

Hands-Free Profile (HFP)

Bluetooth® Implementation Conformance Statement (ICS) Proforma

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Contents

1	General principles	4
1.1	Implementation Under Test (IUT) identification	4
1.2	Enforcement of inter-layer dependencies	4
2	ICS declarations.....	5
2.1	Versions	5
2.2	Core Configuration.....	6
2.3	Roles	7
2.4	Audio Gateway role.....	7
2.5	Hands-Free role	9
2.6	Audio coding requirements	11
2.7	Requirements towards other layers	12
2.7.1	RFCOMM requirements.....	12
2.7.2	GAP requirements	12
2.7.3	BB and L2CAP requirements	13
2.7.4	LC3 requirements	13
2.8	Supplementary Interoperability Verification	13
3	References	15
4	Revision history and acknowledgments	16

1 General principles

1.1 Implementation Under Test (IUT) identification

Using the Bluetooth SIG qualification tool, the implementer is expected to declare details about what will be implemented.

1.2 Enforcement of inter-layer dependencies

This ICS includes one or more tables with inter-layer dependencies (ILDs). ILDs are used for specification requirements that are dependent on other supporting specifications. ILDs can refer to an individual ICS item in a separate layer (individual ILD), or it can refer to the full layer (full-layer ILD).

ILDs residing in an X2Core layer will be enforced from the Bluetooth SIG qualification tool in the following conditions, depending on where the referred ILD is residing:

Referred ILD resides in	Individual ILD	Full-layer ILD
Controller layer	Core-Complete configuration, or Referred layer is supported	N/A
Lower HCI layer	HCI is supported	N/A
Upper HCI layer	Core-Host configuration, or UHCI is supported	N/A
Host layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	N/A
X2Core layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	Core-Host configuration, or Core-Complete configuration

Table 1.1: Enforcement of an ILD within the Bluetooth SIG qualification tool

2 ICS declarations

2.1 Versions

Table 0: No longer used

Table 0a: AG X.Y Versions

Prerequisite: HFP 1/1 “Audio Gateway (AG)”

Item	Version	Reference	Status
1	Hands-Free Profile 1.5**	[1]	Deprecated 2021-02-01. Withdrawn 2023-02-01.
2	Hands-Free Profile 1.6**	[1]	Deprecated 2021-02-01. Withdrawn 2023-02-01.
3	Hands-Free Profile 1.7	[2]	C.1, C.2
4	Hands-Free Profile 1.8	[4]	C.1
5	Hands-Free Profile 1.9	[5]	C.1
6	Hands-Free Profile 1.10	[10]	C.1

C.1: Mandatory to support one and only one.

C.2: Can only be supported with an active X.Y.Z version after Deprecation or Withdrawal. Deprecated 2021-02-01. Withdrawn 2024-02-01.

Table 0b: HF X.Y Versions

Prerequisite: HFP 1/2 “Hands-Free (HF)”

Item	Version	Reference	Status
1	Hands-Free Profile 1.5**	[1]	Deprecated 2021-02-01. Withdrawn 2023-02-01.
2	Hands-Free Profile 1.6**	[1]	Deprecated 2021-02-01. Withdrawn 2023-02-01.
3	Hands-Free Profile 1.7	[2]	C.1, C.2
4	Hands-Free Profile 1.8	[4]	C.1
5	Hands-Free Profile 1.9	[5]	C.1
6	Hands-Free Profile 1.10	[10]	C.1

C.1: Mandatory to support one and only one.

C.2: Can only be supported with an active X.Y.Z version after Deprecation or Withdrawal. Deprecated 2021-02-01. Withdrawn 2024-02-01.

** Deprecated items will not appear in the Bluetooth SIG qualification tool after the next TCRL following the deprecation date.

Table 0c: AG X.Y.Z Versions*Prerequisite: HFP 1/1 “Audio Gateway (AG)”*

Item	Version	Reference	Status
1	Hands-Free Profile 1.7.1 ^{††}	[2]	Deprecated 2021-02-01. Withdrawn 2024-02-01.
2	Hands-Free Profile 1.5.1 ^{††}	[2]	Deprecated 2022-02-01. Withdrawn 2023-02-01.
3	Hands-Free Profile 1.6.1 ^{††}	[2]	Deprecated 2022-02-01. Withdrawn 2024-02-01.
4	Hands-Free Profile 1.7.2	[2]	C.1, C.2

C.1: Mandatory IF HFP 0a/3 “Hands-Free Profile 1.7”, otherwise Excluded.

C.2: Excluded after Deprecation or Withdrawal. Deprecated 2029-02-01. Withdrawn 2031-02-01.

