

AKEP

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ELEKTRONIKE DHE POSTARE

Mapping of Broadband Infrastructure in Albania

ITU REGIONAL REGULATORY FORUM FOR EUROPE
UNIVERSAL CONNECTIVITY FOR A POST-PANDEMIC DIGITAL EUROPE
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REGULATORY FRAMEWORK IN ALBANIA

- Law no. 9918, dated 19.5.2008 “On electronic communications in the republic of Albania(amended).”
- Law no. 120/2016, “For the development of high speed electronic communications networks and the provision of the right of way”
- Regulation no. 26 dated 16.08.2012 for “Content, form and functioning of electronic registry of public electronic communications networks in the republic of Albania”
- Regulation no. 22 dated 24.06.2011 “On technical requirements for construction of urban infrastructure and cable networks, fiber optics, suburban networks of electronic communications” (amended).

THE IMPACT OF THE GLOBAL COVID-19 PANDEMIC

- The impact of the COVID-19 pandemic the Albanian Electronic Communications Sector
- Functioning of AKEP and coordination with operators for the provision of electronic communications services.
- Developing strategy to ensure network integrity
- The consequences of the pandemic
- The role of AKEP in cross-sector coordination to manage the crisis and ensure network and service sustainability

ROADMAP

The objectives of the Roadmap are defined by Statement of Support to the Digital Agenda for the Western Balkans.

RCC in cooperation with EU structures, WB economies (Line Ministries and Regulators), including operators are working in building a Roadmap on WB-EU roaming charges reduction.

The Roadmap is based on 4 main directives for the implementation:

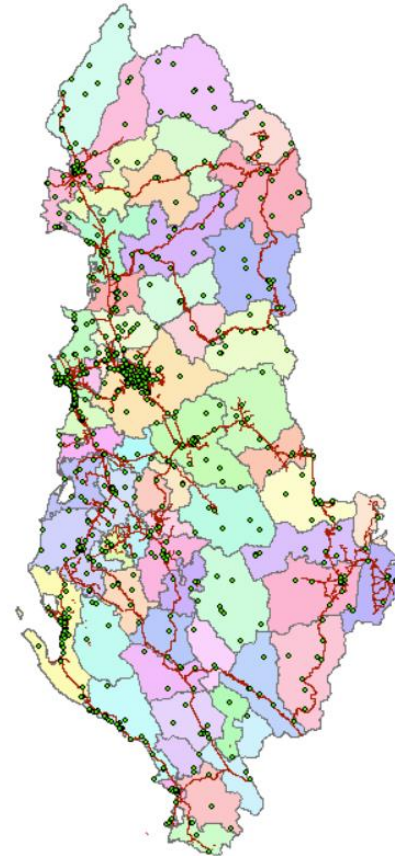
- the fulfilment of RRA,
- increased transparency & monitoring,
- alignment with EU acquis and
- improving the business environment.

By implementing the Roadmap WB economies would in 2-3 years period:

- reduce unnecessary administrative barriers
- simplify permitting procedures and fees
- facilitate access to the physical infrastructure for the deployment of high-capacity networks.
- ensure timely and investment-friendly access and use of 5G radio spectrum.

ATLAS MAPPING SYSTEM

- Information for shared Infrastructure
- Transparency for fixed and mobile network availability
- Which network providers are active within the area
- Atlas system does not include information about end user infrastructure ("Last-Mile").



NEW PROJECT

- Following the directives for the National Plan for sustainable development of broadband digital infrastructure 2020–2025.
- In cooperation with MIE, has been applied at WB for project “Development of broadband Atlas for Albania”
- This project was approved by WB Secretariat.
- In cooperation with MIE, AKEP, Consultant and Lead Finance Institution AFD, we have prepared Terms of Reference (ToR) for the Technical Assistance (TA) required for the preparation of the Pre-feasibility Study (PFS) for the Development of a Broadband Atlas for Albania.

