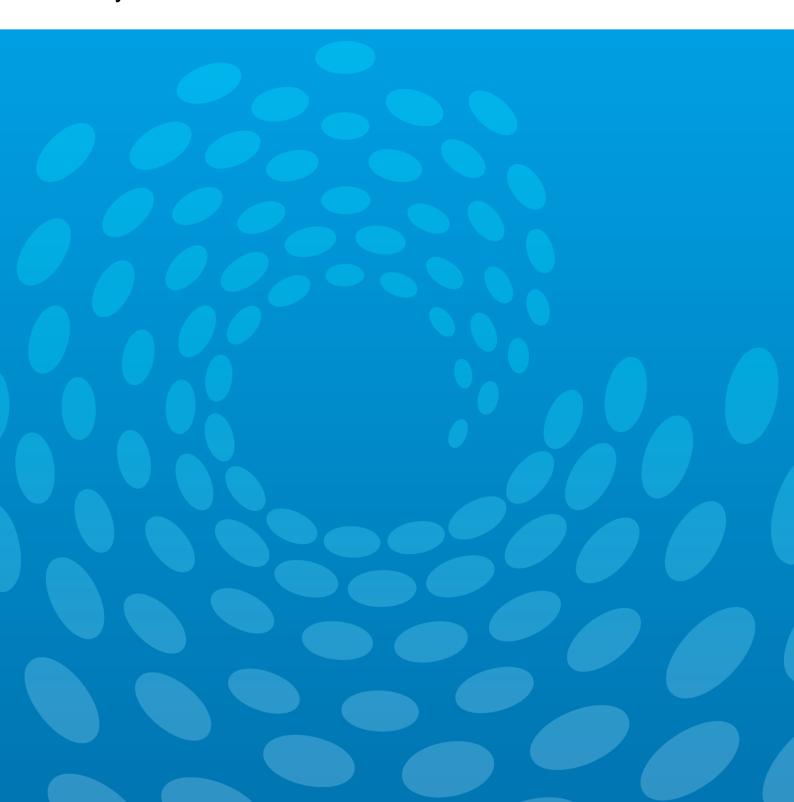


NDR Relaunch: User Group Frequently Asked Questions 1st July 2021





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Roles and Responsibilities

CA Onboarding 28-6 - 1 Can the Company Admin also submit data?

A Company Admin can add the Data Manager role to their account in order to submit data.

CA Onboarding 28-6 - 2 Can a person have more than one role?

• Yes – Company user accounts can have more than one role assigned. This will normally only be necessary for the Company Administrator should they intend to also be a Data Manager.

CA Onboarding 28-6 - 3 Can the Company Admin temporarily pass on the role to another?

 Not currently enabled but we acknowledge that this would be useful for managing short absences. While we consider this, please note that the service team can manage reassignment on your behalf, where authorised by the ISC or a similar authorised user.

CA Onboarding 28-6 - 4 What happen if a company admin is on vacation and we need to add a new user?

• Please refer to: CA Onboarding 28-6 - 3

CA Onboarding 28-6 - 5 Can the data manager role delete an incorrectly loaded entry or only the admin role?

• Company users will not be able to delete data from the system. Please refer to: <u>UG2-23 Will</u> operators be able to delete items, or re-upload a better quality image to an existing record?

CA Onboarding 28-6 - 6 When we start using the new system...and we have almost 75 active users... will we need to re-create each individually and manually or is there a way to submit a batch and be a bit more efficient?

- Users can be registered in batches of up to 10.
- We would also recommend that Company Administrators consider this as an opportunity to
 establish accounts for those who genuinely need access (as in the questioner's example of 75
 active users). Of the 1,931 Regulatory Users of the system, some 254 (13%) have never logged
 in, while 45% of Regulatory Users have not used the system for over a year.



• Please ask yourself if it makes sense for you to create accounts for every user. Contact us at ndr@ogauthority.co.uk if you need more information on usage in your company.

CA Onboarding 28-6 - 7 Are there any limits to the number of Data managers and company users?

 No, there are no practical limitations to the amount of Data Managers and Company Users, although we would recommend limiting the allocation of the Data Manager role to only those who will be uploading data on behalf of your company.

CA Onboarding 28-6 - 8 Are current users transferred to the new system?

 No, all user accounts will be created from scratch in the new system. The unique user ID will be based on the user's email address. No user history, settings or metrics will be included in the transfer of information.

CA Onboarding 28-6 - 10 Have the invites for various training session been sent to old NDR users in my company as well as me?

- Invitations have been issued to the email addresses of the users that have been supplied by ISC's in response to a recent request.
- All companies have been contacted with the offer to include themselves and colleagues in the sessions.
- Please add details using this Form https://forms.office.com/r/kAKYm3KHdG if you or your colleagues need to be added to any of the remaining sessions.

CA Onboarding 28-6 - 12 What communication is going out to users who have public accounts but associated with a company?

All Public Users will receive the same communications, whether they are associated to a
Company or not. As Company Administrator you will be able to add colleagues to your
Company Group once you have access to the system. As Company Users they will have
access to your non-disclosed company information.

Discovery 30-6 - 13 Does a Company User need to get permission to request on media?

 Completing a request for delivery on media will be dependent on payment being received for time and material costs. As such, this will be controlled by the internal procedures for financial expenditure within the requesting organization.



Downloads & Limits

FAQ-4.6.21-3 Will there be any charges for downloading data?

- Users who use discretionary services via the NDR that have associated charges may do so via a Payment Service Provider (PSP) service within the application.
- Approved organisations, including licensees, will each be able to download 3 Terabytes of NDR content in a calendar month, without paying a fee.
- The new system makes downloading data at scale far more straightforward.
- Previously all users had a download limit of 20 Gigabytes per transaction. The was no cap on the number of transactions in any period, but many NDR datasets exceed 20 GB.
- Now, all datasets are downloadable, including the popular PGS SNS mega survey package, at 876 GB. Such "egress" from cloud storage generally attracts a charge, which, if left unconstrained, could become prohibitively expensive for the service. We are making a "fair allowance" of 3 TB available to each organisation each month at no cost.
- Any organisation wishing to increase their download limit for a given month may do so at their discretion and their expense, using the in-application purchasing options. Alternatively, orders on media can also be arranged via the application.

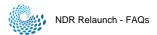
Please refer to:

FAQ-4.6.21-2 How will I pay for discretionary services in the new NDR?

FAQ-4.6.21-17 Will download sizes be limited, as present?

