Creating Disability Inclusive ID Systems
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About ID4D

The World Bank Group’s Identification for Development (ID4D) initiative uses global knowledge and expertise across sectors to help countries realize the transformational potential of digital identification systems to achieve the Sustainable Development Goals. It operates across the World Bank Group with global practices and units working on digital development, social protection, health, financial inclusion, governance, gender, legal, among others.

The mission of ID4D is for all people to be able to access services and exercise their rights, enabled by inclusive and trusted digital identification systems. ID4D makes this happen through its three pillars of work:

- Thought leadership and analytics to generate evidence and fill knowledge gaps;
- Global platforms and convening to amplify good practices, collaborate and raise awareness; and
- Country and regional engagement to provide financial and technical assistance for the implementation of robust, inclusive and responsible digital identification systems that are integrated with civil registration.

The work of ID4D is made possible through support from the World Bank Group, the Bill & Melinda Gates Foundation, UK Government, the French Government, the Australian Government and Omidyar Network.

To find out more about ID4D, visit id4d.worldbank.org. To participate in the conversation on social media, use the hashtag #ID4D.
Acknowledgments

This report was prepared by Janet E. Lord for the World Bank’s Identification for Development (ID4D) Initiative under the leadership of Vyjayanti Desai. It was made possible through the generous support of the World Bank’s Rapid Social Response Program and the ID4D Multi-Donor Trust Fund (Bill & Melinda Gates Foundation, the UK Government, the French Governments, the Australian Government, and the Omidyar Network).

This report benefited greatly from the inputs by Susan Scott-Parker and reviews of the World Bank Group staff including Julia Clark and Victoria Esquivel-Korsia of the ID4D Initiative and Deepti Raja under the supervision of Charlotte McClain-Nhlapo, the World Bank’s Global Disability Advisor.

The findings in the report are based on the research and consultations, during 2018 and 2019, including a formal consultation with civil society at the annual Conference of States Parties to the Convention on the Rights of Persons with Disabilities, held in June 2019, at United Nations Headquarters.
Summary

Access to identification is a vital priority. In developing countries, persons with disabilities are among those most likely to face barriers in accessing government services such as health and rehabilitation, public transportation, education, voting, financial services, and economic opportunities. For women and girls with disabilities and other persons with disabilities with intersecting identities, these barriers are multidimensional. Addressing poverty among persons with disabilities and their families requires solutions that address their differentiated and sometimes complex needs – a precondition of which is possessing official proof of identity.

A robust, government-recognized ID can facilitate persons with disabilities living independently in the community and participating in social and economic activities. Yet, persons with disabilities, and especially those who live in rural communities, are more likely to lack access to identification and face additional barriers to access and use of IDs.

Common barriers faced by persons with disabilities when it comes to accessing and use of IDs include: deficient law and policy frameworks; greater indirect costs; physical inaccessibility of enrollment locations; exclusionary technology choice; lack of qualified and respectful enrollment staff; low demand due to fear of stigma or lack of appreciation of the importance of an ID; and lack of or inaccessible information about ID systems.

Creating an inclusive ID system requires a comprehensive approach to overcome barriers to enrollment and use for persons with disabilities. These should adhere to common principles of disability-inclusion, mainly nondiscrimination, accessibility, reasonable accommodation, and universal design. In the ID context, applying these principles in practice requires:

Figure 1. Global Context of Challenges Facing People with Disabilities
1. Ensuring a supportive legal framework for disability-inclusive ID
2. Conducting disability-inclusive planning and outreach—including a disability assessment, stakeholder engagement, and information and education campaigns
3. Adapting processes and technologies throughout the identity lifecycle—enrollment, credential issuing, use and authentication, and grievance redress—to meet inclusivity standards and principles
4. Continuously monitoring processes to fix issues that arise for persons with disabilities

Figure 2 provides a model of the continuous nature of the ID lifecycle, suggesting some illustrative approaches to designing a disability-inclusive ID process at any stage in the lifecycle. The ID lifecycle comprises five phases, each allowing for disability-inclusive interventions. The five phases are: (1) planning and design; (2) outreach and engagement; (3) enrollment; (4) use of ID; (5) and monitoring and evaluation. The cycle presents examples of continuous activities which should be regularly revisited to ensure that ID systems are accessible to people with disabilities regardless of the stage of implementation of the ID system. While not exhaustive, and recognizing that country contexts differ, this cyclical model can be a useful planning tool, much like that used across the world by electoral commissions for inclusive voter registration.

**Figure 2 • ID Lifecycle and Disability Inclusion**

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1 • Introduction

Enabling persons with disabilities to exit poverty and participate fully in development requires a proactive approach during the design and implementation of critical services, including identification (ID) systems. In developing countries—where many persons with disabilities are living in extreme poverty—they and their families often lack government-recognized identity credentials. For example, reports from the Convention on the Rights of Persons with Disabilities (CPRD) suggest significant identification gaps among persons with disabilities in low- and middle-income countries in particular, starting with the underregistration of births. The absence of an official identity or the ability to prove who they are can exacerbate and reinforce already entrenched barriers to full participation in society, including access to basic public and private sector services, rights, protections, and economic opportunities.

Conversely, ID systems that are accessible, usable, and grounded in the lived experience of persons with disabilities can unlock access to health and rehabilitation services, disability support, social protection schemes, education, and financial and other services that allow persons with disabilities to enter the formal economy and improve their livelihoods. As ID systems and service delivery move into the digital age, this provides an opportunity to increase accessibility, but also runs the risk that exclusionary technologies will deepen the divide for persons with disabilities. Creating disability-inclusive ID systems therefore directly contributes to Sustainable Development Goal (SDG) 16.9 (legal identity for all) and SDG 10, which sets the goal to empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion, or economic or other status.

