

# ITTI – Facts and Experience

## ■ Basic facts

- SME (80 persons) focusing on **IT and telecommunications** technologies
- **”Cristal Brussels Prize 2006, 2010 and 2013”** for the most active and successful Polish SME participating in FP6 and FP7
- professional certificates, e.g. **PRINCE2, MSP, ITIL, ISO 9001, ISO 27001, TOGAF, Certificate in Software Testing (SJSI/ISTQB)**

## ■ Experience in international R&D projects:

- EC (5FP, 6FP, 7FP, H2020) – over 30 projects
- EDA – ca. 10 projects, ESA – 8 projects

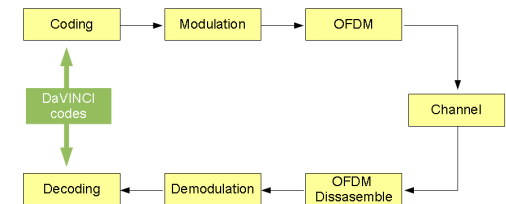
## ■ Examples of projects in the area of ICT:

- FP7 FI-STAR - Future Internet Social and Technological Alignment Research
- FP7 DaVinci – Design And Versatile Implementation of Non-binary wireless Communications based on Innovative LDPC codes
- FP7 N4C – Communications for Challenged Areas: Architecture, Test beds and Innovative Alliances
- FP7 INTERSECTION – INfrastructure for heTEroogeneous, Resilient, SEcure, Complex, Tightly Inter-Operating Networks



# ITTI – Areas of Expertise and Experience Related to 5G PPP Phase 2 TAs

- Wireless System Design and Simulation – PHY & Data Link Layer (Channel coding, Modulation, Equalization and channel estimation, Multiplexing, HARQ, MAC)
- Radio resource management in access networks (WiMAX, UMTS, packet networks)
- Link / System Level testing
- Heterogeneous networks (E2E QoS, QoE/MoS, session management – 3GPP)
- Wireless systems modelling (queueing networks)
- Security (Cyber security, IDS/ADS, Critical infrastructure, Policies/BCP )
- PPDR (e.g. TETRA) & Satellite networks
- Business models/cases



## ITTI – interests in 5G PPP Phase 2 TAs

- **TA1: 5G Wireless System Design** → **Spectrum sharing, business models**
- **TA2: Air Interface and Multi-Antenna, Multi Service Air Interface below xx GHz**  
→ **Supporting security mechanisms on the air interface**
- **TA5: Novel Radio System Architecture** → **Flexible service creation**
- **TA6: Seamless Integration of Satellites Networks and Air Platforms into 5G**  
→ **Scenarios and business cases, assessing the role of satellites ...**
- **TA7: 5G for Future MTC Solutions** → **Vertical requirements, new MTC UE capabilities, integration with legacy MTC radios and networks**
- **TA13: Security, Privacy, Resilience, and High Availability** → **Designing 5G services and solutions, end-to-end security, protocols and critical requirements**

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