**;anäMonday 29th November 2021**

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| GSMA_logo_colour_web_small | | TSG Doc 47\_001  Minutes for TSG#46 v1.0 | |
| Meeting Information | | | |
| Meeting Name and Number | | TSG#47a, b & c | |
| Meeting Date | | 7th, 9th & 11th Mar 2022 | |
| Meeting Location | | **Cc** | |
| Document Information | | | |
| Document Author(s) | | Kay Fritz | |
| Document Creation Date | | Dec 2021 | |
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| This document is for: *(mark X as appropriate)* | | Discussion |  |
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| Document Summary | | | |
| Minutes for TSG #46 Plenary Meeting | | | |
| Document History | | | |
| Date | Version | Author / Comments | |
| Dec 2021 | 0.1 | Kay Fritz / Initial draft version | |
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| **TSG#46 PLENARY SESSION – DAY 1 (TSG#46a)** | | | | | |
| The meeting documents can be found in IC2 [here](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MjNlZDczZGQtMDBjNi00NmY3LWIwN2YtYjgzMzNmNjZjY2Fm%40thread.v2/0?context=%7b%22Tid%22%3a%2272a4ff82-fec3-469d-aafb-ac8276216699%22%2c%22Oid%22%3a%22f614826e-499e-4900-84ed-0356540c043b%22%7d)  The meeting documents can be found on the GSMA Website [here:](https://www.gsma.com/aboutus/workinggroups/resources/tsg46-meeting-documents)  Note: All document for this meeting have been uploaded to the GSMA Website so that we comply with the US Entity List requirements, as the documents are publicly available.  TS.60 TSG Operation Guidelines can be found [here](https://infocentre2.gsma.com/gp/wg/TS/OfficialDocuments/TS.60%20Terminals%20Steering%20Group%20Operating%20Guidelines%20v1.0%20(Current)/TS.60%20v1.0.docx) | | | | | |
| **Item** | **Agenda** | | **Presenter** | **Comments** | **Doc Number** |
| #001 | Welcome | Kay Fritz  Vodafone | |  |  |
| The TSG Chair welcomed the group | | | | | |
| #002 | GSMA Antitrust & IPR policy | Paul Gosden  GSMA | | For Information | [Antitrust](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GSMA%20Antitrust%20Policy.docx)  [IPR](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GSMA%20IPR%20Policy.docx) |
| TSG Director reminded the group that the meeting would be held in compliance with the GSMA Antitrust and IPR policy, as well as the US entity list. | | | | | |
| #003 | Approval of Agenda | Kay Fritz  Vodafone | | **For Approval** | **TSG#46 Doc 002** |
| The leadership team presented the agenda, which was approved after adding an update about the latest work on NFC to a Friday timeslot for Information.  **D46-001:** Agenda was approved | | | | | |
| #004 | Approval of TSG#45(abc) Minutes and review of action items | Kay Fritz  Vodafone | | **For Approval** | **TSG#46 Doc 001** |
| The Minutes were presented and approved, actions updated online.  **D46-002:** Minutes for TSG #45 (a,b,c) were approved | | | | | |
| #005 | TSGVVEC  **TS.43 CR1040** | Nacho Blázquez HPE | | **For Approval**  For Discussion | **TSG#46 Doc 006**  TSG#46 Doc 022 |
| HPE informed us about the latest changes to TS.43 and the features that are covered. They highlighted the new “Voice over new Radio” use case. The CR was reviewed and HPE gave further explanation for the changes. Vodafone highlighted that there had been regular calls to discuss the changes. Orange stated that this standard has been adopted in Android OS, which gives an indication of the importance of the document. T-Mobile US asked about future changes to the related Test book and HPE stated that it is currently on hold, and contribution would be very welcome from other companies to progress the work to completion.  **D46-003:** TSG#46 Doc 006 (TS.43 CR1040) was approved | | | | | |
| #006 | TSGRCS **TS.61 CR1001**  Update | Xin Wang  China Unicom | | **For Approval**  For Discussion | **TSG#46 Doc 010**  **(TSG46 Doc 020)**  TSG#46 Doc 013 |
| China Unicom provided background details about the RCS Test Guide (TS.61) and the latest changes. It was explained what is planned for the next phase, like defining a specification for chatbots which could be used for certification testing. There are some initials plans that will start in January. GSMA explained the content of TS.61 and Vodafone added that the document is meant as supporting testing information and is not intended for certification as those tests are in TS.11.  **D46-004:** TSG#46 Doc 010 (020) (TS.61 CR1001) was approved | | | | | |
| #007 | TSGUEX **TS.29 CR1008**  Update | Xin Wang  China Unicom | | **For Approval** | **TSG#46 Doc 007**  TSG#46 Doc 014 |
