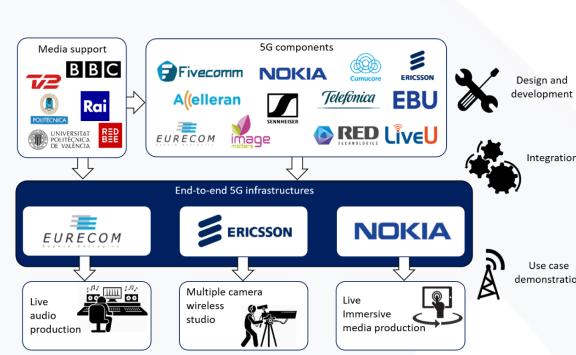
56 key technology enablers for emerging media content production services

David Gómez-Barquero, Irene Alepuz, Cristina Avellán, Salvador García, Adrián Rodrigo (Universitat Politècnica de València), Esther Madejón and Narciso García (Universidad Politécnica de Madrid) on behalf of the 5G-RECORDS team.



5G-RECORDS is a European H2020 project that aims to explore the opportunities that new 5G technology bring to the professional audio-visual (AV) content production sector. It targets the integration and validation of 5G components as part of an overall architecture representing a subset of 5G network functions within 3 use cases.



Objectives:

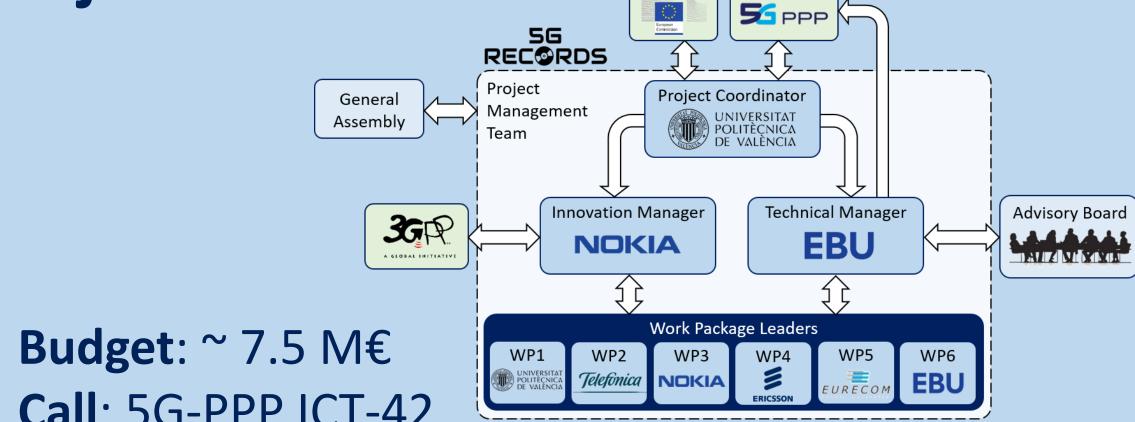
- ✓ To design and develop 5G components for professional content production.
- ✓ To integrate them into end-to-end 5G infrastructures.
- ✓ To validate the 5G components in the context of real production use cases.
- ✓ To demonstrate the potential value for the content production sector.
- ✓ To maximize the impact of project results and influence standardization and regulatory bodies through test-beds, demonstrations and technical solutions.

Consortium:

- Four major European public broadcasters
- Two leading media technology companies
- Four **5G** core technologies experts



Project information:



Call: 5G-PPP ICT-42

devices

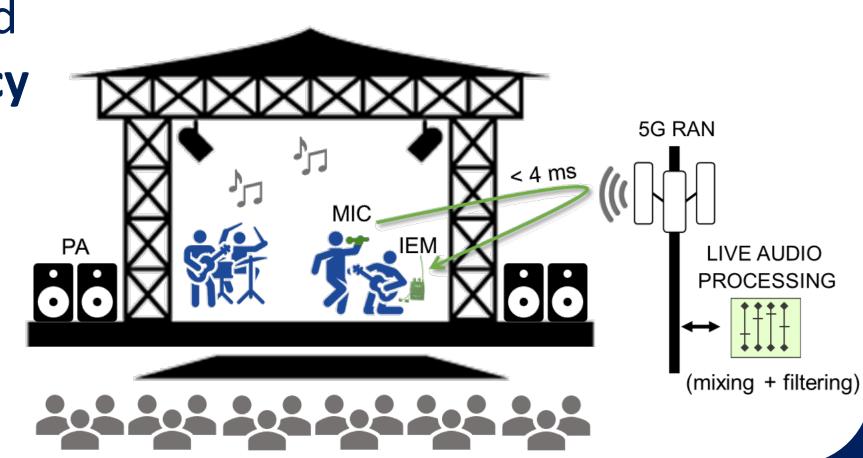
- **Grant agreement no.:** 957102
- **Duration**: 24 months (Sept.2020 Aug. 2022)
- Website: https://www.5g-records.eu/
- **Contact**: 5G-RECORDS-Contact@5g-ppp.eu

Use cases: The integration of the use cases into the 5G ecosystem demands processing audio and/or video data sources with stringent requirements for KPIs such as data rate, latency, synchronicity, availability, and reliability.

