TETRACOM: Technology Transfer in Computing Systems

FP7 Coordination and Support Action to fund 50 technology transfer projects (TTP) in computing systems. This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under grant agreement n° 609491.

Sub 1 GHz ISA100 technology for low cost and low power consumption embedded systems

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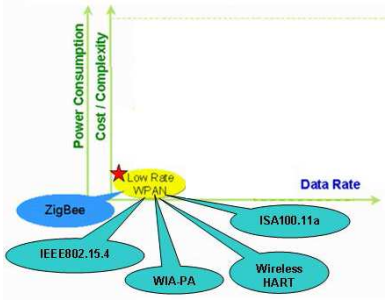
TTP Problem



- Communication range
- Battery life
- Node association time
- Suitability for open loop control
- Costs, design complexity
- Ease of integration by the end-user
- Project development time

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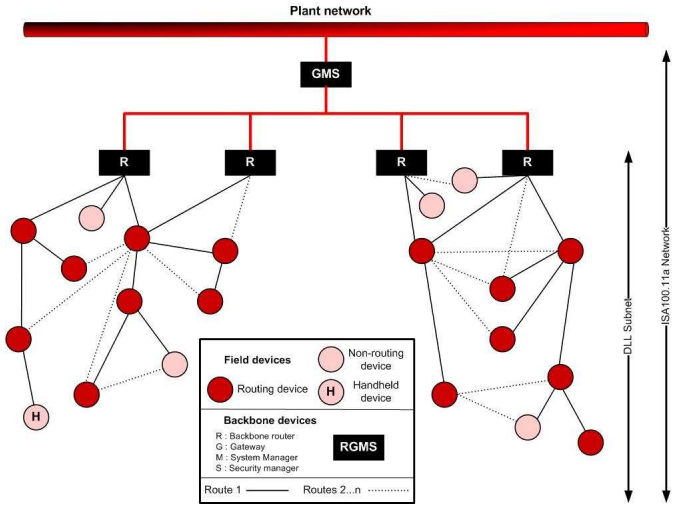
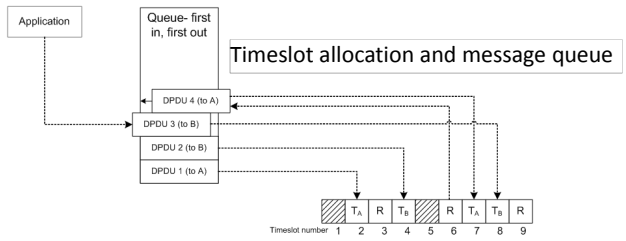
- New application domains
- Control applications
- New investors

TTP Solution



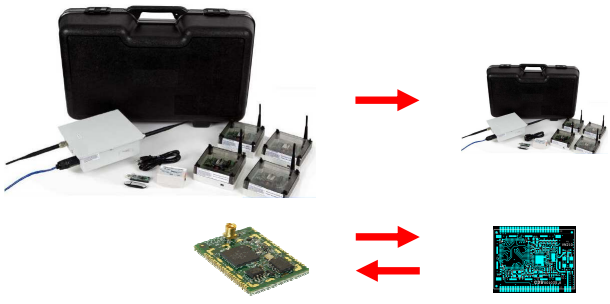
- Communication frequency below 1 GHz
  - •Extended range and longer battery life
- State-of-the art ARM processors, scalable regarding the architecture and footprint
  - Multiple applications on a single wireless node
- Complete hardware redesign and use of the newest transceivers, compatible with 2.4 GHz
  - Minimal investment for integration with existing systems
  - Multi-vendor interoperability
- Firmware porting from the 2.4 GHz solution to sub 1GHz



Timeslot allocation and message queue

TTP Impact

- New markets and applications, including control
- Lower production and distribution costs
- WCI acceptance of sub 1 GHz ISA100 implementation
- New radio module and new development kit with reduced dimensions
- HW and SW compatibility at the radio module and API levels



TTP Facts

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