

Retention of Information and Samples Guidance

January 2023

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1. Scope and purpose of this document

The Oil and Gas Authority ("OGA") is now operating as the North Sea Transition Authority ("NSTA") and will be referred to as the NSTA in this document. The OGA remains the legal name of the company, and all licences and other legal documentation will continue to refer to the OGA.

This document provides updated guidance on the North Sea Transition Authority (Offshore Petroleum) (Retention of Information and Samples) Regulations 2018 (the "Regulations") made by the Secretary of State for Business, Energy and Industrial Strategy (the Secretary of State) under Section 28(1) of the Energy Act 2016¹ ("the Act").

The Regulations² were laid before Parliament on 24 April 2018 and came into force on 14 May 2018. This guidance is intended to aid understanding and interpretation of the Regulations, and to provide technical detail on the categories of information and samples required to be retained under the Regulations. Accordingly, the focus of this document is what information and samples must be retained, by whom and for how long.

Other provisions of the Act, such as the reporting of information and samples to the NSTA pursuant to a reporting notice issued under section 34 of the Act, and their subsequent disclosure by the NSTA, are covered by separate guidance³.

- http://www.legislation.gov.uk/ukpga/2016/20/contents/enacted
- ² http://www.legislation.gov.uk/uksi/2018/514/contents/made
- ³ https://www.nstauthority.co.uk/regulatory-framework/guidance/

2. Introduction and context

The Act includes powers relating to retention of petroleum-related information and samples by relevant persons (as defined in section 9A(1) (b) of the Petroleum Act 1998), reporting them to the NSTA and their subsequent disclosure by the NSTA. Section 28 of the Act gave the Secretary of State the power to make regulations in relation to retention of such information and samples.

The policies on which the Regulations are based were consulted upon by the NSTA in July and August 2017. The NSTA's consultation response was published around the time that the Regulations were laid and is available on the NSTA website⁴.

The Regulations set out **who** must retain information and samples, **what** information and samples must be retained, and **when** the requirement to retain those information and samples ends.

The retention obligations are intended to support the NSTA Strategy by:

- ensuring relevant information and samples from the UKCS are not lost or destroyed. The Regulations impose an obligation to retain such information and samples
- setting out identifiable retention obligations

 the Regulations detail what information and samples are required to be retained and by whom

 minimising industry burden – the requirement to retain relevant information and samples is not intended to place undue burden on relevant persons. The Regulations set out the period for which the obligation to retain applies.

What are Information and Samples?

In this document, the terms 'information' and 'samples' mean 'petroleum-related information' and 'petroleum-related samples' respectively, both of which are defined in section 27(1) of the Act.

The Regulations require the content of information to be retained, not every individual format in which that information is held, unless explicitly required by the Regulations. For example, where information which falls into one of the categories described below is contained in a report, it is the information which must be retained, not a specific draft of a report containing that information. Draft or duplicate reports are not required to be preserved, provided the information is retained (either in the latest version of the report or otherwise).

Who must retain Information and Samples?

The Regulations require "specified relevant persons" to retain specified petroleum-related information. "Relevant persons" are defined in the Act as being those persons listed in section 9A(1)(b) of the Petroleum Act 1998⁵.

⁴ https://www.nstauthority.co.uk/news-publications/consultations/2018/oga-response-to-consultation-on-proposed-regulationsfor-the-retention-and-disclosure-of-information-and-samples/

The Regulations specify that certain relevant persons that create or acquire particular categories of information or samples (or for whom the information or samples were created on behalf of) must retain those information or samples.

In the case of information and samples created or acquired under offshore petroleum licences, the requirement to retain information and samples applies jointly and severally to all licensees in a licensee group. However, it is for the licensee group to decide how to meet its retention obligations under the Regulations.

Creation and acquisition of Information and Samples

The Regulations impose an obligation on certain relevant persons to retain specified categories of information and samples which are either held by such persons at the time of the Regulations coming into force, or are subsequently created or acquired by or on behalf of such persons.

The Regulations do not require relevant persons to acquire or create information; only to retain information and samples they have created or acquired in the course of carrying out activities which are relevant to the fulfilment of the principal objective set out in section 9A (1) of the Petroleum Act 1998 or, where the relevant person is an offshore petroleum licensee, information or samples they have created or acquired in the course of carrying out activities under their licence. The NSTA expects operators, licensees, upstream petroleum infrastructure owners and owners of relevant offshore installations to acquire all the information and samples to meet all of their regulatory obligations, including, but not limited to, those necessary to carry out safe and efficient operations and to properly evaluate prospects and subsurface strata.

The NSTA therefore does not specify a minimum information and samples acquisition programme for activities carried out under a licence (although the licence may include a work programme that includes a requirement to obtain specified information) but it reserves the right to enforce changes or enhancements to planned activities through consenting or approval processes.

As mentioned in the consultation, the NSTA does not consider it either practical or desirable to set out every single information and sample type in the regulations themselves. The lists of types set out in the following sections are for indicative purposes only and any queries that relevant persons may have on particular types of information and samples should be discussed with the NSTA at the earliest opportunity.

