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| ITU logo | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | | TSAG-TD797 |
| **TSAG** |
| **Original: English** |
| **Question(s):** | | N/A | | E-Meeting, 21-25 September 2020 |
| **TD (Ref.:** [SG2-LS168](http://handle.itu.int/11.1002/ls/sp16-sg2-oLS-00168.docx)) | | | | |
| **Source:** | | ITU-T Study Group 2 | | |
| **Title:** | | LS on ITU-T SG2 lead study group activities [from ITU-T SG2] | | |
| **Purpose:** | | Information | | |
| **LIAISON STATEMENT** | | | | |
| **For action to:** | | | - | |
| **For comment to:** | | | - | |
| **For information to:** | | | TSAG | |
| **Approval:** | | | ITU-T Study Group 2 meeting (Virtual, 7 September 2020) | |
| **Deadline:** | | | N/A | |
| **Contact:** | | | Phil Rushton UK | Tel: +44 1206 729738 E-mail: [philrushton@rcc-uk.uk](mailto:philrushton@rcc-uk.uk) |

A new liaison statement has been received from SG2.

This liaison statement follows and the original file can be downloaded from the ITU ftp server at <http://handle.itu.int/11.1002/ls/sp16-sg2-oLS-00168.docx>.

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| ITU logo | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | | | **SG2-LS168** | |
| **STUDY GROUP 2** | |
| **Original: English** | |
| **Question(s):** | | | All/2 | | Virtual, 7-8 September 2020 | |
| **(Ref.:** [**SG2-TD1199**](https://www.itu.int/md/T17-SG02-200907-TD-GEN-1199/en)**)** | | | | | | |
| **Source:** | | | ITU-T Study Group 2 | | | |
| **Title:** | | | LS on ITU-T SG2 lead study group activities | | | |
| **Purpose:** | | | Information | | | |
| **LIAISON STATEMENT** | | | | | | |
| **For action to:** | | | | - | | |
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| **Deadline:** | | | | N/A | | |
| **Contact:** | | Phil Rushton UK | | | | Tel: +44 1206 729738 E-mail: [philrushton@rcc-uk.uk](mailto:philrushton@rcc-uk.uk) |

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| --- | --- |
| **Keywords:** | Numbering, Naming, Identifiers, Services, Routeing, Telecommunications Management, Fraud Management. |
| **Abstract:** | This liaison contains the report of the ITU-T SG2 on lead study group activities (December 2019 – September 2020). |

# Background

According to Resolution 2 of WTSA-16, ITU-T SG2 is the lead study group on:

– Lead study group on numbering, naming, addressing, identification and routing

– Lead study group on service definition

– Lead study group on telecommunications for disaster relief/early warning, network resilience and recovery

– Lead study group on telecommunication management

# Report of ITU-T SG2 on lead study group activities (December 2019 – September 2020)

## 2.1 Allocation of Global Resources

These resources are assigned by the Director of the TSB in accordance with the criteria detailed in the relevant ITU-T Recommendations that are under the responsibility of ITU-T SG2. These criteria are both service based and network based.

The activity in support of allocations for service based allocations, for the period between SG2 meetings (December 2019 –September 2020), is as follows:

|  |  |
| --- | --- |
| **Number of processed requests for UIFN =**  (A) - Number of Assigned and implemented UIFN = 270  (C) - Number of Cancelled UIFN = 10  (D) - Number of Disconnected UIFN = 224  (M) - Number of Modified UIFN’s Details = 79  (O) - Number of UIFN Operated by a secondary operator = 20  (X) - Number of UIFN Disconnected by a secondary operator = 1431  (R) - Number of Reserved UIFN = 282  (S) - Number of Temporary Reserved UIFN = 99  (Y) + (Z) - Number of Transferred UIFN to another ROA = 38 | **2453** |
| **Number of processed requests for Universal International Premium Rate Number** | **0** |
| **Number of processed requests for Universal International Shared Cost Number** | **0** |
| **Number of processed requests for ITU International Network Designator ATM End System Address** | **0** |

In addition, the following resources were allocated to networks:

