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Date	Document
	ISO/IEC 13156

National Committee	Clause/ Subclause	Paragraph Figure/ Table	Type of comment (General/ Technical/Editori al)	COMMENTS	Proposed change	OBSERVATIONS OF THE SECRETARIAT on each comment submitted
Ecma-1	Cover page Introduction		Е	Trademark missing from the word "HDMI".	Add superscript "TM" to the first use of the acronym "HDMI (the title on cover page) and add "HDMI is the registered trademark of HDMI LLC" as a footnote to the first use of "HDMI" in the introduction.	·
Ecma-2	10.1.3	1, Fig 11	Е	The use of term "MSDU" for sections of a PSDU is misleading.	1.In Figure 11, change "MSDU" to "PSDU part". 2.Change the text in the 1st paragraph of 10.1.3 to: "The PSDU shall be split into the MAC header and up to 37 ene or more MPSDU parts, where a PSDU part consists of an MSDU, an FCS and padding. Each MPSDU part may be further fragmented split into two or more data bit blocks. A number of consecutive MPSDU parts that use the same transmission mode may be combined into one data bit block.".	Accepted
Ecma-3	10.1.3 10.2.2.4.1.1.7	1 Table 8	Т	The maximum number of segments that can fit into a single RS codeword is 37. This limit is not specified.		Accepted
Ecma-4	10.2.2.2 10.3.2.2	Table 3 Table 35	E	Typo: In the equations for N_frame and T_frame in instead of N_sync it should be to N_preamble.		Accepted
Ecma-5	10.2.2.5.1 10.2.2.5.2 10.3.2.5.1 10.3.2.5.2 10.4.6.1	2 2 2 2 2	Т	It is not specified whether symbol padding should take place at the end of each segment or at the end of a frame.	1. In 10.2.2.5.1, 10.2.2.5.2, 10.3.2.5.1, and 10.3.2.5.2.: "At the end of each segment, tThe resulting data symbols shall then be appended with". 2. In 10.4.6.1: "At the end of each frame, tThe resulting data symbols shall then be appended with".	Accepted
Ecma-6	10.2.2.5.1.2	2	Е	Typo: 222 in the equation for N_RSpad is incorrect. The first term should be 237.	Correct	Accepted
Ecma-7	10.2.2.5.1.7	Eq. 25	Т	Parameter k_MUX is not defined.	Add the following sentence after the equation: "where k_MUX = 1 for modes A0 to A5, A7 and A9, k_MUX = 3 for mode A6, and k_MUX = 4 for mode A8."	Accepted
Ecma-8	10.3.2.4	Eq. 67	E	Typo: Should not be floor function.	Change the floor function to ceiling function.	Accepted
Ecma- 9	10.3.2.5.1	Eq. 68	E	Typo: Should not be 1972.	Change 1972 to 1792.	Accepted
Ecma-10	10.3.2.5.1	2	Е	Typo: "zero symbols" should be "-1" valued symbols".		Accepted
Ecma-11	10.3.2.5.1.6	1	E	Typo: 10.3.2.5.3 should be referred instead of 10.2.2.5.1.8.	Change 10.2.2.5.1.8 to 10.3.2.5.3.	Accepted
Ecma-12	10.4.6.1.4.1	Eq. 89	Е	Typo: K_MOD should be K_const.	Correct	Accepted

