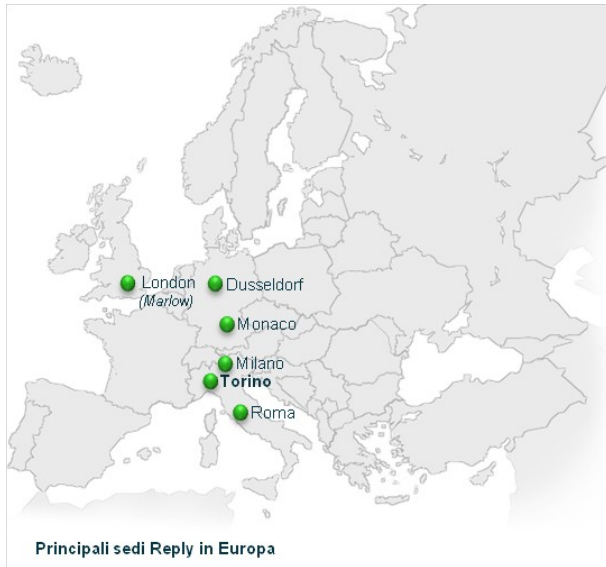


Alternative Usage Area Ideas- Reply

Maurizio Griva

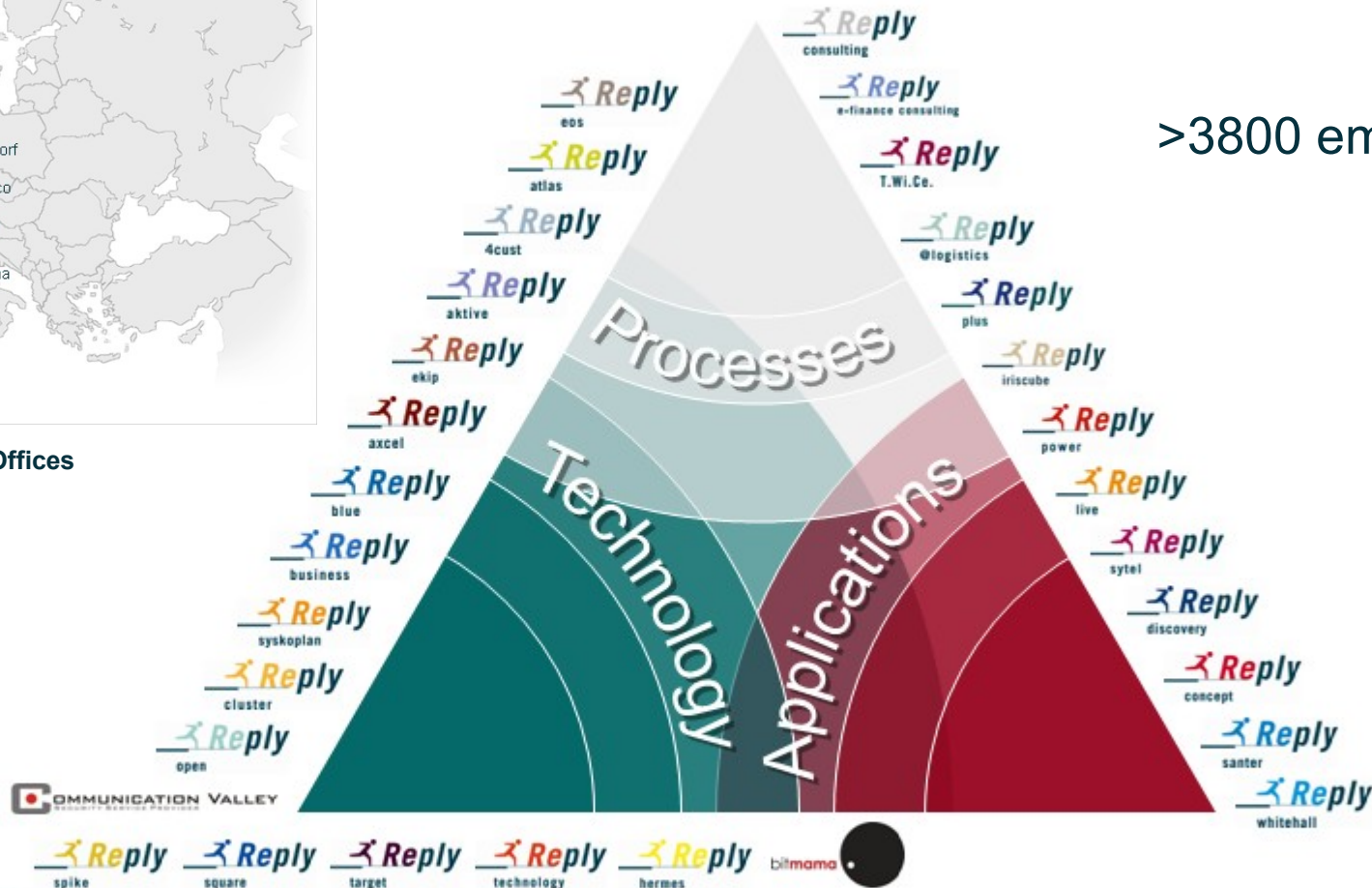
Reply Group

Creating solutions that make Internet of Things, Contents and Services a reality.

