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NRL Onboarding Guide for Providers / Consumers using Direct API Integration

Document Management

Revision History

|  |  |  |
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Glossary of Terms

|  |  |
| --- | --- |
| Term / Abbreviation | What it stands for |
| DBS | Demographics Batch Service |
| DSA | Data Sharing Arrangement |
| DSPT | Data Security Protection Toolkit |
| EUO | End User Organisation |
| INT | Integration |
| IWG | Interoperability Working Group |
| LCHR | Local Care Health Record |
| NEMS | National Event Management Service |
| NRL | National Record Locator |
| NSD | National Service Desk |
| ODS | Organisation Data Set |
| ODS | Organisation Data Set |
| PTL | Path to Live |
| SCAL | Supplier Conformance Assessment List |
| SMSP PDS | Spine Mini Service Provider Person Demographic Service |
| SSP | Spine Secure Proxy |
| TKW | Toolkit Workbench |
| Consumer | Role fulfilling the position of an end user retrieving the pointer information |
| Provider | Role of an organisation providing records and pointers on the NRL |

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# Summary and Document Purpose

This guide is aimed at new **providers** looking to integrate to the NRL (National Record Locator), such as NHS Trusts and LHCRs.

It also provides guidance for a new **consumer** wishing to connect to the NRL from their own system via direct API integration.

Existing suppliers looking for incident resolution support should refer to the National Service Desk for assistance (See [Post Implementation](#_Post_Implementation) for information)

Certain sections of the guide are only relevant to **Consumers** and some to **Providers**. Where this applies, the section will be clearly indicated with **red text**.

**Note:** For organisations wishing to consume from the NRL via the SCRa, please see [*NRL Onboarding Guide for SCRa-only Consumers*](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/NRL%20Onboarding%20Guide%20for%20SCRa-only%20Consumers.docx).

The onboarding guide provides supporting links, reference material, related guidance and contact details for each step, as necessary.

**Note:** If an end user organisation (the customer) is developing an in-house solution for deployment, they are both Supplier and EUO (End User Organisation) and must complete all the required onboarding steps in both capacities.

# Introduction to NRL

For an introduction to NRL, please see the [NRL website](https://digital.nhs.uk/services/national-record-locator) and the presentation [Introduction to the NRL](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/An%20Introduction%20to%20the%20National%20Record%20Locator.pptx).

# Applying to integrate with the NRL

As the NRL is a national data-sharing capability, governance and assurance controls exist to ensure only eligible health and social care organisations are approved to integrate/access the NRL.

These controls are in place to ensure that information sharing requests are kept in line with NHS Digital’s [information governance requirements](https://digital.nhs.uk/data-and-information/looking-after-information/data-security-and-information-governance).

Requests to integrate with or access the NRL are managed through the Interoperability Working Group (IWG) and are triggered by the submission of an Information Flow Request form (available via: [ls.iwg@nhs.net](mailto:ls.iwg@nhs.net)).

Requests are assessed by a multidisciplinary team with representation from the business, clinical safety, information governance and technical architecture to determine:

* Validity of the sharing request
* Necessity, proportionality, and lawful basis
* The organisation’s and its end user’s appropriateness for the sharing of the information

The current scope of the Working Group is the National Events Management Service (NEMS) and the National Record Locator (NRL) service, other capabilities and services may be brought under the remit of the Working Group in the future.

Upon approval at IWG the information sharing request is added to the [NRL Controller Catalogue](https://developer.nhs.uk/apis/nrl/overview_controller_catalogue.html).

The NRL Controller Catalogue provides a current and forward view of NRL providers and consumers. The purpose of the controller catalogue is to document the health and social care organisations authorised to share records using the National Record Locator (NRL).

# Pre-requisites

All pre-requisites are covered in detail within the SCAL/business requirements. However, key items have been summarised here to help connecting parties identify potential showstoppers at an early stage:

1. A valid ODS code is required for the connecting party (whether it be for a LHCR Shared Care Record or Trust).

To verify if your organisation is registered, please use the [ODS Portal](https://odsportal.hscic.gov.uk/Organisation/Search).

