

1st 5G for Smart Communities Working Group

Scaling 5G Infrastructure
Deployment and Innovation

22.05.2025

**Visit our online networking and knowledge-exchange
community for '5G for Smart Communities'**

Welcome

5GSC

5G for Smart Communities

www.5GSC.eu



Welcome Remarks

Jan Droege, Director, 5G for Smart Communities Support Platform

Jean-Luc Lemmens, CEO, Idate

Agenda



Live interaction



slido

OR

5G for Smart Communities Support Platform Welcome Events ▾ 5GSC Support Platform ▾ Participants 5G Community Conference > 🔗 💬 📅 🔔 DV

← Go back ✓ Added

5G FOR SMART COMMUNITIES
CAPACITY BUILDINGS

Discussion X

Working Group 1 - Scaling ... D

Q&A || Polls

DV Type your question

Popular Recent 1 question

DV **Dimitra Vasilia** 3 weeks ago 0 🔄

Welcome to the forum for WG1 – Scaling 5G Infrastructure. Share ideas, solutions & challenges on deploying 5G across Europe. Use the slido to post your contributions and engage with others! Share with us useful material by email to community@5GSC.eu (edited)

↳ Replies Ask

Keynote speech

5G and edgeAI

Ilhem Fajjari, Senior Expert & Researcher, Orange

5G & EdgeAI

Delivering value across critical sectors



Ilhem Fajjari



Paving the Way: synergizing 5G and Edge for enhanced value

Telco Network Openness

Provide opportunities for new players to enter the market, fosters data localization, and stimulates collaboration

Enhanced Quality of service

Offers low latency, high-bandwidth and improve the network efficiency

Continuous Innovation

Develop new services, applications, and business models across a wide range of industries and use cases



Asset Profitability

Leverage Network Edge infrastructure to enable the development of low-latency services

