

Corporate asset management and operation in GIS

- Enterprise GIS' for collaborative data management and decisions support

Esri UC, San Diego, July 11th 2013



Presenters from Dong Energy



Signe Bramming Andersen, sigba@dongenergy.dk
MSc in Economics & Business Administration,
Manager, Energy Management, DONG Energy

Since 1999 working with IT in DONG Energy.
IT responsible for the projects ADMS, Wind Farm
Management Data Platform, Power Hub (VPP), Bio Hub



Jesper Vinther Christensen, jesper@similix.dk
Ph.D. in GeoScience & Computing Science
Owner, Similix

Since 2011 Lead Architect, DONG Energy Smart Grid
programme. 20 years of experience with IT and
especially GIS, architecture and project management.

DONG Energy is one of the leading energy groups in Northern Europe

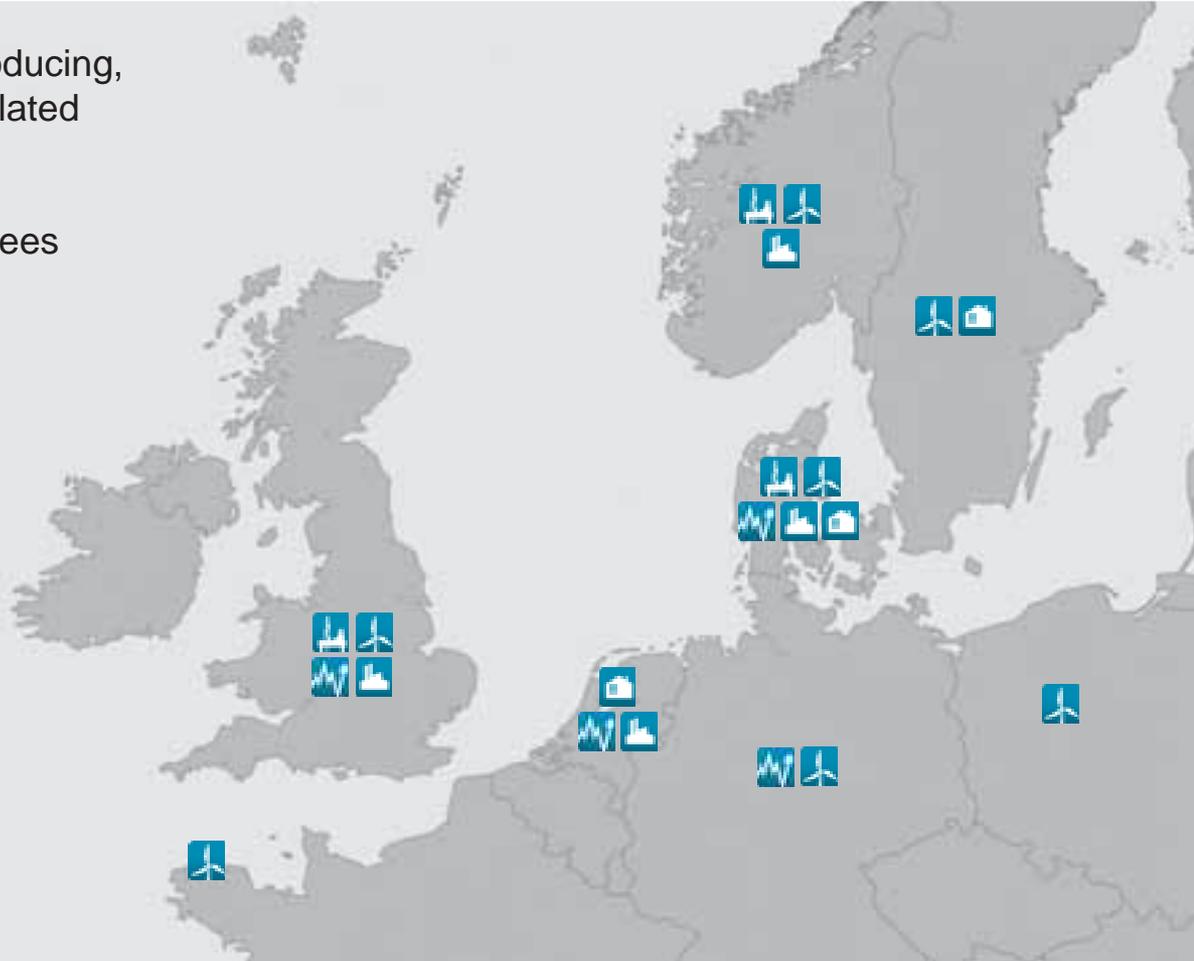
Our business is based on procuring, producing, distributing and trading in energy and related products in Northern Europe.