Table 0d: HF X.Y.Z Versions*Prerequisite: HFP 1/2 “Hands-Free (HF)”*

Item	Version	Reference	Status
1	Hands-Free Profile 1.7.1 ^{††}	[2]	Deprecated 2021-02-01. Withdrawn 2024-02-01.
2	Hands-Free Profile 1.5.1 ^{††}	[2]	Deprecated 2022-02-01. Withdrawn 2023-02-01.
3	Hands-Free Profile 1.6.1 ^{††}	[2]	Deprecated 2022-02-01. Withdrawn 2024-02-01.
4	Hands-Free Profile 1.7.2	[2]	C.1, C.2

C.1: Mandatory IF HFP 0b/3 “Hands-Free Profile 1.7”, otherwise Excluded.

C.2: Excluded after Deprecation or Withdrawal. Deprecated 2029-02-01. Withdrawn 2031-02-01.

2.2 Core Configuration

Table 0e: Core Configuration Requirements

Item	Core Configuration	Reference	Status
1	Profile supported over BR/EDR	[1] 2.1	C.1, C.3
2	Profile supported over LE	[1] 2.1	C.2

C.1: Excluded for this Profile IF CORE 41/2 “LE Core Configuration” OR CORE 40/1 “Core-Controller”.

C.2: Excluded for this Profile.

C.3: Mandatory for this Profile.

^{††} Deprecated items will not appear in the Bluetooth SIG qualification tool after the next TCRL following the deprecation date.

2.3 Roles

Table 1: Role Requirements

Item	Role	Reference	Status
1	Audio Gateway (AG)	[1] 2.2	C.1
2	Hands-Free (HF)	[1] 2.2	C.1

C.1: Mandatory to support at least one.

2.4 Audio Gateway role

Table 2: Capabilities of the AG

Prerequisite: HFP 1/1 “Audio Gateway (AG)”

Item	Capability	Reference	Status
1	Connection management	[1] 4.2, 4.3	M
1a	SLC initiation during active ongoing call	[1] 4.2	O
2	Phone status information	[1] 4.4, 4.5, 4.6, 4.7, 4.8, 4.9, 4.10	M
3	Audio Connection handling	[1] 4.11, 4.12	M
3a	Audio Connection establishment independent of call processing	[1] 4.11, 4.12	O
3b	eSCO support in Audio Connection	[1] 5.7.1 [5] 6.7.1	M
3c	Codec Negotiation	[1] 4.11	C.7
4a	Accept an incoming voice call (in-band ring)	[1] 4.13	C.1
4b	Accept an incoming voice call (no in-band ring)	[1] 4.13	C.1
4c	Capability to change the “in-band ring” settings	[1] 4.13	O
5	Reject an incoming voice call	[1] 4.14	O
6	Terminate a call	[1] 4.15	M
7	Audio Connection transfer during an ongoing call	[1] 4.16, 4.17	M
7a	HF-initiated Audio transfer to AG during ongoing call	[1] 4.17	O
7b	No longer used	N/A	N/A
8	Place a call with the phone number supplied by the HF	[1] 4.18	M
9	Place a call using memory dialing	[1] 4.19	M
10	Place a call to the last number dialed	[1] 4.20	M
11	Call Waiting notification	[1] 4.21	M
12	Three Way Calling	[1] 4.22	O
12a	User Busy (AT+CHLD value 0)	[1] 4.22	C.3
12b	Call Hold Handling (AT+CHLD value 1,2)	[1] 4.22	C.2
12c	Three Way Call (AT+CHLD value 3)	[1] 4.22	C.3
12d	Explicit Call Transfer (AT+CHLD value 4)	[1] 4.22	C.3
13	Calling Line Identification (CLI)	[1] 4.23	M
14	Echo Canceling (EC) and Noise Reduction (NR)	[1] 4.24	O

Item	Capability	Reference	Status
15	Voice recognition activation	[1] 4.25	O
15a	Initiate voice recognition from AG	[1] 4.25	C.6
15b	Autonomous voice deactivation	[1] 4.25	C.6
15c	Enhanced Voice Recognition Status	[4] 4.25 [5] 4.26	C.14
15d	Voice Recognition Text	[4] 4.25	C.13
16	Attach a phone number for a voice tag	[1] 4.26 [5] 4.27	O
17	Ability to transmit DTMF codes	[1] 4.27 [5] 4.28	M
18a	Remote audio volume control – speaker	[1] 4.28.1 [5] 4.29.1	O
18b	Remote audio volume control – microphone	[1] 4.28.1 [5] 4.29.1	O
18c	Volume level synchronization – speaker and microphone	[1] 4.28.2 [5] 4.29.2	C.5
19	Response and Hold	[1] 4.29 [5] 4.30	O
20	Subscriber Number Information	[1] 4.30 [5] 4.31	M
21a	Enhanced Call Status	[1] 4.31 [5] 4.32	C.4
21b	Enhanced Call Control	[1] 4.32 [5] 4.33	C.3
21c	Enhanced Call Status with limited network notification	[1] 4.31 [5] 4.32	C.4
22	Support for automatic link loss recovery	[1] 4.2	O
23	Individual Indicator Activation	[1] 4.34 [4] 4.35 [5] 4.34	M
24	Wideband Speech service	[1] 5.7 [5] 6.7	O
25	Support roaming function	[1] 4.6	O
26	HF Indicators	[2] 4.35 [4] 4.36 [5] 4.35	O
27	Support CVSD eSCO S4 setting	[2] 5.7.3 [5] 6.7.3	M
28	Reserved Fields and RFU Bits	[5] 1.4.2	C.15
29	Super Wideband Speech	[5] 6.7	C.16
30	Call Forwarding	[10] 4.36	C.17
31	Call Duration Information	[10] 4.37	C.17
32	Multiparty Call Duration	[10] 4.37	C.18

