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Our Company



Eight Bells (8BELLS) is a 4-years old **SME** based in Nicosia, Cyprus. In 2020 8BELLS established **a new branch** in Athens, Greece.



Delivers customizable solutions that enhance existing communication technologies relevant to **5G**, **Cloud Computing**, **Internet of Things**, **Cybersecurity**. Specializes **also** in modelling and analysis for businesses.



Has participated in more than 20 EU and national projects that have attracted more than €4 million.



Preparation, Execution, Management of R&D projects (mainly H2020), analysis, and quantification of results. Business and Technical Consulting.





EIGHT BELLS at a glance 2/3



Research Expertise & Consulting Services

Customizable solutions that enhance modern communications relevant to the area of 5G Mobile Technology

5G communications



Knowledge on Network Function Virtualization (NFV) and management solutions for Cloud infrastructures.

NVF Cloud service



Portfolio of cybersecurity solutions that can be used for risk assessment, cyber-hygiene, anomaly detection, and threat remediation.

Cybersecurity solutions



Delivers special advisory services in ICT that help clients understand the market dynamics and profit from the ever-changing landscape. Advise and support other companies and organizations in every step of the process.

Advisory services



Business consulting includes also innovation management, technology transfer and exploitation (including market analysis, patenting, licensing, etc.).

Consulting











Technical Capabilities



Systems & Networks engineering: including design, implementation and integration.



Cloud Computing and Everything-as-a-Service: design, deployment and maintenance of cloud computing infrastructure, etc.



Privacy, Security & Data Protection: Cybersecurity Gap Analysis, Virtualized Cybersecurity, Privacy Impact Assessment, Privacy-by-design architectures.



Software development: for 5G security, wireless network security, software quality assurance, machine learning applications, data analysis and visualization, cloud computing, etc.



Dissemination, Communication and Exploitation Activities.



Ethical and legal compliance activities for various projects, including compliance to the GDPR.





Our Projects































SDN-µSense























RESPOND-A overview





Respond-A is a technology enhancement initiative that focuses on providing the First Responders with immediate access to technological advancements.



Development of a holistic and easy-to-use solution by bringing together the complementary strengths of the 5G wireless communications



34 participants:

Greece, Cyprus, Spain, Portugal, France, Germany, Italy, Sweden, UK, Netherlands, Belgium, Bulgaria



Consortium:

6 large Industries, 8 First Responders, 14 SMEs, 6 Research Institutes and Universities





State-of-the-Art



Private Mobile Radio (PMR) legacy technologies, such as TETRA and TETRAPOL provide very reliable Push-To-Talk (PTT) services for group communications, but are limited to voice, short messages and narrowband data services.

4G technology doesn't meet the requirements of the communication between first Responders, because it cannot guarantee the required services, capacity and availability for PMR usage, especially in a crisis situation.

4G connectivity is much slower and less reliable than 5G, which means it is unlikely for these systems to support the high-end Public Safety and Situational Awareness applications of RESPOND-A.

Mission-critical communications



4G Connectivity



Need of 5G





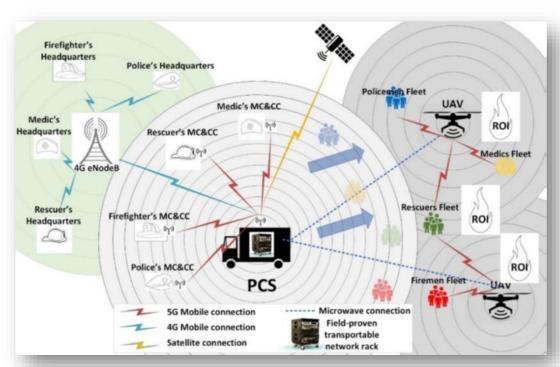






5G connectivity in RESPOND-A

- RESPOND-A will provide 5G (next-generation) capabilities to First Responders for protecting the public and themselves more efficiently and effectively.
- Portable Communication System (PCS) will support the communication needs of First Responders completely autonomously at any location and environmental condition (i.e. without the need for connecting to external network infrastructures).
- PCS will be equipped with 5G New Radio (NR) which will be close to the First Responders and their Mobile Command and Control Centres (MC&CC), in order to maximise the communication coverage and service provision locally.
- UAVs equipped with 5G NR small-cells will be coordinated completely autonomously to fly over Regions of Interest (ROIs) in constellations for optimal radio coverage with respect to First Responder positions.
- 5G connectivity is going to be implemented by NCSRD







