

An overhead view of a long wooden conference table. Several people are seated around the table, viewed from above. They are engaged with various mobile devices: smartphones, tablets, and a laptop. The scene is brightly lit, and the wood grain of the table is clearly visible.

Financing Broadband Connectivity

Agim Kukaj- Project Director
Ministry of Economy



K O S O V O D I G I T A L E C O N O M Y

Components



Financing Digital Connectivity



National Spectrum Monitoring System



Youth Online and Upwards Program



National Research and Education Network

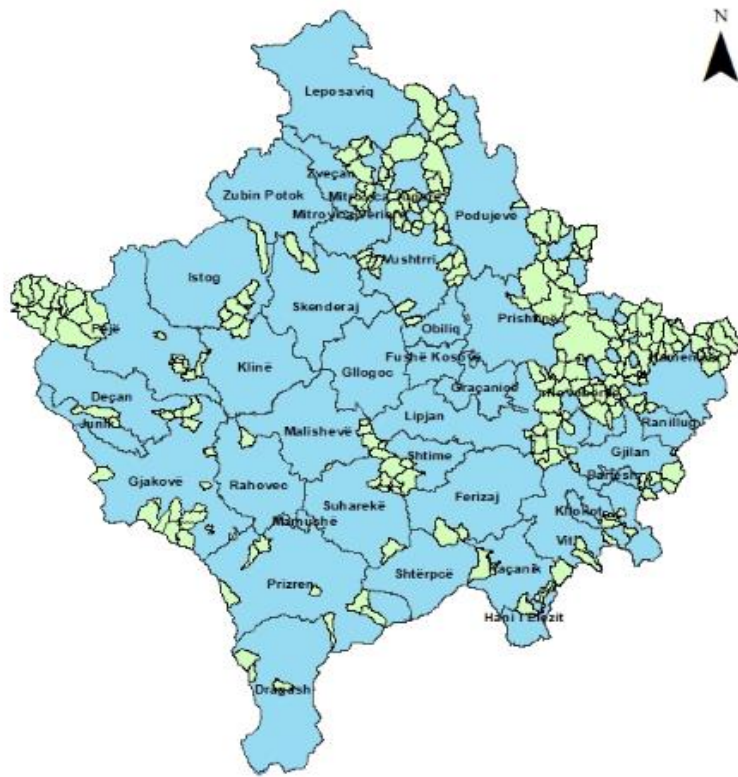
- High-speed broadband infrastructure for white areas (2018-2022)
- Connecting mobile towers with fiber optics – supports deployment of 5G networks (2020 – ongoing)

KEY DEVELOPMENTS (2018-2022)

Number of villages	203
Public Schools	105
Healthcare Institutions	43
Mobile Towers Connected	61
Private Capital Mobilized	Project triggered more than 10 mil EUR private investments

