

RESPONSIBLE DATA FOR CHILDREN

# RD4C OPPORTUNITY AND RISK DIAGNOSTIC TOOL

VERSION 1 - 2020



# INTRODUCTION

Around the world, those working to advance children’s rights increasingly use data to refine and improve service delivery. The right data in the right hands at the right time can significantly improve outcomes for children.

However, avoiding unintended negative consequences on data subjects and beneficiaries means organizations handling data for or about children need to develop a Responsible Data for Children (RD4C) roadmap that includes identifying and handling of:

1. Opportunities for improving children’s lives through data;
2. Risks and unintended consequences that could arise from the collection, storage, sharing, analysis, and use of data for and about children; and

This roadmap can be realized by leveraging [RD4C principles](#) and embedding a culture of responsible data for children. The RD4C principles provide organizations with a way to retain the public’s trust while using data to innovate and improve service delivery. Organizations that are **Purpose-Driven, People-Centric, Participatory, Protective of Children’s Rights, Proportional, Professionally Accountable**, and aware of the need to **Prevent**

**Harms Across the Data Lifecycle** can foster better outcomes for children while ensuring that risks in data collection, analysis, and use does not undermine these benefits.

## Components of the RD4C Opportunity and Risk Diagnostic Tool

As such, this diagnostic tool provides organizations with a way to take stock of the RD4C principles and how they might be realized as an organization reviews a data project or system. The high-level questions and prompts below are intended to help users identify areas in need of attention and to strategize next steps for ensuring more responsible handling of data for and about children across their organization. The diagnostic questions focus on three key areas:

1. The current state of collecting, processing, analyzing, sharing and using data within your organization and, in turn, within the broader data ecosystem (e.g. with key counterparts in government, civil society, or the private sector);
2. The principles and policies (if any) that guide responsible data handling within your organization and within the broader data ecosystem; and
3. The processes, organizations and people in your organization (if any) that affect how your organization’s decisions are made or how its initiatives are designed.

# PHASE 1

Current State of Data for Children  
(Assessing the Data4Children Footprint)

1. Does your organization, division, or department collect or hold data for or about children?

If YES, see Question 2

If NO, initiate a problem definition process (e.g. by allowing public comment, crowdsourced reporting, or hosting co-creation events), to determine if and how data may help achieve your organization's mission as it relates to children.

### USEFUL RESOURCES:

- ▶ [RD4C Data Ecosystem Mapping Tool](#)
- ▶ [The GovLab Problem Solving Canvas](#)
- ▶ [The Open University — Problem Definition Course and Tool](#)

2. Has your organization inventoried the systems needed to collect, share, and store data?

If YES, see Question 3

If NO, develop an inventory of data systems in use or supported by the organization.

### USEFUL RESOURCES:

- ▶ [Terres des Hommes and CartONG Data Protection Starter Kit](#)
- ▶ [IOM Data Protection Manual](#)

3. Can you articulate the intended purpose these systems?

If NO, engage parties responsible and accountable for these systems to understand if and how systems' are serving a clearly defined purpose through appropriate and proportional data handling procedures.

#### USEFUL RESOURCES:

- ▶ [UNICEF — Matching data challenges with practical solutions](#)

If YES, see Question 4

4. Do stakeholders understand access controls, including who has permission to access data, how that access occurs, and under what conditions?

If YES, see Question 5

If NO, establish clear access controls and provisions and train stakeholders on those processes

### USEFUL RESOURCES:

- ▶ [Building Data Responsibility into Humanitarian Action](#)
- ▶ [OECD — Enhancing Access to and Sharing of Data: Reconciling Risks and Benefits for Data Re-use across Societies](#)

5. Can all individuals (including external partners) engaging with your organizational data systems demonstrate that they possess the technical skills and expertise necessary to handle the data safely (e.g. through credentials or documented experience)?

If YES, see Question 6

If NO, define the minimum viable skillset for different roles in supporting a data system and establish fit-for-purpose training interventions and documentation.

### USEFUL RESOURCES:

- ▶ [Dataversity — A Comprehensive Review of Skills Required for Data Scientist Jobs](#)
- ▶ [Data-Pop Alliance — Beyond Data Literacy: Reinventing Community Engagement and Empowerment in the Age of Data](#)
- ▶ [Vodafone Institute for Society and Communications and Data-Pop Alliance — How to Use Big Data? Leading Experts' Roadmap to Data-Driven Innovation Projects](#)



6. Are insights derived from the data system used by intended parties, and is that use aligned with the original purpose of the data collection? Does the data drive decision-making and/or impact service delivery?

