

~ 25 participants

## Session 8B1

**"GEO-INFORMATION FOR A SUSTAINABLE FUTURE ENERGY SUPPLY"**  
- benefits, needs for action -

Organised by EURDGI Member the German Umbrella Association for Geospatial Information



8 October 2014, 11:00 - 12:30  
At the same time the 6. Deutsches Geoforum

**Moderator:**

Peter Ladstaetter, CEO, Ladstatter Geoinformatik, Co-author of the DGI position paper on GI and Energy Policy

**Rapporteur:**

Wolfgang Steinborn, European delegate of DGI, German Aerospace Centre, Bonn

11:00 Introduction by the moderator

11:05 Keynote one

**GIS at the Central Data Entry and Integration Platform in a Large Electricity Utility**  
Florian Brandt-Dohrn, Manager International Business, AED-SICAD AG

11:25 Keynote two

**Information priorities for the transition to renewable energies in France**  
Francois Salge, Senior advisor to the director general for spatial planning, housing and nature, Ministry of ecology, sustainable development and housing and ministry of housing, territories equality and rural policy

11:45 Panel Discussion

Industry, Administration, Research

**GI for Sustainable Future Energy Supply - Benefits, Needs for Action**

Pietro Menna, Policy Officer, European Commission, New energy technologies, Innovation and clean coal  
Udo Quadt, Dep. HoU for Network Agency  
Jose-Lorenzo Mon, Atos Research & Innovation, member of the European "Big Geospatial Environmental Data Value Partnership"

12:25 Conclusions



**imagine**  
OPPORTUNITIES EVERYWHERE

Geographic Information Expertise: Made in Europe



Europe must reduce its dependency from energy import with energies available here -> renewable energies

## EU-28 Energy Import Dependency

By Fuel

	1995	2000	2005	2010	2011	2012
Total	43.0 %	46.7 %	52.2 %	52.7 %	53.9 %	53.4 %
Solid Fuels	21.5 %	30.6 %	39.4 %	39.4 %	41.7 %	42.2 %
of which Hard Coal	29.7 %	42.6 %	55.7 %	57.9 %	62.3 %	62.5 %
Petroleum and Products	74.0 %	75.7 %	82.1 %	84.4 %	85.1 %	86.4 %
of which Crude and NGL	73.0 %	74.5 %	81.3 %	84.6 %	85.5 %	87.8 %
Natural Gas	43.4 %	48.9 %	57.1 %	62.1 %	67.1 %	65.8 %

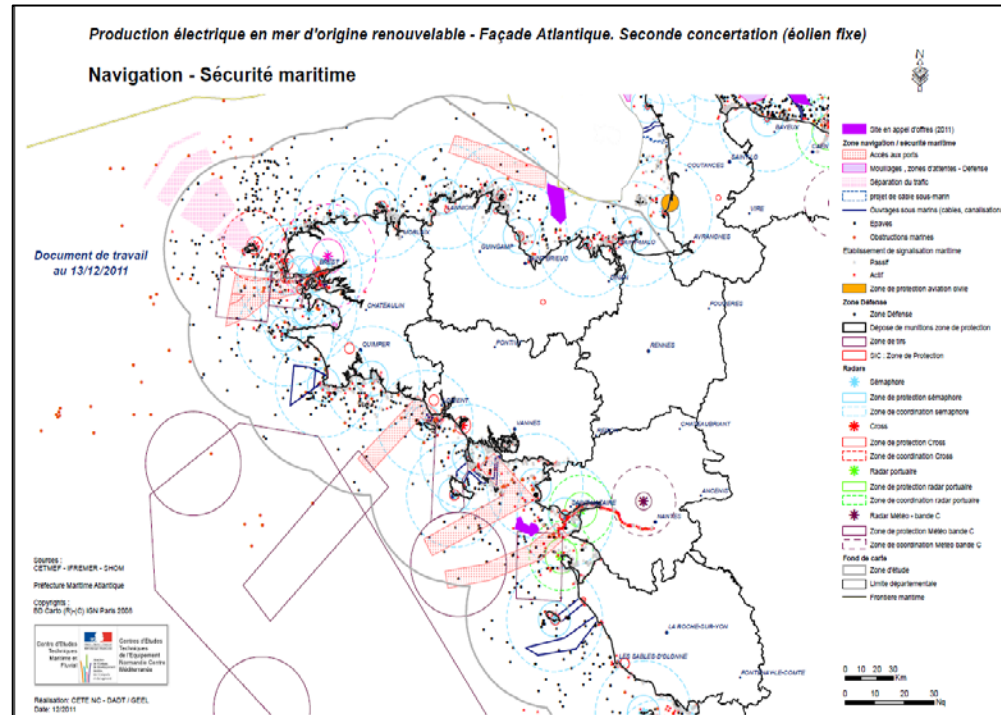
From presentation Menna

Renewable energy means:

- De-centralised supply (bottom-up rather than top-down as before)
- Energy availability varying over short periods (range of 0.2% - 56 % contribution was quoted)  
-> challenge to ICT to handle big and real-time data and produce predictions

# Exploitation of renewable energies is a cross-border task:

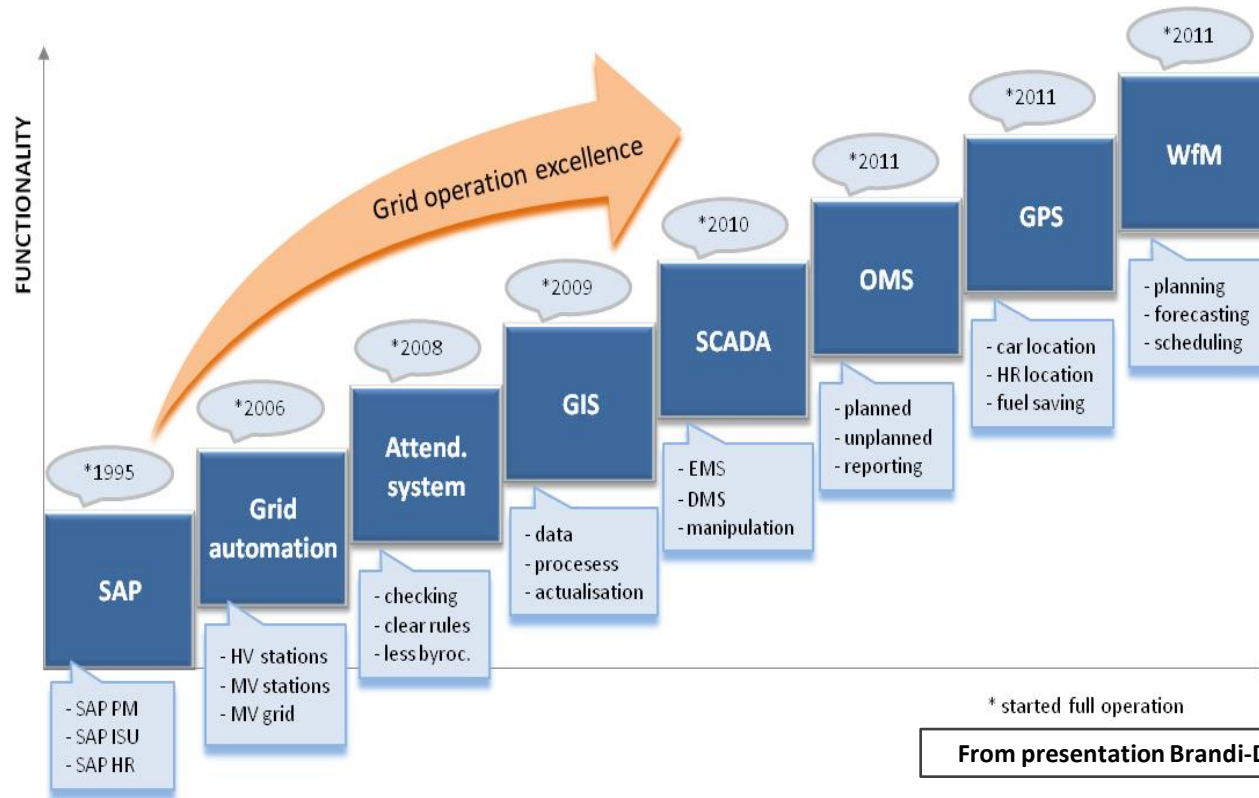
- Sources belong to more than one country (e.g. North Sea)
- X-Border transport networks are needed for high and medium voltages to smoothen peaks and outages



GIS is indispensable to master the challenge (speeds up planning, manages grids etc.).

ICT and utilities industry has developed the right technology, but

- Necessary are data from the local level which are not ready to integrate into ntl. or European GIS (FR maritime GIS has 100 layers, some data were on paper only)
- X-Border infrastructure for exchange of Big Data is insufficient



Oct. 8, 2014

From presentation Brandi-Dohrn

# CONCLUSIONS

1. the geographic dimension of the sustainable future energy supply is gradually recognised by politics
2. Implementation of INSPIRE interoperability standards must reach the local level
3. ICT needs a boost towards big and real-time data integration and analysis (predictive analytics)
4. Public acceptance of energy plants, storage and transmission lines etc. must also be supported by GIS

The DDGI position paper of 2012 describes the situation well and is in line with findings in France.