PSI Document List

PSI-DL

Version:	MS11 [1.3.0]
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1 Document Meta Information

2 Introduction

The Pooling & Sharing Interfaces Definitions (PSID) project is an ESA co-funded effort to define a common standard for the interfaces of Pooling & Sharing Systems (PSS) for Satellite Communication (SatCom) services. A PSS is a digital platform for matchmaking (Gov)SatCom users' demands (both commercial and institutional) with (Gov)SatCom providers' offers. Bringing together multiple (Gov)SatCom providers in one platform makes the market transparent, thus allowing users to get an overview of the market and to compare different offers efficiently. Additionally, a PSS assists users with little knowledge about the (Gov)SatCom domain defining their requirements on the (Gov)SatCom services. Those two aspects combined allow for fast access to the services and an efficient usage of the available capacities. To accomplish this, a PSS steps in between the usual processes of finding a provider/supplier, requesting an offer, and ordering the desired products or services, either as a service broker or by pooling products and services from different providers and offering them as an intermediary or distributor. Subsequently, the PSS can be used to monitor the services and manage multiple missions in a single application.

Eventually, a PSS can also be used as (or manage) a community hub, i.e., a number of end users or customers with similar interest that *share* their common resources and utilize a commonly obtained *pool* of (Gov)SatCom capacities. This strategy increases the efficient usage of scarce resources further.

There are already different approaches on PSSs, that might lead to an unnecessary fragmentation of the market. Therefore, a common standard for the interfaces of a PSS is required to allow the interaction between those different PSSs and reduce the effort of (Gov)SatCom providers to offer their product and services via multiple PSSs to maximize their reach.

Such a standard needs to take care of the different interfaces involved in the aforementioned processes, i.e.,

The goal of this project is to mainly define aspect 1 and to develop a software mock-up as needed to validate the various interfaces being developed.

The PSI standard derives from the existing industry-standard "Open Digital Framework" of **TM Forum** alliance[1]. The "Open Digital Framework" is a reference framework for delivering online Information, Communications and Entertainment services to the telecom world. It empowers market participants to compete and cooperate. One of PSI's goals is to make this existing standard fit for the world of satellite communication.

The consortium for this project consists of the service & technology providers SES Techcom and CGI, as well as of the (Gov)SatCom operators SES, Hellas Sat, Hispasat, Hisdesat, and LuxGovSat, and Inmarsat being both a service & technology provider and a (Gov)SatCom operator.

[1] See https://www.tmforum.org/resources/reference/gb991-tm-forums-core-concepts-and-principles-v22-0-0/