| China Unicom explained the history of UEX and GSMA stated that the latest changes don’t duplicate work being carried out in TSGAI. The added tests are aligned with TSG AI. China Unicom presented the latest addition to the document, which the meeting went through in detail. Qualcomm raised concerns about the value of UEX and GSMA explained the reasoning. Vodafone added that certification would help in identifying supporting terminals, while TS.29 helps in comparing them. China Mobile added that there is only a reference to the document in TS.53 and that it is not meant for certification.  **A46-001**: TSG AI to discuss the addition of the latest UEX CR to TS.29 and how references are used in TS.53 where past / fail criteria should be defined as TS.29 only has subjective criteria  **D46-005:** TSG#46 Doc 007 (TS.29 CR1008) was approved | | | | | |
| #008 | 5G Settings to be included in TS.32 (NSX) | Esther Arellano Villanueva  Telefonica | | For Discussion | TSG#46 Doc 004 |
| Telefonica presented the proposed changes in TS.32. Qualcomm raised concerns about some of the new settings and 3UK provided some background. It was explained that none of the 5G Settings are approved and the document is not for approval in this meeting and at present we are still collecting MNOs proposed 5G Settings. It was stated that it should be approved in the future. Vodafone suggested to have a dedicated call next year. | | | | | |
| #009 | IoT WI update | Nicolas Damour Sierra Wireless | | For Information | TSG#46 Doc 000 |
| Sierra Wireless reminded TSG that the TSGIoT group now works under AA.35 and that the latest changes were related to IoT Device Connection Efficiency. It was stated that TS.35 needs update in line with recent changes to TS.34. American Operators were encouraged to become more active, AT&T started the work and their contributions for future work should include 5G technologies. T-Mobile US asked if TS.35 is a Field Test document and it was explained that there are three different test environments, which include some field testing  **A46-002**: TSG Leadership to contact GSMA North America to give them an update and highlight the work on IoT to raise awareness and encourage engagement / contributions.  **A46-003**: TSG participants to review TS.34 & TS.35 and provide contributions which should include 5G. | | | | | |
| #010 | LS from 3GPP SA2 regarding  IMEI for Non-Public Networks/Private Networks without using USIM  5G Subscription identities  Proposed changes to TS.06, TS.30 & TS.37 | Paul Gosden  GSMA  Mungal Dhanda  Qualcomm | | For Discussion | TSG#46 Doc 005  TSG#46 Doc 015  TSG#46 Doc 016  TSG#46 Doc 017  TSG#46 Doc 018 |
| GSMA reminded about the LS from 3GPP regarding the usage of IMEI in devices on non-public networks, which do not require a UICC (SIM). It was highlighted that we would have to update TS.06, TS.30 and TS.37 to take into account these new requirements. Qualcomm had kindly provided draft CRs that they introduced. The connection options in 3gpp Release 15 and 16 were highlighted and a proposed reply for the LS was reviewed. Draft CRs for TS.06 and TS.30 were reviewed, but a CR to TS.37 would need much more discussion and possibly more input from delegates. TDC asked how stolen devices would be handled and GSMA confirmed that a stolen device should be blocked on private networks in the same manner as it is on public networks. Samsung agreed with the conclusion but asked to add 3GPP2 Networks. Qualcomm explained that the changes are only for 5G so 3GPP2 networks are not included. Qualcomm introduced the changes in TS.06 mainly adding the Network Selected Identifier and the reasons including some editorial fixes.  Qualcomm continued with TS.30 which again included editorial fixes and the main change was to allow using devices without an (U)SIM. GSMA/Qualcomm will provide CRs to TS.06 and TS.30 and circulate them with the group for review and email approval. TS.37 changes were introduced and it was noted that 3GPP are working on requirements for devices with multi-SIM (Rel17), which may require changes when this is released. Estimated release date Q3 2022  **A46-004**: Qualcomm to draft a LS reply to 3GPP SA2 regarding IMEI for Non-Public Networks for the Friday meeting to approve unless anyone objects until Friday, then we would circulate it and put it on regular Email Approval.  **Post Meeting Note:** It was requested to allow comments until the 10th Dec after this the LS will be considered approved and sent to 3GPP SA2  **A46-005:** GSMA to create CRs for TS.06 and TS.30 in IC2 and send them for TSG review and approval. These CRs will also need ISAG approval.  **A46-006:** GSMA to create a CR to TS.37 stating requirements for devices on private networks is currently out of scope. | | | | | |