1. Consistent use of NHS number to identify patients. (A connecting party must be fulfilling their duties under the NHS Standard Contracts to use the NHS number as a 'consistent identifier')
2. The ability to verify NHS numbers via any of the following mechanisms:

* Full PDS Spine compliant system
* Spine Mini Service PDS (SMSP)
* Demographics Batch Service (DBS) (Providers Only)

**Note:** If your system achieves this via an indirect method (e.g. PAS), it is recommended to contact NHS Digital to confirm that the method is acceptable.

1. Previously a N3 or HSCN connection was always required when connecting to the NRL, but now a number of Spine services have been made available via the internet removing the need for an N3 or HSCN connection, so this is no longer a requirement for all systems connecting to the NRL.

Providers need to connect to the NRL service in order to manage their pointers, but also need to accept connections from the SSP to enable consumers to retrieve information. As both the NRL and the SSP are now available via the internet, providers are no longer required to have an N3 or HSCN connection.

Consumers need to interact with the NRL and the SSP, but also the SDS in order to look up the providers ASID as part of the end to end retrieval process. Currently the SDS is not available via the internet and therefore consumers wishing to use the end to end retrieval process, via the SSP, will still need to have an N3 or HSCN connection.

1. Providers sharing contact details (e.g. to their patient support team) via their pointers MUST:
   1. list contact details for the specific support team providing patient care on a publicly available website.
   2. have a dedicated team available to be contacted directly via telephone (as opposed to a general switchboard).
2. Consumers and providers should support PDF for unstructured retrieval. There is a restricted set of data formats allowed for NRL retrieval. Details of the requirements can be found on the [Retrieval formats webpage](https://developer.nhs.uk/apis/nrl/retrieval_formats.html).
3. A valid NHS Smartcard for all users **or** a system that uses an authentication method supported by NHS Identity (Consumer requirement only).

For more information about Smartcards, please see the [Smartcard authentication webpage](https://developer.nhs.uk/apis/spine-core/smartcards.html).

1. Your organisation must have completed the [DSPT (Data Security Protection Toolkit)](https://www.dsptoolkit.nhs.uk) within the last 12 months.
2. Connecting parties must have an appointed Clinical Safety Officer and undertake a Clinical Safety Assessment prior to going live.
3. All connecting parties must carry out Penetration Testing of their systems on an annual basis to [CHECK standards](https://www.ncsc.gov.uk/articles/check-fundamental-principles).

# Delivery Options / Approach (Providers Only)

New providers wishing to connect to the NRL have the following options:

1. **Pointers (with contact details) and Record Retrieval** – Providers will make their records available for direct retrieval by Consumers via the NHS Digital SSP (Spine Secure Proxy). The pointer will contain a link to a static web page (e.g. the contact details for a support team who are currently directly caring for the patient). This allows those users who may not have permissions to access the record (e.g. Administrators and Ambulance service frequent caller teams) to speak directly to the support team.
2. **Pointers (without contact details) and Record Retrieval** – Providers will make their records available for direct retrieval by Consumers via the NHS Digital SSP (Spine Secure Proxy). Used in circumstances where a support team is not available or contact details are not appropriate for the use case being delivered.
3. **Pointers (with contact details) Only** – Used in circumstances where record retrieval is not yet possible or is not appropriate for the use case being delivered. The pointer will contain a link to a static web page (e.g. the contact details for a support team who are currently directly caring for the patient).

The option chosen impacts which of the full set of requirements and tests need to be implemented. These can be found in Appendix 12.2 Business Requirements.

# Development Resources

## Technical Specification

All technical personnel looking to integrate with the NRL can make use of the technical specification using the NRL FHIR API (Fast Healthcare Interoperability Service, Application Programming Interface).

This **MUST** be read before attempting any development:

[Introduction to NRL FHIR® API](https://developer.nhs.uk/apis/nrl/)

## Online Reference Implementation

There are some online resources that can aid in early development against the NRL API specification:

[The NRL Reference Implementation UI](https://data.developer.nhs.uk/nrls-ri/index.html) has “GET”, “POST”, “PATCH” and “DELETE” features which provide example data sets allowing you to quickly run and review calls to, and responses from, the NRL Reference Implementation.

Clicking each of these features will expand to provide more details and then a “Try it out” button that will show you the example data.

When you are ready to connect to the reference implementation, use the following endpoint:

<https://data.developer.nhs.uk/nrls-ri/DocumentReference>

For quick start information and example data, please see the [NRL Reference Implementation quick-start guide](https://github.com/nhsconnect/nrls-reference-implementation/wiki/1.-Quick-Start-guide).

