CSSM Mtg; Rome; Oct 2016

1. Update re SOS Book -- extensibility technique details worked out by NASA/DSN schedule exchange WG
   1. The updates to the SoS were described and HD gave a presentation (uploaded to CWE) explaining the changes resulting from the prototyping.
   2. Working group agreed to the changes.
2. Planning Data Book: Agency review determination
   1. Latest draft of the Planning Info book was discussed. Considerable discussion about whether additional parameters were required for Elevation\_ascending and \_descending events were required, this specifically related to"criteria", i.e. whether the angle specified was due to Horizon Mask, TM , TC etc. Conclusion not needed.
   2. Also considerable discussion about whether RET/FWD COMMs events required additional paramater for band specification (e.g X-band, s-band etc.). Conclusion not needed.
   3. ACTION JPC to provide addtional descriptive text about RET/FWD COMMs events.
   4. JPC requested that an addiotnal event be added that was required for SN (and potentially other space based apertures, LOOK\_ANGLE. It was agreed that this would be added and that JPC would supply the definition of the event.
   5. ACTION JPC supply LOOK\_ANGLE definition for inclusion in PIF.
   6. NP Requested that the terminology used in the PIF book be checked against the CCSDS catalogue of definitions.
   7. ACTION CH to check that terminology used in PIF book is consistent with CCSDS catalogue of definitions.
   8. It was agreed (subject to completion of above actions) that the PIF could go to agency review.
3. Planning Data: Prototype Test Plan Reviews
   1. It was agreed that the PIF Test Plan was progressing satisfactorly, but was needed an addtional test case to cover space based apertures and specifcally the LOOK\_ANGLE event.
   2. Action KT to add appropriate test case for spac based apertures (i.e. LOOK\_ANGLE eveent).
4. SMURF Update Review.
   1. Main points to come out of the SMURF update review were that the configuration profiles should be kept as simple as possible and that the profiles for services should be independent of each other (I'm not sure this is completely possible). All temporal consideration should be moved to event sequence and the responsibilty for the validity of the event sequence should reside with the user.
5. SMURF + Service Package Output (Do SMURFs align with SP R outputs?)
   1. JPC gave presentation uploaded to CWE outlining the alignment between the SMURF and the SP R outputs. This outlines a number or issues/questions that need to be addressed (see presentation for details)
   2. During course of discussion is started to become clear that we need to start to consider the overall lifecycle of a service package request (and probably also the other request types). This can probably be best represeneted by defining a state model for the requests, This probably doesn't require changes to the SMURF, but may need tweaks to the requested data to indicate the current state. Need to think about this in the context of the PIF as this is the furthesy advanced of the returned data formats.
   3. There was a discussion about what should happen if for a service package request that asked for multiple scenarion could not schedule resources for all of the specified scenarios. It was agreed that in this case an "all or nothing" approach should be adopted, i.e. either all the scenarios result in service packages of none do.
6. SMURF Prototype test cases discussion
   1. It was agreed that the SMURF Test Planshould concentrate on validation of the data structures (similiar to the approach adopted in the SoS and PIF test plans), but that there was also a need to validate the result of a SMURF request. This would be handled by effectivly starting the Management services test plan and adding new tests to this as the definitons of the request products was completed.
   2. Action MG to develope outline for Management services test plan.
7. Service Catalog updates/review
   1. HK gave a presentation on the current status of the Service Catalog (uploaded to CWE) and request that the current draft be reviewed and comments supplied to him by end Jan 2017, MU, MG, JPC voluteered to review document. HK also noted that currently CSTS services are not included in the service catalogue. Should these be added ?
   2. Action MU, MG, JPC to review draft service catalogue and provide comments to HK by end Jan 2017
8. TGFT Discussion: XFDU considerations + Prototype discussion
   1. CH gave a presentation (presentation not uploaded as the slides were reused from a presentation given prevuiously at a CCSDS meeting) to bring new memebrs up to speed and refresh everyone as to the current state. A presentation was received from CAS/NSSC (uploaded to CWE), although no representative was present at the meeting outlining the current state of their development, this was gone through during the TGFT session.
   2. With respect to further work on TGFT it is expected that CH and JP will work on getting a complete draft of the TGFT white book ready by San Antonio and in particular sort out the XFDU aspects. CC, KT and MG will work on the test plan for TGFT with intention that a draft of the test plan is ready by San Antonio.
