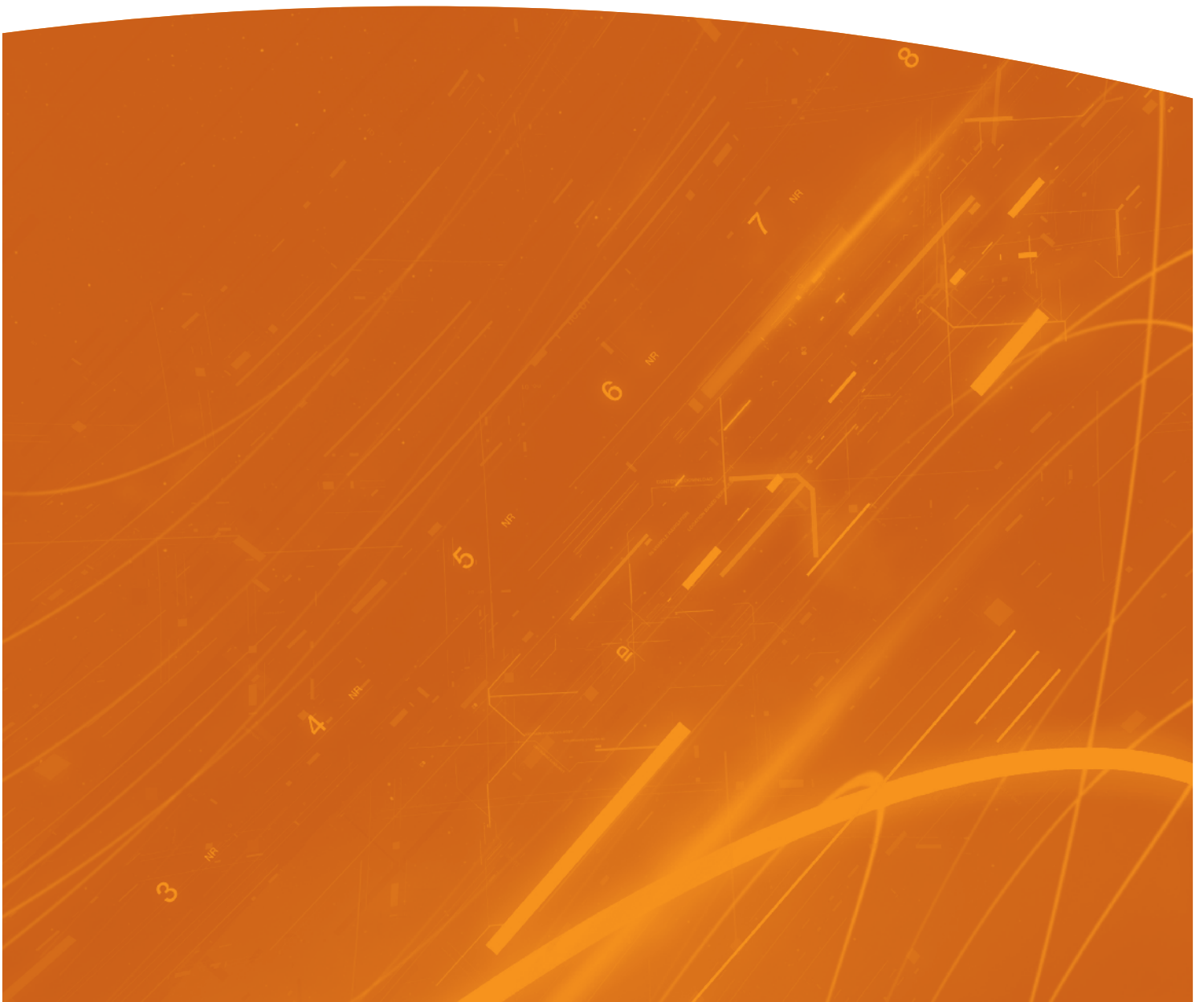# Oil & Gas Authority

Information Management Strategy

Contents

1. Foreword

The Oil and Gas Authority (OGA) was established to influence, promote and regulate the UK oil and gas industry, in conjunction with other regulatory authorities, and has a range of powers to deliver this remit.

The development of a series of strategies and associated delivery programmes represents a key first step in setting out how the OGA, government and industry should work together to Maximise Economic Recovery (MER) from the United Kingdom Continental Shelf (UKCS) – a core recommendation of the Wood Maximising Recovery review.

