



AKEP
AUTORITETI I KOMUNIKIMEVE
ELEKTRONIKE DHE POSTARE

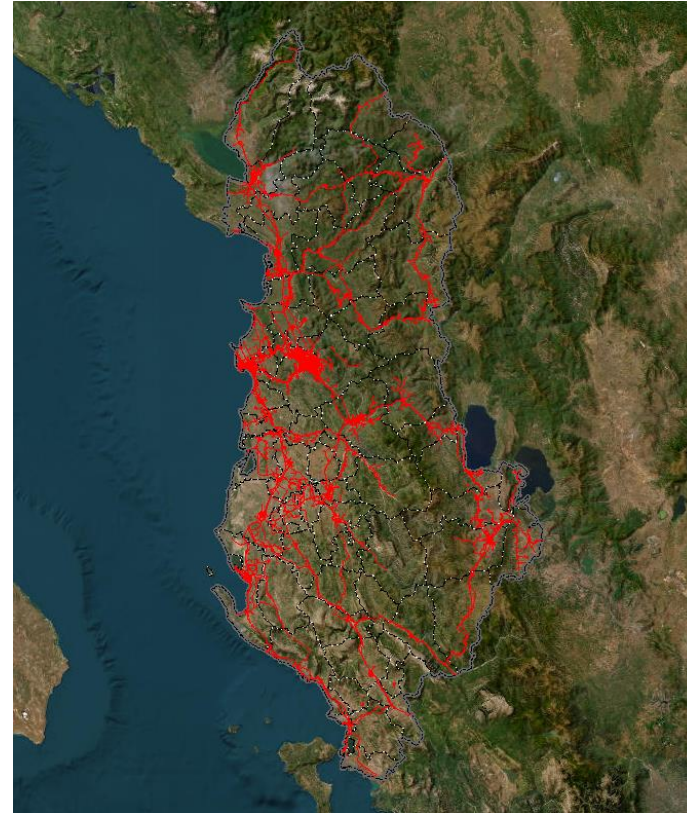


ITU

STRENGTHENING BROADBAND INFRASTRUCTURE AND SERVICES

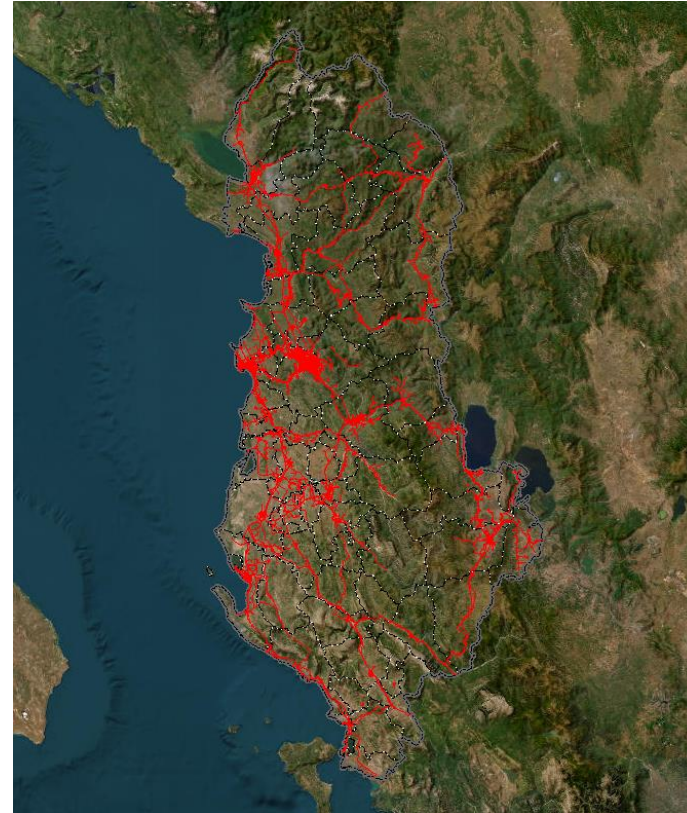
FOURTH ITU-EMERG-EAPEREG JOINT WORKSHOP – 25TH OF JULY, 2024

- The **ATLAS platform is an electronic geo-register for the entire electronic communications network in the Republic of Albania.** ATLAS stores all components of a network, according to self-declaration of data by Telco Operators.
- **Public Domain:**
<https://atlas.akep.al/smartPortal/AKEP>