INNOVATIONS IN THE NEW SYSTEM

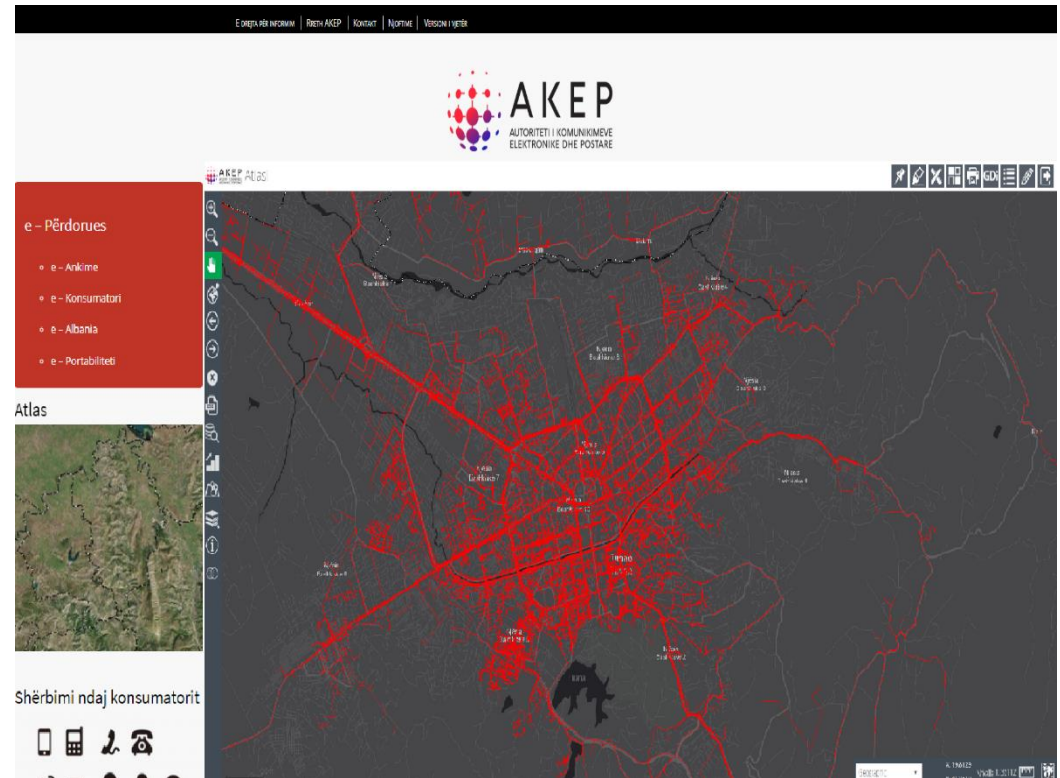
- Coverage situation of the broadband network in Albania.
- Information of broadband infrastructure to the end-users of ‘last mile’
- Transparency in the exchange of information for broadband infrastructure
- Analytical and reporting capability for fixed and mobile network availability.
- Bandwidth in a residential area
- Network providers in the residential area;

INNOVATIONS IN THE NEW SYSTEM

- Information about active and passive infrastructure
- Number of subscribers with broadband access;
- Number of subscribers with broadband access
- Speeds for users in a given
- Broadband internet coverage with technologies
- Appearance of white areas in inhabited areas.
- For market needs, statistical reports on broadband internet

ATLAS MAPPING SYSTEM

- System is built as a multiuser system which offers the possibility to manage different roles for every user.
- There are 3 Webservices, Public, Management, and for Operators.
- Mapping system offer the possibility to the Operators and Administrative Unit to update and create their own communication maps.



ATLAS INFRASTRUCTURE

- 240 services providers
- 3 mobile operators
- Standards for data collection
- Unique datamodel with defined attributes
- Data update interval

INTERNET/BROADBAND INFRASTRUCTURE

Broadband access services are provided through a variety of electronic communications networks:

➤ **Cable networks:**

- Fttx - networks based on optical fiber cables
- Networks based on coaxial cables
- xdsl - networks based on copper cables
- HFC (hybrid optical-coaxial networks).