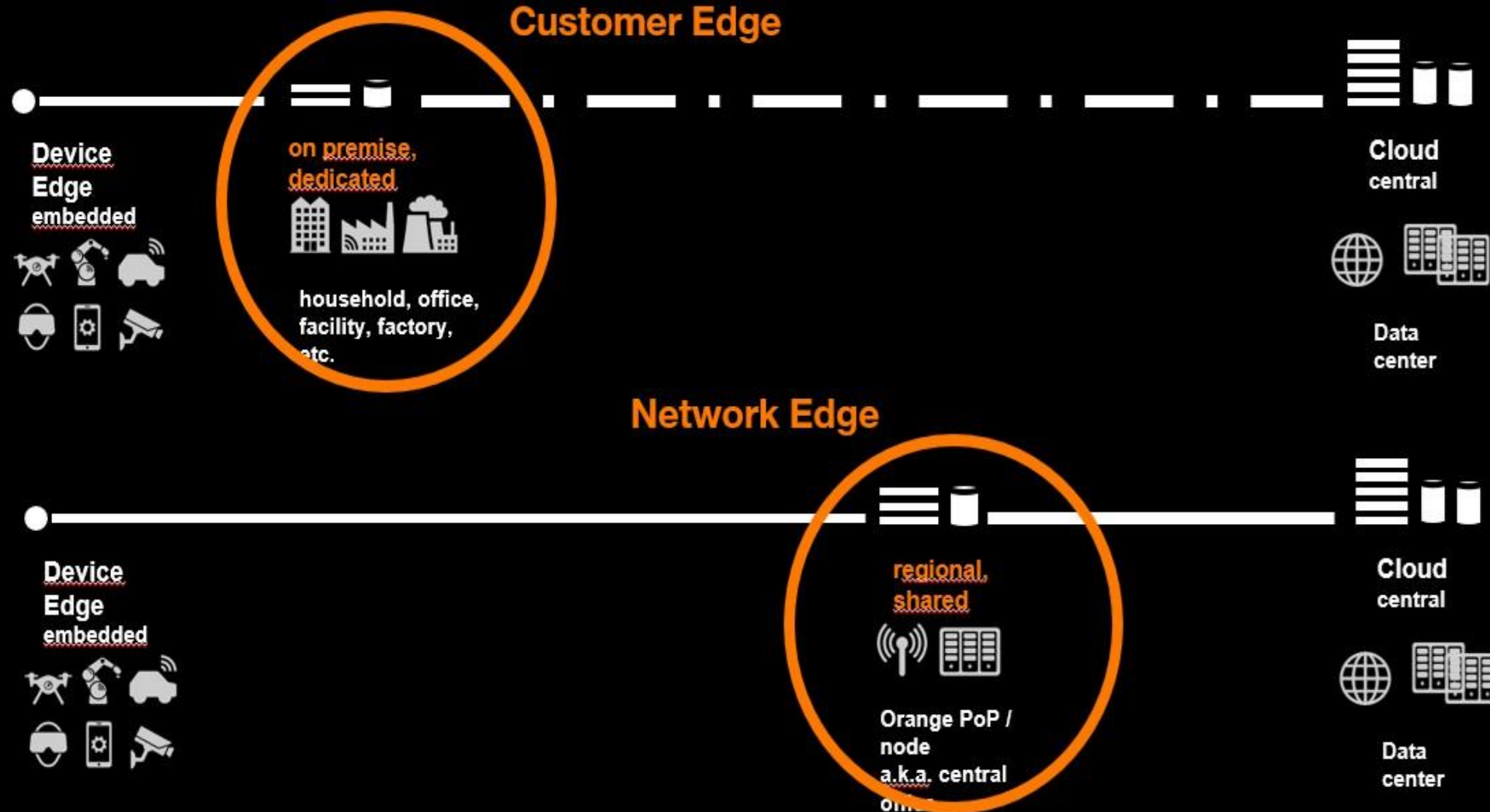
Safe Conditions

Provide, guaranteed latency, immediate data processing, redundancy, enhanced monitoring, and real time alerts

