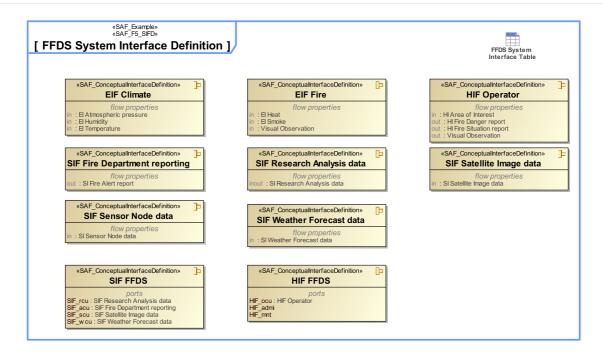
# SAF User Documentation: F5\_SIFD System Interface Definition Viewpoint

Domain	Aspect	Maturity
Functional	Interface	released

## **Example**



## **Purpose**

The System Interface Definition Viewpoint captures system wide concepts defining interfaces. It allows to adopt long-lived standards and to harmonize conceptual interface definitions to improve interchangeability, interoperability, and portability.

## **Applicability**

The System Interface Definition Viewpoint supports the "prepare for system requirement definition" activity part of the "System Requirements Definition Process" activities of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2023 [§2.3.5.3] and contributes to the artifact "System Requirements Definition Report".

Furthermore, the viewpoint supports the "Interface Management" approach of the INCOSE SYSTEMS ENGINEERING HANDBOOK 2023 [§3.2.4].

#### **Presentation**

A block definition diagram (BDD) featuring Conceptual Interface blocks with ports, and flow properties.

A tabular format listing Conceptual Interface blocks, their ports, and flow properties.

#### Stakeholder

- Acquirer
- Customer
- Hardware Developer
- IV&V Engineer
- Maintainer
- Safety Expert
- Security Expert
- Software Developer
- System Architect

#### Concern

- Which are the interface definitions for the logical architecture?
- Which kind of conceptual items (energy, material, information, etc.) are exchanged between the system and external entities?
- Which standards, protocols, and format specifications apply to a physical interface?

#### **Profile Model Reference**

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

- Attribute "realizingConnector" of InformationFlow referencing Connector
- Connector [UML Standard Profile]
- FlowProperty [SysML Profile]
- FlowProperty contained in SAF\_ConceptualInterfaceDefinition
- FlowProperty typed by SAF\_DomainKind
- ItemFlow [SysML Profile]
- · ItemFlow typed by SAF DomainKind
- ProxyPort [SysML Profile]
- ProxyPort typed by SAF\_ConceptualInterfaceDefinition
- SAF\_ConceptualInterfaceDefinition
- SAF DomainKind

• SAF\_F5\_SIFD

# **Input from other Viewpoints**

# **Required Viewpoints**

none

## **Recommended Viewpoints**

none