   3. It was noted that CAS/NSSC  were responsible for one of the prototypes and that it is likely that some webexs will need to be orgainsed at a time suitable for CAS/NSSC to participate, particyaly with respect to prototye activites.
9. Event definition (joint meeting with Nav).
   1. In general Nav okay with updated event definition, couple of minor tweaks were requested, viz the addtional of an optional Time System paramater to the abstract eventTime class. This will be used to identify the time system used, i.e. UTC, UTC1 etc. Possible values for this will probably be stored in SANA. If this parameter is ommitted we can state that this defualts to UTC which is fine for the purposes of CSSM. Agreed that use of CCSDS Time Code was suitable for repseneting an absolute time.
   2. There was still some uncertainty about exactly what Nav needed with respect to the Relative Time. Nav raised an action item to write up their requirements on this. From this discussion its unlikly that this will have a significant impact on the event definition, especially as so far in SM we havn't got any use cases for the relatve time represenation.
   3. ACTION CH update event definiton to take account of Nav requiements on relative time.
10. CSSM XML Schema organization discussion Part 1
    1. HD gve a presentation (uploaded to CWE) about possible aways of organizing schemas, 2 main points were raised;
    2. 1. Use of attributes to specify parameter values, general view of working group was that this was probably the preferred approach, particulary in view of the updates to the way in which parameters are now being specified.
    3. 2. The number of XML name spaces being used in the CSSM area. It was suggested that it might be preferable to only have one name space for CSSM. This has the disadvantge of requiring a new version of the namespace everytime a new standrad is issued/updated, but would simplify the schemas. No overall consensus of this. Further disussion required (possibly during part 2 of the XML discussion on Wednesday).
    4. Addtional points, should check CCSDS standards to check if anything said about the above issues.
    5. NOTE: Need to check if XML schema annexes in SoS book are consitent with current schema.
11. XML Schema
    1. WG going with Holger's approach (see presentation)
    2. Holger is schema master
    3. Each "major" recommendation has it own schema file
12. Revised program of work discussion + resources
    1. Went through priority 1 items and assigned dates/resources
13. Service Package Update Review
    1. Question of what does configuration profile point to (for SMURF)? Multiple profiles? A single pointer? How does this square with event sequences?
    2. Subsequent 10/20/16 discussion
       1. Agreed to 3 distinct request types
          1. No Service Offsets; no event sequence
          2. Service Offsets, no event sequence
          3. No Service Offset; event sequence
14. DDOR Updates/Review
    1. Reviewed lifecycle for DDOR vs information entities
    2. M. Unal suggest that quasar will be close to S/C and probably not needed as input to planning request
15. Joint Session: SANA Registry
16. SOS Book Review (for publication)
    1. Went through all the edits; noted some further follow-up; XML schema updates to be done by CH + HD
17. TGFT/XFDU Exploration
    1. Identified some initital meta data -- notes taken by CH
18. Event Sequence Book Updates re DSN developments
    1. Walked through event squencing developments being done at JPL/DSN
19. Sana Registry & CSSM (2)
    1. Issue of spacecraft name
    2. Agreed to go with Spacecraft Abbreviation as the use in the SOS
    3. Abbreviations will be unique across the entire registry
    4. 16 character field
    5. SANA will do initial abbreviations and inform agencies for confirmation
20. DDOR Joint Session
    1. Action to E.B. to work some examples
    2. Show configuration profile with proposed DDOR configuration paarmaeters
    3. Show proposed SMURF service package request for DDOR (all of these are in conformance with lifecycle chart)
    4. Show proposed event sequence example; how is slewing to Quasars accomplished? (DDOR ground controlled events?)
21. Control Architecture joint meeting
    1. Agreed to consider that there is a controller functional resource
    2. SC-CSTS Recommendation can consider that the controller takes event sequences as its "directives"
    3. This means that the SC-CSTS could turn event sequence execution off (or back on)
    4. Also means that the SC-CSTS could put in new sequences as this is part of the controller functional resources
    5. Actions: E.B. develop a diagram/viewpoint that shows these relationships
22. Config Profile vs SMURF discussion (10/21)
    1. Agreed to introduce abstract TimingInfo
       1. ConfigProfileRef
       2. TimingInfo
          1. config profile offsets
          2. Event Sequence
       3. This is in support of getting config profiles to be just the "static" bits and allowing for "simple" event sequences
23. Update re SOS Book -- extensibility technique details worked out by NASA/ESA schedule exchange effort