

# SID 2025

Sibiu Innovation Days

06-07 November, Sibiu - RO



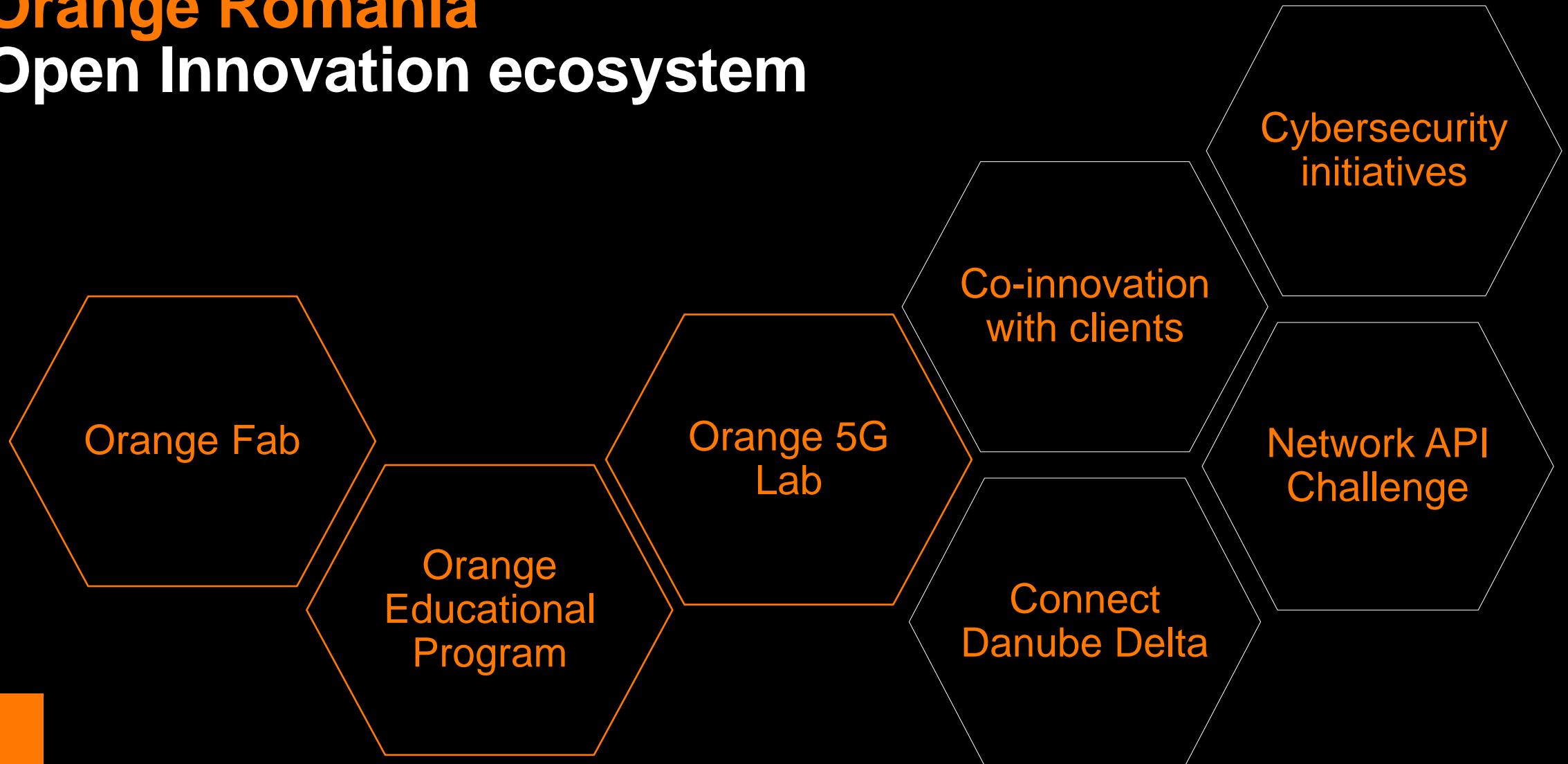
## Beyond Connectivity: Building Romania's Future Through Education and Innovation