- There will be no practical download limit for any data in the new NDR.
- In the current system users can download small files directly to their desktop or they can create collections of data of up to 20 gigabytes per "shopping basket" to then download to their system. Any collection that exceeds 20 gigabytes must be partitioned into smaller basket sizes or ordered for delivery on media, courtesy of the support services team, at the cost of the requester. Many data sets exceed 20 gigabytes, particularly seismic volumes. Such data sets can only be acquired through "on media" exports.
- Future download services will accommodate extremely large files, large data sets of, say, a terabyte can be downloaded through the new system. There is no upper limit on file size.
- However, each participating organisation will have a "fair allowance" of 3 free terabytes of data download per calendar month.

FAQ-4.6.21-20 What is the new download limit? Is that specific to companies, or to individuals?



- There is no download limit per se; in terms of volume restrictions at the data set level. A 3
 terabyte per calendar month data download allowance has been made available for all
 organisations that use the NDR for regulatory compliance and licence operation purposes.
- The OGA determines at its discretion, which organisations qualify for the fair data allowance. By default, licensees who have an obligation to report information through the NDR are provided with the data download allowance of three terabytes per calendar month. Other organisations may be included, such as academic institutions and other industry groups.
- It remains the OGA's intent that NDR content should be widely available to all users on a fair and equitable basis. Any organisation that wishes to access more than their allocated monthly download allowance may purchase additional allowance through "in-app" payment services.
- Additional data allowance is provided in single terabyte instalments and is recovered by the NDR service provider. The cost is considered fair and reasonable and has been approved by the OGA.

CDA-1 You reference charges to load data from media, order data on media, and to increase the download limit. Can you share what the cost of these services will be?

CDA-4 What support will you provide for operator administrators seeking to manage their download allowance? Will it be possible to allocate parts of the allowance to specific users, for example, or is it first come first served?

- In line with the current approach, each organisation, such as a licensee "Company Group", is treated as a single entity. The Company Administrator has control over which users are included in their Company Group, making them eligible to utilise the download allowance.
- Management of the monthly allowance is for the company administrator to oversee. They will be
 able monitor the usage of the monthly 3 Terabyte free download allowance, with reference to
 metrics and reports that will be provided.
- Suggestions for additional requirements, dashboards and functionality will be welcomed and addressed once the roll out is complete.

CDA-5 Will API usage count against the allowance, as / when download via API is enabled?

- Data egress from cloud systems attracts charges, regardless of the type of data, how the data is classified, or the mechanism through which it is accessed.
- It follows that all web browser enabled download of NDR content will attract charges that must be managed within the service's commercial model. For this reason, the service will not differentiate one download from another by the same company.
- The use cases for machine-to-machine downloads in the current NDR service are varied; in the first five months of 2021, the five most active companies used the NDR API to download between 39 GB and 6.3 TB in total over entire the period.



CDA-6 You mention that only 'approved organisations' will have a free download allowance. Will non-regulatory public users be able to download any data for free? If not, what is the process and criteria for becoming an approved organisation with a free download allowance?

- To ensure the viability and performance of the service the OGA will consider representations from non licensees. Eligibility for download access may be granted at the sole discretion of the OGA.
- Non-licensees are encouraged to contact the OGA NDR team via ndr@ogauthority.co.uk with any such enquiries
- The OGA may revise the position on this and other matters, from time to time.

CDA-13 Will download of undisclosed data count against the free download allowance?

Please refer to the answer to CDA-5 (above)
 CDA-5 Will API usage count against the allowance, as / when download via API is enabled?

UG2-1 Will we be able to quickly bulk download?

- Download of multiple wells and post-stack seismic data will be available. Download rates will be dependent on the usual variables of filesize, network bandwidth and so on - much of which will not be in the control of the NDR Service.
- User expectation should be that large collections of NDR information will be available via network download, users will be able to establish a copy on their systems in significantly shorter turnaround times than has been previously possible.

UG2-4 Will there be a way for organisations to keep track of the data downloaded to ensure they do not go over the 3TB free limit?

 Metrics and reports will be provided to authorised users so they will be able to monitor the usage of the monthly 3 Terabyte free download allowance.

UG2-19 Can you preview a whole document/dataset, or do you have to download to see all?

 The initial preview for a document includes the first five pages - based on our review of NDR contents, we expect that this will enable users to determine whether the item is of sufficient



quality for their purposes, and that the contents page or similar summary information will be included in the preview. Users can then decide whether they wish to download that item.

 Datasets will also be available to preview. The approach will vary dependent on the type of data involved.

UG2-36 Is the 3TB download per user or per organisation?

 Please refer to: FAQ-4.6.21-20 What is the new download limit? Is that specific to companies, or to individuals?

CA Onboarding 28-6 - 9 Is the usage - all time - or in that monthly allowance? Does it add to a (cumulative) total?

It is monthly. The total for each user will be reset at the beginning of each calendar month.
 We're continuously developing usage metrics – if you have thoughts on how we can present helpful information, please add them to the NDR User Group feedback form. https://forms.office.com/r/E6ufMZcXat

Discovery 30-6 - 4 How do we query the full well headers tables in order to keep our own systems updated monthly?

- The NDR will refer directly to the OGA's System of Record for summary wellbore information – i.e. the Well Header created via the WONS system. Summary information such as this and much more can be sourced directly from the OGA Open Data site. We would recommend this as your primary reference point for summary wellbore information.
- For more on this topic, please see <u>UG2-6 How and where do you edit</u> metadata? and; https://data-ogauthority.opendata.arcgis.com/

Discovery 30-6 - 5 I think it's important to inform this group about the monthly download limits per company.

- The default monthly download per company is 3 terabytes.
- Please refer to: FAQ-4.6.21-20 What is the new download limit? Is that specific to companies, or to individuals?

Discovery 30-6 - 6 Is it also possible to 'See More', i.e. the whole document, in the PDF preview window?



• The initial rollout will enable previews of the first five pages of a PDF in the NDR. The intention is that they user will be able to determine whether the document is fit for their purposes before downloading it, rather than enabling the full document to be read "in situ".

Discovery 30-6 - 8 Can you click on an object in the map window to get a data listing?

 Locating and selecting a ProjectID in the map will create a listing of associated content in the table view.

Discovery 30-6 - 9 Are company admins notified if the download limit of 3Tb is about to be breached?

- In the **Manage Users** view, a Company Administrator is able to monitor the "mon to date" aggregated download value for their organisation. The relative contribution of each Company User is also displayed.
- There is not currently a notification of an approaching limit. The 3 TB limit cannot be "breached" as such; rather the limit will prevent further downloads being executed.
- Companies will not be surprised by charges for overenthusiastic use by their colleagues. Any increases in the allowance would need to be arranged up-front.

