

SEAP

STATELESSNESS ENCYCLOPEDIA ASIA PACIFIC

Third Edition

**Digital ID and its Impact on Statelessness in
South Asia**



NATIONALITY FOR ALL

Advancing the right to a nationality in the Asia-Pacific region

SEAP

STATELESSNESS ENCYCLOPEDIA ASIA PACIFIC

Third Edition

Published by Nationality For All (NFA)
Lead Researcher Jenna Biedscheid, Nayantara Raja, Nicole Fong, and Shuchi Purohit
How to Cite Biedscheid, J., Fong, N., Purohit, S., and Raja, N. (2026). Statelessness Encyclopaedia Asia Pacific: Digital ID and its Impact on Statelessness in South Asia. Third Edition. Nationality For All.

Law Firms	Fact-sheet worked on	Contributors
Independent Researcher	Nepal	Bhaskar Gautam
Imkaan Welfare Organisation	Pakistan	Tahera Hasan and Maliha Najib
Fellow, Digitally Rights Limited	Bangladesh	Manisha Biswas
Shardul Amarchand Mangaldas (SAM)	India	Protiti Roy <i>Shardul Amarchand Mangaldas and Co. assisted with legal research for the India country factsheet. Opinions and analysis presented in this report are not attributable to them.</i>

Copyeditor Aastha Dahal
Editor Subin Mulmi
Design YoungInnovations Pvt. Ltd.
Special thanks PILNet
Year April 2026
Edition Third

Digital ID and its Impact on Statelessness in
South Asia

List of Acronyms

ABIS	Automated Biometric Identification System (for Afghan)	GDPR	General Data Protection Regulation	NTL	NADRA Technologies Limited	UNHCR	United Nations High Commissioner for Refugees
APPS	Ministry of Interior and Defense Afghan Personnel and Pay Systems	GTR	Grand Technology Resources	OTP	One-Time Password	US	United States of America
ARC	Alien Registration Card	ICCPR	International Covenant on Civil and Political Rights	PAN	Personal Account Number	WFP	World Food Programme
BCRS	Bhutan Civil Registration System	ICERD	International Convention on the Elimination of All Forms of Racial Discrimination	PDA	Pakistan Digital Authority		
BNDA	Bangladesh National Digital Architecture	ICESCR	International Covenant on Economic, Social and Cultural Rights	PDS	Public Distribution System		
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women	ID	Identity	SDG	Sustainable Development Goals		
CIDR	Central Identities Data Repository	IDEAS	World Bank's Identification for Enhanced Access to Services	SEAP	Statelessness Encyclopedia Asia Pacific		
CNIC	Computerized National Identity Card	IDP	Internally Displaced Person	SL-UDI	Sri Lanka Unique Digital ID		
CRC	Convention on the Rights of the Child	ID4D	World Bank Identification for Development Initiative	SOC	Strategic Oversight Committee		
CRC	Child Registration Certificate	MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act	SR	Special Resident (Card)		
CRPD	Convention On The Rights Of Persons With Disabilities	MOU	Memorandum of Understanding	SSC	Secondary School Certificate		
CSO	Civil Society Organization	NADRA	National Database and Registration Authority	SSI	Self-Sovereign Identity		
CRVS	Civil Registration and Vital Statistics	NCIT	Maldives National Centre for Information Technology	TIN	Tax Identification Number		
DCRC	Department of Civil Registration and Census	NDC	National Digital Commission	UAE	United Arab Emirates		
DCO	Digital Cooperation Organization	NDI	National Digital Identity	UCI	Unique Citizenship ID		
DNR	Department of National Registration	NFA	Nationality For All	UDHR	Universal Declaration of Human Rights		
DPI	Digital Public Infrastructure	NID/ NIC	National Identity Card	UIDAI	Unique Identification Authority of India		
e-NIC	Electronic National Identity Card	NIR	National Identity Registration (Act)	UN	United Nations		
SECBHR	State Election Commission Bihar	NGO	Non-governmental Organization	UNDP	United Nations Development Programme		
EU	European Union	NRC	National Register of Citizens				

Table of Contents

List of Acronyms 4-5

Introduction to Digital ID..... 7-11

Sub-Regional Overview: South Asia12-20

Afghanistan.....21-27

Bangladesh.....28-33

Bhutan34-38

India39-46

Maldives47-51

Nepal52-56

Pakistan.....57-63

Sri Lanka.....64-68

Endnotes69-90

Introduction to Digital ID

In the 21st century, there has been a massive shift in priority away from traditional Civil Registration and Vital Statistics (CRVS) systems towards digital identity (digital ID) systems for many development actors.¹ The World Bank’s Identification for Development (ID4D) Initiative, established in 2014, was a crucial catalyst to “help countries realize the transformational potential of digital Identification systems to achieve the Sustainable Development Goals [SDGs]”.² The United Nations and other development actors have also characterized digital ID as having ‘transformative’ potential to increase the convenience and efficiency of public and private services, and to achieve SDG 16.9, to “provide Legal identity for all, including birth registration” by 2030.³ Digital ID systems are a foundational part of digital public infrastructure (DPI), which is a structure that enables governments to deliver services digitally to the public.⁴ As governments establish DPI to deliver services through a streamlined, digital platform, creating digital ID systems allow them to verify the public’s identities to securely deliver such services.⁵ Through ID4D, the World Bank has played a major role in many countries’ DPI development, including digital ID system design and implementation, largely through assistance with “analytics, assessments, and funding”.⁶ Between 2015 and 2020, the World Bank’s Initiatives provided over 60 countries support in establishing digital ID systems.⁷

While digital ID systems, as an integral part of DPI, have the potential to streamline public and private services and increase efficiency of government service delivery, without principles of human rights built into its design, they can also amplify the exclusion, discrimination and inequality that exists in traditional CRVS systems.⁸ In a 2020 UNHCR

analysis on emerging digital technologies and the right to privacy, a key finding was “that emerging digital technologies exacerbate and compound existing inequities, many of which exist along racial, ethnic and National origin grounds”.⁹ The analysis notes that “without stringent protections, digital Identification systems for public services disproportionately exclude racial and ethnic minorities, especially those whose citizenship status is insecure”.¹⁰ Lack of transparency of how digital ID systems are designed and who is consulted in the process makes it difficult for civil society to monitor for potential exclusion or discrimination, putting the onus for regulating the systems on governments.¹¹ Further, digital ID systems store user data, often including biometrics such as photos and fingerprints which are highly sensitive and have the potential to put people at risk if that data is leaked or used for purposes beyond identity verification.¹² In many countries’ regulatory frameworks for digital ID systems, data collected for such systems is set to be used for specified purposes beyond identity verification, such as National security, which could lead to surveillance of immigrant populations, refugees, and stateless people.¹³ One of the 10 Principles of the ID4D Initiative is to “ensure universal access for individuals, free from discrimination”, yet many states’ require citizenship in order to access a digital ID, excluding stateless people.¹⁴

Nationality for All (NFA), through its Third Edition has expanded the Statelessness Encyclopedia Asia Pacific (SEAP) in an effort to begin filling the gap in available information on how digital ID systems are designed in the Asia Pacific region, particularly how they impact stateless people. The application of digital ID systems typically focuses on citizens, which has also been the case in Asia Pacific, which often results in citizenship centric digital ID systems. This reinforces the systematic exclusion that often prevents stateless people from accessing essential services including healthcare, Education, a bank account, and employment. Digital ID discourse is also often highly technical

and inaccessible. As digital ID systems develop rapidly across the region, critical analysis of the impact of these systems on marginalized groups has been slow to catch up. Uncertainty surrounding the design of these systems, the lack of Legal and policy frameworks set in place prior to developing them, and the lack of public knowledge of the implications of such systems are serious concerns.

Beyond knowledge production, combatting the lack of transparency in digital ID systems' design and implementation requires shared principles, positions, and standards for what characteristics they should ideally have. The General Data Protection Regulation (GDPR), a law of the European Union, is the standard Legal framework for how to ensure protection of personal data in digital ID systems.¹⁵ While the GDPR's compliance guidelines are widely followed, it is difficult to monitor government compliance with respect to digital ID systems due to the lack of transparency of their characteristics and the lack of comprehensive Legal and policy frameworks behind them.¹⁶ Another framework is UNDP's Digital Legal ID Governance Framework for governments and civil society actors, which provides recommendations for rights based, inclusive digital identity systems.¹⁷ The Human Rights for Digital ID (HR4ID) Coalition, "a community of civil society organizations and researchers from across the globe advocating to diminish the negative impacts of digital identity on individuals and communities", has also adopted a common position on mandatory digital ID systems.¹⁸ With a focus on systems that either have mandatory enrollment, or mandatory use (required to access essential services such as health care), the common position includes:

- ◆ "Mandatory digital ID requirements negatively impact human rights/human life, particularly for those who are marginalized or vulnerable."

- ◆ "Public institutions should not require mandatory enrollment in a digital ID system."
- ◆ "Public institutions should not require mandatory use of elements of the digital ID system to access public services or privately provided public services."
- ◆ "In contexts where digital ID systems already exist or are in development, the State has an obligation to guarantee there are accessible, non-digital alternatives available for those who are unable to enroll or use the digital ID."
- ◆ NFA hopes that this research can contribute to as well as question these common positions and shared principles on how to ensure nondiscrimination, equity and protection of human rights in digital ID systems.

Methodology

The NFA Research team designed a standardized research framework to ensure consistency and comparability across all factsheets. We developed a uniform questionnaire in-house, outlining key thematic areas such as Legal Identity, Legal frameworks, policy implementation, population impact, and gaps in the protection of stateless and at-risk populations. This questionnaire guided the structure and scope of all data collection. Although not uniform, some elements of primary research have been incorporated based on the contributions to the NFA team by stakeholders. We also undertook an extensive review of secondary sources, including domestic legislation, policy documents, official statistics, academic publications, and credible reports from international organizations. By comparing and cross-referencing multiple sources, we reduced reliance on any single dataset and increased the accuracy of findings. In our attempt to ensure credibility, we have attempted to provide a source

for our claims and provide an analysis of our findings based on available evidence.

In addition to our own desk-based research, we collaborated with law firms, non-governmental organizations, and independent practitioners who contributed pro bono support. These experts shared primary inputs into laws, relevant case studies, provided legal interpretations, reviewed our drafts and provided inputs from their field experience. Their input helped us strengthen the depth and reliability of each factsheet.

Structure

Each factsheet is divided into four sections:

- Legal Identity
- Overview
- Laws
- Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Legal Identity

The primary focus on this section relates to assessing if a given country has a Legal identity and who it is accessible to. It also explores the question of whether it forms a foundational document to access Nationality. The definitions for proof of Legal identity and civil registration that are used throughout the third edition follow the Guide drafted under the World Bank's Identification for Development (ID4D) Initiative¹⁹.