**Wednesday 1st December 2021**

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| **TSG#46 PLENARY SESSION – DAY 2 (TSG#46b)** | | | | | |
| **Item** | **Agenda** | | **Presenter** | **Comments** | **Doc Number** |
| #011 | Welcome | Kay Fritz  Vodafone | |  |  |
| The TSG Chair welcomed the group | | | | | |
| #012 | GSMA Antitrust & IPR policy | Paul Gosden  GSMA | | For Information | [Antitrust](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GSMA%20Antitrust%20Policy.docx)  [IPR](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GSMA%20IPR%20Policy.docx) |
| TSG Director reminded the group that the meeting would be held in compliance with the GSMA Antitrust and IPR policy, as well as the US entity list. | | | | | |
| #013 | Review of Agenda | Kay Fritz  Vodafone | | For Information | TSG#46 Doc 001 |
| We reviewed the agenda and there was no objection or change. | | | | | |
| #014 | VoLTE Interoperability Testing | Wayne Cutler GSMA | | For Discussion | TSG#46 Doc 023 |
| GSMA informed us about VoLTE network and device tests, their experiences and the feedback they have received. There are four different test types and they reminded us about the challenges being faced by MNOs and the roaming of devices using VoLTE. GSMA is promoting device testing and network testing and highlighted the first fully certified network. Apple asked when TS.59 changed the title and nobody could answer this. Orange asked how Interoperability testing would work with O-RAN and 3UK agreed there are new things to be learned for O-RAN.  **A46-007**: TSG Leadership to clarify why TS.59 was renamed to “Device Type Definition” and how/when the current title was approved. | | | | | |
| #015 | TG, AA.35 & ISAG update  Hybrid meetings | Ian Pannell  GSMA | | For Information | Verbal |
| GSMA informed TSG that a new revision of AA.35 is very near to finalisation. The GSMA Website is being updated, providing more information about ISAG. Two new ISIGs have been approved. TG Operator meeting were reintroduced in 2021 with limited attendance. It was explained that there is a aim to reinstate WG f2F-meetings, but not necessarily in the same way as the past. Discussions are ongoing, but not yet finalized. | | | | | |
| #016 | TSG Meeting 2022 & 2023 | Paul Gosden  GSMA | | For Discussion | TSG#46 Doc 008 |
| TSG Leadership presented dates for meetings and shared the possibility of a f2f-meeting in March 2022 in Dubai. A decision was requested to be delayed until end of January based on recent developments but Orange, Qualcomm and 3UK asked to take the decision to have a virtual meetings in March.  **D46-006:** Based on this the next TSG/FTAG Meeting will be again virtual and GSMA will search for a host for a possible F2F-meeting in June.  **A46-008**: GSMA to inform Du about the meeting decision to not have a F2F meeting in March and to accept their alternative offer to host the Dec 2022 meeting  **A46-009:** Orange to see if they could host the TSG#48 June meeting in Paris France  **A46-010:** Qualcomm to see it they could host TSG#49 Sept meeting Toronto Canada | | | | | |
