

MIND YOUR ASSETS

A Standardised Approach to As-Built Data
Management

Liam Murray, GIS Analyst

22nd November 2016, School of Economic Science, London



AGENDA

- Who we are
- The Problem
- The Solution
- What's Next?

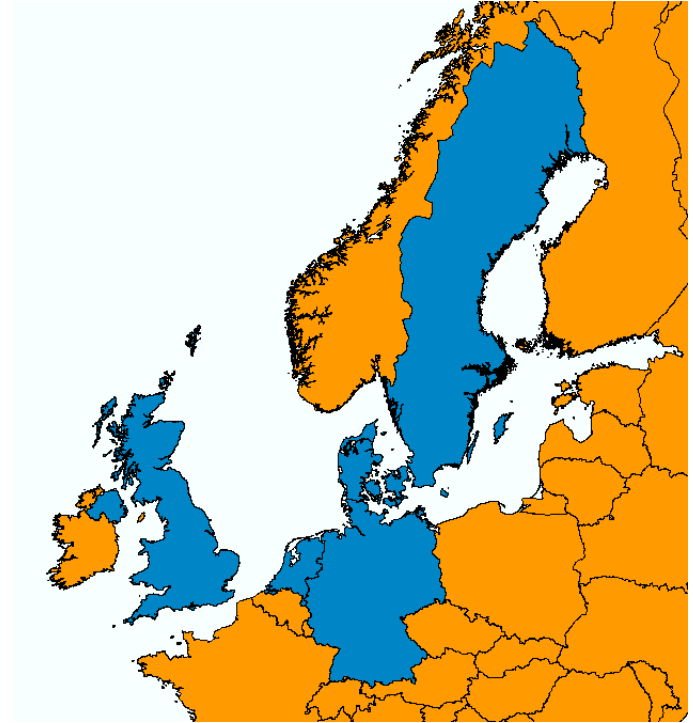
WHO WE ARE

VATTEN...WHO NOW?

- One of Europe's largest utility companies
- 100% Swedish state-owned
- Six core markets: Sweden, Denmark, Finland, The Netherlands, Germany and The UK
- Objective: be a leading developer and operator of wind power while operating large scale, low CO2-emitting production with high efficiency.
- Carbon Neutral by 2050

BUSINESS AREA WIND

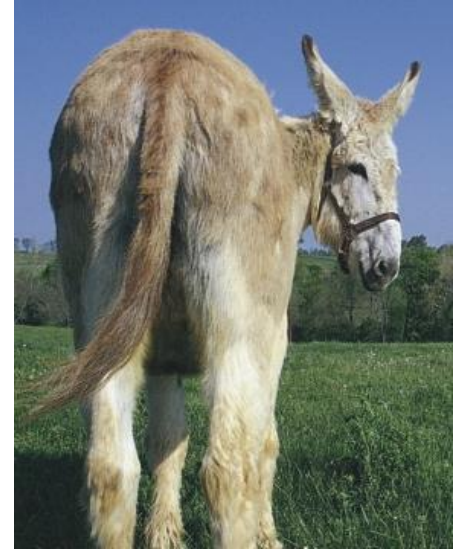
- Installed capacity: 1,825 GW
 - Offshore: 1 GW
 - Onshore: 0.8 GW
- Production = 1.5 million homes
- 94 operating wind farms:
 - Over 20 years
 - Many acquisitions



THE PROBLEM

PUTTING THE “ASS” IN ASSET MANAGEMENT

- Silo working/ passage of time/ lack of corporate-level data management policy =
 - Wildly varying standard of as-built documentation
 - Many different data formats
 - Little or no consistency
 - No central, comprehensive storage location
- Acquired sites – no control over data formats or quality
- VF sites – no excuse!



WHY DOES THIS MATTER?