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Ecma-13	10.4.6.1.7	Table 47	E	Scaling is missing from pilot symbols in the Table.	Scale the pilot symbols in Table 47 with the same scaling factors.	Accepted
Ecma-14	11.2 11.2.1 11.2.2 11.2.3 15.21	Table 50 1 1 1 1 Table 112	E	"_C" suffix in pSIFS_C and pMIFS_C is inappropriate.	Change all instances of pSIFS_C and pMIFS_C to pSIFS and pMIFS, respectively. Delete the superfluous rows (for pSIFS_C and pMIFS_C) in Table 112.	Accepted
Ecma-15	14.2.3.4	1	Т	Aggregation Request subtype is not defined in the aggregated MAC frame format.	Add Aggregation Request bit as bit14 in Frame Control field in Figure 68. Add a new subclause after 14.2.3.6 with title "Aggregation request" and body text of "The Aggregation Request bit is set to ONE in a data frame to initiate an instance of aggregation mechanism as specified in 15.10. The Aggregation Request is set to ZERO in data frames transmitted at all other times. It is reserved in all other frame types."	Accepted
Ecma-16	14.5.3	1	E	Typo: Should not be "MSDUs".	Change "MSDUs" to "MPDUs".	Accepted
Ecma-17	14.5.3.2 15.4.1.1	3 2	E	be "availability".	Change all instances of "DRP available IE" to "DRP availability IE".	Accepted
Ecma-18	14.7.3.2 15.18.6 15.18.7 15.18.8	1 Title 1 3	E	feedback" may be misleading. Instead, "closed loop" and "open loop" should be used.	 Make the following changes in the text: 1. In 14.7.3.2:"indicates whether implicit (set to 0) or explicit (set to 1) feedback is required from the receiver." to "indicates whether closed loop mode feedback is required from the receiver or not (0=no, 1=yes)." 2. In 14.7.3.2: "indicates what kind of explicit feedback is wanted" to "indicates what kind of closed loop mode feedback is wanted." 3. In 15.18.6: change title from "Implicit feedback in open loop mode" 4. In 15.18.7: "after it has successfully received the explicit 15.18.7.1 or implicit 15.18.7.2 feedback." to "after it has successfully received the feedback in closed loop mode (15.18.7.1), or the training frame in open loop mode (15.18.7.2)." 5. In 15.18.8: "When explicit feedback is used" to "When closed loop mode feedback is used,". 	

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Ecma-19	14.7.4	All	Т	Fields carrying the antenna index information of neighbours are missing from BPOIE.	 1. In 14.7.4, Figure 112, a. Replace "Length=1+K+2XN" with "Length=2+L". b. After field "BP length", insert a field named "Number of Beams" with 1 octet in length. c. After field "Number of Beams", insert a field named "Beacon Slot Info" with L octets in length. d. Remove fields Beacon Slot Info bitmap and DevAddr 1,, DevAddr N. 2. In 14.7.4, insert new 3rd paragraph with the text of "The Number of Beams field is set the total number of beams that the device uses to transmit beacons." 3. In 14.7.4, insert a new 4th Paragraph with the text of "The format of Beacon Slot Info field is specified in the Figure below." 4. In 14.7.4, insert the following Figure as the new Figure 113 after the new paragraph of step 3. 	
					Octets= K 2 2 M ₁ M _N	
					Beacon Slot Info Bitmap DevAddr 1 DevAddr N Receiving Beams 1 Receiving Beams 1	
					5	Figure 113 – Beacon Slot Info field format 5. Insert the following 4 paragraphs and the Figure at the end of section 14.7.4, "The Receiving Beams fields correspond to beacon slots encoded as occupied in the Beacon Slot Info Bitmap field. The Receiving Beams field lists the beam identifiers of the antenna beams, from which the device can receive the corresponding beacon." "The format of Receiving Beams field is specified in the Figure below,
					Octets = 1 M	
					Number of Receiving Beams(=M) Beam Identifiers	
					Figure 114 – Receiving Beams field format	
					"The Number of Receiving Beams field is set to the number of beam identifiers that follow." "The Beam Identifiers field contains a list of the beam identifiers, each occupying 1 octet, of the antenna beams from which the device can receive the beacon sent at the specific beacon slot."	