## Local Reference Implementation

The NRL reference tool is open source and can be downloaded, built and run locally. A benefit of this is that you can utilise your own data”.

To download the code and access the wiki for instructions and installation see the [NRL Reference Implementation Github repository](https://github.com/nhsconnect/nrls-reference-implementation).

Alternatively, if you are familiar with Docker you can utilise that to run a version of this tool locally within just a few minutes.

## Other Key Design Decisions (Providers Only)

Before the NHS Digital Solution Assurance Team can finalise your formal testing scope, you will need to confirm the following:

**Will you be implementing the Master Identifier or Logical ID?**

Please see the [Pointer Identity page](https://developer.nhs.uk/apis/nrl/pointer_fhir_resource.html#master-identifier) for further information.

**Note:** If you use the NRL-generated Logical ID thenyou need to store the pointer’s Logical ID that is returned in the HTTP location header in the response to a CREATE).

**Maintenance of pointers approach**

Following completion of bulk upload of pointers during the implementation, the supplier needs to decide the approach to add and maintain existing pointers.

Existing NRL suppliers manage this by one of the following approaches:

1. Nightly bulk maintenance job to create, supersede, update and delete pointers where required.
2. Real-time create, supersede, update and deletes as and when changes are made to patient’s records (e.g. care plans).

Please see the [NRL Provider Guidance](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/supportfolder/NRL%20Provider%20Guidance.pdf) for further information on pointer management.

Any alternative approaches should be discussed with the NRL team

# Testing and Technical Conformance

## Technical Conformance Testing Guidance

When ready to commence assurance activities, please contact the NRL team direct via [nrlnems@nhs.net](mailto:nrlnems@nhs.net) where the team will:

* Assess suitability for NRL (See section 4 for further information).
* Detail the required NRL Assurance stages to complete
* Ensure pre-requisites are met.
* Verify plans for development.
* Issue the latest version of the Supplier Conformance Assessment List (SCAL) that is tailored to reflect any previous conformance testing undertaken with NHS Digital.
* Issue “Scoped Test Cases” document that describes which tests within the SCAL are required to be undertaken, based upon the scope of your delivery.
* Refer you to our Solutions Assurance team to help guide you through test activities.

Please see the [NRL technical conformance testing guide](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/supportfolder/NRL%20Technical%20Conformance%20Testing%20Guidance.pdf), this provides information on where to access the test tools and is an **essential read** for all connecting parties:



## Business Requirements

The purpose of this document is to define the business requirements that need to be satisfied for Consumer and Provider systems wishing to connect and use NRL.



## Provider / Consumer Guidance

The NRL Provider and Consumer Guidance documents outline how to use the NRL from an operational perspective. Of key importance is the pointer lifecycle and its relationship with the patient journey. It is recommended that Consumers and Providers read both documents to obtain a holistic knowledge of the NRL.

