IEEE P802.11

Wireless Access Method and Physical Layer Specification

Changes to Annex C Between D5.3 and D6.1

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This document only lists pages with content changes. Pages are not listed if the only change was to correct minor spelling, punctuation, indentation, or diagram formatting errors found by this editor, and considered to be part of comment MAF-6. SDL/GR diagrams which were changed between D5.3 and D6.1 may be identified by the letter "b" or "c" as the last character before the left parenthesis in the page name (the text string near the upper right corner inside the diagram frame).

- C-4 comment GOT-3: The first sentence changed to read: "This formal description defines the behavior of the 802.11 MAC entities."
- C-6 comment MAF-11: Added literals atimAck and AtimNak to sort TxResult.
- C-8 comment MAF-8: Changed sort of remote variables mBrates and mOrates to Ratestring. comments MAF-22, AS-12: Added remote variable mPdly to hold probe delay value.
- C-15 D5.3 erratum 23: Added element bdStartTs to structure BssDscr.
- C-16 comments MAF-7, AS-2: Removed constraint that tuple cache size must be >2. Note: The comments identify this text as being on C-15, based on pagination of D5.3.

comments MAF-9, AS-3: Changed comment describing operator UpdateTupleCache to state "... or replaces and entry using an unspecified algorithm."

- C-19 comments MAF-9, AS-4: Removed logic that selected the oldest tuple cache entry for replacement. Inserted an informal task symbol and comment stating that the entry to be replaced is selected based on unspecified criteria.
- C-21 comments MAF-16, AS-15: Added element resume to structure FragSdu to allow detection of the case where an RTS frame needs to be sent when a fragment burst is resumed after a dwell/medium occupancy boundary.
- C-23 comment AS-5: Corrected "AsSearch" to "ArSearch".
- C-25 comments AS-6, AS-10: Added decision (based on implementation-dependent criteria) that allows operator ArFree to force a defragmentation array entry free and return a usable index as an alternative to returning -1 in the case that no free entries are available.
- C-42 comment MAF-8: Replaced RateSet (Powerset) with Ratestring (subtype of Octetstring).
- C-45 comment MAF-2: Changed aPreambleLength and aPlcpHeaderLength from Integer to Usec.

- C-49 comments MAF-1, AS-12: Added probe delay parameter (sort Usec) to MlmeJoin.request and MlmeStart.request primitives.
- C-52 comment VH-15: Corrected 3 instances of "serv" to read "srv".
- C-58, C-59 comments MAF-1, AS-12: Added declaration of variable dly (sort Usec) and added references to this variable to the parameter lists for MlmeStart.request and MlmeJoin.request.
- C-62 comments MAF-12, VH-16: Changed name of station-specific version of this service from "AuthReqService" to "AuthReqService_Sta". This name also appears on C-65 and C-66.
- C-70 comments MAF-5, VH-18: Added declarations of variables yEnr and yStt as sort Time.
- C-71 comments MAF-4, VH-17: Corrected 2 instances of nextstate "*" to be nextstate "-".
- C-71, C-73 D5.3 erratum 23: Added task symbols to set new BssDscr element bdStartTs in scan processing and to initialize the station's TSF timer using bdStartTs in join processing.
- C-71, C-72, C-73 comments MAF-1, AS-12: Added task symbols and wait states to use the probe delay parameter added to MImeStart.request and MImeJoin.request.
- C-79, C-80, C-81 comments MAF-16, AS-15: Added task symbols to set new FragSdu element resume to true when re-queueing the FragSdu (fsdu) for a partially-transmitted frame.
- C-82 comment MAF-11: Changed decision criterion to use new TxResult literal "atimAck". Also replaced informal task symbol "move all anQ entries to psQ" with formal decision and task symbols which specify this movement of queue entries.
- C-83, C-84, C-85 D5.3 erratum 6: Added decision symbol on true exit from first decision symbol in Procedure Encrypt (C-85) to encrypt multicast frames only when the privacy capability is true for the BSS. This required adding a parameter to Procedure Encrypt, along with an import specification for variable mCap in Process Prepare_MPDU (C-83) and an import statement to obtain this parameter value for the call of Procedure Encrypt (C-84).
- C-84 comments MAF-16, AS-15: Added assignment to second task symbol on page to set new FragSdu element resume to false when initializing the structure for a new MPDU.
- C-89 comment MAF-13: Added output symbol to send signal PsPoll to Tx_Coordination_AP.
- C-90 comments MAF-14, AS-9: Corrected 2 instances of Tx_Idle to TxC_Idle.
- C-91 D5.3 erratum 8: Added comment on allowed behavior at FH PHY dwell boundary.