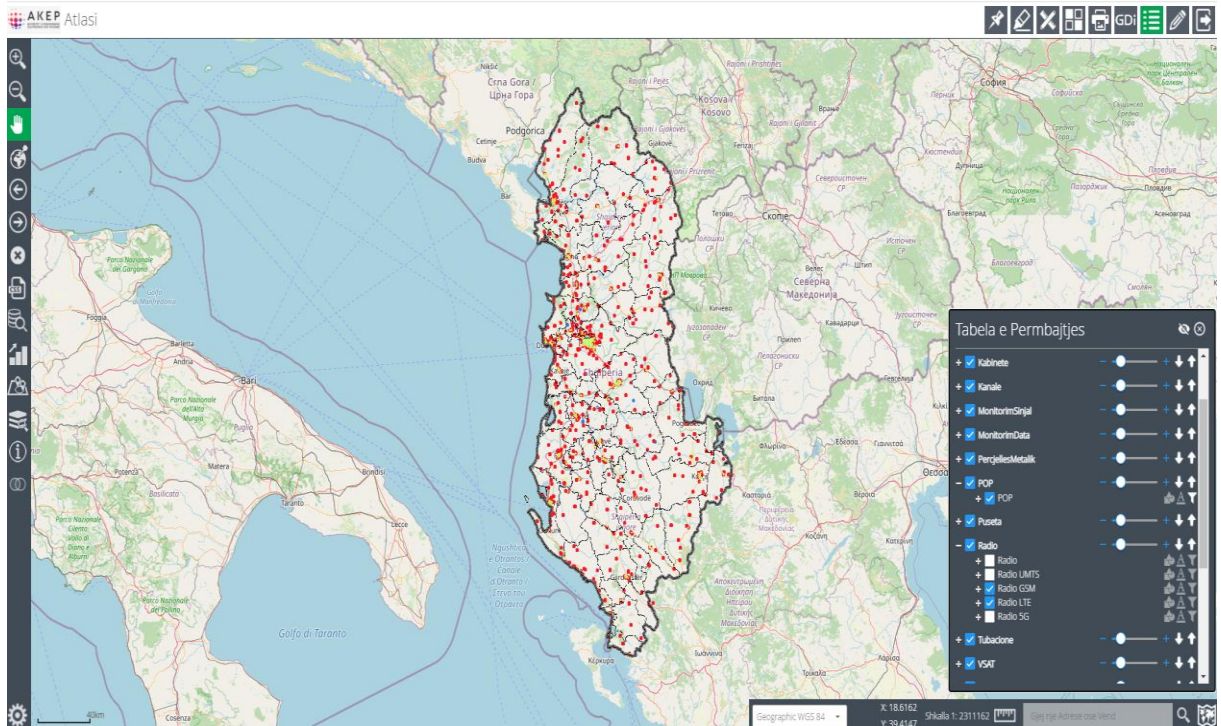
➤ **Radio networks:**

- LTE
- GSM/GPRS/EDGE
- UMTS / HSDPA/ HSPA
- Wi-fi - wireless local area networks,