Creating disability-inclusive ID systems requires specific attention and coordination from ID authorities, as well as international agencies, donors, and civil society organizations. To assist practitioners and other stakeholders, this note provides an overview of the key challenges that persons with disabilities face in accessing and using ID systems, as well as the benefits of implementing disability-inclusive systems. It then provides good practices to ensure inclusivity,
including implementing the principles of accessibility\(^2\) and universal design\(^3\) when defining processes and selecting technologies, making reasonable accommodations\(^4\) throughout the identity lifecycle (see figure 2), adopting suitable exception handling and grievance redress mechanisms, and engaging in proactive outreach and communication involving persons with disabilities organizations (DPOs).

\(^{2}\) **Accessibility** refers to measures taken to ensure persons with disabilities can access, on an equal basis, the physical environment, transportation, information and communications (including information and communications technologies and systems), and other facilities and services open or provided to the public, both in urban and in rural areas.

\(^{3}\) **Universal design** is the design of products, environments, programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

\(^{4}\) **Reasonable accommodation** refers to necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms.
2 • Disability and ID: Benefits & Barriers

In developing countries, persons with disabilities are among those most likely to face barriers in accessing services and rights such as health and rehabilitation, public transportation, education, voting, financial services, and economic opportunities. Disability-related exclusions from development processes take many forms, impact individuals with all types of disability and their families, and invariably lead to or entrench other types of exclusion and discrimination. Stereotypes about disability often lead to discrimination against persons with disabilities in decision-making processes in general. Furthermore, they can lead to legislative stereotyping and rules that restrict or even prohibit altogether certain rights, including restrictions on legal capacity, exclusions from voting rights, among others.

Benefits of Disability-Inclusive ID Systems

Many of these challenges are exacerbated by lack of identity documents and could be mitigated by the successful inclusion of persons with disabilities in ID systems. A government-recognized ID can facilitate the full participation of persons with disabilities in their communities, as shown in table 1. Across these sectors, enabling persons with disabilities to assert their legal identities can be protective of independent living, autonomy, privacy, and asset accumulation.

Table 1. The Importance of ID in Disability-Inclusive Development

<table>
<thead>
<tr>
<th>Area</th>
<th>How Identification Helps Address Barriers to Participation for Persons with Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth registration</td>
<td>Facilitates early identification and intervention for children with disabilities and tracking.</td>
</tr>
<tr>
<td>Education</td>
<td>Supports closing the gap for children with disabilities who are out of school.</td>
</tr>
<tr>
<td>Health</td>
<td>Enhances equal access to health services, including immunization for children with disabilities, early identification and intervention, and rehabilitation.</td>
</tr>
<tr>
<td>Social programs and benefits</td>
<td>Increases access to disability-specific programs and benefits (e.g., vocational training opportunities).</td>
</tr>
</tbody>
</table>

Disability discrimination means any distinction, exclusion or restriction on the basis of disability which has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. It includes all forms of discrimination, including denial of reasonable accommodation.
<table>
<thead>
<tr>
<th>Area</th>
<th>How Identification Helps Address Barriers to Participation for Persons with Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political participation</td>
<td>Facilitates access to voter registration and closing the political participation gap for persons with disabilities.</td>
</tr>
<tr>
<td>Protection</td>
<td>Enhancing protection against risk of trafficking, child and forced marriage, deportation, displacement, fosters safe migration, and protects against child labor.</td>
</tr>
<tr>
<td>Financial services access</td>
<td>Acts as a bridge to financial services and helps to ensure that women with disabilities have equal access to financial services.</td>
</tr>
<tr>
<td>Employment and livelihood benefits</td>
<td>Opens up opportunities for employment in the formal sector, asset accumulation, and other economic activities.</td>
</tr>
</tbody>
</table>

For these reasons, identification is an essential element of disability-inclusive development priorities. This includes realizing the SDGs, including SDG 10 and SDG 16.9, and advancing implementation of the nearly universally ratified CRPD and other treaties that mandate universal access to identity for all. Creating disability-inclusive ID systems from the beginning can also help governments eliminate the cost of retrofitting poorly designed ID systems and achieve a return on investment insofar as inclusive ID supports education, training, health care, and other services (see figure 3).

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7 International human rights laws guarantee the rights of all persons—including persons with disabilities—to identity and identification. Conventions such as the International Covenant on Civil and Political Rights (ICCPR) and the Convention on the Rights of the Child (CRC) guarantee the right to recognition before the law, to identity documents, and to registration immediately after birth for all persons, and the CRPD further enshrines these rights with regard to persons with disabilities. Furthermore, the CRPD mandates that supported decision-making be provided to persons with disabilities where needed, as opposed to arbitrary and discriminatory substituted decision-making. This is critical for persons with disabilities who are often denied their right to legal recognition in the context of applying for identity documents and other transactions such as opening bank accounts or voter registration.

Common Barriers to ID for Persons with Disabilities

Notwithstanding the many benefits associated with ID, persons with disabilities experience a wide range of barriers in obtaining and using identity credentials.” For persons with disabilities who have intersecting identities—for example, women and girls, rural dwellers, older persons, orphans and vulnerable children, stateless persons, refugees, gender and sexual minorities, among others—these barriers are multidimensional. For example, girls with disabilities are less likely to be registered at birth,⁹ and women and girls may be at a higher risk of exclusion from ID systems in general, based on findings of various end user research studies on ID systems. As summarized in table 2, barriers to identification experienced by persons with disabilities often include:

- **Legal frameworks.** Minimum elements of disability rights protection include an explicit prohibition of discrimination on the basis of disability and, as part of that requirement, the duty to provide reasonable accommodation where needed in a particular case. This means that legal frameworks not only need to include disability as a prohibited ground of discrimination but must also include the duty to provide reasonable accommodation. Without such a framework in place, appropriate modifications and adjustments to facilitate their access to government services may not be implemented. Other aspects of the legal framework may also contribute to a lack of identification. For example, laws making fathers legally responsible for registering their children at birth can decrease birth registration as abandonment of a child by the father is a common experience for mothers who have given birth to a child with a disability.

