|  |  |  |
| --- | --- | --- |
| The International Teleocmmunication Union - Connecting the World. | **国 际 电 信 联 盟****电信标准化局** |  |
|  | 2025年3月27日，日内瓦 |
| **文号：** | **电信标准化局第37号通函****SG13/TK** | **致：*** 国际电联各成员国主管部门；
* 巴勒斯坦国（第99号决议（2018年，迪拜，修订版））；
* ITU-T部门成员；
* ITU-T第13研究组部门准成员；
* 国际电联学术成员

**抄送：**- ITU-T各研究组正副主席；- 电信发展局主任；- 无线电通信局主任 |
| **电话：** | +41 22 730 5126 |
| **传真：** | +41 22 730 5853tsbsg13@itu.int |
| **事由：** | **关于发展中国家使用开放网络和人工智能模型实现服务普及的用例的问卷调查表** |

尊敬的先生/女士：

ITU-T第13研究组（未来网络和新兴网络技术）在其上一次会议（2025年3月3-14日，日内瓦）上一致同意分发关于发展中国家使用开放网络和人工智能模型实现服务普及的用例的问卷调查表。本问卷调查表针对发展中国家成员，但也欢迎其他成员做出回答。

第13研究组第5/13号课题（在发展中国家应用未来网络和创新）正在就发展中国家使用开放网络和人工智能模型实现服务普及的用例制定增补。对调查答复结果的分析将为第5/13号课题关于上述增补的工作提供支持。

谨邀请贵方参加本次调查，如能在**2025年6月30日**之前填妥**附件1**中的问卷调查表，我将不胜感激。但请注意，为了更有效地汇总和分析收到的答复，谨请通过以下网址：<https://www.research.net/r/YJ3GHWN>使用在线版问卷调查表。如果使用线上问卷有困难，可以使用附件1中的表格。

|  |  |
| --- | --- |
| 感谢您参与本次调查。我们非常重视您的意见。顺致敬意！电信标准化局主任A black and white text  Description automatically generated 尾上诚藏**附件**：1件 | A qr code with black dots  AI-generated content may be incorrect. |

**ANNEX 1**

**Questionnaire on Use Cases of services universalization in developing countries using open networks and AI models**

Responder’s Information

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

**Instructions:**

Multiple choice to some questions is possible and is welcome.

1. **Status of IMT-2020 and beyond in network deployment**
2. **How many telecom operators have already commercially launched IMT-2020 and beyond services in your country?**

[ ]  0

[ ]  1

[ ]  2

[ ]  3

[ ]  Other (Please specify): ………………………………………………

1. **What percentage of your country's population has access to IMT-2020 and beyond services?**

[ ]  0%

[ ]  Less than 10%

[ ]  10-30%

[ ]  30-50%

[ ]  More than 50%

[ ]  Do not know

1. **How many telecom operators in your country have a focus/strong presence or market segment in rural/remote areas?**

[ ]  0

[ ]  1

[ ]  2

[ ]  3

[ ]  Other (Please specify): ………………………………………………

1. **Which sectors will benefit the most from IMT-2020 and beyond services in your country?**

[ ]  Government (e-services)

[ ]  Healthcare

[ ]  Transportation

[ ]  Education

[ ]  Entertainment and media

[ ]  Manufacturing

[ ]  Agriculture

[ ]  Retail

[ ]  Others (please specify): ………………………………………………

1. **Use of Artificial Intelligence for IMT-2020 and beyond for network deployment**
	1. **Are you currently using any AI-based technology in your telecommunication network?**

[ ]  Yes (please specify):

[ ]  No

[ ]  I don’t know

* 1. **Have you implemented strategies to use AI-based technology in your telecommunication
	 networks in the next 5 years?**

[ ]  Yes (please specify):

[ ]  No

[ ]  I don’t know

* 1. **Rate the following benefits of using Artificial Intelligence in IMT-2020 and beyond networks on a scale of 1 to 5 (1=low benefit 5=high benefit) with regards to network deployment in developing countries.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Response** | **1** | **2** | **3** | **4** | **5** |
| Service orchestration and automation |  |  |  |  |  |
| Increased network capacity and efficiency |  |  |  |  |  |
| Private network deployment |  |  |  |  |  |
| Service deployment |  |  |  |  |  |
| Increased network capacity and efficiency |  |  |  |  |  |
| Client support |  |  |  |  |  |
| Energy consumption |  |  |  |  |  |
| Open systems  |  |  |  |  |  |
| Support for innovative applications and services |  |  |  |  |  |
| Support for digital transformation in the long term |  |  |  |  |  |
| Other (Please specify and rate): …………………………… |  |  |  |  |  |