NETWORK RADIO INFRASTRUCTURE MAP

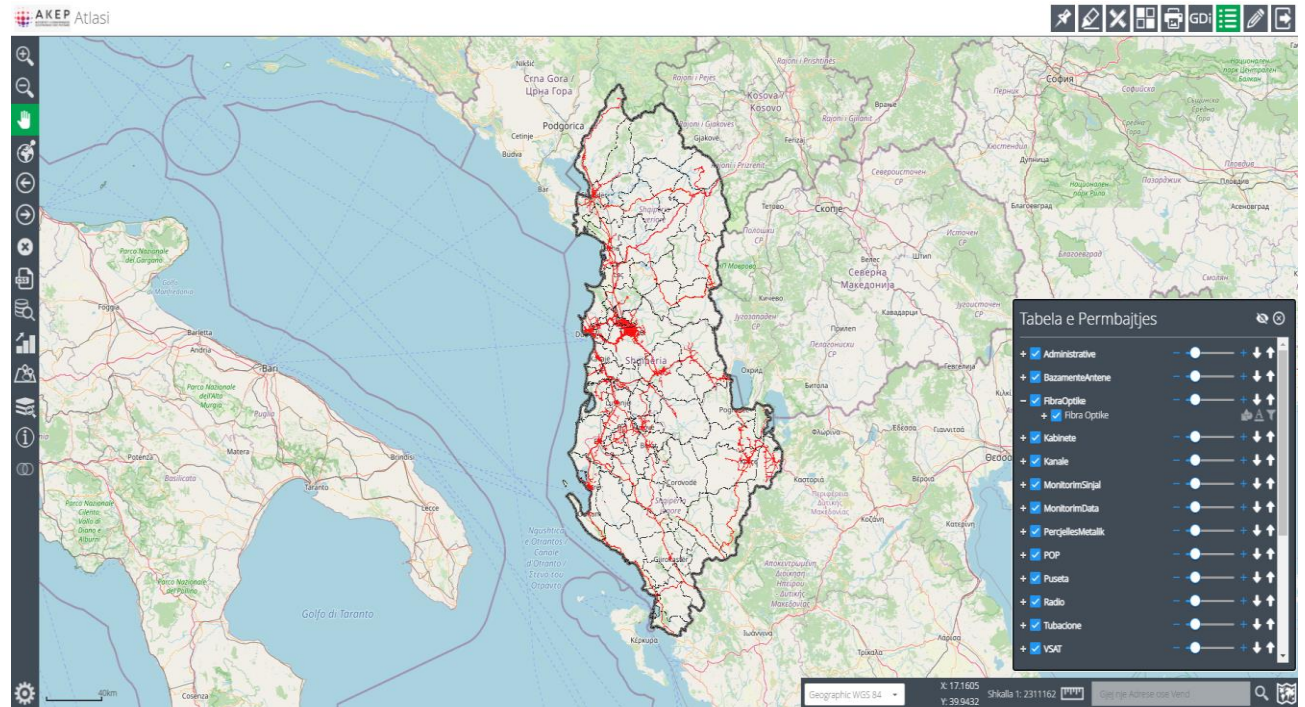
➤ COVERAGE OF RADIO NETWORKS:

- LTE
- UMTS
- GSM
- Wi-Fi - wireless local area networks



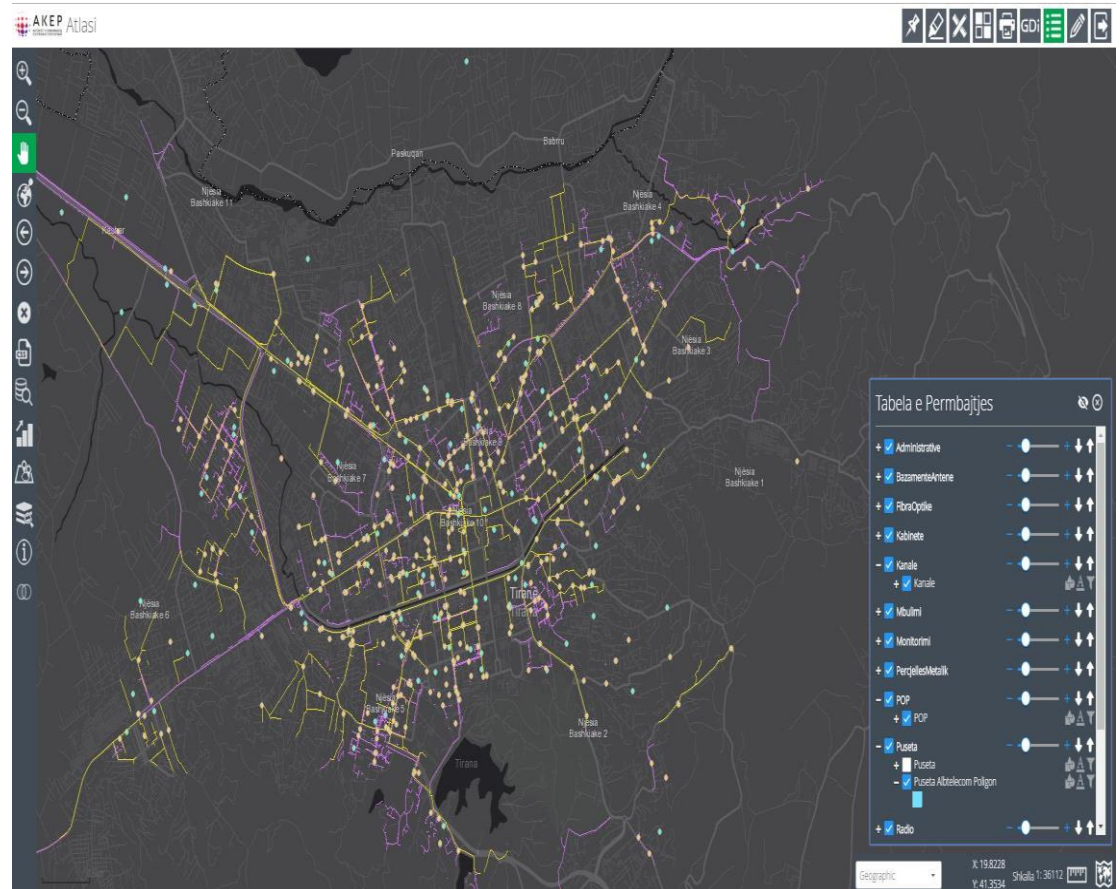
FIBER OPTIC MAP

- Coverage of fiber optic in Albania.
- Akep in cooperation with all electronic communications operators, is gathering all the necessary information for the national backbone network.
- AKEP in collaboration with ITU, will update all the necessary information on ITU interactive transmission map.



NETWORK PASSIVE INFRASTRUCTURE MAP

- Main reasons for mapping of shared infrastructure:
 - Optimization of infrastructure deployment;
 - Avoiding costs of setting-up new networks;
 - Better planning / cost sharing;
 - Low total ownership cost

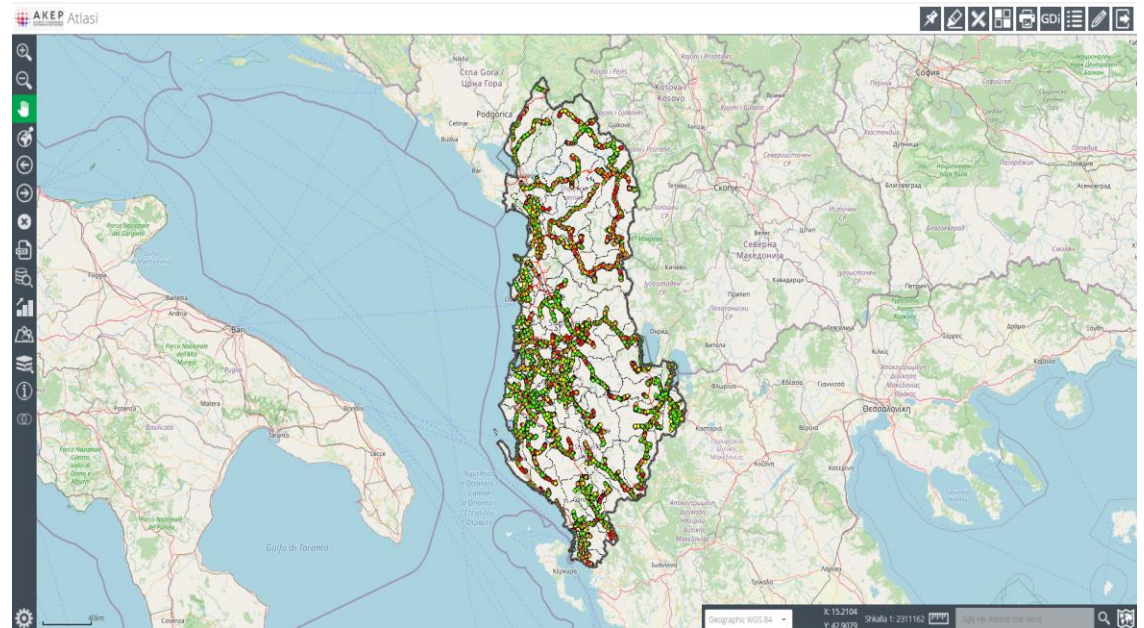


MOBILE QOS MONITORING

On Atlas system, for each operator are published QOS indicators, for all technology as below:

- Signal monitoring 2G
- Signal monitoring 3G
- Signal monitoring 4G

- Data download monitoring 3G
- Data download monitoring 4G





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THANK YOU!



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