Regulatory compliance

Requirements imposed by the Regulations may be sanctionable in accordance with Chapter 5 of the Act. Information on the NSTA's sanction procedure is available on the NSTA website⁶.

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3. Period for retention

Relief through reporting

The Regulations state that, in most cases, where information or samples have been provided to the NSTA in accordance with a notice issued by the NSTA under section 34 of the Energy Act 2016, the obligation to retain that information will end. A section 34 reporting notice will specify the form and manner in which the information, or portion of a sample, must be provided and the time at which, or period within which, it is to be reported.

Ceasing to be a relevant person

For relevant persons who are offshore petroleum licensees, the requirement under the Act to retain information and samples ceases following a termination of rights under the licence (whether by transfer, surrender, expiry or revocation and whether in relation to all or only part of the licence). However, in accordance with sections 30 to 33 of the Act, before any of these licence events take place an information and samples plan must be prepared and agreed with the NSTA, and subsequently complied with. Such plans will provide for the effective transfer, reporting, retention, storage or disposal of information and samples, as appropriate, at the time when a licensee ceases to be a relevant person. Guidance on information and samples plans has been published by the NSTA⁷.

For relevant persons who are not licensees, the Regulations apply while they are relevant persons. When such persons cease to be a relevant person (i.e. by relinquishing ownership of upstream petroleum infrastructure or other relevant offshore installation), the obligation to retain information relating to the upstream petroleum infrastructure or other relevant offshore installation is not applicable. The NSTA intends to use its powers under section 34 of the Act to ensure that relevant information is reported prior to relinquishing ownership of infrastructure or installations.

Disposal notices

Under regulation 11 licensees are able to notify the NSTA in accordance with their licence of their intention to dispose of certain samples, as detailed in the table in Section 6 below. Disposal notices should be sent to the NSTA and should include information on:

- The NSTA wellbore identifier (including any aliases or synonyms) in relation to which the sample was acquired
- The type of sample
- The relevant depth (or interval) at which the sample was acquired
- Any other information relevant to the sample that the NSTA might need when determining if it should be reported to the NSTA or disposed of (i.e. formation)
- Notices should be sent to
 <u>ISC@nstauthority.co.uk</u>

4. Form and manner

Whilst the Regulations do not set out any requirements for the form and manner in which information and samples are to be retained, the NSTA has set out in its Reporting and Disclosure Guidance specific requirements on the form and manner in which information and samples are to be reported. Specific requirements for the reporting of information to the NDR are also available⁸. **Relevant persons should be aware of these requirements (and any changes in them) when considering the retention and/or storage of information and samples.**

5. Well information

Regulation 4 requires relevant persons who hold an offshore licence to retain:

- engineering information related to the well or wellbore; and
- the information and analysis of the strata that the well or wellbore encounters (or is expected to encounter).

This includes information on equipment, material and components used (and how they are used) during the drilling, testing, completion for production, production, suspension, abandonment of the well or wellbore, i.e. the entire wellbore lifecycle. It also includes information about the position and path of the wellbore and its dimensions (such as hole and casing sizes, casing shoe depths, total depths).

In the case of strata, this includes all information created or acquired in the various disciplines used to evaluate the geology of the strata, fluids encountered and other properties of the strata. It is the final versions of such information that are required to be retained; in the planning phase, this will be the final geological and drilling programmes and in other phases of the well lifecycle it will be the finalised information relating to the wellbore as it was drilled, and will include any other future operations undertaken. It is anticipated that much of this information will be in the form of reports created or compiled during or after drilling operations, and may contain information relating to engineering, operations and the geology of the strata. All reports produced for a licensee by a well operator and contractors engaged on any aspect of a well and its entire lifecycle must be retained, in addition to any summaries of those reports such as those included in the operator's End of Well Report.

The following table sets out a detailed list of the information that is routinely created or acquired by or on behalf of an offshore licensee for a well and is therefore what the NSTA requires to be retained.

A "✓" in the table indicates a document, report or information type normally created or acquired in relation to the specified activity and must be retained.

Well data retention	Releva	Relevant well lifecycle activity					
Document/information common name	Pre-drill, drill +/-complete	Complete	Workover	Intervention	Sidetrack	Abandon	Description and comments
Planning and pre-drilling information (fi	inal versi	ion)					
Authority for expenditure, partner consents, etc.	~						Documentation to be retained. A summary in the Operator's End of
Geological/well proposals	~				~		Providing basic details of well location, seismic structure, basic well evaluation plan. May otherwise be included in geological and/or drill
Geological Programme	~				~		Describing the full structural geological setting, cross sections, strat – (including coring, logging (wireline/LWD/MWD), mud logging etc.), other information from geological models, etc. Basic details of contr must also be retained. Alternatively, this may be included in Drilling R
Drilling/Operations Programme	~	~	~	~	~	~	Describing the planned design of the well/wellbore such as drill bit of points, deviation, plug depths etc. May be combined with the Geological statements and the statement of
Site survey	~						Report on rig site conditions, shallow gas, other hazards, bathymeti from 2D shallow seismic surveys must be retained as specified in th
Rig positioning report (for mobile unit)	~			~		~	Documents the physical location of the rig.

f Well Report would be adequate.

