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Title	**Replacement TSS&TP Section 6.4.10**	
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Re:	1802.16.2-03/01 Call for comments and contributions regarding C1802.16.2-03/01r1.	
Abstract	Edited Structure Section to be more in line with rest of document.	
Purpose	Replace current section 6.4.10	
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Replacement TSS&TP Section 6.4.10

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0.0.1 ATM Convergence Sublayer- SS

Note that if the SS accepts other than ATM cells from the user network, and does the appropriate inter-working function internally, the ATM classification tests must be verified either at that inter-working function, or by comparing the SDUs mapped to and from ATM cells at the interface to the user network.

0.0.1.1 Capabilities

Table 1 ATM Convergence Sublayer **- Capabilities**

TP/SS/ACS/ATM/CA-000	Reference: Initial Condition: SS has transmitted TFTP-CPLT to BS. (SS is authenticated and registered.) Stimulus: BS transmits to the SS a DSA-REQ message instructing the SS to create and activate both the UL and DL portions of an ATM service Expected Behavior: The SS shall transmit to the BS a DSA-RSP message accepting the creation and activation of both the UL and DL portions of the service. The SS and BS shall pass user data on the service. Repeat this test for all ATM service types supported by the SS.

0.0.1.2 Valid Behavior

Table 2 ATM Convergence Sublayer **- Valid Behavior**

TP/SS/ACS/ATM/BV-000	Reference: IEEE 1802.16.1, Table A3 Initial condition: Subscriber station is operational and has more than one operational user port. At least 2 downlink services are set up, 1 for one port, 1 for the other. At least one service is VC switched and at least one is VP switched. Stimulus: ATM cells received from BS over air link. Expected behavior: SS forwards ATM cells to correct port.

Table 2 ATM Convergence Sublayer **- Valid Behavior**

TP/SS/ACS/ATM/BV-001	Reference: IEEE 1802.16.1, Table A3/1,2 Initial condition: Subscriber station is operational. At least 2 uplink services are set up, 1 from one port, 1 from another. At least one service is VC switched and at least one is VP switched. Stimulus: ATM cells received from port (ingress). Expected behavior: SS forwards ATM cells on correct CID to BS. ATM cells not mapped to a service are discarded.
TP/SS/ACS/ATM/BV-002	Reference: IEEE 1802.16.1, Table A3/1,2 Initial condition: Subscriber station is operational. At least one VC switched bi-directional service and at least one bi-directional VP switched service are set up. No PHS. Stimulus: ATM cells received from port (ingress) and from the airlink. Expected behavior: SS forwards ATM cells from port on correct CID with VPI/VCI preserved in the MAC PDU (53 –byte SDU). ATM cells with VPI/VCI not mapped to a service are discarded. SS forwards cells from the airlink to the correct port..
TP/SS/ACS/ATM/BV-003	Reference: IEEE 1802.16.1, Table A3/2 Initial condition: Subscriber station is operational. At least one VC switched uplink service is set up. No PHS. At least 2 classifiers are set up. Stimulus: ATM cells received from port (ingress). Expected behavior: SS forwards ATM cells from port on correct CID with VPI/VCI preserved in the MAC PDU (53 –byte SDU). ATM cells with VPI/VCI not mapped to a service are discarded.
TP/SS/ACS/ATM/BV-004	Reference: IEEE 1802.16.1, Table A3/1 Initial condition: Subscriber station is operational. At least one VP switched uplink service is set up. No PHS. At least 2 classifiers are set up. At least one of the classifiers has at least 2 VCIs. Stimulus: ATM cells received from port (ingress). Expected behavior: SS forwards ATM cells from port on correct CID with VPI/VCI preserved in the MAC PDU (53 –byte SDU). ATM cells with VPI/VCI not mapped to a service are discarded.
TP/SS/ACS/ATM/BV-005	Reference: IEEE 1802.16.1, Table A3/4 Initial condition: Subscriber station is operational. At least one VC switched bi-directional service is set up. PHS. Stimulus: ATM cells received from port (ingress) and from the airlink. Expected behavior: SS forwards ATM cells from port on correct CID with 49–byte SDU format. ATM cells with VPI/VCI not mapped to a service are discarded. SS forwards ATM cells from airlink to correct port, correctly reconstituting VPI/VCI and remainder of ATM header from CID and 49–byte SDU format
TP/SS/ACS/ATM/BV-006	Reference: IEEE 1802.16.1, Table A3/3 Initial condition: Subscriber station is operational. At least one VP switched bi-directional service is set up. PHS. Classifier specifies no VCIs. Stimulus: ATM cells received from port (ingress) and from the airlink. Expected behavior: SS forwards ATM cells from port on correct CID with 51–byte SDU format. ATM cells with VPI/VCI not mapped to a service are discarded. SS forwards ATM cells from airlink to correct port, correctly reconstituting VPI/VCI and remainder of ATM header from CID and 51–byte SDU format