Overview

This section provides an overview of digital Identification (digital ID) systems in each country within the Asia Pacific, with a focus on their structure, scope, and implications. Our primary conceptual reference for referring to a digital ID

system is drawn from the World Bank's Glossary on Digital Identification. It further assesses whether each country's digital ID is classified as foundational or functional, following the distinctions made in the World Bank's ID4D Guide. Foundational IDs are "primarily created to manage identity information for the general population and provide credentials that serve as proof of identity for a wide variety of public and private sector transactions and services"²⁰, while functional IDs are designed "to manage Identification, authentication, and authorization for a particular service or transaction, such as voting, tax administration, social programs and transfers, financial services, and more"²¹. The analysis also considers whether the use of digital ID is Legally or de facto mandatory or optional, whether it is available exclusively to citizens or also to non-citizens, and the range of services that are linked to it. Crucially, the section examines the availability of alternative pathways to access these services in cases where an individual does not hold or cannot obtain a digital ID. Beyond the ID systems themselves, the section explores the development of other forms of state-sponsored digital public infrastructure (DPI) and evaluates whether access to these platforms requires a digital ID. These lines of inquiry are critical in understanding patterns of inclusion and exclusion. They provide the analytical groundwork for mapping the ways in which digital ID systems intersect with questions of citizenship and the equitable delivery of essential services.

In addition, the section examines procedural safeguards in the design and rollout of digital ID systems. It investigates whether governments engaged in public consultations, solicited expert input, or conducted impact assessments before implementation, or whether the systems emerged primarily through Public-Private Partnerships (PPPs) without significant public debate. This exploration helps to assess the extent to which the creation of digital ID systems reflects democratic processes and participatory Governance.

Understanding these procedural dimensions is essential for evaluating both the legitimacy of such systems and their potential social consequences.

Laws

This section examines the Legal safeguards that govern digital Identification (digital ID) systems, beginning with an assessment of the laws that apply to such systems in each country. This is a critical starting point, as many governments in the region have moved forward with implementing digital ID systems in the absence of a robust Legal framework. Without Legal safeguards, individuals' most sensitive personal data is at risk. Digital ID systems typically collect highly private information, including biometric identifiers such as fingerprints and iris scans, as well as demographic details such as address, age, and gender.²² The absence of strong regulatory protections exposes this data to potential misuse, surveillance, and security breaches, as has been widely reported.²³ Accordingly, this section not only reviews laws and policies directly governing digital IDs but also assesses the presence and the use of related legislation on data protection, privacy, surveillance, cybersecurity, and access to Legal remedies in cases of rights violations.

The analysis further considers whether a country has drawn on another nation's model in designing its own framework. It also examines how the country defines "digital ID" in its Legal and policy documents. This is significant because no universally agreed definition of digital ID exists, and countries interpret and apply the concept differently. Moreover, States in the Asia Pacific are at varying stages of development and implementation of their systems. The scope of application is another critical point, wherein most cases, the Legal definition specifies that digital IDs are accessible to citizens only, as observed in Afghanistan²⁴, Nepal²⁵, Fiji²⁶. Such a scope automatically excludes stateless persons and other non-citizens from obtaining a digital

ID, creating structural barriers to their access to essential services.

In addition to domestic law, the section explores a country's international obligations. While there are no binding international treaties specifically addressing digital ID systems, States in the region are party to a range of core human rights instruments. The analysis considers whether the design and implementation of digital ID systems are consistent with obligations under treaties such as the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Rights of the Child (CRC), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), the Convention on the Elimination of All Forms of Racial Discrimination (CERD), the Convention on the Rights of Persons with Disabilities (CRPD), and the two Statelessness Conventions. The section evaluates whether digital ID and Legal identity systems risk enabling discrimination in providing Legal identity documents or access to digital ID, infringing the right to privacy, or denying individuals access to essential services, among others, which could amount to violations of these international commitments.

Designed to Include? Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

The final component of each country's factsheet is an analytical section that synthesizes the findings from the preceding three sections to assess the implications of digital ID and Legal identity systems for stateless individuals, drawing together evidence on Legal frameworks, system design, and procedural safeguards. This section aims to identify patterns of exclusion that emerge directly or indirectly from the structure and requirements of digital ID systems. It examines how these systems may create or exacerbate

barriers for stateless individuals in accessing essential services, exercising their rights, or participating fully in public life. Beyond identifying exclusionary outcomes, it also explores whether a digital ID system of a country reflects principles of inclusion, transparency, accountability, and human rights-based approaches²⁷.

Where available, the section incorporates relevant judicial precedents that address digital ID systems in each country, providing insight into how National courts have interpreted and applied laws relating to identity, privacy, and access to services. These cases can reveal whether the judiciary has acted as a check on government overreach, upheld individual rights, or reinforced exclusionary policies. The section also evaluates whether governments have introduced targeted measures to facilitate access to digital IDs for vulnerable and marginalised groups, including stateless persons, persons with disabilities, minorities, and older persons. Examples of such measures might include deploying mobile registration units to remote areas, waiving documentation requirements in certain cases, offering free Legal aid, or conducting outreach campaigns in multiple languages. This concluding analytical section aims to provide a holistic understanding of how digital ID systems intersect with the lived realities of stateless individuals and other at-risk populations.

Limitations

While our methodology maintained a high degree of consistency and credibility, it also faced certain constraints that shaped the scope and depth of our findings. We relied primarily on secondary data, which may not fully capture recent developments, unreported cases, or nuanced local realities. Future research on the subject should aim to incorporate primary fieldwork such that it leads to greater insight into the real on-the-ground impacts of digital ID systems, particularly on

stateless individuals. The availability and quality of information varied considerably across countries. In some contexts, official statistics were outdated or inaccessible. Accessing laws and policies was particularly challenging in politically sensitive environments or where official documents were not available in English. In these cases, our reliance on official translations sometimes meant working with sources that reflected bias or omitted key details. Furthermore, many countries, particularly in the Pacific, were in the developmental stages of their digital ID systems²⁸, which provided very limited room to understand its impact on stateless individuals. There were a few countries in the region which we could not find reviewers or collaborators for, resulting in not all country-specific data being verified directly by in-country stakeholders. The project also experienced temporary delays due to uncertainty arising from potential foreign aid cuts, which impacted timelines and workflow.

The findings presented in this report should be interpreted with these limitations in mind. The aim of this report is knowledge production. It is not intended to serve as legal advice. Future iterations of this research would benefit from incorporating primary field studies, strengthening collaborations with regional partners, and expanding the thematic scope to include other areas where stateless individuals may be affected by the introduction of digital ID systems.

Sub-Regional Overview: South Asia

Countries Covered: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka

Legal Identity

The majority of states in South Asia rely on National identity cards or citizenship certificates as their officially recognized proofs of Legal identity. Birth registration alone does not constitute Legal identity, but it is an essential document required to access primary Legal identity and its corresponding digital ID systems. Three countries in the sub-region face challenges as a result of low birth registration rates. In 2016 India reported 20% of children did not have access to birth certificates,²⁹ Nepal's birth registration rate stood at 73% in 2022,³⁰ and Bangladesh's registration rate was 83% in 2023.³¹ Sri Lanka stands out with its near-universal birth registration rates reaching 97% in 2019.³²

Birth registration typically provides the foundational civil record, after which the state issues a formal identity document: National identity card or citizenship certificate. This serves as the operative proof used to access other identity documents (National identity cards, citizenship certificates) and public or private services. There are alternative documents to birth registration as proof of Legal identity, as in the case of Nepal, a recommendation from the designated local government authority can be submitted instead to acquire a citizenship certificate.³³

In seven out of the eight countries in the sub region (Afghanistan, Bangladesh, Bhutan, the Maldives, Nepal, Pakistan, and Sri Lanka), National identity cards or citizenship certificates are issued to establish Legal identity based on proof of birth registration or alternative documents. In Sri Lanka, alternative documents such as documents certifying the person's name and date of birth, such as school leaving certificate, estate leaving certificate, marriage certificate, citizenship certificate can be provided instead of birth certificates to apply for National identity cards.³⁴

*India, however, does not have one officially recognized legal identity document. Instead it relies on birth registration as a foundational identity document to establish citizenship even though its registration have lagged.*³⁵

Table 1
Primary Legal Identity Document and the Documents Needed to Apply for it across South Asia

Country	Primary Legal Identity Document	Documents Needed
Bhutan	Citizenship Identity Card or an identification document issued by Department of Civil Registration and Census	Birth registration
India	None	Birth registration
Nepal	Citizenship certificate	Birth registration
Sri Lanka	National Identity Card (NIC)	Citizenship certificate, birth registration, or other documents certifying the person's name and date of birth.
Bangladesh	National ID card (NID)	Birth certificate, a passport or a citizenship declaration form, a copy of parents' NID cards or birth certificate or citizenship certificate of parents. ³⁶
Maldives	National ID card	Birth registration
Pakistan	Computerized National Identity Card (CNIC) for adults above 18 year of age. B-form (Child Registration Certificate) for children under 18 years of age.	To apply for B-form, the birth registration and the CNIC of at least one parent. To apply for a CNIC, the CNIC of a parent or close relative, and a Computerized Identity Card Form.
Afghanistan	National identity cards called the Tazkira (paper) and e-Tazkira (digital).	Birth registration is a supporting, but not required, document for obtaining a Tazkira. Instead, the process requires an application form, photographs, an attestation of identity, and the Tazkira of a relative.

Overview of Digital ID in South Asia

Across South Asia, all eight countries have developed National digital ID systems as part of broader Legal identity frameworks that allow citizens to participate in economic, social, and governmental activities. The effectiveness of a digital ID systems depends on factors such as the country's Legal framework, technological

infrastructure, and accessibility to Legal identity documents.³⁷ In many countries, the transition from traditional paper-based identity documents to centralised digital IDs has improved access to government services. However, access to these digital ID systems and the services typically require proof of citizenship. This prerequisite leads to the exclusion of non-citizens and marginalised populations, including stateless persons.

Digital IDs in the South Asia sub-region are predominantly foundational in nature (with the exception of Nepal).³⁸ They function as the primary credentials that establish Legal identity. They have also been instrumental in eliminating duplication in identity records across government

departments. Digital IDs enable access to multiple government and private services. These systems are typically linked to civil registration databases, with enrolment contingent upon proof of birth registration or citizenship certificate.



While some states Legally define digital IDs as voluntary, they are effectively mandatory in practice. Possession of the National digital ID is required to access essential services such as banking, healthcare, Education, and welfare benefits (Bangladesh, India, Pakistan, Sri Lanka). In most countries, digital ID systems also act as markers of citizenship, determining eligibility for rights and entitlements. They thereby exclude

refugees, foreign citizens, and stateless persons from participation in digital Governance.