Il evaluation, mud programme and well illing programme.

tigraphic column, well evaluation programme , pore pressure and temperature profiles and tractors, the well operator, and equity partners Programme.

diameters, casing types, shoe depths, kick-off logical Programme, above.

try for the proposed well. Information arising he geophysics section.

Well data retention	Relevant well lifecycle activity				,		
Document/information common name	Pre-drill, drill +/-complete	Complete	Workover	Intervention	Sidetrack	Abandon	Description and comments
Reports and operational information			_				
Daily (Operations) Reports	~	~	~	~	~	~	May be retained as separate reports, or as included in contractor D retained in addition to any summary included in the End of Well Rep
Well Examiner Reports	~	~	~	~	~	~	Audit report to verify that drilling and other well operations have bee safety criteria.
Definitive Deviation Survey	~				~		The final, definitive deviation survey as approved by the well operate the finalised deviation survey data used as a positional reference for referencing, and associated reports (including the deviation survey of
Casing/Cementing End of Well Report	~				~	~	Details of casing and cementing operations during the drilling opera addition to any summary in the Operator's End of Well Report.
Mud Contractor End of Well Report	~	~			~	~	Full reports must be retained in addition to any summary in the Ope
LWD/MWD End of Well Report	~				~		Full reports must be retained in addition to any summary in the Ope
Mud Logging End of Well Report	~				~		Report typically includes expected prognosis, drilling dynamics data includes associated logs (formation evaluation, ditch gas, temperate
Core Operations Report	~				~		Report from the coring contractor. Alternatively, may be included in Conventional or rotary cut core only.
Biostratigraphy, Palynology, and Palaeontology Reports	~				~		Typically provided by the contractor. Includes reports on palaeontol interpretations and conclusions. Will include zones, species listings wellsite services, where available.
Geochemistry Report	~				~		Typically provided by the contractor. Includes details of methodolog
Conventional Core Analysis Report and core photos	~				~		Typically provided by the contractor. Details of conventional core and descriptions, porosity, permeability, saturations, matrix densities, and driller's depths.

Daily Operations Reports. Full reports must be port.

en carried out in accordance with all plans and

or on behalf of the other licensees, including or all the other data that requires positional end of well report).

ations phase. Full reports must be retained in

erator's End of Well Report.

erator's End of Well Report.

a, lithology and provisional formation tops, and ture, pressure evaluation, etc.).

the Operator's End of Well Report.

logical and palynological analysis activities, and range charts, and includes report from

gy, results, and interpretations.

nalysis activity and results. Includes lithological nd core photos, typically referenced using

Well data retention	Relevant well lifecycle activity						
Document/information common name	Pre-drill, drill +/-complete	Complete	Workover	Intervention	Sidetrack	Abandon	Description and comments
Reports and operational information							
Special Core Analysis (SCAL) Report	~				~		Special core analysis performed on preserved samples, including red data, any other contractor derived data and results.
Sedimentology, petrography, and petrology	~				~		Reports detailing rock properties determined by logging and/or faci
Pressure, volume, temperature (PVT) and other fluid analysis	~				~		Details of measurement of phase behaviour and pressure/volume/te performed on samples from wireline well testing e.g. MDT, or drill st in Bottom Hole Pressure Surveys. Pressure data during production including reference depth information where available (TVD, MD, etc Characterisation of all fluids (water and hydrocarbons) within the hydro aquifer leg. Chromatographic data if recorded.
Contractor Well Testing Reports	~				~		Reports arising from drill stem tests. Gauge Reports (flowing tubing wellhead pressure and temperature, temperature or equivalent). Data from distributed temperature syste
Other bespoke contractor reports (Engineering, Geological, Geophysical, Petrophysical)	~	~	~	~	~	~	Other specialist reports provided by various contractors, e.g. Rock studies) chemostratigraphy, goniometry on cores, etc.

elative permeability data, capillary pressure test

ies descriptions of core.

emperature of reservoir fluids, as typically tem testing. e.g. MDT, RFT, Flowing and Shutand injection operations if recorded, and c.). Frac pressure data (via Leak Off tests). drocarbon leg and if recorded, within the

, shut-in tubing wellhead pressure and ems.