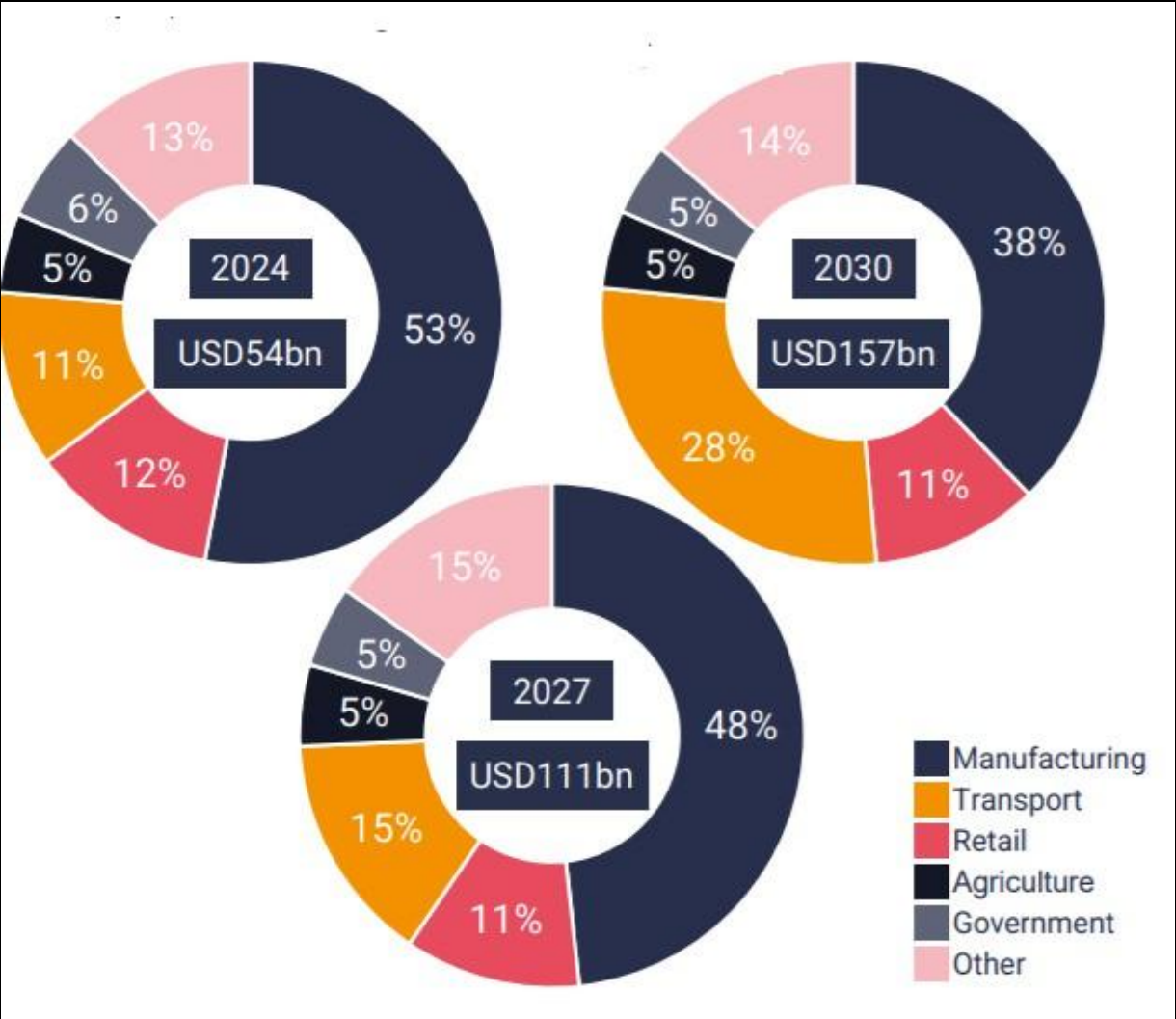