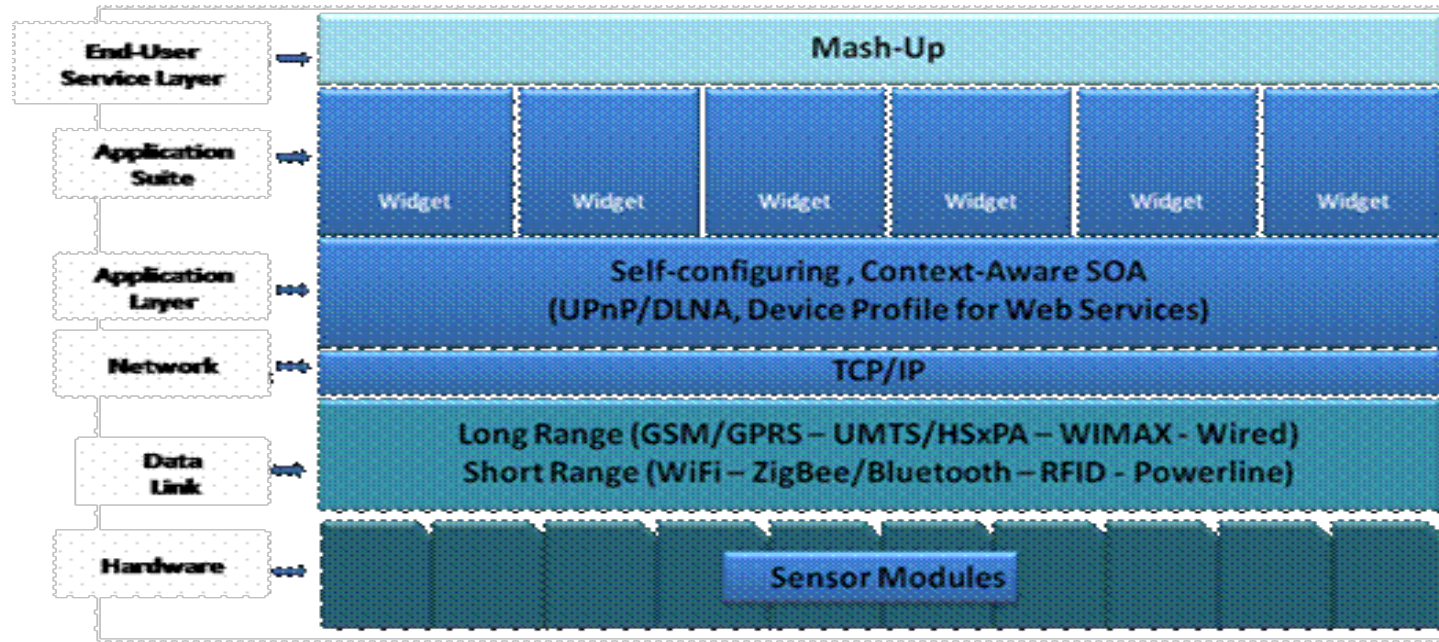


Reply Main European Offices

>3800 employees



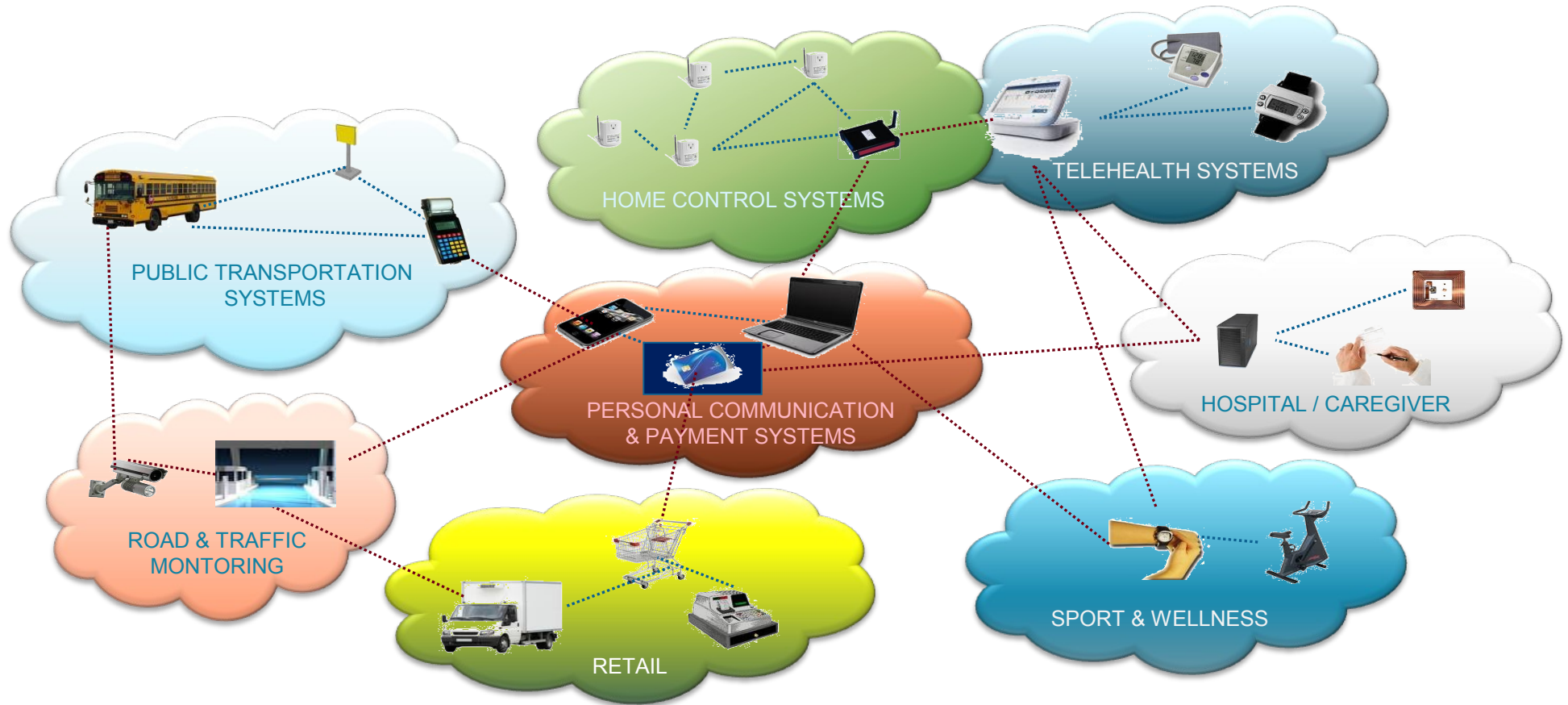
Reply IoT Architecture for Interoperability



WHAT THE FI CORE INFRASTRUCTURE SHOULD PROVIDE:

- Unified resource monitoring and metering systems of resource for wireless sensors networks
- Context awareness
- Self-configuring, self-adaptive, self-healing object networks and protocols.
- Distributed semantic reasoning based on common ontologies
- Heterogeneous networks
- Energy harvesting hardware modules
- Low-bandwidth, low-cost, low energy wireless data networks
- Cloud and grid computing facilities at urban sites (including cloud-of-clouds interoperability)

Alternative Usage Area Ideas - Quality of Life



Difficulty to integrate new machines in existing ecosystem: Interoperability.

Difficulty to interpret data from each ecosystem.

Services provided by M2M devices are proprietary to each ecosystem.

Alternative Usage Scenario: What we propose

- **QoL scenario - Reply foresees a scenario where:**

- The public/private entities, commonalities and the citizens exchange *real-time, multidirectional* information such as
 - positioning of people and vehicles
 - energy and water consumption and production,
 - good transportation, transformations and retailing,
 - health and wellness parameters,
 - environment status data,
 - cultural relationships,
 - digital social interactions.
- Each end user is able to tackle with *his/her own lifestyle* need with mobile devices and vertical applications.
- Each data coming from smart objects is made available in *trusted* and *secure* way to the whole smart city infrastructure and not only to vertical, isolated application as of today.

- **Test Bed:**

- A network of smart cities:
 - each of those making available a **service platform** and a **device/object virtualization layer** with **common characteristics** (service formats, brokering services, energy- and health- oriented ontology)
 - plus a **federated/hybrid public/private cloud-based data center** facilities to host secure databases for real-time computing and historical storage.

- **Reply can contribute to the FI-PPP, in the context of Usage Areas, in the following items:**
 - **Web service and Wireless Sensor Network nodes/devices interoperability** for Internet of Things sub-core middleware platforms for:
 - Health
 - Intelligent Buildings
 - Smart Cities Management and Content Delivery to mobile citizens.
 - **Web service** definition for **common/specialized services** for **energy** monitoring and metering at room/house/building level and energy grids
 - Reply is member of the “Meters and More” alliance and has business relationships with ENI, ENEL, IRIDE (utilities companies for production/transport and delivery of energy in Italy).