



Communities  
& Justice

# infoShare Technical Manual

**Function:** File Uploader

**Function Version:** 1.0.0

**Document Version:** 1.0.1

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**Summary:** This document provides technical information for file-based bulk data upload to **infoShare**.



# Revision History

Version	Date	Change
<b>1.0.0</b>	21/09/2022	Initial release
<b>1.0.1</b>	24/09/2022	Updates and edits for consistency

# Table of Contents

<b>1</b>	<b>Overview</b> .....	<b>4</b>
1.1	infoShare .....	4
1.2	Purpose of this Document .....	4
<b>2</b>	<b>High Level Data Structure</b> .....	<b>5</b>
2.1	DSS DEX Compatibility .....	5
2.2	Data Structure Definition .....	6
<b>3</b>	<b>Interface Details</b> .....	<b>7</b>
3.1	Getting Started .....	7
3.2	Business Process Summary .....	7
3.3	File Format .....	8
3.4	Security and Authentication .....	8
<b>4</b>	<b>Reference Data</b> .....	<b>8</b>
4.1	Schema File .....	9
4.2	Data Structure Entities NOT Submitted via File Uploader .....	9
<b>5</b>	<b>Error Processing</b> .....	<b>9</b>
<b>6</b>	<b>Appendix1: Definitions</b> .....	<b>10</b>
<b>7</b>	<b>Appendix2: Statistical Linkage Key (SLK)</b> .....	<b>10</b>
7.1	SLK Algorithm .....	10
7.2	SLK Examples .....	11

# 1 Overview

## 1.1 infoShare

The Department of Communities and Justice (DCJ) has developed a purpose built data collection tool for funded service providers to use to submit information to the department on the services they have delivered. The tool is called infoShare.

InfoShare allows organisations to submit data to DCJ using either an online portal data entry system, a bulk upload capability, or an API.

InfoShare will improve the ease with which organisations can send their data to DCJ straight from their case management systems, and will improve the quality and consistency of the data submitted.

## 1.2 Purpose of this Document

This document specifies the technical requirements for organisations who would prefer to submit their DCJ Program reporting data using a bulk data file-upload mechanism.

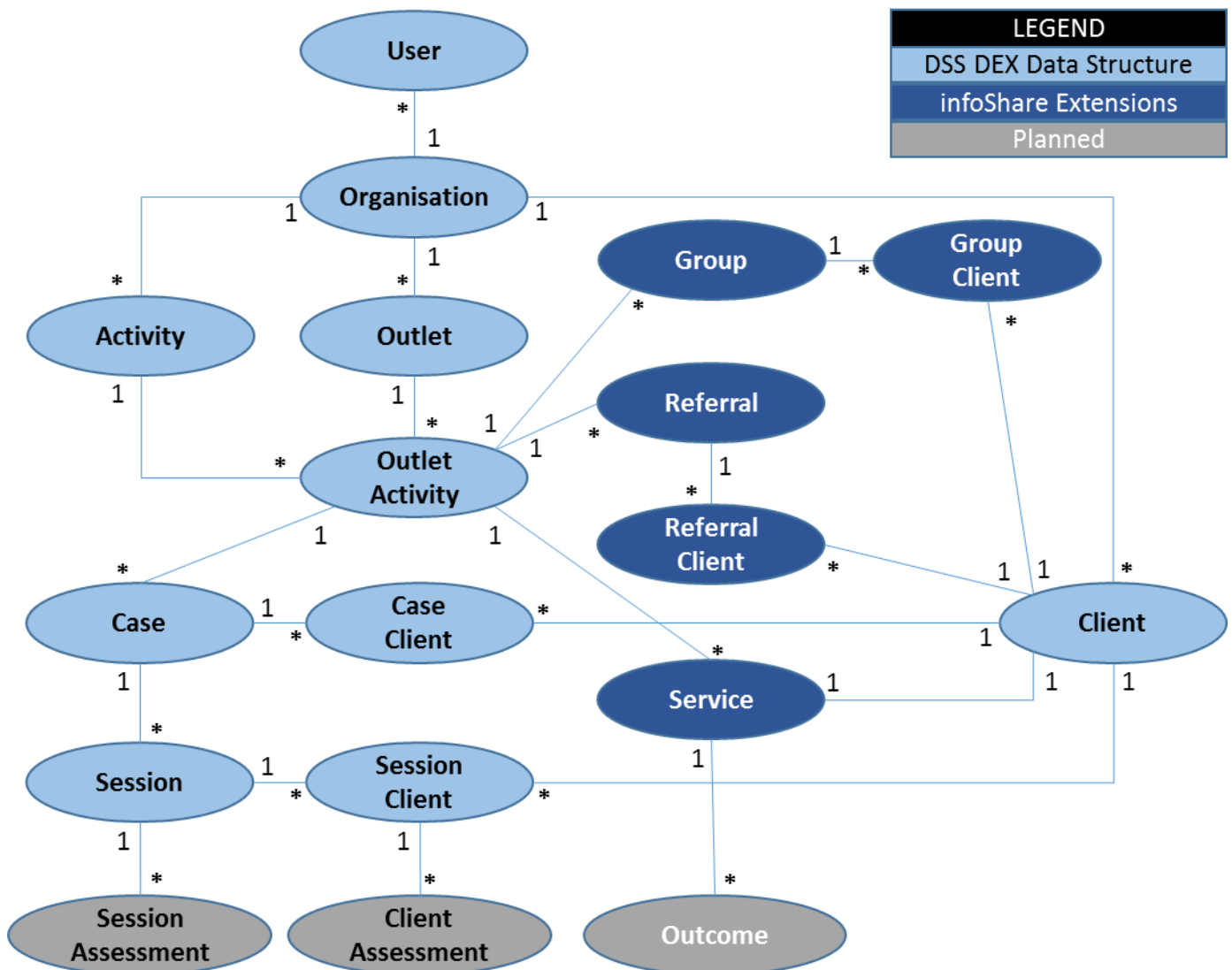
The following is described within this document:

- a) **Data Structure** - Overview of the structure and type of the data to be collected.
- b) **Interface Details** - Details of the steps required to upload data
- c) **Reference Data** - References for the details of the data items to be collected

For assistance in regards to content in this document please contact your DCJ program administrator.

## 2 High Level Data Structure

The following diagram provides a high-level view of the data structure for the data to be collected.



### 2.1 DSS DEX Compatibility

To minimise re-work for Service Providers whose technology supports data submission to [DSS DEX](#), every effort has been made to remain as compatible with the DSS DEX data structure as possible. The **infoShare** approach is to extend the DSS DEX data structure rather than change it.

This includes: adding data structure entities (Group, Referral, Service, and Outcome), adding links to the new entities within existing DSS DEX structure entities (Client and Outlet Activity), and adding / removing existing data items. Existing DSS data structure and data items and their relationships remain unchanged.

For a detailed comparison please see the DCJ provided **infoShare** Technical Domain Data Dictionary documents. These documents contain the full list of DCJ program-generic and program-specific data items required to be submitted including any relation to existing DSS DEX data items.

## 2.2 Data Structure Definition

No.	Data	Definition
1.	<b>Activity</b>	An <b>activity</b> is the program that an organisation is funded to deliver.
2.	<b>Client</b>	A <b>client</b> is an individual who receives a service as part of a funded activity.
3.	<b>Client Assessment</b>	A <b>client assessment</b> is an assessment (e.g. client circumstances, client goal or client satisfaction assessment) conducted against clients who have attended a session.
4.	<b>Case</b>	A <b>case</b> is a grouping of one or more sessions. A case may consist of data that relates to all activities and/or specific activities.
5.	<b>Case Client</b>	A <b>case client</b> represents a client who is involved with the case. Additional data may be recorded against clients associated with a case.
6.	<b>Organisation</b>	An organisation is a funded service provider.
7.	<b>Outlet</b>	An <b>outlet</b> is the location of where services are being delivered from, as referenced in the funding agreement.
8.	<b>Outlet Activity</b>	An <b>outlet activity</b> represents an outlet and the activity that outlet is able to deliver.
9.	<b>Session</b>	A <b>session</b> is an instance or episode of service delivered to a client or a group of clients. A session may consist of data that relates to all activities, specific activities, and/or specific activities and service types.
10.	<b>Session Client</b>	A <b>session client</b> is a client who is involved with the case <b>and</b> has attended a particular session.
11.	<b>Session Assessment</b>	A <b>session assessment</b> is a group assessment (e.g. community assessment) conducted against all clients who have attended a session.
12.	<b>User</b>	A <b>user</b> is a representative of the organisation.
13.	<b>Group</b>	A <b>group</b> is a grouping of two or more clients that share common characteristics or have a relationship (e.g. Family).
14.	<b>Group Client</b>	A group client is a client who is a member of a group receiving a service.
15.	<b>Outcome</b>	An <b>outcome</b> is the measured result of a client outcome assessment for the service provided.
16.	<b>Referral</b>	A <b>referral</b> is a client group or a grouping of one or more clients that is receiving services based on a referral (Referral-In) or who are being referred by the current service provider to another service provider for further service provisioning (Referral-Out).
17.	<b>Referral Client</b>	A <b>referral client</b> is a client who is receiving, or is recommended to receive further service based on a referral to / from their current servicing organisation.
18.	<b>Service</b>	A <b>service</b> represents a funded DCJ activity that a client is currently, or was previously participating in.