The MER UK Strategy underpins the OGA remit and became a legal obligation on licensees in March 2016. It describes how MER should operate in practice, setting out a legally binding obligation on licensees and associated bodies to take the steps necessary to secure the maximum value of economically recoverable hydrocarbons.

The MER UK Strategy also sets out a range of supporting obligations and safeguards, as well as the actions and behaviours required to achieve collaboration and cost reduction.

The purpose of these strategies and delivery programmes, developed in collaboration with industry and the MER UK Boards, is to promote a new way of working across the oil and gas lifecycle. The strategies set the key direction and the delivery programmes provide further direction and detail on the implementation of each strategy.

2. Executive summary

Information and data play a significant role in the UK oil and gas industry. Higher quality information and data will help to deliver more effective and efficient ways to maximise economic recovery.

The OGA aims to provide access to comprehensive, good quality data, which will be critical to the success of the MER UK Strategy.

The ambition of this strategy is to create an environment, over the next five years, in which information and data accelerate the effort to maximise industry value and recovery from the UKCS.

The OGA will set out:

• Its proposals to the Department for Business, Energy and Industrial Strategy (BEIS) on new regulations and guidance for the retention and publication of information and samples by the OGA and industry

• Its expectations of industry and the actions required under Asset Stewardship Expectations

• How the data capability of the OGA and industry will be increased

• How the OGA will increase its ability to collect, store, analyse, report on and publish data within the OGA and to industry and other stakeholders

This Strategy provides the framework for a new approach, which will enable the OGA and industry to improve information quality, coherence, consistency, transparency and help to unlock significant UKCS potential across the whole oil and gas lifecycle.

A new OGA Information Management Forum will create an industry-focused, collaborative environment, which will lead to enhanced information access, increased efficiency and reduced risk.

Under the Energy Act 2016, licensees and other relevant parties will be required to provide information and samples to the OGA for publication, subject to certain disclosure restrictions.

This Strategy identifies six key themes for the delivery of effective information management:

• Analysis, insight and understanding

• Data regulation

• Data quality management

• Data management authority and collaborative working

• Unified data store and access

• Enhanced operational data management

The Strategy represents a step change in the way that information and samples will be managed by the OGA and industry. The OGA will publish an Information Management Delivery Programme to help achieve these improvements, based on the six focus themes. Some initial actions for the future are set out in the following descriptions.

3. Introduction

Data are crucial across the lifecycle of the oil and gas industry. Managing how data are collected, interpreted and published, and determining compliance with regulatory obligations is vital.

The OGA has identified a route to improve performance across the lifecycle, as outlined in Figure 1 below.

