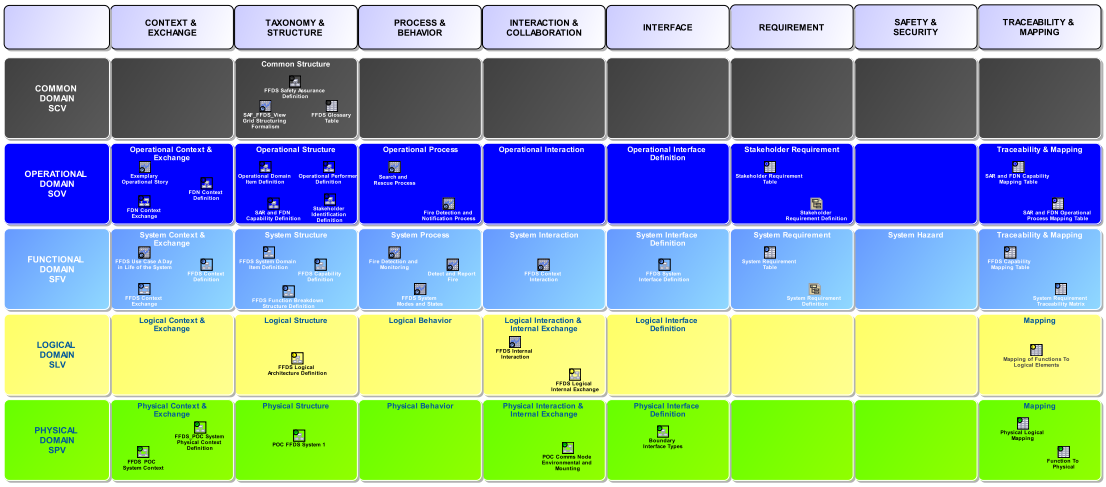
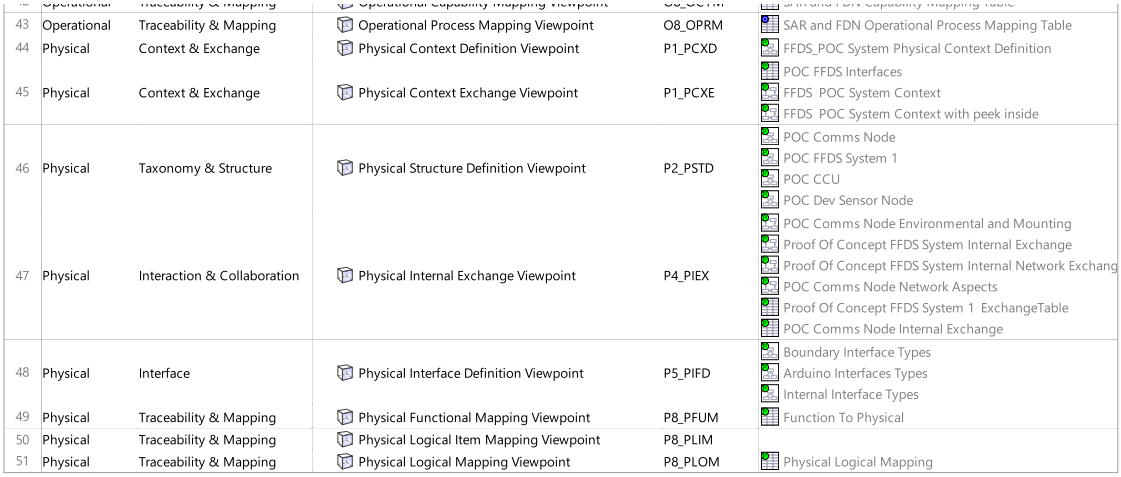
SAF User Documentation : C2_GRID Grid Definition Viewpoint

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	FFDS View Overview SAF_FFDS_View Grid Structuring Formalism
4	Common	Taxonomy & Structure	Common Terms Definition Viewpoint	C2_TRMD	PNG V3 Terms FFDS Glossary Table
5	SAF Developme	Context & Exchange	Stakeholder Viewpoint	D1_STKD	
6	SAF Developme	Taxonomy & Structure	Concept Viewpoint	D2_COTD	SAF_context_F Definition SAF_safety_concept Definition SAF_interaction_O Definition SAF_structural_O Definition SAF_cross-domain FD-OD mapping wallpaper SAF_capability_O Definition SAF_framework Definition SAF_argumentation_C Definition SAF_need_concept Definition SAF_requirement_F Definition SAF_domain_kind_O Definition SAF_functional_concept Definition SAF_context_concept Definition SAF_interaction_L Definition SAF_interface_O Definition SAF_term_and_standard_C Definition SAF_stakeholder Definition SAF_structural_L Definition SAF_structural_F Definition SAF_domain_kind_F Definition SAF_state_F Definition SAF_structural_P Definition SAF_context_O Definition SAF_security_concept Definition SAF_general_concept Definition SAF_capability_F Definition SAF_cross-domain interface wallpaper SAF_general concept wallpaper SAF_interface_F Definition SAF_interaction_F Definition SAF_process_C Definition SAF_functional domain wallpaper SAF_requirement_O Definition SAF_interface_P Definition SAF_operational domain wallpaper SAF_Workshop kassel SAF_cross-domain LD-FD mapping wallpaper SAF_context_P Definition
7	SAF Developme	Taxonomy & Structure	Stereotype Overview Viewpoint	D2_STYD	SAF Stereotype Table SAF Stereotype Table (example)
8	SAF Developme	Taxonomy & Structure	Viewpoint Definition Viewpoint	D2_VPTD	
9	SAF Developme	Taxonomy & Structure	Viewpoint Implementation Viewpoint	D2_VPTI	
10	SAF Developme	Taxonomy & Structure	Viewpoint Overview Viewpoint	D2_VPTO	
11	SAF Developme	Requirement	Concern Viewpoint	D6_CCND	
12	SAF Developme	Requirement	Rationale Viewpoint	D6_RATD	
13	SAF Developme	Traceability & Mapping	Implementation Traceability Viewpoint	D8_STYD	
14	Functional	Context & Exchange	System Context Definition Viewpoint	F1_SCXD	FFDS Context Definition FFDS Context Definition Table
15	Functional	Context & Exchange	System Context Exchange Viewpoint	F1_SCXE	FFDS Context Exchange
16	Functional	Context & Exchange	System Use Case Viewpoint	F1_SUCS	FFDS Use Case Table FFDS Use Case A Day in Life of the System
17	Functional	Taxonomy & Structure	System Capability Definition Viewpoint	F2_SCYD	FFDS Capability Definition
18	Functional	Taxonomy & Structure	System Domain Item Kind Viewpoint	F2_SDIK	FFDS System Domain Item Definition
19	Functional	Taxonomy & Structure	System Functional Breakdown Structure Viewpoint	F2_SFBS	FFDS Function Breakdown Structure Maintainance FFDS Function Breakdown Structure Definition
20	Functional	Process & Behavior	System Functional Refinement Viewpoint	F3_SFRE	Detect and Report Fire
21	Functional	Process & Behavior	System Process Viewpoint	F3_SPRO	Fire Detection and Monitoring
22	Functional	Process & Behavior	System State Viewpoint	F3_SSTA	FFDS System Modes and States
23	Functional	Interaction & Collaboration	System Context Interaction Viewpoint	F4_SCXI	FFDS Context Interaction
24	Functional	Interface	System Interface Definition Viewpoint	F5_SIFD	FFDS System Interface Definition