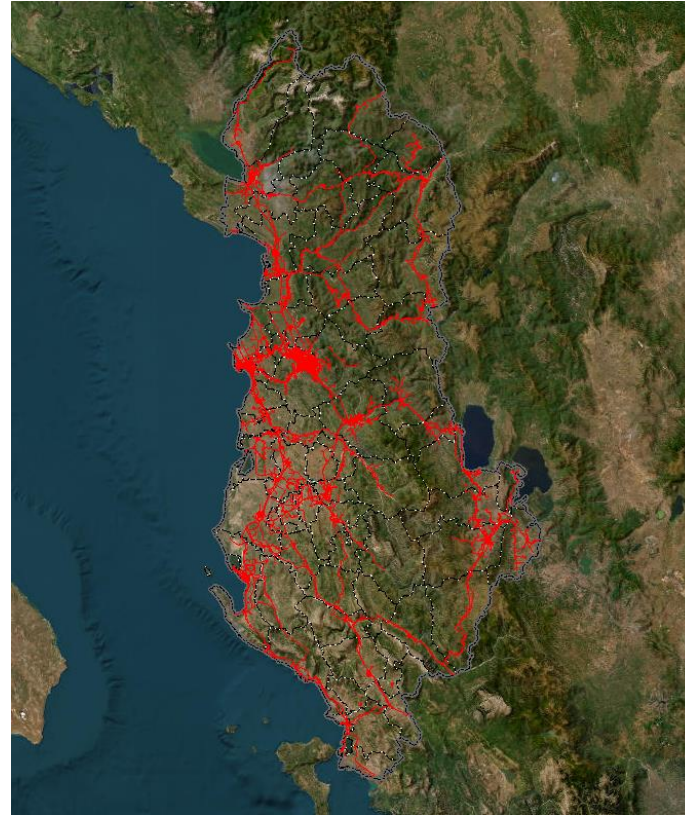
ATLAS – REPUBLIC OF ALBANIA

- **Law 9918**, dated 19.05.2008 – *“For Electronic Communications in Republic of Albania”*
- **Regulation no. 26** dated 16.08.2012, *“On the content, form and electronic functioning of the public electronic communications networks in the Republic of Albania”*



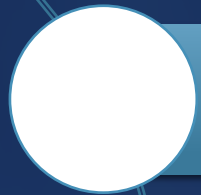
LEGISLATION

- Based on **Regulation no. 26** dated 16.08.2012, “On the content, form and electronic functioning of the public electronic communications networks in the Republic of Albania”, **Telco Operators every 90 days are obliged to update their network** with the most accurate possible data.

