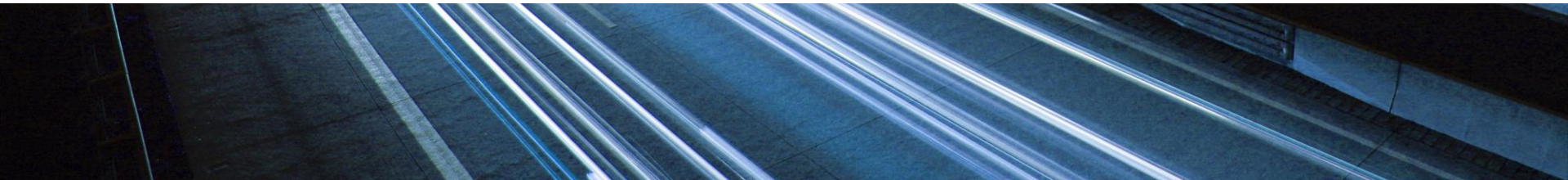




21CXR

21st Century Exploration Road Map



Oil & Gas
Authority



British
Geological Survey

NATURAL ENVIRONMENT RESEARCH COUNCIL



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

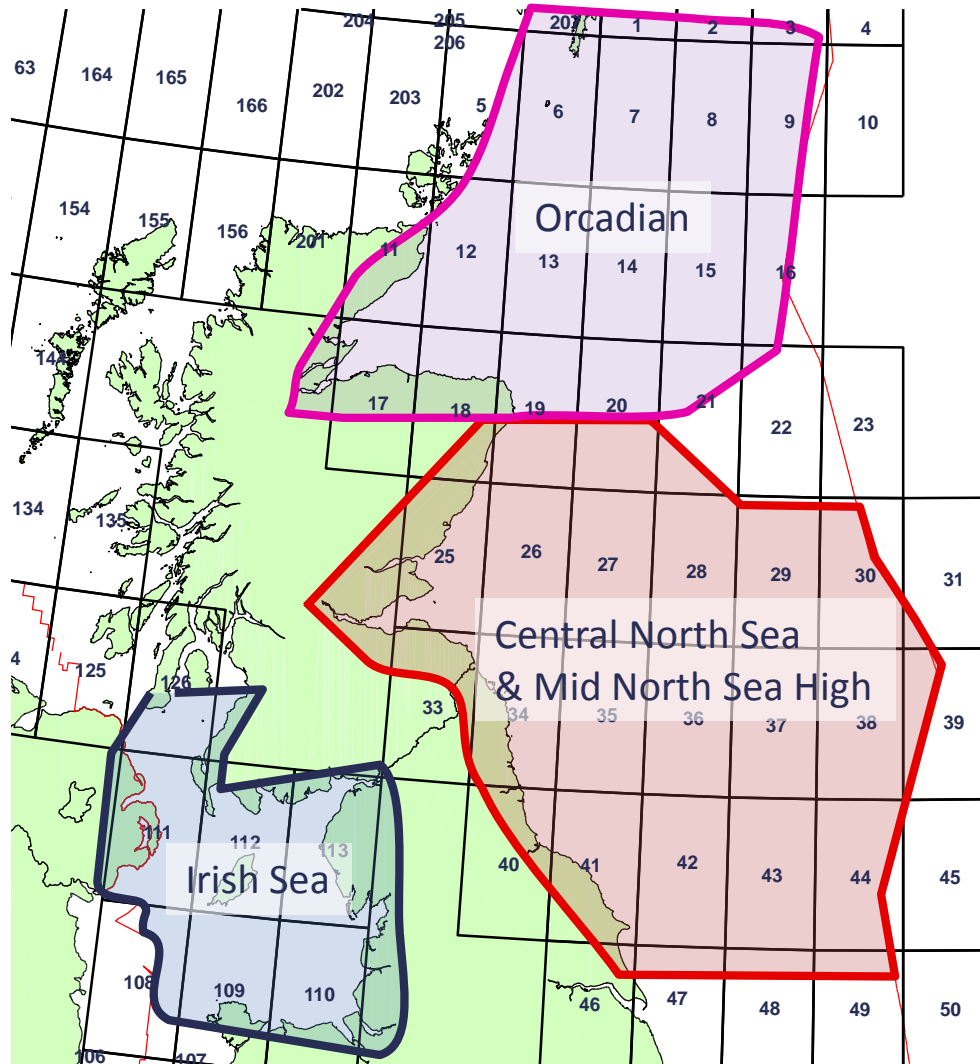
Key Drivers

- 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

Alpha Petroleum Resources	Conoco Phillips	Parkmead (E & P)
Antrim Resources	Dana Petroleum	PGS
Apache North Sea	Dea UK SNS	Premier Oil Plc
Atlantic Petroleum UK	Dolphin Geophysical	Senergy
Aurora Petroleum	Dong E & P	Shell
Azinor Catalyst	Dyas UK	Spectrum
Bayerngas Europe	EBN (Netherlands)	Statoil
BG Group	E.ON E & P UK	Talisman Sinopec
BP	GDF Suez E & P UK	TGS-Nopec
Cairn Energy	Maersk Oil North Sea UK	ThinkTank Maths Limited
Centrica Energy	MOL Operations UK	Total E & P
Chevron Upstream	Nexen Petroleum U.K.	Verus Petroleum
Chrysaor	Origo Exploration UK	Western G / Schlumberger

