

## SAF User Documentation : 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 included 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

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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

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- [Acquirer](#)
- [Customer](#)
- [Hardware Developer](#)
- [IV&V Engineer](#)
- [Maintainer](#)
- [Safety Expert](#)
- [Security Expert](#)
- [Software Developer](#)
- [System Architect](#)

## Concern

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- [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

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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\\_SFV05a\\_View](#)

## Input from other Viewpoints

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### Required Viewpoints

*none*

### Recommended Viewpoints

*none*