**Source: SA4 SQ SWG Chairman[[1]](#footnote-1)**

**Title: 3GPP SA4 SQ SWG report from teleconference on HInT (14 September 2020)**

**Document for: Agreement**

**Agenda item: 2**

**Executive summary**

The meeting (14 participants, about 1 hour) covered three input Tdocs (S4a200147 to S4a200149) as well as a left-over document (S4-AHQ146). Input Tdocs on HInT, i.e. draft CRs to 26.131 and 132 in S4a200148 and S4a200149, were reviewed, and editorial updates were suggested online; these draft CRs were noted, however the contents updated to reflect suggested editorial changes was felt agreeable and the sources were invited to submit updated draft CRs reflecting the output of the discussion to the next SQ SWG telco (to be held place on Oct. 19, 2020).

**A.I. 1 Approval of Agenda and Tdoc allocation**

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| [**S4aQ200147**](http://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_SQ/Docs/S4aQ200147.zip) | Proposed agenda for SQ SWG teleconference on HinT (14 September 2020) | SQ SWG Chairman |

The SQ chair welcome delegates to this first SQ SWG telco after the SA4#110-e meeting. He clarified that input documents were submitted on 3GU before the deadline and projected the agenda in S4a200147 that includes the Tdoc allocation: He clarified that the agenda in the first page is a subset of the complete unique agenda defined by the 3GPP SA4 Chair for 3GPP SA4 adhoc telcos:

The SQ chair asked if this agenda (incl. the Tdoc allocation) was agreeable.S4a200148 is agreed.

**A.I. 2 Reports/Liaisons**

None.

**A.I. 5.3 HInT (Extension for headset interface tests of UE**

The SQ Chair suggests taking S4a200149 before S4a200148, given that test methods are usually handled before requirements.

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| [**S4aQ200149**](http://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_SQ/Docs/S4aQ200149.zip) | Draft-CR TS 26.132 Extension for headset interface tests of UE | HEAD acoustics GmbH |

**Presenter:** Jan Reimes

Within the scope of the work item HInT, it is intended to add new test methods to TS 26.132 for analogue and digital interfaces of UE. As a preparation for these, a detailed specification and description of the introduced interfaces has to be included.

Cha“it is assumed nges in this draft CR: Introduction of new clauses for analogue and digital interfaces, editorial changes in the existing clauses regarding measurement equipment.

**Comments / questions:**

Jan: headset should be removed in “electrical headset interface” in clause 4.3 and twice number 4.3 to be fixed

Andre: “capturing signals electrically instead of an acoustical interface…“, suggest adding “through”.

Jan: good suggestion

Andre: Comment on “Only interfaces with standardized protocols and definitions (e.g., USB, Bluetooth, etc.) shall be used”, this is not calling out which protocols and standards are to be used, suggest “should”, how is it enforced?

Jan: similar discussion in WID preparation, it was demanded that only standardized interfaces should be used, the proposal is aligned with the agreed WID. Want to be more strict?

Andre: “shall” is a bit specific, there are few examples

SQ chair: why not use a white list?

Andre: comment on for all tests in the following clauses that typical signal processing for telecommunication (e.g., noise reduction, echo cancellation) takes places only in the UE and not in the connected equipment”, are tests applicable when signal processing is turned off?

Jan: correct, how to detect this and what to do if the UE does not take into account that there is noise reduction in the headset? The interface is not applicable for such specific UE.

Andre: fine

Jan: avoid that a setup does not comply

Andre: in this case cannot claim compliance

Jan: if UE does not accept commande from headset…

Andre: not a failure, the specification does not apply, it is the same for tests applicable for standardized interfaces

Fabrice: puzzled, proposal in WID simply on test interface, not the issue of having two echo cancellers

Jan: for digital interface, if noise reduction is deactivated in all tests, one would fail all tests, both issues: good to detect malfunction and could have all tests fail

SQ chair: suggest online editing to capture update proposals and progress

(Jan projected the document under editing)

Andre: be specific on signal processing, active noise cancellation also disabled? Why examples for noise reduction, echo cancellation?