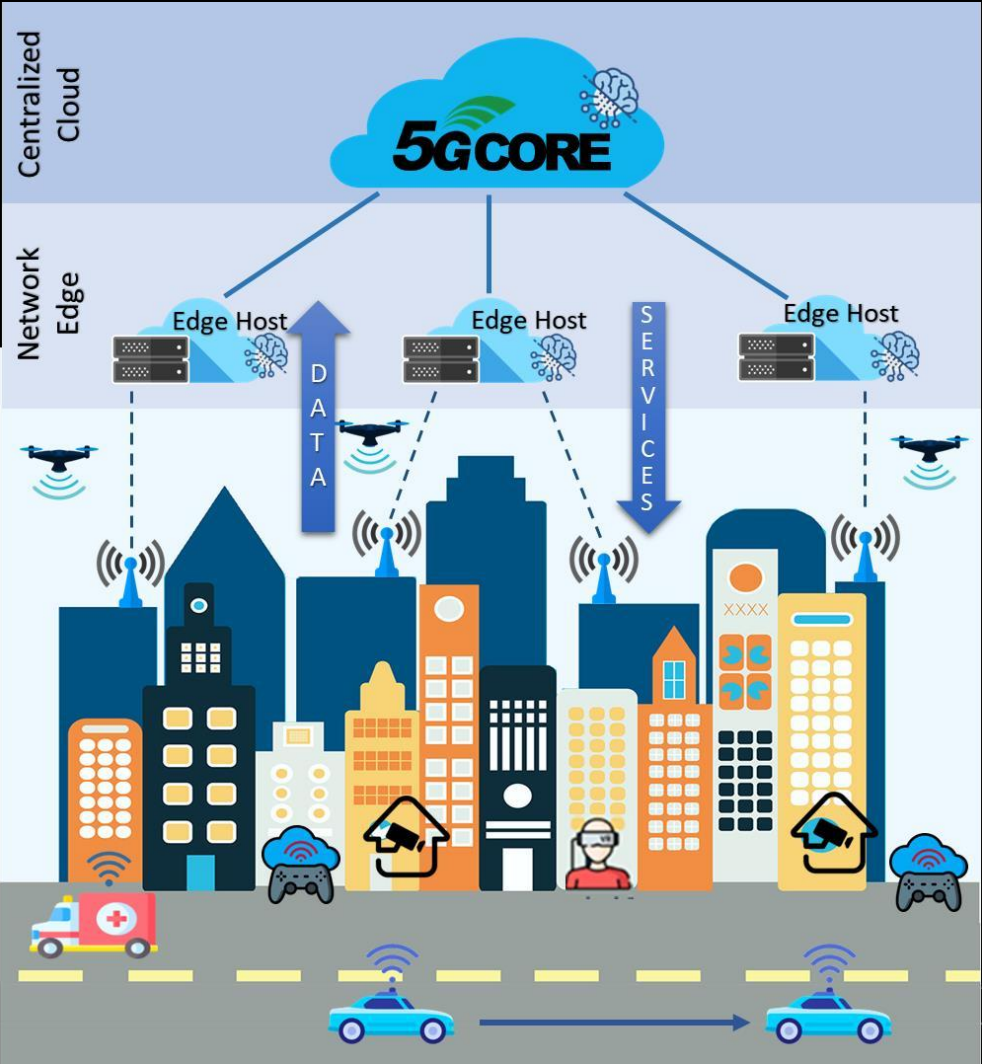
Operational Efficiency