- C.1: Mandatory to support at least one.
- C.2: Mandatory IF HFP 2/12 “Three Way Calling”, otherwise Excluded.
- C.3: Optional IF HFP 2/12 “Three Way Calling”, otherwise Excluded.
- C.4: Mandatory to support one and only one.
- C.5: Mandatory IF HFP 2/18a “Remote audio volume control – speaker” OR HFP 2/18b “Remote audio volume control – microphone”, otherwise Optional.
- C.6: Optional IF HFP 2/15 “Voice recognition activation”, otherwise Excluded.
- C.7: Mandatory IF HFP 2/24 “Wideband Speech service” OR HFP 2/29 “Super Wideband Speech”, otherwise Optional.
- C.8–C.12: No longer used.
- C.13: Optional IF HFP 2/15c “Enhanced Voice Recognition Status”, otherwise Excluded.
- C.14: Excluded IF HFP 0a/3 “Hands-Free Profile 1.7”, otherwise Optional IF HFP 2/15 “Voice recognition activation”, otherwise Excluded.
- C.15: Excluded IF HFP 0a/3 “Hands-Free Profile 1.7” OR HFP 0a/4 “Hands-Free Profile 1.8”, otherwise Mandatory.
- C.16: Excluded IF HFP 0a/3 “Hands-Free Profile 1.7” OR HFP 0a/4 “Hands-Free Profile 1.8”, otherwise Optional.
- C.17: Excluded IF HFP 0a/3 “Hands-Free Profile 1.7” OR HFP 0a/4 “Hands-Free Profile 1.8” OR HFP 0a/5 “Hands-Free Profile 1.9”, otherwise Optional.
- C.18: Optional IF HFP 2/31 “Call Duration Information” AND HFP 2/12c “Three Way Call (AT+CHLD value 3)”, otherwise Excluded.

2.5 Hands-Free role

Table 3: Capabilities of the HF

Prerequisite: HFP 1/2 “Hands-Free (HF)”

Item	Capability	Reference	Status
1	Connection management	[1] 4.2, 4.3	M
2a	Phone status information (“service” and “call” indicators)	[1] 4.4, 4.10	M
2b	Phone status information (“callsetup” indicator)	[1] 4.10	O
2c	Accept indicator of signal strength	[1] 4.5	O
2d	Accept indicator of roaming state (“roam:”)	[1] 4.6	O
2e	Accept indicator of battery level (“battchg”)	[1] 4.7	O
2f	Accept indicator of operator selection	[1] 4.8	O
3	Audio Connection handling	[1] 4.11, 4.12	M
3a	Audio Connection establishment independent of call processing	[1] 4.11, 4.12	O
3b	eSCO support in Audio Connection	[1] 5.7.1 [5] 6.7.1	M
3c	Codec Negotiation	[1] 4.11	C.5
4a	Accept an incoming voice call (in-band ring)	[1] 4.13	M
4b	Accept an incoming voice call (no in-band ring)	[1] 4.13	M
4c	Accept an incoming voice call (in-band ring muting)	[1] 4.13	O
5	Reject an incoming voice call	[1] 4.14	M
6	Terminate a call	[1] 4.15	M