Figure 1: Information and data – scope and overview
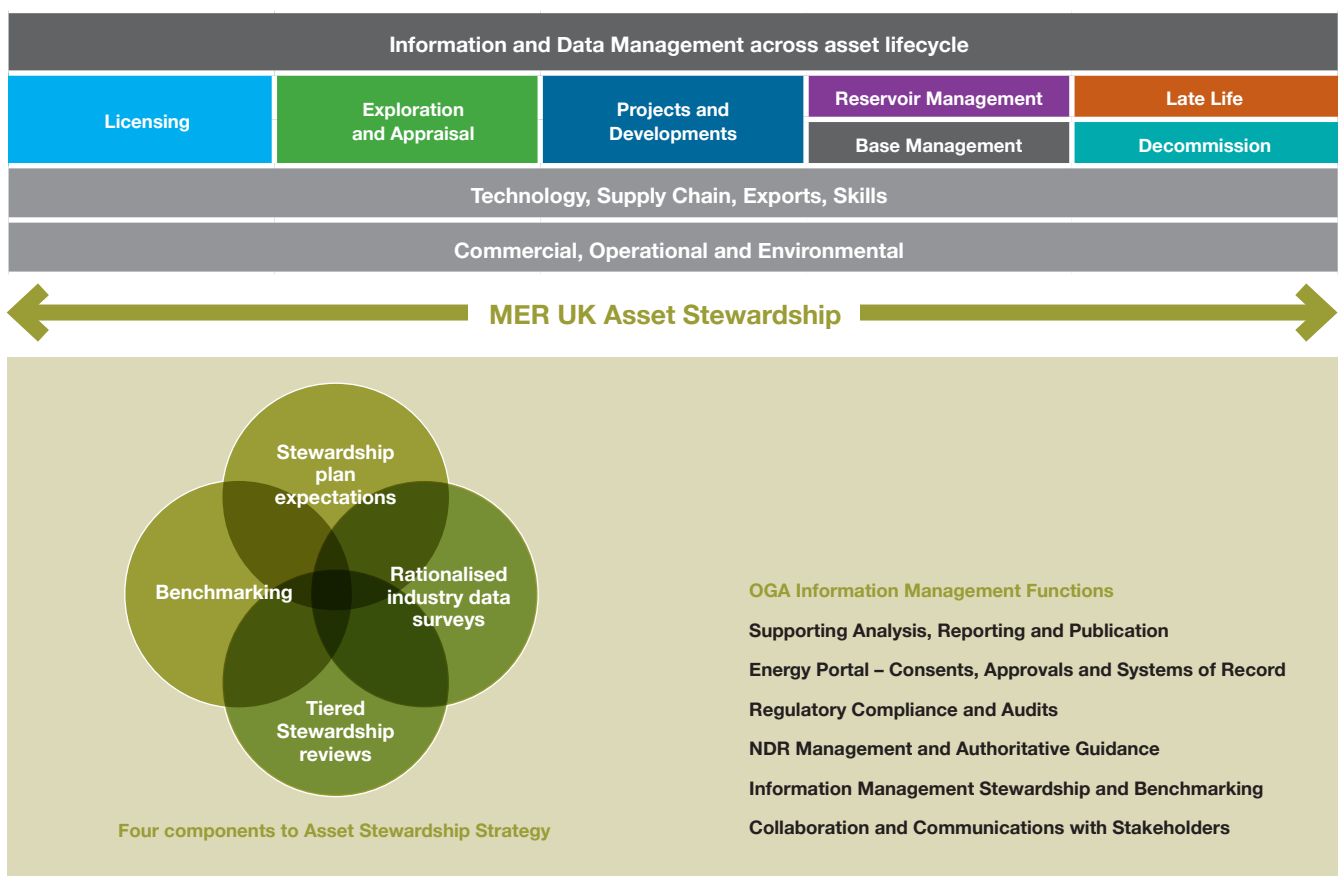
Executing the changes outlined within the six strategic themes will deliver many benefits, including:

- Increasing the required information management capability within the OGA to collect, store, integrate, analyse and publish data to support MER UK objectives

- Harmonising information and data access and quality for a wider variety of data, making data easier to find and use

- Enabling new analysis techniques through significantly more transparent and accessible data

- Providing the OGA with the required systems and processes to support effective compliance monitoring

- Applying the geological knowledge of known accumulations to increase the chance of finding more

- Reducing risk and uncertainty across the Exploration and Production (E&P) lifecycle by enabling the use and re-use of data published under an open government licence

- Increasing focus on acquiring new essential data or reprocessing existing data

- Increasing competition for the granting or renewal of licences that are informed by available geoscientific data and reaching a larger number of investors

4. Current status, opportunities and risks

There is significant scope to improve information management by adopting best practices from other oil and gas regulators and from similar capital intensive, operational industries. The Strategy seeks to maximise the value of existing and future information and data management processes through a number of improvement areas including:

Need for clear regulations and guidelines

Existing information management guidance in Petroleum Operations Notice 9 (PON 9 – Record and Sample Requirements for Seaward Surveys and Wells) does not adequately support the MER UK Strategy

The Energy Act 2016 and new regulations for data retention, with associated guidelines that are intended to replace PON 9, will be supported by an enhanced OGA data management capability and, if required, sanctions

The OGA will propose to BEIS that it introduces new regulations, with the OGA consulting on its recommendations, which are intended to clarify the obligations on licensees and other relevant parties to retain data and the OGA's associated disclosure restrictions. The aim of the proposals the OGA intends to set out in our consultation is to remove the requirement for licensees to retain some information and sample in perpetuity thus enabling considerable cost savings

Improved access to, and quality of, information and data

Current access to information and data is fragmented and difficult, with no unified approach to reporting or publishing

The requirement for a new national data repository has been identified so that data may be reported to the OGA, retained and published where possible under an open Government licence, backed up by effective regulation, guidance, limitations on disclosure and compliance monitoring

The OGA will ensure that current, reliable and accurate core reference data and management information, needed by the public sector and industry, are collected, processed and maintained to maximise economic benefit

5. Strategic themes, objectives and targets

The Energy Act 2016, and supporting regulations and guidance, will establish and clarify obligations on retention, reporting and publication of petroleum related information and data, delivering the following benefits:

• Preventing information and data loss and erosion across licence events

• Providing better information and data management

• Speeding up and improving access to more, better quality, centralised information and data

The OGA Corporate Plan 2016–2021 identifies 10 information and data related actions that directly benefit MER UK. For the purposes of this Strategy, these actions have been summarised into six priority themes. Figure 2 below shows how these six priorities fit into the Strategy and relate to the actions in the OGA Corporate Plan.