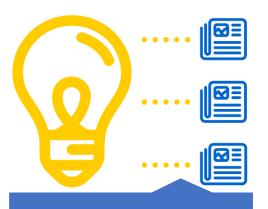


Role of 8BELLS 1/4





Participate in the definition of the overall RESPOND-A system architecture as well as to the specifications for the individual tools



Participate in the use cases and application scenarios



Contribute to the pilot planning evaluation methodology and setup







Role of 8BELLS 2/4

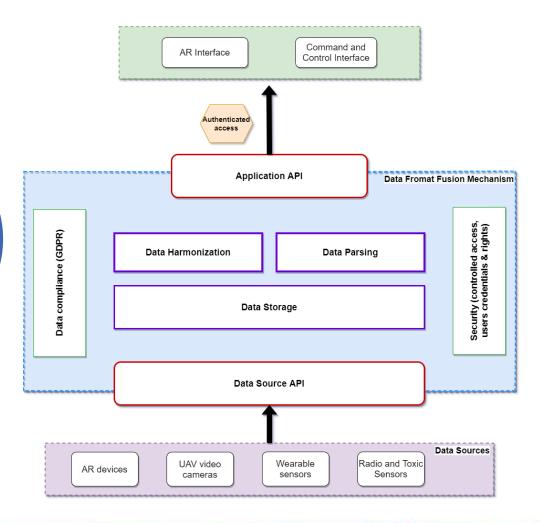


Data Format Fusion Mechanism

The mechanism by using an API will collect data from different sources

The main functionalities are:
Data storage, harmonisation and parsing. The data will be secured and GDPR compliant

The produced data will be available through the Application API to any interface







Role of 8BELLS 3/4







Supports voice chat, real-time video calling and multimedia transmission over the Internet



Dedicated to authenticated and authorized users identified by the company's administrator.



Supports data encryption, data privacy, user authentication and user management

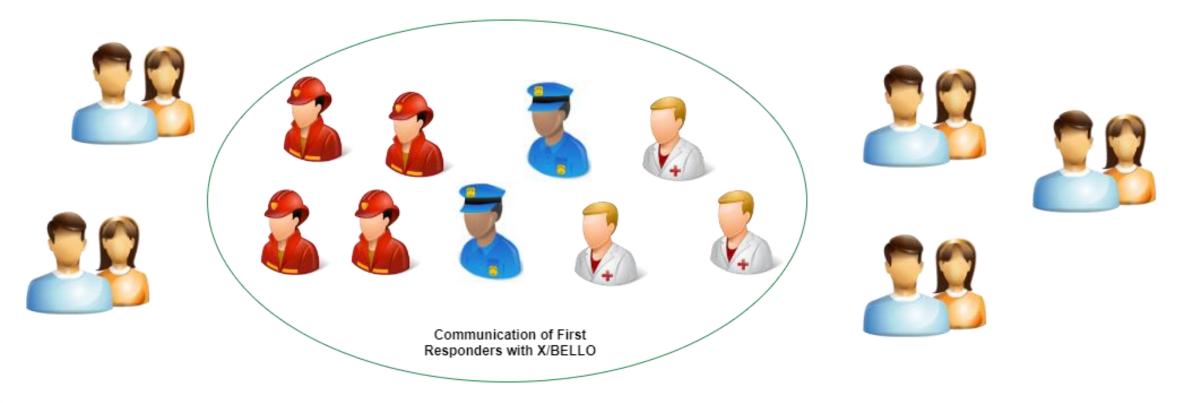




Role of 8BELLS 4/5



Use of X/BELLO in the RESPOND-A project







Role of 8BELLS 5/5







Contribute to the dissemination, communication and standardisation plan

Create a market analysis and SWOT analysis

Contribute to the exploitation plan and knowledge transfer













Thank you!

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