## 3 Interface Details

Organisations have the option to export one or more files containing DCJ Program-specific reporting data from their in-house, out-sourced or cloud-based client management application and then upload the file(s) to **infoShare** via the **infoShare** Web Portal.

**NOTE:** Web Portal user interface screenshots will be provided at a later date.

### 3.1 Getting Started

Before attempting to upload a file to **infoShare** there are a number of constraints you should consider beforehand:

- Your file should contain at least one record list type (e.g. Clients) containing at least one record;
- Your file should be virus-scanned before upload and submitted from a secure computer over a secure organisation network (e.g. not in an airport lounge via airport Wi-Fi);
- Your file should comply with the file format conventions outlined in the **File Format** section;
- All data fields should be filled in as per data dictionary and, in particular, any mandatory client consent fields should be filled in with the relevant consent obtained beforehand; and;
- Within an upload file, each record (i.e. Client, Session, etc.), must have a unique Id (ClientId, SessionId, etc.). The file must not contain multiple data items with the same ID (it would result in a failed addition or, in the case of an update, the records would overwrite each other).

**NOTE:** Data records in the submitted file that have a record Id that matches an existing record in **infoShare** will result in the record in the file replacing the existing record...otherwise a new record will be created. As an example, a submitter uploads a file containing a Client data list with one of the client records in the list having a ClientId of CL001. If this ClientId CL001 is an existing record in **infoShare** for that organisation then the client record will be replaced by the record submitted in the file...otherwise a new client with ClientId of CL001 will be created in **infoShare**.

### 3.2 Business Process Summary

- 1) Organisations enter required DCJ Program reporting data (e.g. outlets, clients, sessions, etc.) in their in-house systems.
- 2) Organisations export a file (or file set) using a format as specified in the **File Format** section with the required DCJ program reporting data from their in-house system.
- 3) There are a number of different data item lists in the **infoShare** data structure (e.g. Outlets, clients, etc.). Using the **infoShare** Web Portal, these data item lists can be uploaded as a single combined file, or a group of one or more files each containing one or more data item lists. The only constraint is that a file should contain at least one data item list.
- 4) Organisations login to the **infoShare** Web Portal and go the “Uploaded files” menu.
- 5) On the View uploaded files page, they click on the button “Upload new file”.
- 6) Organisations upload the file exported in step (2) into **infoShare**.

- 7) Preliminary validation checks will be applied to the uploaded file(s) to verify that the provided data is correctly formed and, if not, validation errors will be provided and the file will need to be corrected before being re-submitted.
- 8) If the file passes preliminary validations, **infoShare** will accept the input file and it will be queued for Program-specific data business rules validation processing. Organisations can do other tasks while the file processing completes, and can come back when notified that processing has completed.
- 9) If the uploaded file data passes all Program-specific data business rules validation checks the submitter will click on the button “Submit Upload File Data”. If the uploaded file data does not pass all Program-specific data business rules validation checks then validation errors will be provided and:
  - a) the submitter can choose to correct the data in the organisation’s source systems and re-export the data file and re-upload it; or;
  - b) the submitter can use the **infoShare** Portal interface to correct the submitter data online and re-submit it for processing.

**NOTE:** DCJ highly recommends option “a)” so that data maintained by the organisation in its in-house systems and data submitted to **infoShare** are identical but DCJ respects that there may be a scenario where the issue is minor, affects a single field and a “per export” cost is involved on the submitter’s side not commensurate with the effort associated with a minor correction.

### 3.3 File Format

The input file format is XLSX.

The data may be submitted in a single combined file, or a group of one or more files each containing one or more data item lists. The only constraint is that a file should contain at least one data item list. Each data item list is contained in a worksheet whose tab name must correspond to one of the entities in the **Data Structure Definition** previously described in this document.

The output error file format is CSV.

The maximum upload file size allowed is **20MB**.

### 3.4 Security and Authentication

The Security and Authentication function is provided via the **infoShare** Portal Web UI using the DCJ digital identity authentication mechanism and the **infoShare** authorisation mechanism.

