North Sea Transition Authority

UKCS Well Applications and Consents Guidance

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Contents

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Please email: correspondence@nstauthority.co.uk with the version you require.

Enquiries to:
North Sea Transition Authority
4th Floor Broadway Buildings
50 Broadway
London
England
SW1H 0DB

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Status and purpose of this guidance

1. This guidance consolidates and replaces previously available guidance on UKCS well consents, and includes guidance on applications for well activity in respect of carbon storage licences. It details when various applications, consents and notifications are required and provides information on the matters the North Sea Transition Authority (NSTA) normally takes into account when considering such applications.
2. The guidance is not a substitute for any regulation or law, has no binding legal effect and does not constitute legal advice.
3. It is intended that the guidance will be kept under review and be revised as appropriate in light of experience, developing law and practice and any change to the NSTA's powers and responsibilities.

Roles and responsibilities

The NSTA

4. The North Sea Transition Authority is the business name of the Oil and Gas Authority (OGA). The OGA remains the legal name of the company and references to the NSTA should be interpreted as the OGA.

5. Licences granted by the NSTA[1] confer exclusive rights to 'search and bore for and get petroleum' (petroleum production licences) and to explore and appraise potential storage sites for the subsequent storage of carbon dioxide (carbon dioxide appraisal and storage licences).

6. The terms and conditions of a licence are set out in the licence itself or incorporated by reference to secondary legislation (including model clauses)[2]. It is the responsibility of every licensee to be aware of all applicable law and relevant regulatory controls, including the model clauses, relating to their licence activities and operations, and to comply with them.

7. Consent from the NSTA is required to carry out certain well activities on the UKCS[3] and areas considered onshore (for the purposes of petroleum licensing) in England. Applications for consents are made on the NSTA's Energy Portal[4] using the NSTA's Well Operations Notification System (WONS). Consented activities must not commence before the date the relevant consent is issued and must be completed by or before the date the consent expires.

8. In addition to a consent from the NSTA, the licensees must ensure that all offshore petroleum operations are conducted by a well operator and/or an installation operator. A well operator and/or an installation operator must be nominated by the licensees and authorised to act in such capacity in accordance with the Offshore Petroleum Licensing (Offshore Safety Directive) Regulations 2015[5] (OSD Regulations). The NSTA is the licensing authority under the regulations. The Well and Installation Operator Service (WIOS) provides a record of all current well operator and/or installation operator appointments.

[1] Licences generally granted under the Petroleum Act 1998, Petroleum (Production) Act 1934 and the Energy Act 2008.

[2] For example, The Petroleum Licensing (Production) (Seaward Areas) Regulations 2008

[3] Similar consents are required for onshore wells in England, the Consolidated Onshore Guidance should be referred to when making consent applications

[4] NSTA's Energy Portal

[5] https://www.legislation.gov.uk/uksi/2015/385/made

9. The well applications and subsequent notifications allow the NSTA to consider and continuously monitor whether the licence conditions and the OGA Strategy (the Strategy) obligations are being met (see the matters considered by the NSTA section).

10. Whilst the NSTA is the licensing authority under the OSD Regulations, it has no direct regulatory responsibility for well safety or environmental legislation, which are the remits of the Health and Safety Executive (HSE), the Department for Energy Security and Net Zero (DESNZ) Offshore Petroleum Regulator for Environment and Decommissioning unit (OPRED) and the Offshore Major Accident Regulator (OMAR).

Licensee and the exploration or field operator

11. Licences can be held by a single company or by several companies working together, however, the licence is granted to a single licensee however many companies it may comprise. All companies holding a licence have joint and several liability for the obligations and liabilities that arise under it and share the rights conferred by the licence. For ease, this guidance refers to the companies jointly holding the licence as 'licensees'.

12. Where there is more than one company holding a licence, the licence holders are required to nominate (or where the licensee is a single company, the NSTA may require the licensee to nominate):

(i) an exploration operator[6] (usually referred to as a licence, block or subarea operator) to carry out the various exploration operations under a production licence on behalf of the relevant licence group. For these purposes, ‘exploration’ means the drilling of exploration and/or appraisal wells. It does not include production of hydrocarbons or the drilling of development wells; or

(ii) a field operator[7] to manage the development operations in relation to a specific field, including the drilling of development wells.

13. In practice, the relevant exploration operator or field operator usually make applications for well consents on behalf of the licensees, but it is the licensees who are given the consent.

14. An exploration operator or a field operator is not necessarily also a well operator or an installation operator. The concept, responsibilities and obligations of a well operator or installation operator are set out in the OSD Regulations (see the well operator and installation operator and matters considered by the NSTA sections).

[6] North Sea Transition Authority: Exploration operatorship - Exploration - Exploration & production (nstauthority.co.uk)

[7] North Sea Transition Authority: Field operatorship - Production - Exploration & production (nstauthority.co.uk)

15. Many oil or gas fields lie beneath two or more licences and a single field operator is approved to organise and supervise operations in that field, including well operations. Where this is the case, the field operator will make applications for well consents for that field on behalf of all licensees whose licence the well passes through.

Well operator and installation operator

16. The concept, responsibilities and obligations of a well operator or installation operator are set out in the OSD Regulations. Only entities that have been appointed pursuant to these regulations are permitted to conduct offshore petroleum operations, including well operations.

17. The well operator is responsible for well operations and for any operation in relation to a well which may result in an accidental release of fluids from that well which could give rise to the risk of a major accident. Additional guidance on these roles is given on the OMAR website[8]. It is the licensees, not the well operator, who must have WONS consent for well activities under their licence and it is the exploration operator or field operator that usually applies for that consent on the licensees' behalf.

18. If the well operator is not an exploration operator or a field operator, then the licensees must ensure that the well operator is aware of all conditions relating to well consents.

19. Licensees can nominate well operator and/or installation operators via WIOS. The WIOS system of record provides details of well operator and/or installation operator appointments since the introduction of the OSD Regulations in 2015. A WONS consent will not be given unless the appropriate appointment has been confirmed in WIOS first. Please note that the appointment of a new well operator and/or installation operator can take up to three months to process. Please refer to the 'Well and Installation Operator Service (WIOS) External User Guidance' document for further information.

[8] OMAR - The Competent Authority - HSE

Summary of requirements

20. Licensees require a consent before:

- A well foundation or other equipment is installed in advance of drilling operations
- A well is spudded, sidetracked or drilling recommences
- Any part of a well comes within 125 metres of a licence boundary
- Completion work (including hydraulic fracturing) is carried out on a well[9]
- A well test, or extended well test, (in each case, including a well injection test) is commenced
- A well is suspended
- A well is abandoned
- Physical changes are made to a well (re-completion)

Licensees should contact the NSTA at an early stage if they intend to carry out any work on a well not covered by these descriptions.

21. If an application is approved and a consent is given, the relevant exploration operator or field operator will receive the consent (on behalf of the relevant group of licensees) electronically subject to the following conditions:

- Well activities should be carried out as described in the application and comply with any licence and specific conditions in the consent
- Specific conditions may include, among others, requirements relating to timing, activity and reporting
- Notification of the resulting well configuration, status etc. must be submitted after the consented activity has been completed[10]
- There is a general licence obligation to execute all operations in or in connection with the licensed area in a proper and workmanlike manner in accordance with methods and practice customarily used in good oilfield practice

[9] The licence conditions (model clauses) require a programme of completion works to be approved by NSTA. However, the NSTA will generally address this requirement by means of the consent process.

[10] https://www.nstauthority.co.uk/media/1100/operator_work_instructions_v3.pdf

22. Where licensees fail to obtain the necessary consent or fail to comply with the conditions of a consent, the NSTA has several regulatory powers available to it. For example, under the Energy Act 2016, a failure to comply with a term or a condition of a licence, or a failure to comply with a duty to act in accordance with the Strategy are both sanctionable. The NSTA has published information on its sanctions powers on its website[11].

23. Where licensees wish to deviate from the well activities as outlined in the current consent, before carrying out the works it should contact the NSTA at the earliest possible opportunity to understand whether a variation or new consent is required. A variation cannot be submitted for a consent that has expired. If operations are delayed to the extent that a consent expires a new application will always be required.

[11] https://www.nstauthority.co.uk/regulatory-framework/disputes-and-sanctions/

Matters considered by the NSTA

24. When considering whether to consent to a WONS application, the NSTA may consider, amongst other things, whether the proposal outlined in the application aligns with:

- The relevant licence obligations and conditions (which may be specific to a licence or more general, or relate to the avoidance of harmful methods of working)
- The development and production consent and associated field development plan (for development wells)
- The obligations set out in the Strategy[12] and in particular, the Central Obligation, which requires that the relevant persons, in the exercise of their relevant activities, must take the steps necessary to:
  a. secure that the maximum value of economically recoverable petroleum is recovered from the strata beneath relevant UK waters; and, in doing so,
  b. assist the Secretary of State in meeting the net zero target, including by reducing as far as reasonable in the circumstances greenhouse gas emissions from sources such as flaring and venting and power generation, and supporting carbon capture and storage projects
- The relevant Supporting Obligations set out in the Strategy, including in relation to cost efficiency, technology, OGA plans and decommissioning and required actions which apply to the Central Obligation and the Supporting Obligations, such as cost efficiency and timing
- The NSTA's stewardship expectations[13], as applicable, to which relevant persons should have due regard when considering how to facilitate delivery of the Strategy
- Any agreement with the NSTA on the stewardship of a licence or field
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

25. Where the licensees are aware that their application may not be aligned with any of the above, they should seek to discuss these issues with the relevant NSTA team at the earliest opportunity to explain the reasons and provide all relevant supporting information and/or evidence for any misalignment. The WONS application should not be used as the means for initiating such discussions as this may lead to a delay in the consenting process, a further information request (FIR) being issued or rejection of the application.

[12] https://www.nstauthority.co.uk/media/6980/annex-2-the-oga-strategy.pdf

[13] https://www.nstauthority.co.uk/regulatory-information/exploration-and-production/stewardship/expectations/;

26. Further information on the WONS process relating to specific types of applications and the relevant considerations which are likely to apply to each case is provided in the corresponding sections below.

Financial guidance

27. The financial capability of each of the licensees included on the application is an important consideration for the NSTA when making decisions for activities during the lifecycle of a licence, including many consents covered by this guidance. To help inform these decisions, the NSTA will normally undertake a financial assessment of the licensees as part of the WONS consenting process.

28. The NSTA has published a 'Financial Guidance' document[14] setting out when the NSTA will consider the financial capability of a licensee and the factors and financial information usually taken into consideration when doing so. These factors may vary according to the circumstances and will be assessed on a case-by-case basis.

29. The 'Financial Guidance' document also sets out the steps that licensees seeking a decision from the NSTA should take to facilitate those considerations and should be referred to when applying for consents for well activities.

30. Where there are multiple licensees, each licensee should provide the required financial information. Financial information may be uploaded to WONS or, where there are multiple licensees, provided by email to licensee.finance@nstauthority.co.uk.

31. When assessing financial capability the NSTA may also consider, where appropriate, whether a person who drilled, or commenced drilling, a well will be capable of plugging and abandoning the well for the purposes of, and whether to exercise its powers under, section 45A of the Petroleum Act 1998[15].

Requirements of other regulators

32. The HSE, OPRED, OMAR and other regulators have their own legislative requirements for well activities. This guidance document does not seek to list or explain these additional requirements and it is strongly recommended that the licensees inform themselves of all relevant additional requirements.