Properties (strength, compressibility, stress

Well data retention	Relevant well lifecycle activity						
Document/information common name	Pre-drill, drill +/-complete	Complete	Workover	Intervention	Sidetrack	Abandon	Description and comments
Logs, wireline testing and borehole sei	smic info	ormatior	ו				
Open hole wireline	~				~		Images and digital data arising from all logs run (includes gamma ra recorded using wireline, slickline, TLC pipe conveyed or coiled tubi
Core data curves	~				~		Including core gamma ray. Typically referenced to driller's depths, a the composite log.
Cased hole and tubing wireline	~		~	~	~	~	Images and digital data arising from all logs run (includes cement b logs).
Well test/formation test logs				~			Logs arising from formation testing tools (e.g. PLT, RFT, TDT, MDT
Composite well logs	~				~		Image log with full well header information, showing all primary well chronostratigraphy, lithostratigraphy, lithologies, selected log curves intervals (depth shifted), sidewall cores, formation tester results, ba depths, casing shoe depth, deviation data, measured 2 way times
Joined well logs	~				~		Joined set of digital log curves spliced together over full depth range purposes it will be the most accurate and complete record of the n as sonic, density, neutron and resistivity. Information on the process also be retained.
Computer processed interpretations (CPI)/petrophysical data log	~				~		Spliced, environmentally corrected log curves for use in petrophysic curves not normally included in a standard composite log. Associa
Borehole seismic data	~				~		Includes reports and logs obtained as part of VSP profile, offset VS two- way time (TWT) logs including calibrated sonic and density log seismograms. Data acquired by distributed acoustic sensing techniques for vertic Where used for 4D surveillance, baseline and final DAS datasets or required to be retained
LWD/MWD log data	~				~		Data and measurements collected while drilling.
Borehole imaging data	~				~		Includes dipmeter logs, borehole televiewer images, etc.
Wellsite lithology log	~				~		As provided by the wellsite geologist.
Wellsite core logs	~				~		Core descriptions as provided by the wellsite geologist.

ay, sonic, density and neutron logs). All logs ing tool conveyance methods.

and used to adjust cores to wireline depths on

bond logs and perforation logs, and slickline

etc.). May include details of samples collected.

Ilbore measurements, including: formation tops, es, DST intervals (with summary results), cored ackground gas, hydrocarbon shows, casing/liner to formation tops.

ge of wellbore. Typically used for correlation main wireline and/or MWD measurements such ssing of well logs, including a full audit trail, must

ical interpretation. Will normally be specialist ated audit trails should also be retained.

SP, velocity survey etc. All sonic/velocity and gs and any derived calculations. Synthetic

cal seismic profiling purposes only.

nly should be retained. Interim datasets are not

Well data retention	Relevant well lifecycle activity						
Document/information common name	Pre-drill, drill +/-complete	Complete	Workover	Intervention	Sidetrack	Abandon	Description and comments
Operator End of Well Reports							
Operator's Drilling End of Well Report	~	~	~	~	~	~	Also known as the drilling report, End of Well Report or End of Job summaries of all contractor activities, and is generated at the end of may exist for a single well/wellbore. Typically includes: LWD/MWD/r etc. plus final well schematic, lessons learned, cementing, mud log certificate, and barrier pressure test/leak off test summary. May cor also include all information required in a well abandonment report, or report.
Operators' Geological End of Well Reports	~				~		Includes final formation tops, stratigraphy, logging summary, coring where relevant. Samples collected, and fluid descriptions. Perforate pressures and gradients from formation pressure logs. May contain For some wells there may be a Well Summary Report containing ar operations and results. This is not a substitute for detailed geologic
Petrophysical End of Well Report	~				~		Petrophysical interpretation with audit trail if not included as part of
Perforation and Reperforation Reports and Logs	~	~	~	~	~		Report on perforating and perforated or reperforated intervals.
Well Abandonment Programme						~	Reports detailing plans for well abandonment/decommissioning op
Well Abandonment HSE Notification						~	Notification of well abandonment/decommissioning operations to H
Daily Well Abandonment Operations Reports						~	Well abandonment/decommissioning daily operations reports.
Well Abandonment/Decommissioning End of Job Reports						~	Reports detailing well abandonment/decommissioning operations a details of pressure tests on all barriers put in place as part of the we stratigraphy for all flowing formations encountered.
Well Abandonment/Decommissioning Cementing Reports						~	Reports detailing cementing operations as part of well abandonme evaluation, pressure tests and weight tests on casing cement and i

Report or drilling well history. Includes of each well lifecycle activity. Multiple reports /mud/mud logging/casing/cementing/surveys/ gging summary, QC reports, well examiner ntain a summary of daily drilling reports. Will essentially, the end of job/operational phase

summary, core depth shifts (driller to logger) ed intervals. Studies conducted. Formation n petrophysical interpretation with audit trail. in executive summary of all aspects of well cal and operational reporting.

the Geological End of Well Report.

perations (before the operations take place).

HSE.

after the operations have taken place. Includes vell abandonment process and details of

ent/decommissioning. Includes cement isolation plugs.

Well data retention	Releva	nt well	lifecycle	activity			
Document/information common name	Pre-drill, drill +/-complete	Complete	Workover	Intervention	Sidetrack	Abandon	Description and comments
Operator End of Well Reports							
Abandonment/decommissioning logs						~	Well logs generated in well abandonment/decommissioning operatic casing imaging tools (e.g. pulsed eddy current).
Well schematic	•	~	•	~	~	V	The final (or most current) well schematic for the well as included in in the End of Well Report, as submitted to WONS. Includes details t against MD and TVDSS where available. Final abandonment (AB3) s to the mudline.
Seabed clearance certificate						~	A seabed clearance certificate may be applicable to more than one report or abandonment report.

ions including cement evaluation tools and

n the drilling programme (as-is and planned) and for all plugs, barriers, casing strings and shoes schematic showing casing cut depths relative

e well. Normally included in the end of well

6. Samples

Regulation 10 requires an offshore production licensee to retain any petroleum related sample of strata or petroleum acquired during drilling.