Table 2**Digital ID System and its Key Features across South Asia countries**

Country	Digital ID System	Key Features
Bhutan	National Digital ID – 2022	The National Digital ID is Asia's first decentralised Self-Sovereign Identity (SSI) system. It serves as a foundational ID connecting citizens, government, and the private sector.
India	Aadhaar Digital ID – 2009	Aadhaar is a functional ID system integrating biometric data with service access. It provides a universal identification number linked to multiple services, including subsidies and financial transactions.
Nepal	National ID Card (NID) – 2016	The National ID Card functions as a functional ID. It is designed to eventually replace the Citizenship Certificate while facilitating access to public services.
Sri Lanka	e-NIC (digital version) – 2012	The e-NIC is a foundational ID system with mandatory registration requirements. It mirrors the paper NIC system in certifying legal identity and enabling access to public and private services.
Bangladesh	National ID Card (NID) – 2009	The National ID Card is a foundational and functional ID using biometric-based authentication. It is integrated with banking, telecommunications, and other public services through a centralized national database.
Maldives	eFaas Digital ID – 2012	The eFaas is a foundational ID enabling users to verify their identity digitally and access government services such as healthcare, employment portals, and business transactions.
Pakistan	Computerised National Identity Card (CNIC) – 2025	The CNIC is a foundational ID that both proves and constitutes Pakistani citizenship. It serves as the official recognition of an individual's citizenship status.
Afghanistan	Tazkira (paper) and e-Tazkira – 2018	The e-Tazkira is both a functional and foundational ID that manages and certifies identity. It enables access to the same public services available under the paper Tazkira system.

Moreover, access to digital IDs remains highly uneven across different countries in the sub-region. In Afghanistan, decades of conflict, displacement, and administrative fragmentation have severely limited access to the Tazkiras and e-Tazkiras. In Nepal and India, citizenship documentation is required for digital ID enrolment.³⁹ This prerequisite results in the exclusion of people who have difficulty accessing citizenship such as children of single mothers and persons of undetermined Nationality amongst others. In Bhutan, only citizens listed in the National census are eligible for a Citizenship Identity Card.⁴⁰ As the Bhutanese Lhotshampa population are excluded from the National census they are effectively stateless.⁴¹

Similar challenges exist in Pakistan and Bangladesh, where the Rohingya refugees and other minority groups are often denied registration.⁴² The Maldives operates under a relatively more inclusive policy framework allowing foreigners or work permit holders to access the eFaas with proof of their passport or work permit number.⁴³

Implementation of digital identity systems across South Asia is largely state-driven, with governments leading the design and rollout, often supported by private technology partners or international development agencies. In Bangladesh, for example, the World Bank provided technical assistance to the Election Commission and other government agencies to develop the regulatory and policy framework as well as the technology required for the NID system.⁴⁴ Generally, public consultation and independent oversight in these processes remain limited in South Asia. There is little evidence of participation from civil society or affected communities.

As a result, digital identity frameworks across the sub-region tend to replicate existing inequalities in citizenship and documentation, further entrenching the exclusion of stateless persons and marginalised

populations from legal identity and essential services.

Laws**Domestic Law and Policy**

Only five out of the eight countries in South Asia (Bhutan, India, Nepal, Pakistan, Afghanistan) have domestic laws and policies that define digital identity. Even among these five, the Legal definitions of digital IDs, the extent to which they establish digital identity and citizenship, vary significantly in scope and substance. Countries in this sub-region generally draw on two approaches when mapping digital ID legislation: some establish new legislation for their digital ID system (an example is Pakistan's recent Digital Nation Pakistan Act (2025), while others adopt or amend existing laws around civil registration systems to incorporate digital or biometric elements (for example, Sri Lanka's Registration of Persons amendment).⁴⁵

In countries that have Legal definitions, digital identity is typically defined as a state-issued identifier that links demographic - and often biometric data - to an individual for authentication and access to services. In practice, some countries set out a clear statutory definition in dedicated digital-ID laws (for example Pakistan). While other countries only define digital identity in operational or technical terms within National ID instruments (such as India's Aadhaar system; Bhutan's Citizenship ID). The nature of how Legal identities are defined appears to affect whether countries have Legal grievance mechanisms for digital-ID related complaints. Countries like Pakistan, with dedicated digital ID laws, have explicit grievance addressing mechanisms. Whereas, other countries rely on amendments to civil registration laws offering more limited avenues for complaints.⁴⁶

Legal frameworks in almost all South Asian countries explicitly or implicitly link digital ID to citizenship. In a number of countries (Afghanistan's Tazkira; Bangladesh's National ID; Nepal's citizenship certificate), the digital ID is issued on the basis of citizenship or civil-registration records, and therefore functions as both identity and proof of Nationality.⁴⁷ In other cases (India's Aadhaar), having a digital ID does not confer citizenship but access to Aadhaar relies on citizenship documentation, so then digital IDs operate as a marker for citizenship along with its access to services.⁴⁸

Data Protection

In South Asia, Bhutan, India, Nepal and Sri Lanka, have policy and laws governing data protection and privacy. With the exception of Bhutan, the data protection Legal and policy framework in India, Nepal and Sri Lanka do not provide explicit safeguards to protect personal information or data within Digital ID systems. In Bhutan, the National Digital Identity (NDI) framework, by contrast, contains in-built data protection provisions. It emphasises user control and consent, stores facial data with the Ministry of Home Affairs for anti-fraud purposes. It requires that all stored information be encrypted and accessed only with the user's consent.⁴⁹ In the other countries there are no equivalent no data encryption requirements, or adequate safeguards for the protection of the storage, use, and access to data. There are major concerns and policy gaps around privacy, surveillance, and exclusion from access to public services across South Asia. In India, Bangladesh and Pakistan, there have been major breaches of personal data from digital ID databases being accessed or exposed through unauthorized methods. For instance, Bangladesh documented two significant data breaches within a single year in 2022- 2023.⁵⁰

There is growing concern regarding the use of digital ID systems and its biometric databases for surveillance and monitoring, particularly in countries where civic spaces are shrinking. In the Maldives, the collection of indirect data such as IP addresses and information generated when people use their eFaas ID, have raised fears that human rights defenders are increasingly being targeted for state monitoring surveillance, harassment, and threats of violence.⁵¹ In Afghanistan, there are significant risks of personal and biometric being used by the Taliban for unauthorised purposes. Human rights groups have criticized the rollout of the e-Tazkira in the absence of a comprehensive human rights and data protection impact assessment.⁵² In Sri Lanka, civil society groups have raised concerns that all-encompassing digital ID systems may enable mass surveillance.⁵³

International Commitments

No country in South Asia is a party to any international treaty that defines or regulates digital ID. Some countries have undertaken voluntary Initiatives to increase proliferate the use of digital IDs. For example, India has made a non-binding commitment to provide Legal identity (including birth registration) to all Indians by 2030, as part of achieving Goal 16 of the Sustainable Development Goals.⁵⁴ Pakistan participates in forums related to the Identification for Development Initiative (ID4D) by the World Bank. It seeks to ensure all its people have full access to digital ID-based services.⁵⁵

Furthermore, no country in South Asia has ratified The 1954 and 1961 Statelessness Conventions. Only Afghanistan in the sub region has ratified the 1951 Refugee Convention and its protocol.

All South Asian countries, However, are party to at least one core human rights treaty such as CRC or CEDAW. Both treaties create Legal

obligations that are tied to the access to Digital ID systems in the country. For example, in Sri Lanka, the Maldives, and Bangladesh, individuals are required to present birth registration or a National identity card when enrolling in school. This requirement creates hindrances in allowing the State to fulfil its obligation to uphold children's right to Education under the CRC.⁵⁶ Similarly, in Afghanistan, documentation requirements linked to the Tazkira and e-Tazkira system have resulted in restrictions on movement and religious expression, particularly for women and non-Muslim communities. This curtailment of basic freedom violates the country's obligations under the ICCPR and CEDAW to ensure freedom of religion, movement and prohibit gender based discrimination.⁵⁷ In Pakistan the exclusion of stateless persons to ID services, results in violations of state obligations under the ICESCR, ICCPR, CEDAW and CERD.⁵⁸

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Generally, digital IDs have not reduced statelessness. In many instances they have in fact, reinforced barriers that stateless persons face in accessing services. The fundamental reason for this is that in most countries National the prerequisite for obtaining digital ID is proof of birth registration or citizenship (as seen in India, Bangladesh, Bhutan, Maldives, Nepal, Pakistan, Sri Lanka). Therefore, possession of the digital ID functions as a practical marker of Nationality and access to services rather than a solution to address statelessness. There are administrative barriers in obtaining citizenship certificates and birth registration, which then prevents stateless persons from being able to apply for a National identity card (NIC). In Sri Lanka birth registration requires the details of both parents and at least

one parent's NIC. This requirement prevents children with stateless parents who lack NICs from applying.⁵⁹ Similarly in Bhutan, for non-residents to register births, they must apply for a special resident card, which requires proof of their own citizenship along with the citizenship of their mother and father.⁶⁰ In Afghanistan to obtain a Tazkiras one needs to furnish documents such as: proof of parentage, a male chaperone, and religious conformity. Many groups such as women, non-Muslims, nomadic tribes, internally displaced peoples (due to reasons of conflict or natural calamities) do not engage with the process of civil registration due to fears of religious persecution.⁶¹

A few countries have undertaken targeted measures to increase access to digital IDs. For example, Pakistan deploys NADRA mobile units to increase access to registration in rural and hard to reach areas.⁶² However, such Initiatives are generally not obligated by law. Thus they are prone to risks of inconsistency. Such Initiatives at larger scales are vital to meaningfully address systemic barriers to digital ID access.

Some digital ID systems such as the one implemented in India, not only excludes stateless persons, but risks excluding citizens and residents as well, with its technical and logistical vulnerabilities that has restricted eligible individuals from receiving and accessing essential services⁶³. These challenges were particularly evident in the Public Distribution System, where fingerprint authentication was mandated for ration collection.⁶⁴ Aadhaar-related errors such as biometric mismatches, connectivity failures, and lack of linkage contributed to the exclusion of over 2 million people from accessing essential food supplies between November 2017 and February 2018.⁶⁵

Summary Table:

The table summarises the types of Legal IDs available, whether their digital IDs are foundational or functional, whether they have data protection laws, the voluntary nature of their digital IDs, access to digital IDs for stateless persons or refugees, and the international core human rights treaties ratified in the South Asia sub-region.