Ana CIOBANU

*Startup Programs Manager, Orange Romania*

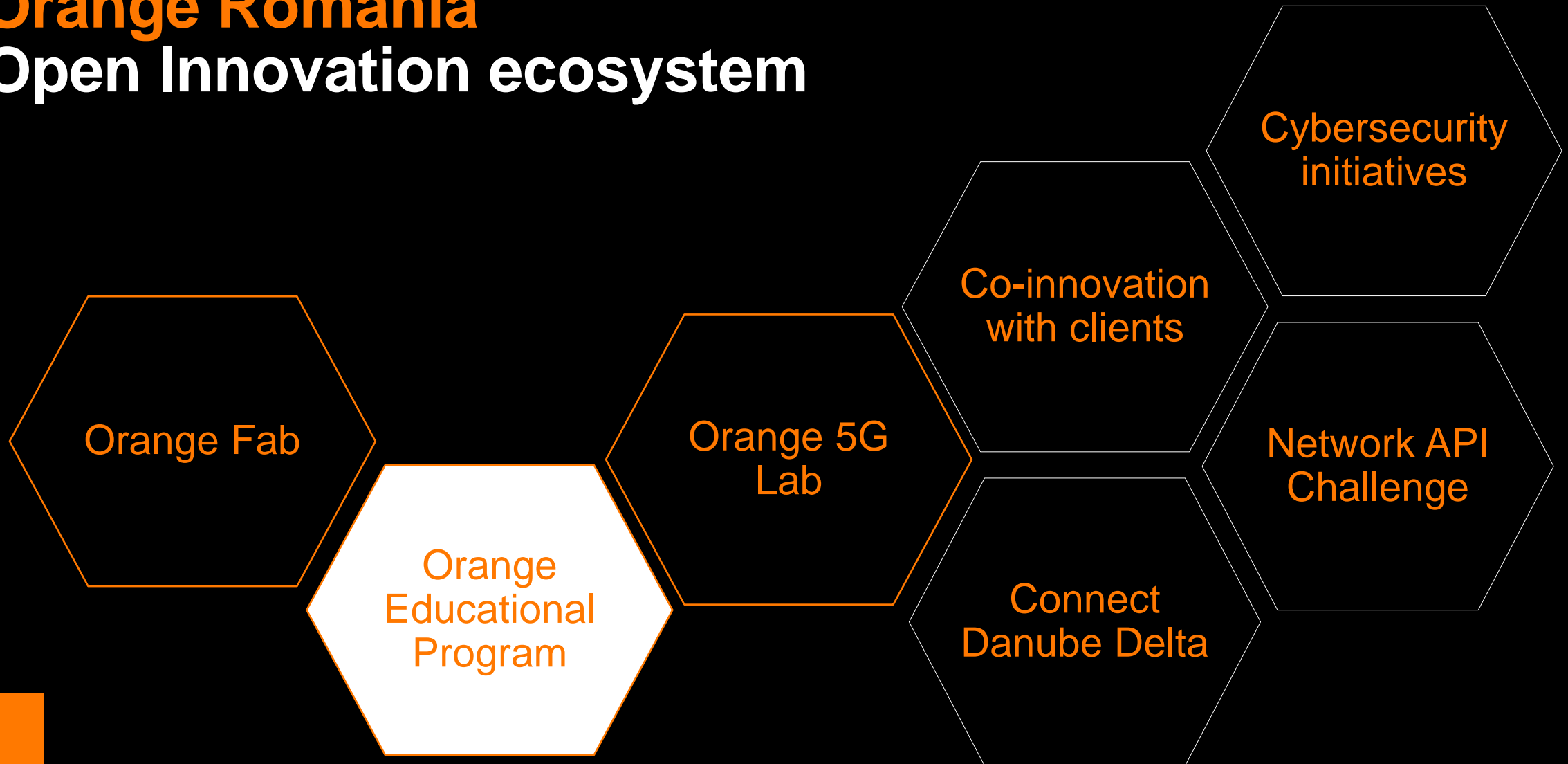
# Orange Romania

## Open Innovation ecosystem

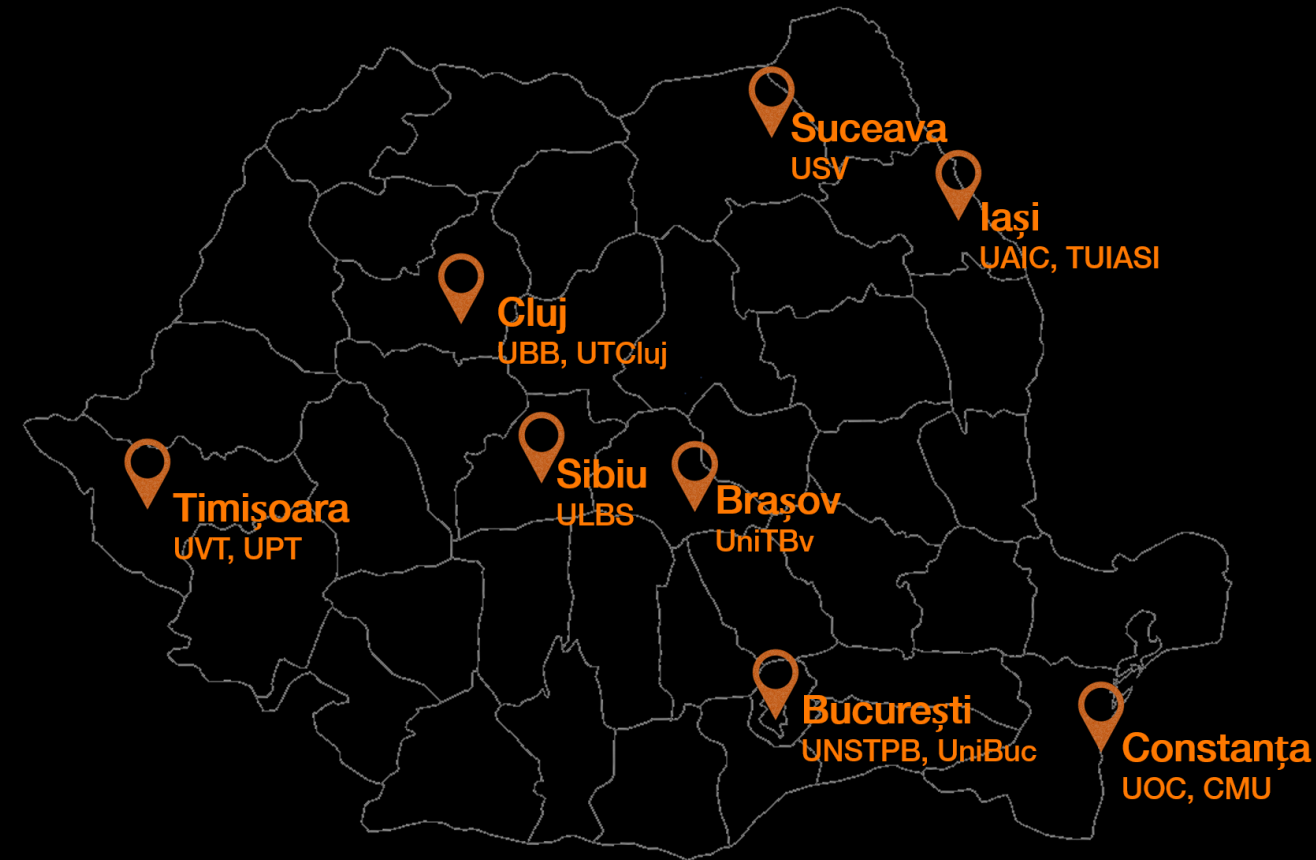


# Orange Romania

## Open Innovation ecosystem



# Orange Educational Program 2025



**2M€**  
Invested

- scholarships: PhD, MSc, BSc
- equipment for course labs
- Wi-Fi for students
- students tech competitions
- scientific conferences
- 5G research laboratories in Bucharest and Iasi

**1400+**  
Graduates

**392**  
Scholarship holders

**13**  
Universities

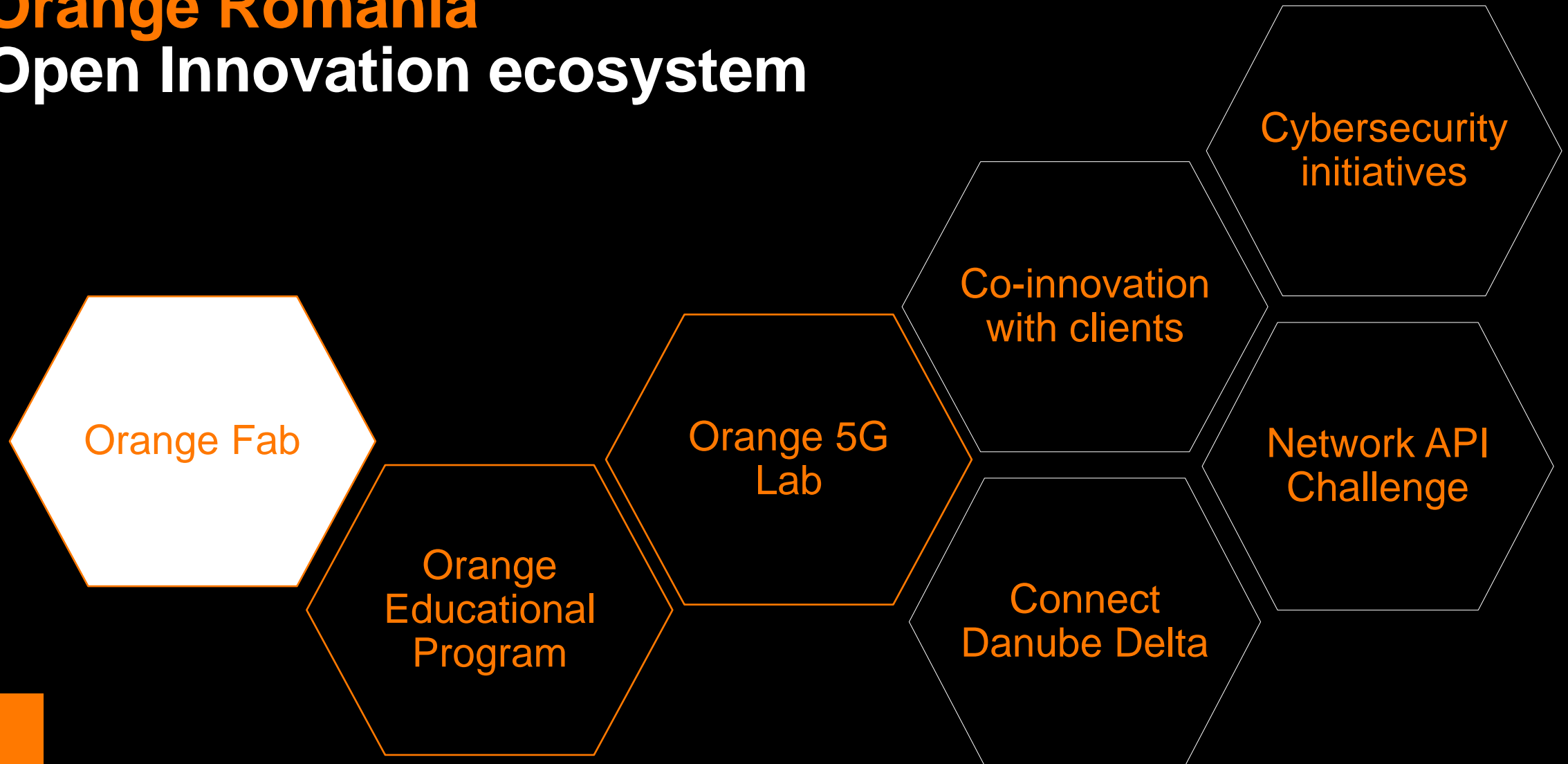
**600+**  
Internships at Orange Romania

