# Intoduction (2017/11/06)

Presentation from CH.

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Autumn%202017%20-%20Intro.pptx>

# TGFT Prototype ntation

Some inputs still required – CRH to provide example of Delta DOR metadata from ESA

DDOR Testing – Only Metadata required – Can use “dummy” data file of appropriate size (several GBytes) during actual testing of delivering the XFDU.

Testing proposal – use the following file types

1. DDOR
2. Radiometric Observation
3. Trajectory Prediction
4. NW Utilization Schedule (i.e. Simple Schedule ?)
5. Pass Report (i.e. agency specific file type not covered by any standard)

Implicit assumption that character coding is LATIN1, add comment to this effect in TGFT Book ?

CNES has had no contact with Chinese Space Agency regarding prototype – needs to be chased up. If necessary arrange WebExs in morning European time to coordinate with Chinese.

KT volunteered for role of test coordinator – will document results in test report.

Set up area in CWE so that Chinese/CNES can upload their reports on their interpretation of TGFT XFDU. KT can then take these reports and compare with what the sending side sent. [Avoids issues with NASA e-mail blocking Chinese addresses.]

Timescale/Budget

CNES Budget only for 2017 and 2018. CNES expects to be ready to exchange files March/April 2018.

Need to start coordinating with Chinese Jan/Feb 2018.

CH to try to set up WebExs/Telecons starting end Jan 2018. CH to propose dates. Start time 9:30 CET (not Mondays). KT to be included on WebEx invitations.

Technical

HD to check TGFT XFDU schema in his role as Schema Master.

How to avoid overwriting files ? Using date/time may not be sufficient if systems in different time zones (although book does state that UTC date/time should be used).

Does WebDAV stop you overwriting files, if so might not need to use timestamping in filename approach to stop files being overwritten – This needs to be checked as it has an impact on the standard and the test plan (i.e.we’d need additional tests for avoiding overwriting etc.)

WebDav – Check that files of size > 4 GByte can be transferred (may be implementation dependent).

TGFT Development

Terminology – JP suggested use of

* TGFT Sender
* TGFT Receiver
* Paylod

This was agreed, JP to update draft TGFT book accordingly.

Check WebDAV versioning capability (CH)

* If it works use it
* If not refine file name timestamping convention (remove ”:” and increase accuracy of timestamp in name)

JP will send update version of book to CH with updated terminology. CH then to update this with Claudias comments and JPs mark up.

CH/HD to try and generate XML diagrams from Eclipse.

# SMURF (2017/11/07)

DLR/SN believe that current concept of treating the configuration profiles as independent is sufficient for the ”simple” case. (i.e. not using Event Sequence, but using the config profile offsets)

Basic Constraints

In BasicApperatureConstraint – make siteRef mandatory (as current) but change apperatureRef to optional. This allows for the case where user doesn’t care what aperture at a site he is given.

Enhanced Constraints

Time Windows – JPC brought up the subject of Time Windows. These would include multiple Basic StartTimeConstraints with the addition of an Inclusion/Exclusion flag for each one. These then indicate windows which are either to be explicitly included or excluded in the scheduling process. Time windows would be included as an X-Ref as it is updatable (like trajectory predications). Possibly could also reference events ?

Add these to SMURF

In SMURF make Enhanced Constraints optional for PlanningInfo and ServicePkgReq but allow that it can be supported for PlanningInfo but NOT for ServicePkgReq.

Add description of how changing a Standing Order affects Service Packages, i.e. only applies to “unreleased” service Packages. [Probably also need to define “unreleased”]

# PIF

PIF status presentation given by CH.

[https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/PIF%20Status%20@%2020171106.pptx](https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/PIF%20Status%20%40%2020171106.pptx)

In the following the numbers refer to the number of the comments provided by Erik on 28th August.

1. Leave as is (covered by service agreement)

3. Add note that elevation for space based apertures is not defined in the recommendation.

4. Add additional parameter to occultation to define occultation type. Check with Erik what this should be and what values required.

6. Leave as is

7. Leave as is. Parameter can be used to indicate when S/C is at a specific range from aperture. Add additional optional parameter to indicate if ascending or descending.

8. RangeRate – change to m/s (instead of km/s)

9. Agreed in San Antonio to change OWLT to RTLT.

14. Agreed in San Antonio to split keyhole event into 2.

15. Agreed to split cable wrap event into 2

* CableWrapStart
* CableWrapEnd

JPC requested that “trajectoryXref ” be added to the PlanningInfoHeader. This was agreed

NOTE 1: In the event that more than one set of trajectory data is used in the generation of the PIF then only a reference to the LATEST trajectory data should be included.