White areas identified in 2018

White areas in 2022



Legend

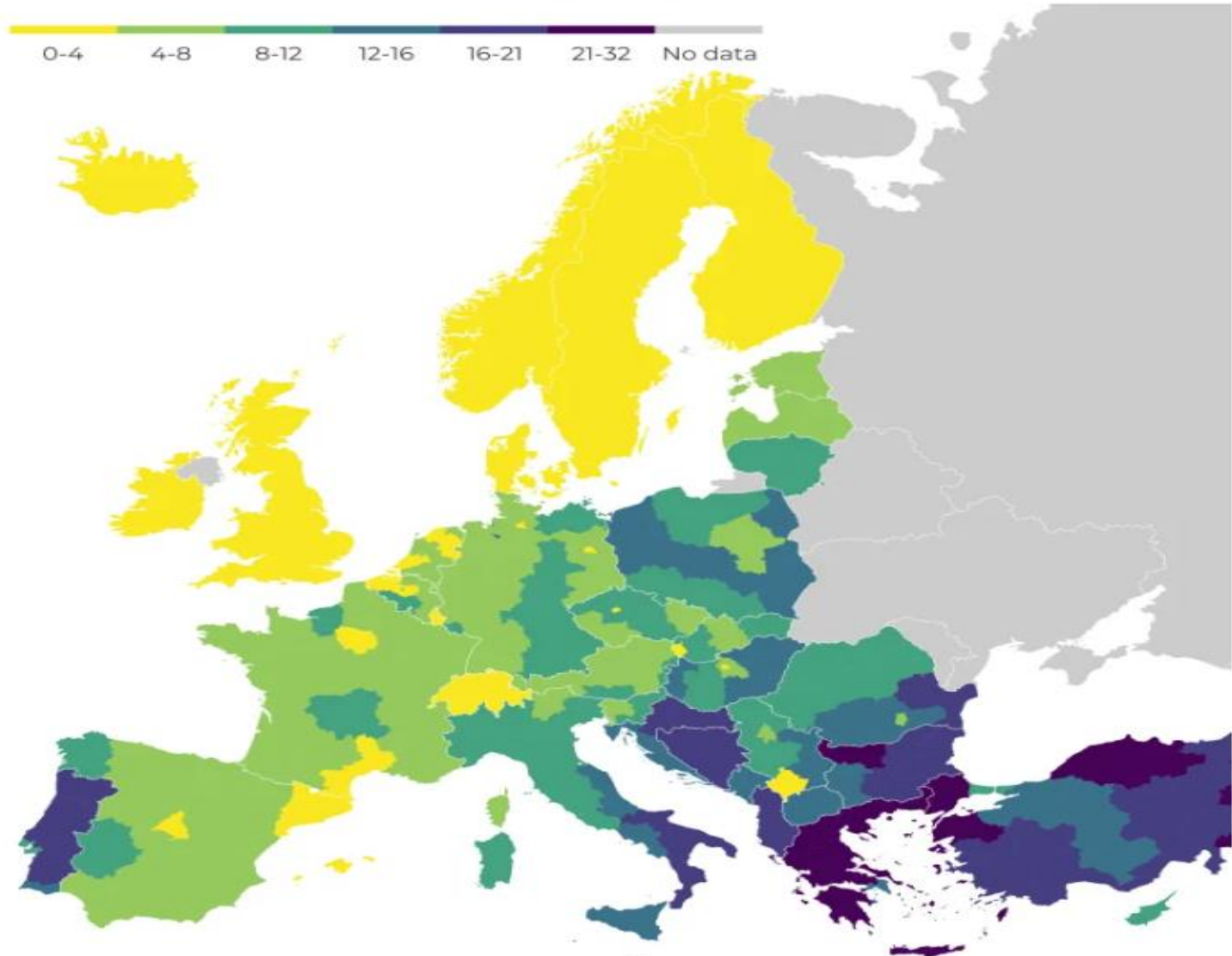
- Uncovered zones 2018
- Municipalities

1:1,000,000

Legjenda

- Zona pambulluar
- Komuna

1:1,000,000



I. FINANCING DIGITAL CONNECTIVITY

COMPETITIVE GRANT SCHEME – PPP MODEL

OBJECTIVE:

- ❖ Finance projects to deploy **high-speed broadband infrastructure** including **households and institutions (white areas) 2018-2022**
- ❖ Finance projects for **connecting mobile towers with fiber optics** - to support deployment of 5G networks **(2020 – ongoing)**

DIRECT BENEFICIARIES:

- ❖ Eligible Internet Service Providers (ISPs)
- ❖ Mobile Network Operators (MNOs)


SELECTED BENEFICIARIES SHALL ENSURE:

- ❖ Free-of-charge access to guaranteed download speed of at least 100 Mbps (upgradable to 1 Gbps) for a period of at least 5 years, after completion of the sub-project, to the **public** institutions, incl. **schools and health centers**, in the relevant uncovered area(s);
- ❖ **Open access** to the subsidized infrastructure, in line with EU Broadband Guidelines




BROADBAND ATLAS

Broadband Atlas is a multi-layer interactive electronic map, which contains data on the geographical location, shapes and attributes of elements of public electronic communications infrastructure and other infrastructures in the Republic of Kosovo.