The NSTA requires the following types of sample to be retained:

- core samples
- core plugs
- drill cuttings
- sidewall cores
- oil and gas fluid samples
- micro-palaeontological microscope slides and preparations
- thin sections prepared from micropalaeontological samples
- polished sections prepared from micropalaeontological samples
- grain mounts taken from micropalaeontological samples
- formation water samples

The Regulations set out retention obligations for samples of the strata and samples of petroleum acquired during the drilling of a well, which includes any coring or well testing taking place during drilling, subject to the limits below:

- a minimum of 1 litre of fluid samples are required to be retained
- a minimum of 100g per sample (where sufficient could be collected) of drill cuttings are required to be retained (in addition to any reported to the NSTA)

The following table sets out a detailed list of the types of samples that are routinely acquired by, or on behalf of, production licensees from drilling, coring and testing activities and therefore is required to be retained in accordance with the Regulations.

The period for which a licensee is required to retain samples is also indicated.

The NSTA Reporting and Disclosure Guidance gives details on the packaging requirements for reporting samples to the British Geological Survey (BGS). The provision of legacy samples (i.e. > 5 years old) to BGS will be subject to fees for any reboxing required.

		Samples					
Туре	Description	Comments	Retention and notice period				
Conventional cores	Slabbed core	Non-reported portion to be retained by licensee. This will differ depending on type of well and any specific use of individual core intervals.	5 years minimum from date sample acquired. Required notice to the NSTA: minim 6 months before intended disposal				
	Resinated core	Thin resinated slab to facilitate description.					
	Core plugs						
	Plug trims	Trimmed sections used for biostratigraphy etc.					
	SCAL/preserved samples (full core width)	SCALS – waxed, flasked in brine or Oil Based Mud (OBM) etc.					
Drill cuttings	Washed and dried	Non-reported portion to be retained from all intervals sampled.	5 years minimum from date sample acquired.				
		Minimum 100g to be retained (where sufficient could be collected) from each sample (in addition to that reported to the NSTA).	Required notice to the NSTA: minim 6 months before intended disposal accordance with the relevant licence				
	Unwashed samples	Bagged samples. One set retained in addition to the biostratigraphy set.	-				
	Geochemical samples	Tinned unwashed cuttings, with bactericide added, and stored inverted.					

	Reporting notes
um n	Routinely reported as follows: exploration or appraisal wells: full longitudinal section (1/4 of diameter) development wells: full longitudinal section (1/2 of diameter).
	Not routinely reported but may be required to be reported or retained on licence determination as set out in an information and samples plan (ISP).
um n e.	Routinely reported as follows: no more than100g of washed and dried samples.
	Not routinely reported but may be required to be reported or retained on licence determination as set out in an information and samples plan (ISP).

		Samples				
Туре	Description	Comments	Retention and notice period			
Sidewall cores	Sidewall cores (percussion)	Cores taken from side of borehole normally by (explosive) wireline tool.	5 years minimum from date sample acquired.			
	Sidewall cores (rotary)	Cores taken from side of borehole normally by rotary drilled, wireline tool (can be used for poroperm analysis).	Required notice to the NSTA: minimu 6 months before intended disposal ir accordance with the relevant licence			
Thin sections and grain mounts	Micropalaeontology and palynological slides and preparations	All those prepared.	5 years minimum from date sample acquired.			
	Thin sections	ctions Petrographic thin sections.				
	Polished sections	Petrographic polished sections.	accordance with the relevant licenc			
	Grain mounts	Resin mounted grains for used for further analysis.				
Fluid samples (DST/MDT etc.)	Oil samples	Non-pressurised. No more than 1 litre.	No minimum retention period howev			
	Formation water samples	No more than 1 litre.	disposal.			
	Gas samples		In the case of gas samples notice m be given 5 days before disposal.			

	Reporting notes
um n 9.	Not routinely reported following acquisition but may be required to be reported or retained on licence determination as set out in an ISP.
um n è.	Not routinely reported following acquisition but may be required to be reported or retained on licence determination as set out in an ISP.
/er vre	Not routinely reported following acquisition but may be required to be reported or retained on licence determination as set out in an ISP.
iust	Not routinely reported following acquisition.

7. Geophysical survey information

Regulation 3 sets out the requirements for the retention of information relating to geological surveys, i.e. geophysical surveys. All geophysical data, whether acquired with passive sensors or with active physical methods using an artificial source and sensor or receiver is in scope of this regulation.

The NSTA requires the following information to be retained:

- a) Seismic data, both newly acquired or reprocessed, using both streamer (towed source and receiver array) or ocean bottom (where the receiver is placed on the sea floor) techniques, collected as part of a site survey, for exploration or development, or for any other purpose, as follows:
 - 2D
 - 3D
 - 4D
 - Ocean Bottom Cable, and
 - Ocean Bottom Node/Sensor

- b) Other data that records the gravitational, magnetic and electrical properties of the Earth's subsurface (often referred to as potential field data). This includes:
 - gravity data
 - magnetic data
 - induced polarisation data
 - gravity gradiometry data
 - electromagnetic data
 - bathymetry data
- c) Site survey data should be retained as follows:
 - all multi-channel high resolution seismic: until reported
 - single channel seismic (i.e. chirper, pinger, boomer energy source): Minimum 10 years or until reported
 - magnetometer: minimum 10 years or until reported
 - sidescan sonar: minimum 10 years or until reported
 - single/multi beam echo sounder: 10 years or until reported