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- **Indirect costs.** Owing to the frequent need to rely on family members or hire intermediaries for assistance, persons with disabilities often face higher indirect costs to obtaining and using ID. This includes opportunity costs related to completing long or complex procedures, obtaining accessible transport often for long distances, and paying fees for assistance with completing forms or obtaining a favorable position when queuing. Because persons with disabilities are more likely to lack foundational documents such as birth certificates, requiring these during the registration process without exception may create a hard barrier and/or add to costs by requiring people to made additional trips to administrative offices.

- **Physical inaccessibility.** The inaccessibility of locations where ID processes occur—for example, registration centers, service centers where IDs are used, and so on—creates another challenge for persons with disabilities. This might involve, for example, barriers along pathways, at entrances to a center, and inside, including inaccessible sanitation facilities, enrollment stations, or service counters. Furthermore, persons with disabilities may be unable to cope with certain environmental conditions (for example, exposure to sun for persons with albinism, heat) or standing in queues.

- **Technology choices.** Certain technologies pose challenges for a number of types of disability. One common example that is increasingly being adopted is the use of biometrics—*for example, fingerprints, iris, and face—which can have high failure to capture (FTC) rates, failure to enroll (FTE) rates, and false nonmatches for persons with disabilities. Some challenges include physical features or behaviors that do not confirm to the expectations of the recognition software (for example, shape of hand or face); changes in physical features or behaviors over time, as with the onset of disease, incident or injury; amputation which prevents the capture of finger or hand biometrics; unreadable prints for older persons; and challenges in iris recognition for certain eye conditions, people with cataract surgery, and persons with albinism, among others.

- **Staff and training.** Personnel may not be not trained to accommodate persons with disabilities and their specific needs or may harbor prejudice around disability that results in rude and discriminatory treatment. Furthermore, there may be a lack of specific staff who are able to provide assistance (for example, orientation for persons who are blind or have poor vision, or interpretation for deaf persons).

- **Low demand.** The value of obtaining an ID may not be readily apparent to individuals with disabilities or their family members, reducing participation. For example, some families may not understand the benefits of birth registration for a child with a disability, perhaps

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10 Biometrics are a measurable physical characteristic or personal behavioral trait used to recognize an applicant’s identity or verify their claimed identity. Facial images, fingerprints, and iris scan samples are all examples of biometrics.

11 These include, for instance, many of the neglected tropical diseases, many of which may lead to problems with biometric capture.
because they assume the child will not need to go to school. In other instances, stigma and prejudice—such as assumptions that an individual with a disability cannot learn or will not be able to get a job, or shame regarding a child with a disability—may reduce participation in ID systems.

- **Lack of—or inaccessible—information.** Lack of access to education, a major problem for persons with disabilities, in turn impacts access to information about the benefits of ID. This may include, for example, the absence of accessible information on ID agency websites regarding details of enrollment procedures, required documents, dates for mobile campaigns for enrollment, and so on. Furthermore, registration materials themselves may not be in usable/accessible formats (for example, physical forms not printed in Braille or web forms not screen-reader friendly).

### Table 2. Common Barriers to ID for Persons with Disabilities

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Examples</th>
<th>Identity lifecycle</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Legal</strong></td>
<td>• Absence of a legal framework protective of nondiscriminatory access to services for persons with disabilities</td>
<td>• Enabling environment</td>
</tr>
<tr>
<td></td>
<td>• Existence of laws that create barriers to the registration or identification of persons with disabilities (e.g., when birth registration requires the father)</td>
<td></td>
</tr>
<tr>
<td><strong>Indirect costs</strong></td>
<td>• Opportunity costs and extra fees incurred by persons with disabilities and their families resulting from complex, time-intensive procedures, inaccessible transit, travel to distant locations, and interpretation or other assistance</td>
<td>• Registration</td>
</tr>
<tr>
<td></td>
<td>• Need to obtain additional documents, such as birth certificates, which persons with disabilities are less likely to have but which require additional fees or trips</td>
<td>• Credential issuance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use (e.g., authentication at point of service delivery)</td>
</tr>
<tr>
<td><strong>Physical access</strong></td>
<td>• Inaccessible facilities, including building entrances, indoor spaces, enrollment stations, toilets</td>
<td>• Registration</td>
</tr>
<tr>
<td></td>
<td>• Long queues with inadequate seating or other accommodation</td>
<td>• Credential issuance</td>
</tr>
<tr>
<td></td>
<td>• Harsh environmental conditions such as direct sun and heat</td>
<td>• Use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Barrier</th>
<th>Examples</th>
<th>Identity lifecycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology choices</td>
<td>• Biometric technology using low quality equipment or single modalities with insufficient exception-handling procedures</td>
<td>• Registration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Credential issuance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use</td>
</tr>
<tr>
<td>Staffing</td>
<td>• Lack of training in accommodating persons with disabilities</td>
<td>• Registration</td>
</tr>
<tr>
<td></td>
<td>• Discriminatory or prejudicial treatment based on social stigmas</td>
<td>• Credential issuance</td>
</tr>
<tr>
<td></td>
<td>• No staff that can serve as assistants (e.g., for persons who are blind or have low vision)</td>
<td>• Use</td>
</tr>
<tr>
<td>Low demand</td>
<td>• Low perceived benefits of ID by persons with disabilities or their families</td>
<td>• Outreach</td>
</tr>
<tr>
<td></td>
<td>• Stigma or attitudes from family that prevent registering children or dependents</td>
<td>• Registration</td>
</tr>
<tr>
<td></td>
<td>• Reticence or fear of disclosing own disability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Anticipated difficulties with registering due to above barriers</td>
<td></td>
</tr>
<tr>
<td>Lack of / inaccessible</td>
<td>• Low knowledge of ID system and benefits, often because of low education rates among persons with disabilities</td>
<td>• Outreach</td>
</tr>
<tr>
<td>information</td>
<td>• Inaccessible materials or communication strategies including lack of Braille, sign language, web forms that are not screen reader friendly, etc.</td>
<td>• Registration</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Credential issuance</td>
</tr>
</tbody>
</table>