DONG Energy has nearly 7,000 employees and is headquartered in Denmark.

Owners at 31.12.2012

The Danish State	79.96%
SEAS-NVE Holding	10.88%
Others	9.16%

-  Exploration & Production
-  Wind Power
-  Thermal Power
-  Energy Markets*
-  Sales & Distribution*



* Customers & Markets from 1 May 2013

Business Drivers for Asset Management

1. Reduce the total costs of operating assets
2. Reduce the capital costs of investing in the asset base
3. Improve the operating performance of assets (reduce failure rates, increase availability, etc)
4. Reduce the potential health impacts of operating the assets
5. Reduce the safety risks of operating the assets
6. Minimize the environmental impact of operating the assets
7. Maintain and improve the reputation of the organisation
8. Improve the regulatory performance of the organisation
9. Reduce legal risks associated with operating assets

Source: Institute of Asset Management

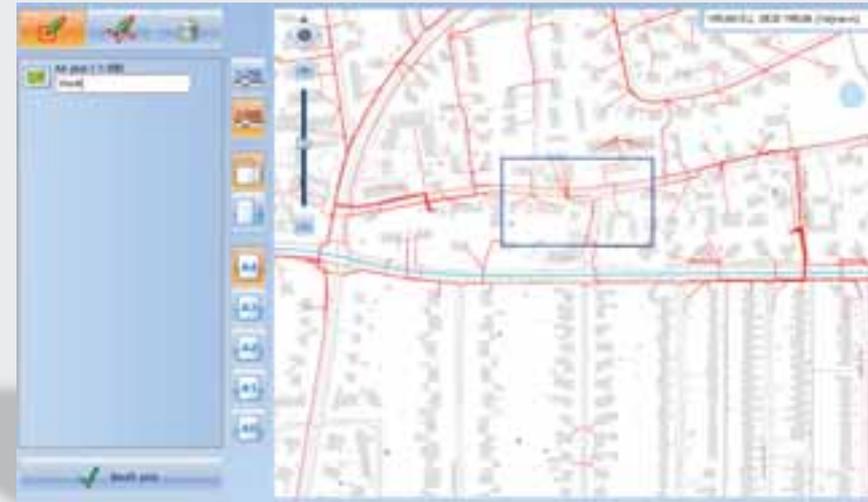
ESRI GIS in DONG Energy Sales & Distribution