comments MAF-2, MAF-15, MAF-16, AS-10, AS-15: Corrected equations which calculate the Duration/Id field values for the data frame and the RTS frame, also added term to decision symbol equation at bottom of leftmost column to use the new FragSdu element resume in the decision of whether to send and RTS frame.

comments MAF-17, AS-11: Added comment about the rate switch occurring within the PLCP header, rather than at the end of the PLCP header, when using an IR PHY.

C-92 comments MAF-2, MAF-16: Corrected equations which calculate the Duration/Id field values for data frames and the CTS and ACK response timeout durations.

comments MAF-18, AS-15: Added transitions for signal TBTT out of states Wait_Rts_Backoff and Wait_Mpdu_Backoff. Added corresponding label atw_start on C-91.

- C-93 comments MAF-19, AS-15: Added output symbols to send signal Backoff on both cts_fail and ack_fail flow paths. Also added Boolean cont to distinguish between continuing with the same FragSdu after backoff or waiting for a new PduRequest after backoff, and corrected next state when a retry limit is not hit, going to state TxC_Backoff rather than TxC_Idle.
- C-94 comments MAF-19, AS-15: Added decision symbol to test whether a DCF backoff needs to be resumed at the end of the Atim window, and to check the value of the new Boolean cont as to whether to continue with the FragSdu in progress or wait for PduRequest signal.

comments MAF-20, AS-16: Changed parameter in Backoff signal output in the middle column to use ccw rather than atimcw for the backoff duration.

comments MAF-21, AS-17: Added decision and task symbols to count Atim failures, and to report reaching the short retry limit as TxResult in a PduConfirm.

comment MAF-2, MAF-16: Corrected equation which calculates the ACK response timeout.

comment MAF-11: Changed TxResults in PduConfirm signals to use atimAck and atimNak.

C-95 comment MAF-22, AS-13: Added wait for probe delay after wake up due to receipt of outgoing traffic to transmit.

comments MAF-19, AS-15: Added decision symbol to test Boolean cont after receipt of a Done signal while in TxC_Backoff, for consistency with corrections on C-93.

- C-100 comments MAF-3, AS-7: Removed the decision symbols which tested whether the BSS for a Cf-End matched the most recent start of CFP as a criterion for clearing the NAV in response to a ClearNav signal.
- C-103 comment VH-14: Completed sentence on comment in upper left corner. Also added closing parenthesis to RxIndicate output symbol parameter list.
- C-116 comments MAF-1, AS-12: Added probe delay parameter (sort Usec) to MlmeJoin.request and MlmeStart.request primitives.
- C-132, C-133 comment MAF-23: Replaced incomplete versions of pages with complete versions.
- C-135 comments MAF-14, AS-9: Corrected 2 instances of Tx_Idle to TxC_Idle.
- C-136 D5.3 erratum 8: Added comment on allowed behavior at FH PHY dwell boundary.

comments MAF-2, MAF-15, MAF-16, AS-10, AS-15: Corrected equations which calculate the Duration/Id field values for the data frame and the RTS frame, also added term to decision symbol equation at bottom of leftmost column to use the new FragSdu element resume in the decision of whether to send and RTS frame.

comments MAF-17, AS-11: Added comment about the rate switch occurring within the PLCP header, rather than at the end of the PLCP header, when using an IR PHY.

- C-137 comments MAF-2, MAF-16: Corrected equations which calculate the Duration/Id field values for data frames and the CTS and ACK response timeout durations.
- C-138 comments MAF-19, AS-15: Added output symbols to send signal Backoff on both cts_fail and ack_fail flow paths. Also added Boolean cont to distinguish between continuing with the same FragSdu after backoff or waiting for a new PduRequest after backoff, and corrected next state when a retry limit is not hit, going to state TxC_Backoff rather than TxC_Idle.
- C-139 comments MAF-19, AS-15: Added decision symbol to test Boolean cont after receipt of a Done signal while in TxC_Backoff, for consistency with corrections on C-138.