Item	Capability	Reference	Status
7	Audio Connection transfer during an ongoing call	[1] 4.16, 4.17	M
7a	HF-initiated Audio transfer to AG during ongoing call	[1] 4.17	O
8	Place a call with the phone number supplied by the HF	[1] 4.18	O
9	Place a call using memory dialing	[1] 4.19	O
10	Place a call to the last number dialed	[1] 4.20	O
11	Call Waiting notification	[1] 4.21	O
12	Three Way Calling	[1] 4.22	O
12a	Three way calling (AT+CHLD values 0)	[1] 4.22	C.2
12b	Three way calling (AT+CHLD values 1 and 2)	[1] 4.22	C.1
12c	Three way calling (AT+CHLD value 3)	[1] 4.22	C.2
12d	Three way calling (AT+CHLD value 4)	[1] 4.22	C.2
12e	Originate new call with established call in progress	[1] 4.22	C.2
13	Calling Line Identification (CLI)	[1] 4.23	O
14	Echo Canceling (EC) and Noise Reduction (NR)	[1] 4.24	O
15	Voice recognition activation/deactivation	[1] 4.25	O
15a	Enhanced Voice Recognition Status	[4] 4.25 [5] 4.26	C.10
15b	Voice Recognition Text	[4] 4.25	C.11
16	Attach a phone number for a voice tag	[1] 4.26 [5] 4.27	O
17	Ability to transmit DTMF codes	[1] 4.27 [5] 4.28	O
18a	Remote audio volume control – speaker	[1] 4.28.1 [5] 4.29.1	O
18b	Remote audio volume control – microphone	[1] 4.28.1 [5] 4.29.1	O
18c	Volume level synchronization – speaker	[1] 4.28.2 [5] 4.29.2	C.3
18d	Volume level synchronization – microphone	[1] 4.28.2 [5] 4.29.2	C.4
18e	HF informs AG about local changes of audio volume	[1] 4.28.2 [5] 4.29.2	O
18f	HF informs AG about local changes of microphone gain	[1] 4.28.2 [5] 4.29.2	O
19	Response and Hold	[1] 4.29 [5] 4.30	O
20	Subscriber Number Information	[1] 4.30 [5] 4.31	O
21a	Enhanced Call Status	[1] 4.31 [5] 4.32	O
21b	Enhanced Call Control	[1] 4.32 [5] 4.33	C.2
22	Support for automatic link loss recovery	[1] 4.3	O

Item	Capability	Reference	Status
23	Individual Indicator Activation	[1] 4.34 [4] 4.35 [5] 4.34	O
24	Wideband Speech service	[1] 5.7 [5] 6.7	O
25	HF Indicators	[2] 4.35 [4] 4.36 [5] 4.35	O
26	Support CVSD eSCO S4 setting	[2] 5.7.3 [5] 6.7.3	M
27	Reserved Fields and RFU Bits	[5] 1.4.2	C.12
28	Super Wideband Speech	[5] 6.7	C.13
29	Call Forwarding	[10] 4.36	C.14
30	Call Duration Information	[10] 4.37	C.14
31	Multiparty Call Duration	[10] 4.37	C.15

C.1: Mandatory IF HFP 3/12 “Three Way Calling”, otherwise Excluded.

C.2: Optional IF HFP 3/12 “Three Way Calling”, otherwise Excluded.

C.3: Mandatory IF HFP 3/18a “Remote audio volume control – speaker” OR HFP 3/18b “Remote audio volume control – microphone”, otherwise Optional.

C.4: Mandatory IF HFP 3/18b “Remote audio volume control – microphone”, otherwise Optional.

C.5: Mandatory IF HFP 3/24 “Wideband Speech service” OR HFP 3/28 “Super Wideband Speech”, otherwise Optional.

C.6–C.9: No longer used.

C.10: Excluded IF HFP 0b/3 “Hands-Free Profile 1.7”, otherwise Optional IF HFP 3/15 “Voice recognition activation/deactivation”, otherwise Excluded.

C.11: Optional IF HFP 3/15a “Enhanced Voice Recognition Status”, otherwise Excluded.

C.12: Excluded IF HFP 0b/3 “Hands-Free Profile 1.7” OR HFP 0b/4 “Hands-Free Profile 1.8”, otherwise Mandatory.

C.13: Excluded IF HFP 0b/3 “Hands-Free Profile 1.7” OR HFP 0b/4 “Hands-Free Profile 1.8”, otherwise Optional.

C.14: Excluded IF HFP 0b/3 “Hands-Free Profile 1.7” OR HFP 0b/4 “Hands-Free Profile 1.8” OR HFP 0b/5 “Hands-Free Profile 1.9”, otherwise Optional.

C.15: Mandatory IF HFP 3/30 “Call Duration Information” AND HFP 3/12c “Three way calling (AT+CHLD value 3)”, otherwise Excluded.

2.6 Audio coding requirements

Table 4: Requirements towards the Link Control Procedures of the Serial Port Profile (AG and HF)

Item	Capability	Reference	Status
1	CVSD audio coding over SCO	[1] 2.3	M
2	mSBC audio coding over eSCO	[1] 5.7.4 [5] 6.7.4	C.1
3	CVSD audio coding over eSCO (Initiating)	[1] 5.7.3 [5] 6.7.3	M

Item	Capability	Reference	Status
4	CVSD audio coding over eSCO (Accepting)	[1] 5.7.3 [5] 6.7.3	M
5	LC3-SWB audio coding over eSCO	[5] 6.7.6	C.2

C.1: Mandatory IF HFP 2/24 “Wideband Speech service” OR HFP 3/24 “Wideband Speech service”, otherwise Excluded.

C.2: Mandatory IF HFP 2/29 “Super Wideband Speech” OR HFP 3/28 “Super Wideband Speech”, otherwise Excluded.

