

SpaceWire Working Group meeting #16, March 2011

Philippe Armbruster ESTEC, Noordwijk 21/03/2011



Foreword

SpaceWire WG meeting #16 - Scope



The meeting will cover specifically the following topics:

- SpW networks used for C&C and High Throughput Data Transfers (SpW-D)
 (Convenors Ph. Armbruster, ESA/ESTEC & S. Parkes, UoD)
- SpW Evolutions and Standard Revision (Convenors D. Jameux, ESA/ESTEC & M. Süß, ESA/ESTEC)
- SpaceWire backplanes (Convenors A. Senior, SEA & M. Nomachi, UoO)
- SpaceWire PnP (Convenors G.Rakow, NASA/GSFC & P.Mendham, SciSys)

In addition, the other regular topics will be addressed:

- SpaceWire related R&D activities (Convenor D.Jameux, ESA/ESTEC)
- SpW Deployment and Handbook (Convenor B. Cook, 4Links)
- SpW Test, Verification and "Certification" (Convenor Y. Sheynin, UoStPg)
- SpW Technology Promotion, SpW Brochure
- SpaceWire International Conferences: SpaceWire 2011

Day 1: Monday, 21 March pm, Einstein



14:00 Welcome and Introduction (Philippe Armbruster, ESA/ESTEC)

14:15 Session 1: SpW-D (Convenor Ph. Armbruster, ESA/ESTEC & S. Parkes, UoD)

Scope: SpW networks used for C&C and high throughput data transfers (SpW-D)

Discussions during the session dedicated to SpW-D will be:

- structured according to the document attached hereby: <u>ESA-PhA-SpW-D</u>
 <u>Requirements and baseline V0-7</u>
- complemented by a contribution on Time distribution from Marko Isomaki,
 Aeroflex Gaisler
- moderated by a contribution from UoD on: <u>UoD-SP-SpW-D Protocol Trade-Off</u>
 Criteria
- and facilitated by an assessment made by Teletel: <u>TELETEL SpaceWire-D</u>
 <u>Baseline Considerations and Proposals v1</u>

18:00 *End of day 1*

Day 2: Tuesday 22 March am, Einstein



Session 2: SpW Evolutions and Standard revision (Convenors D.Jameux, ESA/ESTEC & M. Süß, ESA/ESTEC)

09:00 Introduction/reminder on SpW evolutions, standard revision (SpaceWire Rev. D), backward compatibility, SpaceWire 2

09:15 SpW standard revision Part I

Scope: endorsement by the SpW Working Group of the Change Request dispositions proposed to ECSS. These dispositions are based on the outcome of the discussions during SpW WG mtg#15 Session 3.

12:00 SpW standard revision Part II

Scope: elaboration and endorsement by the SpW Working Group of dispositions to be proposed to ECSS for the Change Request for which no disposition was agreed upon during SpW WG mtg#15 Session 3

13:00 Lunch break

Support document: ECSS Change Request/Document Improvement Proposal

Day 2: Tuesday 22 March pm, Einstein



14:00 SpW standard revision Part II (continued)

- SpaceWire SAPs proposal
- Presentation SUAI, V. Olenev
 - Support document: SpaceWire SAPs proposal from SUAI
- Proposal for Defining Standard Services Over SpW (T.Yamada, JAXA)

15:45 Coffee break

Session 3: SpaceWire related R&D activities (Convenor D.Jameux, ESA/ESTEC)

16:15

- SpaceFibre Very High Speed Link Technology Demonstrator (M. Süß, ESA/ESTEC)
- Proposals on SpW Evolution (A.Khakhulin, Energia)
- MOST, SpaceWire traffic simulator (TAS France/D. Jameux, ESA/ESTEC)
- Low Mass SpaceWire (J. IIstad, ESA/ESTEC)

19:00 Joint dinner

Day 3: Wednesday 23 March am, Einstein



Session 4: SpaceWire backplanes (Convenors A. Senior, SEA & M. Nomachi, UoO)

09:00 Introduction by the Convenors to SpW backplanes

- SpaceWire backplane development in Japan (M.Nomachi, UoO)
- SpaceWire backplanes ITT (J. IIstad, ESA/ESTEC)
- SpaceWire backplanes (A. Senior, SEA Ltd)
- SpaceWire Active Backplane from the software user perspective (P.Mendham, SciSys)

10:30 Coffee break

Day 3: Wednesday 23 March am, Einstein



Session 5: SpaceWire PnP (Covenors G.Rakow, NASA/GSFC & P.Mendham, SciSys)

10:45 Introduction by the Convenors to SpW PnP

Presentation and comparison of different approaches to SpW PnP (P. Mendham, SciSys)

Support document: <u>SpaceWire-PnP Review Comments</u>

Session 6: Other topics

12:00

- SpaceWire Hand Book (Convenor B. Cook, 4Links)
 Support Document: SpW Handbook presentation
- SpW Products ESA brochure (M. Brestanska, ESA/ESTEC)
- SpaceWire International Conferences: SpaceWire2011 (San Antonio TX, USA)

13:00 End of SpW Working Group meeting #16

Day 3: Wednesday 23 March pm, Cf 204



14:00 SpW WG Steering Committee Meeting

Restricted to SpW WG Steering Committee members

17:00 End of SpW WG Steering Committee Meeting