3 • Strategies for Disability-Inclusive ID

Creating an inclusive ID system requires a comprehensive approach to overcome barriers to enrollment and use for persons with disabilities. As reflected in the World Bank’s Disability Inclusion and Accountability Framework (see box 2), this effort should be based on various international human rights laws and standards including the CRPD\textsuperscript{12} that advance the principles of:

- **Nondiscrimination:** Disability discrimination includes any distinction, exclusion, or restriction on the basis of disability that has the purpose or effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. It includes all forms of discrimination, including denial of reasonable accommodation (CPRD, Articles 2 and 5).

- **Accessibility:** The measures taken to ensure that persons with disabilities can access, on an equal basis with others, the physical environment, transportation, information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and in rural areas (CPRD, Article 9).

- **Reasonable accommodation:** The adoption of necessary and appropriate modifications and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms (CRPD, Article 2).

- **Universal design:** The design of products, environments, programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. The essence of universal design is to develop processes that work effectively for those facing the greatest barriers and those most likely to be excluded, with a resulting process that works well for all users (CRPD, Article 2).

**In the ID context, applying these principles in practice requires:**

- Ensuring a supportive legal framework for disability-inclusive ID
- Conducting disability-inclusive planning and outreach—including a disability assessment, stakeholder engagement, and information and education campaigns
- Adapting processes and technologies throughout the identity lifecycle—enrollment,

\textsuperscript{12} See, for example, CRPD Articles 2, 5, 9, 12, and 13.
credential issuing, use, and authentication, and grievance redress—to meet inclusivity standards and principles

- Continuously monitoring processes to fix issues that arise for persons with disabilities

Each of these measures are summarized in figure 2 and table 3 and discussed in the sections that follow.

**Table 3. Examples of Good Practices for Disability-Inclusive ID**

<table>
<thead>
<tr>
<th>Action</th>
<th>Example good practices</th>
</tr>
</thead>
</table>
| Create enabling legal and governance frameworks          | • Create a supportive legal framework that recognizes nondiscrimination on the basis of disability and the right to reasonable accommodation, including access to government ID services along with accessibility measures at all phases throughout the ID lifecycle  
• Address legal barriers that prevent or limit persons with disabilities from obtaining or using ID  
• Allocate sufficient budget for accessible outreach and extra costs of participation for persons with disabilities |
| Engage people with disabilities during planning and throughout implementation | • Conduct a robust disability analysis with a wide range of stakeholders to review laws, policies, barriers, etc., related to disability and ID  
• Engage persons with disabilities organizations early on and utilize their expertise for the disability analysis, training, accessible site selection, training of personnel, testing of technology, monitoring ID-related processes, and continuous improvement  
• Create community task forces and working groups inclusive of persons with disabilities and organizations that can assist in the identification and removal of barriers to ensure access for enrollees with disabilities |
| Inform and educate through targeted outreach              | • Provide high-quality and disability-inclusive information and communication campaigns about ID processes to build awareness of the benefits of identification  
• Develop outreach materials and messaging in multiple formats including large print, Braille, sign language, web-based, and other formats  
• Use the voice and image of persons with disabilities |

Authentication is the process through which a person proves their identity—typically by providing physical or digital credentials and/or authentication factors (e.g., password, PIN, etc.)—and may be required to complete certain transactions or gain access to services or resources.
<table>
<thead>
<tr>
<th>Action</th>
<th>Example good practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapt ID-related processes and technologies according to the principles of:</td>
<td><strong>Reduce indirect costs:</strong></td>
</tr>
<tr>
<td></td>
<td>• Have on-demand registration enabling persons with disabilities to access the process at any time</td>
</tr>
<tr>
<td></td>
<td>• Conduct ID processes as close as possible to where people live and reduce the number of journeys required</td>
</tr>
<tr>
<td></td>
<td>• Have mobile registration that can make home visits for persons with disabilities, and create a registry unit devoted to disability inclusion</td>
</tr>
<tr>
<td></td>
<td>• Provide or subsidize transport to enrollment centers for persons with disabilities</td>
</tr>
<tr>
<td></td>
<td><strong>Improve accessibility of ID facilities:</strong></td>
</tr>
<tr>
<td></td>
<td>• Make enrollment centers physically accessible to persons with disabilities, including by removing barriers to entry and interior mobility, in compliance with ISO standards on accessibility</td>
</tr>
<tr>
<td></td>
<td>• Implement queue preference or separate enrollment lines for persons with disabilities, older persons, and pregnant women</td>
</tr>
<tr>
<td></td>
<td>• Ensure dedicated seating in shaded areas for persons with disabilities (e.g., persons with albinism should not be exposed to long queues in the sun)</td>
</tr>
<tr>
<td></td>
<td>• Provide interpretation for those with hearing impairments, assistance for blind persons and accessible materials (e.g., signs in Braille and using pictograms).</td>
</tr>
<tr>
<td></td>
<td><strong>Select high-quality, accessible technology:</strong></td>
</tr>
<tr>
<td></td>
<td>• Follow ISO standards for accessible technology</td>
</tr>
<tr>
<td></td>
<td>• Engage persons with disabilities organizations in testing technology</td>
</tr>
<tr>
<td></td>
<td><strong>Implement exception handling and grievance processes:</strong></td>
</tr>
<tr>
<td></td>
<td>• Establish exception-handling procedures for when technology (e.g., biometric recognition) fails for persons with disabilities</td>
</tr>
<tr>
<td></td>
<td>• Adopt flexible procedures that allow for modifications or exceptions (e.g., for the enrollment of certain biometrics) for persons with disabilities</td>
</tr>
<tr>
<td></td>
<td>• Establish accessible grievance mechanisms to allow people with disabilities to register complaints</td>
</tr>
<tr>
<td>Action</td>
<td>Example good practices</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| **Train and sensitize staff:** | • Continually train personnel in accommodating persons with disabilities  
• Sensitize staff that everyone has the right to an ID and that no one should be excluded on the basis of disability or have arbitrary decisions made based on disability  
• Develop codes of conduct for enrollment based on principles of nondiscrimination, dignity, and respect for privacy |
| **Monitor implementation** | • Closely monitor ID-related processes for disability inclusion  
• Include persons with disabilities organizations and team members with disabilities in monitoring accessibility and inclusivity as well as privacy implications  
• Ensure that applicants can be directed towards receiving further support when such needs are discovered in the identification process (linkage to services) |