[14] https://www.nstauthority.co.uk/news-publications/publications/2018/financial-guidance/

[15] Petroleum Act 1998

Guidance on specific well activities

Introduction

33. As set out in the roles and responsibilities section, WONS is used for various applications and transactions related to well activities. Applications for consent to carry out well activities are usually made by the exploration operator or field operator on behalf of the relevant licensees through WONS which is accessed through the Energy Portal. Detailed information and working instructions for using WONS is available on the NSTA website.

34. A consent for a well operation, if granted, is issued for a specific period, and such well operation or activity must be completed before the consent expires. Well operations or activities must be carried out as described in the consent (and application, where referred to in the consent), within the period set out in consent and in accordance with any conditions included in the consent.

35. All planned contingent operations should be included in the application. Any technical variations that have not been foreseen at the time of application should be discussed with the NSTA as soon as the need for the variation becomes apparent, depending on the significance of the change, a new or revised application and consent may be required.

36. Only the licensees can be granted consent, so in cases where a non-licensee company is carrying out a well operation or activity as well operator (e.g. a well management company), the relevant operator must apply for consent on behalf of the licensees.

37. Applications should be submitted **at least 28 days** before the anticipated start of the well operation or activity. This is to allow time for the NSTA to properly review the application and, where appropriate, to raise, and consider responses to, any queries. In exceptional circumstances, where 28 days' notice has not been possible, the NSTA team will endeavour to fast track an application, but this should not be assumed. If any information is missing or is inaccurate, the applicant may be asked to submit a revised application or, in some cases, a new application. Where additional information beyond that supplied in the WONS application is needed, an FIR will be issued to the applicant and the 28 day period will be reset from the date on which the response to FIR is received. The NSTA will aim, wherever possible, to raise any FIR early in the process, however, this is not guaranteed and a timely response to an FIR is advised. To minimise the risk of delays, the licensees should ensure that the initial application is complete and accurate.

38. WONS allows certain applications for a well to be 'bundled' into a single application (Table 1). Applicants should ensure that they complete each element of a 'bundled' application in accordance with the guidance provided in applicable sections below.

39. Note that a consent to abandon a well cannot be 'bundled' into an initial drilling consent. Please see Table 1 and the abandonment section for guidance on how to apply.

Table 1 – Separate or 'bundled' applications

	Exploration and appraisal	Development	Inactive(1) exploration	Inactive(1) development
Drill or sidetrack within 125m of licence boundary	Request for consent required as part of application to drill or sidetrack (2)	Request for consent required as part of application to drill or sidetrack unless within a unitised field. (2)		
Structure installed by a separate operation prior to spudding (such as a suction-based well foundation)(3)	Separate application (only if installed in advance of drilling operations)	Separate application (only if installed in advance of drilling operations)		
Drill Spud (4) Mech s/t (4) Geol s/t Complete	Separately (if a separate completion application is not submitted until sidetrack initiated) or as part of a 'bundled' application	Separately or as part of a 'bundled' application		
Recomplete Short well test (5) Extended well test (5)	Separate	Separate		
Suspend, extension to suspend	Separate application required once spudded	Separate application required once spudded	New application required periodically	New application required periodically
Abandon	Separate	Separate	Separate	Separate
Record a well as abandoned(1)				

(1) See definitions in Appendix 1 below.

(2) WONS does not currently provide for such separate (125m) applications and consent must be applied for by including a request and description in the supporting comments section of the well drilling or sidetrack application. This should include the well trajectory and confirm that the licensees on each side of the boundary have no objections. For development wells in unitised fields only, where a well is to cross a licence boundary within the unitised area, no additional consent is required. Drilling into unlicensed acreage is not permitted.

(3) If a structure, such as a suction-based well foundation or conductor, is to be installed in a separate operation prior to drilling operations commencing, a separate consent is required. WONS does not currently offer this application and the licensees should e-mail the NSTA at wons@nstauthority.co.uk and complete the WONS provisional initial drilling application providing the expected installation date as supporting information (see the consent to drill section below). Consent, if given, will be for the installation of this structure and include a condition that such a temporary structure should be retrieved from the seabed in the event that the well is not spudded. This consent is in addition to the OPRED consent to locate.

(4) The initial drilling consent will normally provide for a spud, a single re-spud and a single mechanical sidetrack. Any further re-spuds or mechanical sidetracks should be raised quickly with the NSTA team and need separate applications.

40. Licensees should not assume that consent will be given and should therefore plan and time their application and activities accordingly. For example, an application to continue the suspension of a well should not be made so late that, if consent is not given, the licensees could not comply with their obligation to abandon the well.

41. The NSTA may, on a proportionate basis, apply different levels of scrutiny to different applications depending on the circumstances. For example, an application to drill the first exploration well on a licence may attract more scrutiny than the tenth development well on a field. Similarly, if the NSTA is satisfied with the past performance and financial capability of the licensees and their operator, it may apply a less detailed scrutiny in reviewing an application, than where it has previously expressed concerns, however, this should not be assumed.

42. Where the planned activity is a 'project' for the purposes of the Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) regulations 2020 (2020 EIA Regulations)[16] the NSTA cannot grant consent until the Secretary of State has agreed to the grant of consent. These activities include, amongst others, the drilling of a well and an extended well test. Applications for activities that are subject to the 2020 EIA Regulations should be submitted as early as the well planning process allows, and licensees are similarly recommended to contact OPRED at an early stage to ensure their requirements are met.

[16] The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020 (legislation.gov.uk)

43. Some well operations or activities, including those considered a 'project' under the 2020 EIA Regulations and some well intervention operations (such as re-completions), are also subject to the Offshore Petroleum Activities (Conservation of Habitats) Regulations 2001 (2001 Habitats Regulations). Where the 2001 Habitats Regulations apply, the NSTA cannot grant consent until the Secretary of State has given also agreed to the grant of consent under these regulations. Applications for activities that are subject to the 2001 Habitats Regulations should be submitted as early as the well planning process allows and licensees are similarly recommended to contact OPRED at an early stage to ensure their requirements are met.

Post-activity reporting

44. The NSTA must be notified via WONS when the consented drilling, and/or other well activities have taken place (in the case of drilling operations, this means once they have commenced or recommenced). Notification is also required when a well is expected to be shut-in for more than three months or reopened following shut-in (see the shut-in section below).

45. For this purpose within WONS, each consent includes a requirement to submit a notification in respect of each consented activity, which the licensees must complete and submit within the period specified in the consent.

46. For example, for a spud notification this must be done within three working days following commencement of drilling.

47. These notifications (together with information taken from WONS consent applications) allow the NSTA to populate its database with metadata for wellbores. The various metadata attributes, once fully populated, create a system of record for a wellbore that is essential to many of the NSTA's regulatory processes and is also used by licensees and, when disclosed to the wider industry, in many of their own systems. The notifications allow licensees to report actual information about a wellbore (for instance, the actual total depth of a well as opposed to the planned depth noted in an initial drilling application) as well as other information which the NSTA requires, along with the relevant supporting documents.

48. In addition to the notifications linked in WONS to a consented activity, the NSTA also requires the submission of a wellbore update notification (WUN) within 90 days of the regulatory completion date[17] of the wellbore. The WUN includes summary well information about the well results, the actual strata drilled through, any hydrocarbons encountered, and data and physical samples acquired during well operations.

[17] Defined on page 20 of North Sea Transition Authority: Reporting and Disclosure of Information - National Data Repository (NDR) - Data centre (nstauthority.co.uk)

49. The requirement to report wellbore summary information through the WONS system is underpinned by notices, usually on an annual basis, issued under section 34 of the Energy Act 2016 requiring licensees to provide such petroleum-related information. The Oil and Gas Authority (Offshore Petroleum) (Disclosure of Protected Material after Specified Period) Regulations 2018 allow the NSTA to disclose certain information (referred to in those regulations as 'summary information') about a wellbore as soon as it is reported to the NSTA. For full details of the reporting requirements for wellbores and how reported information is disclosed, see the NSTA's published 'Reporting and Disclosure of Information and Samples Guidance'[18].

Drill, mechanically sidetrack or recommence drilling an exploration, appraisal or development well

50. When considering whether to consent to an application to drill, mechanically sidetrack or recommence drilling a well, the NSTA will have regard to the matters set out in the matters considered by the NSTA section and is likely to consider, among other things, whether the proposed wellbore aligns with:

- The relevant licence obligations
- Any development and production consent and its associated field development plan (including the target, data gathering and well purpose)
- Any carbon storage permit and associated development plan
- The applicable obligations set out in the Strategy
- The NSTA's stewardship expectations, such as those relating to cost efficiency, technology deployment, net zero, impact on carbon storage and cost effective decommissioning
- Any applicable OGA Plan
- Any agreement on the stewardship of a licence or field
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different well activities and circumstances.

51. Where the licensees are aware that their application may not be aligned with any of the above, they should seek to discuss these issues with the relevant NSTA team at the earliest opportunity and explain the reasons for any misalignment. Please note that the WONS application should not be used as the means for initiating such discussions as this may lead to delay the consenting process, FIRs or the rejection of the application.

[18] The NSTA's policy on information acquisition in wells is set out in pon_9_ver9.pdf and oga-guidance-on-reporting-disclosure-18-february-2019.pdf (nstauthority.co.uk)

52. If any part of the well is planned to come within 125 metres of the licence boundary, the application must also seek consent under the Distance of Wells from Boundaries of Licenced Area licence model clause (see Table 1). Licensees should apply for this consent in the supporting comments of their application. If this application is not made, then the consent, if issued, will not address this model clause requirement.

53. It is the licensees' responsibility not to drill into unlicensed acreage.

54. Where sections on a number of wells are drilled sequentially (batch drilled), consent is required before spudding each well. If the final target is not known when the application is submitted, the application can be made using an intermediate casing point as an interim target, and application to vary the WONS consent can be made prior to drilling past that interim target. The NSTA will carry out a further review of such a variation application and may issue a new consent. Any activity which is inconsistent with the original consent must not be undertaken until the varied or new consent is received.

55. The requirements for well testing are set out in the short term and extended well testing section below. A consent to drill a well will normally also permit a single re-spud and a single mechanical sidetrack of the well (see Table 1). Licensees should therefore include these activities in their WONS application and also in their request to OPRED (see paragraph 42) to ensure they are considered under the 2020 EIA Regulations and/or 2001 Habitats Regulations. The need for further re-spuds or mechanical sidetracks should be raised promptly with the NSTA team and will require separate consent(s). Planned suspension of the wellbore should be discussed with the NSTA .

56. A consent to abandon cannot be 'bundled' with the initial drilling consent. A separate abandonment application should be made (see the abandonment section below).

Installation of a well foundation or other equipment in advance of drilling operations

57. If equipment is to be installed in an operation separate from, and prior to, any drilling operations – such as the installation of a suction-based well foundation – a separate consent is required for such preparatory work. Licensees should contact the NSTA at wons@nstauthority.co.uk to initiate an application (currently not available via WONS system)[19], complete a WONS provisional initial drilling application and provide the expected installation date as supporting information. Consent, if given, may include a condition that the equipment should be retrieved from the seabed in the event that the well is not spudded within a specified period. This consent is in addition to any OPRED agreement for such works, such as a 'consent to locate'.

Timing, data and reporting

58. Applications for consent should be submitted in WONS at least 28 days before the intended spud date. All data fields in the WONS application form must be completed for an application to be considered. Where additional information, such as reports, would be helpful to the NSTA's review, these must be attached to the application in WONS. Where an application does not align with all the relevant factors the NSTA considers appropriate to consider, such as the licence, the development and production consent, field development plan, stewardship expectations etc. then the relevant information, evidence and outcomes of any prior discussions with the NSTA must be attached as supporting documents.