Country	Legal ID (Type)	Digital ID ID tional/ Functional)	Domestic Laws & Policy Covering Digital ID	Data Protection Law	Digital ID Mandatory?	Access for Stateless/ Refugees	Intl. Treaty Ratified (Data/ Human Rights)
Bhutan	Birth Registration, Citizenship Identity Card, National Digital ID	Foundational	✔ National Digital Identity Act of Bhutan (2023)	✔	✘	✘	CRC, CEDAW
India	Birth Registration, Aadhaar Digital ID	Functional	✔ Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act (2016)	✔	✘	✘	ICCPR, ICESCR, ICERD, CRC, CEDAW
Nepal	Citizenship certificate, National ID card (NID)	Functional	✔ Nepal's National ID and Civil Registration Act (2020); National ID and Civil Registration Regulations (2021)	✔	✔	✘	ICCPR, ICESCR, ICERD, CRC, CEDAW.
Sri Lanka	National Identity Card (NIC), e-NIC (digital version)	Foundational	✘	✔	✔	✘	ICCPR, ICESCR, ICERD, CRC, CEDAW.
Bangladesh	National ID card (NID)	Foundational and Functional	✘	✘	✘	✘	ICCPR, ICESCR, ICERD, CRC, CEDAW
Maldives	National ID card, eFaas digital ID	Foundational	✘	✘	✘	✘	ICCPR, ICESCR, ICERD, CRC, CEDAW
Pakistan	Computerized National Identity Card (CNIC) for above 18 years of age; B-form (Child Registration Certificate) for children below 18 years of age.	Foundational	✔ Digital Nation Pakistan Act (2025)	✘	✔	✘	ICCPR, ICESCR, ICERD, CRC, CEDAW
Afghanistan	National identity cards called the Tazkira (paper) and e-Tazkira (digital).	Foundational and Functional	✔ Registration of Population Records Act (2014)	✘	✔	✔ Yes in theory but it has many difficulties in practice	1951 Refugee, ICCPR, ICESCR, ICERD, CRC, CEDAW



Photo : Zabihullah Habibi

AFGHANISTAN



whose leadership is overwhelmingly Pashtun) hegemony over others. This was largely due to the classification system, which divided ethnic groups such as Tajiks, Hazaras, and Uzbeks into multiple subcategories—potentially diminishing the reported population size of these communities.

In addition, many of these groups contested being labelled as 'Afghan' in the E-Tazkira, arguing that the term specifically refers to the Pashtun ethnic group. Instead, they advocated for their own ethnic identities—Tajik, Hazara, or Uzbek—to be officially recognised in the document, a stance that was largely rejected by the Pashtun community.

According to Section 9(2), it is mandatory for Afghan citizens, both inside and outside Afghanistan to “record their identity and acquire National identity cards.”¹⁰⁰ As a functional and foundational ID¹⁰¹, the e-Tazkira both manages and certifies identity as well as facilitates access to the same public services as the paper Tazkira.¹⁰² The e-Tazkira is intended to eventually replace paper Tazkiras.¹⁰³

Over 6 million e-Tazkiras have been distributed in Afghanistan since the Taliban takeover.¹⁰⁴ Limited use of the e-Tazkira system has been attributed to low literacy rates and limited access to technology.¹⁰⁵

On paper, stateless persons may be able to obtain an e-Tazkira only by providing a copy of the e-Tazkira of a close relative and copies of the e-Tazkira of two Afghan verifiers.¹⁰⁶ However, this process is especially difficult in cases where multiple generations or family members are rendered stateless, depriving them of their right to basic necessities such as health, Education, voting, employment, land ownership and other social services linked to the digital ID.¹⁰⁷

Acquiring e-Tazkira's is no easy feat even for citizens due as the process is riddled with corruption, with increasing uncertainty brought

on by average wait times of more than 12 months, financial and economic constraints faced by individuals to access them, as well as the requirement to travel distant lands to acquire the same.¹⁰⁸

Today, stakeholders on the ground inform us that the situation has improved in Kabul which has reduced processing times to 1-2 days, and provincial centres up to two weeks.

The e-Tazkira digital ID system was preceded by an automated biometric Identification system (ABIS) introduced by the United States Department of Defense just after the start of US military operations in Afghanistan in 2004.⁸⁶ Motives behind the US military's implementation of the ABIS, a centralized system for biometric data, included establishing ‘identity dominance’ to counter terrorism.¹⁰⁹ This was essentially a tool for US military surveillance, collecting biometric data of anyone deemed as a potential threat to US military operations.¹¹⁰ Recent estimates show roughly 2.5 million peoples' biometrics, including fingerprints, iris scans, and photos, had been entered into this system.¹¹¹

Laws

Domestic Law and Policy

Under the Registration of Population Records Act (2014), which covers the implementation of the paper Tazkira, citizens are required to have a paper Tazkira.¹¹² The Registration of Population Records Act defines the e-Tazkira as “an ‘official document that is printed on polycarbonate cards and distributed to the citizens of the country pursuant to the provisions of this law’, including biometric information.”¹¹³ In this domestic legislation, the e-Tazkira is directly linked to citizenship as they are only provided to citizens of Afghanistan and can be used to verify a citizen of Afghanistan based on the included definition of

e-Tazkira.¹¹⁴ There are no mechanisms for filing or resolving complaints included in the Registration of Population Records Act.¹¹⁵

Data Protection

Afghanistan does not have a general data protection law. The absence of a data protection framework raises concerns about the protection of sensitive data collected by the government.¹¹⁶ Civil society organizations expressed concerns over the potential use of biometric and digital ID data being used against “human rights defenders, journalists, and minorities”, calling for the data to be erased and secured at the time of the Taliban takeover.¹¹⁷ Data attached to the digital ID include home addresses, iris scans, pictures, occupations, names of relatives, and fingerprints.¹¹⁸

There is a high likelihood, although no concrete evidence, that the biometric data held in the ABIS system of those working with the US government have been breached by the Taliban since the takeover.¹¹⁹

Some reports have already confirmed breaches in the e-Tazkira system, which suggests that the data can easily be decrypted to gain direct access to this information.¹²⁰ While there has not been any direct reports of the use of this sensitive information to target stateless persons, refugees or migrant populations, there is widespread concern of the potential harm that could be caused by those in possession of the data.¹²¹

With the Taliban takeover, the multitude of leftover digital ID systems implemented for both the Afghan government and foreign governments and militaries left millions of Afghans' personal data at risk of being used by the Taliban for purposes they were not originally intended for.¹²² This is especially of concern considering that the Taliban had used biometric data to target its enemies in 2016 and 2017.¹²³ In 2015, a technical review of the e-Tazkira system was conducted by

Ashraf Ghani which revealed the system to have issues with data processing and security and lack robust testing.¹²⁴

Human Rights Watch notes that these systems should not have been implemented without “a thorough human rights and data protection impact assessment that includes a contextual analysis, an analysis of the technology to be deployed within that context, a system threat model to assess the risk and possible outcomes of system failure, and a data protection and cyber security assessment specific to the Afghanistan context.”¹²⁵ Further, as the takeover began to take place, there should have been prior reassessments of the security of the stored data.¹²⁶

Given the security risks of the takeover, “all those involved in funding and building these biometric systems” should be transparent about the nature of data that could be breached, the structure and safeguards of the systems, and whether the systems were adapted to changing security concerns in the country.¹²⁷ Without transparency, the collection of sensitive biometric data is seen by some as irresponsible and not beneficial to the population it was supposedly made to benefit.¹²⁸

If Afghanistan had a data protection law prior to the Taliban takeover, it could have influenced better practices that may have prevented the Taliban from being able to access personal data stored in the systems after the takeover.¹²⁹

International Commitments

Discrimination resulting from exclusion of stateless persons from accessing forms of identity, whether digital or paper-based, contradicts Article 7 of the UDHR, which protects the principle of non-discrimination.¹³⁰ As a party to the ICCPR, Afghanistan is obligated to uphold the right to privacy (Article 17), and the right to be recognized before the law (Article 16).¹³¹ The

ICCPR further ensures freedom of movement under Article 12 and freedom of religion under Article 18, both of which are curtailed by the inability to list one's religion (if non-Muslim) on their Tazkira and restricted freedom of movement for those without a Tazkira.¹³² Additionally, Article 8 of the CRC protects the right to an identity, which a significant portion of the population does not have access to.¹³³ The right to an adequate standard of health is protected by Article 12 of ICESCR to which Afghanistan is a party, along with the right to Education (Article 13) and an adequate standard of living, including housing (Article 11).¹³⁴ Further, gender discrimination such as discriminatory procedures in procuring identity contradict Afghanistan's obligations under CEDAW.¹³⁵ Due to the exclusion of stateless persons from accessing the Tazkira and e-Tazkira, all of the above mentioned rights which Afghanistan is obligated to as a result of treaty ratification are under threat.¹³⁶

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Afghanistan needs to be an example of the impact that implementation of digital ID systems can have in illiberal regimes. The Taliban have been clear in their intentions to use the data captured by the digital ID systems, including the e-Tazkira, to identify those who worked with the United States and target "threats".¹³⁷ Between 2016-2017, it has been reported that the extremist group have misused digital ID systems, specifically fingerprints and iris scans of those they consider enemies in buses and killed them.¹³⁸ It has created immense security risks for marginalized groups, such as the LGBTQIA+ community, women, activists, journalists, and others who may have supported or assisted foreign troops previously.¹³⁹

There is exclusion from accessing the digital ID in Afghanistan due to a variety of reasons, with financial barriers being the primary reason. Other challenges also include the barriers faced by women to obtain official documentation as well as those residing in remote areas that are disproportionately affected due to the shutdown of local offices which increases travel time and financial burdens.¹⁴⁰ Exclusion from the Tazkira exacerbates the risk of statelessness as well as significantly infringes on the rights and access to services of stateless persons.¹⁴¹

Denial of the Tazkira causes discrimination, marginalization, and even the denial of citizenship and statelessness.¹⁴² Without an identity, individuals are unable to confirm their status as citizens if they previously had citizenship status, which is in direct violation of the Constitution, which does not allow for any Afghan citizen to be "deprived of citizenship or sentenced to domestic or foreign exile".¹⁴³

Those without a Tazkira, including stateless persons, experience lack of access to employment and humanitarian aid, and exclusion from healthcare, Education, property rights, a bank account, and loans.¹⁴⁴ Freedom of movement is considerably restricted, especially for women, between provinces, districts, and even villages without a Tazkira.¹⁴⁵ Without a Tazkira, children cannot enroll in school.¹⁴⁶ The inability of children without a Tazkira to enroll in school violates Article 43 of the Constitution, which protects the right to Education for all citizens.¹⁴⁷ In order for children in Afghanistan to get Tazkira, their father must also have a Tazkira.¹⁴⁸ For children whose father is absent, or whose father is stateless or without documentation, it is difficult to impossible to obtain a Tazkira.¹⁴⁹ The lack of a Tazkira is also socially stigmatized and often leads to further discrimination.¹⁵⁰

Preceding the launch of the e-Tazkira, there was a five year delay due to debates and serious opposition surrounding whether ethnicity or nationality should



Photo : Farid Ershad

be noted on the digital ID.¹⁵¹

Critics of listing 'Afghan' for nationality felt that it would refer to one of the ethnic groups of Afghanistan rather than to citizenship.¹⁵² Others felt that if one does not accept their nationality as 'Afghan', they "should leave the country".¹⁵³ In terms of Afghanistan's digital ID increasing inclusion, the ability to apply for the e-Tazkira online has increased registration among women, accounting for 47% of new registrations.¹⁵⁴ The National Internally Displaced Persons Policy (2013) recognizes government responsibility for ensuring and promoting issuance of e-Tazkiras to IDPs, which can but does not directly include stateless persons.¹⁵⁵

