

SpaceWire Working Group Meeting 6

Introduction and Agenda

Ph. Armbruster TEC-ED

Introduction and objectives

First SpW WG Mtg, 15th and 16th (AM) of September 2004

Second SpW WG, 10th PM, 11th , 12th (AM) of November 2004 ⇒ RMAP Draft B

Third SpW WG, 15th , 16th , 17th (AM) of February 2005 ⇒ RMAP Draft C

Fourth SpW WG Meeting, 19th (PM), 20th and 21st (AM) of July 2005 ⇒ RMAP Draft D

Fifth SpW WG Meeting, 15th (PM), 16th and 17th of November 2005 ⇒ RMAP Draft E

Sixth SpW WG Meeting, 18th and 19th of May 2006

Scope of the 6th meeting:

The sixth SpaceWire (SpW-SnP) Working Group meeting will focus on implementation issues in currently developed missions. As a complement, the need of additional protocols shall be addressed (e.g for specific applications like robotics or the transport of CCSDS packets,).

Introduction and objectives and SpW WG

- 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.

Day 1 Thursday 18th of May - Plenary session

09:15 Introduction, Ph. Armbruster

09:30 SpW Applications I

SpW Application at Alcatel Alenia Space (A. F. Girard)

SpW Applications for Robotics Applications at Canadian Space Agency (D. Jameux, Estec)

10:30 Break

10:45 SpW Applications II

SpW Applications, update from JAXA (T. Yoshimitsu, M. Nomachi)

SPW Applications, update from NASA (G. Rakow)

SpW Standard Problems (Y. Sheynin, St.Petersburg University of Aerospace Instrumentation)

SpW Devices Development Status in Russia (Y. Sheynin, St.Petersburg UoAI,
T. Solokhina, ELVEES Moscow)

Cables and Connectors (M. Wahl, GORE)*

12:45 Lunch

Day 1 Thursday 18th of May - Plenary session - PM

13: 45 SpW Devices Update on Development Status

Presentation of SpaceWire developments performed at Gaisler Research (J. Gaisler)*
Remote Terminal Controller (T. Hult, Saab Ericsson)
LVDS, SpaceWire Interface (D. Stevenson, Aeroflex)
SpW based Intelligent Camera for Navigation (UoD, S. Parkes)
SpW/RMAP based Video Processing Chain (Sodern, K. Grange, F. Lachaud)*
SpW Router Status (Astrium/AAS, TBD)
SMCS332-SpW and SMCS116-SpW Status (Astrium, TBD)
Update on SpW related developments (P. Walker, 4 Links)*

15:45 Break and *Demonstrations

16:00 Open discussion on SpW Evolution, part I (discussion Part I)

Cables and Connectors
SpW Links Routing on backplanes
CCSDS, PUS packets and other protocols on SpW networks
Your proposal(s)

16:45 Day 1 Plenary Session closure

17:00 - 19:00 SpW Inter-Agency meeting

Day 2 Friday 19th of May - AM Plenary session

09:15 Introduction and de-brief of Inter-Agency Meeting Ph. Armbruster

09:30 In-depth discussion on SpW short term and long term evolutions

CCSDS SOIS
RMAP
SpaceFibre*
Complements and Evolution(s) for the standard
Other aspects

12:30 Wrap Up ext issues, Ph. Armbruster, Estec

13:00 Meeting close