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| **TC VC Multiplexing** | **Creator = CSS Area** | **Editor = John** | **Reviewer = ??** |
| **Status: 20191024** | | | |

| **Issue Short Title** | **Issue Description/Discussion** | **Source** | **Status** | **O/C** |
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| **Add resource status parameter** |  |  | **Agreed and done** | **C** |
| **add "fwd" prefix** | **currently just "TC VC Mux" in registry** |  | **Agreed and done** | **C** |
| **configures and reports** | **The descriptions of parameters for which Configured = true should begin "This parameter configures and reports"** | **correspondence between WH and JP** | **Agreed and done** | **C** |
| **support for Unified SLP?** | **Can this support USLP (possibly with some tweak) or do we need a separate Unified version of the FR? Tentative approach - treat as a separate FR/FR Set**  **190322 WH – Left open for now. This will require further study.**  **190724 WH – The study has been performed. The CSS Area reached the conclusion that separate FR types are the preferred approach. In the light of that this issue is closed.** | **JP** |  | **C** |
| **add fwdTcVcMuxADframeRepetitions parameter** | **190322 WH – This parameter is specific to a given VC and therefore not associated with the multiplexing process. In other words, the incoming frames are already repeated depending on the setting for the specific VC. This means that such parameter must be defined for the FwdFrameCstsProvider and for the FwdTcEncapVcPacketProcessingAndVcGen FRs, because both generate TC VCs.**  **190327 JP – This is part of the larger decision to be made about how the frame repetition functions are going to allocated to the various FRs.**  **190415 WH – On second thoughts, given that I think that we should support what FSP specifies in terms of frame repetition, I now agree that we should add this parameter and I have done so.**  **190724 WH – Given also the further discussion of the repetition topic that we also had with the SLS folks, I think that the FR specification as it is now is okay and I consider this issue closed. The question that remains open is where we will document the production process behavior in this respect (in the FR TN?).** | **TC SLDP Blue Book** |  | **C** |
| **add fwdTcVcMuxBCframeRepetitions parameter** | **190322 WH – This parameter is specific to a given VC and therefore not associated with the multiplexing process. In other words, the incoming frames are already repeated depending on the setting for the specific VC. This means that such parameter must be defined for the FwdFrameCstsProvider and for the FwdTcEncapVcPacketProcessingAndVcGen FRs, because both generate TC VCs.**  **190327 JP – This is part of the larger decision to be made about how the frame repetition functions are going to allocated to the various FRs.**  **190414 WH – Most of the related discussion may be found now in the FwdTcMcMux errata sheet.**  **190724 WH – I regard this issue closed. See also comment in the row above.** | **TC SLDP Blue Book** |  | **C** |
| **add fwdTcVcMuxResourceStatusChange event** |  |  | **Agreed and done** | **C** |
| **add fwdTcVcMuxSetControlParameters directive** |  |  | **Agreed and done** | **C** |
| **add fwdTcVcMuxDiscardDataUnits directive** |  |  | **Agreed and done** | **C** |
| **remove the fwdTcVcMuxScheme parameter.** | **190322 WH – Bearing in mind how the fwdTcVcMuxContr parameter is specified, the multiplexing scheme is implied. The same comment applies to the FwdTcMcMux FR.**  **190327 JP – Agreed** | **WH** | **Closed 190327** | **C** |
| **remove the fwdTcVcMuxValidTcVcIds parameter.** | **190724 WH – See the discussion regarding the validTcScids? Issue of the FwdTcMcMux FR. The same considerations apply here and therefore I have moved this parameter to the FSP provider FR**  **190808 JP – I concur with this approach and consider this item to be closed** | **WH** | **CLOSED 190808** | **C** |
| Change ‘fwdTcVcMuxMc’ to ‘fwdTcVcMuxScid’ | The parameter ‘fwdTcVcMuxMc’ is defined as “*This parameter configures and reports the spacecraft ID and thus the Master Channel that is provided by the given FR instance”. Strictly speaking this is incorrect because the MCID is the combination of the TFVN and the SCID. This should be renamed* ‘fwdTcVcMuxScid’ and redefined as “*This parameter configures and reports the spacecraft ID, and when combined with the TC transfer Frame Version Number specifies the Master Channel that is provided by the given FR instance”.*  190909 WH – I understand the point. Indeed, the Master Channel is defined by the concatenation of the TFVN and the SCID. However, I would not like to rename the parameter because the output of the FR is a Master Channel and I prefer making this visible in the parameter classifier. This FR handles exclusively TC frames and as a consequence the TFVN is given. In order to make the point clear, I propose to change the semantic definition to: “*This parameter configures and reports the Master Channel that is provided by the given FR instance. The Master Channel ID is the concatenation of TFVN and SCID. Given that this FR type handles only TC frames, the TFVN is fixed and only the SCID is variable”.*  To further enforce this understanding, I suggest to change the type specification to:  fwdTcVcMuxMc ::= SEQUENCE  { tfvn INTEGER (0)  , scid INTEGER (0 .. 1023  }  Would that take care of the above expressed concern and be acceptable? | 190809 JP | Ok – closed on 191024 | C |
| **Change name to TcVcMux** | **Drop the “Fwd” so that this FR can be used in nodes other than ESLTs.**  **This item will be closed when the change has been made to the working FRM file** | **JP - 191024** |  | **O** |

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