USLP Telecon #2

Amended Meeting Minutes

Feb 2, 2016

Topics: Sending/Receiving Procedures

Managed Parameters

Atendees: Greg Kazz, Tomaso De Cola, Ed Greenberg, Gilles Moury, Gian Paolo Calzolari, Lee Pitts, Kevin Moore, Victor Sank

1. Greg Kazz and Ed Greenberg took the action to document how the Sending and Receiving side procedures (4.2 and 4.3) are affected if a fixed vs. a variable length transfer frame is used (candidates are e.g. USLP OID Frame generation, multiple frames to coding sub layer, CRC need). This will be communicated with the SLP WG before the Cleveland Meeting. This is only an analysis for now and it will at this time not result in changes to 4.2 and 4.3. Define the constraints. For example, OID frames apply only to fixed length frames.
2. Victor Sank pointed out that the footer on the USLP document needs revision. Greg Kazz will fix.
3. Discussion on the Insert Zone again. Ed Greenberg advocates a variable length IZ, signaled in the TF header so it’s appearance can be dynamic, in which the IZ length is defined in the first octet of the IZ and restricted to 256 octets. One of the major concerns with this approach voiced by Gilles Moury is that it could create too much flexibility if the IZ is variable length, allowing users to by pass the TFDF to insert private data no going around the CCSDS rules. Can what Ed is proposing be equivalently met by inserting packets into the TFDF of a variable length frame ? Is there a clear need expressed for a variable length, dynamic IZ ? Another concern about the IZ service is that it is not part of SM&C or PUS, which do recognize packets. However there still is the requirement to handle RT isochronous data from Ariane 5 and 6.
4. Managed Parameter Discussion –
   1. Physical Layer – add “frame type” i.e., fixed or variable; add minimum transfer frame length; add a note about OID frames only used in fixed case;; add a note that max number of TF given to CS as a single data unit and the max. value of repetitions applies only to the Telecommand case.
   2. Master Channel - add a note to describe how max TF length applies only when using TC and not for telemetry
   3. Virtual Channel – add note on max TF length (constraints); Add note to COP in effect i.e., another alternative is no COP in effect. Repetitions parameter is specific to telecommand; replace TFDF length with TFDF type equals “fixed or variable”.
   4. MAP Channel – Used to be Frame Data Unit in TC now we call it TFDZ. We need to define an equivalent term for the length of the TFDZ. Don’t need maximum TF length defined here.
   5. Packet Transfer – Bring up the idea of potentially harmonizing all Protocol ID definitions (in Encap, IPoC, USLP) with CCSDS SE area. Other alternative is for USLP to define its PIDs with consideration of (i.e., consistent with) the PIDs already defined in Encap Service and IPoC.

Good feedback and a good meeting. We will have more telecons to follow so stay tuned. We will also be issuing an update to the USLP White book shortly based upon comments today and others received.