Standardisation of PF/PL IF – TAS Point of View

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The presentation will be based on the following programs where TAS-F is Prime :

- The Proteus PF, offering a PL interface based on 1553 bus and data storage resource dedicated to PL in the Computer Mass Memory. This PF was able to host Observation and Science Payloads.
- The Herschel and Planck missions : these 2 satellites were developed with a common service module, using a 1553 bus protocol to get science data from PL instrument to Computer Mass memory.
- The Sentinel 3 : this mission accommodates up to 6 instruments linked to a PDHU through a SpW network, for science data. The PL 1553 bus is dedicated to control and command the instruments and the PDHU.
- The MTG : Instruments connected to 1553 and Science data forwarded to a DDU through a SpW network. The presentation will just highlight the detailed presentation given in session 1.

From these various experiences,

- the protocols , and their implementation verification
- synchronization solutions
- the operations and adoption of PUS
- the FDIR implementation
- the operation data exchange to System BDS
- the Verification strategies

will be presented and discussed for a further optimization of PL/PF standardization.