

In brief: the National Data Network

The National Data Network provides a distributed library of data holdings relevant to policy analysis and research. These data holdings remain held and controlled by their Custodian organisations.

This initiative promotes improved integration and consistent systems across government by facilitating greater collaboration between data providers and faster access to data.

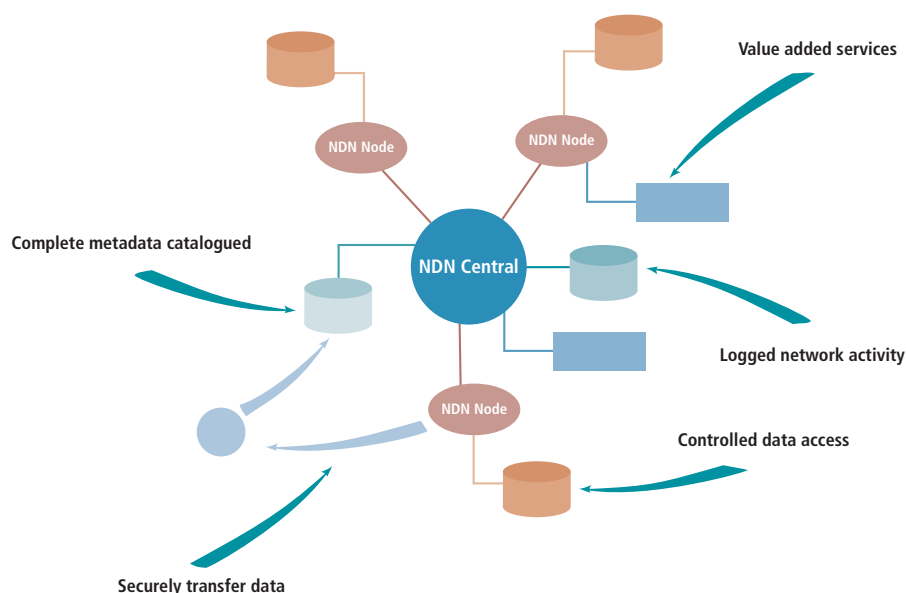
Data Custodians will have access to a range of web based services, protocols, procedures, and tools to assist them to more efficiently manage and share data in a way that ensures security and privacy.

Over time, significant values and benefits will be delivered to:

- agencies, by sharing development costs;
- policy makers, by supporting efficient access to data;
- researchers, by articulating clear and consistent access protocols; and
- the community, by improving outcomes from government policies.

Whilst data is held by each Custodian, the National Data Network provides a complete catalogue of available data sources to allow users to easily search for, and access data holdings which have been exposed.

The National Data Network consists of the **NDN Central** linking to the **NDN Nodes**, which are libraries of metadata about each agencies data holdings. Researchers and policy analysts can search the National Data Network through the web site. Once access conditions have been met, researchers will be provided access to data held on the custodian's node.



How Does it Work?

Custodian Nodes are linked to the National Data Network central server using an open source application that has been developed by the Australian Bureau of Statistics (ABS). This software is free to download.

When exposing data to the Network, the Custodian determines the access conditions of each data source they own. The network will manage communications between the custodian and the researcher, authenticating users and reporting on data requests. For the majority of transactions on the National Data Network, authentication will be via unique usernames and passwords.

The National Data Network exposes metadata about data, rather than the data itself. Researchers and policy makers will have access to metadata to identify data which may be of value to their work. They can then apply for access to the data source.

Data remains held and controlled by the Custodian and access to the data will only be provided after access conditions are met.

Metadata

Custodians will expose data to the National Data Network by preparing metadata that is consistent with the NDN Metadata Schema. This metadata documents key aspects of each data source. **Users** are able to search for data by using key words across a number of the priority elements of the NDN Metadata Schemas.

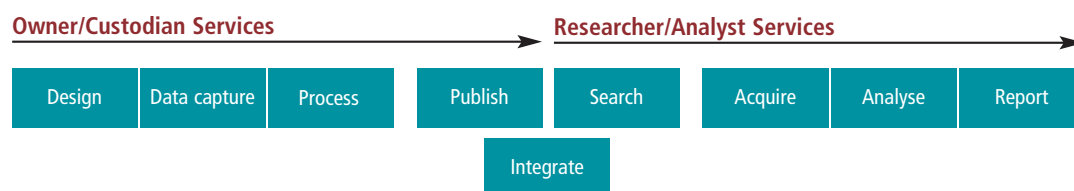
A metadata schema ensures that data exposed through the network is described in a consistent way. Metadata schemas and protocols for the demonstration phase of the National Data Network have been developed in consultation with key stakeholders and are compatible with the Australian Government Locator Service (AGLS), which maximises the visibility and accessibility of Australian Government information on the web.

