

ITU Regional Development Forum for Europe (RDF-EUR)

Information and Communication Technologies for attaining Sustainable Development Goals

organized by the International Telecommunication Union with the support of the National Authority for Management and Regulation in Communications (ANCOM) of Romania and cooperation with the European Conference of Postal and Telecommunication Administrations (CEPT)

22-23 May 2023
Timisoara, Romania

Remote participation at http://itu.int/go/RDF_EUR_23
(Meeting held back-to-back with Com-ITU of CEPT - 24-26 May 2023)

Please note that submitted information will be presented during the RDF-EUR P2C Roundtables and it will also be reflected on the pledging platform of the Partner 2 Connect Digital Coalition.

CONTRIBUTION FORM

ORGANIZATION: The National Authority for Management and Regulation in Communications (ANCOM) of Romania

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TITLE: AISEMNAL -The reference tool for mobile coverage in Romania

DESCRIPTION OF ACTION:

ANCOM launched in 2019 the platform Aisemnal.ro, the map of mobile voice signal coverage in Romanian localities and along national and county roads. The site reflects the mobile signal coverage for all technologies available at the time of measurements for each of the mobile operators active on the Romanian market, the level of the aggregate signal throughout the country, the areas featuring risk of involuntary roaming, as well as the map of mobile voice signal coverage of the Bucharest metro network. The ANCOM map is a world premiere as it is not a simulation-based map, but a map exclusively based on field measurements.

The map aisemnal.ro was fully developed by the Authority following the monitoring annual campaigns and is updated every year, more than 250 ANCOM specialists performing measurements throughout Romania, in all the localities with more than 10 inhabitants, covering more than 240,000 km. The signal coverage of the localities was measured by crossing the accessible roads, the boulevards and the main, as well as the secondary streets, so that the locality could be measured as homogeneously as possible. The ANCOM map was developed using a measurement car equipped with two specialized network scanners, connected to four antennas (installed externally on the roof of the vehicle) and controlled through a specialized application, running on a portable computing system.



In drawing up the methodology for defining the signal levels represented on the national map of mobile signal coverage, ANCOM considered the circumstances under which users might need to find out the level of the mobile signal offered by operators. Thus, the map is helping the users in choosing the right telephony and internet offer, by also taking into consideration the service coverage that they will benefit from upon concluding a contract.

The map is easy to use: to check the coverage at national level, the users must choose one operator and select one or several technologies (2G, 3G or 4G). Users interested in checking the signal level in a certain locality must select the locality concerned. The map also has a location filter to check the signal coverage in the place where the user is.

By means of the www.aisemnal.ro map, all interested persons can see which are the localities with the best mobile signal and those with the weakest signal, the levels of the outdoor signal or the white areas. The users thus have a full and accurate picture of the mobile signal coverage across the country. Also, they can follow the evolution of the coverage from one year to another, while also being able to consult the cumulated coverage with mobile communications services nationwide.

The map also includes the localities where users risk entering involuntary roaming, being identified and represented on the map 298,674 of points with a risk of involuntary roaming from among the localities located at maximum 15 km from the border. The localities with a high risk of roaming were established per operator and are those in which the coverage of the respective operator was less than 90%, and the number of squares at risk of roaming in the respective locality was higher than 50% compared to the total number of measured squares.

The platform is aimed not only for end-users, but also for operators of mobile communications services, being for the latter a mean of assessing the situation on the field which can serve as a tool in planning the investments in the telecommunications infrastructure they own. In 2022, according to the field measurements made by ANCOM, all operators have fulfilled their obligation to cover with voice services 98% of Romania's population. The coverage obligation is a permanent one and will be monitored by ANCOM until the expiry of the licence validity period, respectively 5 April 2029, through annual national measurement campaigns.

As well, in order to support the end-users and the operators, alongside updating the aisemnal.ro platform, ANCOM developed the aisemnal.ro app for the Android and iOS operation systems, which can be downloaded free of charge from the app stores.

ANCOM is planning to enlarge the measurement area by intending to check the signal level on the railway infrastructure and to include new technologies (like 5G).

ANCOM appreciates the invitation to participate at the Regional Development Forum for Europe and looks forward to continuing its collaboration with ITU to promote digital development, as well as to sharing its best practices and experience with the ITU community at the Regional Development Forum for Europe.



COUNTRIES in FOCUS:

ANCOM proposes to share its knowledge and experience with ITU member states in the area of digital infrastructure development in presenting a tool of reference for the users in Romania, which might be of interest for other countries, a map exclusively based on field measurements that reflects the mobile coverage for all technologies available on the Romanian market at the time the measurements were made for all the active mobile operators.

YEARS of IMPLEMENTATION: [Tick the relevant boxes or delete the irrelevant items]☒ 2023☒ 2024☒ 2025**RELEVANT ITU REGIONAL INITIATIVE:** [Tick the relevant boxes or delete the irrelevant items]☒ EUR1: Digital infrastructure development☐ EUR2: Digital transformation for resilience☐ EUR3: Digital inclusion and skills development☐ EUR4: Trust and confidence in the use of telecommunications/ICTs☐ EUR5: Digital innovation ecosystems

Please find more information on the ITU Regional Initiatives 2023-2025, as defined by WTDC-22, [here](#).

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](#)

RELATED WSIS ACTION LINE: [Tick the relevant boxes or delete the irrelevant items]

☐ C1: The role of governments and all stakeholders in the promotion of ICTs for development

☒ C2: Information and communication infrastructure

☐ C3: Access to information and knowledge

☐ C4: Capacity building

☒ C5: Building confidence and security in the use of ICTs

☐ C6: Enabling environment

☒ C7: ICT applications

☐ C8: Cultural diversity and identity, linguistic diversity and local content

☐ C9: Media

☐ C10: Ethical dimensions the Information Society

☒ C11: International and regional cooperation

RELATED SDG: [Tick the relevant boxes or delete the irrelevant items]

☐ SDG 1: No Poverty

☐ SDG 10: Reduced Inequalities

☐ SDG 2: Zero Hunger

☐ SDG 10: Reduced Inequalities ☐ SDG 11: Sustainable Cities and Communities

☐ SDG 3: Good Health and Well-being

☐ SDG 12: Responsible Consumption and Production

☐ SDG 4: Quality Education

☐ SDG 13: Climate Action

☐ SDG 5: Gender Equality

☐ SDG 14: Life Below Water

☐ SDG 6: Clean Water and Sanitation

☐ SDG 15: Life on Land

☐ SDG 7: Affordable and Clean Energy

☐ SDG 16: Peace, Justice and Strong Institutions

☐ SDG 8: Decent Work and Economic Growth




☒ SDG 9: Industry, Innovation and Infrastructure

☐ SDG 17: Partnerships for the SDGs

