SAF User Documentation : C2_GRID Grid Definition Viewpoint
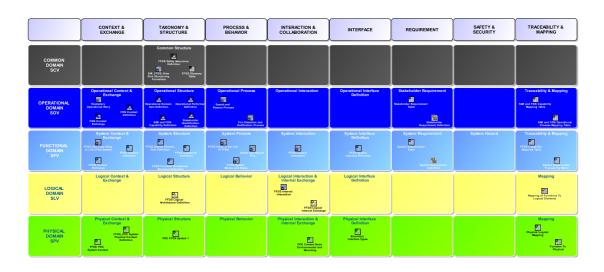
Domain	Aspect	Maturity
Common	Taxonomy & Structure	⚠️ under construction

Example

#	Domain	Aspect	Name	Viewpoint ID	Diagrams
1	Common	Taxonomy & Structure	Argumentation Assurance Viewpoint	C2_ARAS	FFDS Safety Assurance Definition
2	Common	Taxonomy & Structure	Common Standards Definition Viewpoint	C2_CSTD	FFDS_Standards FFDS_Standards
3	Common	Taxonomy & Structure	Grid Definition Viewpoint	C2_GRID	SAF_FFDS_View Grid Structuring Formalism FFDS View Overview
4	Common	Taxonomy & Structure	Common Terms Definition Viewpoint	C2_TRMD	FFDS Glossary Table PNG V3 Terms
5	Functional	Context & Exchange	System Context Definition Viewpoint	F1_SCXD	FFDS Context Definition Table FFDS Context Definition
6	Functional	Context & Exchange	System Context Exchange Viewpoint	F1_SCXE	FFDS Context Exchange
7	Functional	Context & Exchange	System Use Case Viewpoint	F1_SUCS	FFDS Use Case A Day in Life of the System FFDS Use Case Table
8	Functional	Taxonomy & Structure	System Capability Definition Viewpoint	F2_SCYD	FFDS Capability Definition
9	Functional	Taxonomy & Structure	System Domain Item Kind Viewpoint	F2_SDIK	FFDS System Domain Item Definition
10	Functional	Taxonomy & Structure	System Functional Breakdown Structure Viewpoint	F2_SFBS	FFDS Function Breakdown Structure Definition
11	Functional	Process & Behavior	System Functional Refinement Viewpoint	F3_SFRE	Detect and Report Fire
12	Functional	Process & Behavior	System Process Viewpoint	F3_SPRO	FFDS A Day in the Life of FFDS
13	Functional	Process & Behavior	System State Viewpoint	F3_SSTA	FFDS System Modes and States
14	Functional	Interaction & Collaboration	System Context Interaction Viewpoint	F4_SCXI	FFDS Context Interaction
15	Functional	Interface	System Interface Definition Viewpoint	F5_SIFD	FFDS System Interface Definition
16	Functional	Requirement	System Requirement Definition Viewpoint	F6_SRQD	System Requirement Table
17	Functional	Traceability & Mapping	System Capability Mapping Viewpoint	F8_SCYM	FFDS Capability Mapping Table
18	Functional	Traceability & Mapping	System Requirement Traceability Viewpoint	F8_SRQT	System Requirement Traceability Matrix
19	Logical	Taxonomy & Structure	Logical Structure Definition Viewpoint	L2_LSTD	FFDS Logical Architecture Definition Full Tree FFDS Logical Architecture Definition
20	Logical	Interaction & Collaboration	Logical Internal Exchange Viewpoint	L4_LIEX	FFDS Logical Internal Exchange Full FFDS Logical Internal Exchange
21	Logical	Interaction & Collaboration	Logical Internal Interaction Viewpoint	L4_LITI	FFDS Internal Interaction
22	Logical	Traceability & Mapping	Logical Functional Mapping Viewpoint	L8_LFUM	Mapping of Functions To Logical Elements
23	Operational	Context & Exchange	Operational Context Definition Viewpoint	O1_OCXD	SAR Context Definition FDN Context Definition
24	Operational	Context & Exchange	Operational Context Exchange Viewpoint	O1_OCXE	FDN Context Exchange
25	Operational	Context & Exchange	Operational Story Viewpoint	O1_OSTY	Exemplary Operational Story
26	Operational	Taxonomy & Structure	Operational Capability Definition Viewpoint	O2_OCYD	SAR and FDN Capability Definition