ESRI contract signed in 1995

Current version of ArcGIS is 10.1

Telvent utility extension ArcFM & Designer Express on top

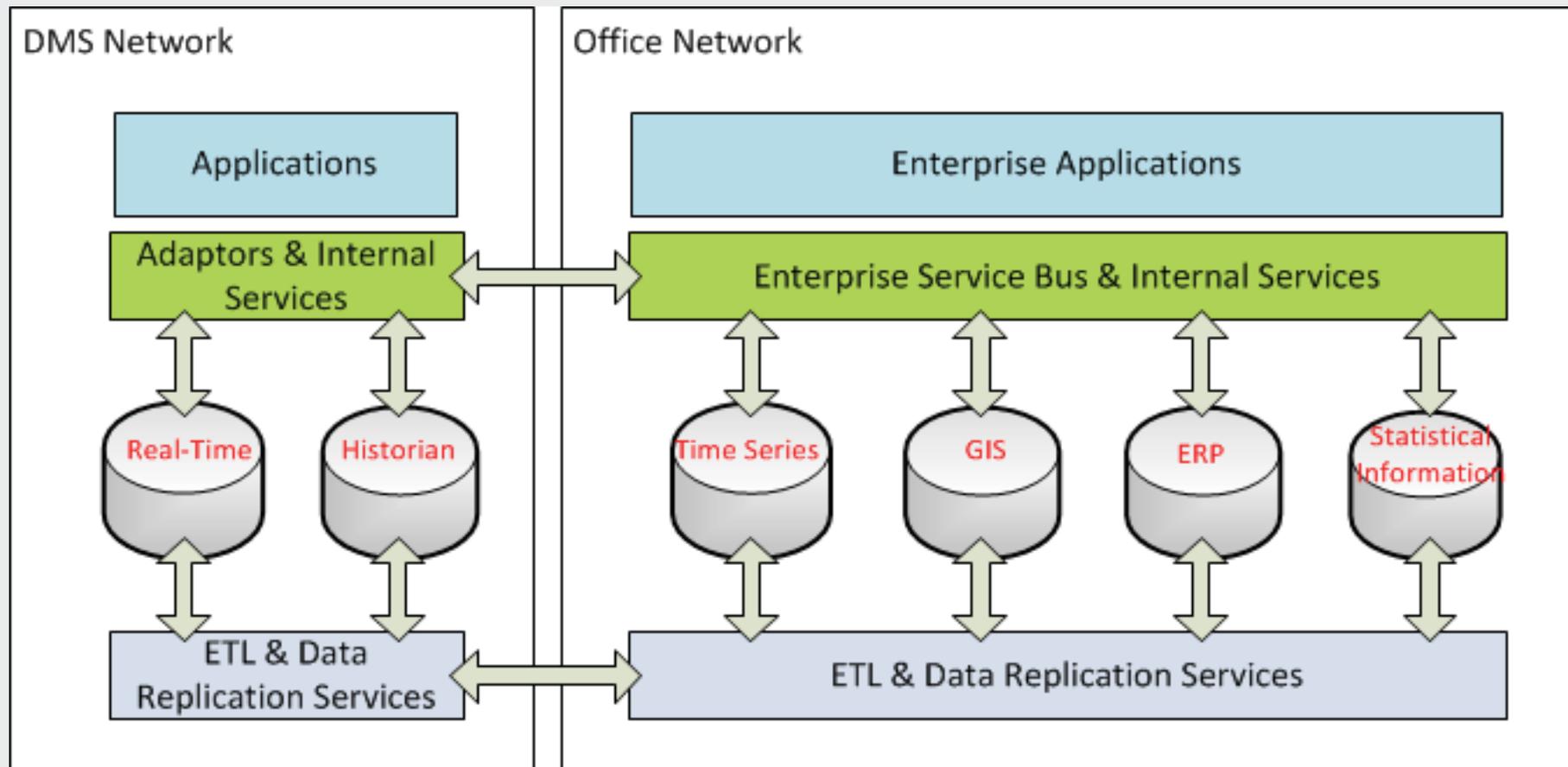
Web apps are built with Silverlight and ArcGIS server technology