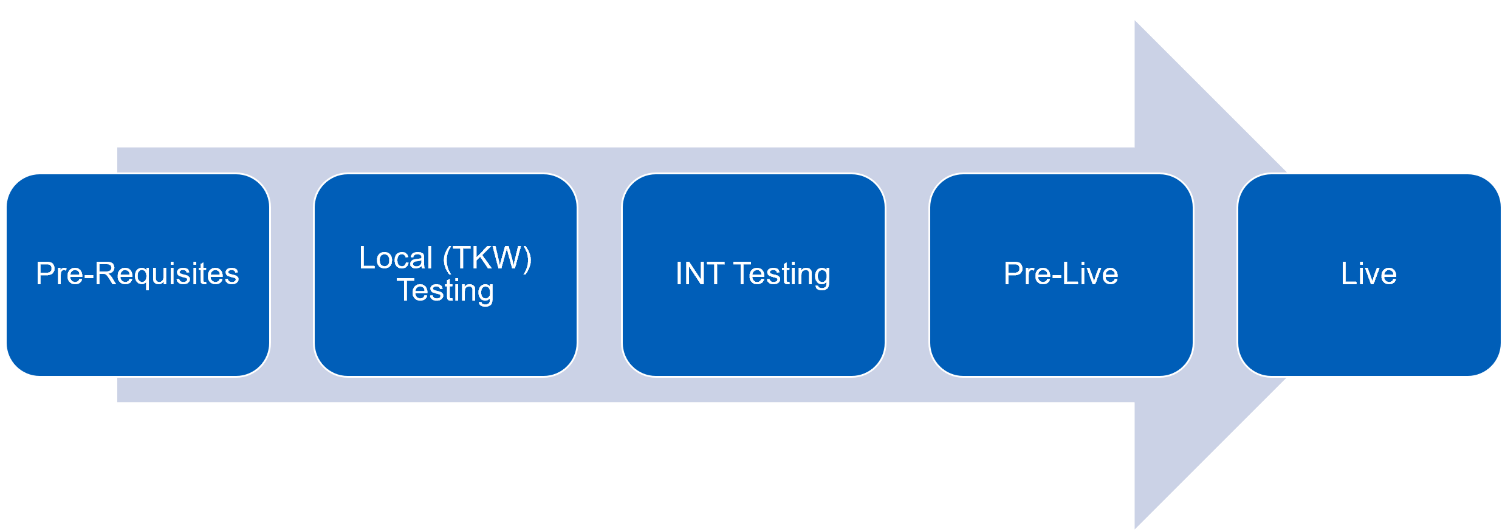
[Consumer Guidance](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/supportfolder/Consumer%20guidance.pdf)

[Provider Guidance](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/supportfolder/NRL%20Provider%20Guidance.pdf)

## NRL Assurance Stages

When an organisation begins onboarding development to NRL as a *provider* or *integrating consumer*, they will be required to carry out assurance and testing activities through the following stages:



**Pre-Requisites**

The team will verify that the organisation wishing to onboard to NRL meets the basic entry criteria to use the product, and will have received guidance from the Interoperability Working Group (IWG) to ensure that NRL is the appropriate route to provide the service (refer to section 4).

To use the service organisations MUST have most of these pre-requisites in place prior to starting development activities and have received approval from the IWG to proceed with NRL.

**Note:** The Developer site provides materials enabling organisation to begin local testing activities, but the NRL team can accept no responsibility in the event that permission to proceed with onboard with NRL is rejected.

Therefore, any activities carried out without meeting these requirements is the risk of the organisation.

**Local (Toolkit Workbench - TKW) Testing**

Following completion of pre-requisite activities, the team will grant authority to proceed to Local (TKW) Testing activities.

This involves working with the NHS Digital Solutions Assurance team who will provide access to test scripts and applications to perform TKW testing.

During this stage you will also receive a copy of the SCAL. Further guidance on completing this is available in section 8.4.2.

To proceed, the organisation will need to demonstrate they can validate messages against the TKW as per the NHS Digital Solutions Assurance team requirements.

**INT testing**

The NHS Digital INT Environment is a *sandbox* environment for testing the functionality to NRL and a pre-test to ensure that the organisations development is safe to use on the Live Spine environment.

Access to the INT environment will be setup prior to completing TKW activities to avoid delays. Details on requesting setup to INT can be found in section 8.3.

The organisation will continue working with the NHS Digital Solutions Assurance team executing the test system cases provided.

Once the Solutions Assurance team are satisfied the test requirements are met, a Technical Conformance Certificate (TCC) will be issued to confirm suitability for go-live.

Further updates are made to the SCAL in reflection of these activities.

**Pre-Live**

Before an organisation is granted access to a live environment they would be expected to sign:

* A Connection Agreement.
* Data Sharing Assessment (DSA).

**Note:** to avoid delays to go-live these agreements maybe provided earlier.

Upon receipt of the agreement the NRL team will request live connection and arrange a session with the supplier to carry out pipe-cleaning testing, to perform validation that the functionality is being performed correctly (see Section 9.4 for further information).

The organisation will also run through a Go-No Go Checklist with the NRL team to ensure all requirements have been met.

**Live**

With all assurance requirements complete, the organisation moves NRL into business as usual activities.

For further support while live please see section 10.

**Note:** For an approximate guide on completing onboarding requirements to NRL, please see Appendix 11.1 Onboarding task checklist

## Connecting to the NHS Digital Integration (INT) Environment

It is recommended to start the process of connecting to the INT environment in advance of completion of TKW testing to ensure seamless progress without potential delays associated with connection issues.