This bulk data file upload function is available only to **infoShare** Web Portal users who have File Upload rights assigned to them by their Service Provider **infoShare** Administrator.

## 4 Reference Data

There are a number of DCJ-wide and DC Program-specific Data Dictionaries and reference datasets provided to assist organisations to structure submitted data to meet DCJ data quality requirements. There are two reference data file types provided:

1. **Data Dictionary** - Contains a description of all data items to be submitted.
2. **Reference Worksheet** - Contains a set of all data item enumerated type lists.



**NOTE:** The Reference Worksheet is contained in the sample file upload template(s) provided.

## 4.1 Schema File

There is no standard offline schema validation file format for validating an xlsx file's contents. The data dictionaries provided are to be used for pre-upload compliance checking. The **infoShare Instruct** application (once it is launched) can be used as a sandbox pre-testing environment to verify the organisation's export / import mechanism is outputting compliant data files (for dummy data only).

## 4.2 Data Structure Entities NOT Submitted via File Uploader

Similar to DSS DEX, **infoShare** file uploader will not process User, Organisation, Activity, or Outlet Activity data which must be entered manually via the **infoShare** Portal Web UI.

Unlike DSS DEX file uploader, the **infoShare** file uploader will also not process Outlet data. Outlet data must also be entered manually via the **infoShare** Portal Web UI since it forms a component of the **infoShare** user on-boarding authorisation process.

All dynamic fields that are not in-scope for submission via the file uploader will be made available for download ahead of time via the **infoShare** Portal Web UI for use in preparing the data file for upload including: Organisation Activity and Outlets data.

Static information, such as enumerated list types such as Service Types will be available in advance via the Reference Worksheet contained in the sample file upload template(s) provided.

# 5 Error Processing

**NOTE:** Error processing details will be provided at a later date.

## 6 Appendix1: Definitions

Term	Definition
CMS	Case Management System
CRM	Customer Relationship Management
NGO	Non-Government Organsiation
SLK	Statistical Linkage Key

## 7 Appendix2: Statistical Linkage Key (SLK)

The following information is provided for background reference only. The **infoShare** solution does not require an SLK to be submitted as a data field in uploaded data. Where an SLK is required to meet privacy legislation it will be generated and managed internally by **infoShare**.

Data submitted to **infoShare** includes basic client identity data (Name, gender, birthdate, address).

When a client consent field in a record is set to false, DCJ will generate an SLK using the following algorithm which will then be used to meet DCJ's legal privacy management obligations as recorded in the DCJ Privacy Management Plan (<https://www.facs.nsw.gov.au/download?file=797573>).

### 7.1 SLK Algorithm

Selected letters of Family name, Given name, Date of birth and Gender are used to generate a statistical linkage key to facilitate the linkage of records for statistical purposes only. The SLK ensures that individual clients will not be identified from data in the collection and comprises the alpha code derived from a client's name, their sex, and full date of birth.

The following algorithm is used to generate an SLK for use with the Data Exchange system.

- Record 2nd, 3rd and 5th letters of last name (family name).
- Record 2nd and 3rd letters of first (given) name.
- Record the date of birth as a character string of the form ddmmyyyy.
- Record the sex of the client as :
  - Code 1 for Male
  - Code 2 for Female
  - Code 3 for Intersex or indeterminate
  - Code 9 for Not stated/inadequately described
- Do not count hyphens, apostrophes, blank spaces, or any other character that may appear in a name that is not a letter of the alphabet.

- Where the name is not long enough to supply all the requested letters, fill the remaining squares with a 2 to indicate that a letter does not exist. This will occur if the first name is less than 3 characters and if the last name is less than 5 characters. If a name is too short, complete with 2's.
- Where a name or part of a name is missing, substitute a 9 to indicate that the letter is not known.
- Always use block capital letters for SLK.

## 7.2 SLK Examples

First Name	Last Name	Gender	Date of Birth	SLK
Jane	Citizen	Female	27 May 1963	ITZAN270519632
Joseph	Bloggs	Male	31 December 1959	LOGOS311219591
Jane	Luca	Female	27 May 1963	UC2AN270519632
Jo	O'Donnell	Female	27 May 1963	DONO2270519632
J	Bloggs	Female	27 May 1963	LOG99270519632
J	Blog	Female	27 May 1963	LO299270519632
J	O	Male	31 December 1959	99999311219591
J	Blog	Not stated	20 June 1967	LO299200619679
Joseph	Bloggs	Intersex	31 December 1959	LOGOS311219593