Statistical Services through the National Data Network

The Network will provide a range of on-line and downloadable services aimed at developing improved data in Australia. These services will support the creation, management, integration and analysis of data.

Some of these services will be provided by NDN Central, while others will be provided by third party service providers.

Progressively, the National Data Network services will be expanded to cover the full life-cycle of statistical processes. Services will be provided to aid Custodians in designing, creating and disseminating statistical data; and researchers in analysing this data.



Frequently Asked Questions

What is the National Data Network?

The National Data Network is a national platform for acquiring, sharing and integrating data relevant to policy and research. It provides a distributed library of data holdings relevant to policy analysis and research. These data holdings remain held and controlled by their Custodian organisations. Whilst data is held by each Custodian, the National Data Network provides a complete catalogue of available data sources to allow users to easily search for data holdings which have been exposed.

What is the difference between the National Data Network and a Google Search?

Unlike a generic search engine, the National Data Network has a specific objective of finding and sharing data. Users of the network will be able to search across the range of data available through the National Data Network and be assured that it is from a credible source and adequately documented.

In addition, the network will provide a secure environment and on-line statistical services. Security protocols have been embedded into the network to securely transfer data, making the authentication processes visible. The network will also provide a range of on-line and downloadable services aimed at developing improved data in Australia.

Will I maintain control of my agency's data?

Yes. Data will only be held by the custodian agency. The National Data Network is based on a distributed library model. Under this model, agencies will control which data they expose through the network and who has access to it.

The National Data Network exposes metadata about data, rather than the data itself. Researchers and policy makers will have access to metadata to identify data which may be of value to their work. Access to the data will only be provided after access conditions are met.

How can I participate in the National Data Network?

There are a range of ways that agencies can contribute to the demonstration phase of the National Data Network. Agencies may choose to:

- publish data to the demonstration phase of the National Data Network;
- contribute to the development of protocols, such as those for metadata;
- develop additional statistical services to link into the network;
- provide administrative support for aspects of the network.

Agencies interested in participating are invited to contact the NDN Business Office. Contact details and other information can be found at www.nationaldatanetwork.org.

Will NDN Metadata Schema align with AGLS?

Yes. NDN Metadata Schema will align with a range of metadata schema, such as Dublin Core, AGLS and those used in the ASDD. A cross-agency group has been established to develop the NDN Metadata Schema. They will be progressing this project over the next 12 months and can be followed through the National Data Network web site.

Will the National Data Network link to other data networks, like the ASDD?

Yes. Longer term, the National Data Network will link and integrate with other networks. To facilitate these linkages, the NDN developers are working with other networks to ensure that the search and discovery metadata is consistent across each system.

In the short term, the demonstration phase will not link to other systems. As our metadata models converge, links will progressively be made to each of the other available networks.

How will the network help me maintain privacy and confidentiality of data?

To safeguard data, embedded access and use policies will provide appropriate levels of security for varying types of data. Four basic levels of security are envisaged - unrestricted, approval required, remote access only and specification only.

Custodians are required to determine appropriate levels of security and attach an access policy to each data source. The National Data Network will apply the access rules and processes stipulated by the custodian.

What is the cost of participating in the National Data Network?

There are a range of activities that agencies will need to undertake to participate in the National Data Network. Broadly these are to load the NDN Node software onto your web site; identify data which you are prepared to expose; prepare metadata which describes your data and commit to operating the NDN Node for an agreed period.

The costs for each agency participating in the National Data Network will differ, depending on their software configuration, hardware needs and level of existing documentation of data sources.

One of the objectives of the demonstration phase of the National Data Network is to estimate the costs for participants. We will gain more information as participants share experiences about their establishment costs.

Why is the ABS involved?

The Australian Bureau of Statistics is supporting the National Data Network because of the benefits to all of Australia's official bodies in both collecting statistics and coordinating data sources. The network will provide a low cost suite of statistical tools to aid all governments agencies. The ABS recognises the potential of the network to deliver the statistics required by key users no matter what their source.