**8**  
Cities

**172**  
theses

# Orange Romania

## Open Innovation ecosystem



# Orange Fab

Orange Fab is a **12 months corporate startup accelerator**, created to support entrepreneurs in developing innovative products and distributing them in Romania and beyond.

**20**

Countries

**3**

Continents



# Why is **Orange** collaborating with startups?



To create added value for both **our customers** and **internal Orange teams** by proposing innovative solutions from startups.



To have **access to innovative solutions** and set new trends.



To **inspire** and promote startup frameworks to **students** and **researchers** who engage with Orange Educational Program and Orange 5G Lab.



To support the growth of the **Romanian startup ecosystem**.

# What do startups **need**?

## Money

FUNDING

SALES CONTRACTS

### Orange Ventures

A corporate venture capital to invest in startups and develop business

## Support

BUSINESS  
DEVELOPMENT

ACCESS TO MARKET

TECHNOLOGY

### Orange Fab

A corporate startup accelerator to build business partnerships

### Orange 5G Lab

To discover, experiment and develop product and services in 5G

## Visibility

The logo for VIVA TECHNOLOGY. The word "VIVA" is in a bold, sans-serif font with each letter in a different color (V: purple, I: blue, V: green, A: yellow). Below it, the word "TECHNOLOGY" is in a bold, black, sans-serif font.



# Orange Fab Mission

- To **support** and **accelerate** the growth/development of innovative tech startups by providing them with resources, mentorship and opportunities to **collaborate with Orange business units**, partners and customers.
- To foster innovation, drive technological advancements to create synergies between startups and Orange's extensive network, **to bring new products and services to the market more effectively.**

Through Orange Fab, Orange seeks to stay at the forefront of emerging technologies and trends, enhancing its competitive edge while contributing to the growth and success of the Romanian startup ecosystem.



# Orange Fab Objectives

- To build **commercial partnerships** between **startups and Orange business units**, through startup scouting and acceleration in order to bring added value to the company and to its customers.
- To raise awareness on the importance of entrepreneurship and innovation, **enabling Orange Romania to make the transition, from a connectivity player, to an innovative operator** that integrates disruptive solutions and provides added value services for its customers.



# Orange Fab Verticals

5G & Networks of  
the Future

Security

Smart City &  
Mobility

Smart Retail

Media &  
Entertainment

Digital Education

IoT & Connected  
Objects

Sustainability

People & Future  
of work

Health & Lifestyle

# What **we offer** to selected startups

- Access to no fee, equity free program based on a business partnership
- Development of your solution through Proof of Concept projects with Orange customers
- Our customer database and a win-win business partnership
- Mentoring in both technology and business with Orange experts
- Access to resources and technology to develop your solution
- Visibility and promotion
- Possibilities of collaboration within Horizon Europe research projects
- Internationalization and collaboration possibilities with the Orange Group through the Orange Fab International Network
- Access to international events/conferences such as Mobile World Congress 2025, Vivatech 2025, GITEX Africa 2025



# Orange Fab in Romania since 2017

54

Startups included in the program

2.2 M€

paid by Orange to acquire  
products and services from  
**Orange Fab startups**

100+

**commercial projects**  
implemented

14

Startups provided products and  
services that were integrated **in**  
**internal Orange processes**

680 K €

invested in the national  
**innovation ecosystem**

4

**Startups' solutions are**  
**integrated in Orange**





# Orange Fab Community Partnerships

## Cowork Timisoara



Partnerships with startup support organizations across Romania, offer Orange Fab program visibility to a targeted audience and the possibility to have access to a curated pool of startups.

Through the partnerships we have a first screening of the startups done by the partners as they have good knowledge of the program and benefits we offer to startups.