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Ecma-20	14.7.8	Figure 119	E	Typo: The length of DRP IE is not "4+4xN".	Change the length of DRP IE to "5+4xN".	Accepted
Ecma-21	14.7.8	Figure 121	Т	antenna index field.	After Table 90, insert a new paragraph with the text of "The Beam Identifier field is set to the same as the Beam Identifier field in the beacon transmitted to the reservation target."	Accepted
Ecma-22	14.7.14	Table 94	Т	Aggregation capability is missing from MAC capability bitmap.	In the row of Bit0 of octet0 in Table 94, 1. Replace "Reserved" with "Aggregation" 2. in the "Description" column of the row, insert the following text: Capable of transmitting and receiving aggregated data frames, =1 for Type A; 0/1 for Type B; 0 for Type C.	Accepted
Ecma-23	14.7.24	Figure 148	E	Typo: Caption is incorrect.	Change "Discovery scanning IE format" to "Scantiming IE format".	·
Ecma-24	14.7.24	Figure 149	E	Typo: Caption is incorrect.	Change "Scanning timing format" to "Scan timing field".	Accepted
Ecma-25	15	All	Е	Introduction to 15.2 - 15.5, 15.7, 15.11, 15.18 - 15.22 is missing.	Add introduction and reference to 15.2 - 15.5, 15.7, 15.11, 15.18 - 15.22.	Accepted
Ecma-26	15.1.1	2	E	It is not clear what private DevAddr is used for, and what is "NULL EUI-48".	After "A device shall associate a DevAddr of either type Private or type Generated with its local MAC sublayer.", insert "A device may use a NULL EUI-48 value (all bits set to ONE) to indicate it does not have a unique EUI_48 value."	,
Ecma-27	15.1.4	1	E	For clarity, reference to 14.2.3.5 is needed after "Delivery ID".	Add a reference to 14.2.3.5 after "Delivery ID".	Accepted
Ecma-28	15.1.5	1	E	needed after "Retry bit".	Add a reference to section 14.2.3.6 after "Retry bit".	Accepted
Ecma-29	15.1.9.3	7	Т	Rules for setting Sequence number for Master-Slave frame are missing.	frame, Type C poll frame, Type C poll response frame transmitted in a superframe, a device shall set the Sequence Number field from a dedicated counter that increments once per superframe, modulo 2048, or shall set it to zero." 2. After that, insert a new paragraph with the text "As for the purpose of setting Sequence Number field, other Type C Master-slave command frames shall be considered as MCDUs."	
Ecma-30	15.3.1 15.3.2	1 2	E	Typo: first two instances of "mode-C0 poll frame" should be "Type C Poll frame".	Change first two instances of "mode-C0 poll frame" to "Type C Poll frame".	Accepted
Ecma-31	15.3.1	1	E	Omitted "and responses" (after mode D0 beacons) in the sentence "After sending a set of discovery beacon blocks, the Type A device shall scan for mode-D0 beacons as specified in 15.5.1.3.",		Accepted

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Ecma-32	15.3.1	1	Т		Add the following to the end of the last sentence: ", or may start the explicit channel selection with the device from which the mode-D0 discovery beacon was received, as specified in 15.4.1, or may transmit a mode-D0 beacon with the Status field set to Response."	Accepted
Ecma-33	15.3.2	5	Т	Antenna training procedure and B0 response options omitted from the end of the paragraph.	may transmit a mode-B0 beacon with the Status field set to Response, or if the device from which the mode-B0 beacon or Poll frame was received is of type A, it may start the antenna training procedure with the originating device, as specified in 15.18."	
Ecma-34	15.3.3	1,2	Е	Typo: first three instances of "mode-C0 poll frame" it should be "Type C poll".	with Status set to Polling" to "Type C poll frame with Status set to Polling".	·
Ecma-35	15.4.2	1	Е	Grammatical error: "before the device will move to another channel"	Change to "before the device moves to anther channel".	Accepted
Ecma-36	15.5	1	Т	In 15.5 and following sub-clause, clarify which clause applies for which type of device.	For the purposes of device discovery, antenna training and channel selection, a device of Type A or Type B shall transmit beacons in the discovery channel as specified in 15.5.1-15.5.3. to discover other devices they intend to communicate with or to perform antenna training. Once a device finds another device with which it intends to communicate, it For data exchange, the device shall set up a superframe structure by transmitting a beacon as specified in 15.5.5. The rules for a Type C device to transmit Type C poll frames in any channel is specified in 15.5.4."	Accepted
Ecma-37	15.5.1	1	E	Typo: In the sentence "A beacon frame transmitted by a Type A/B device" instead of "a beacon frame", it should be "Type C Poll frame".	Change "A beacon frame" to "A Type C Poll frame"	Accepted
Ecma-38	15.5.2	Part C (bullets and following text)	E	The text is improperly formatted, hence not conveying the order of the conditions and subconditions.	 Add "(in the following sub bullets)" after "following conditions". Change the first sub-bullet to: "The device receives no mode-A0 beacon frame headers during the scan; or" Change the second sub-bullet to: "The mode-A0 beacon frame received indicates an aligned BPST to its own." Remove "when transmitting any 15.5.5". Add new paragraph: "When transmitting any mode-A0 beacons, a Type A device shall follow the rules specified in 15.5.5." 	Accepted

