

## SAF User Documentation : C2\_GRID Grid Definition Viewpoint

Domain	Aspect	Maturity
Common	Taxonomy & Structure	 under construction

### Example

	CONTEXT & EXCHANGE	TAXONOMY & STRUCTURE	PROCESS & BEHAVIOR	INTERACTION & COLLABORATION	INTERFACE	REQUIREMENT	SAFETY & SECURITY	TRACEABILITY & MAPPING
COMMON DOMAIN SCV		Common Structure FFDS Safety Assurance Definition SAF FFDS View Grid Rendering Framework FFDS Geometry Tools						
OPERATIONAL DOMAIN SOV	Operational Context & Exchange Contextual Operational Story FFDS Context Definition FFDS Context Exchange	Operational Structure Operational Structure Item Definition Operational Performance Definition SAF and FFDS Capability Definition Operational Identification Exchange	Operational Process Mission and Sensor Process Fire Detection and Identification Process	Operational Interaction	Operational Interface Definition	Stakeholder Requirement Stakeholder Requirement Table Stakeholder Requirement Definition		Traceability & Mapping SAF and FFDS Capability Mapping Table SAF and FFDS Operational Process Mapping Table
FUNCTIONAL DOMAIN SFV	System Context & Exchange FFDS User Data, a Data & LSA, and FFDS System FFDS Context Definition FFDS Context Exchange	System Structure FFDS System Structure Item Definition FFDS Capability Definition FFDS Functional Structure Definition FFDS Functional Structure Definition	System Process FFDS and FFDS Life Cycle FFDS System Process FFDS System Process	System Interaction FFDS System Interaction	System Interface Definition FFDS System Interface Definition	System Requirement System Requirement Table System Requirement Definition	System Hazard	Traceability & Mapping FFDS Operational Process Mapping Table System Requirement Traceability Table
LOGICAL DOMAIN SLV	Logical Context & Exchange	Logical Structure FFDS Logical Architecture Definition	Logical Behavior FFDS Logical Behavior	Logical Interaction & Internal Exchange FFDS Logical Interaction FFDS Logical Internal Exchange	Logical Interface Definition			Mapping Mapping of FFDS to Logical Context
PHYSICAL DOMAIN SPV	Physical Context & Exchange FFDS and FFDS System Physical Context Definition FFDS Physical Context	Physical Structure FFDS Physical Structure 1	Physical Behavior	Physical Interaction & Internal Exchange FFDS Physical Interaction FFDS Physical Internal Exchange	Physical Interface Definition FFDS Physical Interface Table			Mapping Physical Logical Mapping Physical to Physical