Figure 2: Information Management Strategy overview – priority themes

Why	**Vision**	**To create an environment where information and data can help maximise the value created by the industry and achieve maximum economic recovery from the UK**
	Purpose	**To maximise the economic recovery of oil and gas**

		Regulate	Influence	Promote
What	**Role**	• Regulate data retention, reporting and release • Manage consenting data • Monitor and track compliance	• Use data analysis results to steward desired behaviours • Encourage data sharing	• Use data to promote UKCS activity • Use data to promote UK supply chain

Priorities	Analysis insight and understanding	Data regulation	Enhanced operational data management	Data quality management	Unified data store and access	DM authority and collaborative working
This means	Technology, storage, data access, integration: Provides insight and understanding across the lifecycle and exploits data made available by OGA for all	Regulation, guidance, standards, ownership, scorecard: Provides consistent and managed data, makes data available more quickly	Build data capability, information technology, service catalogue: Provides improved capability	Wells, production, field and other data, data quality scorecard: Provides high quality core reference data for the OGA and industry	Single point of access, more data types, integrated search: Provides quick and easy access to data Publish data under open government licence	OGA Information Management Forum: Provides a collaborative approach to Information Management by working with the industry and other boards

Progression of these six themes to 2021, with many deliverables being completed in the next two years, will increase the capability of the OGA and industry in the following areas.

5.1 Data analysis, insight and understanding

Gaining a better understanding from information and data will enable the OGA to regulate, influence and promote in addition to predicting future risks and trends. The OGA's access to a wide range of information and data from across the UKCS allows it to gain clear insights to support MER UK, including aggregated data and benchmarking information. Utilising better data capture, storage, analysis and publication solutions will ensure that industry gains value from collaborative analysis. The OGA will ensure that this information and data will be made available to others under the terms of the Energy Act 2016, proposed regulations, guidance and obligations set out in the MER UK Strategy. Greater data transparency and information sharing will enhance collaboration; this in turn will create more value from data using data analysis and analytics.

Deliverables:

Issue enhanced UKCS information management stewardship expectations

Develop and launch enhanced UKCS stewardship survey

Publish the OGA geospatial strategy

Advanced analytical suite deployment

5.2 Data regulation

The OGA will monitor adherence to regulations and promote information management to achieve compliance and better working practices. The OGA will ensure that information and data are managed and published correctly and consistently, with appropriate industry consultation. The OGA will propose to BEIS it should introduce new regulations that together with supporting guidance will help industry meet the requirements of the Energy Act 2016. Consultation is intended to cover the retention of information and samples, including disclosure restrictions. The OGA will work with industry on practical ways to implement obligations within the Energy Act 2016 relating to information and samples. New standards will be developed with industry to help this effort, along with the required processes and scorecards to support compliance.

Deliverables:

Draft policy instructions for proposed new regulations and supporting guidance for consultation with industry

Deployment of the new regulations and guidelines and revised standards

Implementation of regulatory compliance systems

Compliance management, monitoring and feedback processes created, tested and implemented

Develop and publish the OGA Information Management Strategy and Delivery Programme, including industry communication

5.3 Enhanced operational data management

The OGA will develop data management capability by ensuring that:

- A skilled OGA data management team is in place

- The tools and infrastructure are available to store and analyse data

- High-quality data is available and shared appropriately

The OGA will maintain vital operational capabilities such as consenting, production reporting and compliance, which will be enhanced over time. For example, the OGA will move away from manual systems and use more efficient processes to speed up consenting. The OGA will utilise new digital solutions where appropriate to automate and streamline services.

Deliverables:

Full review of services and capabilities, including gap analysis, future state recommendations and roadmap for improvements

Implement service efficiency and improvement plan

5.4 Data quality management

Creating consistent, quality controlled and comprehensive core reference data will lead to cost savings and efficiencies. Actions include consolidating existing well databases to create a definitive register of all UKCS wells and evaluating other existing registers, including the requirement for better field, licensing, infrastructure and pipeline data. The OGA will adopt a fit-for-purpose approach with a commitment to continuous improvement to produce high-quality core reference data.