| #017 | UWB requirements gap analysis and LS reply to FiRa | Joonwoong Kim  SKT | | For Discussion | TSG#46 Doc 019  TSG#46 Doc 012 |
| SKT presented the current status about the gap analysis work, they pointed out the communication with FiRa and commented on the lack of input from other TSG member companies. The FiRa requirements are not publicly available so the gap analysis was a best effort mainly based on ETSI requirements, this then raised possible areas of work. Further support from FiRa was unlikely and TSG decided that sending them an LS would be worthwhile.  LS (TSG#46 Doc012) was presented and comments are allowed before December 10th, 2021 after this the LS will be considered approved and sent to FiRa. It was explained that without knowing the content of the FiRa specification it is impossible to complete the gap analysis.  **D46-007**: TSG#46 Doc 012 (LS reply to FiRa regarding UWB) was approved allowing until December 10th, 2021 for comments. | | | | | |
| #018 | TAC Database update | Tyler Smith  GSMA | | For Discussion | TSG#46 Doc 029 |
| GSMA gave us an update regarding trends in TAC allocation and highlighted some of the challenges like Bands/Network support. GSMA praised the OEMs who are very responsiveness when it comes to requests made during the TAC Challenge Process. Details about the GSMA Network Settings Exchange and the usage were presented. It was stated that there will be changes based on the usage of devices without a SIM in private networks coming along in Q1 2022. GSMA Services team will be updating the band profile system in the near future based on the feedback they received from OEMs. Qualcomm stated that there will also be changes required regarding satellite communication and there will be details in 2022. | | | | | |
| #019 | ETSI Antenna Work | Doug Roberts  Orange | | For Discussion | TSG#46 Doc 003 |
| Orange informed us about the current status at ETSI work regarding Antenna Performance and pointed out the limits that were introduced, which will be part of the EU regulatory requirements (RED). There was a presentation at the EU that can be reviewed here: <https://www.etsi.org/events/past-events/1990-2021-11-webinar-eu-regulatory-over-the-air-rf-performance-of-mobile-phones>  4G limits that were agreed, will become mandatory in 2023. 3UK asked if this work will be continued into 5G and Orange explained that at some point it most certainly will, but it will take some time. | | | | | |
| #020 | GSMA Services  Product Portfolio update | Conor Dempsey  GSMA | | For Discussion | TSG#46 Doc 027 |
| Connor Dempsey introduced himself to TSG and gave an update about Services offered by GSMA. He then went into more detail about the newer tools and information services they provide for example Roaming Testing Services as presented in detail on Monday to TSG | | | | | |