59. Licensees must demonstrate appropriate level of funding for the proposed activity by uploading all relevant financial information and supporting documents, as set out in the NSTA's 'Financial Guidance', into WONS at the time of making the application. Where there are multiple licensees, financial information may alternatively be provided by email to licensee.finance@nstauthority.co.uk.

60. The licensees must have received the NSTA's consent before a well is spudded and the licensees should check their consent to make sure they understand which activities they have consent to undertake.

61. A spud notification must be submitted through WONS within three working days of the well having been spudded. This notification will need to include confirmation of the date of spudding and the location of the well. Once accepted, an official wellbore number will be allocated to the well. See PON 12[20] for information on well numbering.

[19] In due course this application will be fully integrated into WONS

[20] PON 12

62. If a well is mechanically sidetracked (whether under the initial drilling consent or under a separate mechanical sidetrack consent), a sidetrack notification should be submitted through WONS within three working days of the sidetrack. The sidetrack notification will need to include the date of initiating the sidetrack and the depth in the existing wellbore at which it commenced. Once accepted, an official wellbore number for the sidetrack will be allocated to the well. The original or parent wellbore should be adequately suspended[21] but for a mechanical sidetrack only, a separate suspension application is not required.

63. A WUN must be submitted within 90 days of the regulatory completion date[22] of the wellbore. The WUN includes summary information about the well results, the actual strata drilled through, any hydrocarbons encountered, and data and physical samples acquired during well operations.

64. The drilling of the well must be completed before the expiry date of the consent. If the licensees become aware that this may not be the case, they should contact wons@nstauthority.co.uk as soon as reasonably possible to discuss whether a variation to the original application or (depending on subsequent activity) a new application for consent is required.

Geologically sidetrack an existing well

65. The NSTA's consideration of an application to geologically sidetrack an existing well is very similar to that for the drilling of a well (see the consent to drill section above).

66. Where it is possible that a geological sidetrack will be needed, it is strongly recommended that a sidetrack application is made at the same time as the initial drilling application. This approach ensures a consent is in place in case the original target does not meet expectations, and a decision is made to drill to a new target. It is recognised that the target of a potential geological sidetrack may change and in such circumstances an amendment to the geological sidetrack application will need to be made as soon as this becomes apparent. If required, applications for several geological sidetracks may be submitted at the same time.

67. Where the licensees are aware that their application may not be aligned with any of the requirements in the paragraph above, they should seek to discuss these issues with the relevant NSTA team at the earliest opportunity to explain the reasons for any misalignment and provide the relevant supporting documents. Please note that the WONS application should not be the means for initiating such discussions as this may lead to delay, FIRs or rejection of the application.

[21] Note that wells that are 'plugged', 'AB1' or 'AB2' or 'inactive well shut-in' are classed as suspended wells not abandoned wells. See Definitions section below.

[22] Defined in oga-guidance-on-reporting-disclosure-18-february-2019.pdf (nstauthority.co.uk)

68. If any part of the well is planned to come within 125 metres of the licence boundary, the application must also seek consent under the Distance of Wells from Boundaries of Licenced Area licence model clause (see Table 1). Licensees should apply for this consent in the supporting comments of their application. If this application is not made, then the consent, if issued, will not address this model clause requirement.

69. It is the licensees' responsibility not to sidetrack into unlicensed acreage.

70. For a geological sidetrack an application for the suspension[23] of the original or parent wellbore must accompany the sidetrack application (see the suspension section below). The licensees should check their consent to make sure they understand which activities they have consent to undertake.

Timing, data and reporting

71. The licensees must have received consent before a wellbore is geologically sidetracked. It is strongly recommended that a contingent application for consent is submitted through WONS at the same time as application to drill, i.e. at least 28 days before the intended spud date.

72. A sidetrack notification, which includes confirmation of the date and depth of the sidetrack commencement, must be submitted through WONS within three working days of the sidetrack having been commenced. Once accepted, an official wellbore number will be allocated to the sidetrack (see PON 12 for information on well numbering).

73. A WUN must be submitted within 90 days of the regulatory completion date[24] of the wellbore. The WUN includes summary information about the well results, the actual strata drilled through, any hydrocarbons encountered, and data and physical samples acquired during well operations.

[23] Note that wells that are 'plugged', 'AB1' or 'AB2' or 'inactive well shut-in' are classed as suspended wells not abandoned wells. The parent wellbore must besuspended to an 'AB2' standard. See Definitions section below.

[24] Defined in oga-guidance-on-reporting-disclosure-18-february-2019.pdf (nstauthority.co.uk)

74. Licensees must demonstrate the appropriate level of funding for the proposed activity which can be done by uploading all relevant financial information and supporting evidence, as set out in the NSTA's 'Financial Guidance', into WONS at the time of the application.
If there are multiple licensees, financial information may alternatively be provided by email to licensee.finance@nstauthority.co.uk.

75. The drilling of the geological sidetrack must be completed before the expiry date of the consent. If this may not be the case, then the licensees should contact wons@nstauthority.co.uk to discuss whether an amendment to the original application or a new application and consent is required.

Complete a well

76. The licence clauses require a programme of completion work (e.g. all the operational steps needed to make a drilled wellbore ready for production) to be approved by the NSTA. The NSTA will generally address this requirement through the WONS consent process.

77. When considering whether to consent to an application to complete a well, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider, amongst other things, whether the proposed completion aligns with:

- The licence obligations
- Any development and production consent relating to the well (including the isolation of adjoining petroleum bearing strata), monitoring, the use of technology and decommissioning
- The Strategy
- The NSTA's stewardship expectations, such as those relating to cost efficiency, technology and OGA plans
- Any agreement on the stewardship of a licence or field
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

78. Where the licensees are aware that their application may not be aligned with any of the above, they should seek to discuss these issues with the relevant NSTA team at the earliest opportunity and explain the reasons for any misalignment. Please note that the WONS application should not be used as the means for initiating such discussions as this may lead to delay, FIRs or rejection of the application.

Timing, data and reporting

79. Applications for consent should be submitted through WONS at least 28 days before the intended start of the completion activities. This includes completion of mechanical and geological sidetracks. All data fields included in the WONS online application form must be completed for an application to be considered. If additional information would be helpful to the NSTA's review, this can be attached to the application in WONS.

80. Licensees must demonstrate that the appropriate level of funding is place for the proposed activity and this can be done by uploading all relevant financial information and supporting evidence, as set out in the NSTA's 'Financial Guidance', into WONS at the time of the application. Where there are multiple licensees, financial information may alternatively be provided by email to licensee.finance@nstauthority.co.uk.

81. A WUN must be submitted within 90 days of the regulatory completion date[25] of the wellbore.

82. Consent must be in place before operations commence and the completion work must be completed before the expiry date of the consent. A completion notification, which includes confirmation of the date and technical details of completion, must be submitted through WONS within three working days of the completion work being finished.

Re-complete a well

83. Re-completion activities (i.e. those undertaken after a well has first been put into use) may include:

- Any changes being made to the equipment (including tubulars or the introduction of gas lift valves) installed in the well
- The perforation of new zones or zone isolation
- Hydraulic fracturing/stimulation
- Change of use e.g. from producer to injector requiring well work.

Replacement of like for like equipment e.g. the same model of gas lift valves or reperforation of existing zones, is not considered to be a re-completion work/activity. For other minor related activities, the licensee should discuss with the NSTA whether a consent is necessary.

84. The NSTA's consideration, application process, timing, data and reporting for the re-completion of a well are the same as for the initial completion of a well (see the consent to complete section above).

[25] https://www.nstauthority.co.uk/media/5353/oga-guidance-on-reporting-disclosure-18-february-2019.pdf

85. To re-complete a suspended well, a re-entry notification, confirming the date of re-entry must first be submitted (consent to suspend will also include consent for the subsequent re-entry). A re-completion notification (confirming the date and technical details of the re-completion) should then be submitted.

Short term and extended well testing

Criteria for well testing

86. The NSTA has issued 'Extended Well Tests Guidance for Licensees' (EWT guidance)[26], which should be considered together with this guidance when preparing a WONS application for an extended well test (EWT).

87. Well tests include the clean-up of a well, whether or not the fluids will be flared or saved.

88. An application for a well test with a total flow duration of less than 96 hours or which produces a total of no more than 2,000 tonnes of oil/oil equivalent should accompany the initial drilling/sidetrack application or application to complete (as applicable) and, if granted, will usually be included in such consent.

89. Larger and/or longer well tests, including the clean-up of a well, will be classed as an EWT and will require a separate application and consent.

90. The NSTA will usually treat the testing of discrete well zones and sidetracks as separate well tests although, where the NSTA considers it appropriate to do so, it may require a licensee to apply for an EWT consent. Licensees contemplating a prolonged sequence of zonal testing should discuss their plans with the NSTA at as early a stage as possible.

91. The NSTA may consider long clean-up flows from development wells to temporary facilities to be an EWT even if there is no explicit data gathering objective. Where such flow is contemplated, the need for an EWT consent should be discussed with the NSTA at the earliest opportunity.

[26] https://www.nstauthority.co.uk/media/5476/oga_extended_well_test_guidance.pdf

NSTA consideration

92. When considering whether to consent to a well test application, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider, amongst other things, whether the test:

- Meets the Central Obligation set out in the Strategy which requires the relevant persons to maximise the economic recovery of the recoverable petroleum from the strata beneath the relevant UK waters, including whether the test design, rate, duration and the expected resulting improvement in technical understanding of the field is necessary and sufficient
- Meets the Central Obligation set out in the Strategy which requires the relevant persons to take the steps necessary to assist the Secretary of State in meeting the UK's net zero target[27]
- Conforms to the EWT guidance for licensees
- For oil volumes over 2,000 tonnes, has the potential for saving the produced oil, rather than flaring it
- Will be conducted cost efficiently
- Whether the licensees' objectives would be better achieved by a phased development
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

93. The scrutiny of a short-term test application is likely to be less than for an EWT, but this should not be presumed.

94. Consideration of these points may require detailed discussion with the NSTA to ascertain the rationale for an EWT and what it aims to achieve. To avoid delay in obtaining consent, the licensees should initiate discussions with the NSTA well before submitting their WONS application. Any application subsequently submitted should include all relevant information outlining these discussions, including outcome, and be evidenced by attaching all the relevant documents pertaining to such discussions.

95. An EWT consent is not an alternative to development and production consent. The issue of a consent for EWT production does not constitute approval of the proposed development, and a development and production consent will be required for a licence to enter its final (usually third) term.

96. The NSTA may also consent to phased developments as described in the NSTA's 'Requirements for the Planning of and Consent to UKCS Field Developments' guidance document[28]. While phased developments and EWTs may have some objectives in common, there are important differences and licensees should discuss their approach with the NSTA at an early stage in their project planning.

[27] Net Zero Stewardship Expectation 11 (nstauthority.co.uk)

[28] https://www.nstauthority.co.uk/media/6099/fdp_guidance_requirements-document-oct_update-2019v2.pdf

Other regulatory requirements for an EWT (this list is not exhaustive)

97. Licensees should note that if oil and/or gas are to be saved during the EWT, a field determination may be required for the field[29]. A pipeline works authorisation may also be required for the subsea infrastructure used to carry out the EWT where any resulting produced petroleum is to be saved.

98. An Environmental Impact Assessment (EIA) to assess the likely environmental impact of the proposed EWT may be required by OPRED. Licensees are advised to discuss with OPRED any such requirements and process for their proposals at an early stage. As noted in paragraph 42, where the planned activity is a 'project' for the purposes of the 2020 EIA Regulations, or where the 2001 Habitats Regulations apply, the NSTA cannot grant consent until the Secretary of State has agreed to the grant of consent.