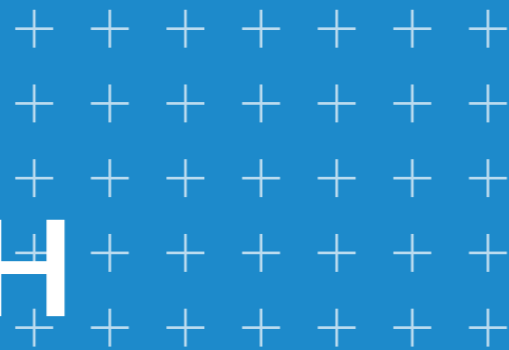
In order to increase inclusivity, there should be more direct and accessible pathways for stateless persons to obtain Tazkiras. Furthermore, those responsible for creating biometric data systems in Afghanistan, "including the US government, the European Union, UN agencies, and the World Bank, should make public the kinds of data lost or potentially seized by the Taliban" and what safeguards were put in place for the protection of data and human rights in these systems.¹⁵⁶ Overall, the case of Afghanistan is a pivotal learning opportunity for the commitment required for the right to privacy to be upheld in digital ID systems implemented in "conflict zones, fragile spaces, or humanitarian settings".¹⁵⁷



Photo: Manzur Alam



BANGLADESH



Bangladesh

Legal Identity

Bangladesh’s official Legal identity is the National ID (NID) card, explained in more detail in the Overview section below.¹⁵⁸ First introduced in 2008 as a paper-based card, the initial purpose of the NID was for voter registration, issued by Bangladesh’s Election Commission.¹⁵⁹ In 2016, NID cards were transitioned from being paper-based to Smart NID cards.¹⁶⁰

Innovations to Bangladesh’s CRVS model in 2021 contributed to increasing the birth registration rate to 83% in the first quarter of 2023.¹⁶¹ Despite these innovations, the Committee on the Elimination of Discrimination against Women (CEDAW) has noted that women and children in the Rohingya community experience lower rates of birth registration, placing them at risk of statelessness.¹⁶² Local private entrepreneurs involved in the data entry process have been reported to charge informal fees for facilitating the data entry of an application for registration.¹⁶³

Overview

Digital Bangladesh, launched in 2009, is Bangladesh’s digital transformation program, which started the implementation of policies for the development of digital infrastructure and related public services.¹⁶⁴ Digital Bangladesh laid the foundation for the NID digital Identification system¹⁶⁵ as well as the Bangladesh National Digital Architecture (BNDA), which allows the government to provide e-services to other government agencies, citizens, businesses and employees.¹⁶⁶ Schemes such as banking, telecommunications, social welfare, pensions, birth and death registration and food and development aid are all administered through

the ‘National e-Service Bus’ introduced under the BNDA.¹⁶⁷

The NID is a biometric, smart identity card with an embedded microchip which is only available to Bangladeshi citizens.¹⁶⁸ Originating from a voter database implemented by the Election Commission in 2008, upon voting, citizens were required to provide biometric data and eventually were issued NID cards with a microchip and unique 10-digit Identification number.¹⁶⁹ The World Bank’s Identification for Enhanced Access to Services (IDEAS) Project from 2011 to 2018 provided technical assistance to the Election Commission and other agencies for laying a regulatory and policy framework as well as developing technology for the NID system.¹⁷⁰ Due to implementation delays of Legal and policy frameworks, the project only achieved half of the target number of 90 million NID cards issued to citizens by 2018.¹⁷¹

In 2023, the smart NID cards began being implemented as a foundational identity system.¹⁷² The new NID system assigns a unique National Identification Number (NIN) to newborns, which will override the multitude of different ID numbers that caused confusion previously.¹⁷³ The same unique NIN assigned at birth will be used later on for the individual’s NID card number, consolidating to one unique identifier for an individual’s entire life.¹⁷⁴

The NID is also used as a functional identity system.¹⁷⁵ While having an NID card will not be enforced as mandatory until all citizens have registered¹⁷⁶, it is required to access “employment, land registration, passports, opening bank accounts, buying mobile SIM cards, electricity, water and gas connections and for other facilities”.¹⁷⁷ Other services linked to the NID system include social and government benefits, voting, taxpaying, and marriage registration.¹⁷⁸ The NID is also required in order to purchase rail tickets in Bangladesh.¹⁷⁹



Documents required to apply for an NID include a birth certificate, a copy of a utility bill for address proof, a citizenship certificate, and photocopies of the NID cards of parents.¹⁸⁰ If relevant, the NID copy of one’s spouse, passport, and drivers’ license may also be required.¹⁸¹ While not required, a Secondary School Certificate (SSC) or equivalent school exam pass certificate and Tax Identification Number (TIN) may also be used to certify a person’s identity.¹⁸² It is important to note that while a birth certificate is a prerequisite for NID registration,¹⁸³ Bangladesh had a birth registration rate of only 83% in 2023.¹⁸⁴

There have been reports of errors in the registration of NIDs, with many people receiving cards with inaccurate information on their card which has led to them being denied access to services.¹⁸⁵ In one case, an individual’s birth date was inaccurate on his card and, as a result, the family was unable to apply for an old age allowance which they depended on.¹⁸⁶ Brokers in Cox’s Bazar have also been reported forging NID cards, birth certificates and Bangladeshi passports for Rohingya refugees, some of which have been detained by police as a result.¹⁸⁷ In response, the government sought to gain access to UNHCR’s database of Rohingya refugees in the country to prevent them from obtaining Bangladeshi identity documents, to which UNHCR provided initial consent for.¹⁸⁸

UNHCR has been issuing ID cards to Rohingya refugees since 2018 as a joint registration exercise in collaboration with the government.¹⁸⁹ The registration exercise’s main objective was to create a unified database with a consistent unique global individual and family identifier for all Rohingya refugees and to have a consolidated registration data from them including previously unregistered refugees from 1992.¹⁹⁰ A total 979,306 individuals from 203,271 families have been reported to have been registered till 30th April, 2024.¹⁹¹ In the Rohingya camps, blockchain technology is being increasingly used for digital Identification, as observed during COVID-19, when the World Food Programme (WFP) introduced the technology and served over 500,000 Rohingya refugees.¹⁹² Through blockchain, WFP optimized resource allocation among multiple humanitarian organizations enabling quicker and more effective assistance delivery.¹⁹³ While different endeavours for digital Identification in different domains have been taking place, the concerning factor is, due to lack of any coherent framework or regulation, sustainable implementation still remains a distant reality.¹⁹⁴

*Additionally, Bangladesh’s recent move to hand over refugees’ digital identity information to the Myanmar authorities without first securing their consent has cast serious doubt on the database’s ability to safeguard confidentiality and maintain trust.*¹⁹⁵

Laws

Domestic Law and Policy

Bangladesh does not currently have a comprehensive Legal framework for its digital ID system.¹⁹⁶ The National Identity Registration Act (NIR Act), enacted in September 2023 includes plans to switch management and implementation of the NID system from the Election Commission to the Home Ministry. However, this transition has raised concerns that doing so would not be effective.¹⁹⁷ Election Commission officials, who believe the 2023 NIR Act should be canceled, have argued that it has had jurisdiction over the system for over a decade, meaning that it has the manpower and experience to operate it where the Home Ministry does not and that switching the system would be financially burdensome.¹⁹⁸ With increasing opposition from civil society and the Election Commission, the interim government repealed the NIR Act on 16th of January, 2025.¹⁹⁹

*In absence of the NIR Act, the National Identity Registration Act (2010) remains the primary legislation governing the NID system.*²⁰⁰

The 2010 NIR Act provides that only citizens who are registered voters can obtain an NID card, and that not having a National ID card shall not infringe on the rights of citizens.²⁰¹ While this is a positive safeguard against exclusion for citizens, it does not prevent exclusion or protect the rights of stateless persons who do not have access to the digital ID system in Bangladesh and therefore, are unable to access the services attached to it.²⁰²

To improve Bangladesh’s Legal framework on digital ID, existing legislation should “be amended to include all significant facets of the ID system”.²⁰³ To achieve this, the legislation should reflect mechanisms for addressing grievances, guidelines

for government bodies and potential private actors, and details of “the rights and obligations of data subjects and administrators”.²⁰⁴

Data Protection

Under the 2010 NIR Act, biometric information collected for the voter ID database included fingerprints, hand geometry, palm prints, iris scans, facial recognition, DNA, signature, and voice.²⁰⁵ The collection of DNA specifically has been widely criticized as “unjustifiable risks to privacy and discrimination,” going outside of the necessary means to achieve the purposes of the system.²⁰⁶

*Currently there is no data protection law enacted in Bangladesh. The draft of the Personal Data Protection Act (PDPA) (2024), which was approved by the cabinet in November 2023 but did not get enacted, was criticized by civil society for failing to ensure the protection of personal data.*²⁰⁷

Rather than prioritizing the privacy and rights of users, the draft “continued to be a potential tool to Legalize control of personal data by the Government”, creating space for increased government surveillance.²⁰⁸ For instance, the draft Act included a list of exemptions for the protection of personal data including “for the prevention or detection of crime or for the purpose of investigations”.²⁰⁹ This would have allowed for access to personal data with no “judicial controls or oversight, or without the requirement to provide justification for” access to the data, which raises serious data privacy concerns for data subjects.²¹⁰ In 2025, the Interim Government currently proposed another draft Data Protection Ordinance, 2025 which still contains vague and an expanded definition of “data fiduciary”²¹¹, continuing to provide discretionary powers to the National Data Governance and Interoperability Authority,²¹² and suggesting a lack of judicial oversight over

different government entities accessing personal data which could lead into potential misuse of personal data.²¹³ The wide scope delineated for the potential use of personal data by the government, as stipulated under section 28²¹⁴ has raised concerns that the government will have unchecked and arbitrary access to personal data which could be used to control dissent.²¹⁵ In order to improve the protective elements of the legislation, the purpose of the law should clearly be to ensure rights are upheld rather than to create room for greater government control over personal data.²¹⁶ Further, in order to access data, judicial approval should be mandatory for access requests.²¹⁷

In July 2023, 50 million Bangladeshi citizens' personal data, including names, phone numbers, emails and National ID numbers, collected in the NID database were breached and publicly accessible on one of the websites of the 171 government partner organizations that use the data.²¹⁸ After two weeks of the data being accessible, the Bangladeshi government secured the website and database.²¹⁹ The data was reportedly leaked from Bangladesh's Birth and Death Registration Information System.²²⁰ In October 2023, another data breach occurred, with users' names, parents names, gender, phone number, addresses, NID numbers, and other data made publicly available through a Telegram bot, which threatened some users' personal safety.²²¹ To prevent this, information, communication and technology experts recommended that the Election Commission consistently surveil the 174 organization websites which use the NID server as well as regularly "conduct vulnerability and penetration assessments".²²² Concerns have been raised by the former Election Commission Secretary, Shaful Azim, that users' data may be breached during the transition of the NID system from the Election Commission to the Home Ministry.²²³

International Commitments

As a party to the ICCPR, Bangladesh is obligated to protect the right to freedom of movement²²⁴, which has not been upheld in the case of requiring NID cards in order to purchase rail tickets.²²⁵ Similarly, the disproportionately low rates of birth registration among the Rohingya community²²⁶ goes against the protection of the right of every child to be registered at birth under Article 24 of the ICCPR, which Bangladesh is a party to.²²⁷ Consequently, since the laws related to digital ID are still under the parliamentary process, it is imperative that Bangladesh adheres to its human rights obligations under ICCPR, ICESCR, ICERD, CRC, and CEDAW.

