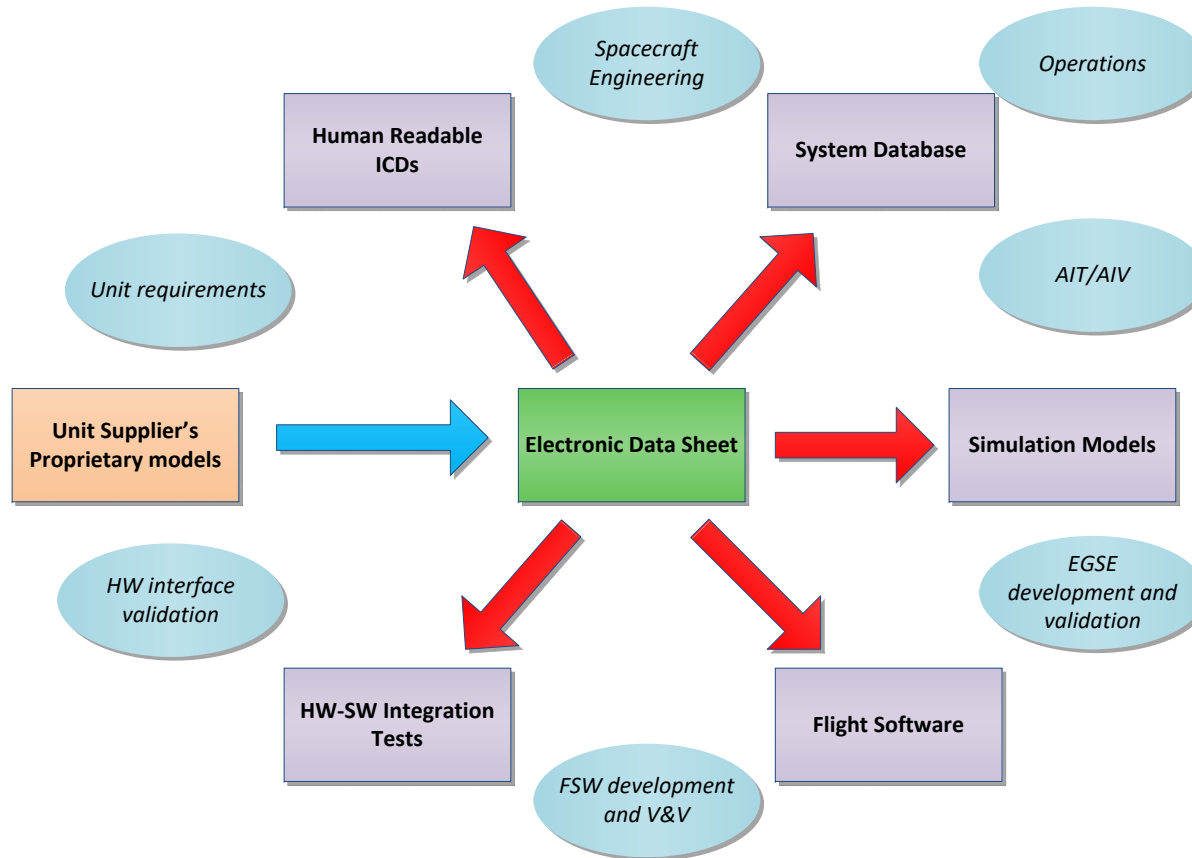
Objectives



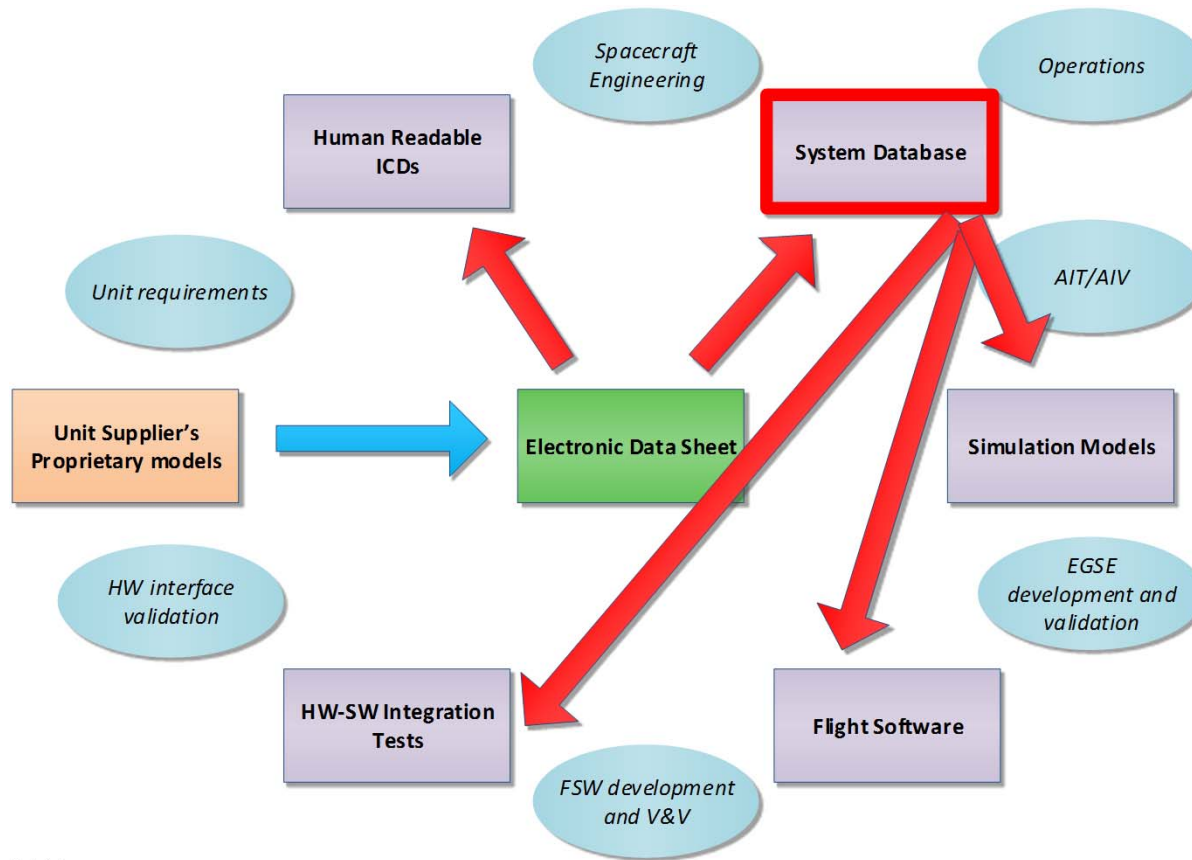
1. Specify user requirements covering current avionics development process and data exchange between primes and unit suppliers
2. Define the SAVOIR EDS data model
3. Assess the existing XML based exchange format developed in CCSDS
4. Develop SAVOIR EDS Common Toolset (SECT)