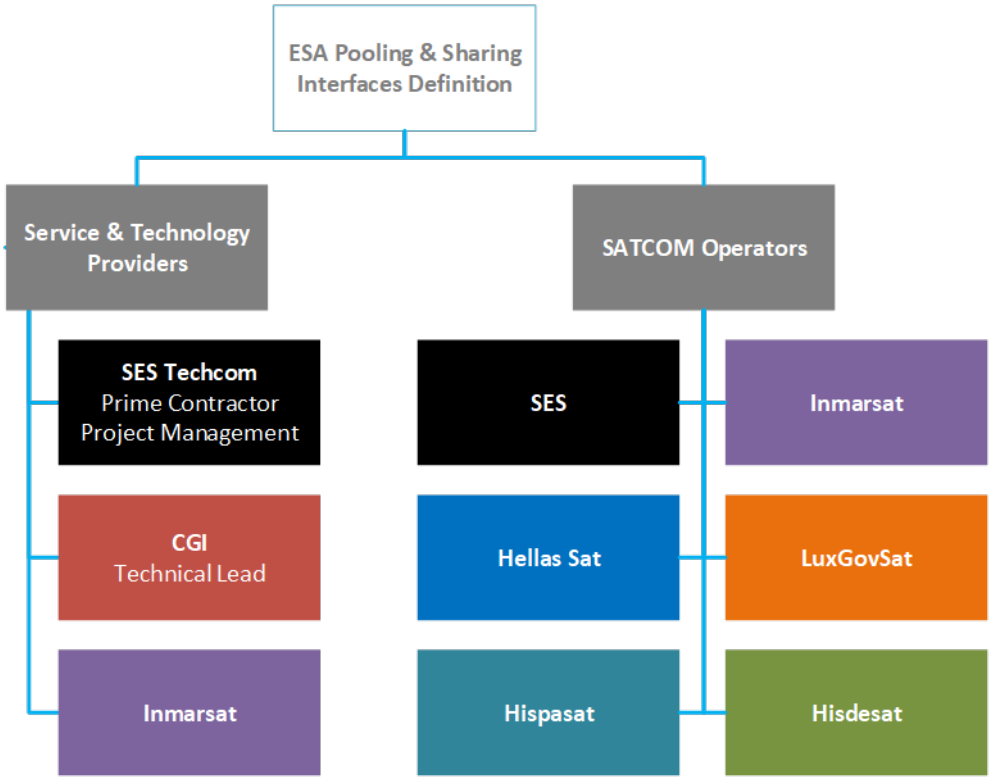

Figure 2.1: The PSI consortium.

2.1 Scope of Document

This document constitutes the document list of the Pooling & Sharing Interface (PSI).

2.1.1 Compiled Document

NOTE: THIS IS A COMPILED DOCUMENT [2]

This document has been compiled/generated from external sources and is not being written as-is. Therefore, any changes made within this compiled version of the document will be lost upon recompilation!

To make (permanent) changes, edit the respective sources directly or contact the PSID team.

2.1.2 Signature

Changes to this document are tracked electronically. No signature is required by the authors. The information in the “Source Control” chapter can prove the integrity of the document and reveal any change.

[2] Document compiled on 2025-04-23 12:44.

2.2 Release Notes

2.2.1 Release Notes

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2.2.2 PSI Release Notes

2.2.2.1 Introduction

Welcome to the latest release of the Pooling and Sharing Interface (PSI) API!
This document outlines the new features, improvements, and important updates included in this version.

2.2.2.2 Key Highlights

The central focus of this release is the implementation of the **Mission Management ODA Blueprint**.
This component complements the mission-related APIs by providing a *reference implementation of graphical user interfaces* that help users specify their product and service requirements.

Designed with users in mind, this component uses templates to simplify mission creation and introduces a governance layer to facilitate and control the requirements collection process.
It's built as a standalone micro-frontend and can be easily integrated into existing OSS/BSS/PSS systems.

The interface includes multiple visualization modes:

Another major update in this release is the migration to **TM Forum APIs Version 5 (TMF5)**.
All APIs have been ported to the current TMF baseline.
However, TMF5 introduced some gaps in the Component Test Kit (CTK), resulting in partial test coverage for certain APIs. This limitation will be addressed once TM Forum updates the CTK.

Additionally, this release introduces **MEF-compatible APIs**, marking the beginning of convergence between MEF and TMF frameworks within PSI.
Our goal moving forward is to support both API standards in their respective areas.

2.2.2.3 What's New

2.2.2.3.1 Newly Added APIs

2.2.2.3.2 Updated APIs

2.2.2.3.3 Added Requirements

2.2.2.4 Known Limitations

2.2.2.5 Feedback and Contributions

We appreciate your input!
If you experience any issues or have suggestions, please don't hesitate to contact us.
We also encourage community contributions to help enhance PSI further.

3 List of PSI Documents (DL)

The following table keeps track of all produced documents and their current status. Resulting from the agile methodology, the actual document list is extended by additional documents. Refer the table above for referencing.

Doc-Ref	Document title	Version
PSI-DL	PSI Document List	1.3.0
PSI-CST	PSI Case Study	1.3.0
PSI-DAC	PSI Documentation-As-Code Whitepaper	1.3.0
PSI-GID	Graphical Interface Description	1.3.0
PSI-ICD	Interface Control Document	1.3.0
PSI-REQ	Interface Requirements Document	1.3.0
PSI-SLF	Software License File	1.3.0
PSI-TAD	Terms, Abbreviations and Definitions	1.3.0
PSI-TOD	Tasks and Operations Dictionary	1.3.0
PSI-READFIRST	Suggested Reading Order	1.3.0

Table 3.1: Document list of the PSI project.

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