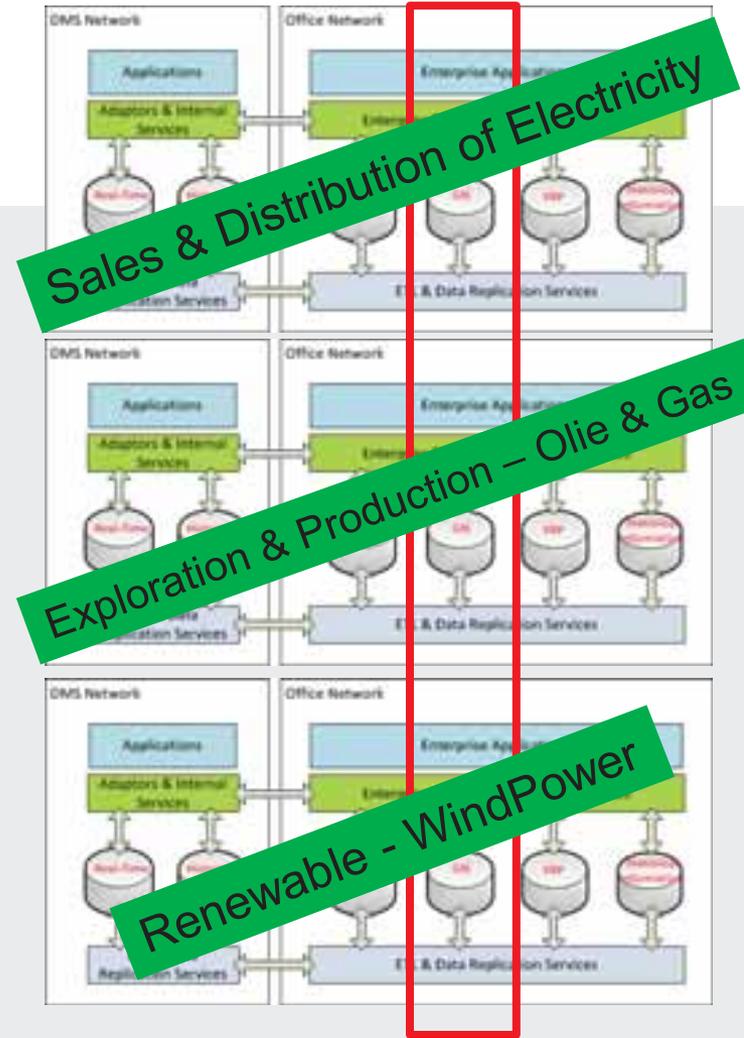
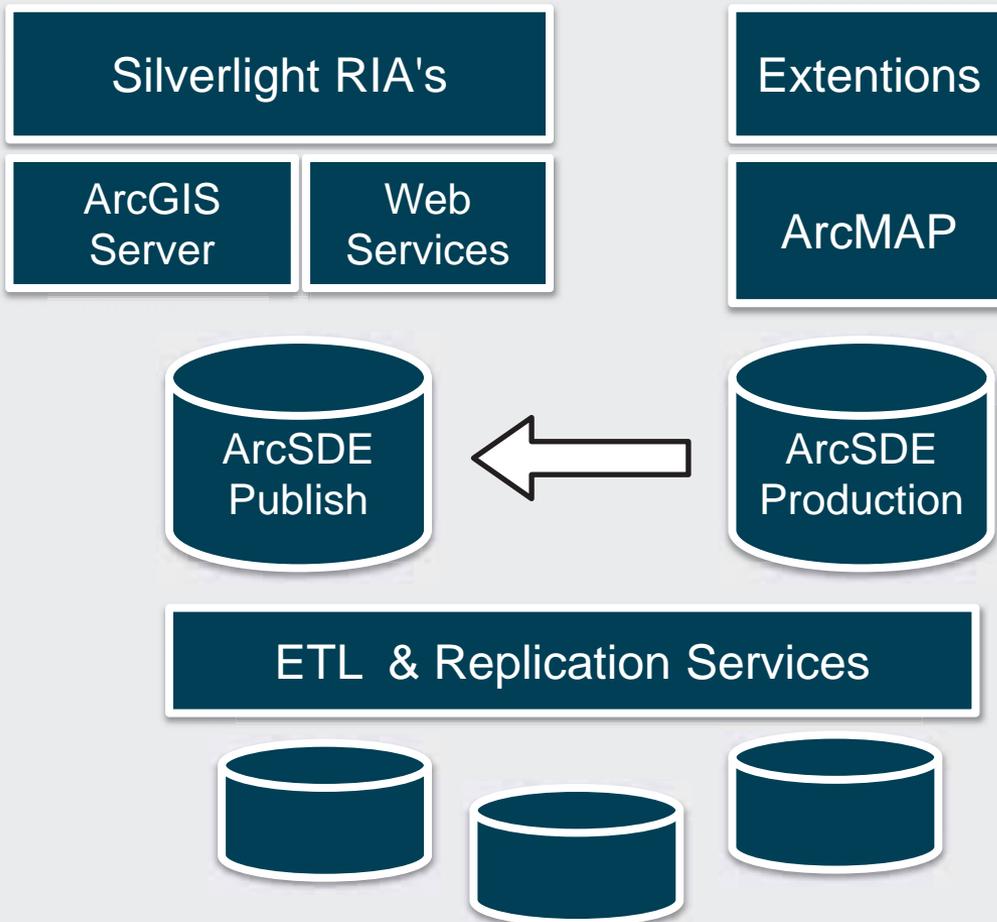


