



BEIA SRL

Company profile

Projects

- **FLEX4RES** - Data Spaces For Flexible Production Lines And Supply Chains For Resilient Manufacturing (HORIZON CL4)
- **AICOM4HEALTH**: AI-powered communication for Health Crisis Management (Celtic running)
- **EARS** - Environment Adaptive Recommendation System (ITEA Call 2021 labelled)
- **EXP AI** - SmartIndustry Integrating AI into smart control systems, and increasing productivity for industrial areas (ITEA Call 2021 labelled)
- **SmartAgroInsurance**: Agro Insurance Data Management Platform with API Services (Eureka Clusters Sustainability Call 2022 labelled c)
- **GAMIR**: General Architecture for a Multilingual Information Retrieval system (Celtic labelled c)

FLEX4RES - Data Spaces For Flexible Production Lines And Supply Chains For Resilient Manufacturing (HORIZON CL4)

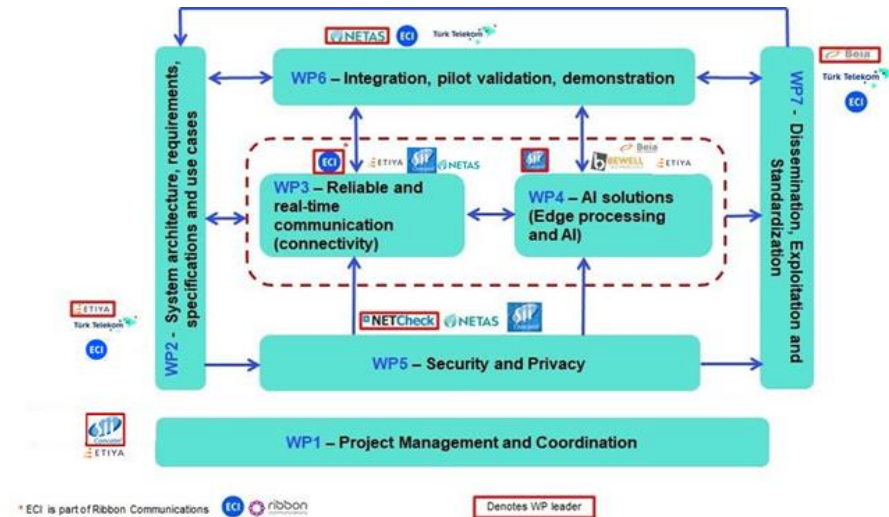


- FLEX4RES provides an open platform to support production networks' reconfiguration for resilient manufacturing value chains. FLEX4RES will utilize platform-based manufacturing that builds on the state-of-the-art Gaia-X and IDS technologies for data-sharing in the horizontal supply chain and the Asset Administration Shell (AAS) that is to implement intra-factory reconfiguration practices.
- The developed platform and specialized hardware aim to improve the existing industry-established lean management approaches related to Reconfiguration Management through the digitalization of the production, characterized as Industry4.0, by allowing for the information sharing between value chain stakeholders.

AICOM4HEALTH



- The objective of Alcom4Health (**AI-Powered Communication for Health Crisis Management**) project is to offer an innovative solution towards recovering the pandemics negative impacts on public health, healthcare access and socioeconomics through remote monitoring -AI based platform's integration to the public's daily life whereas employing healthier citizens for smart cities s in the area of 5G and beyond, network slicing, edge computing, artificial intelligence and machine learning based on feasible use cases including both medical and non-medical sensors for making accurate decisions and predicting risks against contagion in the future.
- The use cases include integration of an IoT platform with various types of sensors to monitor physiological, behavioral and environmental data from natural indoors and outdoors environments.



- From a research perspective, AICom4Health aims to bring together data processing, AI and data communication techniques. Edge computing paradigm is a key enabler that integrates data processing and artificial intelligence algorithms within data communication, 5G, network slicing and IoT domains in order to provide reliability and timeliness in the system.
- Use cases within the AICom4Health project will provide continuous monitoring of individuals and crowds through multivariate analysis, fast response and action to health deterioration of individuals or health threats within a crowd.
- It also deals with big data collection from several measurement surveillance cameras and also air quality monitoring capabilities.
- This will require real-time, fast and intelligent data processing techniques, while providing highly reliable communication through network slicing.

EARS - Environment Adaptive Recommendation System (ITEA Call 2021)



- The main problem of many domains is a lack of information and guidance, as potential customers cannot be reached because there is not enough information and guidance towards the right products.
- The EARS project aims to bring together all parties in the value chain, creating an ecosystem, providing a new platform that fits the purposes of all parties and enabling them to collaborate.
- Entities such as businesses, algorithm developers, solution providers, service providers and recommendation systems are brought together to enhance their capabilities or those of others, monetising the artefacts by utilising them as a service.



EXPAI Smart Industry - Integrating AI into smart control systems, and increasing productivity for industrial areas (ITEA Call 2021)



- Smart technologies are gaining higher importance while supporting Artificial Intelligence technologies that we use in our lives.
- The main goal of this project is to provide a flexible, controllable digital environment supported by an Explainable Artificial Intelligence digital smart platform that will collect and analyse sensor data from various resources for different domains.
- These will be combined in a common framework in industrial areas and the retail market.
- The project will present novel methods and solutions for the industrial market and real-life use-cases for exploitable solutions.