## Make IT in Oradea



## FabLab Iasi

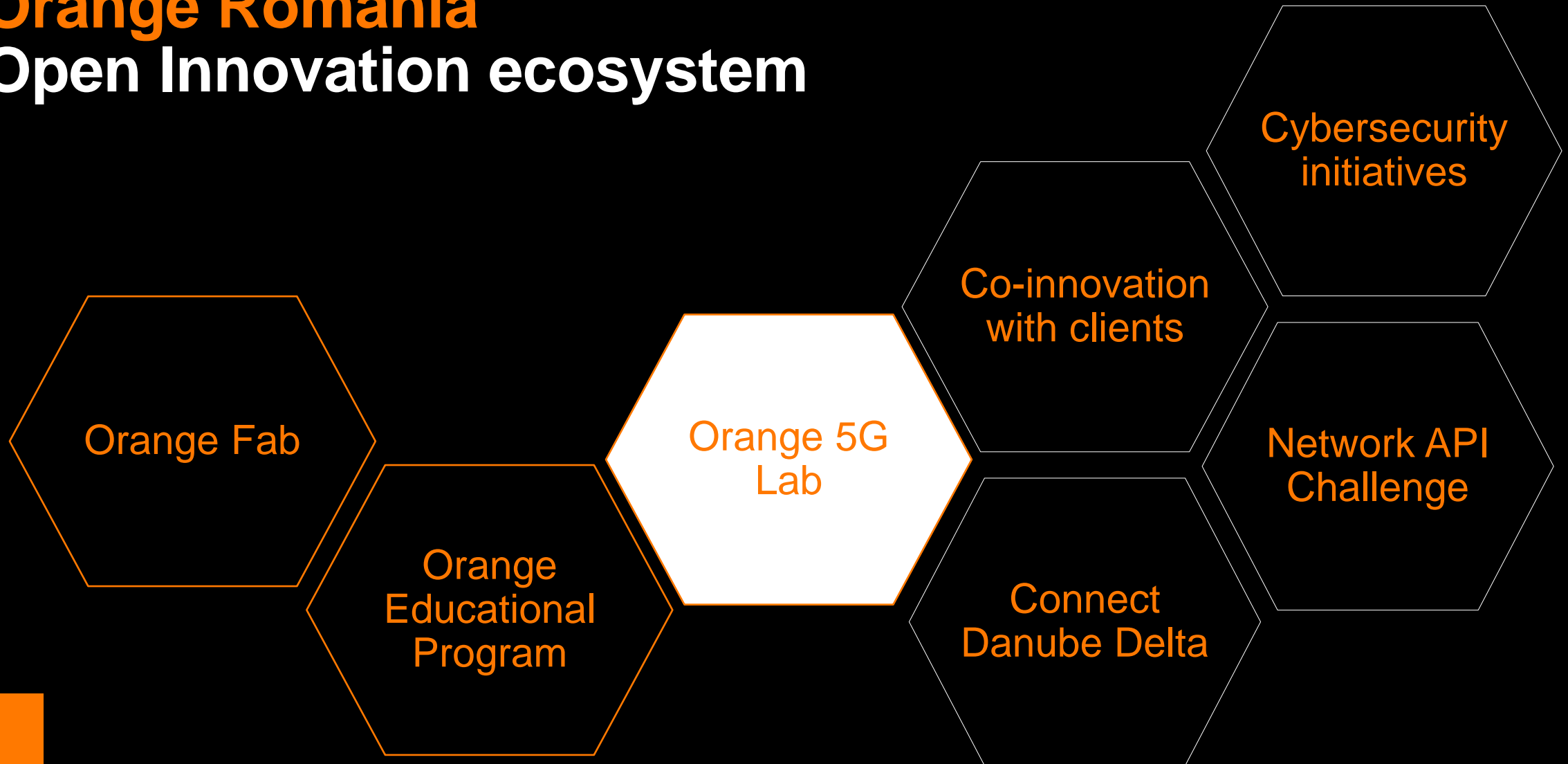


## Rubik Hub Piatra Neamt



# Orange Romania

## Open Innovation ecosystem





## 5G Lab Iasi

partners: Technical University "Gheorghe Asachi"  
Iasi and Continental Automotive  
March, 2023