2.7 Requirements towards other layers

2.7.1 RFCOMM requirements

Table 5: No longer used

Table 5a: RFCOMM Requirements (AG and HF)

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Initialize RFCOMM Session	[2] 5 [5] 6.1	M	[8] RFCOMM 1/1
2	Respond to Initialization of an RFCOMM Session	[2] 5 [5] 6.1	M	[8] RFCOMM 1/2

2.7.2 GAP requirements

Table 6: GAP Requirements (AG)

Prerequisite: HFP 1/1 “Audio Gateway (AG)”

Item	Capability	Reference	Status	Inter-Layer Dependency
1	Bondable mode	[1] 6.1 [5] 7.1	M	[3] GAP 1/7
2	Initiation of general inquiry	[1] 6.3 [5] 7.3	M	[3] GAP 3/1
3	Initiation of general bonding	[1] 6.3 [5] 7.3	O	[3] GAP 3/5
4	Security mode 4, level 4	[1] 6.2 [5] 7.2	O	[3] GAP 2/7a

Table 7: Requirements towards the Generic Access Profile (HF)*Prerequisite: HFP 1/2 “Hands-Free (HF)”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	General discoverable mode	[1] 6.1 [5] 7.1	M	[3] GAP 1/3
2	Security mode 4, level 4	[1] 6.2 [5] 7.2	O	[3] GAP 2/7a

2.7.3 BB and L2CAP requirements

Table 7b: BB and L2CAP Requirements

Item	Capability	Reference	Status	Inter-Layer Dependency
1	2-EV3 packet type	[1] 3	M	[7] BB 6a/1
2	No longer used	N/A	N/A	N/A
3	Initiator	[2] 5.2 [5] 6.2	M	[9] L2CAP 1/7
4	Acceptor	[2] 5.2 [5] 6.2	M	[9] L2CAP 1/8

2.7.4 LC3 requirements

Table 7c: LC3 Requirements*Prerequisite: HFP 2/29 “Super Wideband Speech” OR HFP 3/28 “Super Wideband Speech”*

Item	Capability	Reference	Status	Inter-Layer Dependency
1	No longer used	N/A	N/A	N/A
2	Superwideband (32 kHz) (Encoder)	[5] 6.7.6	M	[6] LC3 3/4
3	7.5 ms (Encoder)	[5] 6.7.6	M	[6] LC3 4/1
4	Superwideband (32 kHz) (Decoder)	[5] 6.7.6	M	[6] LC3 5/4
5	7.5 ms (Decoder)	[5] 6.7.6	M	[6] LC3 6/1

2.8 Supplementary Interoperability Verification

It is recommended but not required to support any of the capabilities defined below. The Bluetooth license grant obtained through Qualification is not predicated on passing any test that is linked to support of these capabilities.

Table 8: Additional Hands-Free Capabilities

Item	Capability	Reference	Status
1	Multiple audio transfers during call – AG and HF initiated	[1]	C.1
2	Audio transfer by SLC release during an active call	[1]	C.1



Item	Capability	Reference	Status
3	Audio transfer by powering ON HF	[1]	O
4	SLC during SDP response	[1]	O
5	Handle dynamic server channel number for HFP service	[1]	O
6	HF disallows connections in non-discoverable mode	[1]	C.2
7	HF connects to AG during incoming call	[1]	O
8	Link loss during incoming call	[1]	C.3
9	SLC release during incoming call	[1]	C.3
10	Voice recognition activation	[1]	C.4
11	Place outgoing call by dialing number on the AG	[1]	O
12	Active call termination – NO CARRIER signal	[1]	C.5

C.1: Optional IF HFP 2/7a “HF-initiated Audio transfer to AG during ongoing call” OR HFP 3/7a “HF-initiated Audio transfer to AG during ongoing call”, otherwise Excluded.

C.2: Optional IF HFP 1/2 “Hands-Free (HF)”, otherwise Excluded.

C.3: Optional IF HFP 1/1 “Audio Gateway (AG)”, otherwise Excluded.

C.4: Optional IF HFP 2/15 “Voice recognition activation” OR HFP 3/15 “Voice recognition activation/deactivation”, otherwise Excluded.

C.5: Optional IF HFP 2/6 “Terminate a call”, otherwise Excluded.

3 References

- [1] Hands-Free Profile, Version 1.5 or later
- [2] Hands-Free Profile, Version 1.7 or later
- [3] ICS Proforma for Generic Access Profile (GAP)
- [4] Hands-Free Profile, Version 1.8 or later
- [5] Hands-Free Profile, Version 1.9 or later
- [6] ICS Proforma for Low Complexity Communication Code (LC3)
- [7] ICS Proforma for Baseband (BB)
- [8] ICS Proforma for RFCOMM
- [9] ICS Proforma for Logical Link Control and Adaptation Protocol (L2CAP)
- [10] Hands-Free Profile, Version 1.10