Discovery 30-6 - 10 Is there a quick way to download all available data for a particular well?

 Yes, select all the files associated with the ProjectID for the specific wellbore and add to Session Basket.

Discovery 30-6 - 11 The old NDR had the option for single file downloads using right mouse click. Does this?

• There is no current functionality that directly replaces the "Download Now" option offered in the previous system.

Discovery 30-6 - 12 Any limits on downloads data package sizes?

The system will determine how best to package information for efficient downloads. Rather than
being constrained to a fixed maximum, the required information may be distributed over several
export .zip files. Users will not be required to manage this – download sizes are limited by the
availability of data and the remaining monthly download allowance rather than the size of the
required data on disk.



Discovery 30-6 - 14 Can you still do a quick direct download without having to use the shopping basket functionality?

• Please see: <u>Discovery 30-6 - 11 The old NDR had the option for single file downloads using</u> right mouse click. Does this?

Discovery 30-6 - 15 What does the data look like when downloaded? i.e. grouped in folders?

 The downloaded .zip packages honour any existing folder structure in the legacy NDR i.e. using Ctags (Ctags are "Classification tags" that we are using as a continuation of the legacy CS8 codes)

Discovery 30-6 - 18 How is downloaded data organized - when unzipping well data?

Please see: <u>Discovery 30-6 - 15 What does the data look like when downloaded? i.e. grouped</u> in folders?

Discovery 30-6 - 19 3TB limit might be easily reached in a large organisation / many users?

- We're confident that the 3 TB per month allowance will be adequate for most, if not all, organisations on a regular basis. If we assume that all users act in a similar way, clearly the more users there are, the more impact will be made on the allowance.
- Increasing monthly capacity above the baseline allowance is available in 1 TB increments for a modest fee.

Discovery 30-6 - 33 Can we extract individual curves from large DLIS, LIS or LAS files and export to another format on download?

- This functionality will not be in place from the beginning of services, but we'd be interested to know more about this. We expect that the ability to extract data will be dependent on the accessibility of the legacy content.
- Please let us know more about your requirement via the NDR User Group feedback form. https://forms.office.com/r/E6ufMZcXat



Upload

CDA-7 Does the new NDR have a bulk well data upload facility? If so, how is metadata captured and formatted for bulk upload?

Multiple well data files can be uploaded at once within the new service. Their associated
metadata is captured in the web application as part of the upload workflow. The metadata does
not require an external file with specific formatting.

CDA-8 I have a lot of well data to upload arising from the SNS call for data – how can I best prepare this data for loading?

- Further information defining folder structures and naming conventions to assist multiple well data file upload will be issued shortly.
- In order to best prepare for your upload, you can ensure the data is compliant with the current data submission criteria as set out in reporting guidance and supporting documentation.
- In line with any normal operational approach it would be advisable to arrange the data folders per wellbore and to have a good understanding of document/file classification, title, format etc. for each item.

CDA-10 How can I prevent uploads of large quantities of seismic data from timing out? I need to be sure that the data has been received without corruption, if the upload starts and stops a lot.

Please see UG2-17
 UG2-17 How does the OGA expect to receive SEG-D data via the Cloud?

UG2-13 How will it work when reporting large datasets? I.e. Hundreds of GB of data (as with a potential 4D Survey?) If submitting via the Web Portal – How do we prevent it from timing out, as this would lead to a corruption of data?

Please see UG2-17
 UG2-17 How does the OGA expect to receive SEG-D data via the Cloud?

UG2-17 How does the OGA expect to receive SEG-D data via the Cloud?

 Osokey's cloud native NDR data ingress routines have been designed specifically to cater for loading the data types that the OGA requires to be reported to the NDR. This extends to all processing stages of seismic trace data, which include Field data in SEGD format.



- Our training workshops for seismic loading, and a follow up session specifically for Field seismic
 data loading will address this matter. In the meantime, users who expect to take advantage of
 the availability of online seismic reporting, at no charge to themselves, can consider whether
 their data quality, alignment with required form and manner set out in reporting guidance and
 supporting documentation.
- Other considerations should include confirming that a suitable Chromium based browser is available on the uploaders systems. Performance, speed of upload and so on will be dependent on various factors including the systems being used to upload the data, network bandwidth and latency and the volume of data involved.
- Alternatively, and in a similar arrangement to the current seismic trace data reporting procedure, licensees may opt to make use of services offered by Moveout, via Osokey's in-app Payment Service Provider.

UG2-35 Is there a limit to how much data that can be uploaded? Thinking of all legacy seismic field data/gathers.

- Basing the NDR in the cloud is, in part, intended to take advantage of the scalability of storage capacities. The provision of storage can scale according to the growth in data, so in that sense, there is no limit. Major cloud providers can certainly accommodate the quantities of data we anticipate being available to be reported to the NDR.
- Leveraging Osokey's domain knowledge and expertise, we anticipate that the NDR collection could grow to some 4 Petabytes over the 5-year initial term of this service contract. We do not expect all of that information to be reported in the short term - rather we have projected a relatively steady growth year-on-year, so the provision for storage will increase annually.
- If the growth in the collection outpaces our forecast, we have controls established in the service contract to accommodate, subject to funding. Alternatively, the annual cap can remain fixed, in which case further reporting of large data sets could be deferred until the next planned increase to capacity.

Discovery 30-6 - 30 In the FAQ, I see that the associated metadata is captures in the web application as part of the upload workflow does that mean that the CS8 codes are assigned by the workflow? or how would this work?

 Depending on the file type, a Ctag can be identified and populated automatically in the upload metadata, however for other formats the user will be required to select from predefined classification codes. These will be constrained to appropriate options based on the input file – e.g. a filename of "file1001.segy" can only have ctags that pertain to SEG-Y data.



Entitlement to Data

FAQ-4.6-21-7 Will entitlements to confidential information be included in the MVP?

- A mechanism for "data owners" to grant entitlement to protected information is registered as an early development, following launch of the NDR in July.
- Regulatory users have become accustomed to sharing protected information at the company to company level within the legacy NDR service, as they had done for many years in the previous system.
- Sharing of definitive information by entitlement within, for example, a joint venture licence group, facilitates delivery of licence commitments and other activities in support of the OGA Strategy. In addition to developments in everyday technology, information control and security, and the intended purpose of the NDR, we expect that users will welcome a more elegant approach to entitlements which, in many cases, will not just be nice to have, but necessary.

