

1 MESSAGE CODING FORMAT

Table 1-1: Standard information field – 10PASS-TS NPar(2) coding – Octet 1

Bits								
8	7	6	5	4	3	2	1	10PASS-TS NPar(2)s
x	x	x	x	x	x	x	1	Upstream use of 25-138 KHz band
x	x	x	x	x	x	1	x	Downstream use of 25-138 KHz band
x	x	x	x	x	1	x	x	Reserved for allocation by IEEE 802.3
x	x	x	x	1	x	x	x	Reserved for allocation by IEEE 802.3
x	x	x	1	x	x	x	x	Reserved for allocation by IEEE 802.3
x	x	1	x	x	x	x	x	G.997.1 – Clear EOC OAM
x	x	0	0	0	0	0	0	No parameters in this octet

Table 1-2: Standard information field – 10PASS-TS NPar(2) coding – Octet 2

Bits								
8	7	6	5	4	3	2	1	10PASS-TS NPar(2)s
x	x	x	x	x	x	x	1	10PASS-TS-MCM
x	x	x	x	x	x	1	x	10PASS-TS SCM
x	x	x	x	x	1	x	x	Reserved for allocation by IEEE 802.3
x	x	x	x	1	x	x	x	Reserved for allocation by IEEE 802.3
x	x	x	1	x	x	x	x	Reserved for allocation by IEEE 802.3
x	x	1	x	x	x	x	x	Reserved for allocation by IEEE 802.3
x	x	0	0	0	0	0	0	No parameters in this octet

Table 1-3: Standard information field – 10PASS-TS SPar(2) coding – Octet 1

Bits								
8	7	6	5	4	3	2	1	10PASS-TS SPar(2)s

x	x	x	x	x	x	x	1	Reserved for allocation by IEEE 802.3
x	x	x	x	x	x	1	x	Used bands in upstream (Note 1) (Note 2)
x	x	x	x	x	1	x	x	Used bands in downstream (Note 1) (Note 2)
x	x	x	x	1	x	x	x	IDFT/DFT size (Note 1)
x	x	x	1	x	x	x	x	Initial length of <i>CE</i> (Note 1)
x	x	1	x	x	x	x	x	MCM RFI bands (Note 1) (Note 2)
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE 1 – These bits shall be set to 0_b if the 10PASS-TS MCM NPar(2) bit is set to 0_b.

NOTE 2 –The length of the corresponding NPar(3) field is variable and is a multiple of 4 octets. The length depends on the total number of bands to be specified.

Table 1-4: Standard information field – 10PASS-TS SPar(2) coding – Octet 2

Bits		10PASS-TS SPar(2)s						
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	DF_STP Parameters (Note 1)
x	x	x	x	x	x	1	x	SCM RFI bands (Note 1)
x	x	x	x	x	1	x	x	Reserved for allocation by IEEE 802.3
x	x	x	x	1	x	x	x	Reserved for allocation by IEEE 802.3
x	x	x	1	x	x	x	x	Reserved for allocation by IEEE 802.3
x	x	1	x	x	x	x	x	Reserved for allocation by IEEE 802.3
x	x	0	0	0	0	0	0	No parameters in this octet

NOTE 1 – These bits shall be set to 0_b if the 10PASS-TS SCM NPar(2) bit is set to 0_b.

**Table 1-5: Standard information field – 10PASS-TS
Used bands in upstream NPar(3) coding – Octet 4n – 3 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS
8	7	6	5	4	3	2	1	Used bands in upstream NPar(3)s – Octet 4n – 3 (n = 1, 2, 3, 4, 5)
x	x	x	x	x	x	x	x	End tone index of band n (bits 7 to 12)

NOTE – n is the band index (starting from 1)

**Table 1-6: Standard information field – 10PASS-TS
Used bands in upstream NPar(3) coding – Octet 4n – 2 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS
8	7	6	5	4	3	2	1	Used bands in upstream NPar(3)s – Octet 4n – 2 (n = 1, 2, 3, 4, 5)
x	x	x	x	x	x	x	x	End tone index of band n (bits 1 to 6)

**Table 1-7: Standard information field – 10PASS-TS
Used bands in upstream NPar(3) coding – Octet 4n – 1 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS
8	7	6	5	4	3	2	1	Used bands in upstream NPar(3)s – Octet 4n – 1 (n = 1, 2, 3, 4, 5)
x	x	x	x	x	x	x	x	Start tone index of band n (bits 7 to 12)

**Table 1-8: Standard information field – 10PASS-TS
Used bands in upstream NPar(3) coding – Octet 4n (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS
8	7	6	5	4	3	2	1	Used bands in upstream NPar(3)s – Octet 4n (n = 1, 2, 3, 4, 5)
x	x	x	x	x	x	x	x	Start tone index of band n (bits 1 to 6)

**Table 1-9: Standard information field – 10PASS-TS
Used bands in downstream NPar(3) coding – Octet 4n – 3 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS
8	7	6	5	4	3	2	1	Used bands in downstream NPar(3)s – Octet 4n – 3 (n = 1, 2, 3, 4, 5)
x	x	x	x	x	x	x	x	End tone index of band n (bits 7 to 12)

**Table 1-10: Standard information field – 10PASS-TS
Used bands in downstream NPar(3) coding – Octet 4n – 2 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS Used bands in downstream NPar(3)s – Octet 4n – 2 (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band n (bits 1 to 6)

