



ANNEX 2

ITU Regional Development Forum (RDF) for the Commonwealth of Independent States (CIS) Region (RDF-CIS)

26-27 March 2024

Astana, Kazakhstan

Organized by the Telecommunication Development Bureau (BDT) of the
International Telecommunication Union (ITU)

Hosted by the Ministry of Digital Development, Innovation, and Aerospace Industry of
the Republic of Kazakhstan

CONTRIBUTION FORM

Please note that submitted information will be presented during the RDF-CIS P2C Roundtables and it will also be reflected on the pledging platform of the Partner2Connect Digital Coalition.

Once completed please send to ITU-RO-CIS@itu.int

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TITLE: *ChatGPT for visually impaired*

DESCRIPTION OF ACTION: *Provide a brief description up to 500 words*

According to the World Health Organization (WHO), hundreds of million people have some type of visual disability. Vision impairment has a personal impact with lifelong consequences because more than 80% of our perception, cognition, learning, and daily activities are mediated through vision. Moreover, in the era of rapid advancements in artificial intelligence (AI), visually impaired and blind people face challenges at work and in education because of inaccessibility to AI technologies. Thus, we present an assistive mobile application with an intuitive user interface (UI) for visually impaired and blind people to interact with ChatGPT via natural conversation. In December 2022, during the Study group-D meeting in Geneva, our Institute presented automatic speech recognition (ASR) for Kazakh language and we told that we would further develop speech technologies for Kazakh language. Now, we have the app which employs ASR, text-to-speech (TTS), keyword spotting (KWS), voice activity detection (VAD), and a convenient UI to interact with ChatGPT effortlessly (in future we will do for Kazakh language). We have made the source code, pre-trained models, and UI publicly available to stimulate the development of assistive mobile applications.

COUNTRIES IN FOCUS:

Kazakhstan, developing countries that would like to create an AI model that can interact with ChatGPT on the original language of country

YEARS of IMPLEMENTATION: *Tick the relevant boxes or delete the irrelevant items*

☒ 2024

☐ 2025

RELEVANT ITU REGIONAL INITIATIVE: *Tick the relevant boxes or delete the irrelevant items*

☒ **CIS1:** Developing infrastructure to promote innovation and partnerships in the introduction of new technologies – the Internet of Things, including the industrial Internet, smart cities and communities, 5G/IMT-2020 and next-generation NET-2030 communication networks, quantum technologies, artificial intelligence, digital health, digital skills and environmental protection

☐ CIS2: Cybersecurity and personal data protection

☐ CIS3: Creating an enabling legal and regulatory environment to accelerate digital transformation

☐ CIS4: Digital skills and information and communication technology accessibility for the public, in particular for persons with disabilities

☐ CIS5: Development of smart cities and communities

Use the link below you discover more information on the ITU Regional Initiatives 2023-2025, as defined by WTDC-22: <https://www.itu.int/en/ITU-D/Pages/regional-initiatives-2023-2025.aspx>

RELATED ITU-D PRIORITIES AS DEFINED BY THE ITU WORLD TELECOMMUNICATION DEVELOPMENT CONFERENCE 2022:

☐ Affordable connectivity

☐ Digital Transformation

☐ Enabling policy and regulatory environment

☐ Resource mobilization and international cooperation

☐ Inclusive and secure telecommunications/ICTs for sustainable development

Please find more information on the ITU-D Priorities, as defined by WTDC-22, [here](#)

RELATED ITU PRIORITIES AS DEFINED BY ITU PLENIPOTENTIARY CONFERENCE 2022:

☐ Spectrum use for space and terrestrial services

☐ International telecommunication numbering resources

☐ Inclusive and secure telecommunication/ICT infrastructure and services

☐ Digital applications

☐ Enabling environment

Please find more information on the ITU Priorities, as defined by PP-22, [here](#)