CDA-12 When will it be possible to entitle data to my JV partners?

Please see
 FAQ-4.6-21-7 Will entitlements to confidential information be included in the MVP?

UG2-14 How will entitlements work within the new NDR?

- The OGA intends that the development of the NDR system and services will be in response to validated user requirements.
- This matter will be raised at the forthcoming DEPAC meeting in June 2021, to recommend that a Task/Finish Group is initiated, to establish user requirements.
- We will invite owners of information in the NDR collection to participate, to determine how
 entitlement to protected information might work in the new system. We expect that users will
 welcome a more elegant and secure approach to granting entitlement to protected information.



Data & Standards

UG2-5 Can you allocate multiple CS8 codes?

- It has been common, historically, for several categories of information to be combined in a single document. This was identified as a limiting factor several years ago in CDA's UKOilandGasData system, which CDA addressed, prior to the first NDR being established.
- Being able to assign more than one classification category to a document or other item is considered vital to effective and granular classification of the NDR collection.
- We are pleased to confirm that multiple codes will be able to be assigned to classify records such that their contents are more easily discoverable and reporting compliance can be more readily demonstrated.

UG2-6 How and where do you edit metadata?

- Metadata such as the information describing a wellbore, licence or any other primary "entity" in the NDR will ordinarily be managed in and sourced from an OGA "System of Record".
- Hence the NDR will not have a version of the Well Header rather it will refer to a "view" of the Well Header that is maintained in the Digital Energy Platform. An exception is the summary information for seismic surveys that will be managed in the NDR by the OGA, for the time being.
- By establishing and developing the Digital Energy Platform, the OGA intends to optimise the
 management of information that is generated in OGA Systems or reported to the OGA. The
 philosophy is that, wherever possible, reference data should only be created once, managed in
 one instance and referred to as the single version of the truth. OGA Systems of Record are
 established through award and management of licences, consenting and operating procedures
 (wellbores, pipelines etc.). With recent investment and focus we have integrated our procedures
 around the inputs and outputs of these systems.
- For example, the ID from a Production Licence and the Regulatory Completion Date of a
 wellbore are key reference metadata that the NDR will use to determine the normal disclosure
 date for licence information that is loaded to a wellbore record in the NDR. Licence metadata is
 created and maintained via "PEARS", whereas Wellbore metadata is created and maintained
 via "WONS" both Energy Portal applications that, along with the NDR, reside within the Digital
 Energy Platform.
- PEARS and WONS generated metadata are written to central OGA Systems of Record that are
 then served out to other applications (such as the NDR) and published to general public users
 via the OGA Data Centre. The future intent is to receive and manager Summary Infrastructure
 Information (i.e. headers) through a dedicated facility, and for that information to be served out
 to the NDR as a reference data set, just as the Licence and Wellbore Systems of Record are,
 and ultimately, a Seismic survey SoR will be.



UG2-10 Will operators be expected to re-assign documents to the new CS8 codes i.e Drilling Cement reports to the new DRILL CEMENT?

- There is no current intention to require owners of information to reclassify legacy information new codes.
- The OGA's aim is to automate the classification of content. Ideally our systems would have the ability to detect a drilling cement report and correctly classify that item.
- Newly reported items should have the appropriate classification applied the time of reporting.

UG2-16 When will the new CS8 guidance be published and when will it take effect?

- An updated list of CS8 codes for well data classification has been devised and agreed by an ISC SIG Task Finish Group, in collaboration with the OGA, and is available for reference within the User Information section of the current NDR Information Page.
- These codes are familiar to many users and are the principal classification method for legacy content. The codes will be maintained in the new NDR platform as "classification tags" - they will be added to and they will evolve according to usability demands.
- The current NDR service is in Read Only mode as we approach the end of the current service, so these new codes cannot be assigned to existing NDR items, however the updates have been included in our system design for the new system, so regulatory users can work on the basis that these codes will be available to them once they have access to the new NDR system.

UG2-23 Will operators be able to delete items, or re-upload a better quality image to an existing record?

- The NDR facilitates licensees in the discharge of their obligations to report certain licence information to the OGA. On the basis that all reported information is to be retained as a national asset, there will be no end user functionality that enables deletion of data.
- We expect that by controlling the quality of information at the point of entry, the requirements for amendment and or improvement will be reduced, however it is the case that current content can be conditioned and improved, and that licensees may identify data that can be superseded by higher quality or more up to date information. Authorised users will be able to add "better" data to the system.
- In exceptional circumstances, where incorrect data has been uploaded, system administrators
 will have the ability to modify and delete content, as we would expect from any system. These
 will be subject to review and approval of the OGA.
- We may include this as a topic for review at a future NDR User Group.



UG2-29 You mentioned that users looking for info for CCS research etc. yet the info we are most often asked for are reservoir models and yet still can't load those - as we discussed recently. Is there a plan for these data types to be loaded?

- The launch version of the new NDR, or "Minimum Viable Product" (MVP) of the new system will
 focus on enablement of the workflows that pertain to existing NDR content well information
 and seismic information.
- The OGA acknowledges the potential for the required reporting and disclosure of what is termed "Other Licence Information" in guidance, which can extend to subsurface data models and other operational data artefacts that are better associated to a Licence, Field, Installation of infrastructure etc.
- When tendering for the NDR service, the OGA asked respondents to factor into their proposals the mechanisms for input and output for "other licence information". Users should consider the development of reporting and disclosure workflows to support "other licence information" as potential developments, that can be included in the design and build according to specifications from an NDR User Group TFG. However, this is addressed, any design should take into account the potential for information to be extracted from proprietary software into generic and universally accessible formats.
- The value to CCS research of subsurface geomodels and reservoir models is appreciated. We will return to this topic following the stabilistation of systems and services.

UG Form – 8 For 2D Seismic Surveys where there is no NAV loaded to the trace headers, will this be carried out by Moveout Data Seismic Services as a routine value added exercise? For 2D and 3D Seismic Surveys with Seismic Velocity datasets in Ascii, will there be a means to request the same dataset in SEGY? For wells with no JWL, will they be carried out as a routine value added exercise?

- Routine value adding exercises are not included in the baseline service contract for the NDR.
- Conditioning of data to improve its usability will of course create value, however as yet we
 haven't taken the opportunity to review data for issues such as trace headers without
 navigation. The OGA has established arrangements with a range of very able service providers,
 whose skill sets are complimentary to one another. The combined competencies will be
 leveraged on a targeted project basis to tackle areas of improvement in data.
- There is no current plan to introduce a SEGY export option for VSP data that has been reported in ASCII format.
- There are no plans to routinely create Joined Well Logs from the reported information. From time to time the OGA has invested in joined digital well log products, on a regional basis in support of licensing rounds and other strategic exercises. Should such data be procured in future exercises they will be loaded to the respective wellbores in the NDR.



