Session #10 - A.E.028 – alte Bibliothek	1 June 9:00-12:00	
Earth Observation in Support of Urban Monitoring		
Moderator:	Dr. Thomas Esch, Dr. Mattia Marconcini - German Aerospace Center (DLR) Earth Observation Center (EOC) German Remote Sensing Data Center (DFD)	
Format	Presentations	
Objectives		

Urban and peri-urban environments show one of the highest dynamics in the context of global land use transformations. The constant urbanization and the rapid changes in urban environments involve considerable challenges with respect to the observation, analysis and understanding of the complex processes affecting and forming metropolitan areas. Hence, effective and sustainable urban management increasingly demands innovative concepts and techniques to obtain up-to-date and area-wide information about the characteristics and development of the urban system – locally, as well as regionally. In established planning procedures, most of this information is collected by means of statistics, surveys or mapping based on aerial imagery. However, in consideration of statistical information these approaches often show a comparably coarse spatial and temporal resolution while surveying and mapping is time consuming and cost-intensive. Therefore, spaceborne Earth Observation (EO) has become a promising approach to provide updated geo-information on various aspects of the status and dynamics of the built environment.

This session is intended to outline how EO might support urban and spatial planning by providing dedicated information products and services. The session will also include a discussion on the current challenges and opportunities in using EO and the new opportunities arising from the European Sentinel program as well as from the use of ICT technologies for collecting, exploiting, and disseminating the generated data and information.

Time	Talk
9:00-9:20	EC objectives & initiatives. Gilles Ollier - European Commission (EC)
9:20-9:40	ESA objectives & initiatives Michael Berger - European Space Agency (ESA
9:40-10:00	GEO Human Planet initiative Thomas Kemper – Joint Research Centre (JRC)
10:00-10:20	Earth Observation in Support of Global Urban Monitoring – The ESA Projects TEP Urban and SAR4Urban. Dr. Thomas Esch/Dr. Mattia Marconcini - German Aerospace Center (DLR)
10:20-11:00	Coffee Break
11:00-11:25	Developing Services EO-based Services for Urban Management – The FP7 Project DECUMANUS.

	Julia Pecci López - INDRA
11:25-11:50	Urban Anthropogenic Heat Flux Measured from Earth Observation Satellites – The H2020 Project Urbanfluxes. Dr. Nektarios Chrysoulakis- Foundation for Research and Technology
11:50-12:00	General discussion