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

By restricting NID card registration to Bangladeshi citizens,²²⁸ non-citizens including refugees, migrant workers and stateless persons in Bangladesh are unable to access social and government benefits, employment, bank accounts, marriage registration, SIM cards, electricity, water, gas or rail tickets.²²⁹

Furthermore, since a birth certificate is a necessary requirement to apply for citizenship, digitalization of birth registration has made the process of citizenship acquisition inaccessible to those who do not have access to internet or digital literacy.²³⁰ As a result, those who are unable to access the process on their own must go through intermediary services to apply for citizenship, which increases the cost and creates another potential barrier to accessing the process.²³¹ With a birth registration rate of only 83% in 2023, the requirement of a birth certificate in order to register for the NID system also excludes 17% of the total population.²³² This disproportionately



Photo: Council of Minorities (CoM)

affects the Rohingya and Urdu-speaking communities, who experience lower rates of birth registration.²³³ Local private entrepreneurs involved in the data entry process have been reported to charge informal fees for facilitating the data entry of an application for registration.²³⁴

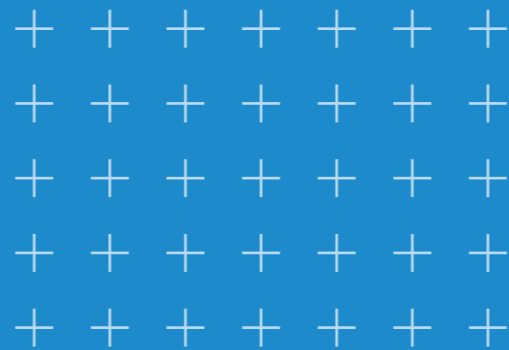
For the Urdu-speaking community, language barriers, structural discrimination and marginalization contribute to a lack of documentation, lack of legal identity, and poverty.²³⁵ Digitalization exacerbates this, when coupled with issues with internet access and digital literacy.²³⁶ In order to foster greater inclusion in Bangladesh's NID system, there should be a focus on ensuring "universal and free birth registration, particularly in remote areas and areas where minority communities live".²³⁷ Further, paper-based systems should also be accommodated to ensure access for those without internet access or digital literacy.²³⁸



Photo : Sujan Mongar



BHUTAN



Bhutan

Legal Identity

Since the 1980s, births and deaths in Bhutan have been recorded through Family Diaries, which were paper based.²³⁹ This system changed in 2003, where the Department of Civil Registration and Census (DCRC) began computerising these diaries to create a more comprehensive database called the Bhutan Civil Registration System (BCRS).²⁴⁰ The primary aim of this system was to issue citizenship cards, while also integrating other details such as births, deaths, family ties, and movement of other family members.²⁴¹ According to Bhutan’s Immigration Rules and Regulations (2023), the proof of Identification or Legal identity for Bhutanese Nationals is the Citizenship Identity Card or an Identification document issued by the DCRC.²⁴² In an effort to be more inclusive and accessible, births and deaths can be registered in the BCRS online.²⁴³

Once a child’s birth is registered in Bhutan, the DCRC instantly assigns them with a Unique Citizenship ID (UCI) which can be activated and utilised once the child turns 15.²⁴⁴ While processing this card, the biometrics of citizens are collected and stored in the BCRS biometric database, which upon the death of the individual gets deactivated.²⁴⁵ Non-residents, who are also a part of this system, are issued Special Residents (SR) Cards.²⁴⁶ Only citizens and SR card holders can register births and deaths through the civil registration system of Bhutan.²⁴⁷ In order to apply for an SR card, one must provide their own citizenship as well as the citizenship of their mother and father, which presents a major administrative barrier for stateless people.²⁴⁸

In case there is a delay in registering a child’s birth, the child will be provided with a civil status, namely “delayed birth registration”.²⁴⁹ Although

there is no late fee for registration, registering a child once the stipulated time has passed becomes more complex, as it requires filling up an individual registration form, attaining the requisite endorsement by local government authorities, and providing reasons as to why there was a delay in the birth registration.²⁵⁰

Overview

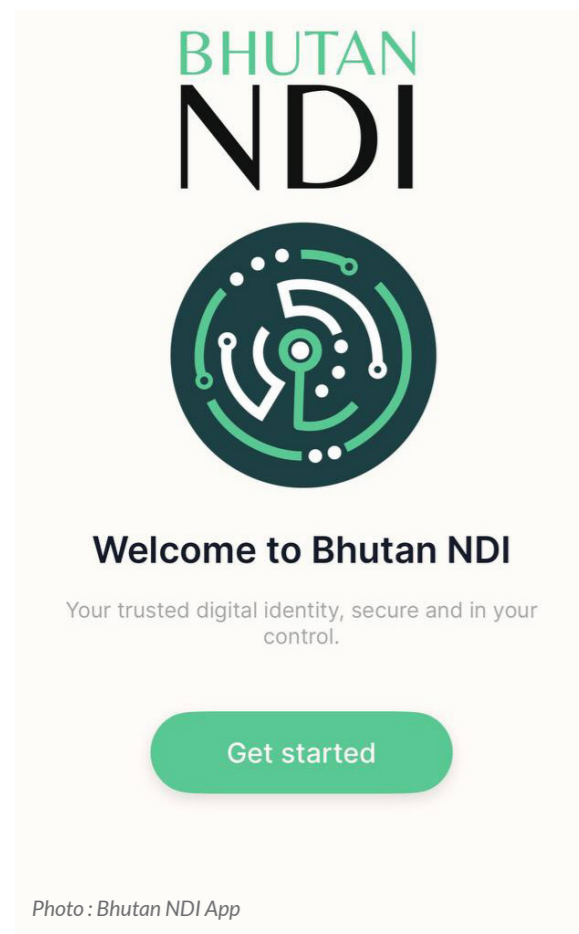
Bhutan introduced its digital ID system, the National Digital ID (NDI) in 2022 with an aim to provide “secure and verifiable digital ID credentials”.²⁵¹ It is the first country in Asia to roll out a decentralised Self Sovereign Identity (SSI)-based system.²⁵² The SSI provides a foundational element, connecting the citizens, government, and the private sector of Bhutan.²⁵³ The Bhutanese government claims that the SSI-based system gives users complete control over their personal data and what information they provide to prove who they are to access websites and other services.²⁵⁴

While there is no data to suggest public involvement in the adoption of the digital ID, media reports show that there were discussions and debates in the Parliament that led to the adoption of the NDI Framework.²⁵⁵ The adoption of the NDI framework has been a collaborative effort between various government institutions and private actors, who came together to establish Bhutan NDI, a body that caters to the issuance and working of NDIs.²⁵⁶

The government, with the Government Tech Agency and DCRC, also developed the Integrated Citizen Services System to further establish DPI and reduce further administrative barriers.²⁵⁷ This system also aims to streamline access to services such as access to Legal documentation like a birth certificate, marriage certificate, or death certificate, and access to agriculture sector, health, and judicial services through the Citizens portal website and the mobile application.²⁵⁸ However, this service is only accessible to citizens as it requires an NDI number.²⁵⁹

While a direct linkage between citizenship and digital ID cannot be drawn through the Act, it can be reasonably ascertained from official sources and Bhutanese media that the digital ID can only be issued to a citizen of Bhutan.²⁶⁰

The National Digital ID (NDI) app holds personal information of users and is designed as a mobile wallet which holds identity related documents that citizens and residents can use to verify on websites and other services.²⁶¹



Biometric data of citizens is collected through this application where foundational IDs can be provided to citizens through the facial recognition process.²⁶²

Bhutan does not recognise dual citizenship²⁶³, hence dual citizens and other non-citizens cannot access digital IDs in Bhutan. Since Bhutanese

citizenship is a prerequisite to accessing the Bhutanese digital ID,²⁶⁴ there is no information available as to how stateless populations will access basic services as the country moves to link access of basic services with the NDI, despite it not being mandatory for citizens to secure.²⁶⁵

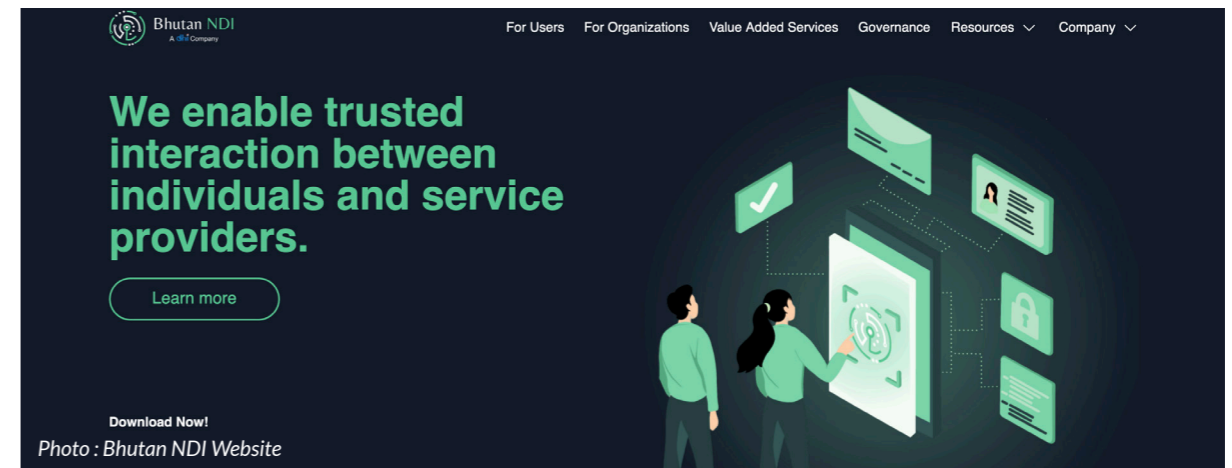
Laws

Domestic laws and policy

The NDI was introduced after the establishment of the NDI Governance Framework by the Bhutanese Parliament by enacting various legislative documents, the key one being the National Digital Identity Act of Bhutan (2023) ('NDI Act of 2023').²⁶⁶ The NDI Act does not expressly define digital ID but simply states its purpose which is to create a digital economy where citizens as self-sovereign identities can access both government and private sector services.²⁶⁷

Data Protection

The Bhutan NDI has in-built-in provisions for data protection.²⁶⁸ Since the NDI is based on principles of self-sovereign identity, each individual has complete control over their personal information, thereby setting a benchmark for digital privacy.²⁶⁹ Furthermore, the NDI Governance framework follows a stringent approach towards data collection by ensuring that any user information is neither collected nor stored.²⁷⁰ The privacy policy of NDI Bhutan states that while a copy of the facial data is stored with the Ministry of Home Affairs to ensure that identity theft or duplication does not take place, no other data provided is stored on the database servers of the NDI.²⁷¹ All digital information present in the digital wallet belongs to the user and cannot be accessed in any form (encrypted or otherwise) by the NDI Admin or a third party, unless the user consents to storing it on the NDI application's cloud servers.²⁷² This



information is only accessible in an encrypted format and cannot be read by the NID Admin or other third parties.²⁷³

The privacy provisions ensure that the data collected at the time of registration is stored and safely secured, creating accountability on those involved in the process.²⁷⁴ There is no evidence to establish the usage of this data by the government against stateless persons, refugees or migrant populations since many of them would have been unable to register for the NDI in the first place since they cannot validly prove their citizenship.

