WP3:
SYSTEM AND NODE ARCHITECTURE DEVELOPMENT

WP Leader: DUTH

KEY OBSERVATIONS

- 4 deliverables, 2 milestones

- No FON participation

- TEKEVER only has minor contribution

- WP3 runs in parallel to *WP4: Service enablement*

- Outcome of WP3 is a **proof-of-concept implementation**

TASKS

- Task 3.1: DTN overlay design and convergence layers for underlying protocols

- Task 3.2: Providing service abstraction to applications through content-centric approaches

- Task 3.3: Smart routing based on social interaction approaches

TASK 3.1

DTN overlay design and convergence layers for underlying protocols

- **Task leader: DUTH**

- Interconnect devices of different types

- Facilitate opportunistic communications

- Develop convergence layers for various underlying technologies

- Name-based replication

TASK 3.2

Providing service abstraction to applications through content-centric approaches

- **Task leader: UCL**

- Introduce a "content layer" to perform location-independent content resolution

- Incorporate user-, server- and content-mobility for smooth operation in infrastructure-less environments

- Extract personal data usage and consumption patterns seamlessly

TASK 3.3

Smart routing based on social interaction approaches

- **Task leader: TECNALIA**

- Integrate social aspects such as trust and social interaction

- Exploit HURRy, Dlife and SCORP routing protocols as basis

- Implement a large crowd scenario with mobile devices

DELIVERABLES

- D3.1/D3.2 Initial and final architecture report (M16/M30)

- D3.3/D3.4 Initial and final ICN layer abstraction specifications (M12/M30)

- No clear deliverable for Task 3.3. Include in D3.1/D3.2?

MILESTONES

- Both milestones on M30

- MS5: ICN layer abstraction specifications defined

- MS6: UMOBILE architecture implemented

PARTNER CONTRIBUTION

- **DUTH**: Convergence layers, smart routing

- **UCL**: ICN content layer that accommodates social interactions

- **UCAM**: Forwarding and topology management, interfaces for QoS

- **COPELABS**: Social-aware and interest-based routing, social trust computation

PARTNER CONTRIBUTION

- **TECNALIA**: Smart routing, input from FP7 SAIL

- **TEKEVER**: Convergence layers for aerial platforms

- **SENCEPTION**: Usage data contextualisation and system personalisation on-the-fly

- **AFA**: Dynamic and on-the-fly evaluation of the physical layer performance