**Friday 3rd December 2021**

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| **TSG#46 PLENARY SESSION – DAY 3 (TSG#46c)** | | | | | |
| **Item** | **Agenda** | | **Presenter** | **Comments** | **Doc Number** |
| #021 | Welcome | Kay Fritz  Vodafone | |  |  |
| The TSG Chair welcomed the group | | | | | |
| #022 | GSMA Antitrust & IPR policy | Paul Gosden  GSMA | | For Information | [Antitrust](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GSMA%20Antitrust%20Policy.docx)  [IPR](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GSMA%20IPR%20Policy.docx) |
| TSG Director reminded the group that the meeting would be held in compliance with the GSMA Antitrust and IPR policy, as well as the US entity list. | | | | | |
| #023 | Review of Agenda | Kay Fritz  Vodafone | | For Information | TSG#46 Doc 001 |
| We reviewed the agenda and there was no objection or change. | | | | | |
| #024 | GCF Update | Tim Evans  NTT Docomo | | For Information | Verbal |
| ntt Docomo reported about the latest meetings from GCF and stated that there had been similar device certification in 2021 as seen in previous years. While LG withdraw from Terminal production, it was equalled by other companies. GCF continues to stay a healthy organisation despite the pandemic. | | | | | |
| #025 | Antenna Performance WI update | Abbas Alpaslan Vodafone | | For Information | TSG#46 Doc 025 |
| Vodafone gave an update about the antenna performance WI. They reflected on the recent survey and raised concern that there are bands from North America missing. Further input would be very welcome! The challenges of the different antennas based on the survey results was explained. They continued with an update of 5G OTA test method. First statistics were presented and it was asked that interested companies should join the next Antenna call, TSGAP#69 January 14th, 2022.  Orange introduced a new OTA test method that would save 75% testing time compared to the current method used, yet it still provides very similar results but only measuring 12 points instead of 288. To use this new method, there is no need to create any new hardware/software, but you only need to adjust the existing process. For more details join the TSGAP group. | | | | | |
| #026 | AIoT Study Item Update | Li Hanyang  China Mobile | | For Discussion | TSG#46 Doc 030  TSG#46 Doc 031 |
| China Mobile updated us about the status of the AIoT study item. It was explained that a framework document is being drafted and more use cases need to be added. Delegates were asked to provide input to continue the work. | | | | | |
| #027 | TSGAI Update | Baorong Li  China Telecom | | For Discussion | TSG#46 Doc 024 |
| The TSGAI Chair from China Telecom gave us an update about the current status of Artificial Intelligence work and on the status of TS.53, a test specification for AI based on requirements defined in TS.47. The progress has been good but contributions have mainly been provided by China Telecom. Qualcomm has invited MLcommons to join the work, but setting up a call is proving challenging. Currently the document (TS.53) is in v0.3, everyone is invited to review the document and provide contributions. China Telecom provided an overview of the content and hopes to improve the test methods in the near future. T-Mobile US asked about the possible adoption of the test cases from MLcommons. GSMA explained that it was very difficult to align with them as they don’t want an agreement with the GSMA but have open public meetings, it is hoped to have a call with them in January. However anyone can bring contributions to the TSGAI (TS.53) work referencing MLcommons publicly available specifications like in other TSG Subgroups and other SDO specifications. | | | | | |
| #028 | 3GPP RAN Update | Mungal Dhanda  Qualcomm | | For Information | Verbal |
| Qualcomm shared with us the latest information from 3GPP and explained that they still plan to finalize Release 17 in the first quarter of 2022, but there will be fixes and additions later in the year. 3GPP are considering AI for networks in Release 19. Qualcomm shared feedback from one of their first tries to have f2f-meetings in multiple locations (hubs) and connect them virtually, this had not work very well due to delegates in different time zones. Orange asked if there are IoT feature list for the different Releases. Qualcomm explained that this information might not be available in such detail, but said they would see what was available  **AP46-011:** Qualcomm to provide details of what is include or proposed to be included in 3GPP Rel16, Rel17, Rel18 & Rel19 | | | | | |