## Adopt a Supportive Legal Framework

An enabling legal and policy environment can facilitate access of marginalized groups, including persons with disabilities and others at special risk of exclusion from ID systems—for example, ethnic minorities, persons living in remote areas, nomadic persons—to access identification and the benefits deriving from it. Conversely, underdeveloped frameworks or explicitly discriminatory laws and policies it can serve as a major barrier to identification for marginalized groups. In addition, systems of categorizing and clarifying persons with disabilities may be done in such a way that undermines rights raising concerns about exclusion, privacy, and confidentiality, among other issues. Conducting a review of the law and policy environment as part of the disability assessment is therefore an important element of building an inclusive ID system.

### Elements of nondiscrimination on the basis of disability:
- It includes all forms of discrimination, including denial of reasonable accommodation;  
- Reasonable accommodation requires making necessary and appropriate modification and adjustments to ID systems where needed to make the system accessible to persons with disabilities as long as they do not impose an undue burden.
International law clearly prohibits discrimination based on disability and requires that reasonable accommodation be provided. Legal frameworks that reflect international standards on disability—in particular those set forth in the CRPD—provide guidance on ensuring nondiscrimination on the basis of disability in law and policy frameworks (see box 1). Such measures will apply to all aspects of the ID system and identity lifecycle, from site selection at accessible locations, information campaigns and outreach strategies, technology choices, enrollment and credentialing procedures, and more, as described in the section below.

### Box 1. Emerging Legal Practice on Disability and ID

**Europe**: eIDAS Article 15 - Accessibility for persons with disabilities. “In line with the obligations under the United Nations Convention on the Rights of Persons with Disabilities, approved by Council Decision 2010/48/EC (1), in particular Article 9 of the Convention, persons with disabilities should be able to use trust services and end-user products used in the provision of those services on an equal basis with other consumers. Therefore, where feasible, trust services provided and end-user products used in the provision of those services should be made accessible for persons with disabilities. The feasibility assessment should include, inter alia, technical and economic considerations.”

**India**: Aadhaar Act Article 5. “The Authority shall take special measures to issue Aadhaar number to women, children, senior citizens, persons with disability, unskilled and unorganized workers, nomadic tribes or to such other persons who do not have any permanent dwelling house and such other categories of individuals as may be specified by regulations.”


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Inclusive Planning and Outreach

Understanding and incorporating the perspectives and needs of persons with disabilities from the beginning is essential for ensuring inclusivity in an ID system. This requires a multistakeholder process that begins during the planning phase and continues throughout the life of an ID system. At a minimum, the planning phase should include a disability assessment and proactively engaging persons with disabilities and civil society organizations in order to:

- Understand ID-related issues and barriers faced by persons with disabilities
- Identify necessary reforms to the legal framework
- Plan for accessible system design, including processes and technology
- Mobilize persons with disabilities organizations and communities
- Overcome stigmas and inform and educate people about the ID system and its benefits

Conduct a Disability Assessment

International standards call for disability assessments on the same basis that gender assessments are required in advance of law, policy, and programming planning. For example, the World Bank’s Environmental and Social Framework requires borrowers to identify the potentially differentiated risks and impacts of projects on persons with disabilities and to prevent and mitigate such risks (see box 2). Disability assessments provide an opportunity to identify needs and barriers, formulate solutions, and make adjustments that are inclusive, accessible, well-coordinated, and consistent with international disability rights and nondiscrimination. Such assessments should, at a minimum, evaluate:

- the legal and regulatory framework to identify potential gaps in disability protection as well as laws (for example, related to legal capacity, civil registration, nationality, and so on) that may create barriers to inclusion for persons with disabilities;
- the mandate, technical readiness, and institutional capacity of responsible national and local bodies for ID—as well as agencies that support ID processes—as this can substantially advance or seriously undermine disability inclusion; and
- the accessibility and accuracy of ID processes and technologies used to capture and enroll participants, including facilities, registration kits and software, procedures for registering and collecting credentials, the types of credentials and authentication mechanisms used, and so on.

### Box 2. World Bank Group Framework for Disability Inclusion

**Environmental and Social Framework:** The World Bank’s Environmental and Social Framework (ESF)\(^a\) advances nondiscrimination for persons with disabilities in development operations supported through investment project financing—including ID-related projects. The ESF requires borrowers to identify the potentially differentiated risks and impacts of projects on persons with disabilities and to prevent and mitigate such risks. This includes stakeholder engagement and specific measures to facilitate the meaningful participation of stakeholders with disabilities, a disability-inclusive risk and impact analysis and the application of principles of nondiscrimination, equal opportunity, and reasonable accommodation.