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	1.5.1	2005-10-31	Change name from HFP1.5.ICS.1.0.x to HFP.ICS.1.5.x. Prepare for publication.
	1.5.2r0	2006-04-04	TSE 853: Added new entry to Table 2 for Enhanced call status with Limited Network Notification. Technical correction to Table 2
1	1.5.2	2006-06-19	Prepare for publication.
	1.5.3r0	2006-10-01	Fix numbering in Table to accommodate TPG TSE 1813: Refine 2/18 and 3/18
	1.5.3r1	2006-11-06	Fix Table 2 footnote O4 to match 21a, 21b, 21c numbering change TSE 1982: Add line !5a in Table HFP 2, Change line 15b, add C.1 footnote
	1.5.3r2	2006-12-08	Change O.x conditional statements to C.x. Fix for TSE 1813
2	1.5.3	2007-01-10	Prepare for publication.
3	1.5.4	2007-08-31	TSE 2055 Table 3/15: change activation to activation/deactivation TSE 2100: Add rows to Tables 2 and 3 TSE 2112: Change 2/21B to C.3 TSE 2219: Table 7: Fix GAP reference TSE 2221: Add eSCO entries to Tables 2 and 3 TSE 2238: Add two rows to Table 3 TSE 1998: Change to Table 2: Add 1a TSE 2027: Changes to Table 2
	1.5.5r0-1	2008-04	Change to Tables 2 and 3 /7a to reflect TSE 2100 text TSE 2449: Item 12/e TSE 2434: Add 2/22 and 3/22 as O Correction for item 3/12e: Change O.x to C.x
4	1.5.5	2008-04-15	Prepare for publication
	1.5.6r0	2008-09	TSE: 2487: Add row Table 2/7b TSE 2605: Add Prereq. to Table 2 and Table 3
5	1.5.6	2008-11-20	Prepare for publication.
6	1.5.7	2009-08-05	TSE 2882: Table item 2/7: Change Reference
7	1.5.8r0	2010-08-17	TSE 2884: Remove 2/7b
	1.6.0r0	2011-04-01	Merge HFP 1.5 and HFP 1.6 ICS
8	1.6.0r1-5	2011-05-04	Edits and reviews by technical reviewers and spec director. Added Prerequisites to Tables 6 and 7. Accept changes.
	1.6.1r0	2013-02-20	TSE 4684: New ICS table for Supplementary Interoperability Verification/Category-X test case mapping.

Publication Number	Revision Number	Date	Comments
9	1.6.1	2012-04-30	Prepare for publication.
	1.6.2r0	2012-09-06	TSE 4617: Correct references in Table 2 and Table 3 for eSCO support in Audio Connection to be 5.7.1, not 5.17. TSE 4905: Added 8/12, Active call termination – NO CARRIER signal
	1.6.2r1	2012-10-22	TSE 4743: Added 2/25 “Support Roaming function”
10	1.6.2	2012-11-02	Prepare for Publication
	1.6.3r1	2013-10-03	TCRL 2013-2 TSE 5166: Updated Table 3, Item 21a to "O".
11	1.6.3	2013-12-03	Adopted by BoD
	DDR CR r00	2013-12-18	Added HFP 1.7 and HF Indicators feature
	DDR CR r01	2013-12-18	Minor versioning and conditional updates
	DDR CR r02	201-01-09	Added IXIT Appendix for HF Indicators
	DDR CR r03	2014-03-04	Merged comments from Meagan
	1.7.0r01	2014-03-24	Template Conversion (Template_ICS_2014r01) Editorial review by Meagan
	1.7.0r02	2014-04-09	Updated contributors list
	1.7.0r03	2014-07-16	Incorporated “HFP – 4.1 Updates ICS CR r03”
	1.7.0r04	2014-08-04	Addressed comments by Alicia and Jason
	1.7.0r05	2014-08-14	TSE 5629: Added tracking for removed item 2/7b that was removed by TSE 2884 and noted as “Item no longer used” according to current convention. TSE 5572: Added a note to Table 2 Conditional item C.4 clarifying what network support was intended to indicate. This was lost in the integration of TSE 1723.
	1.7.0r06	2014-08-11	Legal review edits and addressed Meagan’s comments
	1.7.0r07	2014-08-18	Removed occurrences of “UUID” for HF Indicators
	1.7.0r08	2014-09-08	Fixed Table 7b and changed incorrect eSCO conditional
12	1.7.0	2014-09-18	Adopted by SIG BoD
	1.7.1r00	2015-04-28	TSE 6172: Removed items in Table 0 and added new tables 0a and 0b for AG and HF. TSE 6312: Added items 3 and 4 to IXIT to support updates to TP/HFI/BI-03-I in HFP.TS
	1.7.1r01	2015-06-05	Deleted Section 1.2 (Global Statement of Conformance) per current ICS template standards. Fixed broken references in Table 4.
13	1.7.1	2015-07-14	Prepared for TCRL 2015-1 publication
	1.7.1.0r00	2015-10-28	Updated version numbering to align with Specification version change from 1.7 to 1.7.1 for ESR09. With the specification taking a third identifying number, the ICS version identifier moves to the fourth number and starts again at 0.