| #029 | FTDG#76 Update | Marian Madan Qualcomm | | For Discussion | TSG#46 Doc 032 |
| Qualcomm provided a review of achievements in FTDG#76. There hadn’t been any input for 5G and it was explained that it reached maintenance mode and they introduced possible new tests for 5G that would be considered for next year. The VoNR work plan had been completed and this work will also move to maintenance mode. They highlighted the approved RCS tests and explained that Chatbots certification is still missing.  Changes for the next version of TS.11 will be sent to TSG for approval ASAP. | | | | | |
| #030 | HD Voice Update | Paul Gosden  GSMA | | For Discussion | Verbal |
| GSMA stated that they had reached out to several organisations (e.g. GSMA North America, Network Group) but haven’t receive any feedback yet. There are some proposals from Samsung but this will take some more time to develop as the progress is slow. It was requested to support if anyone else is interested. Ntt Docomo asked when something would be available for review and asked about VoNR, which would be the same as VoLTE. As for a date, it is too early to say. Samsung added that the codecs for VoNR and VoLTE are the same, so the work should be easy. | | | | | |
| #31 | NFC | Kay Fritz  Vodafone | | For Information | Verbal |
| Vodafone explained the challenges that GCF face with the current NFC certification and informed the delegates about a recent meeting that agreed on providing a consolidated list of test cases for a new certification work item, which would be based on existing test cases. The proposal was recently shared with the delegates and companies are asked to review the list before the next call in January, when it is planned to approve the list and send it to GCF.  The list can be found in IC2 [here](https://infocentre2.gsma.com/gp/wg/TS/WorkingDocuments/GCF_NFC_WI%20Proposal.xlsx) | | | | | |
| #031 | **TS.60 Updates CR1002** | Paul Gosden  GSMA | | **For Approval** | **TSG#46 Doc 009**  **(TSG46 Doc 021)** |
| TSG leadership introduced the CR to TS.60 that should describe the reactivation of an archived document and Qualcomm and Nokia provided feedback that we added.  **A46-012:** TSG Leadership to add a definition for “Archived Document” to TS.60  **D46-008:** Once A46-012 is completed TSG#46 Doc 009 (TS.60 CR1002) is to be shared with the delegates for email approval until 10th of December. | | | | | |
| #032 | **TS.60 CR1003**  **Document Numbering** | Scott Probasco  TMUS | | **For Approval** | **TSG#46 Doc 011** |
| T-Mobile US introduced the CR to the group and it was accepted without any change/question.  **D46-009:** TSG#46 Doc 011 (TS.60 CR1003) was approved and will be sent via the IC2 CR approval process and then published with CR1002 | | | | | |
| #033 | AOB | | | | |
| The requested 2G/3G sunset list wasn’t available yet. Orange said that it was defined in one of the NG subgroups and we gave GSMA an AP to provide a presentation for the next TSG meeting.  **A46-013:** GSMA to provide the 2G/3G sunset list and share with the delegates at TSG#47.  TSG reply LS to SA2 had requests from Nokia and Apple for some more time, so the document was put on email approval.  **D46-010:** TSG#46 Doc 028 (TSG reply LS to SA2) was put on email approval until December 10th, 2021.  We continued the discussion about a possible F2F-meeting in March but it was decided by the group to keep the decision from Day2 – TSG#47 will be conference calls  Orange again requested written input from GSMA regarding F2F meetings taking into consideration:   * Health and safety of the delegates * Liability in case of cancellation of a meeting, for the host and delegates * Structure for running such a meeting   T-Mobile US reminded the group to take the above up with their TG delegates.  **A46-014:** GSMA to provide guidance for F2F-meetings regarding the Health and Safety of delegates, possible liabilities in case of cancellations at short notice and structure for running those meetings. | | | | | |
|  | TSG#46 Meeting closed | | | | |