Table 2 ATM Convergence Sublayer **- Valid Behavior**

TP/SS/ACS/ATM/BV-007	Reference: IEEE 1802.16.1, Table A3/1,3 Initial condition: Subscriber station is operational. At least one VP switched bi-directional service is set up. PHS. Classifier with multiple VCI specified. Stimulus: ATM cells received from port (ingress) and from the airlink. Expected behavior: SS forwards ATM cells from port on correct CID with 51–byte SDU format. ATM cells with VPI/VCI not mapped to a service are discarded. SS forwards ATM cells from airlink to correct port, correctly reconstituting VPI/VCI and remainder of ATM header from CID and 51–byte SDU format
TP/SS/ACS/ATM/BV-008	Reference: Initial condition: Subscriber station is operational. At least one uplink service is set up. At least one classifier specified. Cells entering from port that match the classifier, and other cells that do not match the classifier. Those that do not match are being discarded, those that do match are being forwarded. Stimulus: Replace classifier so that originally discarded cells are now forwarded and originally forwarded cells are now discarded. Expected behavior: Originally discarded cells are now forwarded and originally forwarded cells are now discarded.
TP/SS/ACS/ATM/BV-009	Reference: Initial condition: End of TP/SS/CL/ATM/BV-008. Stimulus: Add original version of classifier that was replaced in TP/SS/ACS/ATM/BV-008 so that originally forwarded cells are now forwarded once more, but newly forwarded cells are still forwarded. Expected behavior: Originally forwarded cells are now forwarded once more, but newly forwarded cells are still forwarded.
TP/SS/ACS/ATM/BV-010	Reference: Initial condition: End of TP/SS/CL/ATM/BV-009. Stimulus: Delete version of classifier that was created by replace in TP/SS/CL/ATM/BV-008 so that originally discarded cells are now discarded once more, but originally forwarded cells are still forwarded. Expected behavior: Originally discarded cells are now discarded once more, but originally forwarded cells are still forwarded.

0.0.1.3 Invalid Behavior

While the DS protocol covers most BI tests for the ATM Convergence Sublayer, there are some specific issues that relate specifically to the convergence sublayer.

Table 3 ATM Convergence Sublayer **- Invalid Behavior**

TP/SS/ACS/ATM/BI-000	Reference: Initial Condition: An ATM service exists between the BS and the SS. Stimulus: BS transmits to the SS a DSA-REQ message that directs a change in the service flow scheduling type. Expected Behavior: The SS transmits a DSA-RSP message indicating the errorred parameter.

Table 3 ATM Convergence Sublayer **- Invalid Behavior**

TP/SS/ACS/ATM/BI-001	Reference: Initial Condition: An ATM service exists between the BS and the SS. Stimulus: BS transmits to the SS a DSA-REQ message that directs a change in the Request/Transmission Policy. Expected Behavior: The SS transmits a DSA-RSP message indicating the errorred parameter.
TP/SS/ACS/ATM/BI-002	Reference: Initial Condition: An ATM service exists between the BS and the SS. Stimulus: BS transmits to the SS a DSA-REQ message that directs a change in the Convergence Sublayer Specification. Expected Behavior: The SS transmits a DSA-RSP message indicating the errorred parameter.
TP/SS/ACS/ATM/BI-003	Reference: Initial Condition: An ATM service exists between the BS and the SS. Stimulus: BS transmits to the SS a DSA-REQ message that directs a change in the Fixed-length versus Variable-length SDI Indicator. Expected Behavior: The SS transmits a DSA-RSP message indicating the errorred parameter.
TP/SS/ACS/ATM/BI-004	Reference: Initial Condition: An ATM service exists between the BS and the SS. Stimulus: BS transmits to the SS a DSA-REQ message that directs a change in the SDU Size. Expected Behavior: The SS transmits a DSA-RSP message indicating the errorred parameter.
TP/SS/ACS/ATM/BI-005	Reference: Initial Condition: An ATM service exists between the BS and the SS. Stimulus: BS transmits to the SS a DSA-REQ message that directs a change in the ATM Switching. Expected Behavior: The SS transmits a DSA-RSP message indicating the errorred parameter.

0.0.1.4 Inopportune Behavior

All BO tests for the ACS protocol group are covered by the DS protocol group.

0.0.1.5 Timer

All TI tests for the ACS protocol group are covered by the DS protocol group.

0.0.1.6 Message Formats

For all TP/SS/ACS/ATM tests ensure that messages transmitted by the SS contain the correct parameters in the correct order.