



EUROPEAN COMMISSION

DG JRC  
Institute for Energy and Transport  
Renewables and Energy Efficiency unit

## Visit of Prof. Henrik Madsen to the JRC-IET

Ispira, 23-24 June 2014

### Information Technology for Intelligent Energy Systems

#### Agenda

*Prof. Henrik Madsen is Section Head for Dynamical Studies at the Department of Applied Mathematics and Computer Science ([DTU Compute](#)) of the Technical University of Denmark [DTU](#).*

*DTU Compute does research in both deterministic and stochastic systems within a range of applications. The main themes are energy, smart cities, medicine, and biology.*

*Prof. Madsen is project leader of the 6 years national project C.IT.I.E.S. (Centre for IT Intelligent Energy Systems in Cities). The project CITIES will establish an integrated research centre covering all aspects of the energy system in Cities, including gas, power, district heating/cooling and biomass, and most importantly methods to forecast, control and optimize their interactions through the use of advanced ICT solutions.*

Prof. Madsen will give two presentations to all JRC scientific staff and discuss with representatives from the IET the mutual interest in activities related to the Smart Cities, the Covenant of Mayors and the Energy Performance in Buildings Directive EPBD.

IES staff (H6 unit – Digital Earth and reference data) will also be invited to discuss the potential of the INSPIRE directive and Cities, utility networks and the INSPIRE directive.

#### Monday 23 June

##### **9:30 – 12:30 Meetings Prof. Madsen – IET and IES staff**

Short presentations and discussions on Smart Cities (Isabella Maschio), CoM (Albana Kona), EPBD (Hans Bloem), INSPIRE Directive (Paul Smits)

##### **14:30 – 16:30 Presentation by Prof. Madsen** (to all JRC scientific staff, VC Petten and Geel)

The CITIES project; a hierarchy of control and optimization problems for integration of large fractions of fluctuating renewable energy (like wind and solar power).

#### Tuesday 24 June

##### **10:30 – 12:30 Presentation by Prof. Madsen** (to all JRC scientific staff, VC Petten and Geel)

Dynamic Calculation Technologies for Energy Systems: Use of smart meter data for identification of the thermal characteristics of buildings.

##### **14:30 – Discussions Prof. Madsen - IET and IES staff**

Identifying topics of mutual interest of CITIES, INSPIRE, EULF, EPBD, EED, SmartCities, Covenant of Mayors; possible areas for collaboration between JRC and the Danish national project CITIES

For further information please contact:

Hans Bloem ([hans.bloem@jrc.ec.europa.eu](mailto:hans.bloem@jrc.ec.europa.eu)) or Isabella Maschio [Isabella.maschio@ec.europa.eu](mailto:Isabella.maschio@ec.europa.eu)