Once the TKW has been submitted and verified by the Solution Assurance team, connecting parties will be able to proceed with testing on the NHS Digital INT environment which is the PTL (Path to Live) environment that hosts the instance of NRL most representative of the Live environment.

### Instructions for End Point Registration (EPR) in the INT environment

The following section provides the basic steps for connecting to the INT environment for the specific purpose of undertaking conformance testing with NRL.

Further information, including generic guidance to connect to the NHS Digital INT environment can be found on the [NHS Digital Integration Environments webpage](https://digital.nhs.uk/services/path-to-live-environments/integration-environment).

**Important:** when reading the above linked guidance, please note for the purposes of Conformance Testing with NRL:

* Requesting access to test data is not required for conformance testing with NRL **as a provider**, but can be provided on request.
* Test data will be provided for **integrating consumers**.

**Note:** To request test data contact testdata@nhs.net

* Whilst Smartcards are a requirement to consume NRL as a user in the Live environment, they are not necessarily required to complete conformance testing with the NRL in the INT environment. Similarly, Identity Agent client software is not necessarily required to complete conformance testing with the NRL in the INT environment.

Any questions or request for support should be addressed to the NHS Digital Platforms Support Desk: [platforms.supportdesk@nhs.net](mailto:platforms.supportdesk@nhs.net)

#### How to register for the INT environment

When you have completed the TKW test requirements the NRL team will instruct you to complete the following registration forms:

**Manufacture Product Version Registration Request:**

[NHS Digital Form Link – Manufacture Product Version Registration Request](https://digital.nhs.uk/forms/manufacturer-product-version-registration-request)

When completing the form provide your product name and version, organisation name and ODS code.

Also confirm which message sets you will be using:

|  |  |
| --- | --- |
| **Message Set** | **Description** |
| NRL Provider Core | Enables providers to publish pointers to the NRL index (create, supersede and delete) |
| NRL Provider Patch | Enables providers to update pointers on the NRL index |
| NRL Consumer Search | Enables consumers to search for pointers on the NRL index |
| NRL Consumer Read | Enables consumers to retrieve a single pointer by logical identifier from the NRL index |
| NRL SSP Retrieval | Enables consumers to retrieve records using the SSP as a proxy |
| NRL SSP Retrieval Providers | Enables providers to make records available for retrieval via the SSP |

**Note:** to test retrieval via the SSP in the INT environment, suppliers will need both *NRL SSP Retrieval* and *NRL SSP Retrieval Providers* message sets, regardless whether they are connecting as a Consumer or Provider

Consumers will also need to specify the Category Bag values that need to be added to their registered endpoint, as these are required as part of the access controls mechanism within the NRL. The category bag values requested need to conform to the following format:

*NRL\_POINTER\_TYPE:{Pointer\_Type}*

For example, if you are going to be consuming “Mental health crisis plan” pointers, you would need the following category bag value adding to your registered endpoint:

*NRL\_POINTER\_TYPE:736253002*

**Note:** Any system connecting to NRL via the internet, rather than using an N3 or HSCN connection, will also need to request the following category bag value is added to the registered endpoint:

*NETWORK:INTERNET*

**Combined endpoint and service registration request:**

[NHS Digital Form Link – Combined endpoint and service registration request](https://digital.nhs.uk/forms/combined-endpoint-and-service-registration-request)

**Note:** this step can be performed by the connecting parties EPR admin, if setup to manage own endpoints. Further information on this service can be found on the NHS Digital page [Integration Environment](https://digital.nhs.uk/services/path-to-live-environments/integration-environment).

To complete your End Point Registration to the Integration (INT) Sandpit Environment, please produce a Certificate Signing Request (CSR) containing the following details:

* Keylength: 2048
* CN (Common Name): ***your FQDN***
* Country Code: GB

All other details should be left blank.

**Note:** We have experienced problems in the past when creating a CSR using SSL Win-32 so it is recommended that SSL Win-64 is used. All certificates that are to be used to connect to the spine must have a distinguished name that contains a CN, or Common Name.

**Note:** If you are connecting via the internet rather than via an N3 or HSCN connection the certificate must be a SHA2 certificate.

