International Brokerage Event Istanbul 30/11/2016



# BEIA Consult International George SUCIU George.Suciu@beia.ro

This presentation is for

🗆 Workshop 1 Big Data

□ Workshop 3 Photonics and Micro-and-Nanoelectronics

□ Workshop 2 Robotics

X Workshop 4 internet of Things



| <b>Company Name</b>   | Beia Consult International SRL  |  |  |  |  |
|-----------------------|---|--|--|--|--|
| General Manager       | George SUCIU Sr. (george.suciu@beia.ro)   |  |  |  |  |
| <b>Business Field</b> | Trading and distribution of IT & telecommunications equipment   |  |  |  |  |
|                       | <ul> <li>National and EU R&amp;D Projects (20 on-going, 15 finished)</li> <li>Telecommunications, Telemetry (M2M/IoT) &amp; IT turn-key projects</li> <li>Cloud computing and Big Data Search based applications</li> </ul> |  |  |  |  |
| Team                  | •Total of 40 employees: 20 engineers, 13 R&D employees (2 Ph.Ds, 1 Ph.D candidate, 5 senior researchers, and 5 junior researchers), 7 management personnel  |  |  |  |  |
| Headquarters          | 12, Poiana Narciselor st., sect.1, Bucharest  |  |  |  |  |
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| Home Page             | <u>www.beia.ro,</u> <u>www.beiaro.eu</u>  |  |  |  |  |
| Certification         | ISO 9002/2000; ISO 14001;ISO27000   |  |  |  |  |
| Established           | 1991, family owned (George Suciu Sr. Founder, Jr. Co-owner)   |  |  |  |  |

### **Description of the your research interest**





#### Projects financed from H2020 Programme

- SWITCH: Software Workbench for Interactive, Time Critical and Highly self-adaptive Cloud applications (ICT-9)
- Power2SME: Cloud Platform for intelligent energy use by SMES
- Speech2Platform S2P: Smart, natural language semantic analyser platform to process oriented back-ends
- SoMeDi: Social Media and Digital Interaction
- > ESTABLISH: Environmental Sensing To Act for a Better quality of LIfe: Smart Health
- > SeaForest: Intelligent forest protection monitoring system based on wireless sensor network
- ODSI: On-demand Secure Isolation (positive review)
- > **3DSafeguard**: Global Situational Awareness in Rescue, Calamity and Inspection Operations (positive review)
- > ALADIN: Airports Landside and Air-land Side Attacks' Detection and Prevention (positive review)
- > VIRTUOSE: Virtualized Video Services (under review)
- > HARISMO: Hardware real-time industrial process simulator based on PROFIBUS/PROFINET communication (under review)
- CitiSim: Smart City 3D Simulation and Monitoring Platform (under review)
- > EmoSpaces: Enhanced Affective Wellbeing based on Emotion Technologies for adapting IoT spaces (under review)

#### Projects financed from FP7 Programme

- eWALL : Electronic Wall for Active Long Living
- ACCELERATE: A Platform for the Acceleration of go-to market in the ICT industry
- InCloudInG: Inter-cloud identity governance
- **WATER-M**: Unified Intelligent WATER Management
- ASUA: Advanced Sensing for Urban Automation

#### Projects financed from the "National Plan for Research, Development and Innovation"

- > TORCH-IT: Development of an intelligent system support to reduce the risk of congenital infections (Bridge)
- SICIAD: Intelligent communications system based on integrated infrastructure, with dynamic display and alerting (Bridge)
- SA-TERRA: Sistem de Automatizare si Telemetrie Eficient energetic pentru managementul ResurseloR in Agricultura de precizie (Bridge)
- MobiWay: Mobility Beyond Individualism: an Integrated Platform for Intelligent Transportation Systems of Tomorrow
- > EV-BAT: Redox battery with fast charging capacity as a main source of energy for electric autovehicles
- CarbaDetect: Imuno-biosensors for fast detection of carbamic pesticide residues (carbaryl, carbendazim) in horticultural products
- SARAT-IWSN : Scalable Radio Transceiver for Instrumental Wireless Sensor Networks
- E-STAR: STAR for everyone in ESA frame program (under review)
- POC 5C: Cloud computing customer communication center

IoT-03-2017 (RIA) R&I on IoT integration and platforms TITLE of the PROJECT IDEA : IoT/M2M telemetry for smart urban farming using renewable energy



- Objectives:
  - to develop a telemetry system that can operate in severe conditions (radiation, corrosive, humidity, extreme climate, floods, underground, underwater) with embedded intelligence for actuating and smart behavior
  - to advance the security and resilience of smart M2M communications in water-environments, especially where no GSM coverage is available
  - to improve methods and architectures for energy efficiency of IoT telemetry with low-power sensors in remote locations by using only a small size solar panel
- Expected results
  - The project will develop a telemetry system with self-diagnosis and auto-configuration functionalities for smart farming using renewable energy sources for powering the system
  - Evolution of current M2M solution towards user-friendly IoT applications using existing platforms (FIWARE, etc.)





| No | Partner Name   | Туре | Country | Role in the Project  |
|----|----------------|------|---------|--|
| 01 | BEIA           | SME  | Romania | Development, integration and proof-<br>of-concept prototyping work                   |
| 02 | ICPE-CA        | RTD  | Romania | Development and research of low<br>power sensors and actuators                       |
| 03 | UPB            | UNI  | Romania | Development and research of<br>models and techniques for<br>communication components |
| 04 | VTT            | RTD  | Finland | Research of communication protocols  |
| 05 | Fraunhofer IPB | RTD  | Germany | Development and research of<br>materials for energy efficient<br>structures          |

### **Consortium - required partners**



| No  | Expertise  | Туре         | Country | Role in the project   |
|-----|--|--------------|---------|---|
| 01  | Under-water/ground<br>communication<br>expertise | RTD /<br>UNI | ANY     | Design and development of ultra-low power<br>protocols for wireless underwater<br>communication |
| 02  | Sensors expertise                                | SME /<br>IND | ANY     | Design and development of micro- and<br>miniaturized sensor systems                             |
| 03  | IoT security and<br>privacy expertise            | ANY          | ANY     | Development of end-to-end security solution   |
| 04  | Cloud computing                                  | ANY          | ANY     | Migration to existing platforms (FIWARE)  |
| 05  |  |              |         |   |
| 06  |  |              |         |   |
| 07  |  |              |         |   |
|     |  |              |         |   |
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# **Recommendations**



- The presentation has to last up to 4 minutes (maximum)
- Do not overload your slides
- Provide weblinks to additional material
- Slides should be in English
- Do not use videos etc. they might be not supported by the Infoday IT system
- Send your presentation in PDF or PPTX format to: <u>ICT@turkeyinH2020.eu</u>
   <u>before November 21, 2016.</u>