International Commitments

Bhutan has not ratified any specific treaty or legislation in relation to digital ID. As a party to the CRC, Bhutan has obligations to ensure the right to be registered immediately at birth and the right to an identity.²⁷⁵ Bhutan's CRVS system procedures do not align with these obligations as only citizens and SR card holders can register births, leaving non-citizens without access to the SR card and stateless people unable to register births.²⁷⁶ Stateless people are also unable to access a Legal identity in Bhutan, further contradicting Bhutan's obligations under the CRC.²⁷⁷

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Since Bhutan fails to recognise the presence of stateless persons inside its territories, the situation for such individuals remains precarious because they struggle to secure the 'no objection certificate' and police clearances to access healthcare, Education, employment and other basic facilities.²⁷⁸ Furthermore, foundlings or children born to stateless parents are not recognised as Bhutanese citizens.²⁷⁹

Children born to unwed mothers who are not able to ascertain the identity of the father or vice versa are also at the risk of statelessness as both parents must have Bhutanese citizenship for a child to become a citizen.²⁸⁰

Such individuals are not eligible to access any form of Legal identity through the civil registration system of Bhutan, as they are neither citizens nor SR card holders.²⁸¹ Reports claim that while stateless children are eligible to access health and public Education services, fundamental rights to livelihood liberty, access to Education, employment and healthcare are violated.²⁸²



Bhutan NDI in Action

Dechen's Journey

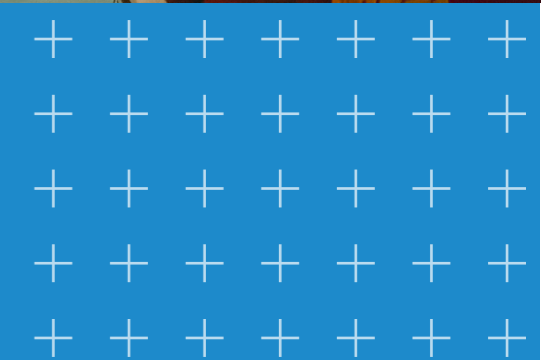
Dechen is a recent university graduate who is currently applying for jobs at various companies.

She must authenticate online and manually submit several documents during the application process which require additional verification.



It is interesting to note that the NDI is extremely inclusive of all types of Bhutanese citizens by facilitating access and assistance to certain sections of society.²⁸⁶ However, this inherently inclusive and accessible system can be exclusionary towards isolated communities, such as the stateless population and refugees, as the government of Bhutan refuses to acknowledge the existence of either of these communities, which they were instrumental in creating.²⁸⁷

Bhutan is among the first countries in the world to create a self-sovereign digital ID system, with an aim to create inclusivity amongst its populations by catering to individuals with limited digital literacy, financial stability and people with special needs.²⁸³ The NDI framework has faced trouble in receiving judicial acceptance because of the latter's reluctance to accept digital evidence in proceedings as the country moves towards a completely digitized economy.²⁸⁴ While the present Legal framework of the NDI is deemed to be robust, the lack of safeguards and laws on digital ID and data protection, prevention of misuse and operability raise concerns for individuals who are new to the digital world, and the maintenance of trust registries which are the foundation to the self-sovereign system.²⁸⁵



India

Legal Identity

There is no one officially recognised Legal identity document in India, and citizenship is conferred through descent. In India, National Family Health Surveys indicate that until 2016, 20% children, approximately 5 million children do not have access to birth certificates, where more than half are not registered at all, and the other half, while registered, do not have access to birth registration.²⁸⁸ Birth registration is a foundational identity document in India to establish age, Nationality, and required to access other identity documents such as passports, for enrollment in schools²⁸⁹, as well as to cast a vote upon attaining majority, among others.²⁹⁰

Overview

'Aadhaar', introduced in 2009 as India's digital ID, aims to provide a unique, universally accepted identifier where each individual's unique identity (i.e., their Aadhaar number) is verified against the demographic and biometric data stored in a centralized database known as the Central Identities Data Repository ("CIDR").²⁹¹ To obtain an Aadhaar, there are specific requirements of documentation necessary, which require individuals to any one provide proof of identity (passport, PAN number, Voter Identification number, etc.) any one proof of relationship (PDS Card, MNREGA Job Card, Government issued Marriage Certificate, etc.), one proof of birth (birth certificate, passport, photo ID card having the date of birth, recognised by Educational institutions, etc.), and one proof of residence (passbook, bank statements, electricity bill, ration card, etc.).²⁹² It is interesting to note here that while Aadhaar does not constitute a foundational Legal identity document, its adoption has achieved

near universal status in the country, where birth registration still lags behind.²⁹³

In the context of India, Aadhaar was conceived as a foundational ID²⁹⁴ to address the problem of identifying individuals in a country as large and diverse as India. Its primary purpose was to eliminate duplication and ensure that each resident has a unique identity, which could be used for a wide range of services and entitlements provided by the State.²⁹⁵

However, a policy shift saw the adoption of digital IDs as a mode of functional ID with the main purpose of streamlining the delivery process of social inclusion projects managed by the Government of India. The main objective of these policies was to fill the identity gap that exists in case of implementation of digital Initiatives of the government, which in turn, is also one of the sustainable development goals as suggested by the United Nations, i.e., the right to identity.²⁹⁶ Therefore, the Aadhaar framework sought to develop a system that guaranteed social protection by preventing leakages and mismanagement in welfare schemes, and "provide efficient, transparent and targeted delivery of subsidies, benefits and services, to the residents of India"^{297,298}

Legally, the Aadhaar is not a mandatory ID for individuals to possess.²⁹⁹ However, practically, access to almost any government service requires the possession of an Aadhaar, both in law and practice. The Supreme Court, in the Aadhaar 5 Judge Case acknowledged the risks of exclusion and ruled that Aadhaar could not be mandatory for accessing welfare benefits. While upholding the Aadhaar's constitutionality, the Apex Court emphasized that an individual cannot be deprived of essential services due to the failure of biometric Identification.³⁰⁰ The judgment underscored the need to balance Aadhaar's benefits with the protection of marginalized groups from being excluded from crucial resources.³⁰¹



Photo : Ali Johar

Aadhaar has since then expanded to cover various aspects of an individual's interaction with the State. These include access to subsidies, financial services, and welfare programs, reinforcing its role as a functional ID system, making it mandatory to possess.³⁰² Aadhaar has also been directly linked for accessing various public services being provided by the Government. For instance, it has been linked with the direct benefit transfer scheme so that individuals can receive benefits for PDS system, MNREGA etc. directly in its bank account,³⁰³ Aadhaar enabled payment systems have been enabled to ensure digital transactions through Aadhaar details.³⁰⁴ It is also a mandated document for SIM Cards as well as to access government mandated healthcare services.³⁰⁵ The Legal framework surrounding Aadhaar and subsequent judicial rulings, underscores its functional nature, particularly in the context of the State's obligation to recognize and verify the identity of its residents for various public services.³⁰⁶

The Preamble of the Aadhaar Act clarifies that the Aadhaar ID is being developed as a unique ID for the efficient, transparent and targeted delivery of public services, subsidies, benefits, etc. being provided by the Government.³⁰⁷

According to Section 7 of the Aadhaar Act, individuals without an Aadhaar number can still receive benefits, subsidies, and services through alternative means of Identification.³⁰⁸ However, in August 2022, the Government through a circular stated that Aadhaar is required for accessing government benefits.³⁰⁹ The circular noted that over 99% of adults in India now have an Aadhaar number.³¹⁰ Therefore, individuals without Aadhaar must apply for enrollment and can use their Aadhaar Enrolment Identification number or slip to access benefits and services until they receive their Aadhaar number.³¹¹

In terms of stateless individuals, those who do not hold appropriate residency status (Long-Term Visas), are automatically ineligible to apply for Aadhaar, excluding them from accessing various government services as discussed below, with no alternate avenues to access the same.³¹²

The Aadhaar Act expressly states that it does not confer any proof of citizenship or domicile on the Aadhaar number holder.³¹³ Since January 2024, new Aadhaar cards and PDF versions of the identity document have started including an express disclaimer on Aadhaar not being a proof

of identity, as well as, date of birth to government departments and other organizations to not use it for those purposes.³¹⁴ The Aadhaar (Enrolment and Update) Regulations 2016, allow for foreign Nationals that have stayed in India for more than 182 days to get enrolled and obtain an Aadhaar number, as long as they qualify as a 'resident' as per the Aadhaar Act.³¹⁵

The implementation of Aadhaar has had exclusionary consequences, particularly for stateless communities who often lack foundational documents such as birth certificates that are required to obtain an Aadhaar number.³¹⁶ Without it, individuals are effectively barred from accessing essential services and social welfare schemes. Documented evidence also highlights how structural issues within the Aadhaar system such as biometric authentication failures, faulty equipment, and unreliable internet connectivity have led to people being denied access to food and entitlements, further marginalizing already vulnerable populations.³¹⁷

*Refugees and stateless people have no avenue to obtain an Aadhaar, since the Ministry of Home Affairs in 2018 made a distinction between "refugees" and "legal residents", claiming that Aadhaar would be available to those who were "legal residents".*³¹⁸

Furthermore, the government stopped accepting the UNHCR-cards, thereby removing all possible pathways for individuals to access social services or a possibility to acquire Long-Term Visas.³¹⁹ Similarly, exclusions from basic services have been faced by individuals left out of Assam's National Register of Citizens (NRC) as they are unable to access Aadhaar enrollment.³²⁰ These exclusions severely restrict access to essential services, benefits, and Legal recognition of individuals impacted by statelessness.³²¹

Laws

Domestic Law and Policy

The digital ID system is governed by the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 ('Aadhaar Act') states that Aadhaar was established to enhance the delivery of central or state government subsidies, benefits, and services to individuals residing in India by assigning to individuals such unique ID numbers.³²² Presently, India does not have a uniform definition of 'digital identity' in its Legal framework, or by virtue of being a signatory to any international instrument. However, in practice, digital identity in the Indian context refers to the electronic representation of an individual's identity, which can be used to authenticate and verify the individual's identity online or in digital transactions.³²³

Aadhaar does not constitute proof of citizenship in India. Section 9 of the Aadhaar Act expressly states that it does not confer any proof of citizenship or domicile on the Aadhaar number holder.³²⁴ This is complemented by the Aadhaar (Enrolment and Update) Regulations 2016, which allow foreign Nationals that have stayed in India for more than 182 days to get enrolled and obtain an Aadhaar number.³²⁵

Further, as of January 2024, new Aadhaar cards and PDF versions of the identity document have started including an express disclaimer on Aadhaar not being a proof of identity, as well as, date of birth to government departments and other organizations to not use it for those purposes.