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**Decision Points**

| **Decision Number** | **Decision** |
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| D46-001 | Agenda was approved |
| D46-002 | Minutes for TSG#45 Approved |
| D46-003 | TSG#46 Doc 006 (TS.43 CR1040) was approved |
| D46-004 | TSG#46 Doc 010 (020) (TS.61 CR1001) was approved |
| D46-005 | TSG#46 Doc 007 (TS.29 CR1008) was approved |
| D46-006 | Based on this the next TSG/FTAG Meeting will be again virtual and GSMA will search for a host for a possible F2F-meeting in June. |
| D46-007 | TSG#46 Doc 012 (LS reply to FiRa regarding UWB) was approved allowing until December 10th, 2021 for comments. |
| D46-008 | Once A46-012 is completed TSG#46 Doc 009 (TS.60 CR1002) is to be shared with the delegates for email approval until 10th of December. |
| D46-009 | TSG#46 Doc 011 (TS.60 CR1003) was approved and will be sent via the IC2 CR approval process and then published with CR1002 |
| D46-010 | TSG#46 Doc 028 (TSG reply LS to SA2) was put on email approval until December 10th, 2021 |

**Actions Items**

| **Action Number** | **Actions** | **Status** |
| --- | --- | --- |
| A44-003 | GSMA TSG to contact LiFI Alliance to establish liaison agreement.  Agreement has been sent to LiFi Alliance and is with them for review (Sept 2021) | WIP |
| A44-005 | GSMA to propose a CR for Tethering and Attach APN process to TS.32 which will be reviewed by TSG. | Closed |
| A45-001 | GSMA staff to ensure the new abbreviation are added to the abbreviation table in TS.06 & TS.30 before publication | Closed |
| A45-002 | GSMA to update the document and share with 5GJA and request further 5G network setting | Closed |
| A45-003 | All to check within their company and provide input for 5G networks settings which could be added to TS.32. | WIP |
| A45-004 | TSG Leadership to propose additions to TS.60 about how to handle changes to archived documents | Closed |
| A45-005 | GSMA to setup calls for the next UEX Cc. | Closed |
| A45-006 | GSMA to inform ISAG of the new TSG ISIG Subgroup | Closed |
| A45-007 | GSMA to inform TSG members about the approval of this new WI and invite them to join the group in IC2 | Closed |
| A45-008 | GSMA to organise elections of the TSGNS chair & deputy chair | Closed |
| A45-009 | GSMA to setup conference calls to start the work | Closed |
| A45-010 | GSMA to set up a TSG Test MS Teams call | Closed |
| A45-011 | Delegates to check within their company to see if they could host a meeting in 2022. | WIP |
| A45-012 | SKT to check how accurate the location distance is in FiRa. | Closed |
| A45-013 | GSMA to set up a dedicated call to check to finalise the gap analysis and decide on next steps/LS to ETSI/FiRa | Closed |
| A45-014 | TSG Leadership team to keep TSG delegates informed about the progress of the alignment work. (UWB) | Closed |
| A45-015 | GSMA to share Slide 8&9 of Doc018 with the IoT groups to highlight the issue. | Closed |
| A45-016 | GSMA to provide details of the Test IMEI allocated by each RBs in the last 12 months. | Closed |
| A45-017 | GSMA to add information about the lack of experts for HD Voice in the TSG report for TG. | Closed |
| A45-018 | GSMA to update GSMA North America SG about the current lack of HD Voice experts and ask for assistance. | Closed |
| A45-019 | TSG BLM Leadership to create a LS to share the latest TS.09 with GCF and PTCRB. | Closed |
| A45-020 | GSMA to setup a call with NG in order to discuss possible problems for Field Trial and Interoperability Testing based on Open RAN. | WIP |
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| A46-001 | TSG AI to discuss the addition of the latest UEX CR to TS.29 and how references are used in TS.53 where past / fail criteria should be defined as TS.29 only has subjective criteria. | New |
| A46-002 | TSG Leadership to contact GSMA North America to give them an update and highlight the work on IoT to raise awareness and encourage engagement / contributions. | New |
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| A46-005 | GSMA to create CRs for TS.06 and TS.30 in IC2 and send them for TSG review and approval. These CRs will also need ISAG approval. | New |
| A46-006 | GSMA to create a CR to TS.37 stating requirements for devices on private networks is currently out of scope. | New |
| A46-007 | TSG Leadership to clarify why TS.59 was renamed to “Device Type Definition” and how/when the current title was approved. | New |
| A46-008 | GSMA to inform Du about the meeting decision to not have a F2F meeting in March and to accept their alternative offer to host the Dec 2022 meeting | New |
| A46-009 | Orange to see if they could host the TSG#48 June meeting in Paris France | New |
| A46-010 | Qualcomm to see it they could host TSG#49 Sept meeting Toronto Canada | New |
| A46-011 | Qualcomm to provide details of what is include or proposed to be included in 3GPP Rel16, Rel17, Rel18 & Rel19 | New |
| A46-012 | TSG Leadership to add a definition for “Archived Document” to TS.60 | New |
| A46-013 | GSMA to provide the 2G/3G sunset list and share with the delegates | New |
| A46-014 | GSMA to provide guidance for F2F-meetings regarding the Health and Safety of delegates, possible liabilities in case of cancellations at short notice and structure for running those meetings. | New |