**Research team:** 5  
professors, 3 PhDs, 1  
MSc, 3 BSc



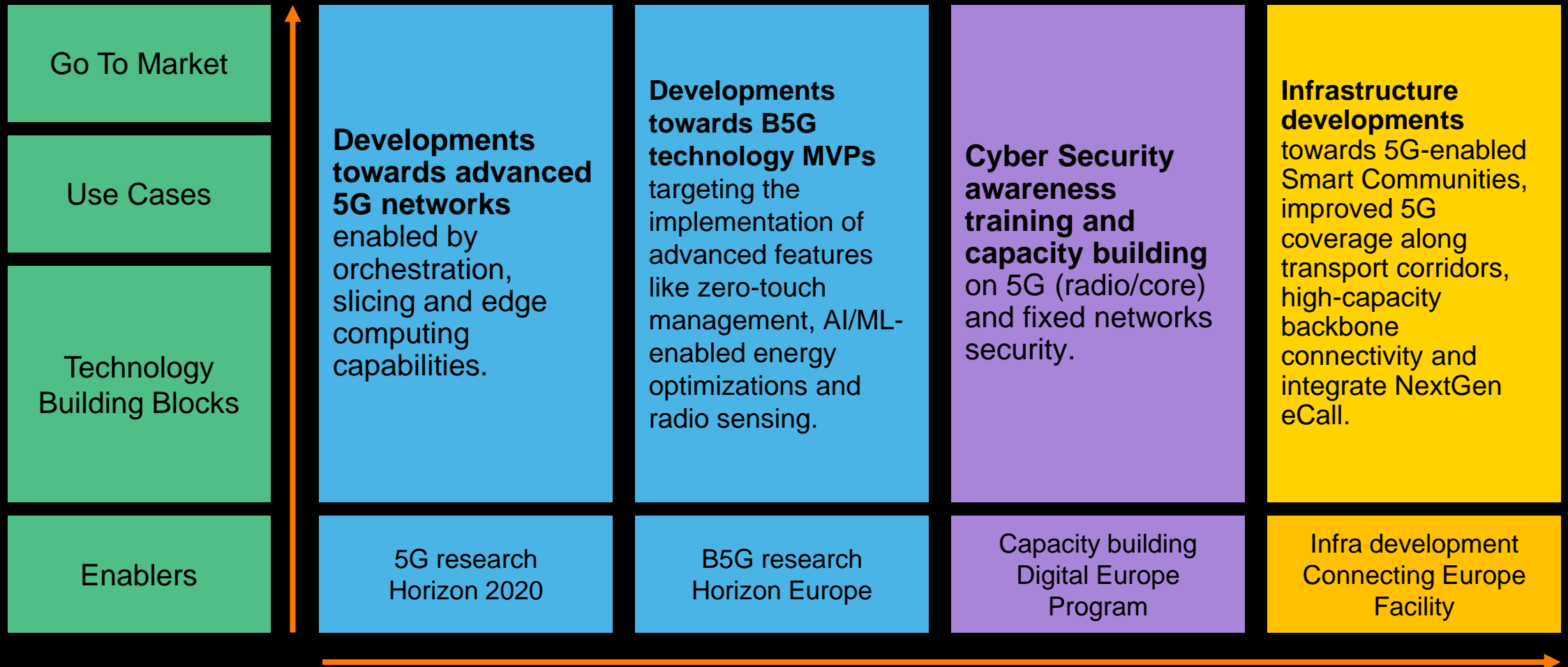
## 5G Lab Bucharest

partner: Politehnica University of Bucharest  
April, 2021

**Research team:** 3  
professors, 2 PhDs, 6 BSc

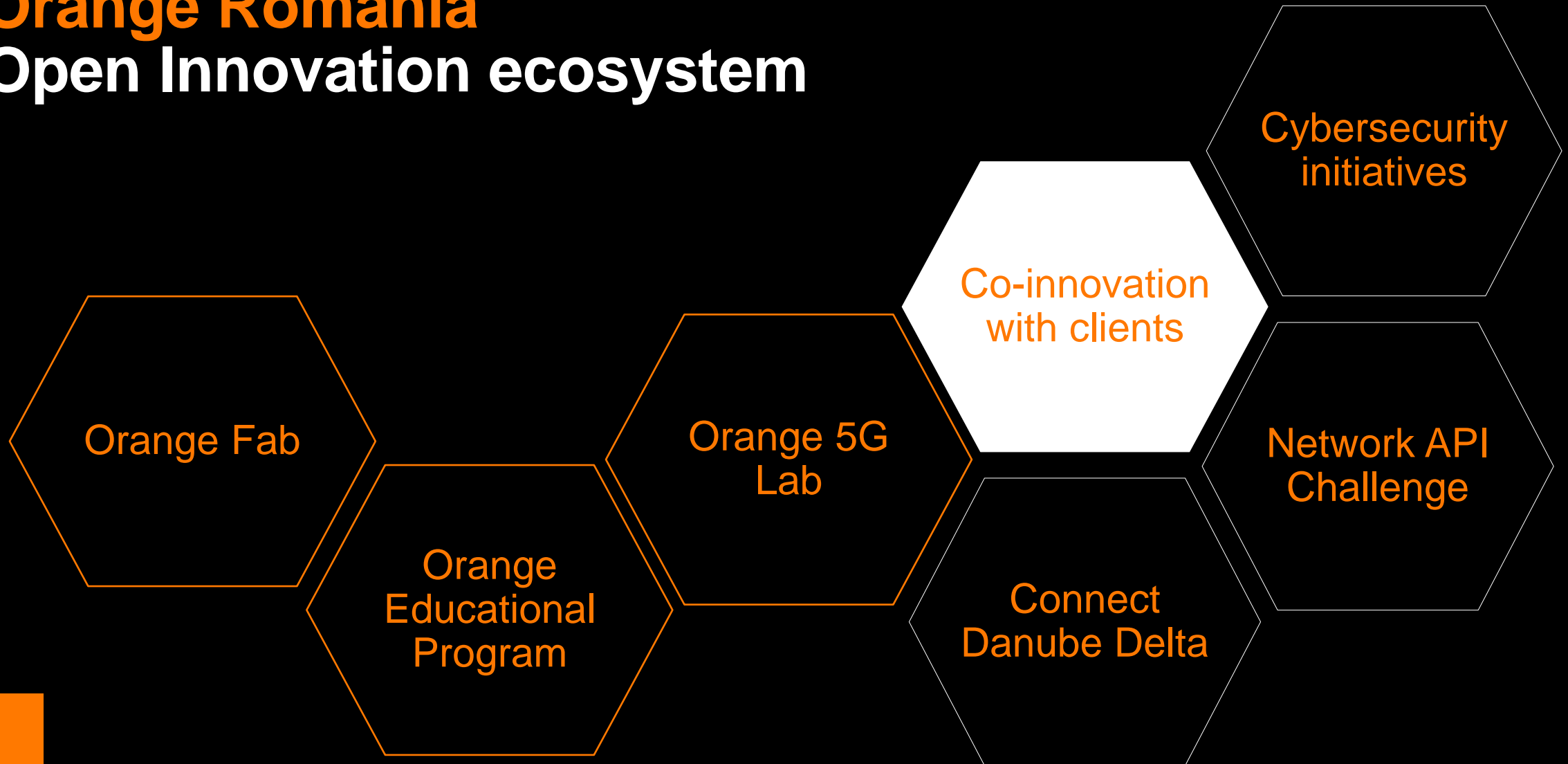


# Tech transfer from EU grants to market



# Orange Romania

## Open Innovation ecosystem



# 4/5G based digital signage Spectro:o

## Solution

- Cellular-enabled compact device
- Intuitive and easy-to-integrate digital signage platform deployed in ORO's premises
- Edge video analytics for marketing reports (e.g. number of viewers, demographics)
- Orange Fab startup

## Verticals

- Retail
- Healthcare
- HoReCa
- Manufacturing
- Academia



# Smart city video analytics

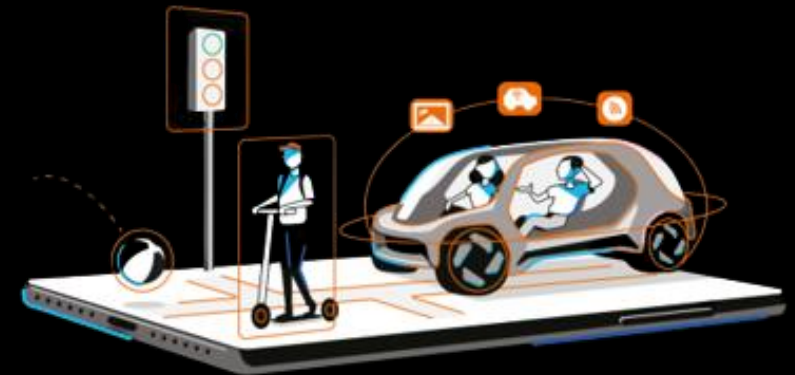
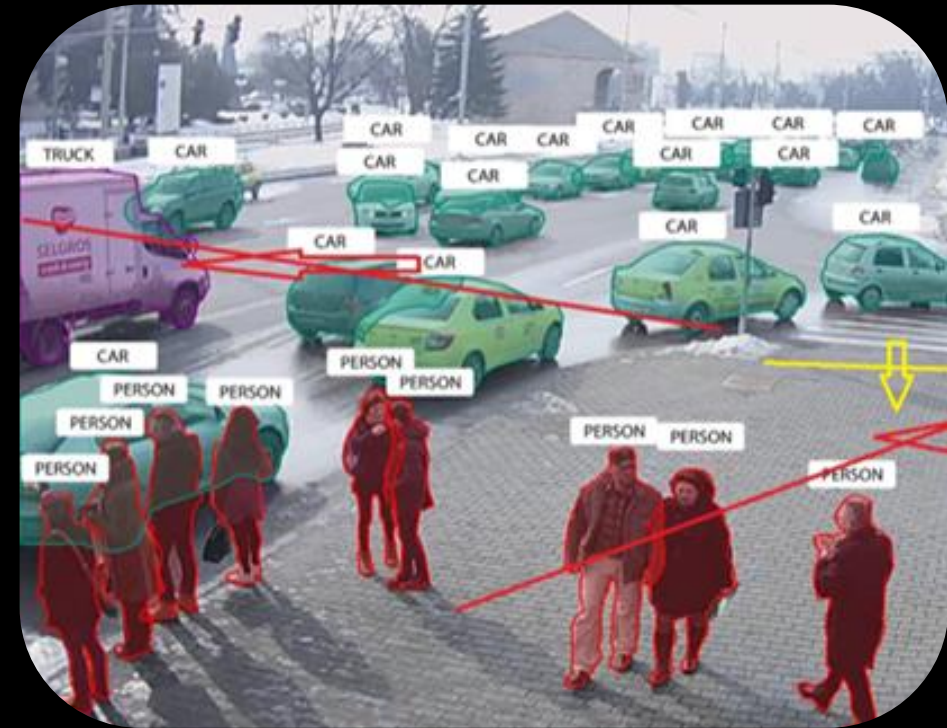
Δ VISION

## Solution

- Combines AI-assisted video image processing with the benefits brought by the connection to Orange 5G and an edge-computing solution
- Validated in the Bucharest 5G Lab
- Orange Fab startup

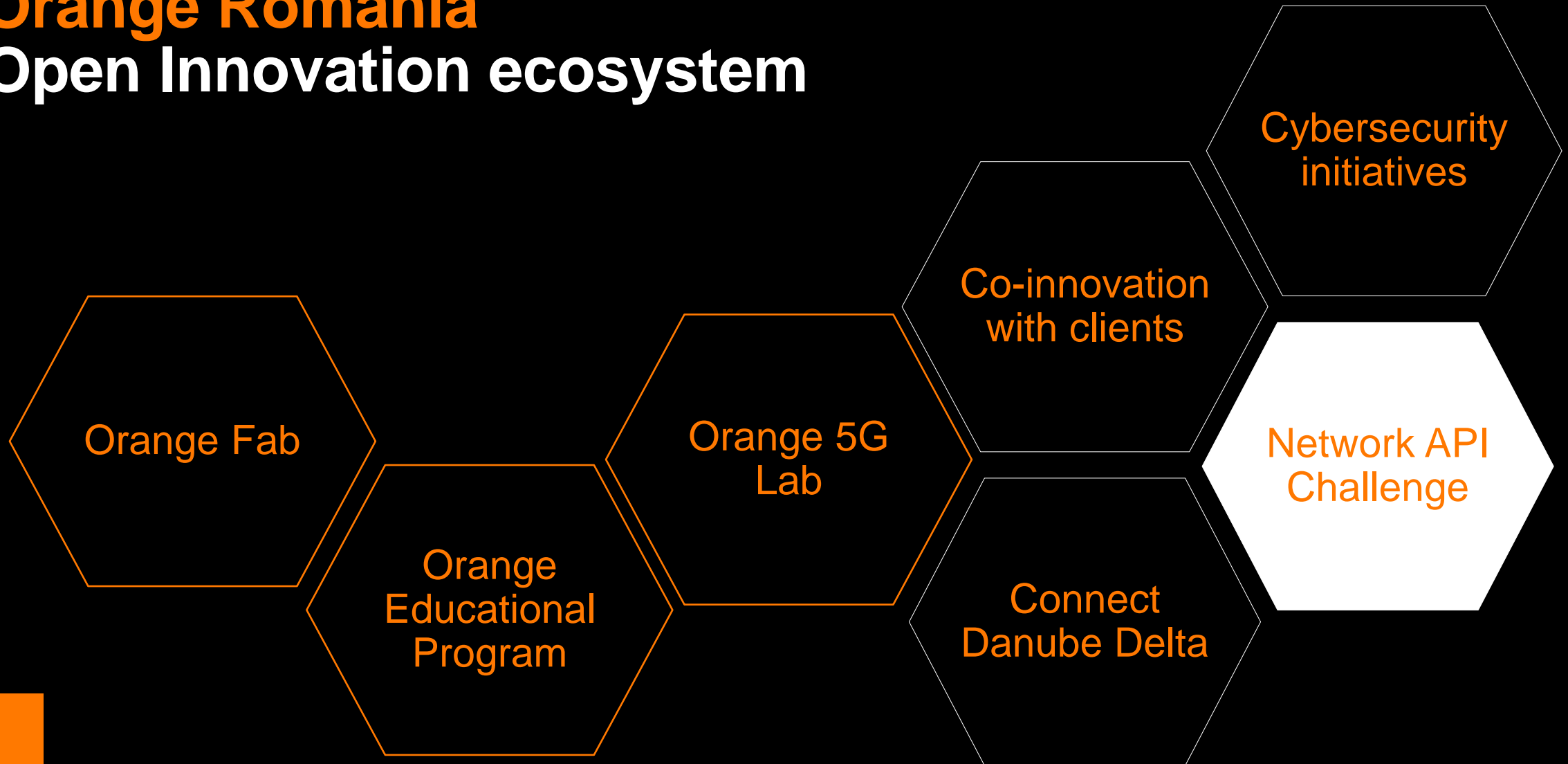
Helps **local authorities and municipalities** to gain insights regarding the roads' users