25	Functional	Requirement	System Requirement Definition Viewpoint	F6_SRQD	System Requirement Table
26	Functional	Traceability & Mapping	System Capability Mapping Viewpoint	F8_SCYM	FFDS Capability Mapping Table
27	Functional	Traceability & Mapping	System Requirement Traceability Viewpoint	F8_SRQT	System Requirement Traceability Matrix
28	Logical	Taxonomy & Structure	Logical Structure Definition Viewpoint	L2_LSTD	FFDS Logical Architecture Definition FFDS Logical Architecture Definition Full Tree
29	Logical	Interaction & Collaboration	Logical Internal Exchange Viewpoint	L4_LIEX	FFDS Logical Internal Exchange FFDS Logical Internal Exchange Full
30	Logical	Interaction & Collaboration	Logical Internal Interaction Viewpoint	L4_LITI	FFDS Internal Interaction
31	Logical	Traceability & Mapping	Logical Functional Mapping Viewpoint	L8_LFUM	Mapping of Functions To Logical Elements
32	Operational	Context & Exchange	Operational Context Definition Viewpoint	O1_OCXD	FDN Context Definition SAR Context Definition
33	Operational	Context & Exchange	Operational Context Exchange Viewpoint	O1_OCXE	FDN Context Exchange
34	Operational	Context & Exchange	Operational Story Viewpoint	O1_OSTY	Exemplary Operational Story
35	Operational	Taxonomy & Structure	Operational Capability Definition Viewpoint	O2_OCYD	SAR and FDN Capability Definition
36	Operational	Taxonomy & Structure	Operational Domain Item Kind Viewpoint	O2_ODIK	Operational Domain Item Table Operational Domain Item Definition
37	Operational	Taxonomy & Structure	Operational Performer Viewpoint	O2_OPRF	Operational Performer Definition Operational Performer Table
38	Operational	Taxonomy & Structure	Stakeholder Identification Viewpoint	O2_STID	Stakeholder Identification Definition
39	Operational	Process & Behavior	Operational Process Viewpoint	O3_OPRO	Search and Rescue Process Fire Detection and Notification Process
40	Operational	Interaction & Collaboration	Operational Context Interaction Viewpoint	O4_OCXI	Fire Detection and Notification
41	Operational	Requirement	Stakeholder Requirement Definition Viewpoint	O6_SKRD	Stakeholder Requirement Table
42	Operational	Traceability & Mapping	Operational Capability Mapping Viewpoint	O8_OCYM	SAR and FDN Capability Mapping Table



43	Operational	Traceability & Mapping	Operational Process Mapping Viewpoint	O8_OPRM	SAR and FDN Operational Process Mapping Table
44	Physical	Context & Exchange	Physical Context Definition Viewpoint	P1_PCXD	FFDS_POC System Physical Context Definition
45	Physical	Context & Exchange	Physical Context Exchange Viewpoint	P1_PCXE	POC FFDS Interfaces FFDS_POC System Context FFDS_POC System Context with peek inside
46	Physical	Taxonomy & Structure	Physical Structure Definition Viewpoint	P2_PSTD	POC Comms Node POC FFDS System 1 POC CCU POC Dev Sensor Node
47	Physical	Interaction & Collaboration	Physical Internal Exchange Viewpoint	P4_PIEX	POC Comms Node Environmental and Mounting Proof Of Concept FFDS System Internal Exchange Proof Of Concept FFDS System Internal Network Exchang POC Comms Node Network Aspects Proof Of Concept FFDS System 1_ExchangeTable POC Comms Node Internal Exchange
48	Physical	Interface	Physical Interface Definition Viewpoint	P5_PIFD	Boundary Interface Types Arduino Interfaces Types Internal Interface Types
49	Physical	Traceability & Mapping	Physical Functional Mapping Viewpoint	P8_PFUM	Function To Physical
50	Physical	Traceability & Mapping	Physical Logical Item Mapping Viewpoint	P8_PLIM	
51	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