

# SpaceWire Working Group Meeting 11

## Introduction

Ph. Armbruster TEC-ED

## Scope: 11<sup>th</sup> Space Working Group Meeting

### What do we have ?

ECSS-E50-12A

Devices: SMCS332, SpW-10X, SpW-RTC from Atmel, Aeroflex devices, other devices from American, Japanese and Russian providers

Missions (many !) using SpaceWire technologies

Remote Memory Access Protocol > PID:1 in ECSS-E50-11

CCSDS SOIS Recommendations for on-Board Service interfaces

CCSDS Packet transfer protocol over SpW > PID:2 in ECSS-E50-11

EGSE from several suppliers – TopNet for virtual integration

Web sites, an International Conference !

## Scope: 11<sup>th</sup> Space Working Group Meeting

### What do we miss ?

A set of protocols providing more robustness, reliability and timeliness > SpaceWire RT (Reliability and Timeliness)

### What else ?

- SpaceFibre
- SpW Handbook
- SpW Test, Verification and “Certification” criteria
- SpW based Backplanes
- Support to Plug and Play

### How do we manage to reach goals ?

# *Through the SpaceWire Working Group*

## **SpW WG : *ESA JAXA NASA ROSCOSMOS INDUSTRY***

Mandate of the WG is manifold:

- To share information related to the implementation of on-board networks based on the SpaceWire standard
- To review and discuss services supported by networks on-board spacecraft
- To define or register (via PID allocations) a set of Networking Protocols (e.g RMAP) for SpaceWire links, nodes and routers (SpW-SnP).
- Cooperation is framed if required by Inter-Agencies agreements – (c.f. BepiColombo, JWST), in the spirit of the CCSDS.
- Information is exchanged openly in a collaborative spirit in full respect of intellectual property rights (responsibility of each participant).

Working Group composition – Open to Industry - Agency members shall act as focal points for national industrial and intra-agencies activities.