**Disability Inclusion and Accountability Framework:** The World Bank’s Disability Inclusion and Accountability Framework aims to support the mainstreaming of disability in all World Bank activities.\(^b\) It lays out a road map for (1) including disability in the Bank’s policies, operations, and analytical work and (2) building internal capacity for supporting clients in implementing disability-inclusive development programs. While the primary target audience of the framework is Bank staff, it is also relevant to the Bank’s client countries, development partners, and persons with disabilities. It forms the foundation for the Bank’s ongoing efforts to ensure disability-inclusive projects, including the Banks work to support ID.

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### Engage Stakeholders

A core component of building a disability-inclusive ID system is ensuring that persons with disabilities and their representative persons with disabilities are key stakeholders in all phases of design and implementation. The stigma, shame, and prejudice associated with disability fuels isolation from the community, creates an incentive not to self-disclose one’s disability, and can encourage the practice of hiding away family members with a disability, creating challenges for ID. Stakeholder engagement strategies, including outreach to persons with disabilities, are essential to consult with individuals with disabilities and ensure they are reached by ID systems.

The stakeholder consultations described in box 3 demonstrate the value of engaging persons with disabilities in ID processes to help identify potential barriers and to devise solutions for inclusive ID. For more guidance on public engagement and consultation, see the ID4D Practitioner’s Guide and Toolkit for Qualitative Research on ID\(^{16}\).

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\(^{16}\) Available at http://id4d.worldbank.org.
Box 3. Voices of Persons with Disabilities from ID4D Stakeholder Engagement Sessions

With support from the World Bank, government representatives conducted consultations with persons with disabilities in three countries in West Africa where ID projects are being planned or implemented. The consultations provided an opportunity for persons with disabilities to share their challenges and experiences accessing identification and to provide feedback on the proposed design of the ID systems.

Focus group discussions elicited a wide range of responses from across the diversity of the disability communities in the respective countries. The structured dialogue around key questions regarding barriers experienced and recommendations for more inclusive identification allowed for a robust sharing of views among and between Bank staff, representatives of a variety of persons with disabilities and other stakeholders engaged in the ID system. Careful planning of the consultation ensured that participants were welcomed into an accessible venue and had reasonable accommodation provided where needed to facilitate their participation in the engagement process.

Key findings included the following:

Focus group participants universally agreed that it was important to make persons with disabilities more aware of the benefits of identification:

- Participants in one country recommended the need to incorporate disability organizations in the technical working group of the ID project as provide trained enrollment officers and disability desk officers at enrollment centers to assist persons with disability

Participants agreed that numerous structural barriers made accessing enrollment centers challenging:

- Long queues without preferential treatment for persons with disabilities (e.g., reserved seats)
- Persons with albinism are exposed to the sun for long periods in queues
- Long distances to enrollment enters for many with inaccessible transport and multiple required visits
- Inaccessibility of enrollment centers for people with disabilities

There was reluctance on the part of many focus group participants to enroll in any ID system because of the rudeness of officials and their lack of understanding about how to accommodate persons with disabilities—in other words, how to enable respectful and equitable access to persons with disabilities.
Communication barriers featured in every consultation:

- There are no sign language interpreters for deaf persons, which makes it difficult to communicate.
- When a deaf person arrives at the center, there are no interpreters and there is difficulty in the exchanges, sometimes modifying the accuracy of the information on the ID card.
- There is lack of listening and courtesy on the ground and poor reception for people with disabilities.
- Forms are not adapted to the needs of persons with disabilities.
- There are many different sign languages across the many local languages, making it even less likely to encounter an ID enrollment officer who will know sign language.

Participants referenced the costs, both direct and indirect, associated with obtaining ID, which served as a disincentive to participate:

There are several additional costs related to the establishment of identification documents for people living with disabilities and informal costs are more costly than formal costs. They must pay for assistance at times to accompany them to the place of enrollment or to move to the interior of the country, to small centers, to get their documents set up quickly and easily. Sometimes you have to pay for an interpreter ... and many other things; the cost of the national ID card remains high for many and results in the loss of a day’s work and other expenses because to establish the identity card, it is necessary to establish initially, a birth certificate, a certificate of nationality or an attestation of identity; formal cost: the cost to make a national ID is too high.

Specific examples were provided regarding barriers presented by the technology used on enrollment:

- Several devices do not take into account disability, for example, iris sensors are not adapted to persons with visual impairments or the height of certain devices for small people.
Inform and Educate

Targeted information and education campaigns are essential for overcoming low demand and stigma against registration for persons with disabilities by increasing awareness about the ID system and tangible benefits. Overcoming these barriers requires preplanning and targeted outreach in addition to ensuring inclusive mainstream information campaigns. Factors that might help address demand-side barriers include information aimed at demonstrating the following advantages to participation in ID systems:

- Securing eligibility to benefits associated with additional needs or costs associated with disability, such as the need for assistive devices and personal assistance.
- Identification can overcome discrimination and exclusion-based on disability.
- Securing access to services for persons with disabilities who may face discrimination in discrete contexts (for example, voting, financial transaction, property disputes).

Differences in communication and information needs must be considered in order to accommodate the diversity of the disability population, including variables such as language, literacy, urban versus rural, cultural traditions, and gender. This includes providing information about ID using a mix of modalities and in accessible formats, including print, radio, and theater; large print and Braille for those with poor vision; captioning, sign language, or other formats for deaf persons; and more. Pictorial information may also be useful for a broad range of people, including but not limited to low-literacy individuals, persons with intellectual disabilities, and deaf individuals.

Ensuring physical access to public meetings, focus groups, plays, or other educational events for persons with disabilities will also require various accommodations and modifications—for example, assistance with travel, accessible site selection, removal of physical barriers to entry, and so on—many of which will enhance access for a variety of marginalized groups.

