National Freight Data Hub: Options Discussion Paper - Response Template

Please note: Submissions close on 11 September 2020 at 17:00, and should be emailed to freightdatahub@infrastructure.gov.au.

We welcome all responses. You may use this template, or simply email your response. You may address all questions, or you may choose to respond to selected questions of interest to you.

Your submission will be published on the website unless you request otherwise. Information collected during this consultation process may be provided to persons making an application under freedom of information laws. Personal details will not be published in any report.

Respondent details

<table>
<thead>
<tr>
<th>Organisation name</th>
<th>Data Republic Pty Ltd</th>
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<tr>
<td>Contact details</td>
<td>Data Republic is an Australian technology business which has, over the past 5 years, developed a technology platform, legal framework and services in the arena of data collaboration. We are keen to see how our local and international experience, and capability can be leveraged in the development of the NFDH.</td>
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Questions for discussion – Design Principles

1. Please share your organisation’s perspectives on the proposed design principles, including any which are not represented here.

There is a typo at page 5 – under Data Exchange referring to “retail” control instead of ‘retain’ control.

Design principles might further consider the following:

- **Demonstrate value early** might be extended to voice the concept of project phasing and scalability (over time to deal with increased scope and data volume).

- **Trusted and independent** might mean governed and subject to review. Commercial interest in running the hub and leveraging the value of data and IP could be highly effective, provided proper governance is in place.

- **Data exchange is collaboration** - “give and get data” typically is effective to develop an *industry cooperative* model (e.g. for a mutual interest reporting capability such as local market share). It may require modification in order to fully leverage potential value from researchers and data-driven innovators who may not have data to give.
**High quality data and insights** – the creation of high quality data is likely to be something data owners/contributors have to take responsibility for (post processing is limited in what it can fix). Insights, derived from data rely on input from persons with appropriate intellectual property and software. If this is a key aim, then the data product model will require careful planning in terms of actors and incentives.

**Value and commercialisation model** – e.g. ‘NFDH governance will focus make decisions about delivering value and raising fees in line with X principles’
Questions for discussion – Data

2. What specific benefits would each data priority provide to your organisation?
3. What level of data fidelity (i.e. transaction level data or aggregated data) and frequency (i.e. near real-time, weekly, monthly, quarterly) would be required to make the data priorities you’ve identified be of value?

Data

Data Republic observes a general trend toward the need to access highly atomic or detailed data on a near real time basis. This is because systems are increasingly digitalised, and decision models need to be applied to individual events.

However, the complexity and cost of near real time data provision, along with the smarts to make good use of that investment; are fundamentally reliant on earlier proofs, that deliver information to feed business cases for the required systems investment. Our experience over the last 5 years is that the aim should initially be to secure detailed data on a periodic or batch basis.

By phasing NFDH development from a batch data starting point (which comes at a reduced cost in terms of systems investment) many of the data application use cases can immediately be met (especially in areas like infrastructure planning, which do not depend on the latest individual consignment movement event).

Business cases can also be built from pilots on detailed, but occasionally-delivered data. These business cases can later be used to drive further phases, moving closer to real time data provision and availability. The requirement here is that the detailed atomic data is secured. Without that, anything requiring event level data for a consignment (for example) cannot be piloted or proofed.

Data segregation would be a worthwhile consideration when planning data priorities and designs. The key concerns that would drive consideration of segregation are privacy and confidentiality. Details of individuals such as consignees, drivers including names, addresses, and phone numbers may not be shared without consent under Australia’s Privacy Act, so a worthwhile consideration is how to suppress this information appropriately for analysis by other organisations, while retaining information value (e.g. locality of final delivery points). Equally, freight operators will need to keep details of their business including customers, volumes and values confidential so that commercial risk can be minimised.

Questions for discussion – Technology

4. If a centralised or federated architecture model were pursued, what would be the benefits and challenges to your organisation to participate in the Hub?
5. What are the preferred methods and technologies to integrate with the data exchange platform?
Options 2 and 3 of the four broad technology options, namely ‘existing technology’ or ‘limited technology uplift’ leverage **ready-to-go technologies** offer the best and fastest option to initiate NFDH. Phasing would enable decision points, and identify any need to alter the technology path to a more bespoke solution.

The architecture should be ideally selected to deliver key capabilities in the following areas:

**Scalability** – NFDH can commence at a modest scale, and expand on a business case basis into more data and application areas

**Governance** – data access is subject to control from data owners, applications of data can be accepted or refused by a data owner. Data usage and approval for usage is auditable, and can be reviewed by a governance committee on a regular basis

**Compliant** – able to meet privacy and confidentiality needs under law

**No need to surrender data to others** – analysis of permitted data can be undertaken within the NFDH, data owners can be assured that their data is not leaked outside of the hub

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**Questions for discussion – Governance**

6. Which governance structure could enable the Hub to be established quickly and generate quick wins, and should it change over time?

7. Which governance structure is most likely to facilitate the greatest use and participation?

Government can play a key role in regulatory compliance for the NFDH, and in marshalling industry participants to come together on a shared interest. Government would later ideally step back and become a stakeholder, allowing a joint/shared interest governance model.

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**Questions for discussion – Funding**

8. What funding arrangements could ensure users gain the value they are seeking from the Hub?
9. What services could the Hub provide that could be paid for by users?

Ideally the NFDH would kick-off as government funded, and move through identified phases to become commercialised.

Questions for discussion – Regulatory

10. To support the Hub’s governance, ability to collect and share data, setting of standards and funding model, which regulatory option is best suited?

11. Would there be significant costs or benefits for your organisation associated with each of the regulatory options?

12. Are there additional circumstances to those outlined above, that may warrant a change, introduction or removal of a regulatory mechanism?

Data Republic would argue that a key impediment to NFDH will be a lack of clarity about the extent to which data can be shared with others. That is because the data (e.g. consignment notes) is likely to contain personally identifiable information. The data could also include information sufficient to deliver ‘insider trading’ insights on public company performance, or compromise commercial confidentiality concerns. Government would appear to be in an ideal position to clarify advice on these matters to participants, assuaging concerns and providing behavioural guidance to organisations in the freight industry so that they can readily and confidently proceed to participate.

Government would also be in an ideal position to drive the innovation agenda on behalf of data custodians. This could include the design and implementation of an innovation programme, which could encompass:

(a) early stage innovation such as datathons
(b) piloting and proofing new ideas and software using real NFDH data
(c) structured problem solving challenges with selected innovators given access to NFDH data