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| ITU logo | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATION STANDARDIZATION SECTOR**STUDY PERIOD 2017-2020 | TSAG-TD892 |
| **TSAG** |
| **Original: English** |
| **Question(s):** | N/A | E-Meeting, 21-25 September 2020 |
| **TD(Ref.:** [SG13-LS166](http://handle.itu.int/11.1002/ls/sp16-sg13-oLS-00166.docx)) |
| **Source:** | ITU-T Study Group 13 |
| **Title:** | LS on Deliverables of Focus Group NET2030 [from ITU-T SG13] |
| **Purpose:** | Comment |
| **LIAISON STATEMENT** |
| **For action to:** | - |
| **For comment to:** | 3GPP, ATIS, BROADBAND FORUM, CCSA, ETSI, ITU-R, GSMA, IETF, MEF, IEEE, ARIB, TTA, TTC, OIF, CENELEC, IRTF, NGMN, ONF, WiFi Alliance, SG2, SG3, SG5, SG9, SG11, SG12, SG15, SG16, SG17, SG20, TSAG |
| **For information to:** | TM Forum, European Commission, TSDSI, 5G PPP, Sigcomm |
| **Approval:** | ITU-T Study Group 13 virtual meeting (31 July 2020) |
| **Deadline:** | 30 November 2020 |
| **Contact:** | Leo LehmannOFCOMSwitzerland | Tel: +41 58460 5752E-mail: Leo.Lehmann@bakom.admin.ch  |

A new liaison statement has been received from SG13.

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-sg13-oLS-00166.docx>.

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| **STUDY GROUP 13** |
| **Original: English** |
| **Question(s):** | All/13 | Virtual, 20 – 31 July 2020 |
| **Ref.:SG13-321-R1/PLEN** |
| **Source:** | ITU-T Study Group 13 |
| **Title:** | LS/o on Deliverables of Focus Group NET2030  |
| **Purpose:** | For comment |
| **LIAISON STATEMENT** |
| **For action to:** | - |
| **For comment to:** | TSAG, ITU-T SG 2, 3, 5, 9, 11, 12, 15, 16, 17, 20, IETF, IRTF, IEEE, 3GPP, ETSI, ARIB, ATIS, CCSA, TTA, TTC, OIF, ONF, NGMN Alliance, GSMA, Wi-Fi Alliance, MEF, ITU-R WP5D, Broadband Forum, OPC-FLC, ODVA, CENELEC, 5G Infrastructure Association |
| **For information to:** | ACM Sigcom, China Network 5.0 Alliance, European Commission Research, TMForum, TSDSI, US National Science Foundation |
| **Approval:** | **ITU-T Study Group 13 virtual meeting (31 July 2020)** |
| **Deadline:** | 30 November 2020 |
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ITU-T Study Group 13 is pleased to inform you that the Focus Group on NET2030 (FG NET2030) has completed its activities. The FG NET2030 was formed in July 2018 in particular to study the capabilities of networks for the year 2030 and beyond. The pre-standardisation deliverables produced by the Focus Group during its lifetime are freely available from [the following link](https://www.itu.int/pub/T-FG/e) as well as from the [Focus Group on Technologies for Network 2030 homepage](https://www.itu.int/en/ITU-T/focusgroups/net2030/Pages/default.aspx).

We appreciate receiving your feedback and related collaborative work considering the outputs provided below. This would be very helpful in determining next steps and for future co-operation and collaboration.

SG13 is looking forward for further co-operation related to this topic.

Attachments:

1. White Paper “[Network 2030 - A Blueprint of Technology, Applications and Market Drivers Towards the Year 2030 and Beyond](https://www.itu.int/en/ITU-T/focusgroups/net2030/Documents/White_Paper.pdf)” ;

The role of Network 2030 is to identify the right set of network technologies required to deliver new/enhanced applications. To be exact, it is scoped to serve up the communication needs of our society in the year 2030: its purpose remains to address new capabilities of both public and private wireline or fixed networks. The white paper describes the Network 2030 initiative and provides a comprehensive analysis of the applications, the network, and the infrastructure in that context.