#	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	Common Terms Definition Viewpoint	C2_TRMD	FFDS Glossary Table PNG V3 Terms
4	Common	Taxonomy & Structure	Grid Definition Viewpoint	C2_GRID	SAF_FFDS_View Grid Structuring Formalism FFDS View Overview
5	Logical	Traceability & Mapping	Logical Functional Mapping Viewpoint	L8_LFUM	Mapping of Functions To Logical Elements
6	Logical	Interaction & Collaboration	Logical Internal Exchange Viewpoint	L4_LIEX	FFDS Logical Internal Exchange Full
7	Logical	Interaction & Collaboration	Logical Internal Interaction Viewpoint	L4_LITI	FFDS Logical Internal Exchange FFDS Internal Interaction
8	Logical	Taxonomy & Structure	Logical Structure Definition Viewpoint	L2_LSTD	FFDS Logical Architecture Definition FFDS Logical Architecture Definition Full Tree
9	Operational	Taxonomy & Structure	Operational Capability Definition Viewpoint	O2_OCVD	SAR and FDN Capability Definition
10	Operational	Traceability & Mapping	Operational Capability Mapping Viewpoint	O8_OCYM	SAR and FDN Capability Mapping Table
11	Operational	Context & Exchange	Operational Context Definition Viewpoint	O1_OCXD	SAR Context Definition
12	Operational	Context & Exchange	Operational Context Exchange Viewpoint	O1_OCXE	FDN Context Definition
13	Operational	Interaction & Collaboration	Operational Context Interaction Viewpoint	O4_OCXI	FDN Context Exchange
14	Operational	Taxonomy & Structure	Operational Domain Item Kind Viewpoint	O2_ODIK	Operational Domain Item Table Operational Domain Item Definition
15	Operational	Taxonomy & Structure	Operational Performer Viewpoint	O2_OPRF	Operational Performer Table Operational Performer Definition
16	Operational	Traceability & Mapping	Operational Process Mapping Viewpoint	O8_OPRM	SAR and FDN Operational Process Mapping Table
17	Operational	Process & Behavior	Operational Process Viewpoint	O3_OPRO	Search and Rescue Process Fire Detection and Notification Process
18	Operational	Context & Exchange	Operational Story Viewpoint	O1_OSTY	Exemplary Operational Story
19	Physical	Context & Exchange	Physical Context Definition Viewpoint	P1_PCXD	FFDS_POC System Physical Context Definition
20	Physical	Context & Exchange	Physical Context Exchange Viewpoint	P1_PCXE	FFDS_POC System Context with peek inside FFDS_POC System Context POC FFDS Interfaces
21	Physical	Traceability & Mapping	Physical Functional Mapping Viewpoint	P8_PFUM	Function To Physical
22	Physical	Interface	Physical Interface Definition Viewpoint	P5_PIFD	Boundary Interface Types Arduino Interfaces Types Internal Interface Types Proof Of Concept FFDS System 1 ExchangeTable POC Comms Node Environmental and Mounting
23	Physical	Interaction & Collaboration	Physical Internal Exchange Viewpoint	P4_PIEX	POC Comms Node Network Aspects Proof Of Concept FFDS System Internal Network Exchange POC Comms Node Internal Exchange Proof Of Concept FFDS System Internal Exchange
24	Physical	Traceability & Mapping	Physical Logical Item Mapping Viewpoint	P8_PLIM	
25	Physical	Traceability & Mapping	Physical Logical Mapping Viewpoint	P8_PLOM	Physical Logical Mapping POC CCU
26	Physical	Taxonomy & Structure	Physical Structure Definition Viewpoint	P2_PSTD	POC FFDS System 1 POC Comms Node POC Dev Sensor Node
27	Operational	Taxonomy & Structure	Stakeholder Identification Viewpoint	O2_STID	Stakeholder Identification Definition
28	Operational	Requirement	Stakeholder Requirement Definition Viewpoint	O6_SKRD	Stakeholder Requirement Table
29	Functional	Taxonomy & Structure	System Capability Definition Viewpoint	F2_SCVD	FFDS Capability Definition
30	Functional	Traceability & Mapping	System Capability Mapping Viewpoint	F8_SCYM	FFDS Capability Mapping Table
31	Functional	Context & Exchange	System Context Definition Viewpoint	F1_SCXD	FFDS Context Definition Table FFDS Context Definition
32	Functional	Context & Exchange	System Context Exchange Viewpoint	F1_SCXE	FFDS Context Exchange
33	Functional	Interaction & Collaboration	System Context Interaction Viewpoint	F4_SCXI	FFDS Context Interaction
34	Functional	Taxonomy & Structure	System Domain Item Kind Viewpoint	F2_SDIK	FFDS System Domain Item Definition
35	Functional	Taxonomy & Structure	System Functional Breakdown Structure Viewpoint	F2_SFBS	FFDS Function Breakdown Structure Definition
36	Functional	Process & Behavior	System Functional Refinement Viewpoint	F3_SFRE	Detect and Report Fire
37	Functional	Interface	System Interface Definition Viewpoint	F5_SIFD	FFDS System Interface Definition
38	Functional	Process & Behavior	System Process Viewpoint	F3_SPRO	FFDS A Day in the Life of FFDS
39	Functional	Requirement	System Requirement Definition Viewpoint	F6_SRQD	System Requirement Table
40	Functional	Traceability & Mapping	System Requirement Traceability Viewpoint	F8_SRQT	System Requirement Traceability Matrix
41	Functional	Process & Behavior	System State Viewpoint	F3_SSTA	FFDS System Modes and States
42	Functional	Context & Exchange	System Use Case Viewpoint	F1_SUCS	FFDS Use Case A Day in Life of the System FFDS Use Case Table

## Purpose

The Grid Definition Viewpoint serves as graphic representation 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

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- [SAF System model user](#)

## Concern

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- [Which views of the frameworks viewpoints are present in the system model?](#)

## Profile Model Reference

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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

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### Required Viewpoints

*none*

### Recommended Viewpoints

*none*