Approaches to enable share-once use-often data sharing

# ABOUT THE SHARE-ONCE-USE-OFTEN PRINCIPLE AND APPROACHES

Enabling ‘share-once use-often’ data sharing is one of four system reform initiatives under the first National Data Sharing Work Program.[[1]](#endnote-2) This initiative explored opportunities to streamline cross-jurisdictional data sharing through ‘share-once use-often’ approaches, with a focus on reducing duplication of government data requests and streamlining internal government reporting purposes.

The project found three main approaches to enable ‘share-once use-often’ data sharing, based on case studies gathered from jurisdictions. These principles are set out below, along with considerations and tools drawn from the case studies.

# 1) Open Data Approach

 ENABLING TOOLKIT:

*Technical:*

* **Reduce privacy risk**: use a data privacy assessment tool such as [personal information factor (PIF) tool](https://data.nsw.gov.au/nsw-government-data-strategy/case-studies/case-study-personal-information-factor-pif-tool)
* **Enable automation**: Storage in machine readable formats
* **Enable discoverability**: Cross-search capability with other websites and open data portals
* **Enable integration**: Use Application Programming Interfaces (APIs) to integrate data from multiple sources into a reporting agency’s platform, consistent with the [National Application Programming Interfaces Design Standards (NAPIDS)](https://api.gov.au/)
* **Enable comparability**: Apply common data specifications and standards

*Governance:*

* **Reduce privacy risk:** Protective assessment system to securely de-identify data, providing assurance by trusted intermediary (e.g. [NSW COVID Open Data](https://data.nsw.gov.au/nsw-covid-19-data))

Wherever possible, **publish data as open by default to meet data access and reporting needs**,enabling data custodians to ‘share-once’ to all users in the public domain for all purposes.

This aligns with the Open by Default policies across Australian jurisdictions, realising broader benefits for industry and the community, and promoting government transparency[[2]](#endnote-3).

Open data is publicly available and unrestricted.

TIPS

Use this approach when sharing **‘low risk’ data** (not sensitive, no or low identification risk)

Check with agencies you provide data to whether what or how you’re publishing can enable them to ‘self-service’ their needs

Consider enabling access to data ‘at source’ (federated or distributed data model), maximising discoverability and interoperability (e.g. maintaining a ‘front door’ through open data portals like data.gov, or enabling data to be ‘pulled’ as needed into platform for analysis e.g. Digital Twin)

# 2) Data Intermediary Approach

 ENABLING TOOLKIT:

*Technical:*

* **Enable comparability**: common data specifications and standards is a key enabler (e.g. [AIHW minimum national data set](https://meteor.aihw.gov.au/content/344846))
* **Enable validation**: e.g. AIHW uses a software solution [Validata’](https://www.aihw.gov.au/our-services/validata) which automates data processing and validation between AIHW and custodians [(National Health data reporting for Report on Government Services)](https://www.pc.gov.au/ongoing/report-on-government-services/2023/health)
* **Enable automation**: Where possible, store data in machine readable formats, use APIs to integrate data and ‘push’ data out to reporting agencies

*Governance:*

* **Enable approvals**: streamline approval process commensurate to risk (e.g., dashboards supported by broad permitted purpose such as [NSW COVID-19 Dashboard](https://www.health.nsw.gov.au/Infectious/covid-19/Pages/stats-nsw.aspx), with ‘light-touch’ governance between trusted parties e.g. [National Interjurisdictional Workforce Dashboard](https://www.dewr.gov.au/workforce))
* **Tiered user access**: tier access to aggregate data dashboards for different data sensitivity and user needs, streamlining user approvals through tools like ([NSW Data Passport](https://datapassport.nsw.gov.au/))

*Legal:*

* **Streamline data sharing agreements** to enable data to be shared for pre-approved purposes and to pre-approved user groups

Where it is not appropriate to publish data openly, and where a ‘data intermediary’[[3]](#endnote-4) exists, consider opportunities to **leverage a data intermediary to collate and share data for reporting purposes**. This enables data custodians to share data once, and for the intermediary to curate the data for multiple purposes, for multiple users.

