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

UMOBILE project kick-off meeting (Grant Agreement No 645124), UCL, London, 26/02/2015