**Applications for E.164 and E.212 shared codes – Assigned**

The TSB Director has made the following assignments:

|  |  |  |  |
| --- | --- | --- | --- |
| **Applicant** | **Request/application** | **Assigned/extended code** | **Assignment/grant date** |
| Bouygues Telecom | Request for an E.212 shared MCC and MNC for Bouygues Telecom | E.212 shared MCC and MNC 901 77 | 28 August 2020 |
| Orange | Request for a 2-digit MNC under the shared E.212 MCC for trials MCC 991 | E.212 shared MCC and trial-MNC 991 02 | 7 August 2020 |
| A1 Telekom Austria AG | Request for an E.212 shared MCC and MNC for A1 Telekom Austria AG | E.212 shared MCC and MNC 901 76 | 31 July 2020 |
| Podsystem Ltd. | Request for an E.164 shared CC and IC and an E.212 shared MCC and MNC for Podsystem Ltd. | E.164 shared CC and IC 883 340 and E.212 shared MCC and MNC 901 75 | 31 July 2020 |
| Etisalat | Request for an E.212 shared MCC and MNC for Etisalat | E.212 shared MCC and MNC 901 74 | 13 July 2020 |
| Cubic Telecom Ltd. | Request for an E.164 shared CC and IC and an E.212 shared MCC and MNC for Cubic Telecom Ltd. | E.164 shared CC and IC 883 330 and E.212 shared MCC and MNC 901 73 | 1 June 2020 |
| Tele2 IoT | Request for an E.164 shared CC and IC and an E.212 shared MCC and MNC for Tele2 IoT | E.164 shared CC and IC 883 320 and E.212 shared MCC and MNC 901 72 | 1 June 2020 |
| Tampnet AS | Request for an E.212 Shared MCC and MNC for Tampnet AS | E.212 shared MCC and MNC 901 71 | 28 April 2020 |
| Clementvale Baltic OÜ | Request for an E.164 Shared CC and 3-digit IC and an E.212 Shared MCC and MNC for Clementvale Baltic OÜ | E.164 shared CC and IC 883 310 and E.212 shared MCC and MNC 901 70 | 3 April 2020 |
| Legos | Request for an E.164 Shared CC and IC and an E.212 shared MCC and MNC for Legos | E.164 shared CC and IC 883 5180 and E.212 shared MCC and MNC 901 69 | 9 December 2019 |

Applications for E.218 (T)MCC and (T)MNC

|  |  |  |  |
| --- | --- | --- | --- |
| **Applicant** | **Request/Application** | **Date of letter of application** | **Status** |
| Vattenfall Vindkraft A/S | Request for an E.218- (T)MCC and (T)MNC | Shared E.218 (T)MCC and (T)MNC 944 0002 | 21 January 2020 |

The following applications for global resources are still being progressed:

|  |  |
| --- | --- |
| **Applicant** | **Request/application** |
| Nokia | Request for an E.212 shared MCC and MNC and an E.164 shared CC and IC for Nokia |

The following applications were reviewed and progressed at the SG2 meeting in May/June 2020 as the request was deemed to be outside of current criteria, or the request required guidance from the study group:

|  |  |
| --- | --- |
| **Applicant** | **Request/Application** |
| Athalos PRS-Telecom | Request for an E.164 shared CC and IC for Athalos |
| WGT (World’s Global Telecom) | WGT's initiative of global mobile digital platform for people with disabilities (GLEOSS) |

The following applications are awaiting a response from the applicant:

|  |  |
| --- | --- |
| OCHA | Reservation of E.164 CC 888 and E.212 MCC and MNC 901 88 for humanitarian purposes to OCHA |
| G3ict | Application for the allocation by ITU of the 887 Country Code to G3ict to establish a global telecommunication service for Persons with Disabilities in cooperation with WGT |
| JpU Io Ltd. | Request for an E.212 shared MCC and MNC for JpU Io Ltd. |

A new [Numbering Applications Monitor](https://extranet.itu.int/sites/itu-t/studygroups/2017-2020/sg2/SitePages/Numbering%20Applications%20Monitor.aspx) site is now available for ITU-T SG2 experts who wish to follow the progress of numbering resource applications in real time. The site may be accessed only using a valid ITU user account (ITU-T Members or Associates of ITU-T SG2).