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Ecma-39	15.5.3	1	E	For consistency, In reference to the sub- clauses, the work "section" should not be used.		Accepted
Ecma-40	15.5.4	all	E	Typo: all instances of "mode-C0 Poll frame" (including in the title) should be "Type C Poll frame".	Change all instances of "mode-C0 Poll frame" in this section to "Type C Poll frame".	Accepted
Ecma-41	15.6.3	2	Т	Antenna Index is not defined in the beacon frame. Also, it should be called "beam identifier".		Accepted
Ecma-42	15.6.3 15.6.6	1, 2	Т	Clarify the usage of antenna index in reservation negotiation and DRP availability IE.	1. In 15.6.3: a. Replace "(2) the Antenna Index in the received DRP IE is the same as the Antenna Index to be used by the device for a new DRP reservation." with "(2) the antenna beam identified by Beam Identifier in the neighbour's DRP IE would be interfered by the antenna beam to be used by the device for the new DRP reservation.". b. Remove "In order to as described above." At the end of paragraph 3 c. Merge paragraphs 2 and 3. 2. Make the following changes to the 1st paragraph of 15.6.6: "A device is considered to conflict with an existing a neighbour's DRP reservation if (1) a MAS included in the device reservation is also included in the existing neighbour's reservation, (2) the Antenna Index of the existing reservation is the same as the Antenna Index in the beacon that includes the DRP IE of the existing reservation, and (3) the Antenna Index of the existing reservation is the same as the Antenna Index of the device's own reservation. The antenna beam (identified by the Beam Identifier in the device's DRP IE) used by the device in the MAS interferes with the antenna beam (identified by Beam Identifier in the neighbour's DRP IE) used by the neighbour in the MAS."	Accepted
Ecma-43	15.7.1	1	E	Typo: "mode-C0 Poll frame" should be "Type C Poll frame".	Change "mode-C0 Poll frame" to "Type C Poll frame"	Accepted
Ecma-44	15.10	1	E		Replace by reference to aggregated MAC frame in 14.2.2.	Accepted

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Ecma-45	15.10	all	Т	Clarify the usage of the specified procedure for the case where the ACK Policy field is set to "No-ACK" or to "B-ACK Request" for aggregated frames.	 Paragraph 3: Replace "On receipt of such a frame" with "On receipt of such an aggregated frame that requires an acknowledgement". Paragraph 10: When the recipient device receives a frame with Frame Type set to Aggregation data frame and ACK Policy set to BACK-Request, it shall respond using SIFS with a B-ACK frame If any MSDU with an invalid FCS has not timed out. It the recipient device shall also set the Sequence Control and Frame Bitmap fields to indicate to the source device which frames should be retransmitted. In 14.2.2 insert "The ACK Policy of the Frame Control field in the MAC header of any aggregated MAC frames shall not be set to Imm-ACK or B-ACK (See 14.2.3.3)" after the Figure 65. Add a new paragraph at the end of section 15.12 with the text of "A device shall not set ACK Policy of any aggregated MAC frames to Imm-ACK, or B-ACK." 	Accepted

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Ecma-46	15.10	all	T	Requesting frame is not defined.	Make the following changes to this section: 1. Paragraph 5: A source device shall initiate use of the aggregation mechanism by transmitting an aggregation request frame from the same stream or of the same user priority. An aggregation request frame is a data frame with Aggregation Request set to ONE and Ack Policy set to B-ACK Request. with Frame Subtype set to Aggregation Request frame, the source device shall follow the rules of operation as described below. 2. Paragraph 6: When receiving an aggregation request frame with Frame Subtype set to Aggregation Request from a source device for a specific stream or user priority, the recipient device shall respond as follows: 3. Paragraph 7: After transmitting a the aggregation request frame with Frame Subtype set to Aggregation Request, the source device expects to receive a B-ACK frame in response and takes one of the following actions: 4. Paragraph 7: To continue transmission of aggregated frames, requesting aggregation operation, the source device shall retransmit the requesting frame independently of whether the frame was indicated as received or not. do one of the following: (1) if the frame was indicated as received correctly, the source shall transmit a new frame or a frame with zero payload with Aggregation Request bit set to ONE and ACK Policy set to B-ACK Request. (2) Otherwise, the source shall retransmit the same aggregation request frame. 5. Paragraph 9: Change " aggregated frame must not exceed" to "" aggregated frame shall not exceed".	Accepted
Ecma-47	15.12.3.2	1st bullet	Е	Duplicated reference to 15.6	Remove one.	Accepted
Ecma-48	15.19	1	E	Clarify first sentence.	Change the sentence to "The communication between two Type C devices is performed using the Master-Slave operation."	·
Ecma-49	15.19	2 Figure 188	E	The word "slot" might be misleading the reader to think that it has a fixed length.	Change all instances of "Poll Frame Slot" and "Poll Response Slot" to "Poll Frame Period" and "Poll Response Period" respectively in clause 15.19, Including in Figures. Add to Figures 188 and 189 an arrow showing "poll frame duration".	