5. Develop multiple proof of concept prototypes reflecting various use cases
 - Involving different usage of EDS
 - Various types of units (sensors/actuators, PCDU, SSMM, RTU, etc.)
6. Propose a roadmap towards EDS adoption by European industry



Electronic Data Sheets – Multiple Domains



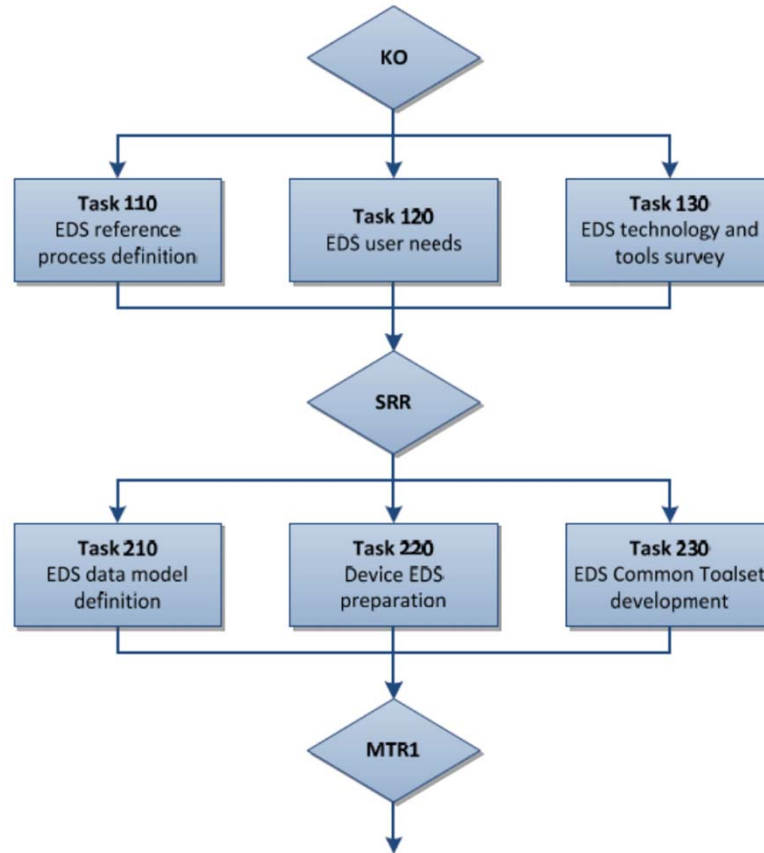
Electronic Data Sheets – Multiple Domains