**DNS request form for Path to Live environments:**

**[NHS Digital Form Link – DNS request form for Path to Live environments](https://digital.nhs.uk/forms/dns-request-form-for-path-to-live-environments)**

To complete registration of your Fully Qualified Domain Name (FQDN) with the NHS Digital DNS team provide your HSCN-facing IP address, (with an appropriately formatted test FQDN), so that it can be registered on the NHS Digital DNS.

**Note:** the following requirements for endpoints must be met:

* 1. The FQDN must end in nhs.uk
  2. Endpoints must be on port 443
  3. Endpoints must not include explicit port declarations (e.g. :443)

**Note:** If you are connecting via the internet rather than via an N3 or HSCN connection the FQDN must consist of 4 sections, e.g.

section1.section2.nhs.uk

#### Complete INT environment setup

**Configure Firewalls:**

Make sure firewalls allow appropriate inbound and outbound messages.

*Section 8.3.2 INT Environment Connection Details for NRL* can assist with completing this action.

**Complete Local Environment Setup:**

Once we have the CSR and the Service Registration has been completed, we will send you the Party Key, ASID and digital certificate to enable your connection to the INT environment for the final tests.

### INT Environment Connection Details for NRL

|  |  |  |
| --- | --- | --- |
| Component | Item | Value |
| NRL | URL | https://msg.int.spine2.ncrs.nhs.uk/STU3/DocumentReference |
| IP address | 10.239.14.26 |
| Port | 443 TCP |
| ASID[[1]](#footnote-2) | 200000000370 |
| Internet Gateway URL | https://msg.intspineservices.nhs.uk |
| SSP (Spine Secure Proxy) | URL | proxy.int.spine2.ncrs.nhs.uk |
| IP address | 10.239.14.31 |
| Port | 443 TCP |
| Internet Gateway URL | https://proxy.intspineservices.nhs.uk |
| LDAP[[2]](#footnote-3) | URL | ldap.nis1.national.ncrs.nhs.uk |
| IP address | 10.196.94.141 |
| Port | 636 TCP |
| Misc. | Spine Party Key | YES-0000806 |

Further information can be found on the [NHS Digital Path to Live environment webpage](https://digital.nhs.uk/services/path-to-live-environments).

## Onboarding Artefacts

There are 3 key artefacts that support Technical Conformance and the integration with NHS Digital Services.

### Supplier Conformance Assessment List (SCAL)

The SCAL replaces the TOM that was used for the initial NRL Beta in November 2018 and is issued when the supplier begins TKW testing.

Its purpose is to:

* Map all the requirements needed to interface with a specific service and the evidence required during technical conformance process and is Supplier/Product focussed.
* Log where a product meets the technical, Information Governance, Security and Clinical safety requirements in a technical and business context by the connecting party.
* Act as a ‘working document’ which is completed as the supplier carries out all the assurance activities. Therefore, it is recommended all connecting parties familiarise themselves with the requirements of the SCAL.

**Note:** The NRL is a generic capability provided by NHS Digital and is designed to be used as a tool to support multiple use cases (e.g. child health, end of life, mental health).

### Already completed a SCAL?

There are two approaches to completing this document, dependent on whether the organisation has already completed a SCAL for an NHS Digital product.

* *If the organisation has previously completed a SCAL for an NHS Digital product*: the organisation will need to **update** the *‘General’* and *‘Architecture’* tabs and **complete** the required NRL tabs (Consumer and/or Provider).
* *If the organisation has NOT completed a SCAL for an NHS Digital product*: the organisation will need to **complete** the *‘General’* and *‘Architecture’* tabs, **and** the required NRL tabs (Consumer and/or Provider).

The SCAL contains guidance to help populate the required information to complete assurance requirements for onboarding.

### Guidance to complete the SCAL

The SCAL contains guidance to support in its completion, but please see the following to support in it’s completion. additional information to help support its completion:

**Basic information**

Please ensure all basic information on the SCAL is completed, this helps with the cataloguing of progress and gives a clear point of contact should the NRL team have queries about the SCAL submission.

**Yes/No requirements**

When completing the SCAL it will request assurances of meeting requirements (as detailed in Section 5 – Prerequisites). Where a ‘Yes’ is recorded, further information is not required. If the response is ‘No’ then further information is needed for us to assess and agree a way forward.

**Additional information**

Ensure to complete all additional requested steps such as Service Desk Registration and embed additional requested information

**Test requirements**

During the technical conformance work with the Solution Assurance team to validate requirements conformance, provide evidence where required and continue to log progress in SCAL.