Publication Number	Revision Number	Date	Comments
	1.7.1.0r01	2015-11-02	Added items 0a/4 and 0b/4 for new Specification version 1.7.1 (ESR09).
	1.7.1.0r03	2015-11-24	Added Tables 0c and 0d for minor profile versions.
14	1.7.1.0	2015-12-22	Prepared for TCRL 2015-2 publication
	1.7.1.1r00	2016-03-01	TSE 6678: Updated conditional statements C.7 in Table 2 & C.5 in Table 3.
15	1.7.1.1	2016-07-13	Prepared for TCRL 2016-1 publication.
	1.7.1.2r00	2017-03-15	TSE 7814: Updated Table 6/4 and 7/2 to include new GAP item (2/7a).
	1.7.1.2r01	2017-04-25	Updated to the ICS description for items 6/4 and 7/2. Update ICS template. Replace parentheses with quotation marks per the current ICS conventions. Separate the IXIT information to a separate document.
16	1.7.1.2	2017-07-03	Approved by BTI. Prepared for TCRL 2017-1 publication.
	1.7.2.0r00	2018-11-09	Updated version number to 1.7.2.0 to align with adoption of the specification 1.7.2. Added items 0c/2-4 and 0d/2-4 for new versions 1.5.1, 1.6.1, and 1.7.2.
17	1.7.2.0	2018-11-21	Approved by BTI. Prepared for TCRL 2018-2 publication.
	1.8.0r00–r03	2019-06-05 – 2019-08-28	Incorporated changes to accommodate integration of Enhanced Voice Recognition Activation change request for HFP 1.8. Items added: 2/15c Enhanced Voice Recognition Status 2/15d Voice Recognition Text 3/15a Enhanced Voice Recognition Status 3/15b Voice Recognition Text Updated template and made minor editorial fixes. Accepted Changes, added Contributor. Expanded revision history in response to BTI feedback. TSE 12506 (rating 1): Clarify the ICS conditionals of Table 2 to indicate at least one or one and only one (C.1, C.4). Revise Table 2 conditionals C.8, C.9, and C.11 to remove the “NOT” by starting the statement with “Excluded IF x supported”. TSE 12515 (rating 1): Correct the SPP ICS references in Table 5 and correct the layer name typo.
18	p18	2020-04-21	Set publication number for previous v1.8.0 as p18. Removed “Support” column from tables per new document guidelines. Approved by BTI on 2019-10-08. Adopted by the BoD on 2020-04-14. Prepared for publication.
	p18ed2r00	2021-01-14	TSE 15982 (rating 1): Changes for deprecation.
	p18 edition 2	2021-02-01	Approved by BTI on 2021-01-15. Prepared for edition 2 publication.

Publication Number	Revision Number	Date	Comments
	p18ed3 r00–r01	2021-08-02 – 2021-09-24	TSE 17318 (rating 1): Consistency checker findings. Template-related editorials. Consistency checker editorials to align wording with the latest ICS template.
	p18 edition 3	2021-09-28	Approved by BTI on 2021-09-27. Prepared for edition 3 publication.
	p18ed4 r00–r04	2022-02-17 – 2022-04-29	TSE 18104 (rating 1): Updated deprecation and withdrawal dates for HFP 1.5, 1.5.1, 1.6, and 1.6.1 in Tables 0a – 0d and updated item statuses and conditionals to account for those deprecations as follows: updated 2/3b, 2/23, and 2/27 to M, updated 2/24 and 2/26 to O, deleted C.8–C.12, and removed v1.5 and v1.6 from C.14; updated 3/3b and 3/26 to M and 3/23, 3/24, and 3/25 to O, deleted C.6–C.9, and removed v1.5 and v1.6 from C.10; updated 4/3 and 4/4 to M and deleted C.2; and updated 7b/1 to M and deleted C.1. TSE 18373 (rating 1): Corrected “is/are/not supported” language in conditionals globally to align with the latest ICS conventions. Editorials, including template-related formatting fixes and alignment of copyright page with v2 of the DNMD.
19	p19	2022-06-28	Approved by BTI on 2022-05-31. Prepared for TCRL 2022-1 publication.
	p19ed2r00– r03	2023-02-07 – 2023-02-23	TSE 22626 (rating 1): Updated to align with current ICS conventions, and updated the Withdrawal date for HFP 1.7 and HFP 1.7.1 from 2023-02-01 to 2024-02-01. Deleted all draft revision history comments prior to p0.
	p19 edition 2	2023-02-27	Approved by BTI on 2023-02-23. Prepared for edition 2 publication.
	p20r00–r03	2023-07-25 – 2023-08-21	TSE 18207 (rating 4): To align with E18424 and E20445, added new “Reserved Fields and RFU Bits” items 2/28 and 3/27 and related conditionals C.15 and C.12, respectively. Added new reference to HFP v1.9 and added “or later” to the v1.8 reference text. TSE 19028 (rating 1): To align with E18696, added references to HFP v1.9 to 2/3b, 2/24, 2/27, 3/3b, 3/24, 3/26, 4/2, 4/3, 4/4, 5/1, 5/2, 6/1, 6/2, 6/3, 6/4, 7/1, and 7/2 and added references to HFP v1.8 to 2/23, 2/26, 3/23, and 3/25. TSE 19177 (rating 1): Per E18697, globally updated terminology capitalization and grammar per new conventions approved by the working group (made consistent with the latest spec draft where conflicting). TSE 19239 (rating 1): Per E17611, which calls for the removal of references to SPP, set Table 5 to “No longer used” and added new Table 5a, renaming auto-numbered Section 1.6.1 from SPP to RFCOMM. Added 7b/3 and 7b/4. Updated references to include HFP v1.9 and the ICSs for RFCOMM and L2CAP.