Deliverables:

Revised Well Operation Notice consents solution

New system of record for wells, including full access to the data for all parties

New system of record for pipelines, infrastructure and licences, including full access to the data for all parties

New data standards and system of record for monthly production data reporting including publication in new data centre area of OGA website

New data standards and system of record for field data reporting

5.5 Unified data store

Access to information and data needs to be simplified, making more data more transparent, more quickly to a wider audience, to inform decisions and facilitate investment. It is intended that a new Petroleum Data Portal will be progressively developed and established as the key tool through which licensees will seek consents, and report and access data. The OGA anticipates that certain activities currently undertaken by Common Data Access Limited (CDA) could be incorporated into a newly created OGA national data repository within the portal, with appropriate links to the British Geological Survey (BGS) and other data sources. This would provide a shared platform to allow licensees and others to collaborate on projects. Central to this would be a robust system to assure confidentiality, while enabling efficient, controlled and secure information sharing between the OGA, licence holders and other parties as appropriate. This would enable the use of information in different ways to change how the OGA make decisions, for example by using intelligent analytics.

Deliverables:

Create data centre area on new OGA website centralising access to data

Publish 'options for change' paper

Phased integration of BGS, UK Onshore Geophysical Library (UKOGL) and other data sources and incremental improvement projects

New system to enable retention of data and collaborative platform operational

5.6 Data management authority and collaborative working

The OGA, working with industry, will become an acknowledged authority in information management, providing pragmatic and timely guidance to industry. It will set a clear example on collaboration. The new OGA Information Management Forum will see the OGA work with industry and stakeholders to promote best practice, understanding, collaboration and compliance. The OGA Information Management Forum will consider the creation of additional task/finish work groups to progress key themes consistent with MER and creating additional value.

Deliverables:

Create the IM Forum and establish the terms of reference

Define three 'work task groups' in line with the above programme for 2016 and a further three for 2017

Organise meetings and an annual OGA Information Management Forum event as a continuous activity

6. Implementing the Strategy

6.1 Delivery

This Strategy will be delivered through collaboration with industry, effective project management and use of decision quality processes, in particular through the following:

The OGA will:

Simplify and automate information and data requests, consents and other items from industry

Lead consultation on information management matters and support industry implementation

Enhance compliance and records management and where required take enforcement action

Where possible, publish information and data directly under an open government licence

The OGA Information Management Forum will:

Act as the main conduit for working with industry

Consist of representatives from the OGA, licensees, service companies, consultancies and other relevant parties

Be a collaborative body that helps to drive best practice and utilise industry knowledge and experience to drive better information management and value

The industry will:

Effectively support the development and implementation of new information and data management solutions

Alongside the OGA, work to enhance information and data quality for key sets of information and data, as well as collaborate more effectively to share more data and information more quickly

Be required to provide timely, high-quality information and data inputs and updates to the OGA in accordance with regulations and information management expectations as set out in guidance and the OGA's new asset stewardship model

6.2 Monitoring progress

The OGA will publish an Information Management Delivery Programme, which will provide additional detail on the implementation of this Strategy.

The OGA will assess progress and success based on the delivery programme, as well as feedback from operators and others in industry to support improvements.

The OGA will maintain a scorecard based on the actions in the OGA Corporate Plan 2016–2021 and related objectives in this Strategy. The scorecard will be available to the OGA Information Management Forum members and progress will be discussed at the Forum meetings.

6.3 Stakeholder engagement

The OGA will seek to enhance collaboration and co-operation to deliver this Strategy. The OGA Information Management Forum will act as a central engagement point for a number of stakeholders. Key parties, and their relative degree of involvement with the OGA, are shown in Figure 3 below.