Note that all site surveys reports (whether for a well, installation or any other kind of site investigation conducted by relevant persons) should be retained until reported. Regulation 3 refers to the retention of 'relevant data', which is data acquired or created in the course of a geological survey. This includes information relating to the position of energy sources, and sensors during acquisition, data derived from processing of relevant data (where it is used to create an end result) and any reports relating to acquisition and processing. This means that the raw data, navigation data, processed data and reprocessed data (and any associated reports of the data), where available, which arise from remote sensing techniques, including geophysical surveys should be retained, including the following:

- the raw data acquired using the methods described above, including both the results obtained at the sensors (which may also include any group formed or final field produced data) and the associated navigational information describing the position of the sources and sensors at the times the measurements are taken;
- reports associated with the acquisition and processing (or reprocessing) of the raw data, as specified in the following tables
- datasets generated during processing (or reprocessing) of the raw data that are subsequently output as final products

- the version(s) of any datasets derived during processing of the raw data that are subsequently used in the creation of the final processed stack and migration data (i.e. not including any test or interim datasets that are not eventually used in the creation of the final processed data)
- final processed stack and migration data

Detailed retention requirements

The following tables set out a detailed list of the information that is routinely created or acquired by or on behalf of an offshore licensee for a geophysical survey and therefore the NSTA requires to be retained:

Table 1: Field data from seismic surveys

Туре	Remarks
Recorded trace data	
Raw navigation data	
Source-receiver navigation data	
Group formed or final field produced	Where partial processing has occurred during acquisition. Including de-ghosted data.

Table 2: Pre-stack data from seismic surveys

Туре	Remarks
Pre-stack time migrated data	Raw and final PSTM gathers.
Pre-stack depth migrated data	Raw and final PSDM gathers.
Nav-seis merge data	Source/receiver navigation data assigned to CMP positions.
Stacking, migration, anisotropy and water column velocities as used in depth migration processing	

Table 3: Post-stack data from seismic surveys

Туре	Remarks
Final migrated stack	The final migrated stack after full pre-stack processing.
Final migrated stack after full pre- stack and post stack processing	Includes angle and offset stacks.
All other post-stack depth migrated volumes	Includes post stack time migrated volumes if created.
Post-stack time migrated volumes	If created as part of a PSDM project.
Final processed navigation data	Navigation and bathymetry data.

Table 4: Reports

Туре	Remarks
Acquisition, including QC reports	Reports detailing the acquisition and quality checking of seismic surveys, including weekly reports and the final deliverables or outputs from surveys. These include shot point base maps and maps showing the full fold of coverage.
Field tape listings	
Observers logs	
Processing reports	Information on processing system and sequence, final products, input data etc.
Navigation reports	
Navigation QC reports	
Source signature	

Table 5: Other Geophysical Data

Туре	Remarks
Gravity and magnetic	All raw and processed and gridded data and associated reports.
Electromagnetic	Field data (both raw and calibrated), time series data, magnitude and phase data, traces (transient CSEM) and impedance tensor (MT) and associated reports.

8. Production information

Production data from licensees and other relevant persons is reported to the NSTA on a monthly basis by means of the Petroleum Production Reporting System (PPRS).

The information reported through PPRS is aggregated for the whole field and for the month of production in question. It includes volumetric information (i.e. the amount of petroleum, gas or other fluids produced or injected) and some high-level information on the composition of petroleum or gas (such as density or calorific value in the case of gas).

This information is derived from more detailed information gathered by the licensee from individual wells (either individually metered or allocated) and sometimes individual reservoirs. It is also gathered at more frequent intervals than the monthly information reported through PPRS.

Regulation 4 sets out requirements for the retention of this more detailed and higher frequency production information than is currently reported to the NSTA on a monthly basis by means of the PPRS.

Where acquired, offshore licensees must retain information on:

- quantities of petroleum or any other fluid produced from or injected into a reservoir
- the composition or characteristics of petroleum or any other fluid produced from or injected into a reservoir
- quantities of gas which is produced from a reservoir which is flared, vented or used in or during production from that reservoir
- quantities of petroleum any other fluid produced or used in or during production from a reservoir which is transported from the petroleum field
- the composition or characteristics of petroleum or any other fluid produced or used in or during production from a reservoir which is transported from the petroleum field
- the composition or characteristics of gas produced from a reservoir which is flared or vented or used in or during production from that reservoir

This information must be retained by reference to the corresponding wellbore (and where such information is acquired, by individual reservoir) in relation to each period of 24 hours or more.

Information collected on a more frequent basis (e.g. hourly or real time) is not required to be retained.

The term "any other fluids" includes, for example, water, CO2 and N2.

