Objective

- Provide a new mobility management architecture more suitable for user-centric environments
- De-construct current mobility management based on centralized and static mobility anchoring
- Provide nomadic end-user experience
- Provide session continuity

Motivation

- Paradigm shift of Internet services delivery due to:
  - Widespread wireless technologies
  - Diversity of user-friendly and multimedia-enabled terminals
  - Available open-source tools for content generation
- User-centric, spontaneous wireless environments, today populate the last hop to the Internet end-user
- End-user has a novel role in controlling content and connectivity, based on cooperation (micro-provider)
- Current solutions for global mobility management implement centralized and static mobility anchor points

Handover Optimization

- QoE and available (aggregated) spectrum to guarantee:
  - The best connection
  - Seamlessly
  - At any time
  - Independent of location
  - Expectations
- Characteristics (interfaces, technologies, services)
- Environment (mobility behavior, social patterns, resources)
- Network policies
- Analyze and validate adequate cost functions and metrics to estimate QoE levels on-the-fly
- Intelligent selection of best mobility anchor points

User-centric mobility management

- Identify basic mobility functionalities on current standards
- Decoupling of functionalities in different management elements (mobility anchor points)
- Evaluate the better location to place mobility management elements (server, router, end device)
- Management functionalities placed closer to the end-user
- Optimize the distribution of mobility anchor points
- Specify the mobility control mechanism required for communication between the different entities
- Propose a decentralized and distributed approach
- Evaluation and validation by means of simulation and real testbeds