Timing, data and reporting

99. Applications for consent should be submitted through WONS at least 28 days before the intended commencement date. To avoid any unnecessary delay or rejection of their application licensees should discuss the justification and objectives of an EWT with the NSTA well in advance of submitting their application for consent.

100. All data fields included in the WONS application form must be completed for an application to be considered. If additional information would be helpful to the NSTA's review, this can be attached to the application in WONS.

101. Licensees must demonstrate that an appropriate level of funding is in place for the proposed activity and this can be done by uploading all relevant financial information and supporting evidence, as set out in the NSTA's 'Financial Guidance', into WONS at the time of the application. Where there are multiple licensees, financial information may alternatively be provided by email to licensee.finance@nstauthority.co.uk.

102. The licensees must have received consent before an EWT commences. Once the licensees have completed their analysis of the EWT data (and within 90 days after the post-test shut-in date), they should submit to the NSTA an EWT notification report fully describing the test results (including but not limited to the total quantities of oil and gas produced, saved or flared and the durations of the flow and build-up periods) and the conclusions reached as a result of the EWT.

103. There may also be additional reporting requirements, such as weekly reports, and these will be detailed in the consent.

[29] https://www.nstauthority.co.uk/exploration-production/development/field-determinations/

104. The EWT must be completed before the expiry date of the consent. If there are likely to be delays, then the licensees should contact wons@nstauthority.co.uk to discuss whether an amendment to the original application or a new application for consent is required.

Suspend a well

105. A well should be abandoned (decommissioned) to an appropriate standard and in a timely and cost-effective manner once it has served its original purpose and if no alternative use has been identified. It is expected that wells with serious integrity issues such as leaks will not be left suspended and will therefore not qualify for a suspension consent.

106. The licence clauses require wells to be plugged in accordance with a specification approved by the NSTA. In the same way that the NSTA addresses the requirement for a programme of completion work to be approved by the NSTA by means of the consent process, the plugging requirement is also addressed by means of the WONS consenting process.

107. The NSTA generally expects the licensees to plug and abandon a well, however, there may be circumstances where consent may be given for a well to be suspended for a specified period. This could be for planned operational reasons such as batch drilling or for unforeseen circumstances due to weather or drilling hazards.

108. If the NSTA consents to a suspension, this will usually be for a period of up to two years but may be for a shorter (or more exceptionally, a longer) period if this is appropriate in the circumstances. The NSTA will also consider the impact of the suspension on any wider area plans or initiatives which could represent opportunities for efficient reuse, intervention or decommissioning. Applications for extensions to suspension consents are described below.

109. An application to suspend the parent wellbore must always accompany an application to geologically sidetrack a well.

Timing of suspension applications and the relationship to well abandonment and well abandonment notices

110. Depending on the terms and conditions of a licence, licensees will be required to plug and abandon all wells by:

(i) not less than one month before the determination of the licensees' rights under the licence, or part of the licensed area where the well is drilled (and whether by expiry or otherwise);

(ii) such time / within such period as specified in a notice to plug and abandon (P&A notice) given by the NSTA to the licensees pursuant to the licence; or

(iii) such time / within such period as specified in a deed of variation (DoV) to the licence.

111. The licensees should ensure that any application for the suspension of a well or for an extension to an existing suspension consent does not conflict with the timing of their licence obligation, any P&A notice or DoV relating to the plugging and abandoning of the well.

112. For this reason, the NSTA will not take into account or look to accommodate the licensees' desired schedule for the well operations or activities where this may result in there being insufficient time to allow the NSTA to properly consider a well suspension (or an extension of suspension) application. Where it becomes apparent that too little time has been provided for a full and proper consideration of a suspension (or extension of suspension) application, the licensees should be aware that this may cause delay to such well operations or activities, and the NSTA may consider the use of its sanction powers.

113. The duration of well suspension, the timing of abandonment and the relationship to licence expiry or determination may be relevant to the Strategy considerations, such as, for example, those relating to cost efficiency and/or re-use. Consideration of these points may require detailed discussion with the NSTA to ascertain the rationale for a suspension and what it aims to achieve. To avoid delay in obtaining consent, the licensees should initiate discussions with the NSTA before submitting their WONS application. Any application subsequent to those discussions should include all relevant information outlining these discussions, including outcome, and be evidenced by attaching all the relevant documents pertaining to such discussions.

Suspension of original or parent wellbore prior to a geological sidetrack

114. For a geological sidetrack, an application to suspend[30] the parent wellbore should be made. When considering whether to consent to a suspension of a parent wellbore, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider, amongst other things:

- whether a well has a foreseeable potential for future use, such as further petroleum production, or alternative use, such as carbon storage, and, if so, the specification of materials and the techniques to be used to prevent leakage or protect and preserve the adjacent strata

Suspension of exploration and appraisal wells

115. Exploration and appraisal wells should normally be fully abandoned before the rig departs after drilling and testing is complete. When considering whether to consent to a suspension of an exploration or appraisal well, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider among other things:

[30] Note that wells that are "plugged", "AB1" or "AB2" or "inactive well shut-in" are classed as suspended wells not abandoned wells. The parent wellbore must be suspended to an "AB2" standard. See Definitions section below.

- Whether there is a valid reason for the suspension, for example, whether it is needed for a future EWT or development
- Whether there is an integrity issue necessitating suspension
- The proposed duration of the suspension and the certainty of future plans
- Whether there is a further potential use for the well, such as for carbon storage, and whether this has been fully investigated by the licensees
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

116. If it may be appropriate for an exploration or appraisal well to be suspended after drilling then, to avoid additional cost, licensees should make their plans for suspension clear and apply for suspension consent prior to the well being spudded, even this if this may be contingent on other events.

Suspension of operational development wells

117. When considering applications for the suspension of development wells with a continued use, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider, amongst other things:

- Operational justification, such as sequential well construction or where there is an integrity issue, and whether the well needs to be made safe until remedial action can be undertaken
- Whether the well is to be suspended in preparation for a sidetrack
- The proposed duration of the suspension and the likelihood of deterioration during the suspension which could lead to increased decommissioning costs
- Whether there is a further potential use for the well, such as for carbon storage, and whether this has been fully investigated by the licensees
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

118. When considering applications for the suspension of development wells (including those used for injection into carbon storage sites) which have no anticipated continued use, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider, amongst other things:

- Operational justification for suspension/removing from service permanently
- Whether the licensees have sufficiently demonstrated that there is no opportunity for continued use of the well for the benefit of continued production and by extension, maximising the economic recovery of production from the field
- Whether the well could be used in any potential future carbon storage development
- The proposed duration of the suspension and how the well will be secured in the interim to avoid deterioration which could result in integrity issues and increased decommissioning complexity and costs
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

Suspension of inactive wells

119. Inactive wells are defined in the definition section and include all development wells in a field that has permanently ceased production. To comply with licence obligations and allow the NSTA to steward inactive wells effectively, all inactive wells, if not abandoned, must be covered by a valid suspension consent. The NSTA may consider the use of its sanction powers where an inactive well is suspended without a valid suspension consent.

120. For some inactive wells, suspension rather than abandonment may be appropriate if this might assist the aggregation of work scopes by that licensee, or a number of licensees, to deliver a more cost-efficient decommissioning solution. Suspension may also be appropriate for wells which, the licensees can demonstrate to the NSTA's satisfaction, are candidates for an alternative use, such as to enable carbon storage.

121. When considering whether to consent to a suspension of an inactive well, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider amongst other things:

- Whether a potential alternative use for the well has been demonstrated or is under active consideration
- Whether the abandonment of the well is planned to be part of a wider, defined, future abandonment campaign and the certainty of the campaign plans/timing
- The presence of any infrastructure (e.g. where a subsea well is under a platform) and/or the 500-metre safety zone which may limit simultaneous operations (to both rigs and light well intervention vessels and necessitate a delay to abandonment

- For wells with a foreseeable potential for future/alternative use, such as further petroleum exploitation or carbon storage, the material specification, and techniques to be used to isolate sections of the well to prevent leakage and protect and preserve the adjacent strata
- The cost effectiveness of the suspension viewed over the life of the field, including abandonment costs and the effects on supply chain capability
- Whether the well is likely to deteriorate during the suspension period leading to increased decommissioning complexity and cost
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

122. Licensees should attach the latest well examination report containing details of the integrity status of the well and the independent well examiner's review of the status.

Batch drilling/completing and short term suspension for operational reasons

123. When a number of wells are being sequentially (batch) drilled and completed, a suspension consent is required for each well. A suspension notification (which includes confirmation of timings, depths and details of temporary barriers) must be then be submitted via the WONS system within three working days of the well being suspended and, where relevant, a re-entry notification for each subsequent phase of drilling and a further notification for each subsequent suspension.

124. Short term suspensions of less than two days for operational reasons, for example, due to equipment problems, need not be notified and do not need a consent provided the rig does not move from the well and remains on station. A suspension application must be made, as soon as is practicable, if the suspension is or extends to, two days or more.

Extension of all well suspension consents

125. At the end of the initial suspension consent period the NSTA expects that such wells will normally be completed (operating or shut-in) or permanently abandoned. If it is proposed that a well remains suspended for a period longer than the initial consent period, this must be raised with the appropriate NSTA team well in advance of the expiry of the current consent and a new application will require to be submitted. A request for variation of an existing consent, rather than a new application, may be accepted if the requested extension is less than three months and is due to matters out with the control of the licensees, such as weather delays or equipment failures, however this should not be assumed.

126. Licensees must not make an application so late that, should the application be refused, insufficient time remains to complete or abandon the well before the existing suspension consent expires (resulting in a breach of the licence terms and conditions and the potential use by the NSTA of its sanction powers).

127. When considering whether to consent to extend a suspension of any well, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider amongst other things:

- Whether the licensees have demonstrated to the NSTA that there is a satisfactory, detailed, well completion/abandonment strategy which sets out the schedule, techniques and campaign arrangements, detailing the other wells that are part of the campaign
- The cost effectiveness of the suspension viewed over the life of the field, including abandonment costs and the effects on supply chain capability
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

128. Consideration of these points may require detailed discussion and explanation and, to avoid delay, these discussions should take place before, and be documented in attachments to, the WONS application.

129. The duration of any extension will be determined by the NSTA and will generally not exceed five years. The NSTA may in certain circumstances include stage-gates to ensure the licensees' strategy is on track. The NSTA will use its stewardship process[31] to review the licensees' progress against the licensees' strategy.

130. Licensees should attach the latest well examination report containing details of the integrity status of the well and the independent well examiner's review of the status.

131. Where the suspension of a well is planned to be carried out as part of a batch process, it is possible to submit a single application covering multiple activities on a single well with periods in between where there will be no work carried out e.g. plugged, then AB1, then AB2. In this case, the application must include details of each step along with schematics showing the suspended status at each stage.

Timing, data and reporting

132. Applications for consent should be submitted through WONS at least 28 days before the intended suspension (or extension of suspension) date. As with all WONS applications, where there is a misalignment with the factors that the NSTA will normally consider as part

[31] Stewardship Expectations Overview (nstauthority.co.uk).

of the consenting process, the licensees should explain and resolve this with the NSTA prior to the WONS application. The NSTA will not allow its consideration of a well suspension or extension application to be compromised by the licensees' desired schedule for the well. Where it becomes apparent that too little time has been provided for a full consideration, this may cause delay to activities.

