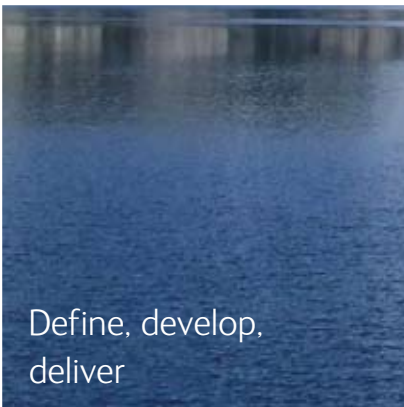


# National Data Repositories (NDR)



# Introduction

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RPS Energy helps companies develop natural energy resources across the complete asset life cycle, combining our technical and commercial skills with an in-depth knowledge of environmental issues.

The expertise within RPS Energy is applied world-wide to a broad range of projects across a number of industry sectors. In each of these areas, we provide our clients with independent flexible support to help them achieve their technical and commercial goals.

RPS Energy has major regional offices across the UK, Australia, USA and Canada as well as local offices and agencies in many other areas. Oil and gas projects remain a central part of our work, but we are also world-leaders in advice to windfarm operators and are increasingly involved in other forms of renewable energy. Transferring skills across these sectors is a core capability for RPS Energy.

Our clients include governments, NOCs, IOCs, independents and financial institutions, as well as companies in the wider energy industry and other infrastructure and asset owners.

Increasingly we operate on projects where the issues surrounding the development energy resources and the preservation of the environment converge. RPS Energy brings a unique combination of such skills to all our projects.

RPS Energy, through its acquisition of Paras Consulting, is one of the world's leading independent consulting companies in the field of Information Systems and Processes. This combination of vendor/service neutrality combined with E&P technical know-how, makes RPS Energy uniquely placed to offer services to governments to implement an NDR.

The large system vendors are vital stakeholders in the NDR domain and RPS Energy maintains excellent relationships with these companies. We manage technology procurement projects for both energy companies and governments, providing a unique understanding of the capabilities of the technologies on the market.



# National Data Repositories

Typically, the role of any governing body with the responsibility for a country's oil and gas industry, is as the domestic petroleum resource owner, manager, and regulator of the country's E&P industry. The role represents a number of responsibilities including:

- Regulatory compliance
- Promotion of inward investment
- Cost savings
- Long term preservation of data for scientific purposes

As investment within a country's E&P industry increases, so do the volumes and complexity of data. An existing, efficient data repository is an attractive proposition to any exploration company looking for new regions to explore.

**The challenges facing government departments include:**

- Improved recognition of data as an asset and as a key enabler for potential new investment
- Adding value to current oil and gas assets and realising new opportunities in an environment with business, technological and political fluctuations
- Managing increasing multi-sourced volumes of a variety of data in a multi-client environment
- Ready availability of high integrity integrated datasets
- Continuous monitoring of data quality and improved understanding of integrity of datasets

- Improved interaction between the Government and Industry
- Improved methods of addressing security and entitlement issues
- Improved standards and procedures to ensure preservation and increase in value from the data including regulatory compliance
- Establishing an improved strategy for storage and archive of data



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An NDR would provide long term storage for future use, ensuring that data retains value into the future.

**How can we help?**



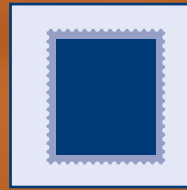
### National Data Repositories Lifecycle