Live audio production

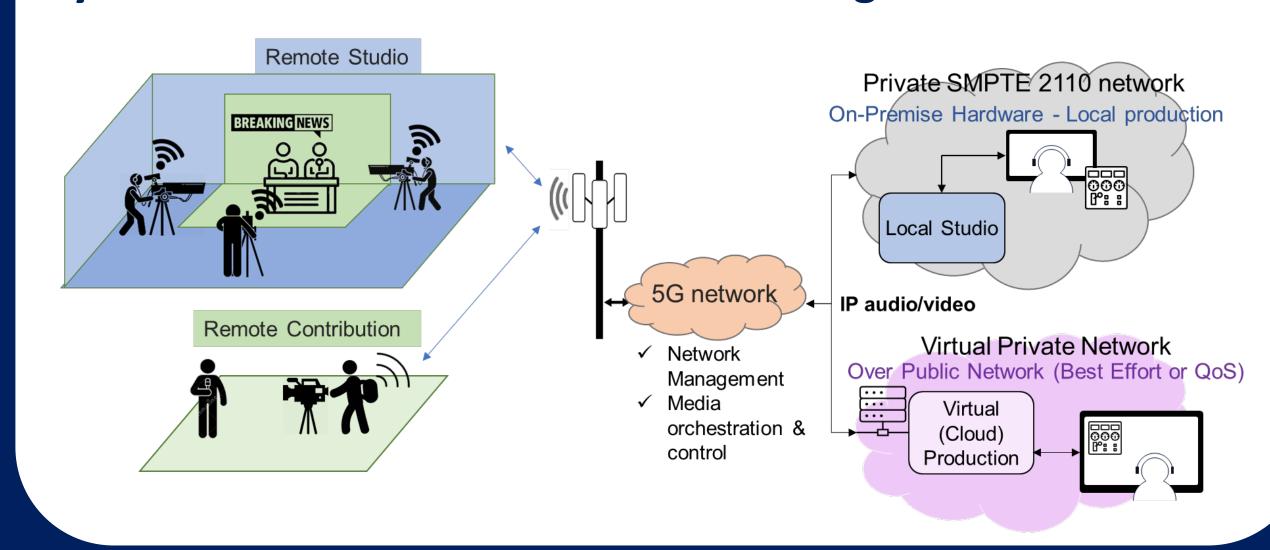
This use case aims to implement a local 5G wireless high-quality ultra-reliable and low-latency audio production network by deploying a 5G URLLC standalone Non-Public Network. Latency, reliability,

synchronicity and spectral efficiency are the main challenges. UC1 will focus on an AV production Scenario.



Multiple camera wireless studio

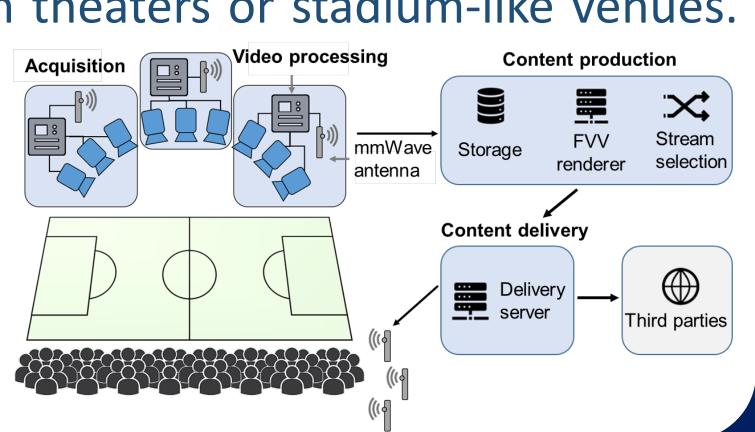
This use case is based around multi-camera audio and video production in a professional environment. It aims to create a fully IP production system connected to of media streams, equipment NPNs. Transport development, management and source synchronization are the main challenges.



Live immersive media production

This use case considers a real-time, end-to-end, Free ViewPoint View (FVV) system aiming multitudinary events on theaters or stadium-like venues.

Captured video is contributed via 5G, then processed and delivered via mmWave to on-site attendees.



5G Technology Enablers