* 1. **Rate the main technical challenges or concerns about using Artificial Intelligence in IMT-2020 and beyond networks on a scale of 1 to 5 (1=low concern 5=high concern)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Response** | **1** | **2** | **3** | **4** | **5** |
| High infrastructure cost |  |  |  |  |  |
| Uncertain return on investment (RoI) |  |  |  |  |  |
| Deployment complexity |  |  |  |  |  |
| Integration with existing networks |  |  |  |  |  |
| Regulatory issues |  |  |  |  |  |
| Lack of expertise |  |  |  |  |  |
| Cybersecurity risks |  |  |  |  |  |
| Data privacy and protection concerns |  |  |  |  |  |
| Energy consumption |  |  |  |  |  |
| Other (Please specify and rate): ……………………………………………… |  |  |  |  |  |

1. **Use of Open Networks for IMT-2020 and beyond for network deployment**
	1. **Are you currently using any tool/framework/equipment that provides openness to your current telecommunication network infrastructure?**

[ ]  Yes (please specify):

[ ]  No

[ ]  I don’t know

* 1. **Have you implemented or considered strategies to use open networks in your telecommunication infrastructure for the upcoming years?**

[ ]  Yes (please specify):

[ ]  No

[ ]  I don’t know

* 1. **In your opinion, which type of network will benefit the most on the use of Open Networks for IMT-2020 and beyond in developing countries?**

[ ]  Public network

[ ]  Private Network

[ ]  Both

[ ]  I don’t know

* 1. **Has the Local Regulatory Authority implemented or considered strategies to regulate Open Networks for IMT-2020 and beyond for network deployment:**

[ ]  Yes (please specify):

[ ]  No

[ ]  I don’t know

* 1. **On a scale of 1 to 5, where do you consider the use of open networks and open interfaces will benefit your current telecommunication network? (1=low benefit, 5=high benefit)?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Response** | **1** | **2** | **3** | **4** | **5** |
| Access Network  |  |  |  |  |  |
| Private Network Deployment |  |  |  |  |  |
| Service Deployment |  |  |  |  |  |
| OPEX and CAPEX optimization |  |  |  |  |  |
| Core Network |  |  |  |  |  |
| Scalability |  |  |  |  |  |
| Other (Please specify and rate): ……………………………………………… |  |  |  |  |  |

* 1. **On a scale of 1 to 5, which do you consider the use of open networks and open interfaces will present the major challenges for your current telecommunication network? (1=low challenge, 5=major challenge)?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Response** | **1** | **2** | **3** | **4** | **5** |
| Infrastructure cost |  |  |  |  |  |
| Deployment complexity |  |  |  |  |  |
| Integration with existing networks |  |  |  |  |  |
| Regulatory issues |  |  |  |  |  |
| Lack of expertise |  |  |  |  |  |
| Equipment and Software providers |  |  |  |  |  |
| Cybersecurity risks |  |  |  |  |  |
| Data privacy and protection concerns |  |  |  |  |  |
| Energy consumption  |  |  |  |  |  |
| Customer adoption |  |  |  |  |  |
| Device availability and compatibility |  |  |  |  |  |
| Other (Please specify and rate): ……………………………………………… |  |  |  |  |  |

1. **Network Deployment Landscape**
	1. **Which IMT-2020 and beyond use cases do you consider would benefit from using artificial intelligence and open networks for network deployment?**

|  |  |  |  |
| --- | --- | --- | --- |
| **IMT-2020 and beyond use cases** | **Short-term****(within 1 year)** | **Mid-term****(1 to 3 years)** | **Long-term****(More than 3 years)** |
| **High-speed mobile Internet access** |  |  |  |
| **Fixed Wireless Access (FWA)** |  |  |  |
| Augmented Reality (AR) and Virtual Reality (VR) |  |  |  |
| Enhanced entertainment and media (including gaming) |  |  |  |
| e-Government  |  |  |  |
| **Healthcare applications and telemedicine** |  |  |  |
| **Smart agriculture** |  |  |  |
| **Smart transportation and autonomous vehicles** |  |  |  |
| **Industrial automation and smart factories** |  |  |  |
| **Public safety and emergency services** |  |  |  |
| **Cloud computing and edge computing** |  |  |  |
| **Environmental monitoring** |  |  |  |
| Smart grids and energy management |  |  |  |
| Smart retail solutions |  |  |  |
| Education and e-learning |  |  |  |
| Other (Please specify): ………………………………… |  |  |  |

* 1. **What are the key considerations for prioritizing IMT-2020 and beyond use cases in your country when using artificial intelligence and open networks? Rate the following considerations on a scale of 0 to 5 (1= least important, 5 = most important):**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Response** | **1** | **2** | **3** | **4** | **5** |
| Economic benefits |  |  |  |  |  |
| Technological maturity |  |  |  |  |  |
| Digital inclusion and societal needs and benefits |  |  |  |  |  |
| Alignment with national regulatory frameworks and policies |  |  |  |  |  |
| Compliance to standards |  |  |  |  |  |
| Infrastructure availability  |  |  |  |  |  |
| Ease of adoption |  |  |  |  |  |
| Cost and maintenance |  |  |  |  |  |
| Scalability and sustainability |  |  |  |  |  |
| Other (Please specify and rate): ……………………………………………… |  |  |  |  |  |

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

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

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