

# Data Standards for Interoperability: Guidance Note

Preamble	1
What are these Data Standards?	2
Who developed these Standards?	2
Why were these Standards developed?	3
What about HXL?	3
Who are these Standards aimed at?	3
How were the Standards developed?	4
Sources	4
Applying the Standards	4
What do the Data Standards include?	5

## Preamble

Standards in any sector are always a work in progress - they need to be revised on a regular basis to take account of changing circumstances. The Data Standards presented in this package should be understood as part of such a process, and not as a final product that cannot be updated or adapted. We encourage other stakeholders in the humanitarian community to use them freely.

The Data Standards are licensed under Creative Commons Attribution-ShareAlike 4.0 International (<https://creativecommons.org/licenses/by-sa/4.0/>). You can adapt, build upon and distribute the standards, even for commercial purposes. The only condition is that you give credit to the CCD Network and license any modified material that you produce under identical terms.

This Guidance Note and the accompanying Data Standards were drafted between 2023-2024 by Paul Currion, under instruction from Amos Doornbos, for the Collaborative Cash Delivery Network ([www.https://www.collaborativecash.org/](https://www.collaborativecash.org/)). This iteration of the Data Standards were considered final draft on 30th April 2024.

The Data Standards should always be applied in conjunction with good practice and existing principles around data management, such as data minimisation.

# What are these Data Standards?

These Data Standards attempt to harmonise and systematise the data required for collective action in humanitarian consortia. They were developed to support two use cases:

1. Deduplication, including:
  - a. Deduplication of registration, i.e. identifying whether an individual or household has been registered more than once by different organisations;
  - b. Deduplication of assistance, i.e. identifying whether an individual or householder has received overlapping assistance.
2. Referrals, specifically between CVA actors, and between CVA and other programme units. The Standard is not intended to replace existing Protection referral mechanisms, but to improve and extend referral capability.

The Standards are not a policy document. They do not dictate which data humanitarian organisations should collect for their own internal use.

The Standards are an operational tool. They are intended to be incorporated into collective data management processes which require interoperability.

## Who developed these Standards?



The Data Standards were developed by the Collaborative Cash Delivery Network between 2023-24. They are part of a project to improve interoperability in the humanitarian sector



The project approaches the question of interoperability from a data governance perspective. We developed the Stack Approach (left) to show the different aspects (or 'Layers') involved in governance.



The Stack Approach shows how data must be understood in a wider context, and shows how challenges such as interoperability cannot be approached on a purely technical level.



While the other layers are just as important for successful data governance, the Data Layer is foundational - since without data there would be no need for governance.

## Why were these Standards developed?

In order to address the data interoperability challenges faced by its members, CCD first needed to establish a “common language” for sharing data. Without this, it is difficult to develop the technical platforms or legal agreements which enable practical data sharing.

A common language enables agencies to map their existing data to a standardised set of fields. They can then share that data more easily with other organisations - without having to change their internal systems, or waste time transferring data between different formats.

There are currently no data standards agreed at the global level for either deduplication or referrals. Some standardisation is implied in the creation of e.g. the Inter Agency Protection Referral Form equivalent, but no policy or legal documents have been found.

While the Standards were developed to facilitate specific pilots in two locations - South Sudan and Ukraine - CCD aims to test if they can be adopted more widely within their network, and in cooperation with other networks.

## What about HXL?

The Humanitarian eXchange Language (HXL) maintained by UN OCHA via the Humanitarian Data eXchange (HDX) is “a simple standard for messy data”. HDX does not allow personal data or personally identifiable information (PII) to be shared.

As a result HXL is not generally applied to personal data of the type which is required for deduplication and referrals. These Data Standards are cross-referenced with HXL hashtags, and should be considered complementary to HXL.

## Who are these Standards aimed at?

Initially the Standards were intended for members of the CCD and DIGID consortia, but the pilot also includes NGOs that are not part of either consortia. We believe that the Standards can be adapted and adopted by a wide range of stakeholders to improve interoperability.

Since the Standards are platform agnostic, they can be incorporated into any platform where they might be useful - whether provided by government or non-government, public or private, national or international organisations.

While the Standards are primarily intended for sharing data between organisations, they can also be incorporated into your internal data processes, for example in drafting data collection forms, building databases, or developing MEAL processes.

CCD also hopes that the standards - and the data governance framework in which they exist - will contribute to wider discussions about data governance within the humanitarian community, and perhaps contribute to the development of global standards.

# How were the Standards developed?

CCD carried out a series of key informant interviews and design workshops in the pilot countries. The workshop participants identified a need for standards to support collective action around data management.

Once the requirement was identified, CCD carried out a review of existing attempts to standardise data collection. There were no obvious examples of standardisation, although there were some indicative documents.

CCD reviewed existing technology solutions - such as UNHCR's RAIS, WFP's Building Blocks, and the NRC's RIMS platform - as well as talking with private sector vendors of other platforms used by NGOs within our consortium.

Drawing on these multiple sources and cross-referenced with existing data standards and guidelines, CCD identified the key data required for successful deduplication and referral between humanitarian organisations within our pilot projects.

## Sources

This is not an exhaustive list. It is simply intended to show the type and range of sources that were reviewed during the development process.

- Standards or recommendations:
  - Humanitarian eXchange Language
  - UNCCS Minimum Core Assistance Delivery Dataset
  - ISO Standards
- Protocols
  - Inter Agency Protection Referral Form
  - Ukraine MPCA Referral Form
- Platforms
  - UNCHR RAIS
  - WFP Building Blocks
  - World Vision LMMS

## Applying the Standards

If you are developing a deduplication or referral process - regardless of which technology you use, or even if you use paper - you will need to decide which data to share. The Standards provide guidance on the minimum necessary data that you and your partners will need to facilitate deduplication or referral.

Different organisations may use different labels for the same data. This will make it difficult for them to share data - particularly if they try to combine their data for a common purpose. The Data Standard provides a common reference. The different labels used by different organisations can be mapped to the data standard, enabling data to be shared more readily.

Organisation	Label 1	Label 2
Alpha International	Name	
Bravo Relief	First Name	Family Name
Charlie Federation	Name	Last Name
<b>Data Standard</b>	<b>first_name</b>	<b>last_name</b>

The Standard label can be incorporated easily into any spreadsheet, database or other platform solution which you or your partners decide to use. They are recommended minimum datasets, and you can add additional fields if necessary for your context. However you should not add too many fields - keep your focus on the use case.

## What do the Data Standards include?

The Data Standards are presented in spreadsheets. Each spreadsheet includes two key pages:

1. Core Data. This describes the information you will need to collect and share to facilitate deduplication and referrals.
2. Metadata. This describes the metadata that you will need to ensure a complete record of deduplication and referrals.

The Referral Data Standard spreadsheet also includes some supplementary pages which contain examples which might be useful for specific types of referral. They should all be adapted depending on the needs of your referral mechanism and the local context in which it is being implemented.

- Minor-Specific: specific additional fields for a referral which involves a minor.
- Services Requested: the types of services that you can make the referral to.
- Vulnerability Criteria: some criteria that can be used to assess vulnerability.