## 2.2 Reports of misuse

In response to the significant decline in the number of reports of misuse of numbers, ITU-T SG2 undertook a review of the relevant Recommendation. Revised [Recommendation ITU-T E.156](https://www.itu.int/rec/T-REC-E.156/en) was Approved by TAP at the closing plenary of ITU-T SG2 on 5 June 2020.

The revised text of the Recommendation better reflects the different types of numbering resources between directly assigned resources, so called global numbers, which are the responsibility of the Director TSB, and indirectly assigned resources, numbers that are the responsibility of Member States. The proposed amendment to the Recommendation seeks to make the reporting of the indirectly assigned resources more effective through email notification to a pre-determined mailing list of misuse rather than registration of the report of misuse for action by the TSB.

A report on activities related to misuse of numbering resources can be found in [SG2-TD968](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T17-SG02-200527-TD-GEN-0968).

An alleged misuse of +888 that was reported to the study group, without the necessary detail to follow up, was noted by the meeting. The meeting further agreed that it was crucial that any action that would prevent unassigned codes to be misused should be taken, and that the note on the Operational Bulletin was a first and necessary step to this end.

## 2.3 Recommendations

At its last meetings (May/June and September 2020), SG2 took the following decisions with respect to:

Approved Recommendations

|  |  |  |
| --- | --- | --- |
| Rec. # | Rec. title | Documents |
| M.3362 (ex M.rtafm) | Requirements for Telecom anti-Fraud Management in the TMN | Text for Approval: [SG2-TD1102-R2](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1102)  Consultation: [TSB Circular 229](https://www.itu.int/md/T17-TSB-CIR-0229/en) Consultation result: [SG2-TD976](https://www.itu.int/md/T17-SG02-200527-TD-GEN-0976) |
| E.218 (2004) Amd.1 | Management of the allocation of terrestrial trunk radio Mobile Country Codes - Annex B | Text for Approval: [SG2-R22](https://www.itu.int/md/T17-SG02-R-0022) Consultation: [TSB Circular 229](https://www.itu.int/md/T17-TSB-CIR-0229/en) Consultation result: [SG2-TD976](https://www.itu.int/md/T17-SG02-200527-TD-GEN-0976) |
| E.212 (2016) Amd.2 | The international identification plan for public networks and subscriptions - Annex G | Text for Approval: [SG2-R21](https://www.itu.int/md/T17-SG02-R-0021) Consultation: [TSB Circular 229](https://www.itu.int/md/T17-TSB-CIR-0229/en) Consultation result: [SG2-TD976](https://www.itu.int/md/T17-SG02-200527-TD-GEN-0976) |
| E.164.2 | E.164 numbering resources for trials | Text for Approval: [SG2-R20](https://www.itu.int/md/T17-SG02-R-0020) Consultation: [TSB Circular 229](https://www.itu.int/md/T17-TSB-CIR-0229/en) Consultation result: [SG2-TD976](https://www.itu.int/md/T17-SG02-200527-TD-GEN-0976) |
| E.156 | Guidelines for ITU-T action on reported misuse of E.164 number resources | Text for Approval: [SG2-R19](https://www.itu.int/md/T17-SG02-R-0019) Consultation: [TSB Circular 229](https://www.itu.int/md/T17-TSB-CIR-0229/en) Consultation result: [SG2-TD976](https://www.itu.int/md/T17-SG02-200527-TD-GEN-0976) |
| M.3164 (ex M.tsm-gim) | Generic information model for on-site telecommunication smart maintenance | [SG2-TD1101-R1](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1101) |