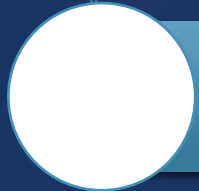


REPORTING

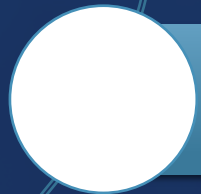
STAKEHOLDERS



AKEP



Operators

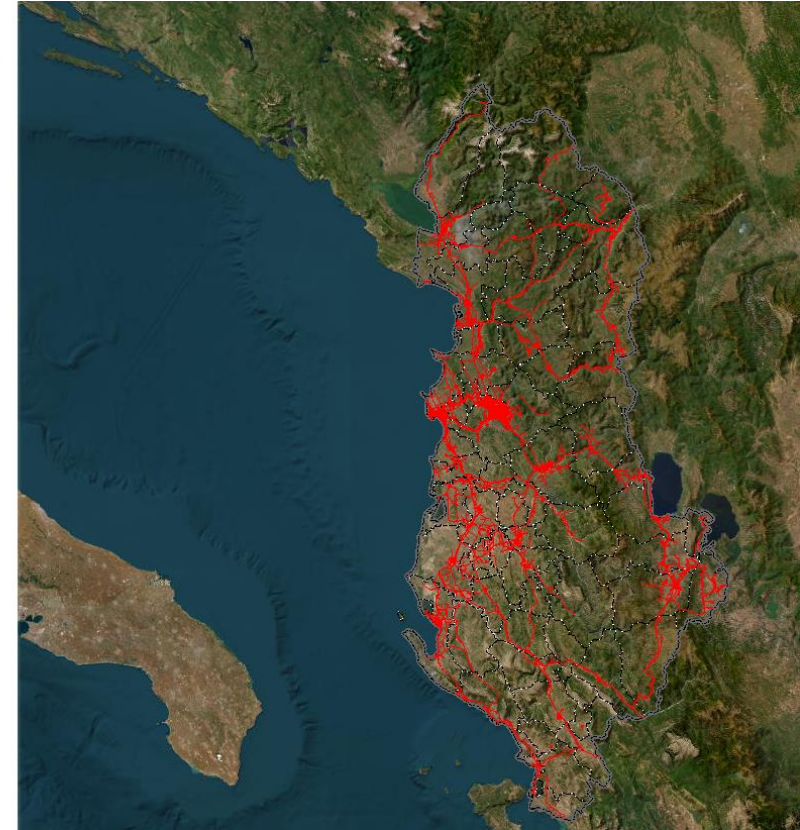


Municipalities

- **Optic Fiber**
- **Antennas**
- **IXP**
- **Cabinets**
- **Radio transmitter**
- **Ducts, Pipes and PoP**
- **Channels**
- **Data and Signal Monitoring**
- **Coverage**

TABLE OF CONTENT ... X

Layers	Legend
+ <input checked="" type="checkbox"/> Bazament Antene	...
+ <input checked="" type="checkbox"/> Fibra	...
+ <input checked="" type="checkbox"/> IXP	...
+ <input checked="" type="checkbox"/> Kabinete	...
+ <input checked="" type="checkbox"/> Kanale	...
+ <input checked="" type="checkbox"/> Percjelles Metalik	...
+ <input checked="" type="checkbox"/> Pop	...
+ <input checked="" type="checkbox"/> Puseta	...
+ <input checked="" type="checkbox"/> Radio	...
+ <input checked="" type="checkbox"/> Tubacione	...
+ <input checked="" type="checkbox"/> VSAT	...
+ <input checked="" type="checkbox"/> Administrative	...
+ <input checked="" type="checkbox"/> MonitorimSinjal	...
+ <input checked="" type="checkbox"/> MonitorimData	...
+ <input checked="" type="checkbox"/> Mbulimi	...
<input checked="" type="checkbox"/> Basemap	...



