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| The International Teleocmmunication Union - Connecting the World. | **International telecommunication union****Telecommunication Standardization Bureau** |  |
|  | Geneva, 17 August 2023 |
| **Ref:** | **TSB Circular 131****SG13/TK** | **To:**- Administrations of Member States of the Union;**Copy to:**- ITU-T Sector Members;- ITU-T Associates of Study Group 13;- ITU Academia- The Chairmen and Vice-Chairmen of Study Groups;- The Director of the Telecommunication Development Bureau;- The Director of the Radiocommunication Bureau- Regional Telecommunication Organizations:ATU; APT; CEPT; CITEL; LAS and RCC. |
| **Tel:** | +41 22 730 5126 |
| **Fax:****E-mail:** | +41 22 730 5853tsbsg13@itu.int |
| **Subject:** | **Questionnaire on Use of Satellite Communications by Developing Countries** |

Dear Sir/Madam,

ITU-T Working Party 3/13 (of Study Group 13 on future networks) at its last meeting (Geneva, 26 July 2023) agreed to disseminate the questionnaire *on Use of Satellite Communications by Developing Countries*. This questionnaire is primarily targeted at Member States from Developing Countries; however, responses from all Member States are encouraged.

Study Group 13, Question 5/13 (*Applying Future Networks and innovation in developing countries*), is developing a Supplement on *Use cases of satellite communications in Developing Countries.*

The survey will help to collect data on the usage, requirements, standardization, opportunities and challenges for satellite communications in developing countries with the objective of identifying issues that could be addressed by standards and propose some guidelines that could accelerate the application of satellite communications in these countries. Analysis of the answers to this questionnaire, collection of experiences on usage and requirements of satellite communications in developing countries will serve as a good basis for this Supplement.

I invite you to participate in this survey and would appreciate it if you would complete the questionnaire reproduced in **Annex 1** no later than **10 October** **2023**. Please note, however, that for more efficient reply consolidation and analysis we kindly request that the following online version of the questionnaire be used: [https://www.research.net/r/satellite\_communications](https://eur03.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.research.net%2Fr%2Fsatellite_communications&data=05%7C01%7Ctsbsg13%40itu.int%7Cd5e0ed1dc3ab4bf97ad008db8f53a132%7C23e464d704e64b87913c24bd89219fd3%7C0%7C0%7C638261361581176482%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=bXQ%2BAkQnSiT102i2ZsTkzr9qNWj6V0f20cHaN3GqC0E%3D&reserved=0). The form in Annex 1 could be used in case there are difficulties in using the online one.

I wish to thank you in advance for your participation in this survey. We value your opinion.

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| Yours faithfully,Seizo OnoeDirector of the TelecommunicationStandardization Bureau |  |

**Annex:** 1

**ANNEX 1
Questionnaire on Use of Satellite Communications by Developing Countries**

Responder’s information

|  |  |
| --- | --- |
| Country: |   |
| Sector: |   |
| Organization: |   |
| Name: |   |
| Title: |   |
| Address: |   |
| Telephone: |   |
| Fax: |   |
| E-Mail: |   |

**1- Usage of satellite communications**

**1.1** Are there satellite communications services currently been provided in your country?

[ ]  Yes

[ ]  No, but on the roadmap

[ ]  No

**1.2** Which use case is the most using satellite communications in your country?

[ ]  There is no land-based network in specific region (such as ocean, sea, desert, deep mountain, deep forest and polar region)

[ ]  The data rate of land-based network is not enough (such as remote village, remote settlement, ecoregion and small isle)

[ ]  The capacity (volume) of land-based network is not enough (such as remote IoT, remote industrial network and remote vehicular network)

[ ]  There is no land-based network of the serving operator (such as domestic roaming, international roaming and global communications)

[ ]  There are requirements to use satellite communications for emergency communications

[ ]  Other (please specify):

[ ]  Not used

[ ]  Do not know

**1.3** Are there requirements for using satellite communications in your organization?

[ ]  Yes

[ ]  No, but foreseeable

[ ]  No

**1.4** How important is the use of satellite communications for your organization?

[ ]  Mission-critical

[ ]  Important

[ ]  Quite important

[ ]  Least important

[ ]  Not needed

**1.5** Have your organization already used satellite communications?

[ ]  Yes

[ ]  No, but planning to use

[ ]  No, not on our technology roadmap

**2- Requirements of satellite communications**

**2.1** Which types of services are required for satellite communications in your country (one or multiple choices)?

[ ]  Voice service

[ ]  Video service

[ ]  Message service

[ ]  Data service (data traffic)

[ ]  Broadcast/multicast service

[ ]  Multi-access edge computing service

[ ]  Vertical industry service

[ ]  Domestic/international roaming service

[ ]  Global communications service

[ ]  Other (please specify):

**2.2** Which types of satellites are required for satellite communications in your country (one or multiple choices)?

[ ]  Low Earth Orbit

[ ]  Medium Earth Orbit

[ ]  Geostationary Earth Orbit

[ ]  Highly Elliptical Orbit

**2.3** Which types of terminal equipment are required for satellite communications in your country (one or multiple choices)?

[ ]  Handset terminal

[ ]  Portable terminal

[ ]  Vehicular terminal

[ ]  Satellite earth station/satellite gateway

[ ]  Other (please specify):

**2.4** Which types of network capabilities are required for satellite communications in your country (one or multiple choices)?

[ ]  Hybrid network (land-based network and satellite-based network integration)

[ ]  Multi-access convergence (fixed, mobile and satellite convergence, FMSC)

[ ]  Service continuity

[ ]  Quality of service (QoS)

[ ]  Network slicing

[ ]  Multi-access edge computing

□ Artificial intelligence (AI) / machine learning (ML)

[ ]  Distributed ledger technology (DLT)

[ ]  Capability exposure

[ ]  Network sharing

[ ]  Other (please specify):

**3- Standardization of satellite communications**

**3.1** Which standards development organizations (SDOs) on satellite communications you have good knowledge of (one or multiple choices)?

[ ]  ITU-T

[ ]  ITU-R

[ ]  3GPP

[ ]  ETSI

[ ]  IETF/IRTF

[ ]  Other (please specify):

**3.2** Which SDOs on satellite communications you have participated in, including attending a meeting and/or submitting a contribution (one or multiple choices)?

[ ]  ITU-T

[ ]  ITU-R

[ ]  3GPP

[ ]  ETSI

[ ]  IETF/IRTF

[ ]  Other (please specify):

**3.3** Which areas of standardization do you consider important for satellite communications?

[ ]  Use cases

[ ]  Requirements

[ ]  Framework/Architecture

[ ]  Network capabilities

[ ]  Enabling technologies

[ ]  Service enhancements

[ ]  Management and orchestration

[ ]  Security and privacy

[ ]  Energy efficiency

[ ]  Other (please specify):

**4- Opportunities & Challenges of satellite communications**

**4.1** What are the opportunities of satellite communications in your country?

**4.2** What are the challenges of satellite communications in your country?

*Thank you for your active participation in this survey!*

If you have questions, please, contact us at tsbsg13@itu.int.

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