The NSTA therefore requires the following information, where created or acquired by a licensee, to be retained for each wellbore, on a daily basis:

- produced volumes of hydrocarbons and any other fluids
- injected volumes of hydrocarbons and any other fluids
- temperature and pressure measurements from down hole gauges (including the depth of those gauges), and at the well head
- the number of hours in the measurement period that the wellbore was open to flow
- compositions of hydrocarbons (and any other fluids) that have been produced or injected or used in production

9. Other licence information

Regulation 3(b) requires the retention of other information which can provide an insight into a licensed area, and which are not encompassed by the categories of data set out in Sections 5-8 above.

Such information includes the latest or final copy of any report from a study into the sub-surface in areas such as the geology of the strata, the structure of the reservoir, the chemistry of the petroleum, how the petroleum may behave in the reservoir, or how it may be trapped and migrated from source and includes studies that draw on varied information sources and are then synthesised into one study or report.

The NSTA considers this to be any report not related to an individual well or survey, containing geological (including biostratigraphical), petrophysical, geophysical, geochemical and geotechnical information about the formations and fluids in the licence area including any analysis and/or interpretation of such information. Regulation 4 (2) requires the retention of computerised models which either:

- provide a spatial representation of the distribution of sediment and rock in the subsurface, or
- simulate the flow of fluids in a reservoir

There may be many versions and updates of these models throughout the life of a licence (or fields within that licence), however the

Regulations require only the most recent version to be retained. The NSTA anticipates that the regular updates to such computerised model over the course of a licence will culminate in a final model which captures all the production history/geology of the entire licence area in scope. Documentation showing how these models have been created, including all input data and software versions used must also be retained. This means that the following information must be retained:

Information type	Remarks
Computerised reservoir simulation models	The most recent or final reservoir simulation models together with supporting documentation on how these models have been created and input data used. These may be both static or dynamic models.
Computerised geological interpretations	The latest or final geological models together with supporting documentation on how these models have been created and input data used.
Subsurface and reservoir studies	Final copies of studies of reservoir information of the sub-surface including geology of the strata; structure of the reservoir; the chemistry of the petroleum; how the petroleum may behave in the reservoir, or how it may be trapped and migrated from source.
Geological studies	Final copies of reports containing geological information – including biostratigraphical, petrophysical, geophysical, geochemical and geotechnical information about the formations and fluids in the licence area including any analysis and/ or interpretation of such information.
Multi well reports and field studies	Final copies of multi well studies or field studies containing interpretations of the subsurface.

10. Upstream petroleum infrastructure, relevant offshore installations information

Regulation 6 requires the retention of construction, maintenance, inspection, operational and decommissioning information created or acquired by the owners of upstream petroleum infrastructure or a relevant offshore installation.

The NSTA considers this to be:

- information about the materials, equipment and components that are used in the infrastructure or installation, and how they are used during the construction, maintenance, and decommissioning of the infrastructure or installation
- information about the position and dimensions of the infrastructure or installation

References to "infrastructure" and "installation" mean "upstream petroleum infrastructure" and "relevant offshore installations" respectively as defined to in sections 9H and 9HA of the Petroleum Act 1998. The NSTA considers it would not be practical or desirable to specify every type of information that may be created or acquired by such persons.

However, the NSTA expects owners of upstream petroleum infrastructure or a relevant offshore installation to retain all of the information required to in order to comply with its other legal obligations with respect to such infrastructure and installations.

The NSTA does not require documents and drawings related to upstream petroleum infrastructure that has been completely removed and recovered to shore as part of decommissioning for permanent destruction to be retained. This means the following information must be retained for upstream petroleum infrastructure and relevant offshore installations:

Information type	Remarks
Basis of design	The latest version of the basis of design for infrastructure and installations detailing the description and justification the design.
Design and operating philosophies	The latest version of reports detailing design and operating philosophies of infrastructure and installations including major process and utility systems.
Inspection reports	The latest reports detailing the condition of installations and infrastructure.
General arrangement drawings	The latest version of plot plans, elevations' equipment layouts and general arrangement drawings of upstream installations and infrastructure.
Facilities positional data	Accurate facilities positional data describing the coordinates of infrastructure and installations.
Availability and reliability reports	Reports detailing the availability and reliability of infrastructure and installations.
Specifications	The latest version of specifications of major equipment and structures.
Marine documentation	Naval architecture reports, structural design reports, moorings reports, turret design reports and metocean studies for infrastructure and installations.

11. Pipeline information

Regulation 5 requires that the following must be retained in relation to pipelines:

- any information relating to the occurrence, materials or components used in construction, operation, inspection, maintenance or decommissioning of the pipeline
- any spatial information or drawings relating to the pipeline as constructed and installed (including relating to any subsea junctions and riser connections)

Therefore, the NSTA requires the following pipeline information to be retained:

Information type	Remarks
Basis of design	The latest basis of design for pipelines, including operating parameters, routing, risers, tie-ins, material selection, insulation, mechanical equipment, cathodic protection, construction, installation and commissioning.
Pipeline inspection reports and surveys	The most recent pipeline inspection reports – including intelligent "pigging" reports indicating the condition of the pipeline and mechanical equipment. The most recent periodic surveys of pipelines such as surveys conducted by divers and remotely operated vehicles.
Pipeline as-built reports	Reports detailing the manufacture and installation of pipelines reflecting the as-installed condition of the pipeline, mechanical equipment, and associated structures such as risers, mid-water arches, junctions and buoyancy aids.
Pipeline drawings	The latest drawings showing pipeline general arrangements and routing – including subsea structures, crossings, junctions, protection, deposits, cables and umbilicals.
Pipeline positional data	Accurate pipeline positional data.