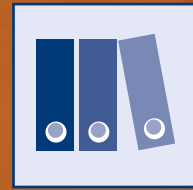
Define



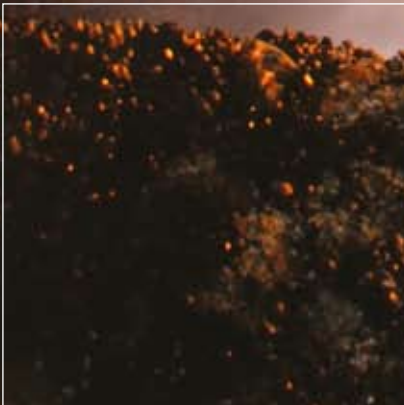
Develop



Deliver



Ongoing Audit





# National Data Repositories Lifecycle

## RPS Credentials

We were among the pioneers of the concept of NDR's through work with energy companies and government in the UK. We managed the design and set up the UK's Common Data Access (CDA) initiative and have been involved since inception in its continual evolution. Our work as leaders in this field has taken us to Norway, Colombia, Venezuela, Algeria, Peru, Russia, and Romania. In parallel with this NDR work, RPS Energy continues to advise companies in data management strategies. We are therefore able to integrate a given country strategy into a company's internal data management strategy. This has worked very effectively in Norway.

## Recent Project Examples

Specifically, RPS Energy is experienced in working with a number of government bodies around the world in developing strategies for NDR implementation, and has undertaken a number of projects in this area. These include:

- Original design and implementation of the UK Common Data Access (CDA) systems. CDA provides data storage and access systems to a consortium of exploration and production companies in the UK Continental shelf.
- Enhancement of the system to provide UKDEAL – the web based information system available on the internet which shows data availability to interested parties.

- Development of the commercial and process models for the UK National Hydrocarbon Data Archive (NHDA) which is designed to provide long term storage of data which is of no current interest to the E&P industry.
- Development of the Banco de Información Petrolé (BIP) for Ecopetrol in Colombia. The system was designed to hold all of Ecopetrol's information which it shared with the operating companies in Colombia, plus all the data from within Ecopetrol.
- Assisting Perupetro with the definition and tendering for a commercial solution for their petroleum data system.
- Carrying out a feasibility study on behalf of the West Australian Government and industry for development of a Petroleum Data Centre supporting both government and industry requirements. Further work was carried out to update the proposed roadmap as a result of ongoing differences between Government and Industry on the way forward.
- Working with the Malay Thai Joint Authority (MTJA) to help it manage its interactions with the Joint Development Area (JDA) license holders more effectively. The work includes streamlining decision-making processes, developing data analysis capabilities to allow MTJA to

better assess operational activities, and investigating a shared system for managing common data and information. A common document management system and a data analysis technology have been implemented.

In addition to our work with national authorities we have extensive experience in developing systems and processes for managing data and information in oil companies. Our clients in this area include:

- BP
- BG
- OMV Group, including Petrom
- Shell
- Anadarko
- Hess
- UK DTI Oil and Gas division (now part of DECC)
- Maersk Oil
- GDF Suez



## Our Approach

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RPS Energy have a structured approach to undertaking projects of this nature based on a “define, develop, deliver” methodology.

### Define

We are the E&P industry’s leading independent data management consultancy, and have the resource capacity to support large and complex programmes. RPS Energy has no connections with data management products or contracting services, and therefore provide a service focused entirely on adding value to the business. We have an unrivalled reputation for taking on complex problems and breaking them down into manageable elements to form an integrated programme, using a wide range of specialist expertise in the Technical Information Management arena.

- Understand the stakeholder drivers (NOC/oil companies/ministry etc)
- Set up an effective governance structure
- Understand data volumes, owners and locations
- Build the business case and assist in promoting the concept
- Outline statement of requirements
- Assist secure funding

### Develop

The core capability of an NDR is organizing and exploiting large volumes of data covering a comprehensive

geographical area to serve a community of users and prospective investors, allowing improved promotion of acreage and improved management of existing acreage.

An NDR would therefore be of national strategic importance for the prosperity of the country’s petroleum industry.

An NDR would be able to store and provide access through a single portal, reducing the number of applications required to access the information and consolidating data sources into a single framework. The data types included in an NDR would include all exploration, drilling and production activity – both national and private enterprise. However, there is scope to include other nationally important data – for example planning and environmental information. Additionally the data stored can be structured or unstructured data, and include the majority of raw data formats.

