

~ 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 % |

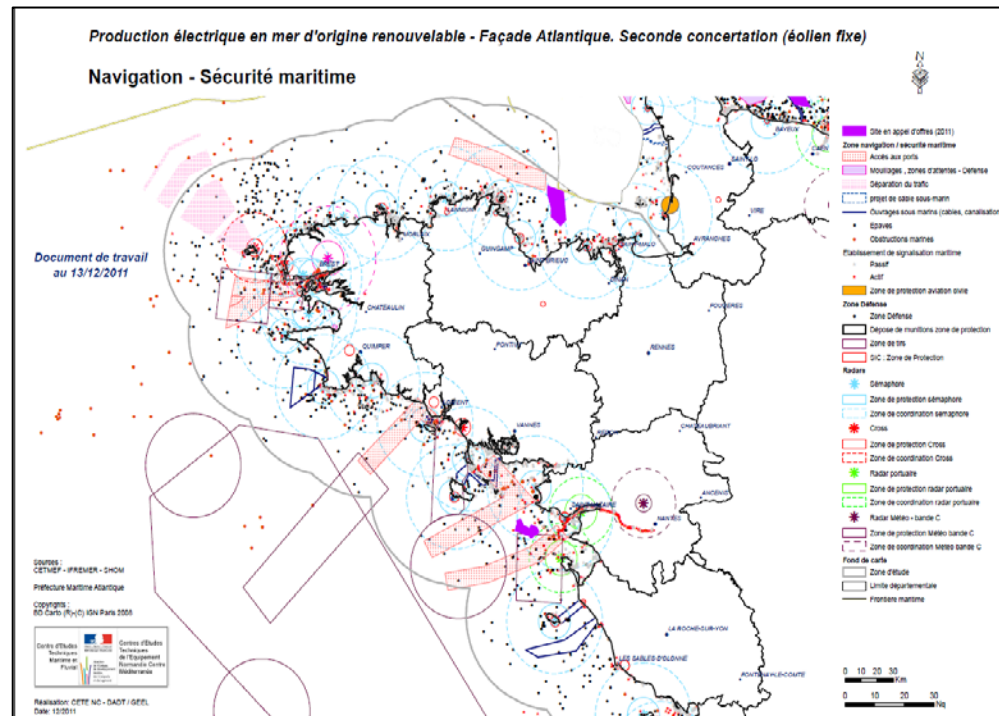
From presentation Menna

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:

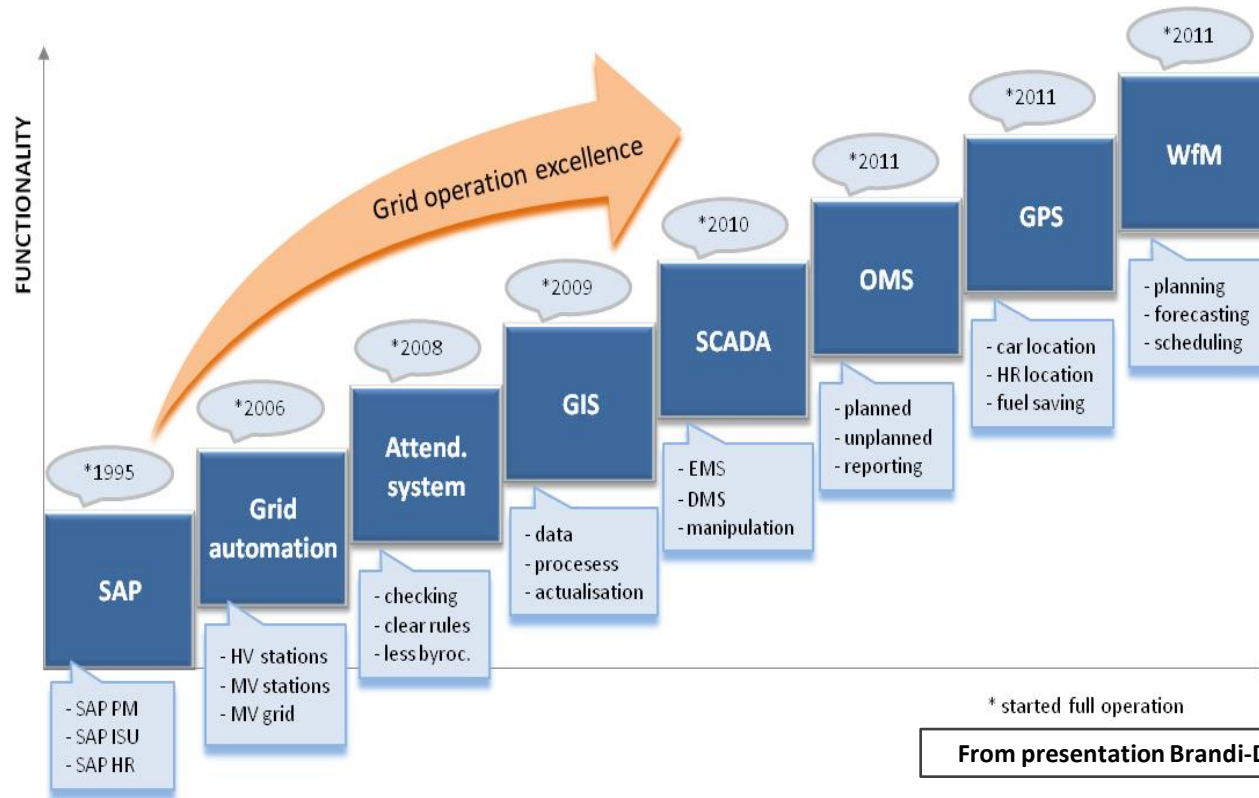
- Sources belong to more than one country (e.g. North Sea)
- X-Border transport networks are needed for high and medium voltages to smoothen peaks and outages



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.