Facilitates integration with different alerting solutions through APIs



# Orange Romania

## Open Innovation ecosystem





# Network APIs Challenge

Build fast.  
Connect smart.  
Scale with Network APIs.



# Network API Challenge

Overview

APIs

What

Which

How

Target Audience

Timeline

Within Orange's general mission to become a leader in the network API ecosystem **Orange Fab and 5G Lab** together organise **Network API Challenge** — a unique innovation opportunity for Romanian tech community to test real network APIs and explore new integrations.

The challenge aims to give **the opportunity** to Romanian companies and app developers **to test 7 Network APIs** developed by Orange under CAMARA open-source project and available in 5G Lab in Bucharest and Iași.

## Objectives

- Introduce the **Network APIs to Romanian market**
- Identify monetizable and scalable API integrations
- **Support our innovation roadmap** with tangible outcomes
- Attract startups and tech talent around our infrastructure



# Network API Challenge

Overview

APIs

What

Which

How

Target Audience

Timeline

**APIs**, or Application Programming Interfaces, are a set of rules that allow software programs to communicate with each other regardless of their manufacturers, architectures, or programming languages. **Network APIs provide** developers with a standardized, simplified way to integrate 5G services and capabilities into their applications.

**How does it work?** Through API one application can request data or services from another: the API receives the request, gets the data from its system, and sends back the result.

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**APIs are essential, as they allow to integrate advanced network functionalities in the applications without building everything from scratch.**

# Network API Challenge

Overview  
APIs

What  
Which

How  
Target Audience  
Timeline

We are providing access to **7 Network KPIs** developed under CAMARA open-source project

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**SIM Swap** – to know if a SIM card has been changed in a terminal recently, helping to detect fraud and to protect logins or transactions.

**KYC (Know Your Customer) Match** – to confirm a user's identity by matching their details with verified mobile operator data, helping reduce identity thefts.

**Geofencing** – to detect when a device enters or leaves a specific area, sending instant alerts to enable real-time tracking and safety actions.

**Device Location Verification** – to confirm if a device is inside or outside a specific area for location-based services.

**Device Reachability Status** – to check if a mobile device is currently connected to the network (via data, SMS, or not at all).

**Quality on Demand** – to temporarily boost network performance (bandwidth/latency) for specific app tasks, ensuring seamless user experiences during high-demand scenarios like streaming or gaming.

**Population Density Data** – to see how crowded a place is using anonymized mobile network data, improving planning and targeting for marketing, transportation, and urban development.

# Network API Challenge

Overview  
APIs

What  
Which  
How

Target Audience  
Timeline

We are offering a **Playground** and a **Sandbox** as environments for testing and exploring



Our **API Playground** provides developers with an interactive environment to explore, test, and integrate our software API seamlessly without the overhead of using a real network



To further enhance this experience, we offer a dedicated 5GSA infrastructure **E2E Sandbox**, enabling realistic testing scenarios that mirror production environments. This comprehensive approach accelerates development, reduces onboarding time, and builds confidence in our solutions before formal engagement



# Network API Challenge

Overview  
APIs

What  
Which  
How

Target Audience  
Timeline



- Startups
- SMEs
- Developers and Programmers  
(including internal teams ORO & OSE)
- Industry Experts
- Students & Academia