Jan: this does not matter in telecom applications

Andre: on the white list, the problem is also “shall”, everything else is out of scope, in the test plan we should call out specific parts

Jan: practical issue, a UE manufacturer may have a proprietary protocol for an intended hardware but one cannot make the test, one can only rely on standardized interfaces such as Bluetooth or USB

Andre: what is the definition of standardized interfaces? Just say test is applicable

The following edits were captured online:

* Put in brackets and editor’s notes around two debated sentences in clause 5.1.6.2:
  + Only interfaces with standardized protocols and definitions (e.g., USB, Bluetooth, etc.) shall be used, i.e. digital interfaces of proprietary hardware or protocols are out of scope.
  + In order to be compatible with the analogue headset interface, it is assumed for all tests in the following clauses that typical signal processing for telecommunication (e.g., noise reduction, echo cancellation) takes places only in the UE and not in the connected equipment.

SQ chair: received good feedback, it seems impossible to get a new Tdoc from 3GU for the online revision

Jan: tried, cannot get a new Tdoc for a revision in 3GU

SQ chair: could this document be agreed as a basis for further editing noting that all requested updates will be in the meeting minutes?

Andre: request to just note this Tdoc and put in the minutes that the document is agreeable with few editorial changes.

**Decision:**

S4a200149 is noted, however the content after the suggested editorial changes is felt agreeable.

The SQ chair invited the source to submit a revision of S4a200149 to reflect the suggested editorial changes, to be handled as an output document from this meeting in the second SQ SWG telco on Oct. 19.

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| [**S4aQ200148**](http://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_SQ/Docs/S4aQ200148.zip) | dCR 26.131 Extension for headset interface tests of UE | Orange |

**Presenter:** Alain Curti

TS 26.131 does not currently specify requirements for an analogue, digital or wireless headset interface of a terminal. It is relevant to introduce testing of the headset interface in today’s market where users can purchase compatible products that use standardized connections from different suppliers, and compatible headsets can be freely combined with mobile phones.

Update clause 4 (“Interface definition”) of TS 26.131 to include standardized analogue (wired) and digital (wired and wireless) headset interfaces and other clauses

**Comments / questions:**

Alain: The summary of changes in the cover page is incomplete, clauses 5 to 8 are also updated. Some clauses in TS 26.131 (e.g. 5.5, 5.14 and 5.15) are not considered because they apply for acoustic tests or there are not specific to the type of UEs

SQ chair: Same issue as in S4a200148, headset should be removed in “electrical headset interface” in clause 4.3

Jan: Formal question, all clauses where there are changes should be intended as a placeholder, there are lots of TBDs, it make time a lot of time to get the whole CR

Alain: Currently just proposal of structure for discussion

Andre: Clauses with TBDs should be in brackets

SQ chair: All clauses as placeholder can be put in brackets to avoid ambiguities on TBDs

**Decision:**

S4a200148 is noted. The content is felt agreeable after all new subclauses in clauses 5 to 8 are put in brackets.

The SQ chair invited the source to submit a revision of S4a200148 to reflect the suggested editorial changes, to be handled as an output document from this meeting in the second SQ SWG telco on Oct. 19.

**A.I. 8 Others including TEI**

None.

**A.I. 9 Review of the future work plan**

SQ Chair: no Tdoc, just recall that next SQ SWG meeting will take place on Oct. 19, to cover three work items (ATIAS, HaNTE, HInT)

**A.I. 10 Any other topic of discussion**

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| --- | --- | --- |
| S4-AHQ146 | Preliminary HaNTE round robin results at Lab 1 | Qualcomm Incorporated |

**Comments / questions:**

SQ chair: we have one document that has no status, it was already taken at SA4#110-e as S4-201096. Is it ok for the source to note the following Tdoc?

Andre: sure

**Decision:**

S4-AHQ146 is noted without presentation

**A.I. 11 Close of the session**

The SQ Chair thanked the sources for their contributions and all delegates for their and participation, he invited contributions for the next SQ telco and closed the meeting at 16:55 CEST.

**Annex A – Meeting agenda**

**Source: SA4 SQ SWG Chairman[[2]](#footnote-2)**

**Title: Proposed agenda for SQ SWG teleconference on HInT (14 September 2020)**

**Document for: Approval**

**Agenda item: 1**

**Agenda for this telco (keeping only relevant items from the unique agenda for 3GPP SA4 AH telcos post-110e):**

|  |  |  |
| --- | --- | --- |
| 1 | Approval of Agenda and Tdoc allocation | S4a200147app |
| 2 | Reports/Liaisons |  |
| … |  |  |
| 5 | Speech Quality (SQ) SWG |  |
| .. |  |  |
| 5.3 | HInT (Extension for headset interface tests of UE | S4a200148n (Orange, dCR 26.131)S4a200149n (Head Acoustics, dCR 26.132) |
| … |  |  |
| 8 | Others including TEI |  |
| 9 | Review of the future work plan |  |
| 10 | Any other topic of discussion | AHQ146n (wp) (left-over, status to be clarified at SQ SWG level) |
| 11 | Close of the session |  |