DONG
energy

Enterprise Architecture – Patterns for Asset Management



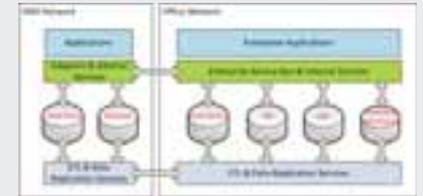
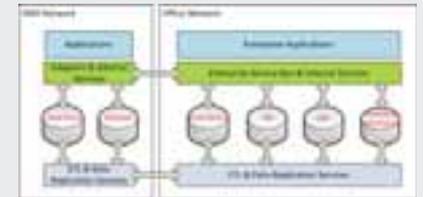
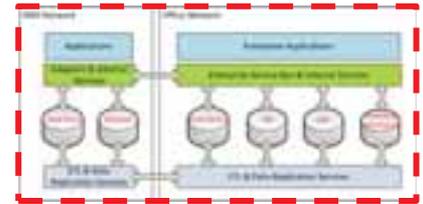
The Esri Platform



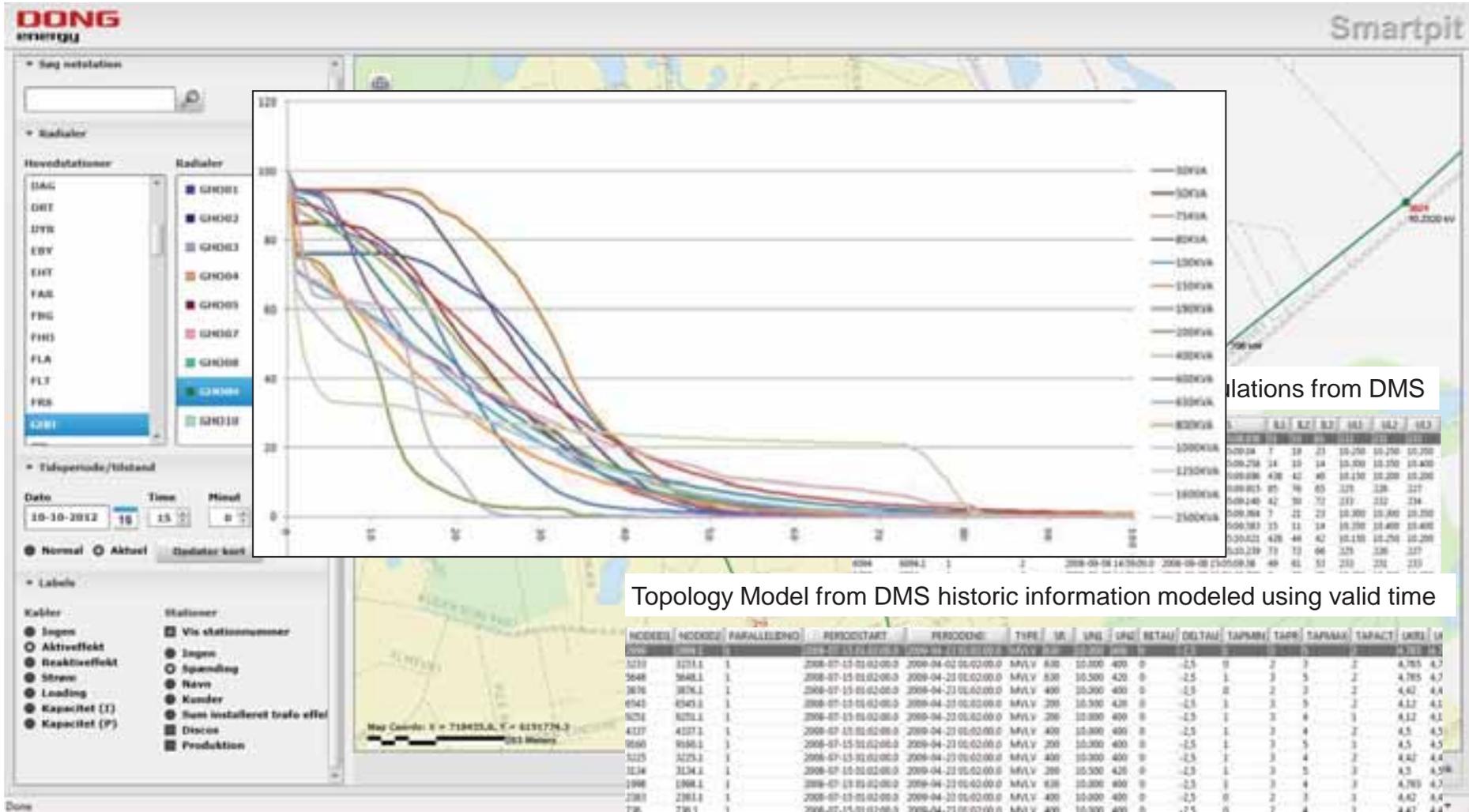
Case Study: S&D



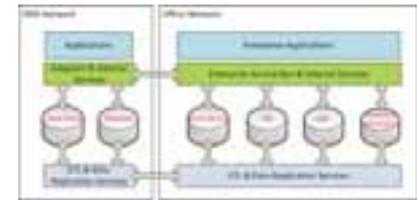
GridHUB



S&D continued



Case Study: E&P....



DONG energy

Licence Management System Exploration & Production

16/98
Cecilie Field
5404/19, 20

Status: Production
Average: 22.5 Km²

Selected 20 Licences: Status: Production

License	Field	Production %	Operator
1/98	Lulita	43,594%	DONG ESP A/S
16/98	Cecilie Field	22%	DONG ESP A/S
4/95	Trin Field	40%	DONG ESP A/S
4/95	Sin	100%	DONG ESP A/S
7/86 b	Lulita Part	43,594%	DONG ESP A/S
7/89	Syl Arms Field		
PL019	Ule		
PL019B	Gyds		
PL065	Tambar		
PL122	Haruk		

Country

- Denmark: 14
- Faroe Islands: 2
- Greenland: 1
- Norway: 22
- United Kingdom: 27