Ensure agile and cost-effective operations, better decision-making, and improved user experiences

From Device to Cloud: understanding the edge layers



Global Edge Computing addressable revenue by vertical – 2023, 2027 and 2030



*Source: STL Partners - January 2025

Unlocking sectoral value with 5G and Edge AI

Smart City

Scope: Process data locally from cameras, sensors, and connected infrastructure to enable real-time decisions for traffic control, energy optimization, and public safety

5G Added Value: Ultra-low-Latency, High bandwidth, massive IoT support, network slicing

Edge AI Added Value: Local AI decision making, privacy & sovereignty, faster reaction time, reduced backhaul and improved efficiency, resilience

Manufacturing

Scope: Analyze machine and sensor data directly on-site to detect anomalies, predict equipment failures, and optimize production processes in real time

5G Added Value: Private 5G networks, scalability and flexibility, reliable connectivity, high-density IoT

Edge AI Added Value: On-site processing, enhanced cybersecurity, operational continuity, real-time process optimization

Healthcare & live sciences

5

Scope: Local processing of patient data from medical devices and wearables, supporting real-time diagnostics and continuous monitoring

5G Added Value: Fast & reliable data transfer for telemedicine, ubiquitous coverage, mobility

Edge AI Added Value: Real-time processing, local inference, privacy & data sovereignty, operational efficiency,

Unlocking sectoral value with 5G and Edge AI

Government & Public Sector

Scope: Rely on highly secure, resilient, and real-time systems to support command, control, surveillance, tactical decision-making

5G Added Value: Ultra-reliable low-latency communications, high-bandwidth and device density, mobile coverage continuity, dynamic network slicing

Edge AI Added Value: Fast response to emergencies, offline operability, sovereignty & confidentiality

Telco

Scope: Improve customer experience through predictive and real-time analytics, enable smarter operations, reduce network TCO

5G Added Value: Dynamic network slicing, Ultra-low latency, Massive device support, Seamless handover and mobility

Edge AI Added Value: Real-time network management, AI-enhanced UC apps Data sovereignty & compliance

Media & Entertainment

Scope: Personalized video streaming via generative AI and AI-optimized CDN

5G Added Value: High-bandwidth connectivity, ultra-low latency, mobility & seamless coverage

Edge AI Added Value: On-the-fly content optimization, real-time personalization, sovereignty & rights management, AI-based moderation & compliance

Opportunities and challenges for Edge AI in a sovereign 5G future



- Ultra-low latency and high bandwidth
- Reliable distributed infrastructure for proximity to customers
- Supports sovereignty and GDPR compliance
- Enables critical AI use cases



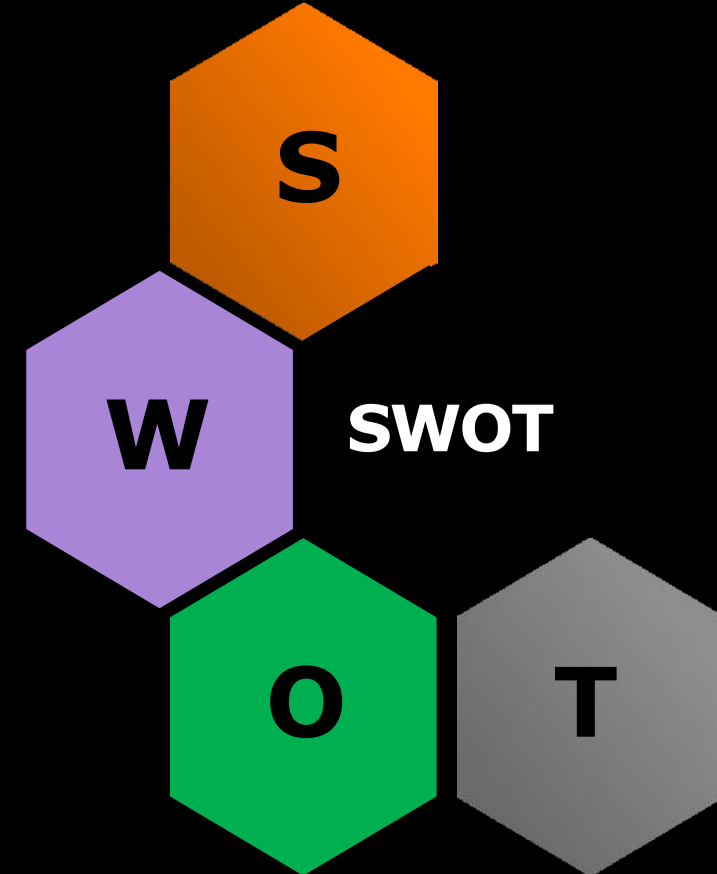
- High initial investment costs for edge infrastructure rollout
- Dependence on non-EU suppliers
- Limited edge computing coverage
- Slow adoption for some sectors
- Capability gaps in large-scale AI deployment