**Legend for Tdocs:**

* **Color: not-yet processed**, **processed**, **late**, **~~withdrawn~~**, **moved to a different A.I.**, **under email agreement**
* a agreed, app approved, n noted, pa partially agreed, np not pursued, pp postponed…

**Unique agenda for AH telcos post-110e (for information):**

|  |  |
| --- | --- |
| 1 | Approval of Agenda and Tdoc allocation |
| 2 | Reports/Liaisons |
| 3 | Enhanced Voice Service (EVS) SWG |
| 3.1 | IVAS\_Codec (EVS Codec Extension for Immersive Voice and Audio Services) |
| 4 | Multicast-Broadcast-Streaming (MBS) SWG |
| 4.1 | 5GMS3 (5G Media Streaming stage 3) |
| 4.2 | FS\_5GMS\_Multicast (Feasibility Study on Multicast Architecture Enhancements for 5GMSA) |
| 4.3 | FS\_EMSA (Feasibility Study on Streaming Architecture extensions For Edge processing) |
| 5 | Speech Quality (SQ) SWG |
| 5.1 | ATIAS (Terminal Audio quality performance and Test methods for Immersive Audio Services) |
| 5.2 | HaNTE (Handsets Featuring Non-Traditional Earpieces) |
| 5.3 | HInT (Extension for headset interface tests of UE) |
| 6 | Video SWG |
| 6.1 | RM\_H263\_MP4V (Removal of H.263 and MPEG-4 Visual from 3GPP Services) |
| 6.2 | FS\_VR\_CoGui (Feasibility Study on VR Streaming Conformance and Guidelines) |
| 6.3 | FS\_5GVideo (Feasibility Study on 5G Video Codec Characteristics) |
| 6.4 | FS\_XRTraffic (Feasibility Study on Typical Traffic Characteristics for XR Services and other Media) |
| 6.5 | FS\_5GSTAR (Feasibility Study on 5G Glass-type AR/MR Devices) |
| 7 | Multimedia Telephony Service for IMS (MTSI) SWG |
| 7.1 | ITT4RT (Support of Immersive Teleconferencing and Telepresence for Remote Terminals) |
| 7.2 | FS\_FLUS\_NBMP (Feasibility Study on the use of NBMP in E\_FLUS) |
| 8 | Others including TEI |
| 9 | Review of the future work plan |
| 10 | Any other topic of discussion |
| 11 | Close of the session |

**Annex B – List of participants (provided by host)**

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| --- |
| Apple - Fabrice Plante |
| Dolby - Frederic Gabin |
| Dolby - Stefan Bruhn (SA4 VC) |
| Ericsson - Tomas Toftgård |
| HEAD acoustics - Jan Reimes |
| Huawei Technologies – Antero Tossavainen |
| Qualcomm - Min Wang |
| Orange - Alain Curti |
| Orange - Stéphane Ragot |
| QUALCOMM - Nikolai Leung |
| Qualcomm - Andre Schevciw |
| SONY - Peter Isberg |
| Samsung - Eric Yip |
| Tencent-Zhuoyun Zhang |

**Annex C - Documents status**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tdoc | Title | Source(s) | Agenda Item(s) | Status |
| S4-AHQ146 | Preliminary HaNTE round robin results at Lab 1 | Qualcomm Incorporated | - | Noted (without presentation) |
| [**S4aQ200147**](http://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_SQ/Docs/S4aQ200147.zip) | Proposed agenda for SQ SWG teleconference on HinT (14 September 2020) | SQ SWG Chairman | 1 | Approved |
| [**S4aQ200148**](http://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_SQ/Docs/S4aQ200148.zip) | dCR 26.131 Extension for headset interface tests of UE | Orange | 5.3 | Noted |
| [**S4aQ200149**](http://www.3gpp.org/ftp/TSG_SA/WG4_CODEC/3GPP_SA4_AHOC_MTGs/SA4_SQ/Docs/S4aQ200149.zip) | Draft-CR TS 26.132 Extension for headset interface tests of UE | HEAD acoustics GmbH | 5.3 | Noted |

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