Adapt ID Processes and Technologies

The principles of nondiscrimination, accessibility, reasonable accommodation, and universal access should be applied during the design of ID systems, including technology choices, processes, and procedures. These measures should mitigate barriers identified during the disability assessment and ongoing consultations with persons with disabilities organizations that may be present throughout the identity lifecycle, including during:

1. **Registration**—the collection and proofing of identity information and creation of official identity records

2. **Credentialing**—issuing credentials and binding them to the person
3. **Use**—verifying or authenticating identities using these credentials and records at the point of service delivery or other transaction

4. **Management**—updating identity information, renewing or revoking credentials, and so on.\(^{17}\)

For each of these stages, governments must take disability seriously and invest sufficiently in adapting good practices to national context and capacity constraints. This includes steps to reduce indirect costs, improve the accessibility of ID facilities, select accessible technology, train and equip staff, and implement exception-handling procedures and grievance redress mechanisms—as summarized in Table 3 and discussed below. Importantly, ID administrators should allocate sufficient budget and staff resources to cover these disability-inclusive measures both during the start-up phase and the longer term.

### Reduce Indirect Costs

Persons with disabilities often face high indirect costs—including opportunity costs and hiring assistance—to complete registration and collect and use credentials. In order to ensure that ID systems are inclusive, a number of steps should be taken to reduce these costs, such as:

- **Mobile enrollment units** that can make house calls for those unable to travel to a registration center (for example, as done in Thailand, Peru, El Salvador, Guatemala, Costa Rica, Panama, and Ecuador).

- **Setting up enrollment or credential collection points** at disability centers or other appropriate community locations or creating disability-specific enrollment units (for example, the civil registrar in Colombia has a “unit of attention to vulnerable population,” supported by UNHCR that helps people with disabilities in remote areas).

- **Providing accessible travel means or vouchers** for accessing a registration center or to collect credentials (for example, Peru, Ecuador, and Argentina provide transportation waivers).\(^{18}\)

Thailand, for example, undertakes significant outreach to persons who are unable to visit a registry owing to physical disability, illness or old age, for instance. Each subdistrict and district office (of which there are more than 2,000) have mobile kits, including facial image backdrop, biometric capture and card production. See further examples from Argentina and Chile in box 4 and box 6.

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Box 4. Good Practices from the Civil Registry in Neuquén Province, Argentina

Reducing the cost of enrollment and credentialing:
• For those unable to travel to the Civil Registry office, personnel will make home visits, and specialized training is provided for staff for this procedure.
• Online registration: In general, 90 percent of the processes have been computerized in order to reduce the need to travel to a civil registry office.

Making facilities more accessible:
• The province has worked to construct access ramps and modify workspaces and walkways to improve mobility.
• Movable cameras allow staff to adjust them to the person’s needs.
• Implementing exception-handling procedures:
• In cases where it is impossible to collect biometrics, an exception protocol exists (subject, however, to certification from a doctor).

Training and sensitizing staff:
• All staff are trained by the undersecretary of disability for the province to sensitize them on how to deal with situations that may arise for people with disabilities and how to make procedures more accessible, with the goal of addressing both physical and cultural barriers.
• Selected agency workers also have in-depth training on sign language.

Improve Accessibility of ID Facilities and Procedures

When persons with disabilities do need to visit physical centers to enroll in ID systems, collect credentials, update information, or use their IDs, accommodation should be made to ensure accessibility. Ensuring accessibility facilities will benefit not only persons with disabilities but also other individuals who may have limited mobility, including pregnant women, older persons, and individuals with various temporary or long-term health conditions. Such measures should be consistent with accessibility standards and the requirements of CRPD Article 9 and include:

• Ground-level entry points and barrier-free access outside and inside facilities, including service counters and toilet facilities.
• Reserved seating in shaded areas and at enrollment stations for persons with disabilities and others.
Priority queues or services to avoid the need to wait or stand for long periods of time.

Interpretation services for those with hearing impairment, assistance for those with low visibility and signs, instructions, and other markers in Braille and or pictograms to ensure that everyone is able to physically navigate the space and has the information needed to complete procedures.

**Select Accessible Technology**

The selection of accessible technology—that is, enrollment equipment and software, credentials, authentication mechanisms, and so on—is essential for ensuring that ID systems are flexible and responsive to the needs of all users. To begin, the International Organization for Standardization (ISO) develops standards that provide requirements, specifications, guidelines or characteristics that can be used consistently to ensure that materials, products, processes, and services are usable and fit for their purpose. There are various ISO standards that set out accessibility specifications for technology products and services to address the needs of persons with disabilities, including:

- ISO/TR 22411, Ergonomics data and guidelines for the application of ISO/IEC Guide 71 to products and services to address the needs of older persons and persons with disabilities (2008)
- ISO/IEC 19794 (All parts), Information technology—Biometric data interchange formats
- ISO/IEC 19795 (All parts), Information technology—Biometric performance testing and reporting; data interchange formats

- Are technologies able to identify and authenticate individuals in all cases? If not, what are the exception-handling protocols?
- Are staff well trained to understand and follow such protocols? Do staff follow these protocols when needed?
- Are there individuals for whom the technology may present barriers?
- How accurate are these technologies when confronted with anomalous identity characteristics?
When selecting technologies, disability-specific guidance should be included in standard procurement documents to ensure nondiscrimination and adherence to the principle of universal access.\textsuperscript{19}

In addition, specific attention should be paid to technologies—such as biometric recognition—that are known to have higher error rates for persons with disabilities. Applying the ISO standards listed above, choosing multimodal biometrics, having well trained staff, and implementing strong exception-handling procedures are crucial for ensuring that the use of biometrics during enrollment (for deduplication) or authentication does not pose an insurmountable barrier for the inclusion of persons with disabilities (e.g., see Box 5 on India). While errors will occur even in a carefully and well-designed system, planning will ensure the existence of alternatives that can prevent exclusion.