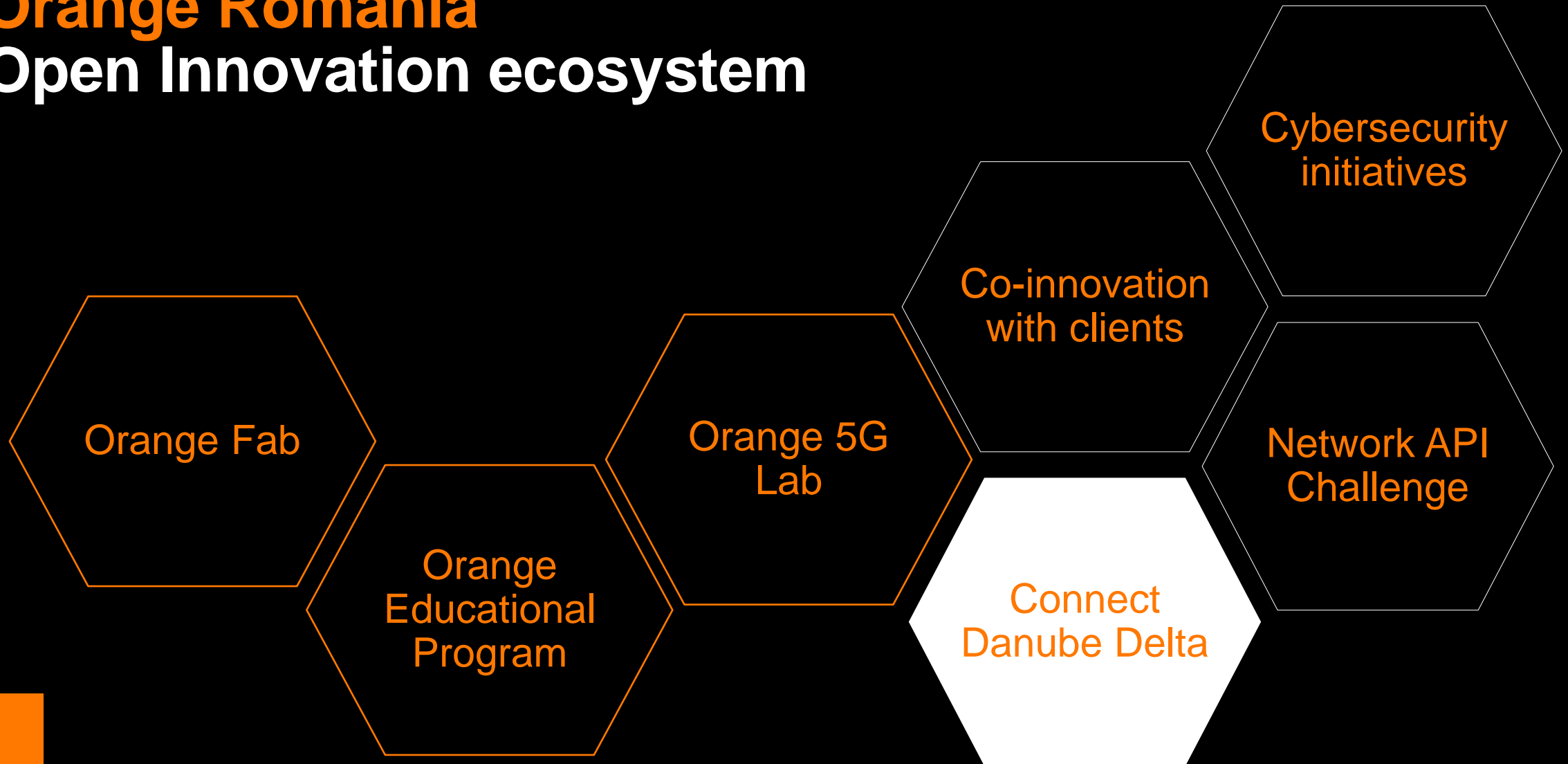


## Why to apply?

- Access to Orange APIs available for the first time in Romania
- Access to mentors and industry experts that will support companies during the onboarding and testing period
- The opportunity to start business partnerships within Orange Fab International network ecosystem

# Orange Romania

## Open Innovation ecosystem



# 5G Connected Danube Delta

## Transforming Connectivity in the Danube Delta Region

CEF-Digital 2021-2027



Co-funded by  
the European Union

5G and Edge Cloud for Smart Communities,  
Grant Agreement 101181137



-  Digital education
-  Telemedicine
-  Slow tourism
-  Environmental monitoring



Asociația  
Ivan Patzaichin - Mila 



Fundația



Telios





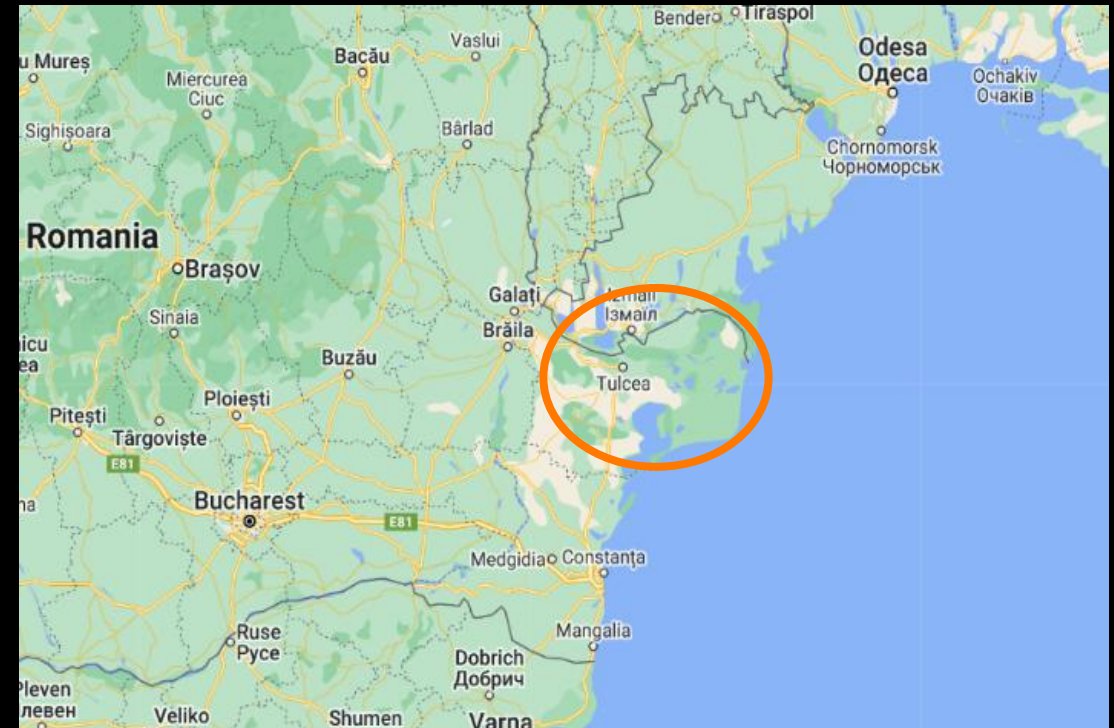
# 5G Connect Danube Delta

**Scope:** development of a communications network based on 5G Stand-Alone and Edge Cloud technology in localities in the Danube Delta to support digital education, telemedicine, slow tourism and environmental monitoring applications

## **Consortium:**

- Orange Romania
- Fundatia Orange
- Asociatia Ivan Patzaichin – Mila 23
- UNST Politehnica Bucuresti
- Virtual Board
- Consiliul Judetean Tulcea
- Telios Care

**Period:** Oct 2024 – Sept 2027



# 5G Connect Danube Delta. Use cases

## Digital education

- Orange Foundation programs and VBoard remote education solution
- Hybrid teaching real time collaboration between students and teachers
- Orange Digital Center in Mila 23
- Leveraging on the Digitaliada educational content
- Piloting XR education use case in 1 school from Tulcea county

**Target:** 1,470 beneficiaries in 17 schools and 600 beneficiaries through the ODC





# 5G Connect Danube Delta. Use cases



## Telemedicine

- Legacy portable medical devices using 5G-enabled laptops / tablets
- Telios Care telemedicine eHealth solution
- Deploying the remote medical control mobile app
- Deploying instances of the Point of Care concept with the associated clinical devices
- Sinergy with Ministry of Health telemedicine program