Figure 3: Stakeholder engagement

Degree of Involvement
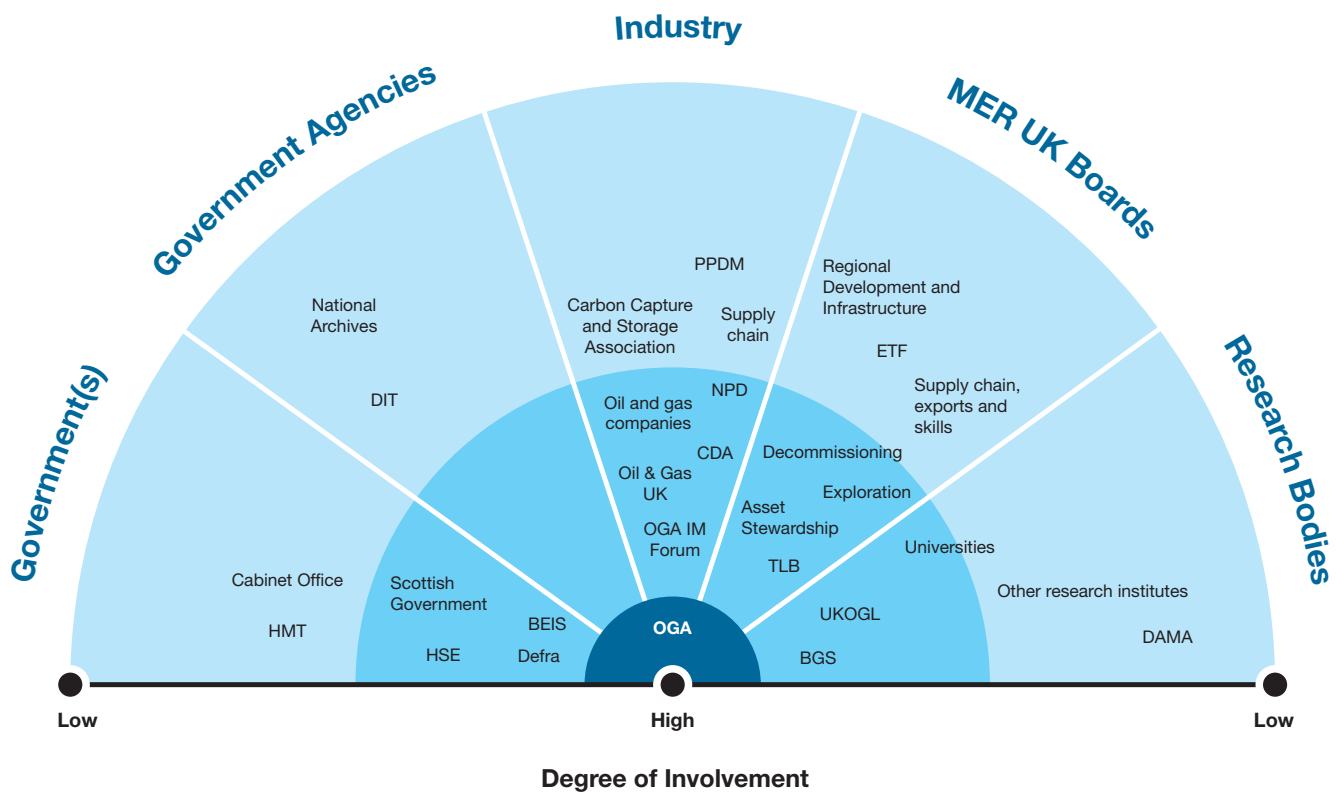
BEIS   : Department for Business, Energy and Industrial Strategy
BGS   : British Geological Survey
CDA   : Common Data Access
DAMA   : Data Management Association
Defra   : Department for the Environment, Food and Rural Affairs
DIT   : Department for International Trade
ETF   : Efficiency Task Force
HMT   : Her Majesty's Treasury
HSE   : Health and Safety Executive
IADC   : International Association of Drilling Contractors
NPD   : Norwegian Petroleum Directorate
PPDM   : Professional Petroleum Data Management
TLB   : Technology Leadership Board
UKOGL   : UK Offshore Geophysical Library

6.4 Timing

The delivery programme, which will accompany this Strategy, will describe how the implementation of initial actions will be completed over the next two to three years.

7. Acknowledgements

The OGA Information Management Strategy has been compiled with the input and advice of a number of people and organisations. The OGA would like to acknowledge the following specific contributors:

The OGA Information Management Forum

- Amec Foster Wheeler

- BP

- Centrica

- CDA

- DataCo

- Flare Solutions

- Lloyd's Register

- Schlumberger

- Shell

- Total

The MER UK Boards

- Asset Stewardship; Regional Development and Infrastructure; Exploration; Decommissioning; and Supply Chain, Exports and Skills.

Oil & Gas Authority

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