**Completing the SCAL**

Once the SCAL is complete it will undergo review by the NRL and Solution Assurance team.

Please submit this to: [nrlnems.ls@nhs.net](mailto:nrlnems.ls@nhs.net).

The Solutions Assurance team will issue a Technical Conformance Certificate to confirm that requirements have been satisfied. This MUST be embedded into the SCAL, updating the section requesting the TCC issue date.

**Note:** because the SCAL is a working document, it will be updated throughout the assurance stages to reflect testing activities and evidence completed, though the NRL team will provide assessments as the documentation progresses.

### Connection Agreement

The Connection Agreement is formed between the supplier (as the connecting party) and NHS Digital. It comprises of a standard set of terms and conditions for any party connecting to NHS Digital systems, accompanied by a special set of terms directly relating to the NRL service. It links to the SCAL and exists as an agreement for the duration of the connection to the service.

The Connection Agreement only needs to be completed by the organisation directly connecting to NHS Digital systems and the latest version can be obtained from [nrlnems.ls@nhs.net](mailto:nrlnems.ls@nhs.net).

Once a completed SCAL and Connection Agreement have been received, you will be provided with the Data Sharing Agreement (DSA) for your end users to complete.

### Data Sharing Arrangement

The DSA sets out the roles, responsibilities and obligations of participants of NRL, aligned to GDPR legislation. The latest copy of the DSA can be obtained from [nrlnems.ls@nhs.net](mailto:nrlnems.ls@nhs.net) and must be signed before entering live service.

A copy of the DSA must be sent to each end user organisation for completion - this enables endpoint messaging creation with Live certs and credentials issued for each site as they sign the DSA’s.

# Live Service Implementation

## Implementation Pre-requisites: Go/No go criteria

Before any activity can take place on the Live Service, approval must be granted via a Go / No-Go assessment (usually undertaken as a teleconference). The following checklist must be completed and returned in advance to provide a basis for the assessment:



## Requesting a live connection

Before a live connection can be requested, the supplier MUST have completed the following activities:

1. Technical Conformance Testing Completed by Supplier.
2. SCAL completed by supplier and accepted by NHS Digital.
3. Connection Agreement signed and returned by Supplier.
4. Data Sharing Agreement completed by End User Organisation.

Once completed, the NRL team will advise on live connection details, instructing the NHS Digital DIR team to configure endpoints in the live environment.

A 12-digit ASID will be registered for the connecting party and attached to their Party Key.

Finally, the NRL team will contact the supplier with the IP address to connect to the live environment and schedule a date to perform the required pipe-cleaning live test activities (see section 12.4).

## RBAC (Consumers Only)

Role Based Access Control only applies to Consumers accessing via the SCRa.

Therefore, it is the organisations decision to decide how RBAC permissions are assigned

**Note:** If using the SCRa to access the NRL, users will need to be able to perform a patient trace on the SCRa. If they don’t already have the RBAC code to do this it will need to be added

## Pipe-Cleaning

Once connected to the NHS Digital Live environment and approved for implementation, all providers and consumers are required to undertake pipe-cleaning.

This is a live validation exercise using dummy NHS numbers to create pointers on the NRL and to illustrate the functionality performed during testing works.

The [pipe-cleaning test plan](https://github.com/nhsconnect/FHIR-NRLS-API/blob/develop/content/uploads/onboarding/supportfolder/go-live%20pipecleaning%20test%20plan.pdf) is written from the perspective of at least one provider and one consumer going live at the same time.

To complete pipe-cleaning the supplier must provide evidence of meeting the requirements detailed in the pipe-cleaning test plan. In the event where either a provider or a consumer is not present, the NRL team will provide support to test.



## Bulk Upload of Pointers (Providers Only)

Once pipe-cleaning is complete, you will be able to commence the bulk upload of pointers. This represents the baseline from which you will begin live service.

1. Prior to commencing the bulk upload, please confirm to the NRL team how many pointers you intend to upload and confirm that both parties are ready to begin.
2. Once the bulk upload is complete, please confirm the exact number of pointers uploaded and any issues/discrepancies encountered.
3. NHS Digital will then run a count directly against the NRL index to confirm that they match

## Completion of Assurance

Upon completion of all required activities the NRL team will contact the supplier/organisation lead to confirm go-live is complete, issuing any appropriate evidence for your records.

