SOIS – SpaceWire Working Meeting major outcomes and way forward

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Main findings

- SOIS Subnet
  - Subnet services are about right (rough order of priority – Packet and Memory access services, Time service, Test, and finally Device Discovery service)
  - QOS needs to be reviewed with possible removal of retry with resource reservation
  - Use cases are required to drive requirements for P&P
  - QOS may need to be added to all services
  - Memory access may need alignment with RMAP (verified write)
  - Packet service may operate unidirectional (conformance change)
  - Time distribution may need to include correlation
  - Distributed interrupts/events – availability to Application needs to be considered
- General
  - May need to consider cyclic acquisition for Time and Device access
  - Need to clean-up QOS descriptions (consistency)
  - Device virtualisation – may need to consider calibrated parameters
  - File services may need to include support for packet-stores
  - Parameters for services interfaces need to be fixed at implementation time, and included in the MIB

CCSDS SOIS group Current Planning

- Now – Obtain agreement within CESG and release current books for Agency review
- Develop WG drafts for remaining services
  - Need to develop use cases for Plug and play and coordinate with SpaceWire group
- Initiate prototyping activities for all services including protocols
  - Need to have underlying subnet protocol (SpaceWire and Milbus) from other groups
  - Testing of all services/protocols and demonstration in realistic configuration
- Update (release) all documents based on review and prototyping feedback and release issue 2 red books for Agency review – begin 2008 (Maybe optimistic!)
- Submit SpaceWire mapping and protocol specification for CCSDS adoption (sometime in the future)

Future Cooperation

- We need to prototype to be able to complete the SOIS specifications but also to qualify the SOIS for CCSDS adoption
- The prototyping is a considerable effort and will require careful coordination between many groups
- Eventually we need to bring individual developments together in a single implementation to enable system level testing in a realistic environment
- Need to identify the activities and agree on who does what (subject of a follow-up ESA Discussion)