**CFDP Changes from 727.0-B-4 to 727.0-B-5**

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| **727.0-B-5 Section** | **Change** | **Necessary Updates to Support Version 4** | **Status** |
| Appendix B | Store and Forward moved to Appendix B from Section 6 | Store and Forward is not implemented – No changes required. | Done |
| N/A | Extended Procedures and Service Classes 3 and 4 removed | No current customer requirement for extended procedures and they were dropped from the spec in version 5 – No changes required | Done |
| 1.4 | Several Reference Documents Added | No Changes required | Done |
| 2.4 | Added optional Finished PDU in unacknowledged mode | Need to reject this option in version 0 mode | Done |
| 3.2.22 | Added closure requested parameter | Make sure this isn’t available in version 0 mode | Done |
| 3.2.23 | Added file size parameter statement | File size is not specified in the Metadata-Recv.indication in version 0 (However it is useful so I will leave in our implementation) | Done |
| 3.2.24 | Added segment metadata parameter | Segment metadata not available in version 0 | Not implemented for either version |
| 3.2.25 | Added segment metadata length | Segment metadata length not available in version 0 | Done |
| 3.2.26 | Added record continuation state | Record continuation state not available in version 0 | Done |
| 3.3 Note 6 | Discussion of CFDP not handling security | No changes required | Done |
| 3.4.1.2 | “closure requested” field added to Put.request | Need to reject this option in version 0 mode | Done |
| 3.4.9.1 | “file size” field added to Metadata-Recv.indication | No harm in leaving this in all modes | Done |
| 3.4.10.2 | “record continuation state”, “length of segment metadata”, “segment metadata” added to File-Segment-Recv.indication | Don’t include these fields in version 0 mode | Not implemented for either version |
| Version 4 – section 4.1.2 | There is only 1 checksum procedure – This procedure is the same as checksum type zero specified in version 5 and known as the modular checksum | No checksum selection in version 0 mode – MIB setting ignored for version 0 | Done |
| 4.3 | Talks about use of the closure requested indication | Raise error in version 0 mode | Done |
| 4.6 Note 1 | Adds “Unsupported checksum type” | Won’t be possible in version 0 mode – No changes needed | Done |
| 4.6.1.1.3 | The Metadata PDU contains an indication on segmented transmission in version 4 that is not mentioned in version 5. Additionally version 5 includes closure requested and checksum type number. | Include indication in version 0 mode and not in version 1 mode. Ensure new fields not present in version 0 mode. | Done |
| 4.6.1.1.5.1 | File Data PDU now includes info on record structure. | Handle differences between PDUs. | Done |
| 4.6.1.1.5.2, 4.6.1.1.5.3, 4.6.1.1.5.4 | Segment metadata added | Ensure this info isn’t present in version 0 mode. | Not supported in either version (other than receive) |
| 4.6.1.1.6, 4.6.1.1.7 | New discussion of segmentation control flag | Ensure this is used differently version 0 mode. | Done |
| 4.6.3.1 | Mentions duplex is required for unacknowledged mode if transaction closure option is invoked | No changes needed. | Done |
| 4.6.3.2.2, 4.6.3.2.3, 4.6.3.2.4 | New transaction specific check timer if transaction closure requested | N/A for version 0 mode. No changes needed. | Done |
| 4.6.3.3 | Discusses use of new closure requested flag, and different effects of check timer | N/A for version 0 mode. No changes needed. | Done |
| 4.6.4.2 | Acknowledge mode requires duplex transmission path | No changes required. | Done |
| Version 4 – 4.1.6.4.1.3 | Discusses Finished PDU with End System Status Flag Set causing notice of Completion | Need to set this flag in version 0 mode (and not in version 1 mode)  Version 1 just requires receipt of finished PDU.  Note we ignore this flag when issuing notice of completion on our side due to extended procedures not implemented | Done |
| Version 4 – 4.1.6.4.1.4 | Discusses End System Flag of 0 in regards to extended procedures | Extended procedures are not implemented. No changes needed. | Done |
| 4.6.4.3.3 | Note d.2) mentions NAK timer | NAK timer should be beneficial in version mode 0 as well. No changes needed. | Done |
| 4.6.4.3.4 | Mentions finished PDU (complete) with no mention of End System Status flag set to 1. Also mentions “unsupported checksum type” | End System Status Flag Needs to be present in version 0 mode. | Done |
| 4.6.7.1 | Adds note about Remote Resume – recommends sending on local resume | This should also be beneficial in version 0 mode. No change needed. This has to be done manually if desired. | Done |
| 4.11.2.5.1 | Adds note about Remote Suspend – recommends sending on local suspend | This should also be beneficial in version 0 mode. No change needed. This has to be done manually if desired. | Done |
| 4.11.2.6.1 | Suspend suspends Metadata PDU, and EOF PDU (and file segments) | This was probably always the intention. No change needed. | Done |
| 4.11.2.6.3 | The sending entity always issues Suspended.indication (vs just source entity) | Seems no harm in always issuing this indication. No change needed. | Done |
| 4.11.2.7 | Adds f) issue a Suspended.Indication if so configured in the MIB | Seems a useful featere even in version 0 mode. No change needed. | Done |
| 5.1.3 | Version changed to 001 | Properly set flag to match mode | Done |
| 5.1.3 | Reserved bit changed to large file flag | Always set to zero in version 0 mode. | Done |
| 5.1.3 | Segmentation control flag added | Always set to zero in version 0 mode. | Done |
| 5.1.3 | Segment metadata flag added | Always set to zero in version 0 mode. | Done |
| 5.1.7, 5.1.10 | File Size Sensitive Added | Make sure sizes always 32 bits in version 0 mode | Done |
| Table 5-5 | Unsupported checksum type added | N/A in version 0 mode. No change needed | Done |
| Table 5-6 | File size changed from 32-bits to FSS | Ensure always 32 bits in version 0 mode | Done |
| Table 5-7 | End System Status changed to Spare | Ensure this bit is 1 in version 0 mode and 0 in version 1 mode | Done |
| Table 5-9 | Segmentation Control changed to Reserved with value 0 | This was moved from the metadata pdu to the overall header. Need to use in the right place based on mode. | Done |
| Table 5-9 | Closure Requested Added | Make sure this isn’t available in version 0 mode | Done |
| Table 5-9 | Checksum Type Added | Make sure this is always zero in version 0 mode | Done |
| Table 5-9 | File size changed to FSS | Make sure always 32-bit in version 0 mode | Done |
| Table 5-10 | Scope sizes changed to FSS | Make sure always 32-bit in version 0 mode | Done |
| Table 5-11 | Offsets changed to FSS | Make sure always 32-bit in version 0 mode | Done |
| Table 5-13 | Progress changed to FSS | Make sure always 32-bit in version 0 mode | Done |
| Table 5-14 | Optional segment metadata fields added | Make sure never present in version 0 mode | Done |
| Table 5-14 | Offset changed to FSS | Make sure always 32-bit in version 0 mode | Done |
| Table 6-3, Table 6-11, 6.2.4 | Proxy Closure Request Added | Not available in version 0 mode | Done |
| Table 6-16 | Successful and Unsuccessful values changed | Directory listing response changed. Need to build correctly for each mode. | Done |
| 6.5.3.1.2, 6.6.3.1.2 | Indicates the put request shall be acknowledged | We don’t enforce the mode for any version – No change needed | Done |
| 7.2.3 | EOF-Recv.Indication added | No harm in supporting this in version 0 mode. No change needed. | Done |
| 7.2.3.1 | Transaction Closure added | Not applicable in version 0 mode. Not changes needed. | Done |
| Table 8-2 | Protocol version number added, “Check limit” added, default checksum added | Need to ignore checksum mode in version 0 mode | Done |
| Version 4 Table 8-2 | includes “One-way light time”, “Total round-trip allowance for queuing delay), “Prompt transmission interval” | These settings are not supported | Done |