- €150B+ market for Edge AI by 2030
- Strong policy support in Europe for digital sovereignty & edge infras
- Strategic use cases
- Partnerships with European providers
- Differentiation from hyperscalers by offering regulated & secure services



- Fast expansion by hyperscalers
- Growing complexity of compliance
- Security vulnerabilities increase
- Regulatory delays and fragmentation
- Lower adoption by traditional sectors





Open discussion

5G Use Cases & New Business Models

AI, APIs & Industry-Specific Innovation



Dimitri Jungblut

MANAGER, 5GMEC4EU

CHAIR



Clara Ulken

SENIOR PROJECT MANAGER
GCORE

CO-CHAIR



Ioannis Patsouras

SENIOR SOLUTIONS ARCHITECT
WINGS ICT SOLUTIONS

CO-CHAIR

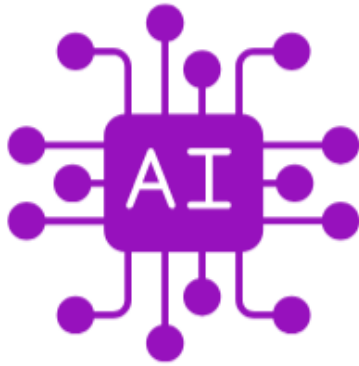


David Kennedy

DIRECTOR, EURESCOM
BOARD MEMBER 6G SNS

CO-CHAIR

Key Discussion Points



AI



APIs



**Industrial
innovations**

Q&A

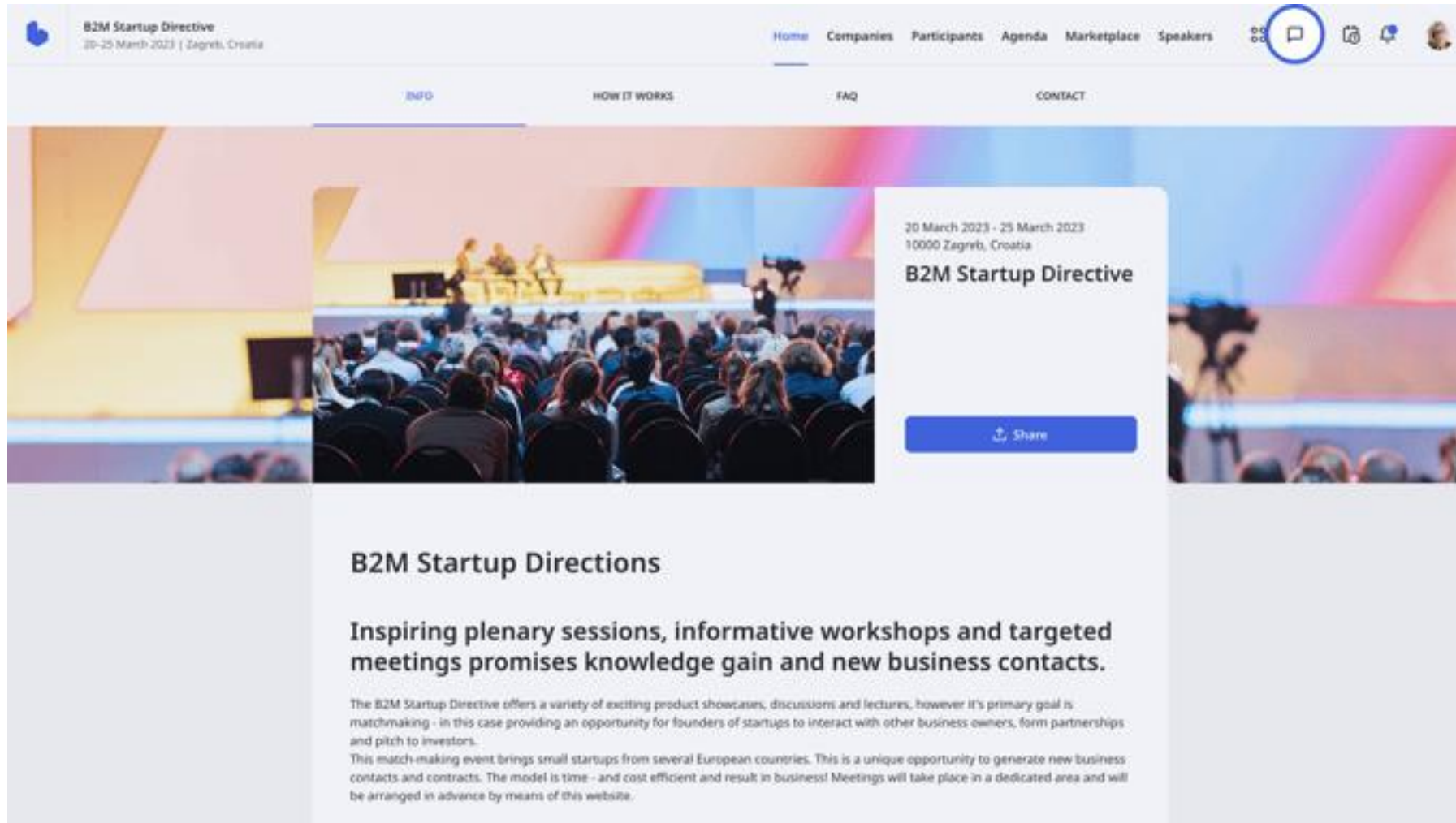


slido

The 5GSC Platform

Dimitra Vasilis, Project Manager, 5G for Smart Communities Support Platform

NEW Conversations feature



Conversations

- ✓ Add up to 8 people
- ✓ Direct message participants
- ✓ By clicking the staple icon attach images and documents to the conversation
- ✓ All conversations are private

NEW Meetings feature

B2M Startup Directive
10-25 March 2023 | Zagreb, Croatia

Home Organizations Participants Agenda Marketplace Speakers **Meetings**

Upcoming Canceled Past My meetings Availability

Today

Tuesday, 21 March 2023 Show less

11:50 - 12:00

Peter O'Brien ✓
Armunt Design Co.

Tomas Doyce ?
Urbyg Inc.

Accept

On-site meeting

Pending Received invitation 1 Accepted, 2 Pending

12:00 - 12:10

Ruben Devlin ✓
Molynsea Inc.

Peter O'Brien ✗
Armunt Design Co.

Sasha Pollar ✓
Molynsea Inc.