- **Safety**

- A Vattenfall core value
- Other stakeholders (fishermen, shipping, general public)

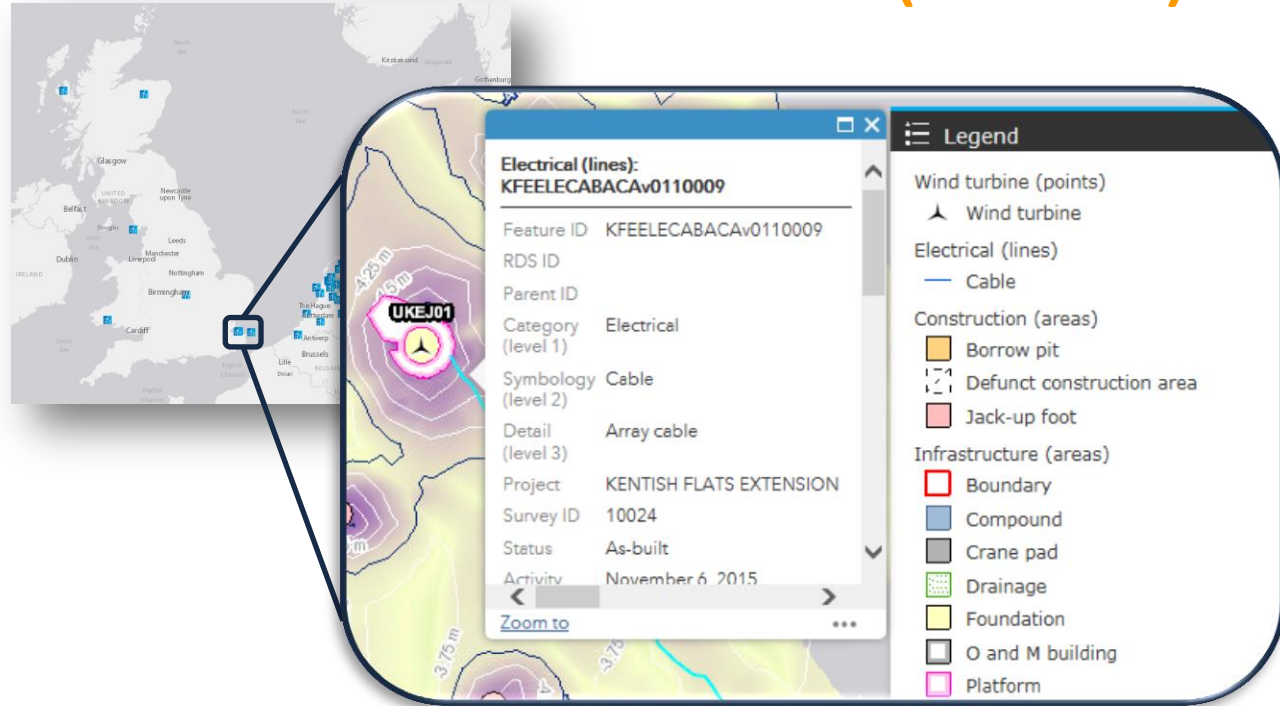
- **Cost:**

- Delays to repair jobs while documentation is located
- Documentation not always useable; missing vital elements (such as coordinates!)

THE SOLUTION

OPERATIONS SPATIAL DATABASE (OSDB)