If YES, see Question 7

If NO, review documents related to the creation of the data system and speak to stakeholders involved in its creation and use to ensure the actual use aligns with the intended use.

#### USEFUL RESOURCES:

- ▶ [Development Gateway — Understanding Data Use: Building M&E Systems that Empower Users](#)
- ▶ [UNICEF — From Insight to Action: Using data to drive results](#)

7. Does anyone measure whether the data affects progress toward goals set at the outset?

If YES, see Phase 2

If NO, establish metrics to assess the use of the collected data and define an approach for monitoring those metrics.

### USEFUL RESOURCES:

- ▶ [National Institute for Children's Health Quality and Center for the Study of Social Policy — Metrics for Early Childhood Systems: A National Scan](#)
- ▶ [UNICEF Data — Indicator Profiles](#)
- ▶ [UNICEF Data — Progress for Every Child in the SDG Era Dashboard](#)

# PHASE 2

## Policies and Risk Management

1. Is the purpose for which the organization collects data proportional with the breadth of data collected and the length for which it is held?

If YES, see Question 2

If NO, develop a strategy for more proportional data procedures, which might include more constrained data collection procedures or the destruction of superfluous data.

### USEFUL RESOURCES:

- ▶ [UNOCHA — Building Data Responsibility into Humanitarian Action](#)
- ▶ [UNICEF — Child Privacy in the Age of Web 2.0 and 3.0: Challenges and Opportunities for Policy](#)

2. Are procedures in place for conducting an end-to-end risk assessment on how child rights are upheld across the data lifecycle — from original collection to eventual use?

If YES, see Question 3

If NO, convene relevant actors and initiate an end-to-end risk assessment for data systems or initiatives that feature data for or about children.

### USEFUL RESOURCES:

- ▶ [UNOCHA — Data Responsibility Guidelines](#)
- ▶ [UNICEF Innocenti — Children and the Data Cycle: Rights and Ethics in a Big Data World](#)

3. Are there procedures to mitigate risks identified in the previous assessment?

If YES, see Question 4

If NO, research risk mitigation efforts from similar contexts and build a strategy for mitigating any emergent risks in your organization's data activities.

#### USEFUL RESOURCES:

- ▶ [The National Academies of Sciences, Engineering, Medicine — Sharing Clinical Trial Data: Maximizing Benefits, Minimizing Risk](#)
- ▶ [510 Data Responsibility Policy: An Initiative of the Netherlands Red Cross](#)
- ▶ [Computer Law & Security Review — AI and Big Data: A blueprint for a human rights, social and ethical impact assessment](#)

4. Have you determined which policy and legal frameworks at the local, national, regional, and global level must be taken into account? This could include data protection laws, such as GDPR, and sector-specific regulations relating to, for example, sensitive health or child protection data.

If YES, see Question 5

If NO, identify frameworks relevant for the context and align current practices with them.

### USEFUL RESOURCES:

- ▶ [Bloomberg Law — Privacy Laws Around the World](#)
- ▶ [DLA Piper — Data Protection Laws of the World](#)
- ▶ [European Union — The General Data Protection Regulation](#)

5. Do practitioners in your organization understand and refer to institutional policies and guidance regarding child rights and data collection, handling, and use procedures?

If YES, see Phase 3

If NO, engage with practitioners to understand the gaps in their understanding or their reasons for not using relevant frameworks. Review the tools and frameworks used by these individuals and determine how these documents can be revised or supplemented to address these gaps.

### USEFUL RESOURCES:

- ▶ [UNICEF — Data for Children Strategic Framework](#)
- ▶ [UNICEF — Procedure For Ethical Standards In Research, Evaluation, Data Collection And Analysis](#)



# PHASE 3

Processes, Organizations, and People  
(Mapping the Decision/Design Flow)

1. Are data protection legal guidelines and organizational data responsibility principles operationalized in the form of clear processes, policies, roles, and responsibilities?

If YES, see Question 2

If NO, ensure adherence to existing standards and codify RD4C principles in, for example, manuals, employee handbooks, onboarding procedures, and job descriptions.

### USEFUL RESOURCES:

- ▶ [RD4C Principles](#)
- ▶ [Center for Democracy & Technology — Responsible Data Frameworks: In Their Own Words](#)
- ▶ [The GovLab and Centre for Innovation, University of Leiden — Mapping and Comparing Responsible Data Approaches](#)

2. Is data collected by your organization intended to be made accessible to external parties or otherwise move outside of your organization?

If YES, see Question 3

If NO, codify data responsibility principles in, for example, manuals, employee handbooks, onboarding procedures, and job descriptions.