COMPONENTS STORED

TECHNICAL DOMAIN

2 Virtual Machines

Built on ArcGis

Database & Application

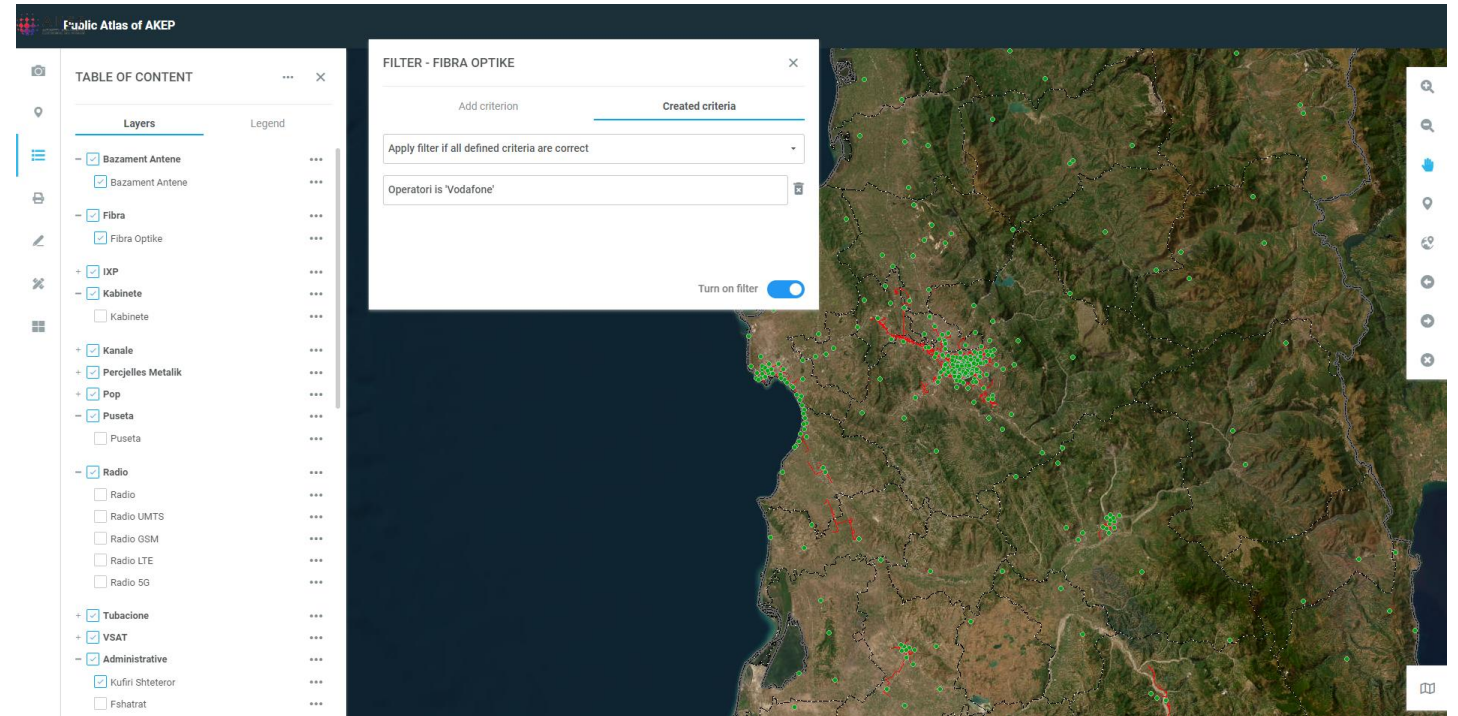
USERS

● AKEP – System Manager

● ~250 Operator users

● 61 Municipalities

- You can make visible every element that you want to be shown in the front page (i.e below: we have chosen to show public data for optic fiber network and antenna). You can filter the data for each Operator (i.e below: we have filtered data only for Vodafone Albania, selecting it's fiber and antennas)



USING PUBLIC ATLAS – SELECTING&FILTERING DATA

- You can read specific data for each element by clicking on it (i.e below: we are reading data for one antenna)