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**Box 5. Multimodal Biometrics in India’s UID Program**

India’s Unique Identification (UID) program has the objective of providing every Indian resident with a unique, secure identification or “Aadhaar” number. In addition to basic biographic information, the system uses multimodal biometrics—collecting ten fingerprints, two iris scans, and a facial image—to deduplicate new enrollees. The decision to use a combination of biometrics was taken not only to reduce the potential error rates in a large (over 1 billion) population, but also to reduce the rate of exclusion by providing multiple options for people who have difficulty giving biometrics, including those with disabilities. Data from the UID program suggests that iris scans are far more inclusive than fingerprints, especially when applied to poor populations engaged in heavy manual labor and allow for more precise authentication.\textsuperscript{a} Few people have neither a usable iris nor fingerprints, though the incidence of problems is somewhat higher among the aged.


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**Train and Sensitize Staff**

Training personnel on how to assist persons with disabilities appropriately at enrollment points is critical. Personnel should be able to competently apply exception-handling protocols and interact with persons with disabilities in a respectful manner. Persons with disabilities organizations should be engaged early on to provide training on how to accommodate persons with disabilities. This training should be continuous and should sensitize staff that everyone has the right to an ID

and that no one should be excluded on the basis of disability or have arbitrary decisions made based on disability. Codes of conduct for enrollment should be developed based on principles of nondiscrimination, dignity, and respect for privacy.

Leveraging community resources is essential and community workers and members of the disability community should be included in service as enrollment agents. Community task forces inclusive of persons with disabilities and persons with disabilities organizations can assist in the identification and removal of barriers to ensure access for enrollees with disabilities.

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**Box 6. Good Practices in the Chilean Civil Registry and Identification Service**

The Chilean Civil Registry and Identification Service adopts a three-pronged approach to inclusion for their staff members and for the public and have instituted an inclusive hiring process.

1. **Access to the environment:** A range of measures have been undertaken to improve accessibility of infrastructure, including mobility, access and exits, special hygienic services, care modules, training, and protocols for personnel on face-to-face and remote interactions.

2. **Access to information:** A multitude of options for accessing information about registry services and products, including specific means for persons with disabilities.

3. **Communications:** In addition to visiting the office, some requests can be made through call center and web services. Web services provide captcha is available in audio format and plans are underway to enhance website accessibility, including page contrast, variable letter sizes, among other things.

**Mobile services:** The enabling registration for civil registration specifically requires officers to visit their districts in order to realize services, which has led to the deployment of mobile teams that visit vulnerable groups and those unable to travel to their offices. Priority groups for these mobile services include: older persons, schoolchildren, preschoolers, inhabitants of high rural communities, persons with disabilities, indigenous peoples, Chile Solidario (social program) beneficiaries, and those living in poor communes. Home data collection (including biometrics) may be used where needed, including for persons with mental disabilities or for others who require additional time during data collection or for whom a home visit is required because of stress or other reasons. An annual field campaign provides ID cards, passports, certificates, among other documentation, to persons unable to access service offices.

**Priority/preferential treatment:** The agency’s “Service Commitment Letter” provides a process for preferential treatment for those who are pregnant, elderly, or have a disability, and requires that staff “be supportive and respectful with people who require preferential attention.” All offices have a “line management” system that gives a preferential service ticket...
Implement Exception Handling and Grievance Procedures

Flexible protocols and exception handling are essential for meeting reasonable accommodation requirements and ensuring that persons with disabilities are not excluded from enrolling in or using an ID system. As noted above, this is particularly essential when biometric recognition is used. An exception protocol might allow for a manual form of registration where either the technology or procedures cannot accommodate an individual with a disability (for example, see box 4 and box 6 on Argentina and Chile). If this technology is used for authentication at the point of service delivery (for example, receiving a cash transfer), alternative methods such as a PIN or one-time password (OTP) should be in place to ensure that people are not unfairly excluded from service delivery as a result of a failure to capture or matching error.

Where authentication fails, grievance mechanisms must be available and accessible to all users. This requires efforts to enhance the understanding and use of the grievance processes by the general public, including persons with disabilities. It should be made clear that complaints processes are available and accessible to all persons. Too often, persons with disabilities face serious barriers in accessing complaints processes which means they are denied the right to seek redress and the barriers they experience are not captured or acted upon. Complaints mechanisms should therefore be clear with information on how to make a complaint offered in more than one format. Helplines should also be accessible and information posted on websites should conform to accessibility standards.
Continuous Evaluation

The success of disability inclusion should be monitored continuously throughout the life of an ID system. This should include periodic reviews on the adoption of recommendations to improve accessibility measures and persistent or new issues related to inclusion. It is also an opportunity to harmonize procedures regarding accessibility for persons with disabilities in what is a fast-evolving disability rights framework in many countries. This might involve measures such as improving stakeholder engagements, especially of persons with disabilities organizations representing a diversity of the disability community, procedural measures to provide disability accommodation at ID enrollment and points of authentication, the specific training needs of officials, the design of inclusive and accessible ID outreach and public information, improving the accessibility of grievance redress mechanisms, among other issues.

4 • Conclusion

When persons with disabilities and their families lack government recognized IDs, already entrenched barriers to full participation in society are compounded. Disability-inclusive ID systems not only realize the right to an identity, but they can also unlock access to health and rehabilitation services, disability support, social protection schemes, education, and financial and other services that allow persons with disabilities to enter the formal economy and improve their livelihoods. Best practices addressed in this note include implementing the principles of accessibility and universal design when defining processes and selecting technologies, making reasonable accommodation throughout the identity lifecycle, adopting suitable exception handling and grievance redress mechanisms, and engaging in proactive outreach and communication that involves persons with disabilities organizations.
**Additional Resources**


