Interface Design Description (IDD) Template

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1 Interface Design Description Overview

This document must describe how to realize the service, pointing out the technologies and the Communication Profile to be used.

The set of technologies to be used must be explicitly described.

An abstract view of how the interfaces are realized by using the Communication Profile should be placed here.

This section MUST contain pointers to SD documents.

Table 1 Pointers to SD documents

Service description	Path
Service1	Path the document on the repository
Service2	Path the document on the repository

This section MUST contain pointers to CP documents.

Table 2 Pointers to CP documents

Communication Profile	Path
Profile1	Path the document on the repository
Profile2	Path the document on the repository

This section MUST contain pointers to SP documents.

Table 3 Pointers to SP documnets

Semantic Profile	Path
Profile1	Path the document on the repository
Profile2	Path the document on the repository

2 Interfaces

Every interface should be fully described in a separate section. In this section correlation among communication profiles and interfaces must be presented in detail. Every function included in the interface should also be presented and explained in a subsection for each interface. Sequence diagrams might be included to give a clearer view on functions' usage.

The use of the following diagrams is proposed for representing the behavior:

- UML Sequence diagram
- UML or SysML Activity diagram

If it is considered necessary to define the structure, these diagrams can be a choice:

- UML Class diagram
- UML Component diagram
- SysML Parametric diagram
- SysML Block Definition diagram

Every function that is included in the interfaces must be described to the necessary extent. The usage of tables to provide that kind of information can be used, describing for instance, method's names, types, input parameters and output information. Every function should also be described in separated sections in order to for someone else to easily to implement it.

In the following table, a function name should be defined. For each operation, a service which is related to the function, a method to interact with the function, the input parameters and the output that will be obtained when using the function should also be presented.

Table 4 Function description

Function	Service	Method	Input	Output

Each function which is described in Table 4 is required to be pointed to the correct interface provided by the Communication Profile (eg. subsection 8.1 – Operations, included in Section 8 – Description Format) and Semantic Profile that are implemented by the current service.

3 Information Model

In the present section detailed information regarding the format of the service data throughout the process, should be provided. Specifications regarding data format should be described here.

UML or SysML can be used to describe the relation of data format and specifications.

If any metadata is available, also must be included in this section.

This section does not report how data is encoding, since it is targeted by CP / SP documents.

4 References

Any references must be placed here.

5 Revision history

5.1 Amendments

No.	Date	Version	Subject of Amendments	Author
1	20-2-2015	1.0	Revision of text	Michele Albano / Luis Ferreira
2	30-09-2015	1.1	Refinement of the structure	Michele Albano / Luis Ferreira
3	2016-03-19	1.2	Transfer to Latex	Jerker Delsing

5.2 Quality Assurance

No.	Date	Version	Approved by
1			
2			