27	Operational	Taxonomy & Structure	Operational Domain Item Kind Viewpoint	O2_ODIK	Operational Domain Item Definition Operational Domain Item Table
28	Operational	Taxonomy & Structure	Operational Performer Viewpoint	O2_OPRF	Operational Performer Table Operational Performer Definition
29	Operational	Taxonomy & Structure	Stakeholder Identification Viewpoint	O2_STID	Stakeholder Identification Definition
30	Operational	Process & Behavior	Operational Process Viewpoint	O3_OPRO	Fire Detection and Notification Process Search and Rescue Process
31	Operational	Interaction & Collaboration	Operational Context Interaction Viewpoint	O4_OCXI	
32	Operational	Requirement	Stakeholder Requirement Definition Viewpoint	O6_SKRD	Stakeholder Requirement Table
33	Operational	Traceability & Mapping	Operational Capability Mapping Viewpoint	O8_OCYM	SAR and FDN Capability Mapping Table
34	Operational	Traceability & Mapping	Operational Process Mapping Viewpoint	O8_OPRM	SAR and FDN Operational Process Mapping Table
35	Physical	Context & Exchange	Physical Context Definition Viewpoint	P1_PCXD	FFDS_POC System Physical Context Definition
36	Physical	Context & Exchange	Physical Context Exchange Viewpoint	P1_PCXE	FFDS POC System Context POC FFDS Interfaces FFDS POC System Context with peek inside
37	Physical	Taxonomy & Structure	Physical Structure Definition Viewpoint	P2_PSTD	POC Dev Sensor Node POC FFDS System 1 POC CCU POC Comms Node
38	Physical	Interaction & Collaboration	Physical Internal Exchange Viewpoint	P4_PIEX	POC Comms Node Environmental and Mounting POC Comms Node Network Aspects Proof Of Concept FFDS System 1 ExchangeTable Proof Of Concept FFDS System Internal Network Exchang Proof Of Concept FFDS System Internal Exchange POC Comms Node Internal Exchange
39	Physical	Interface	Physical Interface Definition Viewpoint	P5_PIFD	Boundary Interface Types Arduino Interfaces Types Internal Interface Types
40	Physical	Traceability & Mapping	Physical Functional Mapping Viewpoint	P8_PFUM	Function To Physical
41	Physical	Traceability & Mapping	Physical Logical Item Mapping Viewpoint	P8_PLIM	
42	Physical	Traceability & Mapping	Physical Logical Mapping Viewpoint	P8_PLOM	Physical Logical Mapping

Purpose

The Grid Definition Viewpoint serves as overview about the of the Views present in a System Model.

Applicability

The Grid Definition Viewpoint supports the "System Viewpoints, Views and Models" input/output of various Technical Processes in INCOSE SYSTEMS ENGINEERING HANDBOOK 2023.

Presentation

A content diagram featuring a matrix view for the SAF Viewpoint conceptual model: Rows represent Domains, and columns represent Aspects, and the cells manage the Views.

A table featuring the saf viewpoints, the views (diagrams, tables, ..) of the system model conforming to those viewpoints, domain and aspect information

Stakeholder

- SAF System model user

Concern

- Which viewpoints are used in the system model
- Which views of the frameworks viewpoints are present in the system model?

Profile Model Reference

The following Stereotypes / Model Elements are used in the Viewpoint:

- Attribute "diagrams" of SAF_Viewpoint referencing SAF_Diagram
- SAF_C2_GRID
- SAF_C2_GRID_Table
- SAF_Diagram
- SAF_Viewpoint

Input from other Viewpoints

Required Viewpoints

none

Recommended Viewpoints

none