Discovery 30-6 - 27 Are historical CS8 codes remained with associated file?

• Yes – please refer to <u>UG2-16 When will the new CS8 guidance be published and when will it take</u> effect?

Quality

FAQ-4.6.21-6 What quality criteria will the OGA apply to reported data?

- The format, and quality of data reported in the new system will be aligned with that of guidance that has been published for many years. We intend to improve the quality and consistency of information in the NDR by ensuring that users cannot upload non-compliant information.
- The previous service did not constrain uploaded information to required formats and standards.
 Consequently, some of the information in the NDR does not meet the required reporting criteria.
- The new service will check before data is loaded to verify, for example, that where it is stated as
 a requirement, in guidance, all documents are reported in machine readable PDF format.
 Similarly, post-stack seismic must be in a compliant SEG-Y format, ASCII format for log files
 and other tabular information, etc.
- Any attempt to load data, that does not comply with the predetermined formats set out in guidance will result in rejection of upload for that item.

CDA-9 Do quality criteria include seismic headers? If so – is there a means to validate headers without uploading all trace data? I am keen to minimise the number of potentially lengthy uploads required, and to avoid the circumstance that I must upload the data multiple times, depending on the nature of the rejection received.

• Seismic header quality will be assessed prior to upload. Data upload will only be possible where the data headers are compliant with the published data submission standards.

UG2-37 Is there a way for the end users to see which items up on the new NDR didn't pass the quality filters (so these can be resolved, and the data then classed as submitted in the correct form and manner)?



- The quality status of the migrated NDR collection is such that it has not been possible to apply quality checks during the migration procedure.
- The OGA is committed to improving standards in the NDR collection. Future projects will
 address various aspects of data quality. Conducting further analysis of the collection once we
 have completed the roll out of the new service will be necessary. This may present the
 opportunity to classify data in terms of quality assurance.

Reporting & QC

FAQ-4.6.21-1 Are there any charges for reporting data to the NDR?

- Regulatory users can fulfil their obligations to upload reportable information via the NDR web interface using self-service workflows.
- The OGA is making the most of advances in technology to reduce barriers to the timely reporting of data.
- The legacy process enabled self-service reporting of smaller sized files (documents, well logs, etc.) but all seismic trace data was loaded by the NDR service team, from disk or tape that had been created specifically for this purpose, with all time and materials costs being met by the reporting organisation.
- Now all reportable information, including seismic trace data, can be uploaded online, using self-service workflows. This cuts out the additional costs to data owners, who no longer need to have data transcribed to new "single use" media and dispatched to be loaded to the NDR.
- However, there is still the option to submit data on media to the service team, for those who prefer to do so. Charges will be applicable where reporters choose to use these services.

FAQ-4.6.21-4 When reporting seismic trace data, am I required to submit two copies on physical media?

- No, there is no need to create and submit duplicates of reportable seismic. If you choose to submit data on media rather than self-service upload, only one copy should be submitted.
- All reported data will be loaded to the OGA's resilient, duplicated cloud services.
- The previous practice provided a resilient archive by taking two copies on high density tape, retaining one copy in Aberdeen and the other in Gatwick, providing a geographically separated, duplicated and recoverable offline archive to resort to in the event of any major incident.



 The new approach, which involves duplicated uploads to OGA's cloud services, follows a similar rationale – although there will be no persistent portable media – the data will be online, and any media involved in its delivery to the NDR will be a temporary artefact.

FAQ-4.6.21-5 Will I have to change what I report to the National Data Repository?

- The information you are required to upload for reporting purposes will not change.
- Some additional classification tags will be available for better identification of content, and compliance with required formats for data will be managed at the point of entry.
- Currently, the information you are required to report is set out in guidance for the reporting of
 information, and samples under the Energy Act 2016 and PON9 for licence data acquired under
 licences issued prior the regulations coming into force in 2018.
- These requirements don't change in the new NDR. Generally, the required form and manner, does not change either, unless we have identified ways to make reporting easier, such as enabling online reporting for all data types.

FAQ-4.6.21-8 What happens to physical media after it is submitted to report data?

- Magnetic tapes and portable USB drives that are submitted to the NDR when reporting large volumes of seismic data, will be deemed to have become the property of the OGA.
- The current service operates a similar model whereby submitted media is not routinely returned to the reporting organisation.
- When information is submitted on media, the data will be extracted and uploaded to the NDR cloud services. The media will then either be cleared of information and repurposed or destroyed using an environmentally safe method.
- No physical media will be retained by the NDR as a permanent archive.

FAQ-4.6.21-9 Do I know that my data is safe after I have reported it? How is it backed up?

- All data that is loaded to the NDR will be stored in duplicate across two separate cloud services building a high degree of resilience into the system for data recovery purposes.
- Reported information is principally stored in a Microsoft Azure cloud subscription, that is
 dedicated to the NDR. As it is loaded, each item is simultaneously loaded to a dedicated
 Amazon Web Services (AWS) cloud subscription. Controls are in place to compare the content
 in each cloud, confirming they are consistent with one another.
- Should any unforeseen event, disable either one of the cloud services, whether that is a physical "force majeure" event, a malicious attack, or other unexpected event. An accessible



copy of the entire NDR archive will remain in the alternate cloud service, which itself has inherent resilience.

CDA-14 The current NDR service returns my USB media to me for re-use once data loading is complete. Why is this changing in NDRv2?

- Reportable information that is available digitally should, by default, be submitted online and free
 of charge.
- Reporting organisations may, at their discretion, submit digital data on media to be handled by the Moveout team as part of the new service. A fee will be charged for this service.
- This service can also include handling charges to return media for reuse, should you wish to arrange it.

CDA-15 If the OGA is no longer retaining data on physical media, can you confirm for the record that operators can dispose of their physical media copies also, after the data has been submitted?

- The requirement to retain licence information states that the information should be retained in a state that is readily recoverable and reportable to the OGA. No stipulation is made as to the storage medium that licensees must use for the retention of such information.
- For information that relates to the Energy Act 2016, the Regulations state that, in most cases, where information or samples have been provided to the OGA in accordance with a notice issued by the OGA under section 34 of the Energy Act 2016, the obligation to retain that information will end. Similar provisions are made in PON9, which is applicable to information acquired prior to the Energy Act 2016 regulations coming into force.
- Once data has been reported to the OGA, in line with the form and manner set out in guidance, reporting organisations are entitled to make their own decisions about management of their information assets.

