21CXRM

21st Century Exploration Road Map
21st Century Exploration Road Map (XRM) Objectives

• Develop a deeper collective understanding of mature plays that will:
  - Increase prediction accuracy
  - Increase success rate
  - Find bigger pool sizes

• Create an investment case in the frontier plays that will
  - Articulate scale of the prize
  - Understand the play risks and the work needed to de-risk the play
  - Produce Investment programme to de-risk (seismic acquisition)

• Set up a collaborative geoscience programme that raises the bar of knowledge of the North Sea
Palaeozoic Project – Key Objectives

• Searching deeper and wider than the conventional hydrocarbon horizons
• Develop a strong, consistent regional data-set to provide a platform for more specific oil & gas exploration studies
• Develop new scientific understanding
  • that down-risks some of the critical play elements
  • that stimulates new ideas for plays and prospectivity
• Provoking
  • new data acquisition
  • additional analysis and interpretation programmes
• Leading to
  • licence activity
  • significant exploration well activity
  • economic commercial success rates
Key Drivers

• Achieving the best understanding we can to ensure that more, more successful wells are drilled by the industry
• Win-win arrangements for optimal seismic data use
• Expectation of a fully integrated approach with industry supporting and involved
## Palaeozoic Project Sponsors

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Focus on Devonian-Carboniferous
What is different about this project?

- Digital atlas
- Incorporation of industry datasets
- Including new seismic, biostratigraphy, geochemistry etc
- Collaborative approach
- Builds on existing BGS-DECC work
- Between ‘Millennium Atlas’ and block scale:
  - source rock analysis, maturity, uplift/burial history
  - stratigraphy incorporating onshore knowledge
  - tectono-stratigraphic analysis
  - regional distribution of reservoirs, sources, seals
- Provision of information digitally/ 3D model

To enable: identification of new prospective areas and key areas where new seismic or studies are required
Plan

Project management, IPR, data gathering

Well database
Seismic interpretations (new, existing) Depth conversion
Gravity study

Well correlations and information (biostrat, geochem, rock properties etc)
3D geological model
Tectono-stratigraphic development

RockEval source rock analysis
Well log analysis
Burial/uplift, maturity, migration studies

Deliverables (digital)
Reports to download
Well correlations
New analyses (RockEval etc)
Synthesis of legacy datasets (subject to IP restrictions)
Geological model grids
GIS database

Up to date data, interpretations and knowledge from industry

Oil & Gas Authority
British Geological Survey

Oil & Gas UK
Confidentiality & IP

- Seismic database: Terms & conditions
  - Each dataset will be provided with clear agreed terms and conditions
  - The BGS project team will have access to data through their contract with DECC. No data or interpretations undertaken for the project will be released to any sponsors without data owners approval
  - Contributions from licensees
  - Voluntary release of data and/ or interpretations

- Well data access and associated legacy data

- IPR, product release

- Future development and long term storage
Further Information

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