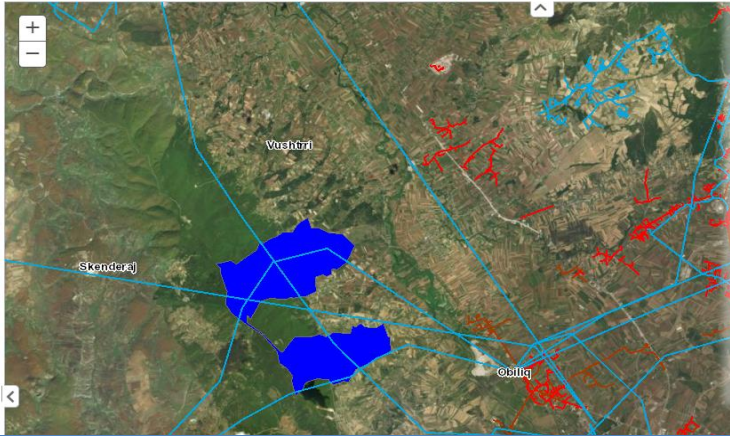


ATLLASI ELEKTRONIK
Ministria e Zhvillimit Ekonomik

Identifikohu SQ SR EN 

Shtresa

- Infrastruktura alternative
 - Adresat
 - Rrjeti rrugor
 - Komunat
 - Rrjet elektrik
 - Lumenjt
 - Liqenjt
- Infrastruktura telekomunikuese
 - Kabllot optike
 - Kabllot koaksiale
 - Çifte të përdredhura bakri
 - Tubacionet kablore
 - Pusetat
 - Kabinetet
 - Njjet dhe Amplifikuesit
 - Ndërtesat
 - Shtyllat
 - Antenat



Broadband Atlas contains:

- Elec. Comm. Infrastructure Map
- Service Map
- Investment Map
- Alternative Infrastructure

Table

optika

FID	Shape *	purpose	main_owner	ownPercent	length	condition	technology	services	tCapacity	aCapacity	fibres	standard	aFibres	remarks	operatorID	descripti	date
0	Polyline	IPKO		100	812	operative	GPON	GPON	0	0	48		0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
1	Polyline	IPKO		100	812	operative	GPON	internet & DTV	1000	100	48	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
2	Polyline	IPKO		100	250	operative	GPON	internet & DTV	1000	100	48	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
3	Polyline	IPKO		100	430	operative	GPON	internet & DTV	1000	100	48	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
4	Polyline	IPKO		100	438	operative	GPON	internet & DTV	1000	100	48	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
5	Polyline	IPKO		100	174	operative	GPON	internet & DTV	1000	100	96	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
6	Polyline	IPKO		100	24	operative	GPON	internet & DTV	1000	100	96	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
7	Polyline	IPKO		100	464	operative	GPON	internet & DTV	1000	100	48	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
8	Polyline	IPKO		100	57	operative	GPON	internet & DTV	1000	100	96	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
9	Polyline	IPKO		100	279	operative	GPON	internet & DTV	1000	100	96	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
10	Polyline	IPKO		100	369	operative	GPON	internet & DTV	1000	100	96	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
11	Polyline	IPKO		100	97	operative	GPON	internet & DTV	1000	100	12	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
12	Polyline	IPKO		100	66	operative	GPON	internet & DTV	1000	100	12	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
13	Polyline	IPKO		100	339	operative	GPON	internet & DTV	1000	100	24	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018
14	Polyline	IPKO		100	188	operative	GPON	internet & DTV	1000	100	12	G652	0	Projekti KODE, bashkëfinancim me MZHE	0		7/20/2018

IMPLEMENTATION EXPERIENCE FROM GRANT SCHEME



I. Identification Phase

Identification of the Geographic Areas eligible for Project intervention - White Areas;

II. Application and Selection Phase

Call for Applications to deploy infrastructure in White Areas;
Evaluation of the proposals and selection of the Beneficiaries;
Contract signature;

III. Implementation Phase

Field controls;
Processing and Authorization of Payments;
Acceptance of works;