### USEFUL RESOURCES:

- ▶ [Global Food Security Cluster — Field Guide to Data Sharing](#)
- ▶ [PIM — Framework for Data Sharing in Practice](#)
- ▶ [UNHCR — Model agreement on the sharing of personal data with Governments in the context of hand-over of the refugee status determination process](#)

3. Do processes and policies encourage alignment between data-handling practices and the expectations of children, caregivers, and their communities?

If YES, see Question 4

If NO, engage with stakeholders through a survey or other tool to better understand their expectations. Upon receiving and analyzing the responses, update processes and policies as necessary.

#### USEFUL RESOURCES:

- ▶ [Conflict and Health — Ethical considerations for children’s participation in data collection activities during humanitarian emergencies: A Delphi review](#)
- ▶ [UNICEF Innocenti — What We Know about Ethical Research Involving Children in Humanitarian Settings: An overview of principles, the literature and case studies](#)

4. Are relevant personnel familiar with and trained on these processes and policies?

If YES, see Question 5

If NO, establish staff onboarding and training procedures to familiarize relevant personnel with key data responsibility processes and policies.

### USEFUL RESOURCES:

- ▶ [The Engine Room — Responsible Data Handbook](#)
- ▶ [Oxfam — Responsible Data Management Training Pack](#)

5. Are processes in place for engaging individuals and groups affected by a data system both during the design process and after deployment?

If YES, see Question 6

If NO, develop a communications and outreach strategy to engage regularly with children, their caregivers, and other relevant parties to inform system design and deployment with a deeper understanding of risks, opportunities, needs, and expectations.

### USEFUL RESOURCES:

- ▶ [International Organisations Clinic, New York University School of Law and UNICEF — Accountability for Children’s Rights: A research mapping of local and informal accountability mechanisms](#)
- ▶ [Save the Children — Guidelines for Children’s Participation in Humanitarian Programming](#)
- ▶ [UNICEF — Accountability for Children’s Rights: With special attention to social accountability and its potential to achieve results and equity for children](#)
- ▶ [UNICEF — Participatory Approaches](#)
- ▶ [UN Women — Participatory Data Collection Approaches](#)

6. Do you understand which internal and external actors are involved in the development, implementation, and management of your organization's data system? Do you understand how each actor relates to one another?

If YES, see Question 7

If NO, map stakeholders and maintain an up-to-date overview of the key actors involved in relevant systems and initiatives.

### USEFUL RESOURCES:

- ▶ [UN Development Group – Data Privacy, Ethics and Protection: Guidance Note on Big Data for Achievement of the 2030 Agenda](#)
- ▶ [UNICEF Innocenti – Ethical Considerations When Using Geospatial Technologies for Evidence Generation](#)
- ▶ [UNICEF Innocenti – Ethical Considerations When Using Social Media for Evidence Generation](#)
- ▶ [Save the Children – Breakthrough Innovations for Children](#)
- ▶ [World Economic Forum – Guidelines for AI Procurement](#)

7. Do personnel understand who is responsible and accountable for data-related activities and data handling practices?

If YES, see Question 8

If NO, conduct a decision provenance mapping exercise to clarify the actors involved in decision-making at different stages of the data life cycle and ensure the mapping is accessible to relevant internal stakeholders and counterparts.

### USEFUL RESOURCES:

- ▶ [RD4C Decision Provenance Mapping Methodology](#)
- ▶ [FAT\\* \(Fairness, Accountability, and Transparency — Closing the AI accountability gap: defining an end-to-end framework for internal algorithmic auditing](#)



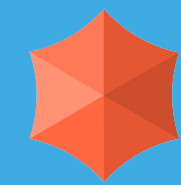
## 8. Are there clear procedures for responding to data-related disputes, unauthorized access or data breach, critical incident management, and other challenges?

If YES, Share lessons learned from the use of this tool with colleagues and collaborators. Consult relevant internal expertise, policies, and guidance to act upon identified opportunities for bolstering responsible data for children in alignment with existing organizational procedures. UNICEF personnel should consult the global helpdesk for support.

If NO, review and align with institutional guidance or policies; then consider convening internal and external experts and stakeholders to assess which types of disputes could potentially arise and develop standard policies and procedures to guide their resolution.

### USEFUL RESOURCES:

- ▶ [UN Statistics Quality Assurance Framework](#)
- ▶ [UNHCR — Policy on the Protection of Personal Data of Persons of Concern to UNHCR](#)
- ▶ [UNOCHA Centre for Humanitarian Data — Guidance Note: Data Incident Management](#)



**RESPONSIBLE DATA FOR CHILDREN**

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