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Ecma-50	15.19.4	1	E	The first sentence has grammatical errors.	Change the first sentence to "Prior to starting an MSPr, a device shall complete a channel scan for Master device detection, as described in 15.19.3, and select a channel in which to start its Master-Slave operation."	
Ecma-51	15.19.7.2	All	E	Channel access for CEP and DCA are duplicated and should be harmonized.	 In 15.2, insert a new 2nd paragraph with the text of "The DCA is also used for frame exchange in the CEP of a MSP." In 15.2.1, insert 3rd bullet with the text of "During the CEP of a corresponding MSP if the device is the Master or the Slave of the MSPr." In 15.2.2, insert a new paragraph at the end with the text of "A Type C device shall not maintain a NAV." Replace the body of 15.19.7.2 with the following text: "Devices shall use DCA (15.2) for frame exchange in the CEP of a MSP." Change the value of LIFS in Table 112 to "12666ns" 	Accepted
Ecma-52	15.19.7.3.4	3	Е	Reference to 15.19.12.2 is incorrect.	Change the reference to 15.19.12.1.	Accepted
Ecma-53	15.19.9	1	E	The section should simply say that MAC shall not perform fragmentation and defragmentation.	Replace the entire section by "Type C devices shall not perform fragmentation and defragmentation".	Accepted
Ecma-54	15.19.10	2	E	The maximum number of retransmissions is implementation specific.	Remove sentence "A frame shall only be allowed to be retransmitted up to mMaxRetryCount times.".	Accepted
Ecma-55	15.19.10	2	Е	and/or implementation-specific and it should be removed.	1 3 1	
Ecma-56	15.19.11.2	2	Т	There is normative text that is written in an informative style and vice versa.	Master device may initiates the remote scan procedure by sending a Remote Scan Request command (described in 14.8.12) to the associated Slave device and starting the RequestTimeout timer. The duration of RequestTimeout is shall be determined by implementer upper layer and shall will be communicated to the Slave device via the Request Timeout field in the Remote Scan Request command, as described in 14.8.12."	
Ecma-57	15.19.11.2	2	Е	"Master-Slave Imm-ACK" is not defined.	Delete "Master-Slave" from "Master-Slave Imm-ACK".	Accepted

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Ecma-58	15.19.12.2	1	E	The text on the broadcast requirement is redundant (initially in section 14).	Change the sentence "and broadcast it for at least mMaxLostPolls number of MSPs." to "and shall include the Channel Change IE in its Type C Poll Frame for at least mMaxLostPolls MSPs." Also, replace "After broadcasting the Channel Change IE containing the new MSP Interval for at least mMaxLostPolls number of MSPs," with "After that,"	Accepted
Ecma-59	15.21	Table 112	Т	Table contains suboptimal values.	In Table 112, modify the values to B-Scan and C-Scan = 128us, D-Scan = 8192us, mCWmin = 3 and mCWmax = 255	
Ecma-60	17	ΑII	E	Remove superfluous and informative copied text, Figures and Tables from HDMI spec.	 In 17.1: In the first paragraph, delete the word "pass-through" in the first sentence. Add ", see HDMI specification" to the end of the first sentence. Remove the remaining of the paragraph. Remove Figure 218. Remove paragraphs 3 and 4. Modify Figures 219 and 220 to remove the gray boxes and all details inside them. Replace the grey boxes with "HDMI source" and "HDMI sink" respectively. Remove Figure 221. In 17.2: Replace "In the wireless HDMI transmitter" with "At the transmitter". Remove Figures 222 and 223 and the text between them. In 17.3: Replace "In the wireless HDMI receiver" with "At the receiver". In 17.3.1: Replace the clause with "For video packets the PAL needs to apply the TMDS coding prior to passing it to the HDMI sink, as described in the HDMI specification." Remove Table 118 and Figure 228. In 17.3.2: Replace: "HDMI receiver" with "HDMI sink". 	