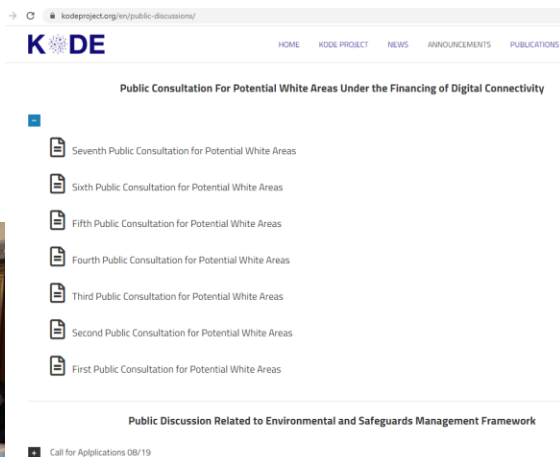
IV. Post Evaluation Phase

Audit;

Grant Scheme

IMPLEMENTATION EXPERIENCE FROM GRANT SCHEME [I]

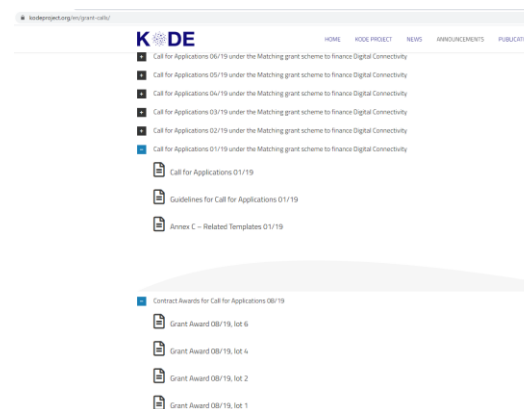
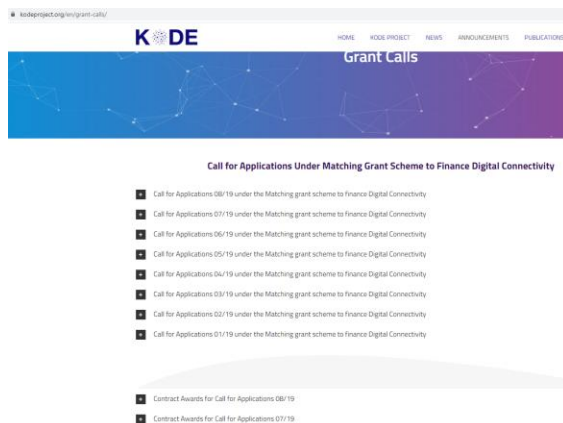
IDENTIFICATION PHASE		
Desk Review	Field Check	Consultation with ISPs
Reviewed information from Ministry and ARKEP data Reviewed information sent from ISPs	In-person visits to the relevant zones	Consultation publicly announced for 2 weeks to verify whether ISPs have plans to cover white areas (incl. ESMP Checklists)



IMPLEMENTATION EXPERIENCE FROM GRANT SCHEME [II]

APPLICATION AND SELECTION PHASE

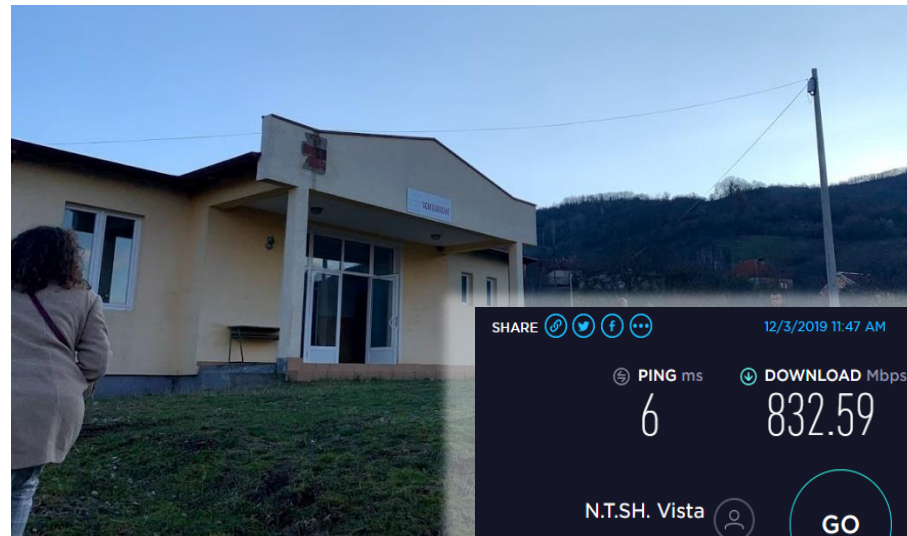
Call for Applications	Evaluation of the proposals	Grant Agreement signature
<p>Announced for the duration of 20 business days</p> <p>Published on the Ministry and KODE websites</p> <p>Eligibility criteria; Checklist of required documents</p>	<p>Evaluation Committee</p> <p>Evaluation based on the most economical and technically strong Grant Application:</p> <ol style="list-style-type: none"> 1. Economic Criteria – 70% 2. Technical Criteria – 30 % 	<p>After clearance of all procedures, awarded ISP is invited to sign the Grant Agreement</p>



