



# “Smart agents for network performance and security monitoring”

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**5G-PPP Information Day for ICT-19 proposers**

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- French SME created in 2004
- Located in Paris (13th district)
- Workforce : 10 experts in cybersecurity, network protocols...
- Well known in Europe for research in IT security and network monitoring
- Systematic French cluster “success story”
- EU Seal of excellence
- Main products:
  - **MMT** (security and performance monitoring based on distributed intelligent agents)
  - **EPC-in-a-box** (developed with Cumucore, integrating monitoring function)
  - **Endpoint protection** (patented technology for eliminating all unwanted/unneeded traffic)



# Experience in 5G & Vertical Industries

- **EPC-in-a-box product**



- **CelticPlus SENDATE:** Security as a Service, SSLA, Software Defined Security, Orchestrator



- **SoftFire FIRE+ Testbed:** Monitoring Network Security in SDN/NFV environment (MONET)



- **H2020 ANASTACIA:** Monitoring IoT networks and self-healing



- **ITEA2 DIAMOND:** Security testing and monitoring of industrial vertical use cases (Automotive, Banking, Industrial Automation, etc.)



# Contributions to ICT-19

<b>Validation</b>	Real-time measurement of <b>KPIs</b> (security and performance) of: <b>5G Infrastructure</b> (e.g., RAN, back/fronthaul, Core, eMBB, mMTC, URLL) <b>Verticals</b> (e.g., automotive, smart factories, energy, media, healthcare)
<b>Self-*</b>	Provide <b>metrics</b> (for configuration, healing, optimisation, protection) Trigger <b>reaction</b> mechanisms (interact with Orchestrators and Controllers)
<b>Visualisation</b>	<b>Network and application states</b> Custom <b>dashboards</b> (statistics, alarms/notifications, topology...)
<b>Integrate monitoring framework</b>	Deploy smart monitoring <b>agents</b> Monitoring <b>operator</b> (visualisation, control, decision support and self-healing)
<b>Advanced event analysis</b>	<b>Protocols</b> (600+, new plugins, layers 2-7) OSI <b>Physical layer</b> 1 (e.g., Optical and Radio) <b>IA/ML</b> analysis <b>CEP</b> (Complex event processing), <b>BAM</b> (Business Activity Monitoring)

# Contact information

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