Publication Number	Revision Number	Date	Comments
			Incorporated changes to accommodate integration of Super Wide Band Speech change request for HFP v1.9 (HFP.ICS_TS.p24r00_TSE18207_CRr05_th.docx). Items added: HFP 0a/5, HFP 0b5, HFP 2/29 and C.16, HFP 3/28 and C.13, HFP 4/5 and C.2, and HFP 7b2 and C.1. Added entire new Table 7c.
20	p20	2023-09-19	Approved by BTI on 2023-08-30. HFP v1.9 adopted by the BoD on 2023-09-12. Prepared for publication.
	p21r00-r01	2023-10-04 – 2024-04-23	TSE 24073 (rating 2): Removed SUM ICS from the References section. Updated 7b/1 to BB ILDs. TSE 24998 (rating 1): Marked Item 1 of Table 7c as “No longer used.”
21	p21	2024-07-01	Approved by BTI on 2024-05-22. Prepared for TCRL 2024-1 publication.
	p22r00-r02	2024-10-10 – 2024-11-19	TSE 25895 (rating 2): Per E25913, updated Table 7b to cut conditional C.1. Updated table spacing to guidelines throughout. TSE 26428 (rating 2): Updated items 2/15c, 2/16, 2/17, 2/18a, 2/18b, 2/18c, 2/19, 2/20, 2/21a, 2/21b, 2/21c, 2/23, 2/26, 3/15a, 3/16, 3/17, 3/18a, 3/18b, 3/18c, 3/18d, 3/18e, 3/18f, 3/19, 3/20, 3/21a, 3/21b, 3/23, and 3/25.
22	p22	2025-02-18	Approved by BTI on 2024-12-25. Prepared for TCRL 2025-1 publication.
	p23r00	2025-02-26	TSE 27004 (rating 2): Updated conditional C.2 for Tables 0a and 0b. Added “Core Configuration” section and Table 0e.
23	p23	2025-07-08	Approved by BTI on 2025-05-30. Prepared for TCRL pkg100 publication.
	p24r00	2025-07-23	TSE 27855 (rating 2): Per E25913, removed item 7b/2.
24	p24	2025-11-04	Approved by BTI on 2025-09-24. Prepared for TCRL pkg101 publication.
	p25r00-r03	2025-09-04 – 2025-10-22	Work for p25 began after p24 content was finalized; publication of p24 occurred later due to internal processes. Incorporated HFP_CF.ICS.CRr08. To account for the Call Forwarding feature enhancement in Hands-Free Profile v1.10, incorporated approved Test Issues 25373 and 25704. Added HFP 0a/6, HFP 0b/6, HFP 2/30, HFP 3/29, and conditions 2/C.17 and 3/C.14. Incorporated HFP_CDI.ICS.CRr04. To account for the Call Duration Information feature enhancement in Hands-Free Profile v1.10, incorporated approved Test Issues 20438, 25379, and 27508. Per E20436, added HFP 2/32. Also added HFP 2/31, HFP 3/30, HFP 3/31, and conditions 2/C.18 and 3/C.15. Updated the references list and the acknowledgments.

Publication Number	Revision Number	Date	Comments
25	p25	2025-12-16	Approved by BTI on 2025-11-20. HFP v1.10 adopted by the BoD on 2025-12-15. Prepared for TCRL pkg101-addition publication.
	p26r00	2026-01-08	TSE 28611 (rating 1): Updated the status and conditions for Tables 0c and 0d to include D&W dates for HFP v1.7.2.
26	p26	2026-02-17	Approved by BTI on 2026-01-22. Prepared for TCRL pkg102 publication.
	p26ed2r00	2026-02-17	TSE 28699 (rating 1): Updated the Capability and ILD values for Items HFP 7b/3 and HFP 7b/4 to align with L2CAP roles.
	p26 edition 2	2026-05-05	Approved by BTI on 2026-04-19. Prepared for edition 2 publication.
	p27r00–r01	2026-04-16 – 2026-04-27	TSE 28438 (rating 1): To support E28261, globally changed “Wide Band” to “Wideband”.
27	p27	2026-06-23	Approved by BTI on 2026-05-28. Prepared for TCRL pkg104 publication.

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