# Post Implementation

## Support Model – Process for Raising Incidents

It’s vital that all incidents or requests for support are raised through the appropriate channels so that they can be investigated and resolved as quickly as possible.

**Note:** When raising an incident please specify your request relates to the National Record Locator and ensure to provide as much detail as possible so that your request can be passed to the appropriate team.

This is especially important whilst we are in the beta phase so that we can resolve any issues before going into full national rollout.

All incidents affecting the service usage should be reported to the National Service Desk.

Attached is the support model for your information. In summary, the key action is that any incident that is raised and can’t be resolved locally must be raised to the NHS Digital National Service Desk:

****

**National Service Desk**

* Tel: 0300 3 035 035
* Email: [ssd.nationalservicedesk@nhs.net](https://hscic365.sharepoint.com/sites/IP/National%20Record%20Locator%20Phase%202/Requirements/Processes%20and%20Guidance/ssd.nationalservicedesk@nhs.net)
* [Weblog](https://nww.serviceportal.digital.nhs.uk/CherwellPortal/NHSD#0) – Account Creation Required (see guide)



## Environment Maintenance

During the onboarding process, all connecting parties will be added to the Platforms Support Newsletter distribution list. The newsletter informs users of forthcoming changes to the NRL Service that are deployed to the NRL test environments (currently “INT”) prior to Live.

If you do not receive these newsletters in the first two weeks following go-live, it is recommended that you contact the Platforms Support Desk ([platforms.supportdesk@nhs.net](mailto:platforms.supportdesk@nhs.net)) who will be able to add you.

## Benefits reporting

It is essential that we are able to quantify and qualify the benefits of using NRL and as such all consumers and providers will be required to provide baseline information in the form of short surveys and questionnaires prior to going live and then again, 1 month, 3 months and 6 months post go live.

This information will be used to ensure that NRL is delivering the benefits identified during the discovery and implementation phases and to enable future work to be commissioned to continue to increase uptake and provide feedback to the users of NRL and any management information that is required internally.

Providers will be required to:

* Document baseline data on how patients / service users are transferred to their care
* Document and review changes in the number of times a patient / service user is transferred to A&E
* Document and review changes in a patient / service users experience as a result of their record being made available on NRL
* Work with NRL to produce reports on the benefits of NRL to the provider and patient periodically.

For SCRa consumers reports will be produced by NHS Digital that will provide the user ID of the staff at consuming trusts along with the date and time a record has been accessed. The consuming trust will be requested to provide the names and contact details of the users to NHS Digital staff. This will enable NHS Digital colleagues to contact them at an agreed time to discuss the benefits of using NRL and provide valuable information for management reporting, case studies and benefits realisation reports.

# Appendices

## Onboarding Task Checklist

The following high-level activities are listed in an approximate chronological order as a guide only, to be tailored according to local working practices and processes:

1. Assign key resources to the project including:
   1. Primary Contact (e.g. project manager)
   2. Technical lead and/or developer(s)
   3. IG lead
   4. Clinical lead
2. Review Onboarding Documentation and Technical Specification.
3. Confirm Delivery Approach.
4. Commence Product Development.
5. Commence activities listed in SCAL
6. Commence any applicable local clinical safety assessments / processes.
7. Test development against online reference implementation.
8. Complete TKW.
9. Establish connectivity to NHSD online testing environment (INT)
10. Complete Conformance Testing in INT environment.
11. Update Business Processes and Train Users.
12. Obtain all necessary local approvals for go-live (e.g. clinical safety, board approvals).
13. Sign NHS Digital Data Sharing Arrangement (DSA) and Connection Agreement
14. Complete Go / No-Go checklist
15. Complete Live Endpoint Registration and install Live certificates
16. Undertake pipe-cleaning in Live
17. Perform Bulk Upload of Pointers and enter Live Service
18. Provide Benefit Realisation feedback

1. The value 928942012545 can also be used for the NRL ASID in the INT environment, though generally the 928942012545 value is reserved for PDS messages and the 200000000370 value is reserved for NRL interactions. [↑](#footnote-ref-2)
2. LDAP information may not be required, depending on local implementation differences. [↑](#footnote-ref-3)