TIPS

Consider this approach when sharing **‘medium risk’ data** (aggregate data that is not highly sensitive, nor identifiable)

Be clear on the data services being offered by the intermediary (whether data collation, translation, validation or coordinating approvals)

For agencies with specific data reporting functions, consider using data and measures already collected by intermediaries wherever possible. Only require different measures if there is a valid reason for separate data collection/ sourcing

 ENABLING TOOLKIT:

*Technical:*

**Enable secure hosting**: Use a secure data platform that can host, integrate and provide restricted access for analysis, as well as manage release of any approved outputs

* **Enable comparability**: Apply common data specifications and standards

*Governance:*

* **Extensive controls and explicit authorities:** Apply controls commensurate to risk with explicit authority for each stage of data lifecycle
* **Streamline approvals where appropriate**: Balance controls with opportunities to streamline e.g. for pre-approved purposes, tiering risk to allow for ‘faster track’ process e.g. through approvals from a single lead data custodian ([National NDDA](https://ndda.dss.gov.au/))
* **Tiered product approach:** ‘Tier’ out services for users with aggregate reporting needs (e.g. Evaluation Datalab in [NSW Better Outcomes Lab](https://www.digital.nsw.gov.au/delivery/state-digital-assets/whats-available))
* **Tiered user access**: Apply pre-approved user groupings, with capability uplift offered e.g. under NDDA)

*Legal:*

* **Express legal authority:** Express legal authority under legislation or legislative instruments
* **Streamline data sharing agreements** to enable data to be shared for pre-approved purposes and to pre-approved user groups. This ‘frontloads’ approvals where possible, ‘pre-describing’ different governance for different risk streams (e.g., reporting data products may carry more streamlined governance) (NDDA and see also tool [VIC Data Sharing Heads of Agreement](https://www.vic.gov.au/victorian-public-sector-data-sharing-heads-agreement))

# 3) Data Asset Approach

Where an integrated data asset exists, consider opportunities to **use the asset to meet data access and reporting needs**,enabling data custodians to ‘share-once’ when contributing data to the asset, for use by multiple authorised users for authorised purposes.

Where a data asset exists, this approach is preferred to the Data Intermediary approach as it minimises duplicative data flows, while enabling a deeper level of data analysis within a secure environment with appropriate governance and access controls.

It aligns with work already underway to build the [National Disability Data Asset (NDDA)](https://ndda.dss.gov.au/) in a way that supports the building of national data infrastructure for restricted data assets beyond the disability portfolio.

TIPS

Use this principle when sharing **‘high risk’ data** (unit record level linked data that is sensitive, and identifiable) to form the data asset (noting that the data outputs generated for reporting is generally aggregate and lower risk)

 Check with agencies you provide data to whether and how the data asset can be used to meet their reporting needs

***Note on scope****: The above approaches are not intended to be definitive or exhaustive, but rather are observations based on the limited research undertaken for this project. Advice should be sought on individual circumstances.*

*The aim is to enable data sharing between governments (rather than with other sectors). They should also be read in light of other national reforms, including the Data Availability and Transparency Act 2022 (DATA) Scheme.*

# Contact information

If you have any questions about is document, or would like further information about case studies, please contact Digital Victoria via email at data.insights@dpc.vic.gov.au, or the Data and Digital Ministers' Meeting secretariat via email at ddmm@finance.gov.au

1. For period September 2021 to February 2022, made under the [Intergovernmental Agreement on Data Sharing](https://federation.gov.au/about/agreements/intergovernmental-agreement-data-sharing) (IGA) signed on 9 July 2021. [↑](#endnote-ref-2)
2. As well as other flow-on benefits greater discoverability, greater consistency in metadata and public transparency. [↑](#endnote-ref-3)
3. iii ‘Data intermediary’ is defined broadly as organisations with technical expertise that can offer data services, ranging from data collation and integration, translation, validation, other data quality improvement services, and managing approvals for sharing and use on behalf of data custodians. *Note:* In future, data intermediaries that operate under the DATA Scheme will need to be accredited. [↑](#endnote-ref-4)