133. Licensees should demonstrate that there is an appropriate level of funding for the proposed activity which can be done by uploading all relevant financial information and supporting documents, as set out in the NSTA's 'Financial Guidance', into WONS at the time of the application. Where there are multiple licensees, financial information may alternatively be provided to licensee.finance@nstauthority.co.uk.

134. The licensees must have received the requisite consent before a well is suspended (or an existing suspension is continued). A suspension notification (which includes details confirming timings, depths and types of barrier as well as requiring attached schematics) must be submitted through WONS within three working days of the well first having been suspended and a re-entry notification must be submitted through WONS within three working days of it being subsequently re-entered.

Abandon a well

135. When considering whether to consent to an application to abandon a well, the NSTA will have regard to the matters set out in paragraph 24 and is likely to consider among other things:

- Whether there is potential for abandoning the well as part of a wider well abandonment campaign, and whether these have been fully investigated by the licensees with a view to improving cost and efficiency, or whether the well is subject to an OGA plan relating to these
- Whether there is a further potential use for the well, such as for carbon storage, and whether this has been fully investigated by the licensees
- For wells in strata with a foreseeable potential for future use, such as further petroleum production or carbon storage, the specification of materials and the techniques to be used to prevent leakage or protect and preserve the adjacent strata
- The financial capability of the licensees

This list is not exhaustive and different considerations may apply to different activities and circumstances.

136. Where the application may not align to the considerations above, for efficiency and to avoid unnecessary delay, the licensees should seek to discuss and explain their proposals with the NSTA before the application is made.

137. OPRED requires that a well origin is removed to at least three metres below the seabed. If OPRED agrees to waive their requirement, a copy of all relevant documentation confirming OPRED's agreement must be attached to the application for a consent to abandon a well. When the NSTA is satisfied that all work has been completed in accordance with the NSTA's requirements, the wellbore will be recorded in WONS as AB2 or AB2 derogated (for wells which are included in a derogated decommissioning programme). The licensees should note that in the circumstances where a well does not form part of a derogated decommissioning programme, only those wells which meet all the relevant AB3 criteria will be generally assigned AB3 status by the NSTA and where these criteria are not met, the AB2 status will be assigned.

Abandonment of exploration or appraisal wells

Exploration or appraisal well abandonment

138. The abandonment consent application for exploration and appraisal wells cannot be 'bundled' with the initial drilling consent application and a separate application for consent to abandon should be submitted at the same time as the drilling application.

Abandonment of wells in parallel

139. If a group of wells of any description are to be abandoned in parallel (e.g. first install all AB1 plugs, then all AB2, then all AB3) then, in addition to the abandonment consent, a suspension consent for each well will be required in respect of each individual suspension operation. A suspension notification must be submitted through WONS within three working days of each consented suspension operation. This includes when the well is first suspended and any subsequent suspension or re-entry operations (where a re-entry notification should be submitted also within three working days).

140. If it is intended to carry out the isolation of a well with a rig and then return with another rig or vessel to complete the well origin removal, then an application to suspend the well will be required to be submitted before the isolation work is due to start. An application for consent to abandon the well must then be made at least 28 days before the final abandonment work is to take place. The well will remain recorded as AB2 (or mechanical status reflecting that all in well isolation work is complete) until the well origin and all conductor above the well origin is removed. In circumstances where a vessel will return within three months of completion of the isolation work to carry out the final abandonment activities, the entire well decommissioning scope will be considered under an abandonment application, with a separate suspension consent not required.

141. There are limited instances where licensees may apply for derogation from OPRED to leave part of an installation structure in place which may mean that the well origin and all conductor above the well origin are not removed. In these instances, an application to suspend the well should be made in the normal manner adding information about any intention to apply for derogation from OPRED and including any relevant documentation which supports a derogation request justification (e.g. the consultation draft of a decommissioning programme). Once the suspension has taken place, the well will remain recorded as AB2 (or mechanical status reflecting that all in well isolation work is complete) until the licensees have sent a copy of their formal derogation to the NSTA at which time the well origin will be recorded in WONS as AB2 derogated.

Timing, data and reporting

142. Applications for consent should be submitted through WONS at least 28 days before the intended start of the abandonment. No abandonment work must be carried out or commence until the date of the relevant consent granted by the NSTA.

143. An application to have a well recorded as AB3 must be submitted through WONS within seven days of the well having been fully abandoned along with all relevant evidence which shows that all criteria to meet the AB3 status has been achieved, including schematic, seabed clearance (where appropriate) and the well examiner's checklist of the activity. If the well origin was not removed below three metres and this was not previously agreed with OPRED (see paragraph 137 above) then the application to have the well recorded as AB3 should include evidence that OPRED is content that there is no future risk to other seabed users.

Shut-in and re-open notifications

144. The licensees must submit a shut-in notification (giving details of the date of activity and reasons) when a completed, active well is planned to be shut-in for more than three months or when it becomes apparent to the licensees that a well will be shut in for more than three months. The notification is to be made within three working days of the actual shut in operation taking place, or when becomes apparent that a shorter planned period will extend to more than three months.

145. The licensees must submit a re-open notification (giving details of the date of re-opening and reasons) when a well where a shut-in notification has been submitted, is re-opened for production/injection. The notification is to be made within three working days of re-opening the well.

Appendix 1: Definitions and interpretation

In this guidance the following terms have the meaning set out below.

In this guidance, references to days are references to calendar days unless otherwise stated.

AB1

A wellbore where the reservoir has been permanently isolated. The wellbore below the barrier is no longer accessible.

AB2

All required permanent isolation barriers have been installed and verified (including environmental barriers). No 'in-well' work is required to fully decommission the well. The well origin and conductor along with all associated structures and equipment above the well origin may still require to be removed.

AB2 (derogated)

All 'in-well' isolation work is complete. Derogation to leave the well origin or well equipment, e.g. conductor, above the well origin has been granted by OPRED.

AB3

In addition to permanent isolation barriers associated with AB1 and AB2 status, the well origin and all conductor equipment associated with the well origin have been removed.

Completed – Shut-in

An active wellbore in which all completion activities have taken place, and the wellbore is shut-in at the tree valves or subsurface safety valve but can be operated by the control system. Normally this status will only be applied if the wellbore is intended to be shut-in for more than 90 days then re-opened. Where a field or part field has ceased production, the producing wells are no longer classified as completed shut-in – see definition of inactive well.

Completion activities

Completion activities are those activities that are carried out after a well has been drilled for the purposes of bringing the well into use. This includes installing the completion string and associated equipment, installing sand control equipment, perforating, hydraulic fracturing, well stimulation and installing the tree so that the well is ready to start production/injection.

Decommission

A general term used in the context of wells to cover all stages of abandonment up to and including AB3. A fully removed well origin is termed decommissioned.

Geological sidetrack

A sidetracked well where the target location is different from the previous wellbore.

Inactive well

This is:

a) a development well when the field or asset (e.g. a platform) permanently ceases production;
b) a development well that has never been brought into use;
c) a subsea development well, with no further identified use, and not connected to an installation;
d) an exploration or appraisal well, without an active rig working on it and after any well test is completed; or
e) a well that has had a P&A notice served by NSTA. (see paragraph 110 (ii))

Mechanical sidetrack

A sidetracked well where the target location stays the same. This can be due to an obstruction or failure to maintain a well path.

Plugged

A mechanical term to describe a wellbore that has been given a temporary barrier (usually a mechanical plug) rather than a permanent isolation barrier. This includes inactive wells where the well is effectively plugged with the subsurface safety valve and tree valves. Note that licence clauses refer to 'plugging' and 'plugged and abandoned', 'plugged and sealed', 'plugging or sealing', these should be interpreted in the context of the licence and clause in question.

Re-completion activities

Re-completion activities (i.e. undertaken after the well has first been put into use) include any changes being made to the equipment (including tubulars or the introduction of gas lift valves) installed in the well, the perforation of new zones or zone isolation, hydraulic fracturing, well stimulation and change of use, e.g. from producer to injector that requires well work. Replacement of like for like equipment e.g. the same model of gas lift valves or reperforation of existing zones, is not considered to be a re-completion activity.

Spud

A well is spudded when the drill first penetrates the ground or seabed or, in the case of a sidetrack, when new formation is drilled.

Suspended

An operational term to describe a wellbore that has the mechanical status of either plugged, AB1 or AB2.

Well

Where the context requires, 'well' includes 'wellbore'.

Well origin

The location on the land or seabed where the well penetrates the earth.

Appendix 2: Guidance on specific well activities for carbon storage wells

Introduction

The aim of this this part of the guidance is to help support the application of carbon storage (CS) wells in WONS. WONS will be updated in due course to reflect the information required with regards to CS well applications, but in order to capture the information required and facilitate CS well applications, this guidance is intended to enable the applicant to complete each application type, with direction on which information fields within the application are applicable. Coupled with the WONS application is an Excel file that we require the applicant to complete and upload as an attachment to the application. This file is required in order to capture essential information that cannot be populated within the current version of WONS, so that the NSTA can properly assess each application.

Notes on using WONS to make applications for CS well consents:

WONS was originally developed to handle consents for well activity on petroleum licences. Whilst some system amendments have been made to cater for well activity on carbon storage licences, there are certain areas where attributes and wording are not optimised for carbon storage purposes. These will be addressed in future updates to the system.

When applying for consents relating to CS wells the following WONS terms should be given substitute meanings as noted below:

- 'Resource' substitute with 'storage site'
- 'Field development plan or FDP' substitute with 'storage permit'

Note on CS wellbore referencing

All wellbores drilled under a CS licence will be given a 'C' pre-fix. Apart from that they will be designated (upon receipt of a spud notification by the NSTA) using the same format as wells drilled on petroleum production licences (e.g. incorporating the usual quad/block, platform or installation reference letter and drilling sequence number). The eventual drilling sequence number assigned will take into account any pre-existing wells in the block or installation. For further information on wellbore numbering please refer to PON 12.