UG2-7 Given the relatively poor quality of the data across wellbores, seismic & infrastructure, what is the OGA strategy for driving it up? Is there a data quality improvement project in existence/planned, for example?

- The OGA has operational procedures, active projects and future intent to improve both quality and compliance across all aspects reportable licence information
- For wellbores that have been completed since 2016, we routinely monitor compliance in relation
 to 11 types of licence information that are required to be reported to the NDR. Further to the
 NDR content, 7 metadata attributes that are managed via WONS are also routinely overseen.
 The scope of monitoring is set to expand as the NDR content is further integrated into the
 Digital Energy Platform and the capability to objectively measure compliance improves.



- By and large, the information in question is created or acquire by and owned by licensees and
 others in industry, who are therefore best placed to provide the right information. More effective
 monitoring and intervention by the OGA has prompted a positive response from industry that
 has led to several improvements including corrected assignment of 'ownership' of over 500
 wellbores, and inconsistencies in the reporting of infrastructure information.
- Data Quality Management is almost by definition never completed, and there are certainly many areas for improvement in the completeness and quality of NDR data, as well as in other OGA Systems. With the OGA Strategy as the guiding principal for our priorities and the engagement with users of OGA services through channels such as the NDR User Group, we will identify further areas for improvement and the make the case for investment.
- Having recently appointed several expert service providers to augment the OGA team in the delivery of improvements in data quality, we expect to establish and deliver improvement plans that can and will be communicated in due course.

UG2-8 What happens with historic well data, deemed to be poor quality?

Please refer to <u>UG2-7 (above)</u>.

UG2-11 Can a 3rd party load data to a well on behalf of a company with an account not registered to the owning company domain?

- A third-party user, with a username/email address relating to a domain other than that of the Company, may be granted a role by the Company Administrator that entitles them to conduct data upload as a "Data Manager" for that company.
- The granting, associated activities and revoking of this role is the responsibility of the Company Administrator.

UG2-12 It was mentioned that Osokey had to switch off rules when loading some seismic. Will Osokey contact the relevant data owners to discuss the issues encountered?

- It is more fitting to state that, had the quality criteria intended for the system been applied, many items would have been rejected by ingress routines.
- Importing over 800,000 files of varying standards and often unexpected formatting has proved
 challenging in itself. Given the constraints of the project and the fair expectation of continuity of
 services, it has not been practically possible to track and report on the instances of "good" and
 "bad" data. Rather we are focused on reestablishing the legacy NDR collection in the future
 system, such that future monitoring and improvement may be carried out in the new system.
- Osokey will certainly have a role to play in facilitating analysis and reporting of compliance with published standards for reported information, however it will be for the OGA to contact those responsible for reporting the data to discuss potential improvements.



UG2-32 Will seismic field data be accepted automatically with new NDR?

- The move to cloud-based storage enables a significant change in position for the OGA. Previously the 'elective' reporting of legacy seismic field data was not permitted.
- Now with scalable storage capacity at our disposal, and interest from across the NDR user community that has demonstrated a clear need for access to legacy field data, for the purposes of reprocessing, the OGA actively encourages licensees to report all legacy seismic information to the new NDR.
- In the past, reporting any seismic data required OGA approval. This will no longer be required, so any licensees wishing to upload their legacy data may do so. Any data that is successfully loaded to the NDR will be considered to have been reported.

Discovery 30-6 - 7 Do we since have the Missing Data Request (MDR) functionality in NDR v2?

 The OGA is working on a definition of a common MDR workflow that can be applicable to all reportable information. This is to combine, for example, well and seismic information in one process, and seismic from both exploration and production licences (otherwise known as commercial and proprietary seismic, respectively). Osokey will complete the development shortly, based on the OGA definition.



Compliance

UG2-33 Are OGA actively checking compliance for submission of SPEC seismic datasets that are now released?

- Routine reporting of seismic data was not a requirement for "pre-2018" survey's; since January 2018 when the Energy Act 2016 regulations for information retention and reporting came into force, routine reporting of certain data sets in response to a s.34 notice has been required.
- The common practice since the NDR was first launched in early 2019 has been for legacy seismic data to be reported as and when NDR users have requested access to it. Commercial seismic data (often called "Speculative" or "Spec" data) has not previously been included within the scope of NDR services.
- Reporting obligations are applicable to geophysical data acquired on both offshore Exploration
 and offshore Production licences. The OGA can require seismic to be reported, for the purposes
 of disclosure, regardless of the type of licence it has been acquired in relation to. The required
 period for confidential retention by the OGA prior to disclosure, via the NDR or otherwise, varies
 according to the licence type and the date of acquisition. Reporting and Disclosure Guidance
 sets out the retention periods. These have been summarised for ease of reading here:
 https://www.ogauthority.co.uk/data-centre/national-data-repository-ndr/reporting-and-disclosure-of-information/
- All licensees are expected to respond to OGA requests to report information in the manner set out in the applicable guidance document.



Network / Application

FAQ-4.6.21-12 Will the current NDR API be available in the new system?

- Web services and automated functionality from the current NDR will cease permanently at the end of June 2021. A complete technology swap out means this service will no longer be available.
- We are revisiting the requirement for automated access with a range of users who have varied
 use cases for web service style connectivity. Fit for purpose, automated services are the
 backbone of the new NDR, and this will extend to external, machine to machine, secure
 connectivity.
- An NDR Task Finish Group will determine the user requirement as an early NDR development.

FAQ-4.6.21-15 Will Secure FTP continue to be an option for data download?

- The capability to download large data sets, that is enabled on the existing system will be a standard feature of the new system.
- Secure FTP will not be included in the technical solution meaning no client application will be required to be installed on the user systems. All future downloads will be enabled through a modern "Chromium" browser.

FAQ-4.6.21-16 What is meant by "chromium" browser? Do I have to use Google Chrome?

- The NDR will be accessible through a wide range of modern and "standard issue" browsers.
- Chromium is open-source software development framework, while Google Chrome is a
 proprietary software. The Chromium framework is principally maintained by Google, however
 there several modern web browsers that have been developed using the framework, which
 include Google Chrome, Microsoft Edge and Opera.
- Microsoft's Internet Explorer, Apple's Safari and Firefox browsers are not developed on the Chromium framework and as such are not recommended for accessing the future NDR.

