

# **Promoting Research** by developing ICT services in a NREN



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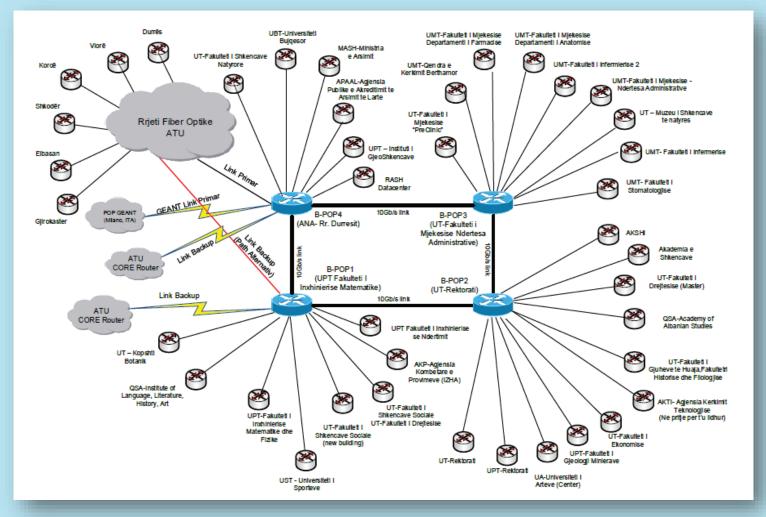
## **ABSTRACT**

National Research and Education Network (NREN) could be not only a service provider for the need of Research & Academia but it can be used as well as a bridge between Universities, Government and Private Industry. In this poster is described the case study of Albanian NREN (RASH) and how is orientating its strategy using this paradigm.

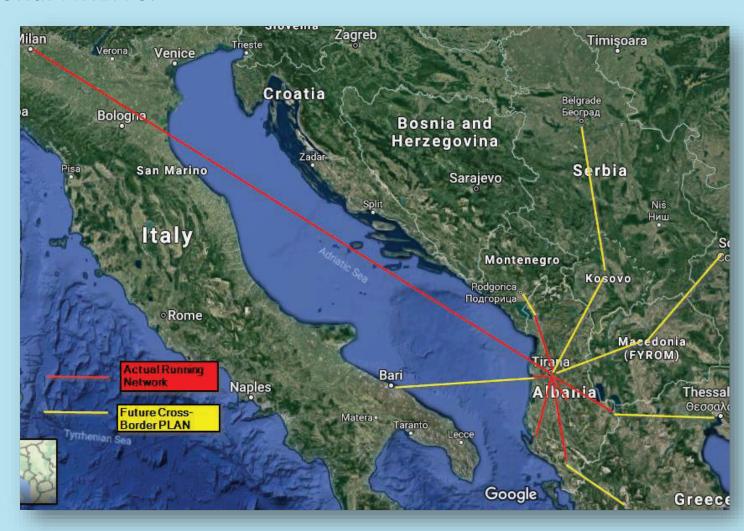
## **NETWORK**

Academic Network of Albania RASH (in Albanian: Rrjeti Akademik Shqipetar) is offering network services to public universities and research institutes, and is managing the educational and research Network in Albania. Planed is to open this services also for private research and education sector.

RASH owns a high capacity network that connects all public Universities. It is supported by a backbone with a bandwidth of 10 Gbps situated in the MAN of Tirana and 1 Gbps for point-to-point campus connection. The connection to GEANT BPOP in Milan supports a capacity of 2Gbps. The capacity of connection for campus sites starts from 250 Mbps for Universities outside Tirana to 1 Gbps for point-to-point



For the next four years, during the GN4-3 project RASH together with other NREN's from Mediterranean & South East Europe area plans to increase its capacity and have new cross borders IRU in order to optimize the connection with the GEANT network and neighboring regional NREN's.



## **NETWORK SERVICES FOR LOCAL ISP: Neutral IXP**

RASH together with NAMEX (Rom IXP) have created the first neutral **IXP** in Albania. Local ISP are now exchanging traffic with each other also with RASH; this is one of the steps to manage collaboration with not public entities through a NREN. We also are coordinating the creation of ALNOG in Tirana.





RASH has implemented eduroam service in the GN4-2 project and is planning to implement other services.

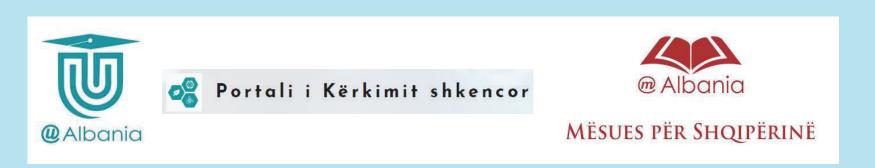


RASH will involve good part of its staff and partner universities in the GN4-3 project. The focus will be in Trust And Identity services but also software developing.

## **SOFTWARE SERVICES**

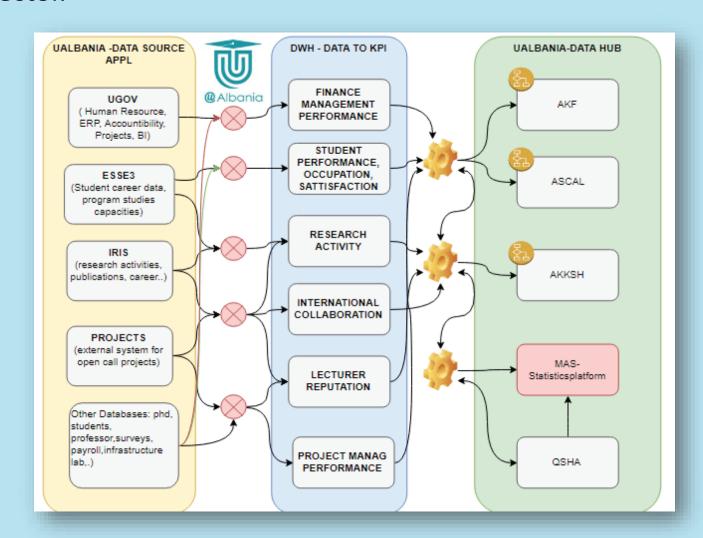
RASH has a dedicated Software Development department that specializes in Web Technologies. Our Software Products are oriented towards Academic Institutions such as:

Student Management Systems, Research Database Portals, Teacher Training Portals and University Application Portals.



#### NATIONAL DATA HUB IN A NREN

RASH with its Software department is projecting to develop a platform based on Open Data concept that would be a natural Bridge between Academia, Government and Private Industry for an Research datahub collector.



This platform will be based on ODS (operational data store) layer which will gather data from several sources (Universities databases, Government Agencies) in a unique high performance database. Integration services will transform data to be ready for data mining approaches and then to be used for analyzing information in data marts and reporting solutions.

## **OUTSOURCING SERVICES**

RASH offers the following software development services:

- Web Applications in Python, C# and Java
- Skillset: Python, Django, C# .Net MVC, Java, Hibernate, HTML, CSS, JS, CoffeeScript, PostgreSQL, ORACLE, MySQL.















django