**CFDP Changes from 727.0-B-3 to 727.0-B-4**

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| **727.0-B-4 Section** | **Change** | **Necessary Updates to Support Version 3** | **Status** |
| Table 5-1, 5.1.4 | Added clarification that Source Entity ID, Transaction Sequence Number, and Destination Entity ID, are unsigned binary integers | Already unsigned binary integers. No change needed. | Done |
| Table 6-2 | Added clarification that Source Entity ID and Transaction Sequence Number are unsigned binary integers | Already unsigned binary integers. No change needed. | Done |
| Table 6-4 | Added clarification that Destination Entity ID is an unsigned binary integer | Already unsigned binary integers. No change needed. | Done |
| Table 6-17, 6-18, 6-20, 6-21, 6-23, 6-24 | Added clarification that Source Entity ID and Transaction Sequence Number are unsigned binary integers | Already unsigned binary integers. No change needed. | Done |
| 6.7.4.1.5 | Large new paragraph related to store and forward | Store and Forward Not Implemented. No changes needed. | Done |
| Table 6-26 | Significant changes to SFO Request Message Comments | Store and Forward Not Implemented. No changes needed. | Done |
| Table 6-29, 6-30 | Changed comment on SFO Message | Store and Forward Not Implemented. No changes needed. | Done |
| 6.7.5.6 | New paragraph related to store and forward | Store and Forward Not Implemented. No changes needed. | Done |
| 6.7.5.7 | paragraph modified | Store and Forward Not Implemented. No changes needed. | Done |
| 6.7.5.8, 6.7.5.10 | New note added | Store and Forward Not Implemented. No changes needed. | Done |
| 6.7.6.1.1 | Makes as applicable | Store and Forward Not Implemented. No changes needed. | Done |
| 6.7.6.2 | Significant changes to comments, and some value in SFO Report Message | Store and Forward Not Implemented. No changes needed. | Done |
| 6.7.7.4, 6.7.7.5, 6.7.7.6 | Significant update to SFO Transmission Report and relay transaction | Store and Forward Not Implemented. No changes needed. | Done |