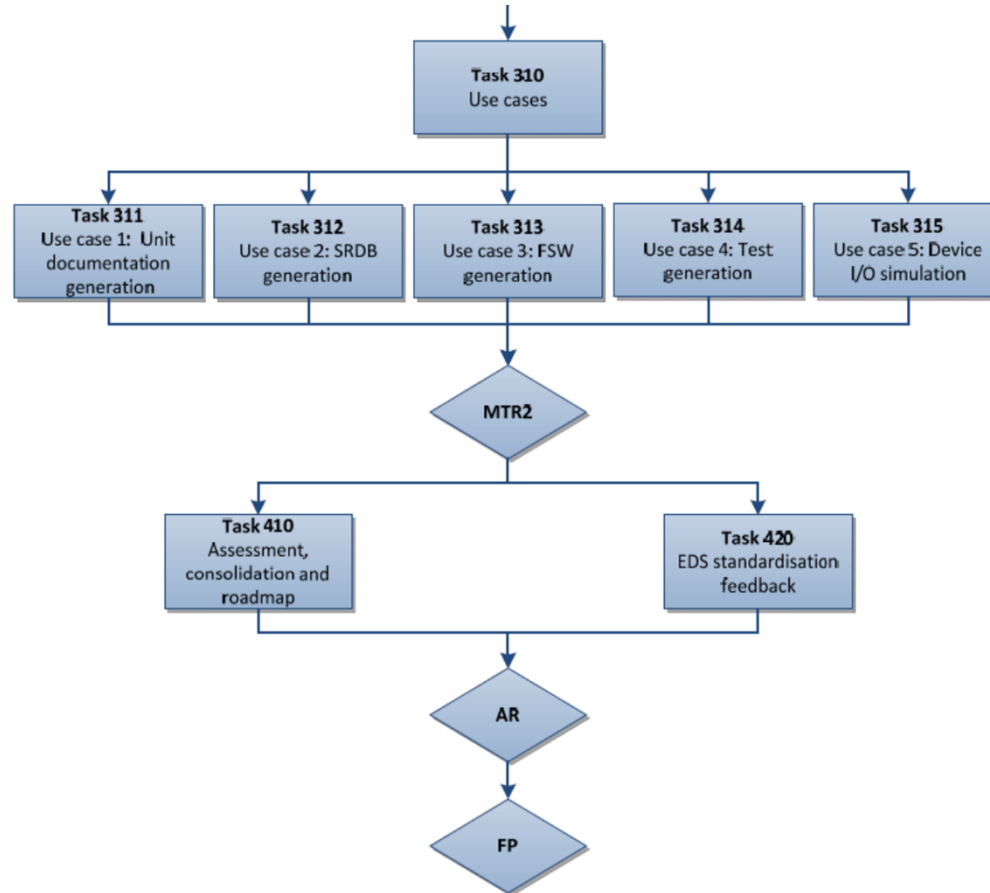
SAVOIR EDS Definition: Key Points

- Focused primarily on Data Handling and Electrical ICD
- SAVOIR EDS Data Model definition: The WHAT
 - CCSDS EDS defines WHAT+HOW (also format)
 - Also definition of ontology (CCSDS EDS Dictionary of Terms)
 - Hope is to find large overlap for TM/TC ICD
- Broader system-level view
- A number of use cases and prototypes
 - Wide range of electronic units
 - Generation of documentation/code/system database/V&V/simulation artefacts
 - Experimenting with EDS together with nominal production engineering tools
- Feedback to standardisation (CCSDS, SAVOIR, ECSS ?)
- Proposing roadmap for EDS adoption
 - Steps to be taken by primes, unit suppliers, agencies

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Ambition

- **Think big**
 - Model-Based System Engineering
 - Functional Modelling
 - EDS for multiple disciplines, covering “all” unit ICDs
- **Stay realistic and make something small work**
 - Focus only on interfaces and not functional models
 - A simple EDS “core” could be agreed and adopted
 - Core of electrical ICD
 - Core of TM/TC ICD
 - Achievable goal – general concept and technology ready

THANK YOU



Questions?

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