12. Transition arrangements

The categories of information and samples that are required to be retained by offshore licensees under the Regulations are also within scope of the offshore production licence model clauses.

The Regulations require relevant persons to retain petroleum-related information until such information is reported to the NSTA in accordance with a notice issued under s.34 of the Act. The licence model clauses do not specify when such obligation to retain information ends. However, if information that is required to be retained under the terms of a licence is reported in accordance with a notice issued under s.34 of the Act, the NSTA will consider the licensee to be relieved of its obligation to retain such information under the relevant licence. The Regulations do not apply to determined licences or previously licensed areas which have since determined. However the NSTA has clarified that relief from the obligation to retain such information will be given if reported in accordance with the NSTA's requirements as set out in PON 9.

The NSTA has published revised PON 9⁹ guidance that is aligned more closely with the provisions of the Regulations.

When do the Regulations apply?

The Regulations apply to petroleum-related information and petroleum-related samples held by, or on behalf of, a relevant person at the time the Regulations come into force or created or acquired after that date.

13. Definition of terms

Term/abbreviation	Description/definition
2D	Two dimensional – meaning seismic data or a group of seismic lines acquired individually such that there typically are significant distance between adjacent lines.
3D	Three dimensional – meaning seismic data with closely spaced receiver and shot lines so that there usually are no significant gaps in the data coverage.
4D	Four dimensional – meaning 3D seismic data acquired at different times over the same area to assess changes in a producing hydrocarbon reservoir with time.
BGS	British Geological Survey
CSEM	Controlled source electro-magnetic
СМР	Common mid-point
D well	Development well
DST	Drill stem test
FDP	Field development plan
HSE	The Health and Safety Executive
Petroleum-related information	As defined in Section 27 (1) of the Energy Act 2016
Petroleum-related samples	As defined in Section 27 (1) of the Energy Act 2016
Information and Samples Coordinator	As defined in Section 35 of the Energy Act 2016
Information and Samples Plan or ISP	As defined in Section 30 of the Energy Act 2016
LWD	Logging while drilling
MDT	Modular formation dynamics testing
MT (remote sensing)	Magnetotellurics (impedance tensor)
MWD	Measurement whilst drilling

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Term/abbreviation	Description/definition
NSTA	North Sea Transition Authority
ОВМ	Oil based mud
Offshore licensee	A holder of an offshore license
Pipeline	As defined in Section 45 of the Petroleum Act 1998
PLT	Production log test
PPRS	Petroleum production reporting system
PSDM	Post-stack depth migration
PSTM	Pre-stack time migration
PVT	Pressure, volume, temperature
QC	Quality control
Relevant person	A person listed under 9A(1) (b) of the Petroleum Act 1998
RFT	Repeat formation testing
SCAL	Special core analysis laboratory
SCALS	Special core analysis laboratory sample
ТDТ	Thermal decay time
TLC	Trough logging conditions
тwт	Two-way time
UKCS	United Kingdom Continental Shelf
VSP	Vertical seismic profile
E/A well	Exploration or appraisal well
WONS	Well operations and notifications system

14. Revisions summary

Page	Section	Change
3	1	Addition of link to reporting guidance in footer 3.
6	2	Editing to remove references to Wood Review no longer considered relevant.
8	4	Reference to NDR form and manner document (plus link in footer).
		Clarification that whilst retention regulations do not set out any specific form and manner requirements, relevant persons should be aware that form and manner requirements do exist in the Reporting and Disclosure Guidance and associated NDR form and manner guidance document.
9	5	Various revisions to well information table to align with Reporting and Disclosure guidance, in particular: Casing/Cementing End of Well Report; Core Operations Report; Pressure, Volume, Temperature (PVT) and other Fluid analysis; Borehole Seismic Data; Operators' Geological End of Well Reports ; Well Abandonment Programme; Well Abandonment HSE Notification.
23	6	Clarification that packaging requirements for sending samples to BGS is set out in PON9 and the Reporting and Disclosure Guidance. Also notes that the provision of legacy samples to BGS may be subject to reboxing fees.
25	6	Clarification in samples table that 100g of washed and dried drill cuttings should be retained if sufficient collected.
27	6	Clarification in samples table that although for oil and water samples 6 months notice should be given of disposal, for gas samples it is only 5 days .
28	7	Clarifications and additions on the retention requirements for various site survey data types.
30, 31	7	Clarification in table 2 to include anisotropy and water column velocities; addition of source signature in table 4, addition of "associated reports" to both rows of table 5.
40	13	Various additions and deletions to definitions.
Various	Various	Replacement of references to OGA with NSTA.
Various	Various	Update of contact email address to ISC@nstauthority.co.uk

15. Contact

Any questions/comments related to this guidance, should be directed to isc@nstauthority.co.uk

Any questions/comments related to information and samples plans should also be directed to <u>isc@nstauthority.co.uk</u>



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