Initial drilling application (IDA)

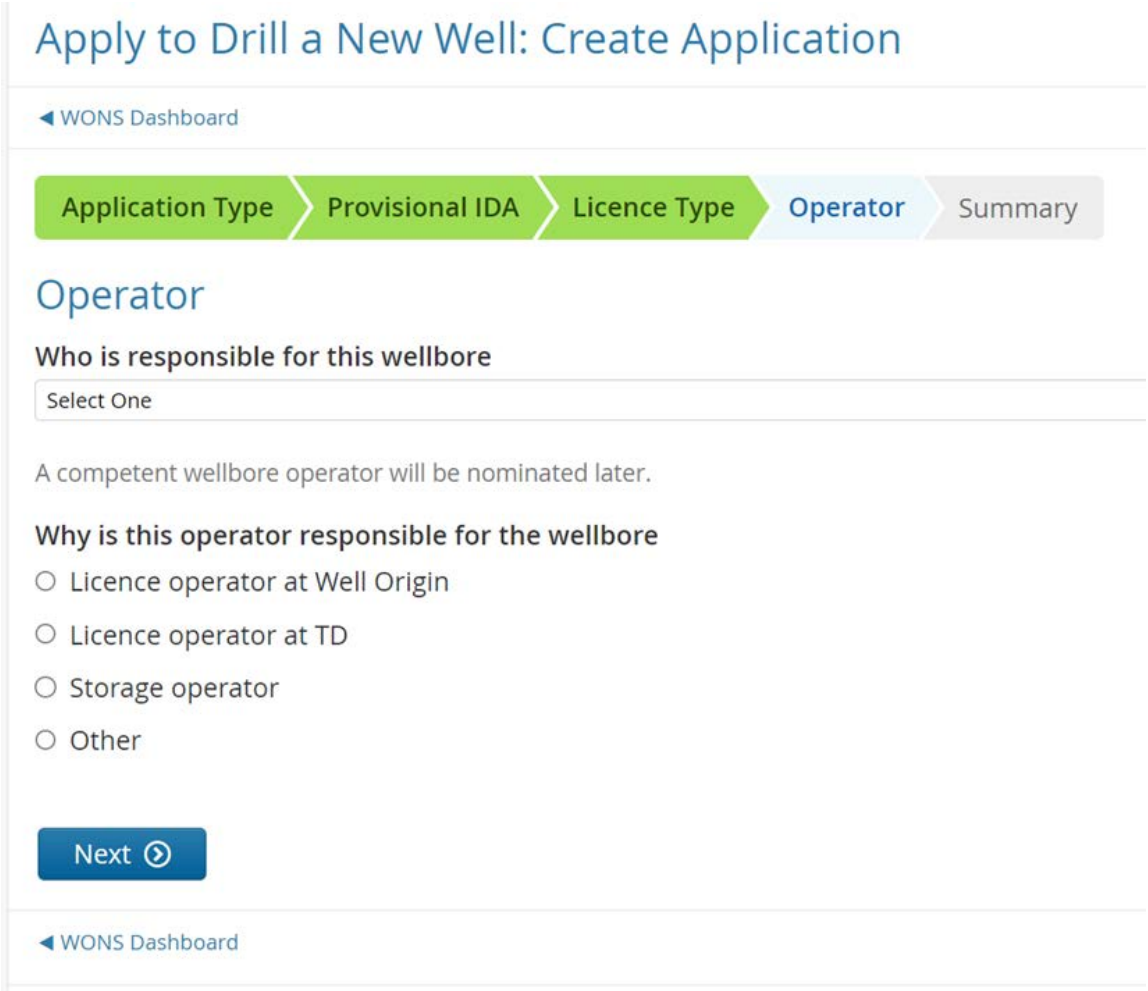
Select 'apply to drill a new well'.

Select 'application type – full initial drilling application'.

Select 'relevant provisional initial drilling application' or select 'no relevant provisional initial drilling application'.

Select 'carbon storage' for licence type.

Select 'operator and why the operator is responsible for the wellbore'.



Note that where 'resource' is mentioned in the application, a CS well application should substitute 'resource' with 'storage site'.

Select 'create IDA'.

General details.

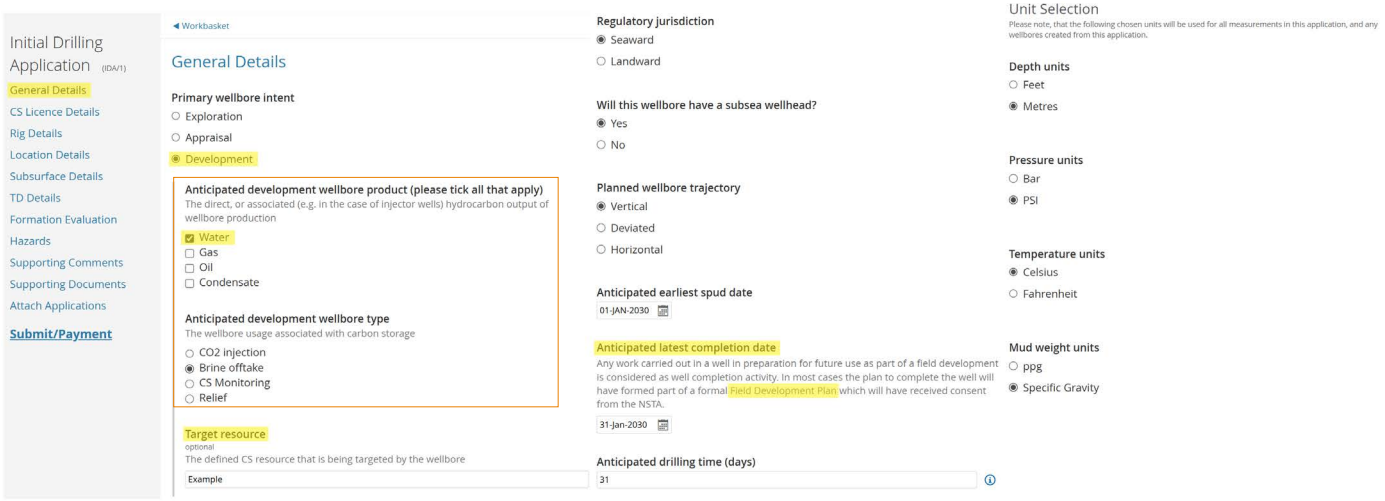
Enter details as appropriate.

Select 'primary wellbore intent select development', note for monitoring wells please select 'development'. For the anticipated wellbore product for CS wells please select 'water'.

Anticipated development wellbore type – please select the most appropriate option.

'Target resource' should be read as 'target storage site'.

Anticipated latest completion date – CS licence will have storage permits not FDPs.



CS licence details

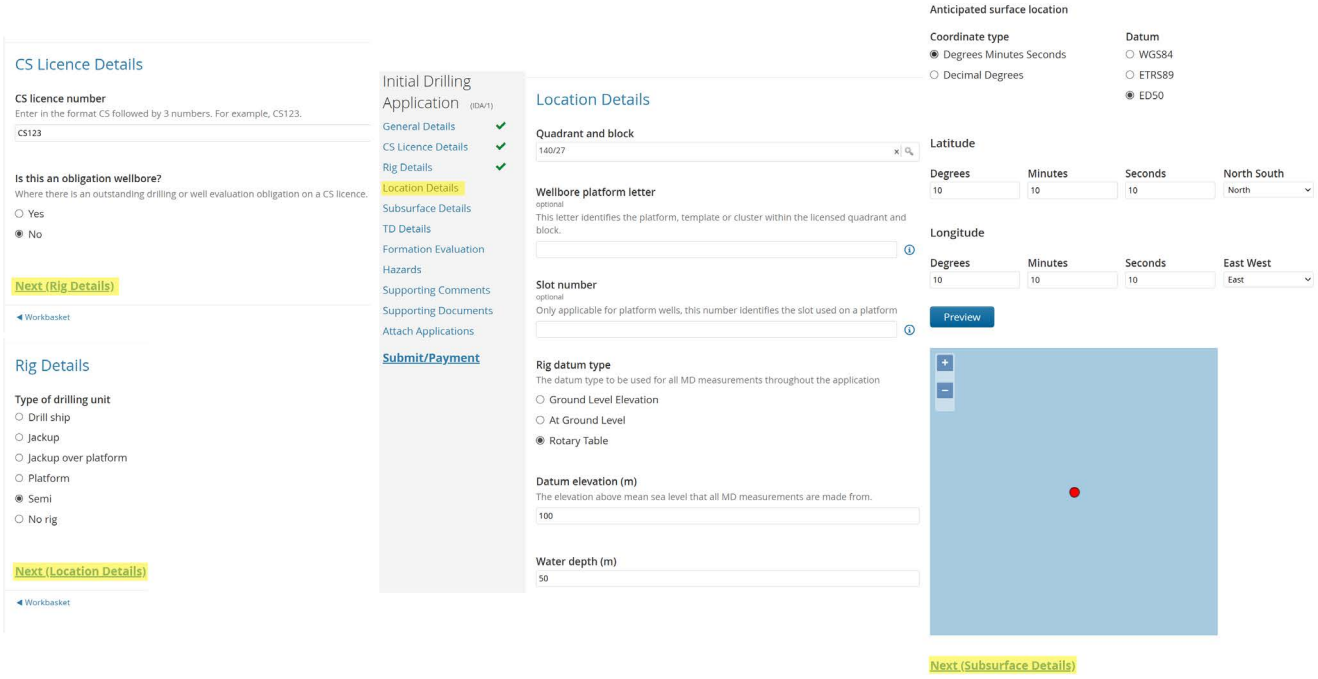
Enter details as appropriate.

Rig details

Enter details as appropriate.

Location details

Enter details as appropriate.

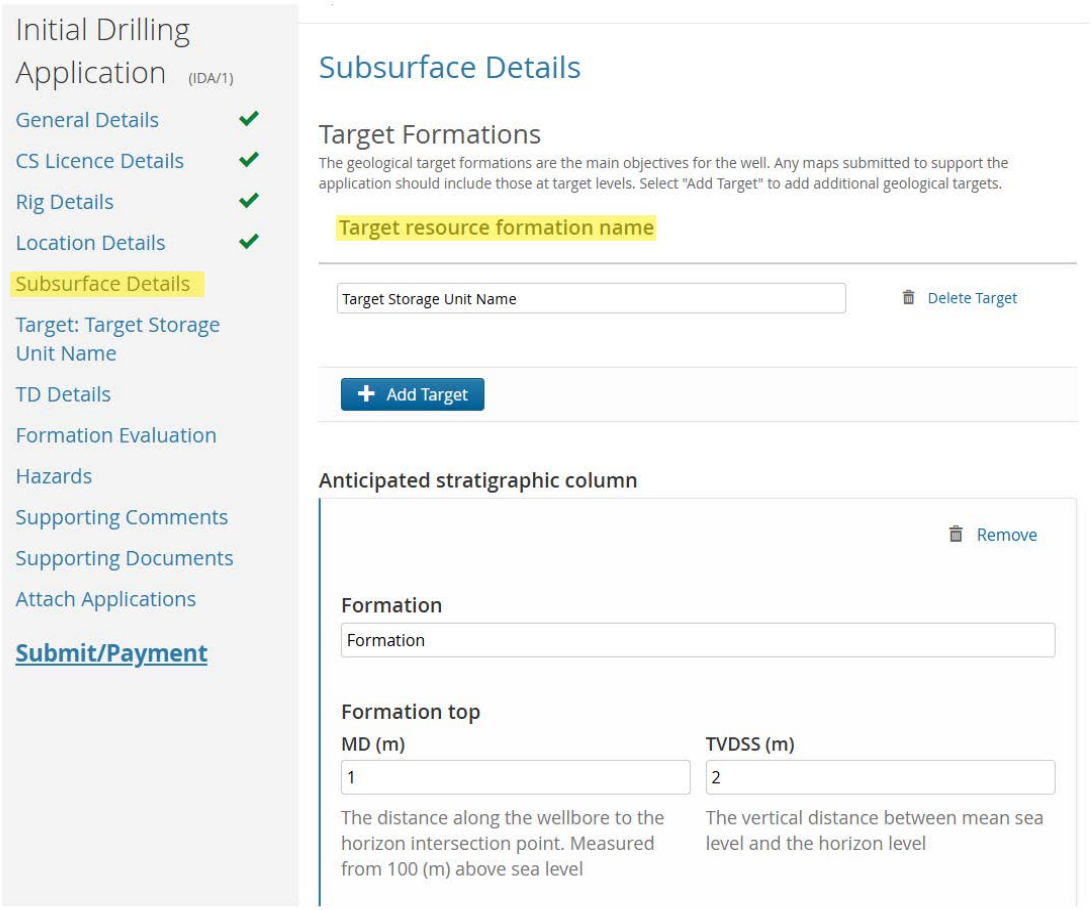


Subsurface details

Enter details as appropriate.

An overview of the injection formation should be provided covering the type of reservoir (aquifer, depleted gas field, depleted oil field) and its properties (rock properties, temperature, pressure). The impact of an injection test on future storage capacity, injectivity, and any offset hydraulically connected projects (hydrocarbon or CS) should be discussed. The application should state whether the test poses any risk to the containment integrity of the storage location, and whether any hydrocarbons would be flowed to surface and/or flared as part of the test.