Programme

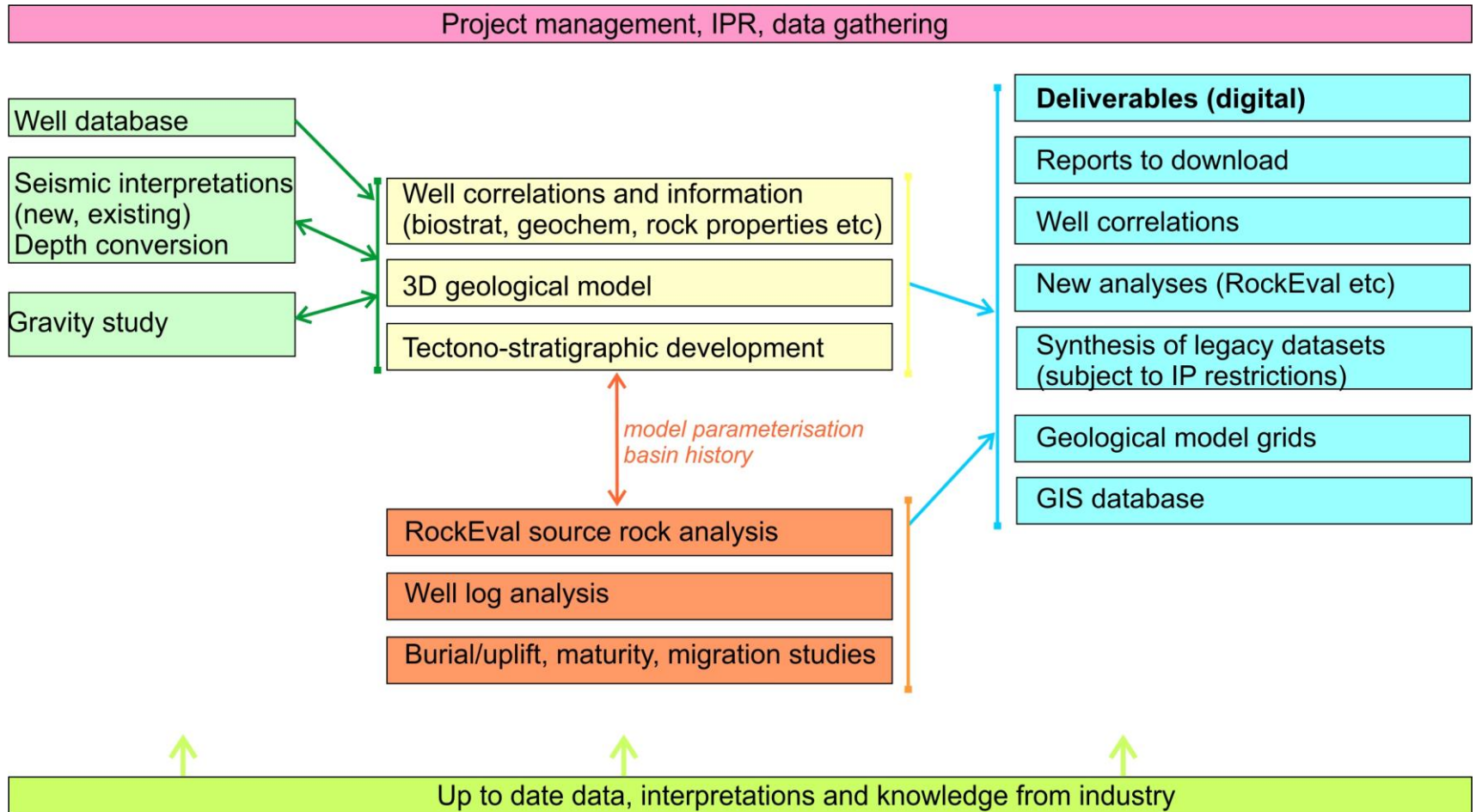


Focus on Devonian-Carboniferous
What is different about this project?

- 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



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/ interpretations
- Well data access and associated legacy data
- IPR, product release
- Future development and long term storage

Further Information

- Contact

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