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# **Benchmarking Data Service Data Charter**

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# IPA Benchmarking Data Service Data Charter

## 1. Introduction

### Benchmarking Data Service Background and Brief History

The Benchmarking Data Service (“BDS”) was created to enable government organisations to align with best practices in benchmarking for project and infrastructure expenditures, duration and carbon emissions. In 2017 the Infrastructure and Projects Authority (IPA) released its long-range plan, TIP (Transforming Infrastructure Performance), for transforming infrastructure and the construction sector. In 2019, the IPA published a guide for best practices in benchmarking, followed by dissemination of the benchmarking capability toolkit, which aids organisations in understanding its current benchmarking capability for estimating project and infrastructure costs. In addition, the IPA Benchmarking data service, which is a data sharing platform that collects and makes available actual cost data from completed projects, enables organisations to improve the quality of their estimates/forecasts, project outcomes and demonstrate value for money.

### Benefits of the Benchmarking Data Service

The BDS provides government organisations with a secure location to submit and access project data to increase benchmark utility, and to shape future project investment decisions. By leveraging similar data from other government and private organisations, cost estimations should be nearer to actual costs and minimise the churn of locating additional funds when actual costs exceed projected costs. This is well aligned with the UK’s National Data Strategy<sup>1</sup> and evidences commitment by the IPA to “*Transform government’s use of data to drive efficiency and improve public services*”.

### Data Charter Purpose

This charter defines the core principles that governs use of the BDS and provides a guide on how Data Providers and Data Consumers should interact with the BDS. Furthermore, this charter provides valuable resources and information to gain secure access to the BDS, promote high quality data sharing, and encourage informed and ethical use of the benchmarking data available in the BDS.

### Intended Audience

This charter is intended for the following UK government agencies:

- **IPA** –Maintains the BDS, sets the principles, and promotes adherence to the commitments defined in this charter; and
- **Data Providers**<sup>2</sup> – Any UK government body (e.g., government departments, Arm’s Length Bodies (ALBs), etc.) onboarded to share project data from completed projects with the IPA to load into the BDS; and
- **Data Consumers** – Any UK government agency users authorised by IPA to access and use aggregated project data to increase benchmark utility, and support and shape future project investment decisions.

<sup>1</sup> <https://www.gov.uk/government/publications/uk-national-data-strategy/national-data-strategy>

<sup>2</sup> Data Providers may also be Data Consumers



## 2. Overview of Data Charter Principles

The data charter principles are designed to be simple, transparent statements that any United Kingdom (UK) government organisation required or interested in sharing project data (e.g., cost, schedule, carbon, etc.) with the IPA should adopt for data-sharing activities aligned to the IPA Mandate.<sup>3</sup>

The remainder of this document defines the purpose of each principle, what each principle means in practice and what commitments the IPA, Data Providers, and Data Consumers agree to when using the BDS, together with links to supporting guidance and relevant documents.

## 3. Principle 1: Build trust in benchmarking through transparency

The BDS provides a platform for government organisations and ALBs to share appropriate project data. Transparency from the Data Providers, Data Consumers, and the IPA is essential to ensure the success of the BDS. When data is combined between projects and across organisations, transparency from all parties is vital to create a reliable, usable, and robust collection of benchmarking data. In part, the service is designed to collect anonymised information to mitigate risks taken on by the Data Provider's organisation when sharing potentially sensitive data (for example project name, location or commercial partners). In turn, all relevant and available data from each Data Provider shall be loaded to the BDS.

For more information on a recommended methodology for cost and performance benchmarking and how it can save your organisation from costly inaccurate project estimations, see the IPA's guidance on Best Practice in Benchmarking<sup>4</sup>.

### IPA Principle #1 Commitments

IPA commits to the following requirements to uphold transparency.

- **Data Structure:** Data will be organised using a standard data taxonomy. The data taxonomy is expected to evolve over time. A change in the final data taxonomy will be shared with stakeholders prior to the change taking place.
- **Data Storage:** Data that are shared via the BDS submission process will be stored in the BDS database only in a UK government owned environment serving as a single source of truth for project benchmarking in the UK. A change control process will be adopted for any updates after data submission(s).
- **Data Normalisation:** All data normalisation changes will be explained and made available to Data Providers and Data Consumers through the BDS website. For example, unit standardisation of fields, data type alterations to maintain consistency and usability, and aggregation of some fields to maintain anonymity or for analytic purposes are common transformations.