CDA-19 Apple's Safari browser isn't based on Chromium. Could you confirm if it may be used with NDRv2?

- The recommendation is that a Chromium browser is used to access the NDR. Users accessing with a non-Chromium browser may find that some functionality is not supported.
- For comments on Chromium browsers, please refer to FAQ-4.6.21-16 (below)



UG2-20 Will the OGA/Osokey provide the web address/IP details for the NDR v2 download server prior to launch? This will allow company IT departments to proactively add firewall rules etc. to allow the download of data.

- DNS settings for the new system will resolve to the same sub domain that is used by the existing service, https://ndr.ogauthority.co.uk
- The handover from the existing to the future service will be managed at the end of June 2021.
- If you require any additional information, please contact <a href="mailto:ndecomparison-ndecompari

UG2-25 Aware it's been asked in other forums, but when will API connection to v2 be possible?

• Please refer to FAQ-4.6.21-12 (above).

Discovery 30-6 - 16 Typically when a new well in 'our patch' is released, we would download all available material via the old CDA FTP. Is there going to be a size limit issue doing this on the new NDR system?

 The new system is designed to enable download of greater volumes of data per session than the previous service. FTP will not be included in the design, however a comparable service will be in place to manage large mutli-file downloads.

Discovery 30-6 - 17 Is it possible to pick up downloads from SFTP?

Please see: <u>Discovery 30-6 - 34 Secure FTP access for downloads would help particularly for larger packages</u>, allowing ongoing browsing during the download or a separate scheduled ftp session.

Discovery 30-6 - 23 Can we create customised reports like for NDR, where we could have for instance a query always ready to let us know which new final deviation surveys, checkshots and JWLs had been added in that month?

 This functionality will not be in place from the beginning of services, but we'd be interested to know more about this and other requirements that can make repeated actions more straightforward for all users. Please let us know more about your requirement via the NDR User Group feedback form. https://forms.office.com/r/E6ufMZcXat



Discovery 30-6 - 24 Will it be the same URL to access the NDR?

- Yes, the NDR will be hosted from the same sub-domain; https://ndr.ogauthority.co.uk/
- DNS records have been reconfigured as of 17:00 on 30.06.21 to resolve to the new service.
- Please ensure that any saved settings and shortcuts etc. in your browser are refreshed for instance the URL to the previous landing page (below) will no longer be accessible: https://ndr.ogauthority.co.uk/dp/controller/PLEASE_LOGIN_PAGE

Discovery 30-6 - 26 Will filters and map preferences etc save for your next login session?

 This functionality will not be in place from the beginning of services, but we'd be interested to know more about this and other requirements that can make repeated actions more straightforward for all users. Please let us know more about your requirement via the NDR User Group feedback form. https://forms.office.com/r/E6ufMZcXat

Discovery 30-6 - 31 How long are download session baskets kept live on the NDR system to be downloaded at a later date?

 Session baskets will remain available for 10 days. A user may return to initiate the download of a basket from a previous session at any time in the 10-day period.

Discovery 30-6 - 32 Can you create alerts say, for when new data is uploaded for a particular well, field etc? / Can you get notification if new data added?

 This functionality will not be in place from the beginning of services, but we'd be interested to know more about this and other requirements that can make repeated actions more straightforward for all users. Please let us know more about your requirement via the NDR User Group feedback form. https://forms.office.com/r/E6ufMZcXat

Discovery 30-6 - 34 Secure FTP access for downloads would help particularly for larger packages, allowing ongoing browsing during the download or a separate scheduled ftp session.

 Please see: <u>Discovery 30-6 - 16 Typically when a new well in 'our patch' is released, we would</u> download all available material via the old CDA FTP. Is there going to be a size limit issue doing this on the new NDR system?



Help & Training

FAQ-4.6.21-21 Will training be provided to the licensees?

- The NDR service will provide targeted training for Regulatory Users.
- This will include sessions forthe administration of user accounts by company, administrators, and sessions dedicated to assist and train users in standard workflows such as navigation of the system, searching for and visualising data, downloading data etc. and specialised sessions for data loading of seismic and well data.
- Recorded training materials will be provided for those who cannot attend the scheduled sessions, and the incoming support services will be available to assist regulatory users through various communication channels.
- In good time this will be extended to Public Users to support their familiarisation with the new system.
- UG2-3 Will there be a manned help desk to call?

UG2-15 Will a suite of video guides be available?

• Where there are common themes arising that can be readily demonstrated these may include short video "explainers" as a complement to other self-service support materials.

UG2-18 Training/onboarding for data loaders?

- Effective use of the new system is clearly a high priority for all of us. Whereas you should expect much of the functionality to be intuitive to any user familiar with the current NDR service, and systems of that nature, there will of course be differences that user will need to familiarise with.
- Training will include:

Specifically for nominated Administrators: :
User Account and Company Access Management

All users:

General system navigation and familiarisation - all users Data download and data ordering procedures - all users

Specifically for those with Data Manager role and privileges:

Wellbore information reporting and management Seismic information reporting and management (including "on media")
Field seismic information reporting and management (including "on media")



- We will be contacting licensees (current and former, that are assigned as owners of information)
 to request that individuals in their organisation are nominated to attend training events that will
 address specific areas of NDR functionality.
- Sessions will be recorded and made available for review via the OGA NDR web pages.

Discovery 30-6 - 2 Is there a User Guide document? Or different guides for the different workflows?

- Yes, User Guides and Getting Started videos, along with reference materials for User permissions, Account administration, How to report information and How to download information, will be available in the Support section in the NDR.
- User Guides and Workflow Guides will be added to over time.

Continuous Improvement

FAQ-4.6.21-19 How do I provide feedback or enhancement requests to the OGA?

- The OGA shall provide a feedback mechanism to users prior to launch in July 2021
- Feedback should be given directly to the OGA via this mechanism, so it can be discussed by the NDR User Group.
- https://forms.office.com/r/E6ufMZcXat



Payments

FAQ-4.6.21-2 How will I pay for discretionary services in the new NDR?

- Users who use discretionary services via the NDR that have associated charges may do so via a PSP service within the system.
- All in-application services will be delivered by the OGA's service partner, Osokey Ltd.
- Previously the service provider offered similar services, at published rates, agreed by the OGA, that could be arranged through the application.
- A broadly similar service is offered, although the rates and certain services have necessarily changed.

CDA-1 You reference charges to load data from media, order data on media, and to increase the download limit. Can you share what the cost of these services will be?