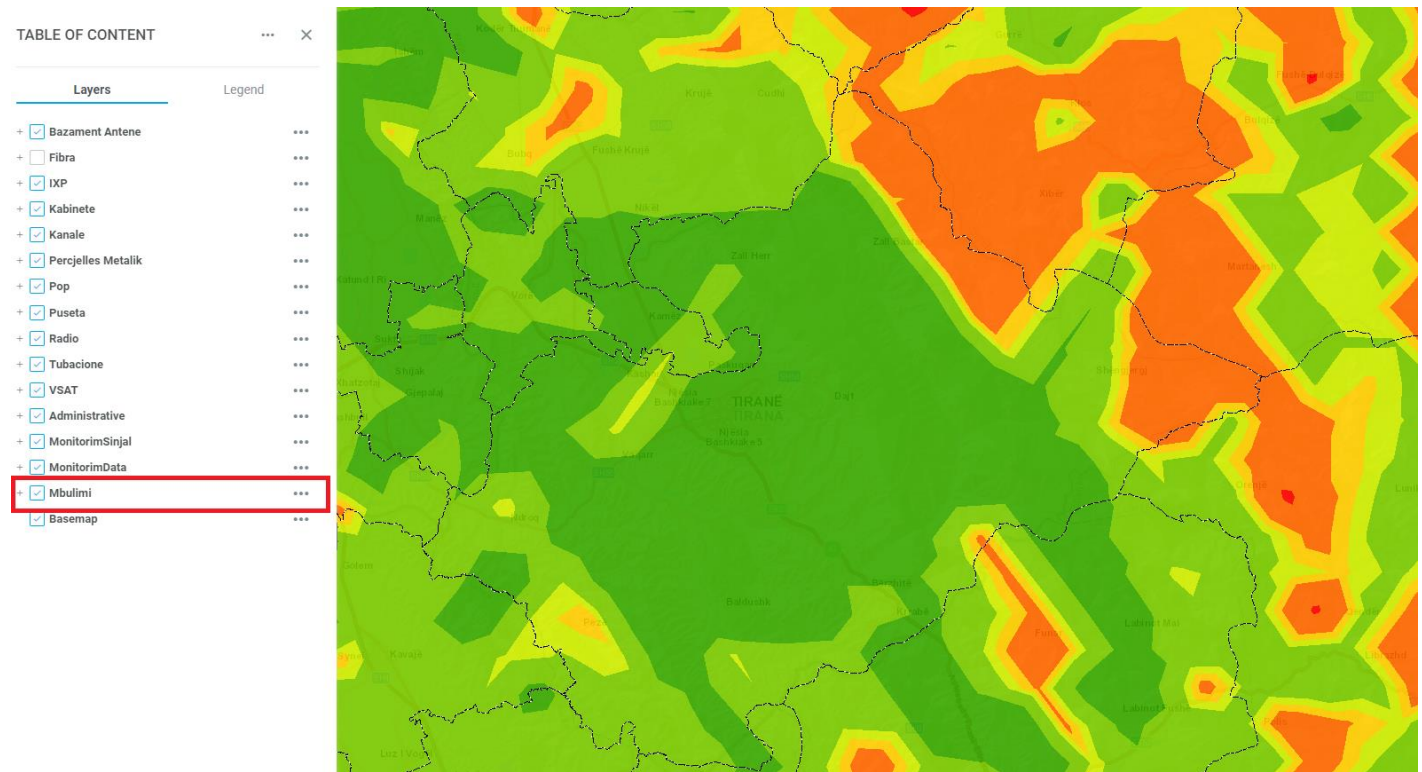
The screenshot shows the Atlas web application interface. On the left, a sidebar titled "TABELA E PERMBAJ TJES" contains a "Layers" section with various data layers, including "Bazament Antene". The main map area displays a satellite view with numerous red dots representing antenna locations. A popup window titled "ANT BAZAMENT ANTENE" is open, displaying the following data:

ANT BAZAMENT ANTENE	
Nr. Stacioni	665
Shenja	ANT
Koordinata X	19.777361
Koordinata Y	41.324333
TipiBazamentit	S
Vendosja	Siperfaqje
Statusi i Bazamentit te	AKT

At the bottom of the popup, it indicates "1 nga 267" items.