<sup>3</sup> <https://www.gov.uk/government/publications/infrastructure-and-projects-authority-mandate>

<sup>4</sup> <https://www.gov.uk/government/publications/best-practice-in-benchmarking>



- **Data Quality:** IPA will highlight identified data quality issues submitted by the Data Providers.
- **Data Enrichment:** IPA may link and crosslink data in the BDS with government and third-party data sources as required for cross referencing and attribution.
- **Data Sharing:** Data will be made available to registered Data Consumers via the BDS data service in pre-defined downloadable formats, and/or inter-departmental IPA reports and not in its raw form. Data may be shared with other central government functions (e.g., Cabinet Office) to achieve the objectives of the IPA and the BDS.
- **Data Retention:** Data will be stored and retained in perpetuity unless otherwise stated.

### **Data Provider Principle #1 Commitments**

Data Providers commit to the following requirements to uphold transparency.

- **Data Completeness:** Data Providers will submit to BDS at a regular cadence (as determined by the IPA) all relevant available data regardless of the completeness of the project data.
- **Data Quality:** Data Providers will communicate any known data quality issues or limitations with each data submission.

### **Data Consumer Principle #1 Commitments**

Data Consumers commit to the following requirements to uphold transparency:

- **Data Usage:** Data Consumers will use the latest available data from the BDS and use the data for benchmarking purposes only. Data Consumers should ask permission before using the data for other purposes than stated. To request permission to use the data for a different purpose please submit an inquiry to IPA Inquiries.<sup>5</sup>
- **BDS Acknowledgement:** Data Consumers should acknowledge data source(s) and any transformation applied therein.

## **4. Principle 2: Promote shared accountability**

The primary business driver in the creation and utilisation of the BDS is cost savings through improved project performance. As such, Data Providers and Data Consumers (“BDS Stakeholders”) need to be accountable in setting realistic funding envelopes by using an outcomes-based approach to ensure project deliverables are reasonable and achievable based on previously completed projects.

### **IPA Principle #2 Commitments**

IPA commits to the following accountability requirements:

- **Data Usage:** IPA will use data provided by Data Providers to achieve the objectives of the BDS to improve estimation across UK Government.
- **Data Standards:** IPA will communicate any changes to the standard data submission templates and data submission requirements within a reasonable period of time prior to requiring Data Providers to adhere to the new changes. IPA will enforce adherence to the standard data submission templates at the point of submission.

<sup>5</sup> Contact [benchmarking@ipa.gov.uk](mailto:benchmarking@ipa.gov.uk)



- **BDS Uptime:** IPA will maintain adequate uptime for the BDS to allow the BDS to be available for Data Providers and Data Consumers. Dates will be shared for planned outages, but unplanned downtime may be essential to respond to unforeseen needs or modifications. Every effort will be made to minimise downtime.
- **Support:** IPA will provide reasonable support to Data Providers and Data Consumers to provide clarity on any topics related to the BDS and to address technical issues with regards to access and use of the BDS.

### **Data Provider Principle #2 Commitments**

Data Providers commit to the following accountability requirements:

- **Timely Submission:** Data Providers will provide data submissions for all applicable projects to the BDS as soon as reasonably possible.
- **Data Standards:** Data Providers will adhere to the data submission templates provided by IPA and adhere to the BDS's data submission template's guidelines to promote better quality benchmarking data and simplifying the data onboarding process to the BDS.
- **Partnership Continuity:** Data Providers will make good-faith efforts to ensure continuity of data uploads to the BDS to ensure that the data in the BDS remains up to date for all Data Consumers.

### **Data Consumer Principle #2 Commitments**

Data Consumers commit to the following accountability requirements:

- **Data Usage:** Data Consumers will use data from the BDS only for benchmarking purposes. To request permission to use the data for a different purpose please submit an inquiry to IPA BDS ([benchmarking@ipa.gov.uk](mailto:benchmarking@ipa.gov.uk)).

## **5. Principle 3: Promote ethical usage and sharing**

The BDS provides a mechanism for UK government organisations to share project data (e.g., cost, schedule, and carbon) and benchmarking best practices and to use this data to improve benchmarking capabilities to better estimate the costs of future projects. The integrity of the BDS depends on all BDS stakeholders following proper standards of conduct.

### **IPA Principle #3 Commitments**

IPA commits to the following requirements for ethical sharing and usage of the BDS.

- **Data Usage:** IPA will use data provided by Data Providers to achieve the objectives of the BDS and to improve cost estimation across the government.



### **Data Provider Principle #3 Commitments**

Data Providers commit to the following requirements to uphold ethical sharing and usage of the BDS.

- **Data Access:** Data Providers will not share individual access credentials with other individuals.
- **Data Submission:** Data Providers will maintain the integrity of the original estimation values and submit all applicable assets to the BDS.