Recommendations Determined under TAP

|  |  |  |
| --- | --- | --- |
| Rec. # | Rec. title | Documents |
| E.212 (2016) Annex H (previously known as Annex G) | Criteria and procedures for the assignment and reclamation of shared ITU-T E.212 mobile country codes (MCC) for regional and other international organizations (ROIO)/standards development organization (SDO)-specified networks and their respective mobile network codes (MNCs) | Determined text: [SG2-TD1017](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1017) Text for Approval: [SG2-R27](https://www.itu.int/md/T17-SG02-R-0027/en) Consultation: [TSB Circular 254](https://www.itu.int/md/T17-TSB-CIR-0254/en)  Responses: [SG2-TD1146](https://www.itu.int/md/T17-SG02-200907-TD-GEN-1146) Contributions: [SG2-C279](https://www.itu.int/md/T17-SG02-C-0279); [SG2‑C281](https://www.itu.int/md/T17-SG02-C-0281); [SG2-C282](https://www.itu.int/md/T17-SG02-C-0282); [SG2‑C283](https://www.itu.int/md/T17-SG02-C-0283); [SG2-C285](https://www.itu.int/md/T17-SG02-C-0285) |

Recommendations Consented under AAP

|  |  |  |
| --- | --- | --- |
| Rec. # | Rec. title | Document |
| M.3373 (ex M.rcsnsm) | Requirements for synergy management of cloud and SDN-based networks | [SG2-TD1182-R1](https://www.itu.int/md/T17-SG02-200907-TD-GEN-1182) |

Supplements to be approved

|  |  |  |
| --- | --- | --- |
| Supp.# | **Supp. Title** | **Document** |
| TR.CLE | Identify call location for emergency services | [SG2-TD1091-R1](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1091) |
| E.Suppl.11 to ITU-T E series | Criteria for M2M/IoT-related assignments Under Recommendation ITU-T E.164.1 and Recommendation ITU-T E.212 Annex A | [SG2-TD1098](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1098/en) |

# WTSA20 preparations

Parts I and II of the ITU-T SG2 report to WTSA-20, and proposals to streamline WTSA Resolutions, were discussed before and during the SG2 meeting held in May/June 2020. This work was carried out by [correspondence](https://www.itu.int/ml/lists/arc/t17sg2nsp), supported by the [documents collaboration site](https://extranet.itu.int/sites/itu-t/studygroups/2017-2020/sg2/wtsa20/) and a series of e‑meetings held on:

˗ 4 March 2020.

˗ 1 and 15 April 2020.

˗ 6 and 22 May 2020.

An ad-hoc meeting to further discuss these reports was held on 27 May 2020. The output drafts of Part I and II of the report were approved at the closing plenary held on 5 June 2020, as contained in [SG2-TD1042-R3](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1042/en) and [SG2‑TD1043‑R3](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1043/en), respectively. Proposed updates to ITU-T SG2’s mandate and Question texts were transmitted to TSAG in [SG2-LS1198](https://www.itu.int/md/T17-SG02-200907-TD-GEN-1198).

A further e-meeting was held on 3 August 2020 to conclude discussions on streamlining WTSA Resolutions. Proposed revisions to WTSA Resolutions 20, 29, 61, and 65 were sent forward to the SG2 Plenary on 7-8 September 2020 for final review.

# Progress

As noted in the table above, the meeting approved a supplement with criteria for IoT/M2M-related assignments of global resources under E.164 country codes and E.212 country codes. Further study on normative text was identified as future work. Additionally, SG2 has agreed to further develop guidance on the NCT processes on the application for, and assignment, of global NNAI resources as a supplement.

Discussions on the possible use of Country Code +888 as a shared humanitarian global country code supported progressing the proposed work as a Technical Report, and agreed to hold an e-meeting dedicated to this topic, which would provide an opportunity to more fully address the questions and comments raised. The results of the subsequent e-meeting, held on 11 August 2020, are contained in [SG2-TD1178](https://www.itu.int/md/T17-SG02-200907-TD-GEN-1178/en) and will inform further work.

Revisions to Recommendation ITU-T E.157 (Calling Number Presentation Delivery) and a draft new Supplement to E.157 (E.sup.spoofing to E.157) on countering spoofing were discussed. The work was further progressed through several e-meetings on 1 July 2020, 17 July 2020, and 5 August 2020.

The latest base text of Draft Recommendation E.IoT-NNAI was reviewed and it was agreed as the way forward. Further contributions were called for. Also included in the text of this draft Recommendation was the proposal from CNIC (China) that it had submitted.

Further progress was made on the draft new Recommendations E.ACP (Alternative Calling Procedures) and E.dit (Deemed impermissible traffic), as well as amending Recommendation ITU‑T E.370 “Service principles when public circuit-switched international telecommunication networks interwork with IP-based networks”.