USING PUBLIC ATLAS – DATA FOR COMPONENT

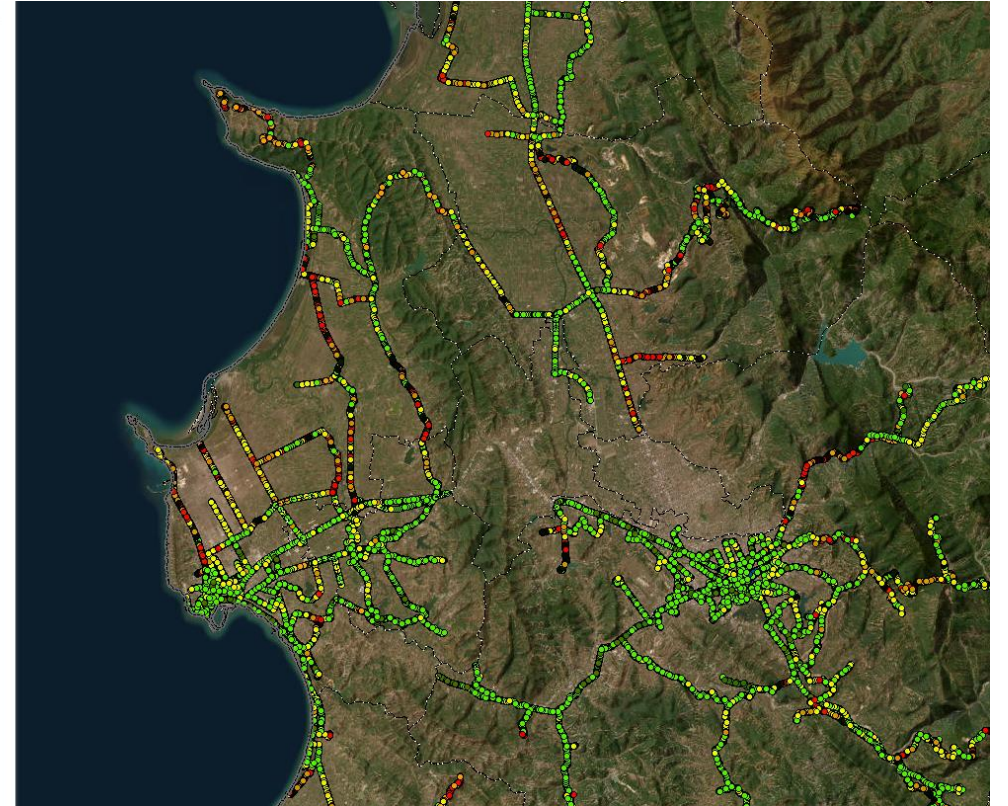
- How coverage visualization look like in our Public ATLAS. The example on the right side is for coverage in Tirana



USING PUBLIC ATLAS – COVERAGE

- How data & signal monitoring visualization look like in our Public ATLAS. The example on the right side is for coverage in Tirana and Durrës

Layers	Legend
<input checked="" type="checkbox"/> Bazament Antene	***
<input type="checkbox"/> Fibra	***
<input checked="" type="checkbox"/> IXP	***
<input checked="" type="checkbox"/> Kabinete	***
<input checked="" type="checkbox"/> Kanale	***
<input checked="" type="checkbox"/> Percjelles Metalik	***
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<input checked="" type="checkbox"/> Administrative	***
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<input checked="" type="checkbox"/> MonitorimData	***
<input type="checkbox"/> Mbulimi	***
<input checked="" type="checkbox"/> Basemap	***



USING PUBLIC ATLAS – SIGNAL&DATA MONITORING

- To fill the gaps of the current ATLAS, make it more performant, add features, generate reports, store accurate data, this year we have been in close collaboration with ITU, to create the best idea of what the future broadband mapping system in the Republic of Albania will look like.



REVISED ATLAS

- One of the biggest gaps in our actual data stored in ATLAS is Passive Infrastructure. According to the system, we currently cannot say if a channel is technically and legally available for telco operators to store their network (optical fiber), apart from the data that are self-declared by operators.
- We have to technically add this layer and we have to be in close collaboration with other public stakeholders, such as: ARRSH – Albanian Road Authority, Municipalities and even ASIG – State Authority for Geospatial Information.



REVISED ATLAS – TO FILL A BIG GAP FOR PASSIVE INFRASTRUCTURE

- **Physical infrastructure (hardware) – Building performance**
- **Generating reports**
- **Automatic validation of Data**
- **Passive infrastructure**
- **Better visualization**



REVISED ATLAS – PROBLEMS TO TACKLE

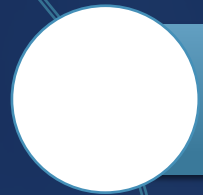
NEW FEATURES

● New physical (hardware) infrastructure

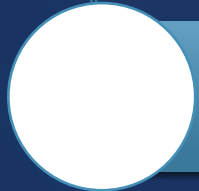
● Improved system management

● Last-Mile implementation

NEW FEATURES CONT.



Data Auto-Validation



Generating Real-time Reports



Improved coverage visualization



THANK YOU!

ARLI.MINGA@AKEP.AL



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