



5GZORRO Final Event 2022

Towards a Dynamic Spectrum Marketplace

Sept. 19, 2022 – <u>5GZORRO</u> is pleased to present in this **Final Event**, the latest results and outcomes on the ambitious goal stated at the initial stage: to define solutions for the *5G evolution in longer terms*, having **Zero-touch automation**, **security**, **and trust among multiple parties through blockchains**, **network slicing across ubiquitous computing and connectivity** as key aspects of the investigation.

The main objective was to share our innovative approach to:

- Share and discover heterogeneous types of resources, in particular spectrum, virtualized radio access, virtualized edge/core, software defined WAN across multiple operators and infrastructures.
- Multi-party agreements to build distributed and pervasive 5G infrastructures, from data centres down to edge and far edge computing.
- Full automation of network and service management (zero-touch network and service management).
- Coexistence of Cloud-native and traditional laaS network functions (containers, service meshes, microservices).
- Distributed Ledger Technologies for spectrum sharing and cross-operator/cross-domain service chains.

In these past 36 months, due to the very innovative nature of the core topics covered by **5GZORRO** research, the Consortium has worked very hard and invest a significant amount of resources in generating awareness and visibility for its results, both within the scientific community working on 5G and within network industry, operators, regulators, SMEs.



Since 5G has demonstrated to be one of the main catalysts of the pervasive digitalisation of our society: ultra-high bandwidth, low latency, increased density, and continuity of connectivity for various Vertical industries (*Media, eHealth, Smart Cities, Digital Factories, etc.*), the step forward is to achieve **intelligent connectivity** and to implement it **without limits**.

Thus, future multi-stakeholder communication networks will place unprecedented demands on wireless connectivity's most valuable and scarce resource, the **radio spectrum**. Which it also introduces further complexity in the connectivity value chain, with the role of intermediaries who, along with traditional network operators, will repackage and customise connectivity to the needs of particular economic and industrial sectors or verticals, in the pursuit of an optimal balancing between **spectrum efficiency and effective use.**

Collaboration in research and development projects, such as **5GZORRO**, are exploring innovative and **dynamic spectrum solutions**, including those enabled by artificial intelligence and blockchain technologies.



5GZORRO FINAL EVENT 27 OCTOBER 202214:00 - 17:00 CET

14:00 CET 5GZORRO Platform Presentation

Opening Speech by

Project Coordinator and Techical Manager

15:00 CET 5GZORRO DEMOS

Hands-on Platform

Demol: Automated 5G Marketplace for real-time

Resources Allocation
Demo2: Automated and Secured Transactive

Spectrum Sharing Demo3: Pervasive vCDN Services

16:00 CET TECH TALK #5

Trust in B5G Networks

Exploring with guests expert speakers the new requirements and characteristics introduced by BSC and 6G networks, which have not been covered by previous solutions. Moderates Prof. Cregorio Martínez Pérez, University of Murcia



During the **5GZORRO Final Event**, we aim to show more about the **5GZORRO innovative platform** and speak with various stakeholders about the incredible opportunities offered by our proposals.

For this reason, next 27th Oct. from Universidad Carlos III Madrid – Leganes, 5GZORRO Consortium is planning several activities:

➤ 14:00 CET - Opening Speech

- Shuaib Siddiqui i2CAT, Project's coordinator will hold a 5GZORRO presentation on latest outcomes.
- Giacomo Bernini Nextworks, and Project's technical manager will give a technical overview of achievements.



> 15:00 CET – 5GZORRO Demos – Hands-on Platform

UCs Leaders will be showing and explaining three **DEMOS of 5GZORRO Platform** from the representative UCs:

DEMO 1: Automated 5G Marketplace for real-time Resources Allocation

From **UC1** - *Smart Contracts for Ubiquitous Computing/Connectivity*: to show how an automotive manufacturer can obtain 5G network and computing resources from multiple providers.

DEMO 2: Automated and Secured Transactive Spectrum Sharing

From **UC2** - *Dynamic Spectrum Allocation*: to show 5GZORRO Marketplace capability for dynamic spectrum trading through the use of SpecTokens.

DEMO 3: Pervasive vCDN services

From **UC3** - *Pervasive vCDN Services*: to show the AI driven operation of commercial CDN services.

Finally, to conclude this Final Event the last Tech Talk from a well-received series will take place hosting relevant guest speakers to approach and discuss about another interesting topic:

> 16:00 - 17:00 CET 5GZORRO Tech Talk#5



Trust in B5G Networks

This final **5GZORRO Tech Talk#5** will address an issue that in the last years has constantly increased and affects the figures and type of relationships among entities: the number of connections in the mobile telecommunication networks.



If we want to ensure future trustworthy ecosystems with profitable interactions across domains, entities should rely on each other. Thus, **mobile telecommunication networks demand new trust approaches** that allow the development of feasible communications in 5G and beyond networks, through which a group of entities can establish chains of services between cross-operators/domains with trustworthiness and security.

One of the **key obstacles** to achieving generalized connectivity beyond 5G networks is the **lack of automatized, efficient, and scalable trust models for establishing trustworthiness and security.** Hence, we open the discussion on new requirements, features, and proposals to be considered to achieve cross-domain reliable connectivity in 5G/6G environments.

Invited Speakers:

- Tooba FAISAL, PhD Student Department of Engineering at King's College London.
- **Raimo KANTOLA**, Prof. of Networking Technology, Security, and Trust Aalto University Espoo, Finland.

From 5GZORRO project:

- **Gregorio MARTÍNEZ PÉREZ**, Prof. Computer Science at the University of Murcia, Spain.
- **Diego R. LÓPEZ**, Head of Technology Exploration in Telefónica I+D, Madrid, Spain.

The event will be **LIVE from UC3M & Streamed** on the project's website, socials, and YouTube channel.

SAVE the DATE!

To find out more details on **5GZORRO activities during the 5GZORRO Final Event...**

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<u>5GZORRO project</u> has the goal of developing envisaged solutions for zero-touch service, network and security management in multi-stakeholder environments (ubiquitous), making use of Smart Contracts based on Distributed Ledger Technology to implement required business agility.

The <u>5GZORRO consortium is formed by 12 partners from 6 European countries</u> and funded by the **European Commission** under the <u>5G PPP Phase 3</u>, <u>Part 4: 5G Long Term Evolution programme</u>.

More info: www.5gzorro.eu

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PROJECT FUNDED



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871533