E.212 Annex H was discussed in the meeting with a proposal being sought to re-visit the proposed text to insert a new clause. There was no consensus to revisit that decision so as to open a discussion on whether Annex H should be amended. After extensive discussion, the meeting agreed that the text of the proposed new Annex H can be considered as stable. The meeting therefore agreed to propose Annex H for determination and emphasized that Member States are welcome to provide any additional comments as part of the TAP ballot consultation process. An e-meeting was held on 6 August 2020 to further discuss issues related to E.212 in general.

E.118 will be further developed based on discussions of a proposal from GSMA on its intention to define and assign EID resources for M2M/IoT.

The future use of E.164 CC +878 was discussed, based on a contribution from Malta, and it was noted that services available under +878-10 in the future if the range is allocated for M2M/IoT, and any “grandfathering” or “exceptions” to future general rules applicable to 878, warrant further discussion moving forward.

The meeting further discussed the referral by the NCT to the SG of a request for an E.164 CC+IC, because the request sought to use one numbering resource for provisioning a service that was substantially similar to an ITU-T-approved global service for which a country code has already been reserved or assigned. (The E.164 country code for International Premium Rate Service is 979.) The meeting invited the applicant to contribute additional information in response to the potential overlap and the issues raised.

Progress was made on the following draft recommendations:

˗ M.rscnsm on “Requirements for synergy management of cloud and SDN-based networks,” based on the comments received during the interim meeting.

˗ M.AI-tom “Framework of AI enhanced Telecom Operation and Management (AI-TOM),” based on the comments received during the interim meeting.

˗ M.resm-AI “Requirements for energy saving management of 5G RAN system with AI,” based on the comments received during the interim meeting.

In addition a new work item was approved on “Requirements for work order processing in telecom management with AI” (M.rwop-AI). This activity provides a further specific application scenario by using the framework proposed in the previous work item M.AI-tom.

The new version of X.rest on “Guidelines for defining REST-based managed objects and management interfaces” was reviewed. This version provided the modeling guidelines for REST-based interface, as well as the formal definitions of generic managed object and common data types. Also reviewed was Q.rest on “REST-based management services” that provided some formal definitions of the management services. The meeting mainly agreed with the new changes. These two work items will be further progressed in interim meetings jointly with 3GPP.

# Cooperation with other SGs

Cooperation with other study groups continues, specifically ITU-T SGs 3 5, 11, 12, 13 and 20. The highlights of the cooperation are:

˗ Reply liaisons were sent to SG3 informing SG3 of the on-going work in SG2 on a definition of OTT bypass. SG2 will keep SG3 informed about the progress of relevant work in the future and has informed SG3 that SG2 is the lead SG on service definition. In addition, SG2 agrees with the overall sentiment of SG3 that the definitions of ACP and OTT bypass are still under development within SG2, whose responsibility includes service definition.

˗ A reply liaison was sent to SG12 in [SG2-TD1095](https://www.itu.int/md/T17-SG02-200527-TD-GEN-1095/en) informing them of the two ongoing work items within Question 3/2 that relate most directly to the definition of ACP: a draft new ITU-T Recommendation on ACP ([E.ACP](https://www.itu.int/ITU-T/workprog/wp_item.aspx?isn=16429)) and a Technical Report on definitions for telecom and telecom interconnection ([TR.DOTT](https://www.itu.int/ITU-T/workprog/wp_search.aspx?sg=2&q=3)).

˗ A reply liaison was sent to SG16, based on very similar base texts being presented to both study groups, that proposed coordination of work between SG2 and SG16, given that the initiated work in both study groups contains elements regarding numbering and identifiers as well as services.

˗ A liaison was sent to SG13 informing them of the initiation of the NWI on “Requirements for work order processing in telecom management with AI” (M.rwop-AI).

# SG2 regional groups

During the period December 2019 to September 2020, there were no meetings of the Study Group 2 Regional Groups for the Americas (SG2RG-AMR), Africa Region (SG2RG-AFR) or Arab Region (SG2RG-ARB).

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