Status

- Exploration: 26
- Development: 28
- Production: 22

Rate

- DONG Operated: 30
- Third Party Operated: 46

Co-operation With

- DONG ESP A/S

Capture Year

- 2002-06-15

Include Relinquished Licences

Licence Information

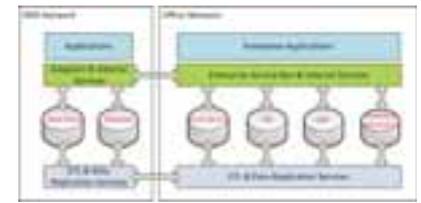
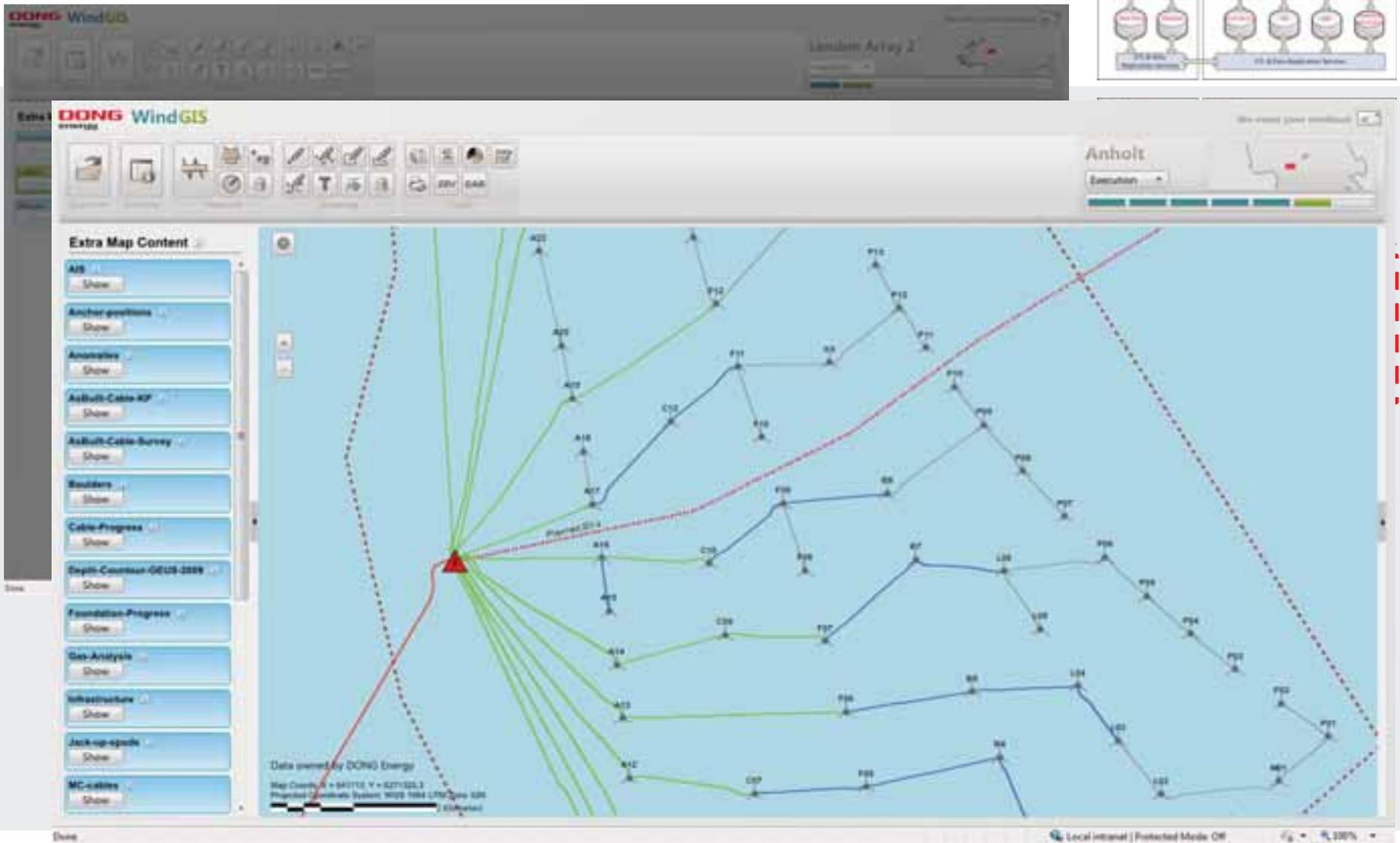
- Capture Method: Award
- Licence Round: DK 5th Round
- Disposal Method: [None]
- Capture Date: 1998-06-15
- Expiry Date: 2002-06-15
- Original Expiry Date: 2002-06-15
- Extension Date: 2002-06-18
- Relinquishment Date: [None]
- Proposed Work Programme: [None]

Commitment

Expiry Date	Type	Status	Description

- Prospects, Discoveries & Fields
- Partnership
- Committees
- Reports and Links
- Licence History

Case Study: WindPower....



Towards Asset Optimization