**Attendees Day 1 (29th Nov 2021)**

| **Name** | **Company** |
| --- | --- |
| Roberto Jorge Hernandez Perez | America Movil |
| Simon | Blah |
| Xin Wang | China Unicom |
| Tatiana Pena Valencia | Claro |
| Schmitt, Florian Leon | DT |
| Paul Gosden | GSMA |
| Blazquez, Nacho | HPE |
| Ahmed Sabanaa | Jawwal |
| Hamza Jraiwi | Jawwal |
| Casati, Alessio | Noika |
| Gkatzikis, Lazaros | Noika |
| Timothy Evans | NTT Docomo |
| GOUMBALLE Momar | Orange |
| Mohammad AbdelRaziq | Paltel |
| Omar Qwariq | Paltel |
| Mungal Dhanda | Qualcomm |
| David James Nash | Samsung |
| Jim Wu | Samsung |
| Nicolas Damour | Sierra Wireless |
| Jesper Matzen Lund | TDC |
| Ferrabone Paolo | Telecom Italia |
| Napolitano Antonia | Telecom Italia |
| ESTHER ARELLANO VILLANUEVA | Telefonica |
| Andrew C. Utomo | Three |
| Irwan Radius | Three |
| Richard Ormson | Three |
| Willy Firdaus Tandililing | Three |
| Probasco, Scott | TMUS |
| Marcin Adamczyk | Truephone |
| Fritz, Kay | Vodafone |
| Hatem Galal | Vodafone |
| Mohamed Helal | Vodafone |
| Rauer, Petra | Vodafone |

**Attendees Day 2 (1st Dec 2021)**

| **Full Name** | **Company** |
| --- | --- |
| Richard Ormson | 3 UK |
| Hyewon Lee | Apple |
| Ron Borsato | AT&T |
| Ya Liu | China Mobile |
| Chen Shuzhen | China Telecom |
| Di Zhang | China Telecom |
| Shuzhen Chen | China Telecom |
| Wangxin | China Unicom |
| Tatiana Pena Valencia | Claro |
| Schmitt, Florian Leon | DT |
| Carlos Bosch | GSMA |
| Conor Dempsey | GSMA |
| Ian Pannell | GSMA |
| Paul Gosden | GSMA |
| Tyler Smith | GSMA |
| Wayne Cutler | GSMA |
| Kun Pang | Honor |
| Gkatzikis, Lazaros | Nokia |
| Timothy Evans | NTT Docomo |
| Doug Roberts | Orange |
| Mungal Dhanda | Qualcomm |
| David James Nash | Samsing |
| Jim Wu | Samsung |
| Joonwoong Kim | SKT |
| Jesper Matzen Lund | TDC |
| Ferrabone Paolo | Telecom Italia |
| ESTHER ARELLANO VILLANUEVA | Telefonica |
| Svanberg Svante | Telenor |
| Probasco, Scott | TMUS |
| Marcin Adamczyk | Truephone |
| Bhagwan Singh | Tune Talk |
| Fritz, Kay | Vodafone |
| Rauer, Petra | Vodafone |

**Attendees Day 2 (1st Dec 2021)**

| **Full Name** | **Company** |
| --- | --- |
| Hyewon Lee | Apple |
| PRATHER, SCOTT D | AT&T |
| Michael Ciplajevs | Bureauveritas |
| Hanyang Li | China Mobile |
| Ya Liu | China Mobile |
| Baorong Li | China Telecom |
| Di Zhang | China Telecom |
| Shuzhen | China Telecom |
| Tatiana Pena Valencia | Claro |
| Richard Ormson | Corpuk |
| Jussi Kuusisto | Dish |
| Sauter, Martin | DT |
| Schmitt, Florian Leon | DT |
| Paul Gosden | GSMA |
| Kun Pang | Honor |
| Gkatzikis, Lazaros | Nokia |
| Timothy Evans | NTT Docomo |
| Doug Roberts | Orange |
| GOUMBALLE Momar | Orange |
| Marian Madan | Qualcomm |
| Mungal Dhanda | Qualcomm |
| David James Nash | Samsung |
| Jim Wu | Samsung |
| Jesper Matzen Lund | TDC |
| Mayra Sol Fernandez Linck | Teco |
| Ferrabone Paolo | Telecom Italia |
| ESTHER SUSANA ARELLANO VILLANUEVA | Telefonica |
| Mohamed Eldakroury | Telus |
| Probasco, Scott | TMUS |
| Marcin Adamczyk | Truephone |
| Alpaslan, Abbas | Vodafone |
| Fritz, Kay, Vodafone | Vodafone |
| Rauer, Petra | Vodafone |