'Target resource formation name' should be read as 'target storage unit name'.

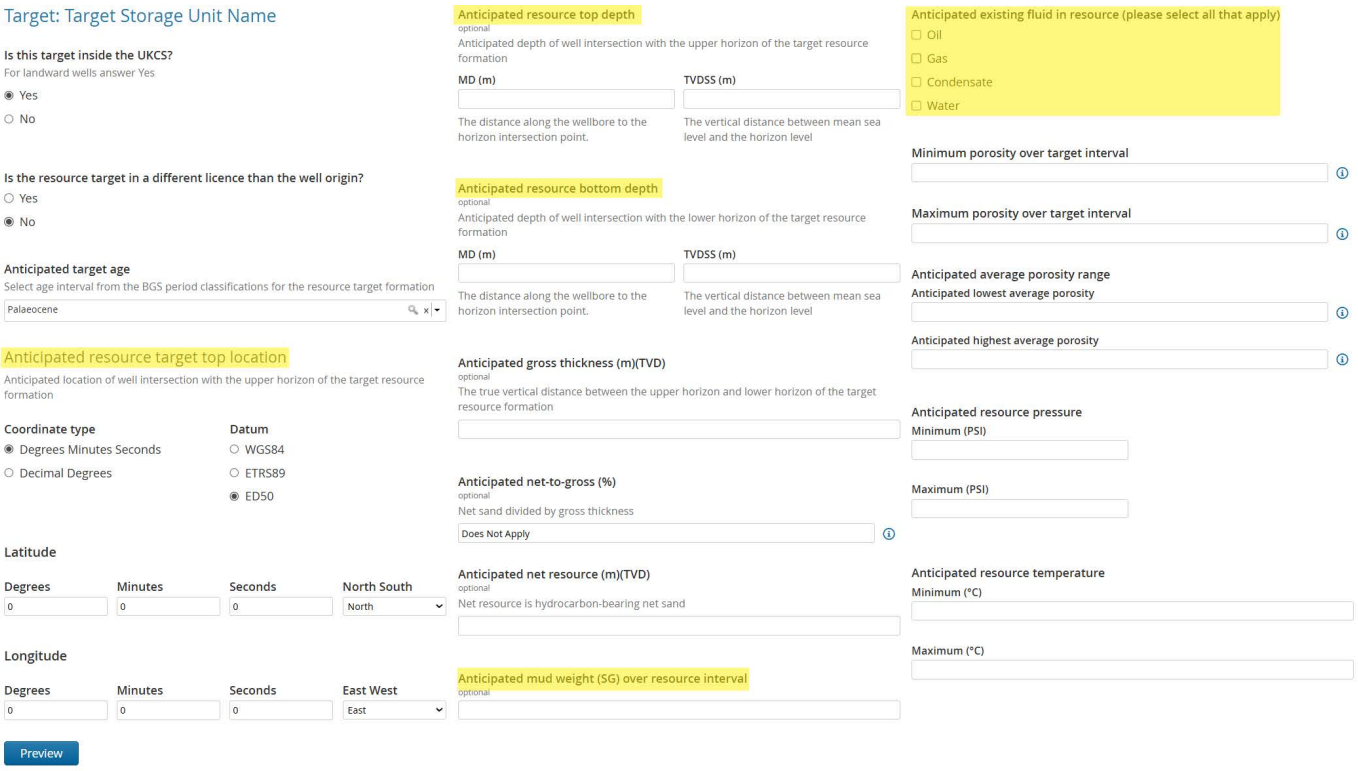


Target

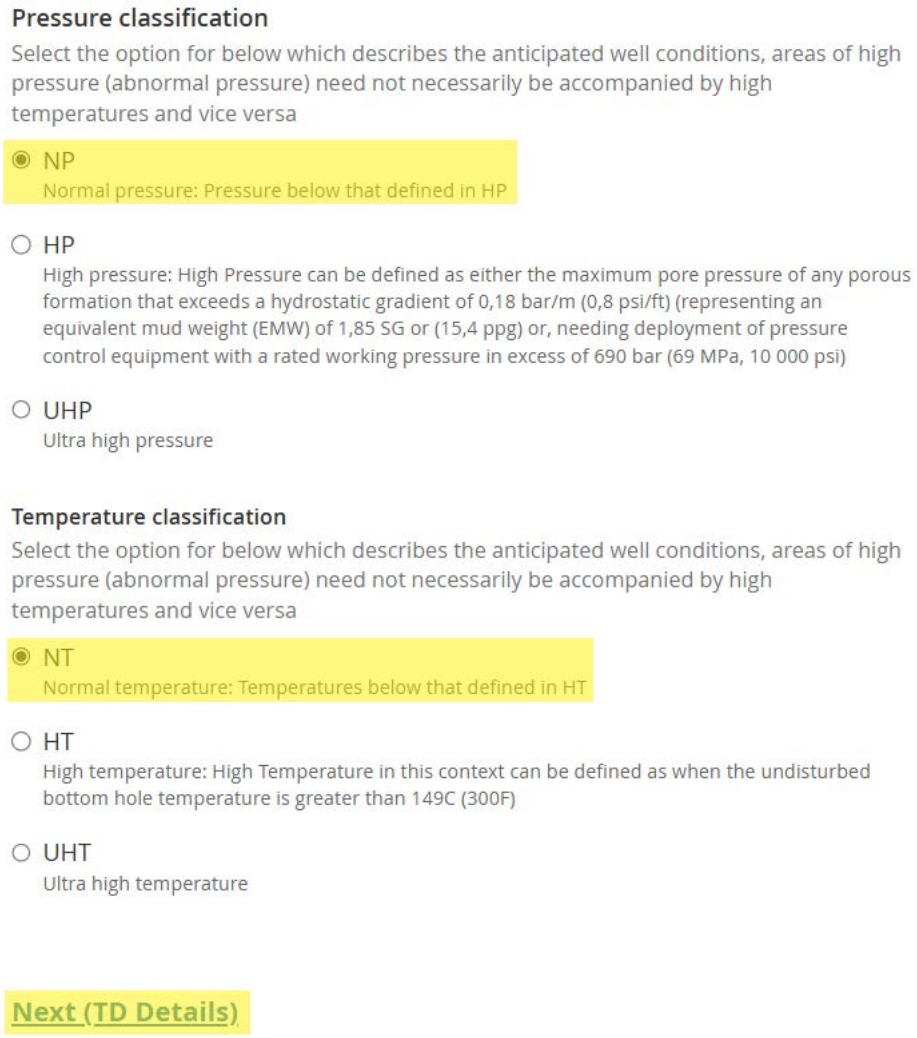
Enter details as appropriate unless listed below:

Anticipated net-to-gross (%) – this does not apply.

Anticipated existing fluid in resource (please select all that apply) – please enter legacy reservoir fluid.

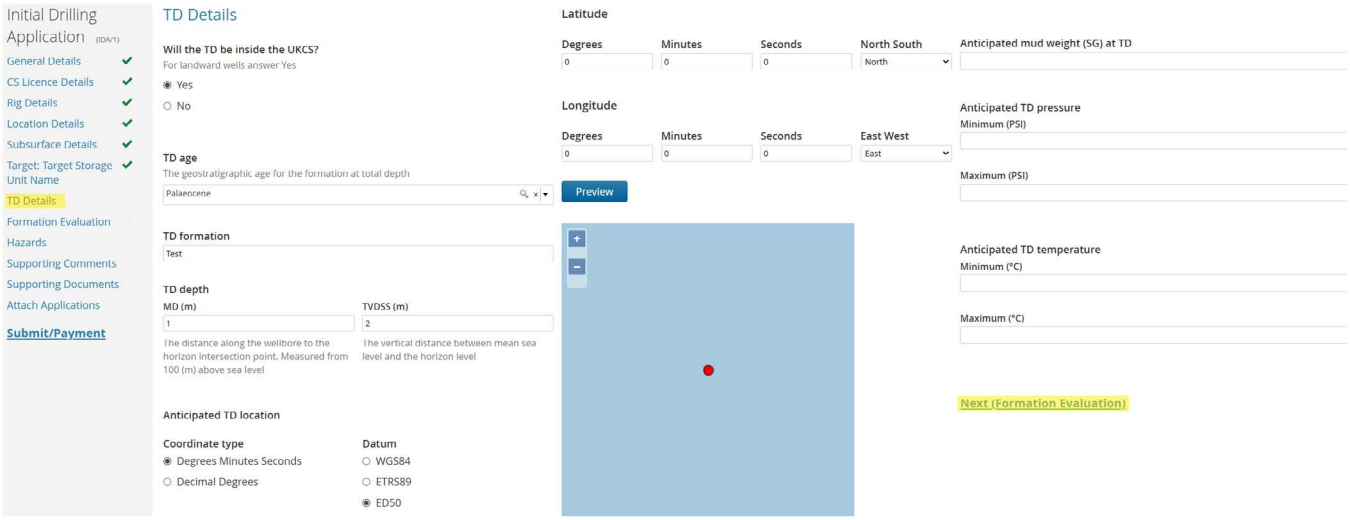


It is assumed the HP/HT and UHP/UHT conditions are not an option for an application relating to CS storage. Please contact the NSTA focal point is this assumption is incorrect.



TD details

Enter details as appropriate.



Formation evaluation

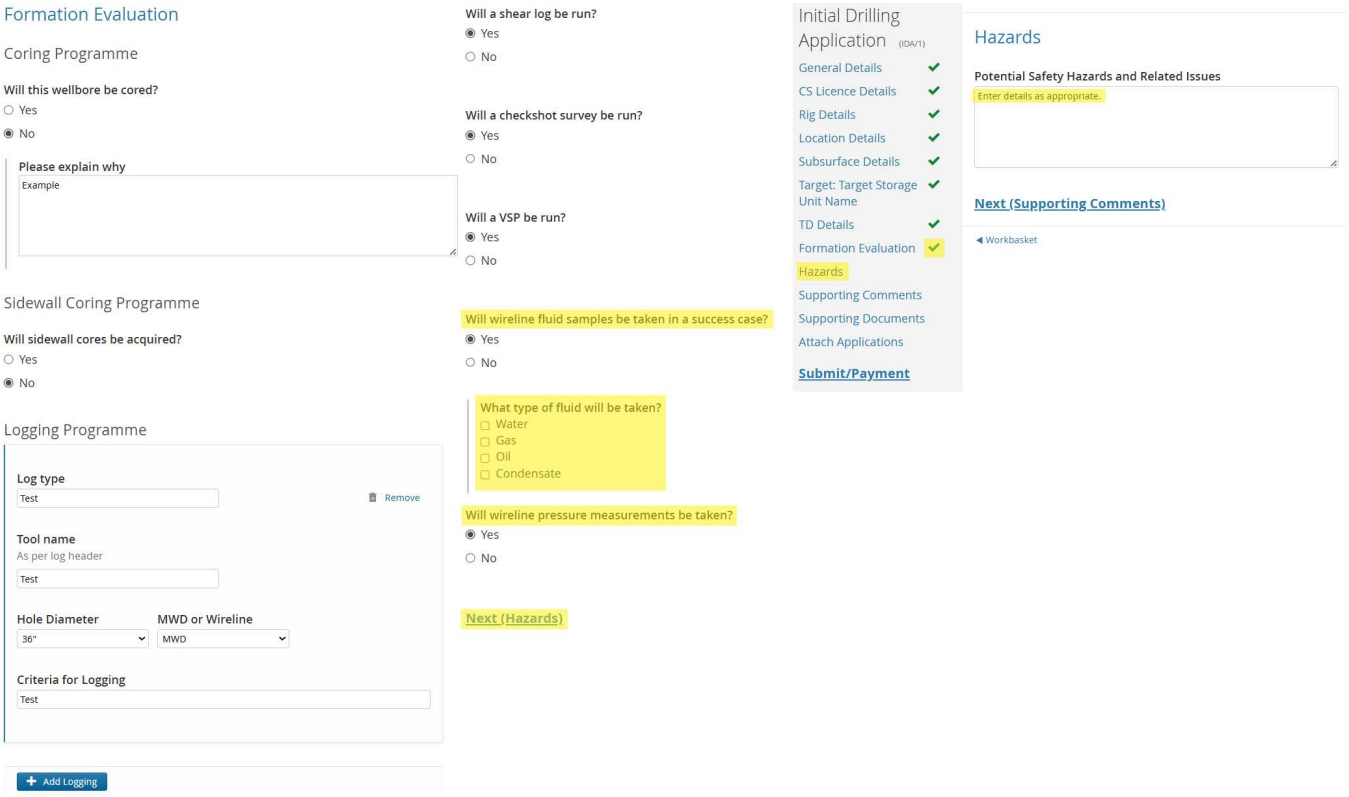
Enter details as appropriate unless listed below:

Will wireline fluid samples be taken in a success case? – please answer 'yes' or 'no' if fluid samples are to be taken and ignore the success case.