**Target:** 5,218 beneficiaries in 10 medical units

# 5G Connect Danube Delta. Use cases

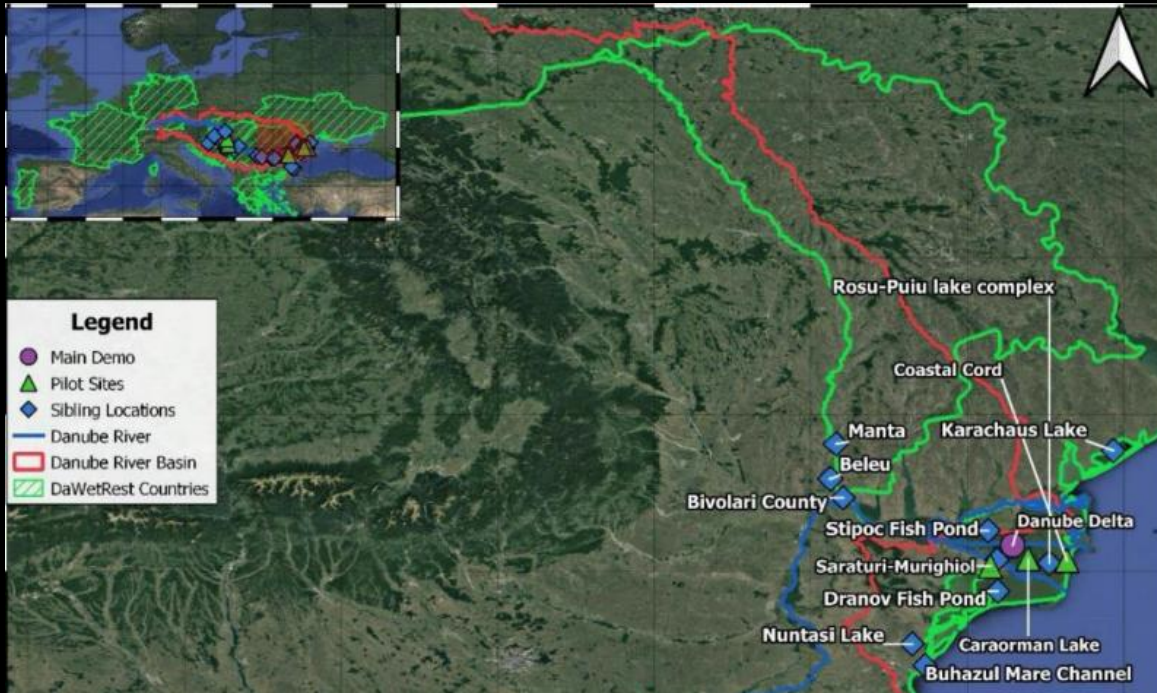
## Slow tourism

- MILA23 mobile app that augments the visitor's experience in the Danube Delta biosphere
- Includes educational content, routes and points of interest, geo-fencing and dangerous events reporting capabilities
- Tourism points of interest monitoring with 5G-enabled smart surveillance cameras

**Target:** 2,050 tourists and explorers



# 5G Connect Danube Delta. Use cases



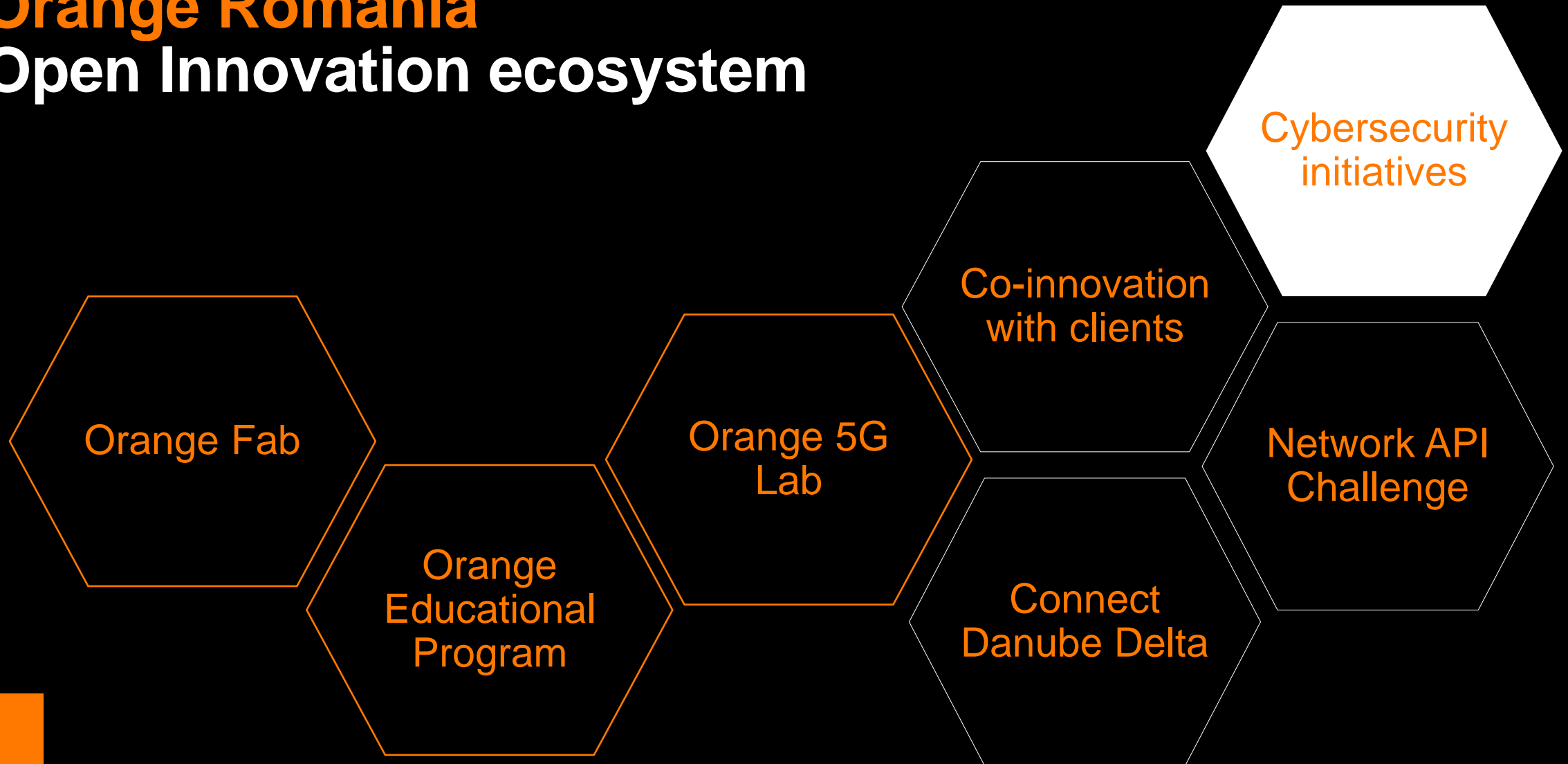
## Environmental monitoring

- Environmental monitoring
- Based on the DaWetRest Horizon Europe project of NUSTPB
- Key protected areas to be fitted with environmental monitoring sensors connected to 5G routers
- Targets the improvement of local hydrological conditions, water surface cleanness and reed cultures

**Target:** public authorities implementing environmental policies, climate protection NGOs

# Orange Romania

## Open Innovation ecosystem



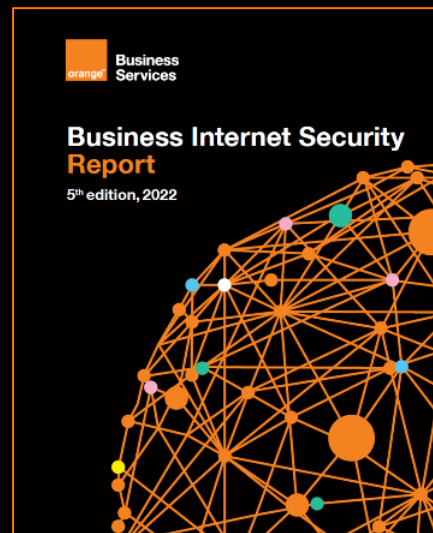


# CyberSecurity education activities

## DefCamp

- International conference with 2000 participants from 30 countries
- 10 cybersecurity competitions in Hacking Village
- First Attack & Defence style competition at D-CTF Finals

Business Internet Security Report:  
launched at  
DefCamp



# CyberSecurity education activities

## European Cyber Security Challenge - #TeamRomania

- Supported by Orange
- **14<sup>th</sup> place** (out of 34 teams) in the final in Warsaw
- Selection event - RoCSC, held on the CyberEdu platform (Orange Fab startup)



## Unbreakable Romania

- Supported by Orange
- The national program to develop the next generation of cybersecurity experts



# Thank you

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