







### **ABOUT**

MonB5G will provide zero-touch management and orchestration in the support of network slicing at massive scales for 5G LTE and beyond. It proposes a novel autonomic management and orchestration framework, heavily leveraging distribution of operations together with state-of-the-art data-driven AI-based mechanisms.

Project Start: 01/11/2019 Budget: € 5.572.491,25 € Instrument: ICT-20-2019-2020 Duration: 36 Months

Partners: 12



### **OBJECTIVES**

- Distributed management plane to support massive deployment of network slices
- Definition of novel end-to-end (e2e) slice Key Performance Indicators (KPIs) and development of AI-based mechanisms for their accurate prediction from multi-level metrics
- Data-driven management system based on federated learning
- Zero touch network configuration
- Decision Engine decisions tailored to the RAN
- AI-driven slice security management via robust and efficient trust-based mechanisms
- Al-driven energy efficient network management
- Dissemination, standardization and exploitation of MonB5G

## **USE CASES**

#### Zero-Touch Network and service management with end-to-end SLAs

It leverages the highly distributed MonB5G mechanisms to provide automated, zero-touch service management across domains, enabling Network Operators and MVNOs to avoid domain silos and ensure end-to-end cross-domain SLAs.

#### AI-assisted policy-driven security monitoring & enforcement

It demonstrates the efficiency of MonB5G when relying on AI to ensure legacy/new security threats detection in addition to their respective mitigation actions, and the proper enforcement of the AI-based techniques through novel trust-based evaluation mechanisms.

# CONSORTIUM

























PROJECT MANAGEMENT BOARD

Project Coordinator (PC): Engin Zeydan (CTTC)

Project Manager (PM): Hatim Chergui (CTTC)

Technical Manager (TM): Adlen Ksentini (EUR)

Innovation Manager (IM): George Tsolis (CITRIX)