**Table 1-11: Standard information field – 10PASS-TS
Used bands in downstream NPar(3) coding – Octet 4n – 1 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS Used bands in downstream NPar(3)s – Octet 4n – 1 (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band n (bits 7 to 12)

**Table 1-12: Standard information field – 10PASS-TS
Used bands in downstream NPar(3) coding – Octet 4n (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS Used bands in downstream NPar(3)s – Octet 4n (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band n (bits 1 to 6)

Table 1-13: Standard information field – 10PASS-TS IDFT/DFT size NPar(3) coding

Bits								10PASS-TS IDFT/DFT size NPar(3)s
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	IDFT/DFT size (bits 6-1 × 256 points)

**Table 1-14: Standard information field – 10PASS-TS
Initial length of CE NPar(3) coding – Octet 1**

Bits								10PASS-TS Initial length of CE NPar(3)s – Octet 1
8	7	6	5	4	3	2	1	
x	x	0	0	x	x	x	x	Initial sample length of cyclic extension (bits 7 to 10)

**Table 1-15: Standard information field – 10PASS-TS
Initial length of CE NPar(3) coding – Octet 2**

Bits								10PASS-TS Initial length of CE NPar(3)s – Octet 2
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Initial sample length of cyclic extension (bits 1 to 6)

**Table 1-16: Standard information field – 10PASS-TS
RFI bands NPar(3) coding – Octet 4n – 3 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS RFI bands NPar(3)s – Octet 4n – 3 (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band n (bits 7 to 12)

**Table 1-17: Standard information field – 10PASS-TS
RFI bands NPar(3) coding – Octet 4n – 2 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS RFI bands NPar(3)s – Octet 4n – 2 (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	End tone index of band n (bits 1 to 6)

**Table 1-18: Standard information field – 10PASS-TS
RFI bands NPar(3) coding – Octet 4n – 1 (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS RFI bands NPar(3)s – Octet 4n – 1 (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band n (bits 7 to 12)

**Table 1-19: Standard information field – 10PASS-TS
RFI bands NPar(3) coding – Octet 4n (n = 1, 2, 3, 4, 5)**

Bits								10PASS-TS RFI bands NPar(3)s – Octet 4n (n = 1, 2, 3, 4, 5)
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	Start tone index of band n (bits 1 to 6)

8		7		6		5		4		3		2		1		NPar(3)s – Octet 6
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

**Table 1-26: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 7**

8		7		6		5		4		3		2		1		10PASS-TS DF_STP Parameters NPar(3)s – Octet 7
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

**Table 1-27: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 8**

8		7		6		5		4		3		2		1		10PASS-TS DF_STP Parameters NPar(3)s – Octet 8
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

**Table 1-28: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 9**

8		7		6		5		4		3		2		1		10PASS-TS DF_STP Parameters NPar(3)s – Octet 9
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

**Table 1-29: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 10**

8		7		6		5		4		3		2		1		10PASS-TS DF_STP Parameters NPar(3)s – Octet 10
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

**Table 1-30: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 11**

8		7		6		5		4		3		2		1		10PASS-TS DF_STP Parameters NPar(3)s – Octet 11
x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	

Bits								NPar(3)s – Octet 17
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	DS1 PSD Level, (dBm/Hz+100)/4 (bits 1 to 6)

**Table 1-37: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 18**

Bits								10PASS-TS DF_STP Parameters NPar(3)s – Octet 18
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	DS1 PSD Level, (dBm/Hz+100)/4 (bits 7 to 8)

**Table 1-38: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 19**

Bits								10PASS-TS DF_STP Parameters NPar(3)s – Octet 19
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	DS2 PSD Level, (dBm/Hz+100)/4 (bits 1 to 6)

**Table 1-39: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 20**

Bits								10PASS-TS DF_STP Parameters NPar(3)s – Octet 20
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	DS2 PSD Level, (dBm/Hz+100)/4 (bits 7 to 8)

**Table 1-40: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 21**

Bits								10PASS-TS DF_STP Parameters NPar(3)s – Octet 21
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	US1 PSD Level, (dBm/Hz+100)/4 (bits 1 to 6)

**Table 1-41: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 22**

Bits								10PASS-TS DF_STP Parameters NPar(3)s – Octet 22
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	US1 PSD Level, (dBm/Hz+100)/4 (bits 7 to 8)

8	7	6	5	4	3	2	1	NPar(3)s – Octet 28
x	x	x	x	x	x	x	x	US Interleaver <i>M</i> (bit 7)

**Table 1-48: Standard information field – 10PASS-TS
DF_STP Parameters NPar(3) coding – Octet 29**

Bits								10PASS-TS DF_STP Parameters NPar(3)s – Octet 29
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	x	US Interleaver <i>I</i> index, 0-3

**Table 1-49: Standard information field – 10PASS-TS
SCM RFI bands NPar(3) coding – Octet 1**

Bits								10PASS-TS SCM RFI bands NPar(3)s – Octet1
8	7	6	5	4	3	2	1	
x	x	x	x	x	x	x	1	RFI notch 1
x	x	x	x	x	x	1	x	RFI notch 2
x	x	x	x	x	1	x	x	RFI notch 3
x	x	x	x	1	x	x	x	RFI notch 4
x	x	x	1	x	x	x	x	RFI notch 5
x	x	1	x	x	x	x	x	RFI notch 6

Editor's note: See Table 45-26.