 Osokey's current schedule of charges for discretionary services, provided via the NDR, are available from the NDR User Group page of the OGA website.

https://www.ogauthority.co.uk/data-centre/national-data-repository-ndr/ndr-user-group/

• This schedule has been approved by the OGA; charges may be changed from time to time.

CDA-2 My organisation only allows payment by PO / invoice. Will this be possible in the NDR PSP?

- Yes, it will be possible to arrange payment of an invoice, please contact Osokey via info@osokey.com if you would like to ensure that arrangements are in place, in your organisation, prior to the launch of the new system.
- This may involve obtaining details from Osokey, to establish the company as a supplier to your organisation in your corporate procurement systems and processes.

CDA-3 If payment by invoice is allowed, will services be delivered on submission of the PO, or will Osokey wait for cleared funds before providing the services, as is the case with the current provider?

- In line with financial transactions for all public sector services, activities will commence once payment has been received.
- A faster turnaround will be available to users that can take advantage of the in-application payment system.



UG2-28 What will the Moveout cost of transcription be?

Please refer to CDA-1 You reference charges to load data from media, order data on media, and to increase the download limit. Can you share what the cost of these services will be?



General

FAQ-4.6.21-10 When will licensees have access to the NDR?

- The OGA intends to launch the NDR to licensees on the 1st of July 2021.
- All current licensees and other owners of information that is held in the NDR have been invited
 to appoint an Administrator in the new system for their company group. In a similar way to the
 approach when creating the first NDR service, appointed administrators will be able to create
 accounts for their colleagues. Alternatively, non-administrator users can create their own
 account, and their administrator can approve their inclusion in the relevant company group.
- By using corporate email addresses as NDR usernames, we will enable automated allocation of valid users to companies. Although controls will still be in place to giving discretion to the administrator.
- Regulatory Users will have access to the NDR for about four weeks during July, before the
 system is made available to Public Users. This priority access period will enable regulatory
 users to familiarise with the system, become accustomed to workflows and validate for
 themselves, the content that has been migrated to the new NDR system.
- We consider this an important opportunity for regulatory users to make use of the system, and our support services.

FAQ-4.6.21-11 What is the beta period before launch for familiarisation and user acceptance testing?

- Users of particular workflows will be invited to participate in user acceptance testing prior to launch. Several components are about to be made available for UAT. We do not intend all functionality to be available on the industry launch date of July 1st. Components will be developed using Agile methodology, and based on user requirements, gathered in focused Task Finish Groups, shortly after launch.
- Task Finish Groups will be proposed by the NDR User Group and endorsed by the OGA Digital Energy Platform Advisory Committee (DEPAC).

FAQ-4.6.21-13 Will headings, format and content of reports be different in the new system?

Default report headings, format and content will be different within the new system.

FAQ-4.6.21-14 Can the list of CS8 codes for the new system be shared?



- An updated list of CS8 codes for well data classification has been devised and agreed by an ISC SIG Task Finish Group, in collaboration with the OGA.
- The updated codes will be published on the current NDR platform by the week of the 7th June 2021.
- The codes will be maintained in the new system and will be referred to as data classification tags.
- Classification tags will extend to seismic data, and subsequently to other licence data types that may be reported to the OGA via the NDR.

FAQ-4.6.21-18 Will data be transferred from the current to the future NDR? Will any data be excluded?

- The transfer of legacy data to the new NDR service includes all "licence data" that includes data that has been acquired in relation to offshore petroleum licences and reported or otherwise uploaded to the NDR by Regulatory Users.
- OGA data packages will not be transferred to the new system. These are either available separately through the OGA Data Centre, or they replicate data that is already available as disclosed NDR content.
- The OGA has identified several documents that are classified as "Data Licence and Trade Agreements" – these documents are Seismic Data Release Agreements (SDRAs), contractual documents that played a role in granting access to proprietary data in UKOilandGasData, the service that preceded the current NDR.
- The OGA does not consider it appropriate to include these documents in the future NDR the OGA does not assume right of access to these items, and they are not disclosable information.
- Authorised users may wish to download a copy of any such documents before the current service is retired at the end of June.

https://www.ogauthority.co.uk/data-centre/

UG2-26 How does the OGA look to balance the increased scrutiny of seismic data over other data concerns. i.e. Infrastructure, Well etc.?

- The OGA has commissioned an NDR service that can respond to the demand and expectation
 of a userbase that intends to obtain and reuse seismic data at a scale that was not previously
 achievable. This is expected to lead to an increase in the volume of requests for data to be
 reported to the NDR, and for the requested data to include original format data for the purposes
 of reprocessing.
- Rather than any shift in the expectations that data should be retained in a standardised format, and that the data is readily accessible and reportable to the OGA, the requirements set out in guidance for retention and reporting of information will remain generally as they have been.



We expect to engage industry to work on specific improvement projects, whether that involves
data conditioning, completeness of reporting or otherwise. The standard approach is to specify
a timeframe in which the OGA expects various actions from data owners to be completed. If
certain organisations find the tasks or timeframes a challenge, versus their other commitments,
the OGA encourages direct and open communications, to help us to help you with a solution or
prioritisation of work.

UG2-31 Will reporting deadlines be extended to allow time for training / understanding of new system?

- Rather than extending periods in which the OGA requires information to be reported, the OGA
 encourages licensees that expect to be reporting information in the initial period of operation of
 the new system to have any reportable information prepared and ready to be uploaded.
- Preparedness includes taking the opportunity that reports and datasets are formatted appropriately, with reference to the relevant reporting guidance.
- In April, prior to the current system being restricted to "Read Only" mode, the OGA contacted ISC's for some 30 licensees whose organisations would ordinarily have been expected to report certain data to the NDR, before the launch of the new system. The position remains as it was then, that no organisation will be penalised for reporting late as a result of circumstances created by the change in system.
- The OGA intends that the relaunched NDR is a success for all users; please do make contact
 with us to set out any concerns that you may have, or requests for assistance in reporting data
 to the new system. We will be ready to assist you for as long as it takes to establish regular
 operations.

Discovery 30-6 - 1 It will be great if the OGA can send to all the ISCs a report of what each company has before in NDR v1 and after migration into the NDR v2. This will enhance the regulatory and gcing processes.

- Please contact the OGA directly to request listings of the information owned by your organisation in the original NDR system.
- Listings will be reflective of the status of Company data when the service was put in Read Only mode in mid-May 2021.

Discovery 30-6 - 28 Can users still have access to the NDR v1 while running the NDR v2 till Sept?

 No. The new NDR will be released on July 1st 2021 at which time the previous version will no longer be available.