On-site meeting Table 1

Starts in 22 minutes Request sent 3 Accepted, 1 Canceled

Thursday, 23 March 2023

Show less

11:20 - 11:30

Amy Withen ?
Pexels Mag GmbH

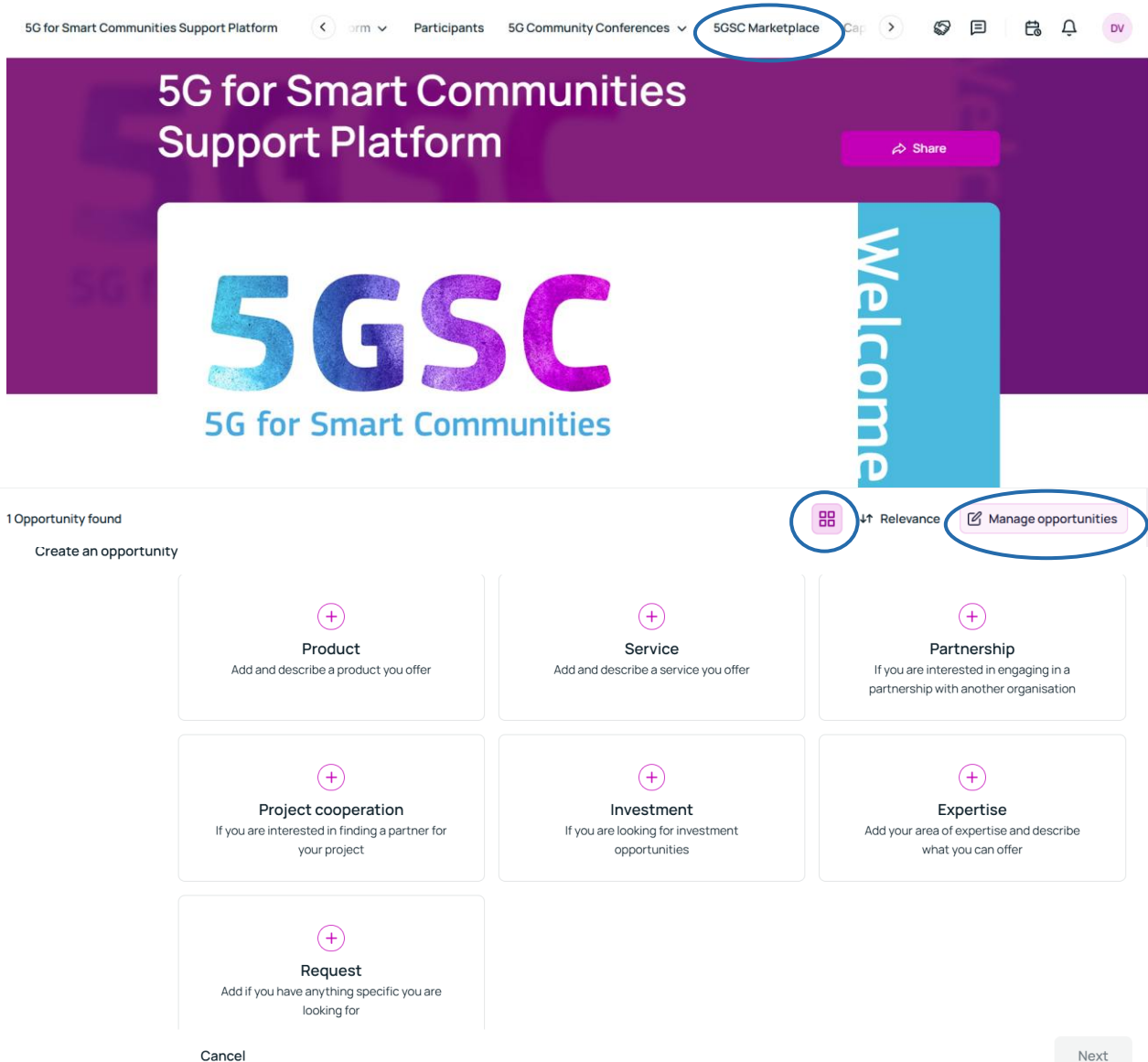
Online video meeting

Pending Request sent 1 Accepted, 1 Pending

Meetings

- ✓ Up to 8 people
- ✓ Online video meetings & onsite 5G Community Conference October
- ✓ Check meeting status: upcoming, cancelled, past
- ✓ Request meetings

NEW 5GSC Marketplace feature



5GSC Marketplace

- ✓ Login to the platform
- ✓ Go to 5GSC Marketplace
- ✓ Choose to view opportunities in a list or grid view or filter them by relevance or creation date.
- ✓ Manage opportunities & create an opportunity – add images, files and videos.

Next Working Group meeting



Thursday June 19, 2025 – Online

Second 5GSC Working Group - 5G for Smart Cities & Urban Connectivity

Register your interest now to join the discussion!

Details and information: sofia.profico@5GSC.eu

Save the dates



Thursday June 19, 2025 - Online

Working Group 2 - 5G for Smart Cities & Urban Connectivity



Thursday September 18, 2025 - Online

Working Group 3 - Business and investment models for 5G pilots



Tuesday October 7, 2025 - Brussels

CEF Conference & European Digital Connectivity Awards



Wednesday October 8, 2025 - Brussels

5G Community Conference