Seminar Overview

Pierre Fabry

ESTEC / TOS - EDP

Technical & Operational Support (directorate)

Electrical (department)

Data systems (division)

onboard Payload data Processing (section)

Information around the Seminar

- Preparation of this Event: *co-organized with Luca Tunesi*

- *Main Objectives :*

    - *provide newcomers with an introduction to SpaceWire*

    - *let more experienced SpaceWireMen/Women share their ideas*

    - *have an overall picture on what is ongoing with SpaceWire,*

    - *identify the weak points & future issues with SpaceWire.*

- SpaceWire at ESTEC: *a team work (inside and outside TOS-EDP)*

- Seminar CD: *abstract booklet + final papers + ECSS standard + slide shows*
    → You will receive it via normal mail (2 months from now)

- Exhibition and Poster Authors: *Einstein room already open for your installation :*
    if any problem please contact Jorgen Ilstad.

On-board Payload Data Processing section

Tuesday 4 November 2003 - Morning

09:00 Welcome & Objectives *by Philippe Armbruster*

09:25 Overview of the Seminar *by Pierre Fabry*

09:35 The Origins of SpaceWire *by Paul Walker*

Tutorials

10:00 SpaceWire Standard ECSS-E50-12A *by Steve Parkes*

10:40 Coffee Break

11:05 The SpaceWire CODEC *by Chris Mc Clement*

11:35 Procurement of the ESA-UoD SpaceWire CODEC *by Agustin Fernandez-Leon*

11:50 SpaceWire Router *by Steve Parkes*

12:20 The Operation and Use of the SpaceWire Time Codes *by Steve Parkes*

12:50 Discussions and Wrap-up (if time)

13:00 Lunch

On-board Payload Data Processing section

Tuesday 4 November 2003 - Afternoon

Current Developments & Applications - part I

14:15 Introduction & Status of SpaceWire Related ESA Contracts *by Luca Tunesi*

14:30 NASA/BAE SpaceWire Efforts *by Glenn Rakow*

14:55 Coffee Break

15:20 IP Macrocell for SpaceWire I/F Compliant with AMBA-APB BUS *by Luca Fanucci*

15:45 "MCFlight"-SOC Based Chipset with SpaceWire Links for Aerospace

Applications *by Tatiana Solokhina*

Introduction to Exhibitions

16:10 UNIONICS - A New Scalable On-Board Processing Architecture *by Mick Johnson*

16:25 Demonstration of SpaceWire Systems and EGSE *by Paul Walker*

16:40 Architecture for using spacewire links in a bus configuration *by Joel Lamorie*

On-board Payload Data Processing section

Tuesday 4 November 2003 - Afternoon

16:55 Posters & Exhibitions (EINSTEIN Room)

- Poster: SpaceWire Router Technology Makes ASIC Interfacing Easy *by UoD*

- Poster: Monitoring & Analysis of SpaceWire Links *by 4Links (UK) & NASA-JPL (US)*

- Poster: SpaceWire DSP *by University of Dundee & SciSys (UK)*

- Poster: Laben Current Application of SpaceWire Technology *by Laben (I)*

- Demo: Architecture for using spacewire links in a bus configuration *by XIPHOS (CA)*

- Demo: UNIONICS - A New Scalable On-board Processing Architecture *by EADSASTRIUM,*

   SEA & SciSys (UK)

- Demo Demonstration of SpaceWire Systems and EGSE *by 4Links (UK)*

These exhibitions will be accompanied by a Cocktail !

On-board Payload Data Processing section

Wednesday 5 November 2003 - Morning

Current Developments & Applications - part II

09:15 Highly Integrated Payload Suites and Related Data Link Requirements *by Peter Falkner*

09.35 The ASTRIUM-Velizy SpaceWire IP core *by Jean-Francois Coldefy*

10:00 Building SpaceWire Systems *by Paul Walker*

10:25 SpaceWire Conformance Tester *by Gerald Kempf*

10:50 Coffee Break

11:20 SpaceWire Developments & Test Equipment *by Steve Parkes*

11:45 SpaceWire-PCMCIA Card Development *by Jaakko Toivonen*

12:10 The New SMCS332 / SMCSLite SpaceWire ASIC *by Stephan Fischer*

12:35 Experience from Using SpaceWire in a Spacecraft Telemetry System *by Torbjorn Hult*

13:00 Lunch

On-board Payload Data Processing section

Wednesday 5 November 2003 - Afternoon

SpaceWire Evolutions & Future Equipments

14:00 ESA Intro *by David Jameux*

14:15 SpaceWire Standard Problems and Evolution Lines *by Yuriy Sheynin*

14:40 Reducing SpaceWire Time-Code Jitter *by Paul Walker*

15:05 Coffee Break

15:20 The SpaceWire Transport Protocol *by Stuart Mills*

15:45 SpaceWire Networks Implementation, Validation & Remote Integration:

TopNet *by Alberto Donadoni*

16:10 SpaceFiber *by Martin Suess*

Conclusion

By Philippe Armbruster & Pierre Fabry.

On-board Payload Data Processing section

Thank You for your attention !

On-board Payload Data Processing section