1. Deliverable “[New Services and Capabilities for Network 2030: Description, Techni​​cal Gap and Performance Target Analysis](https://www.itu.int/en/ITU-T/focusgroups/net2030/Documents/Deliverable_NET2030.pdf)​”;

This deliverable describes new communication services for Network 2030, provides gap analysis, and specifies performance targets for different type of new services and capabilities along with the objectives for new communication services. It introduces new services and capabilities for Network 2030, including common terminology and definitions necessary for describing new services. It also analyses gaps in existing communication technology to provide the reasoning behind the new communication services that are proposed in this document.

1. Representative Use Case Deliverable “[*Representative use c*​*ases and key network requirements for Network 2030*](https://www.itu.int/pub/T-FG-NET2030-2020-SUB.G1)*​”*;

Technical Report presents seven use cases: holographic type communications (HTC); tactile Internet for remote operations (TIRO); intelligent operation network (ION); network and computing convergence (NCC); digital twin (DT); space-terrestrial integrated network (STIN); industrial IoT (IIoT) with cloudification. It elaborates key network requirements to support these use cases. In addition, five overarching abstract requirement dimensions are depicted and scored relatively in order to compare the requirements of each use case. Through a clustering methodology these dimensions are also presented graphically.

1. Technical Report “[*Gap Analysis of Network 2030 New Services, Capabilities and Use Cases*](https://www.itu.int/pub/T-FG-NET2030-2020-1)”;

The Technical Report on Gap Analysis presents the current work on network and communication services that has been carried out by different standards development organizations (SDOs) with respect to the Network 2030 services, capabilities, and representative use cases. Based on these inputs, this report identifies gaps, namely issues and technologies that are not currently addressed, and will be required for the support of new use cases and the network infrastructure of 2030 and beyond. The major challenges identified relate particularly to machine to machine communications, autonomous operations, specific bandwidth requirements, and the finest possible granularity of time-engineered services.

1. Technical Report “[*Additional representative use cases and key network requirements for
Network 2030*](https://www.itu.int/pub/T-FG-NET2030-2020-2)”;

This technical report covers five additional use cases to those contained in the first report [3, above]: Huge Scientific Data Applications, Application-aware Data Burst Forwarding, Emergency and disaster rescue, Socialized Internet of Things, and Connectivity and sharing of pervasively distributed AI data, models and knowledge. Their corresponding key network requirements are also briefly described. Five overarching abstract requirement dimensions (articulated within each use case with respect to their related requirements) are compared graphically. The representative use cases are also briefly analyzed from the abstract requirement dimension perspective.

1. Technical Specification “[*Network 2030 Architecture Framework*](https://www.itu.int/pub/T-FG-NET2030-2020-3)”; Technical Specification “Network 2030 Architecture Framework”;

This technical specification begins describing architectural principles and overall architecture for public networks in the year 2030 and beyond, namely Network2030. Later, the specification elaborates on the details of access/edge architecture, routing and addressing, data path security, quality of service (QoS), burst switching, network slicing, Multi-access Edge Computing (MEC) federation, and network management for Network2030. Impact of quantum computing is also addressed.

1. Technical Report “[*Description of Demonstrations for Network 2030 on Sixth ITU Workshop on Network 2030 and Demo Day, 13 January 2020*”](https://www.itu.int/en/ITU-T/focusgroups/net2030/Pages/default.aspx), [Doc-O-037](https://extranet.itu.int/sites/itu-t/focusgroups/net-2030/_layouts/15/WopiFrame.aspx?sourcedoc=%7B4808778B-8DDA-4148-B0C1-7CC17DE654C6%7D&file=NET2030-O-037.docx&action=default&CT=1597409966565&OR=DocLibClassicUI);

This technical report provides a description of demonstrations made on Sixth ITU Workshop on Network 2030 and Demo Day, 13 January 2020, Lisbon. It includes New IP demonstration, Computing Power Network demonstration, Self-Generated Intent-Based System demonstration and Enabling Internet-scale Holographic-Type Communications demonstration.

1. Technical Specification “[*Terms and Definitions* [*for Network 2030*](https://www.itu.int/pub/T-FG/publications.aspx?lang=en&parent=T-FG-NET2030-2020-4)](https://www.itu.int/pub/T-FG-NET2030-2020-4)”.

This technical specification represents a glossary of terms helping to understand the Network 2030 use cases, requirements, challenges, and potential operation.

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