NOTE 2: Add a recommendation (i.e. not mandatory) that each PIF should be generated with trajectory calculated only from one set of trajectory data.

Are nested EventAssoiations needed ? – Probably not so leave as is for the time being.

Add a note to PIF stating that events in the PIF files shall be time ordered. (Where should EventAssociations go, probably before any events).

CRH to update PIF model, schema and doc in line with above.

# ESA Implementation Status

Presentation from MU.

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/CCSDS%20SM%20-%202017%20ESA%20implementation-2017_11_07.pptx>

Raised the point that it was not completely clear in the SMURF who is the “Owner” of some fields. Update SMURF so that this is clear.

SMURF Prototype (ESA/DLR) should start Mar/April 2018.

# Joint Session with CSTS (2017/11/8)

Event Sequences

Idea of state machine and formal definition of states seen as useful for implementing Event Sequences.

HD gave EBs Event Sequence presentation followed by his own presentation.

EB Presentation [https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Response%20to%20AI%202017-0512-16%20(Event%20Sequence)-11-Oct-2017.pptx](https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Response%20to%20AI%202017-0512-16%20%28Event%20Sequence%29-11-Oct-2017.pptx)

HD Presentation <https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Event%20Sequences%20vs%20FRM%20HD.pptx>

IOAG wish list wrt CSS

At the request of NP CH gave a brief presentation outlining IOAG prioriy1 wish list for 2020 wrt CSS.

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/IOAG%20and%20CSS%2020171107.pptx>

Conclusion not enough resources…

MdG/CH to provide proposal to CESG on how to deal with services built on top of TGFT.

1. Standalone annexes (SM W/G proposal)
2. Separate blue books (NO!!!!)
3. Separate magenta book
4. Only in SANA (is this realistic ???)

Also need to address who should document these services…

1. CSS Area (probably impractical as Area does not necessarily have required knowledge)
2. W/G responsible for subject area
3. Combination of above.

# SM Management Service

AC gave presentation

Presentation

Discussion indicated that there was a desire to keep things as simple as possible;

1. Only use asynchronous message responses (i.e. no requirement that the receiving system responds instantly to a message).
2. Use responses only from underlying protocol to check that message has been delivered to target system.

# SM Config Profile

Presentation from JP

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/ConfigurationProfilesAndServiceProfiles-171108.pptx>

JP intends to put config profile construction rules (possibly slightly informally) into TN [by spring 2018 ?]

MG can then use this as input for the Config Profile BB.

# SM Service Package

Service Package presentation from JPC

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/SCCSM_ServicePackage_DenHaag_Nov2017.pptx>

Service Package state machine presentation from MG.

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/AI2017-0512-11_Service_Package_State_Machine_20171106.pptx>

Considerable discussion on service package state machine. Outcome at end of day indeterminate – to be continued.

# Service Catalogue (2017/11/9)

HK noted that the intention for the service Catalogue was to provide guidelines on how a service provider should produce their Service Catalogue, what should be included, how to present parameter ranges etc.

Presentation from HK.

[https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Service%20Catalog%20-%20Fourth%20Draft%20Magenta%20Book%20(2017%2011%2009).pptx](https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Service%20Catalog%20-%20Fourth%20Draft%20Magenta%20Book%20%282017%2011%2009%29.pptx)

Update of Doc currently ongoing – should be completed by end 2017.

Needs SANA registries which have not yet been made public !

Latest snapshot has been uploaded to CWE.

With respect to formalising Service Catalogue as a CCSDS Project UKSA do not have resources to commit to this and no other agency volunteered resources.

# Service Package State Machine – Part 2

Continuing the discussion from the previous day resulted in a simplified version of the service package state machine. MG will update this and distribute. It also highlighted the need to also consider the lifecycle of the service package request in conjunction with that of the service package.

Also highlighted was a need to add a ReplaceServicePackage request in the SMURF that could be used to replace/modify exactly 1 service package. The existing ReplaceServicePkgReqs affect all service packages resulting from a request, so if a ServicePkgReq results in more than 1 service package it is currently not possible to modify only 1 of the resulting service packages.

CH to add this to the SMURF.

MG will also look at the lifecycle/state machines for other Service Management entities.

# Workplan Fall 2017 - Spring 2018

Workplan contained in presentation

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/Workplan%20Fall%202017%20-%20Spring%202018.pptx>

# Closing Plenary

Closing plenary presentation

<https://cwe.ccsds.org/css/docs/CSS-SM/Meeting%20Materials/2017/Fall/SM%20Closing%20Plenary.pptx>