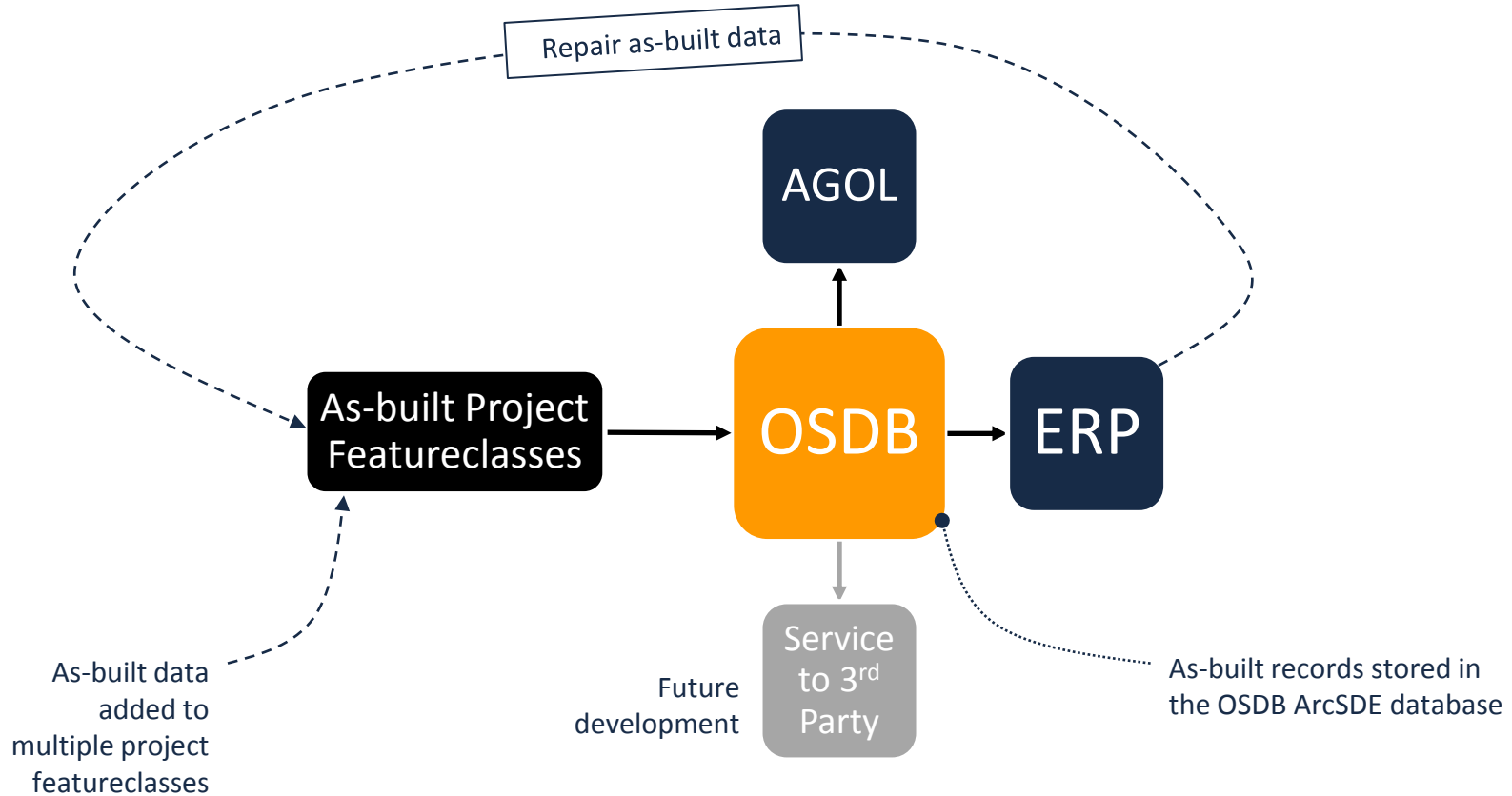
- **Standardise** as-built data delivery and storage
- Record works details in a **centralised** location
- **Aim: a single, centralised database containing all operational assets**



OSDB: BENEFITS

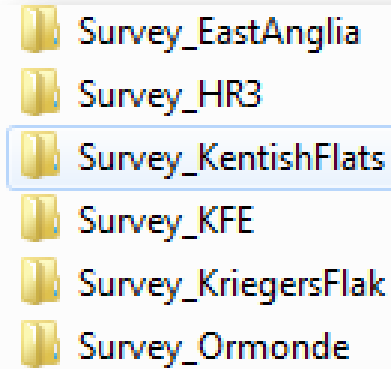
- **Standardised** data structure for contractors and Vattenfall
- **WebGIS Gateway** to project documentation that is stored on Livelink or in a Data Archive
- Becomes the basis for a **data pack** to be used in an emergency response scenario (e.g., cable failure)
- Services can potentially be incorporated into **Marine Coordination** packages

OSDB DEPENDENCIES



DATA ARCHIVE

- **Low cost** dedicated storage for each project
- Large-capacity, **read-only** server space
- Raw and processed data stored in their **entirety** in a readily accessible format



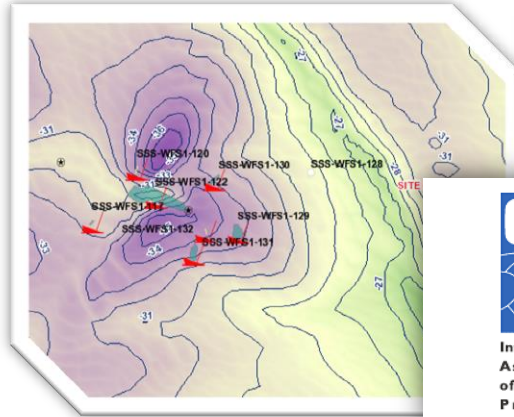
(VIDEO)

WHAT'S NEXT?

WHAT NEXT?

- Seabed Survey Data Model (SSDM)
- Marine Themes/ Raster charts
- Onshore sites
- SAP integration

- Real-time data:
 - Vessel tracking
 - Turbine production
 - Fault alerts



THANK YOU

Questions?