- Write technology and service (either in one or two tenders) RFP
- Manage procurement
- Define the entitlements system
- Assist in setting up the data release policies
- Advise on optimal vendor/service combination
- Assist in contract negotiations with the chosen vendor

### Deliver

Through the implementation of the plans developed by RPS Energy, the challenges facing government departments are met, through delivery of the following:

- Implementation plan
- Map out processes
- Document policies and procedures
- Detailed data loading planning
- System roll out
- Testing
- Integration testing
- Training
- Manage Change





Define



Develop



Deliver



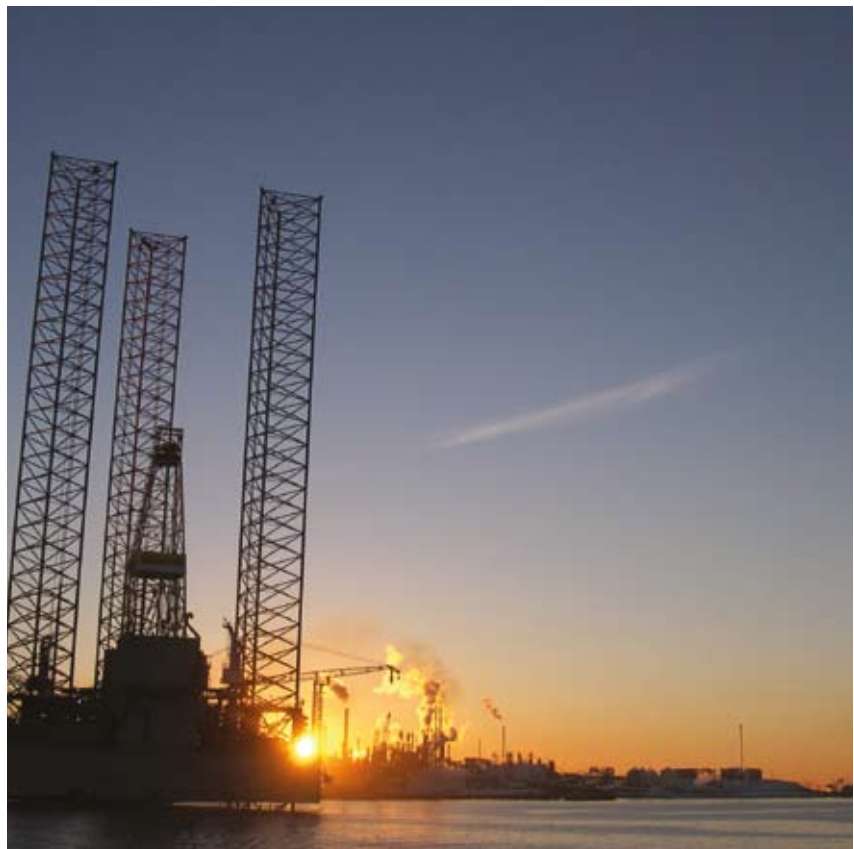
Ongoing Audit

### Ongoing Audit and support

RPS Energy has a continuing relationship with many of the governments we have worked with in the past, ensuring that the systems put in place continue to function fully. RPS Energy offers the following services:

- Validating the security of systems including the entitlements system
- Retendering of systems as and when required
- Validating the processes used to capture and manage data, improving them where appropriate

In addition to the services outlined above, RPS Energy is also involved in advising governments on inward investment into E&P. Data is a vital part of such a process and is therefore integral to a country's strategy in attracting investment from the oil industry.



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RPS Energy is a part of RPS Group Plc, a consultancy organisation employing over 5000 professionals with a unique blend of skills and experience. We operate worldwide from regional offices in North America, Europe, Australia and S E Asia.

We have a reputation for successfully meeting the challenges posed by large complex projects and for providing reliable and practical advice to clients in all sectors of the economy. RPS Energy conducts business in an open and fair manner, contributing to society in a positive way.



For more information about our  
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