What type of fluid will be taken? – please provide answer in additional spreadsheet provided.

Hazards

Enter details as appropriate.



Supporting comments

Please use the free text box to provide as much detail as possible about the CS well.

Supporting documents

Please upload any documents that will provide further information on the CS well.

Attach applications

Enter details as appropriate.

Geological sidetrack

General details

Enter details as appropriate.

Wellbore synopsis – please add note about the wellbore intention to be for CS use.

Parent wellbore details

Enter details as appropriate.

Licence details

Enter details as appropriate.

Subsurface details

Enter details as appropriate.

'Target resource formation name' should read 'target storage unit name'

Rig details

Enter details as appropriate.

Subsurface details

Enter details as appropriate.

'Target formation' should be read as 'target storage unit'.

Target

Enter details as appropriate unless listed below:

Anticipated net-to-gross (%) – this does not apply.

Anticipated existing fluid in resource (please select all that apply) – please enter legacy reservoir fluid.

It is assumed the HP/HT and UHP/UHT conditions are not an option for an application relating to CS storage. Please contact the NSTA focal point is this assumption is incorrect.

TD details

Enter details as appropriate.

Formation evaluation

Enter details as appropriate unless listed below:

Will wireline fluid samples be taken in a success case? – please answer 'yes' or 'no' if fluid samples are to be taken and ignore the success case.

What type of fluid will be taken? – select 'no' and write 'not applicable CS well'.

Hazards

Enter details as appropriate.

Supporting comments

Please use the free text box to provide as much detail as possible about the CS well.

Supporting documents

Please upload any documents that will provide further information on the CS well.

Attach applications

Enter details as appropriate.

Completion application

General details

Enter details as appropriate.

Anticipated wellbore type on completion – please select the most appropriate option.

Rig details

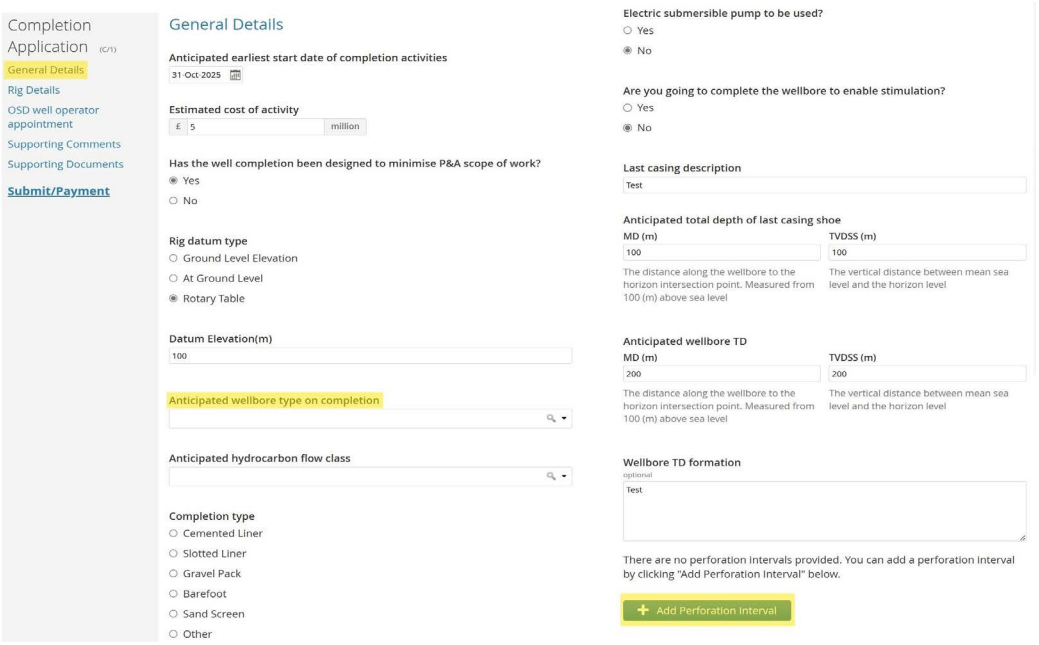
Enter details as appropriate.

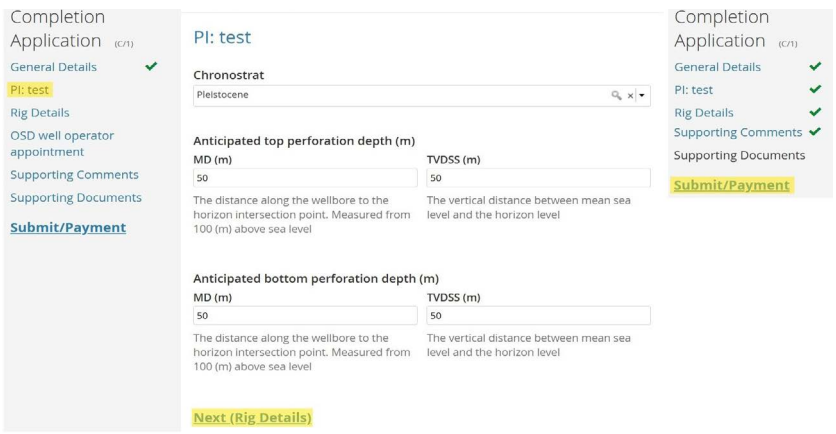
Supporting comments

Please use the free text box to provide as much detail as possible about the CS well.

Supporting documents

Please upload any documents that will provide further information on the CS well and its completion.





Re-completion

General details

Enter details as appropriate.

Injection/well test

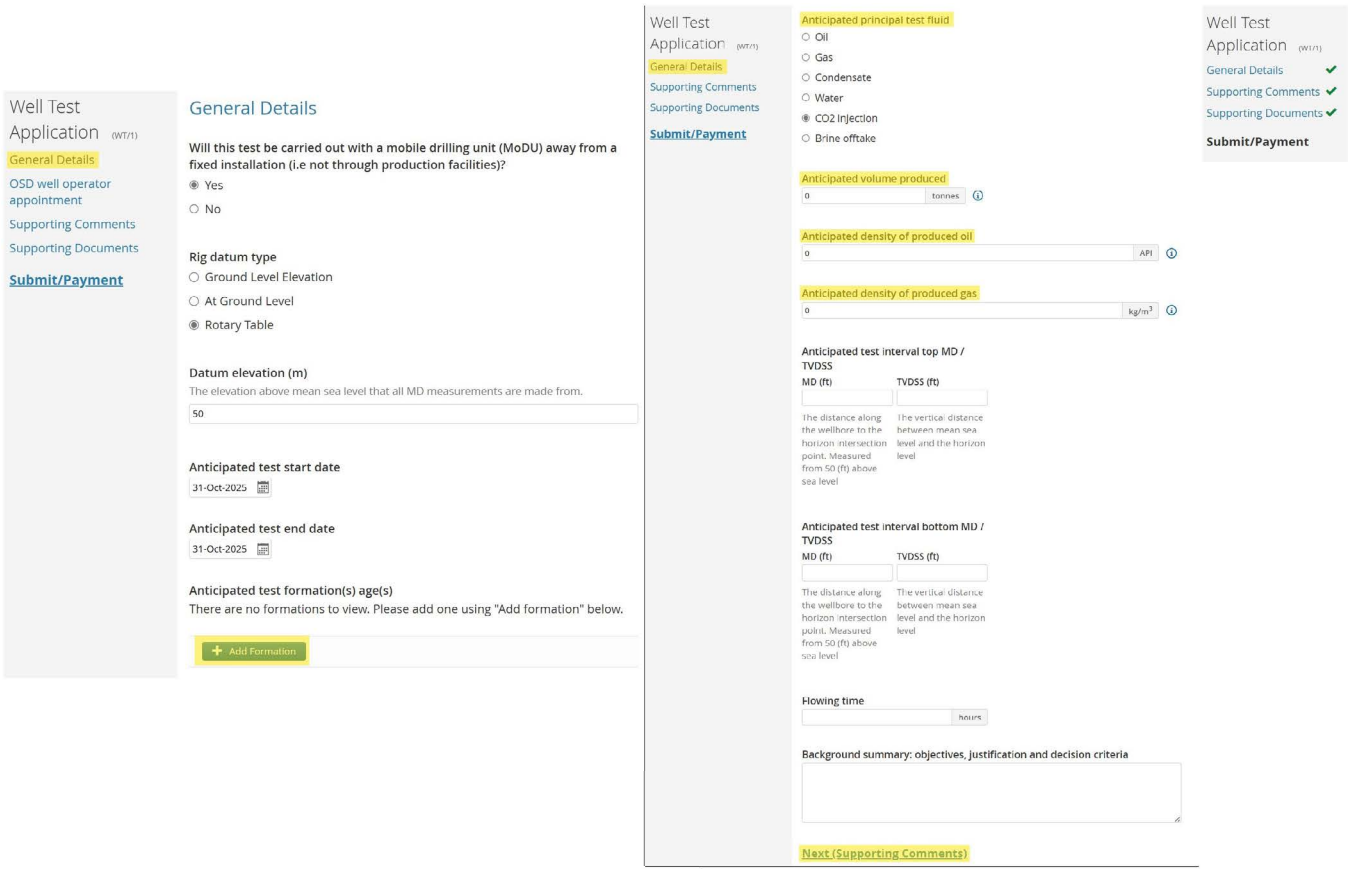
General details

Enter details as appropriate.

Select 'appropriate test fluid'. For CO_2 injection select 'CO_2', for brine offtake select 'brine offtake'. For any other fluid, please select the most appropriate choice.

'Anticipated volume produced' refers to injected volume or brine offtake volume.

Please provide density information where possible.



Extended well test

Please fill in EWT section where applicable for injection test that will last longer than 96 hours. Please also proved answers to further question provide in the excel sheet.

North Sea Transition Authority

The North Sea Transition Authority is the business name for the Oil & Gas Authority, a limited company registered in England and Wales with registered number 09666504 and VAT registered number 249433979.
Our registered office is at 4th Floor Broadway Buildings, 50 Broadway, London, SW1H 0DB.

www.nstauthority.co.uk