### **Data Consumer Principle #3 Commitments**

Data Consumers commit to the following requirements to ethical sharing and usage of the BDS.

- **Data Usage:** Data Consumers will use all relevant data sourced from the BDS only for benchmarking purposes.
- **Data Timeliness:** Data Consumers should use the most up-to-date data from the BDS to support benchmarking activities since data updates will occur.
- **Data Access:** Data Consumers will not share individual access credentials or data exports with other individuals

## **6. Principle 4: Make sure data is secure, quality assured, and accessible**

Data Providers and Data Consumers need ready, continuous, and secure access to reliable benchmarking data, assured using various data quality checks.

### **IPA Principle #4 Commitments**

IPA commits to the following requirements to quality, security, and secure access to the BDS.

- **Data Protection/Security:** IPA will secure data in a way that protects it from being accessed by unauthorised individuals as aligned to the Government Minimum Cyber Security Standard.
- **Data Access:** IPA will regularly audit data access and may revoke access to accounts for the following reasons: no activity for an extended period, failure to comply with the BDS Data Charter commitments, change in job responsibilities no longer requiring access to the BDS, or leaving the organisation.
- **Data Quality:** IPA will perform data quality checks prior to loading data into the BDS and will coordinate with the Data Provider to address certain data quality issues identified.

### **Data Provider Principle #4 Commitments**

Data Providers commit to the following requirements to uphold quality, security, and secure access to the BDS.

- **Data Access:** Data Providers must request access from the IPA by completing the onboarding process. Data Provider organisations will inform the IPA of any event that results in users who should no longer have access to the BDS due to a change in job responsibilities and / or leaving the organisation, within 5 business days of identifying the

<sup>6</sup> <https://www.gov.uk/government/publications/the-minimum-cyber-security-standard>



event and provide details of a suitable replacement, where required.

- **Data Submission:** Data Providers will submit data to the IPA using the agreed upon template.
- **Data Quality:** Data Providers will perform data quality checks prior to submission to validate the data's accuracy, consistency, completeness, integrity, source, and timeliness as aligned to the Government Data Quality Framework.<sup>7</sup>

#### Data Consumer Principle #4 Commitments

Data Consumers commit to the following requirements to quality, security, and secure access to the BDS.

- **Data Protection/Security:** Data Consumers will store any data downloaded from the BDS in a way that ensures adherence to applicable government guidance and standards on data security and data sensitivity classification from time to time<sup>8</sup>.
- **Data Access:** Data Consumers must be registered with the BDS and will inform the IPA within 5 business days of a suitable replacement Data Consumer where individuals should no longer be granted access to the system.

## 7. Governance

The IPA will adhere to the following governance practices to maintain the integrity of data in the BDS.

- IPA will review the BDS Data Charter at least annually, or as appropriate. The review will take account of any relevant new or updated IPA or other UK Government policies and guidance.
- Any material changes made to the Data Charter will be communicated to the intended audience.
- IPA will ensure ongoing oversight and governance of the BDS and the commitments defined in this charter.
- IPA will obtain regular feedback from Data Providers and Data Consumers to make improvements to the Data Charter and the BDS, as appropriate.
- IPA will track, review, and assess any request for exceptions to the principles listed in the charter.

## 8. Inquiries

For inquiries on the Benchmarking Data Charter, please send an email to [benchmarking@ipa.gov.uk](mailto:benchmarking@ipa.gov.uk)

<sup>7</sup> <https://www.gov.uk/government/publications/the-government-data-quality-framework>

<sup>8</sup> Including, but not limited to, <https://www.gov.uk/government/publications/the-minimum-cyber-security-standard> and <https://www.gov.uk/government/publications/data-sharing-governance-framework/data-sharing-governance-framework>





## 9. Glossary Acronyms and Terms

The following table provides a list of acronyms found in this document.

Acronym	Description
<b>ALB</b>	Arm's Length Body
<b>BDS</b>	Benchmarking Data Service
<b>IPA</b>	Infrastructure and Projects Authority
<b>MOU</b>	Memorandum of Understanding
<b>TIP</b>	Transforming Infrastructure Performance
<b>UK</b>	United Kingdom

The following table provides a list of terms and definitions found in this document.

Term	Description
<b>BDS Stakeholders</b>	Refers to stakeholders involved with the BDS such as Data Providers, Data Consumers, and IPA.
<b>Data Providers</b>	An entity that is supplying data created from a project owned by that entity to the BDS
<b>Data Consumer</b>	An entity that has downloaded data from the BDS.