

# **SpW WG Steering Committee Meeting #13**

## **Wednesday, 16<sup>th</sup> of September 2009**

At ESA / ESTEC



# **SpW Working Group Steering Committee Meeting 13 (SpW WG StCMtg13)**

## **Steering committee**

ESA (Chair): Ph. Armbruster, M. Suess

JAXA/ISAS: T. Yamada, S. Fukuda, M Ozaki

NASA: G. Rakow

ROSCOSMOS: V. Grishin,

### **Sub-WG Conveners:**

Standard Editor: S. Parkes (UoD)

SpW Handbook: B. Cook (4Links)

SpW Validation and certification: Y. Sheynin (UoStPb)

SpW Backplane: A. Senior (SEA)



## Agenda

- SpaceWire-T
- Reports by the sub-working group conveners
- SpW Conference
- Next WG meeting



## SpW-T

- Draft protocol specification in version 2.1 was discussed during the WG meeting
  
- Error handling of SpaceWire (R)T
  - If an error occurs during the transmission of an SDU then SpaceWire (R)T would act similar to a SpaceWire link and therefore append the correctly received part of the SDU with an EEP.
  - ESA will make an analysis on which control loop speed is required to determine the required time slot time
  - The failure model which has to be considered when analysing SpaceWire-T needs to be defined and agreed



## SpaceWire Virtual Networks

- The ideas presented by 4-Links are recognised as being of general interest
- The implementation of Virtual networks will require a revision of the SpaceWire codec
- It should be considered for integration in SpW-2



## ECSS-E-ST-50-11 / 50-5X

ECSS secretariat proposed to split different chapters of ECSS-E-ST-50-11 in different standard documents

- The ECSS-E-ST-50-5X series shall be reserved for this purpose:
  - E-50-50: SpaceWire Protocols General Information and Protocol Identification
  - E-50-51: Remote Memory Access Protocol
  - E-50-52: CCSDS Packet Transfer Protocol
  - E-50-53 and following: Additional SpaceWire Protocols
- The changes are regarded as only editorial
- Therefore no new public review process is required
- The changes will be implemented by the ECSS Secretariat
- The resulting documents will be reviewed by the ECSS RMAP WG
- The publication is planned for November of this year
- The Technical Authority still has to approve this change by its vote
- **NOTE! Information available only after the meeting: The TA did not approve the proposal from the ECSS secretariat to split the standard in several parts. Therefore the ECSS-E-ST-50-11C standard will be published as is.**



## Revision of the ECSS-E-50-12 Standard

- Work on revision of the 12C standard is planned to start next year to generate a 12D version.
- 12D should correct errors in 12C and add the features and modifications that have been discussed and agreed in the past.
- Formal inputs through ECSS revision sheets will be requested to the change proposals.
- The inputs through revision sheets will be discussed during the next SpW WG meeting.
- Separately work should start on the definition of SpaceWire-2 that should incorporate more far reaching modifications like half-duplex, virtual channels over SpaceWire and SpaceFibre.



## SpW Handbook

- *To be completed*





## SpaceWire PnP

- UoD will provide the document on PnP that has been written by Peter Mendham.
- The XTEDS document will be made available through CCSDS and further discussed and agreed in this frame.
- The discussion will be further continued through a number of telephone conferences



## **SpW Test, Verification and Certification**

- More and more SpW testers are in development.
- Each tester uses custom test procedures which are treated as company confidential.
- This makes it difficult to get inputs for a standardised set of conformance tests
- It would be good to include a first set of conformance tests in the update of the standard



## 3<sup>rd</sup> International SpW Conference

- Location: St. Petersburg
- Date: 22-24 June 2010
- The call for papers has been sent out
- Deadline for abstracts 16 November 2009
- Roscosmos announced general support of the conference
- NASA will produce a letter to authorise the use of the NASA logo



## Next SpW WG meeting #14

- Date: 22-24 February 2010
- Location: Cannes, France (TBC) or ESTEC