IMPLEMENTATION EXPERIENCE FROM GRANT SCHEME [III]

IMPLEMENTATION PHASE

Field Control and Acceptance of works	Processing and authorization of payment	Execution of payment
Project Manager / Commission for Technical Acceptance for each of sub-projects conduct relevant technical field checks	Review of each payment evidence, as indicated in the request for payment	Final checks and confirmation from financial management department of the Ministry



SHARE [Icons] 12/3/2019 11:47 AM RESULTS SETTINGS

PING ms 6 DOWNLOAD Mbps 832.59 UPLOAD Mbps 598.70

N.T.SH. Vista [Icon] GO [Icon] Artmotion SH.P.K. Prishtina

IMPLEMENTATION EXPERIENCE FROM GRANT SCHEME [IV]

Post-Evaluation Phase

Monitoring

Grant Agreements shall be monitored by KODE-PIU during the implementation of Sub-projects and for 7 (seven) years after the implementation by MoE



- Beneficiaries are **highly satisfied with the project** results
- Growing demand for introducing new services
- Opportunity to strengthen data infrastructure (e.g., data center, cloud services) to **enable the resilient and efficient rollout of data-based services** in Kosovo

"Isolated villagers that were infected with COVID-19 were concerned about their health and reached us through Viber (a messaging app) or any other instant communication app to tell us their symptoms and ask if their health condition is becoming worse. Me and a doctor have responded to many messages. Also, as a resident of this village I can say that without internet we were like isolated from the world."

Melihate Asllani
Nurse, Guske Village



"Learning from distance was challenge for me, but I feel so lucky that we had the internet connection at home which allowed me to get class updates. My teacher helped to learn how to use the online platform to attend classes and to submit the homework."

Petra Kosumanović
Primary school student, age 14, Makresh Village



"We have advanced in the extension of the fiber optic network in our area, which technology was not deployed before by our company. We have a significant increase as a company which has been reflected in increasing the number of employees and on customer satisfaction as well."

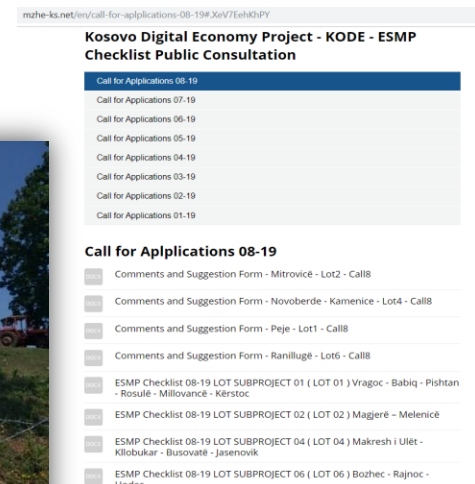
Bajram Hyseni
CEO at ISP Giga Group, Gjilan City



LESSONS LEARNED THUS FAR (2018-2022)

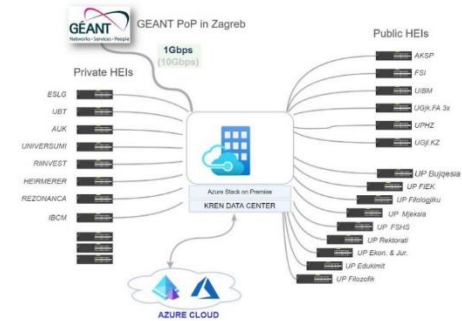
FREQUENT COMMUNICATIONS & COORDINATION WITH RELEVANT STAKEHOLDERS IS KEY TO BETTER PLANNING AND IMPLEMENTING ACTIVITIES:

- ❖ Ministry and KODE Team organized multiple public discussions with ARKEP & ISPs
- ❖ Feedback received and incorporated from different target groups
- ❖ Publication of GRM and adherence to environmental & social safeguards
- ❖ KODE website launch, engagement through social media
- ❖ Team experienced through pilots





KODE Project – activities 2023 - ongoing



Provision of dedicated high-speed internet access to the primary and secondary schools nationwide,

Installation of internal networks in schools- WiFi Campuses

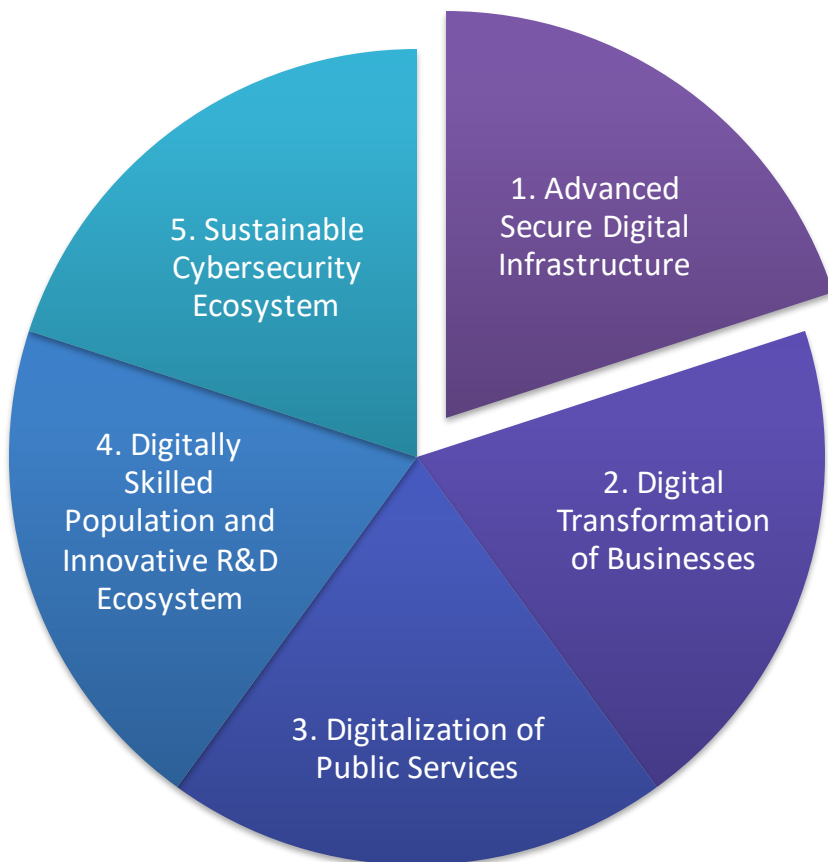
Scaling-up the Kosovo Research and Education Network (KREN) and its services to schools in Kosovo

Ministry of Economy is cooperating with Ministry of Education in achieving the objectives of the Education Strategy 2022-2026, specifically for the Strategic Objective "The use of digital technology for the improvement of services and quality in education, in accordance with the trends of digital transformation".



Strategic Objectives

Vision



By 2030, Kosovo will become a digitally modern country, with advanced digital economy, effective public administration ensuring smart use of the territory and infrastructure, whose citizens will use digital tools and electronic services and live high-quality and secure lives in digital era

Key activities of Strategic Objective 1

- Frequency spectrum - providing adequate frequency bands for operators – ARKEP ([700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2600 MHz, 3.4-3.8 GHz, and 26 GHz \(suitable prices\)](#))
[Third Mobile Phone License](#)

- Installation of Sustainable Green Infrastructure and secure fixed and mobile network (infrastructure sharing)

– 5G Mobile Technologies for public safety and smart communities

“5G enabled mobile ICT for smart communities and public safety”; **Socio Economic Drivers**; 5G smart village and Smart City; 5G Pilot; 5G Smart Factory- Private Networks

- Further operationalization of DESI; Broadband Atlas and SIP Creation

1. ADVANCED SECURE DIGITAL INFRASTRUCTURE

Thank You!

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