However, there is explicit linkage of citizenship with Aadhaar, as observed in Assam, where around 1 million people faced blocked IDs on the pretext of "precarious citizenship status" during the NRC Process.³²⁶ This precarity was not a judicial mandate, but rather an administrative exercise

Photo : Unique Identification Authority of India Website Johar



adjudicating the most important human right of all- Nationality. The blocking of these ID's on executive authority, resulted in individuals living their lives in limbo for five years, without any means to their entitled government benefits, access to healthcare, and faced challenges in obtaining salaries from employers.³²⁷

Data Protection

The implementation of Aadhaar came much prior to a legislation on data protection or privacy, which are amiss in law even today. Six years after the Supreme Court of India granted the right to privacy as a fundamental right, the law on Digital Personal Data Protection Act ('DPDP Act') came into force in 2023³²⁸ with the Digital Personal Data Protection Rules, 2025 ('Draft Rules') being released in January 2025. The Ministry of Electronics and Information Technology has opened it up for comments

from various stakeholders and the DPDP Act is currently in the final stages of enforcement.³²⁹ The regulations on privacy are currently governed by the Information and Technology Act, 2000 and Information Technology (Reasonable Security Practices and Procedures and Sensitive Personal Data or Information) Rules, 2011.³³⁰ These rules in addition to the specific protections under the Aadhaar Act are applied to biometric data.

The right to privacy, while being a fundamental right as laid down by the Supreme Court, is not an absolute right. The Apex Court laid down a three-fold test to be satisfied in case an individual's right to privacy is being impinged upon: (i) 'Legality', i.e., the action must be sanctioned by law; (ii) 'necessity', i.e., the proposed action must be necessary in a democratic society for pursuing legitimate aims of Governmental agencies; and (iii) 'proportionality', i.e., the extent of such interference by the legislative action must be proportionate to

the need for interference; and there should be a rational nexus between a Government's objective and the means adopted to achieve such objective.³³¹ This means the Indian government may be able to access Aadhaar data if it meets the above criteria. However, if the government accesses data unlawfully or without due process, individuals can challenge this infringement on their fundamental right to privacy. Further, given that Article 21 of the Constitution extends to "every person"³³², the right to privacy is available to non-citizens / foreign Nationals, in addition to Indian citizens. Critics argue that the provisions of the Draft Rules are not only in violation of Constitutional principles of data protection, but are also seen to disregard the proportionality test laid down in the Aadhar 5-judge case.³³³

Under Rule 22, the Executive is given broad access to personal information with no transparency in terms of the number of times that the government can access the information, "undermining principles of purpose limitation and data minimisation"³³⁴.

This centralised framework with unfettered access to personal information creates grounds for state surveillance. Furthermore, the Draft Rules, while they require an independent regulatory body such as the Data Protection Board to oversee compliance, there are concerns raised with regards to the political influence, due to the appointments to the Board being undertaken by the Executive.³³⁵ Finally, the Draft Rules also weaken the Right to Information Act, which guarantees the fundamental right to information. It allows officials to withhold personal information that may be critical to public interest under the garb of the right to privacy, departing from the standard of proportionality laid down by the Puttaswamy judgment.³³⁶

There have been repeated instances where the personal data collected for Aadhaar, which include names, addresses, dates of birth, and Aadhaar numbers, have been inadvertently

exposed or accessed through unauthorized means.³³⁷ This is despite the fact that the core databases maintained by the Unique Identification Authority of India (UIDAI) have not suffered confirmed breaches.³³⁸ In one widely reported case from 2018, a journalist was able to pay just INR 500 (around USD 7) to gain access to a portal that allowed them to input any Aadhaar number and retrieve the corresponding demographic information.³³⁹ This incident has highlighted the ease with which sensitive data can be obtained, and points to larger systemic issues, particularly the ambiguity surrounding who can access such data, how it is to be managed, and under what safeguards.

In July 2025, the Government of India during the state Elections of Bihar introduced the E-SECBHR mobile application to cast votes.³⁴⁰ However, the development and implementation of this scheme has been undertaken without any clearly defined Legal framework, parliamentary discussion, or any public consultations that would ensure transparency and accountability.³⁴¹

Civil society has raised serious concerns on the transparency of how the data collected, which includes facial recognition and other biometrics data, is stored, used, and shared. Furthermore, the procedure of casting a vote, requires the identity of an individual to be authenticated by the application by sharing an OTP against a mobile number, where two people are allowed to cast a vote from the same confines of their homes. They have also flagged the ominously low rates of digital literacy in Bihar, with around 67% women and 35.4% men who have never used the internet.³⁴² This lack of digital literacy amplifies the risk of voter coercion, where there is little guarantee of the vote being cast in a fully informed manner, without coercion.³⁴³

The Internet Freedom Foundation notes that the privacy policy of the E-SECBHR allowed for data sharing with third parties, reserving the right to use

the data for research and analysis purposes.³⁴⁴

International Commitments

India is not a party to any international framework, agreement or treaty which sets out obligations in relation to or definition for a digital ID. However, India, being a member of the United Nations, has made an non-binding commitment through the 2030 Agenda on Sustainable Development with respect to providing Legal identity to all, as part of Goal 16 of the Sustainable Development Goals ("SDG").³⁴⁵ India is also not a party to any international agreements on data protection that specifically regulates their practice for implementation of framework on digital IDs. However, the country's approach to data protection is influenced by its constitutional framework and obligations to other international human rights instruments, which upholds the rule of law and fundamental human rights, including the right to privacy. Furthermore, the Constitution of India guarantees fundamental rights such as the protection of life and personal liberty, freedom of speech, and protection against discrimination.³⁴⁶

Furthermore, India is a signatory and party to several core international human rights instruments, including the United Nations Declaration of Human Rights ("UDHR"), the International Covenant on Civil and Political Rights ("ICCPR"), the International Covenant on Economic, Social and Cultural Rights ("ICESCR"), the Convention on the Rights of the Child ("CRC"), and the Convention on the Elimination of All Forms of Discrimination Against Women ("CEDAW").

These instruments emphasize the protection of privacy and non-discrimination, which align with India's constitutional values. For instance, Article 12 of the UDHR, and Article 17 of ICCPR are similar, as they require that no individual shall be subjected to "arbitrary interference with regard to his privacy, family, home, or correspondence,

nor to attacks upon his honor and reputation and everyone has the right to protection of the law against such interference or attacks".³⁴⁷

The ICESCR guarantees certain fundamental human rights, such as right to Education³⁴⁸, right to be free "from discrimination of any kind as to race, color, sex, language, religion, political or other opinion, National or social origin, birth or other status",³⁴⁹ Further, the CEDAW prohibits discrimination against women in all forms and embodies the principle of equality of men and women, and the CRC directs all parties to the convention to take appropriate measures to ensure that the child is protected against all forms of discrimination, including from discrimination towards the child because of their or their parent's National, ethnic, and social origins³⁵⁰. The CRC also lays an obligation on State Parties to register children right after birth, where the child has the right to acquire a Nationality.³⁵¹

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Despite the government's push for "Digital India"³⁵² and the reliance on Aadhaar to reduce leakages, the system has been riddled with problems of exclusion that are not just limited to stateless individuals, but citizens and residents too. Research pointedly states that the system has been devoid of multiple technical and logistical vulnerabilities that has ultimately blocked eligible individuals from receiving and accessing essential services.³⁵³

In several states, it was found that individuals were required to provide fingerprint scans to collect food ration.³⁵⁴ A survey conducted across three states revealed that Aadhaar-related issues accounted for 0.8 to 2.2 percent of all



Photo : Ali Johar

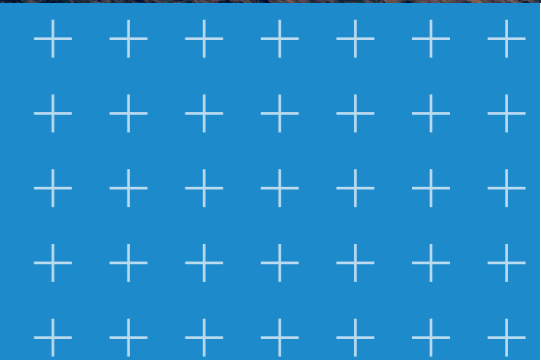
exclusions from the PDS, leading to a denial of food rations to over 2 million people.³⁵⁵ These failures reportedly stemmed from a range of factors, including the absence of Aadhaar linkage, biometric mismatches, connectivity problems, electricity outages, or simply the beneficiary being unable to physically authenticate at the time of distribution.³⁵⁶

Furthermore, the advancement of technology has resulted in the deepening of the exclusionary mandate of Aadhar due to the lack of regulatory safeguards and legislative frameworks.

In terms of data protection, the country has witnessed almost a breakdown of due process, where data, while maybe with the intent of ensuring inclusion has come at a cost of ensuring “privacy, security, and democratic legitimacy”³⁵⁷. The absence of strong regulatory safeguards, inadequate infrastructure, and limited avenues for redress have turned what should be enabling systems into barriers, resulting in disempowering the vulnerable. Without meaningful Legal protections, transparency, and accountability mechanisms in place, the promise of “Digital India” may continue to leave behind those it claims to empower.



MALDIVES



Maldives

Legal Identity

The National ID card serves as Maldives' primary legal identity documentation, established through the Civil Registration and Issuance of Birth Certificates and National Identity Cards Act (2022).³⁵⁸ Maldives has a CRVS system in place where the Department of National Registration (DNR) is the government agency responsible for registering births and deaths as well as issuing National identity cards.³⁵⁹ One must be a Maldivian citizen in order to obtain a National ID card.³⁶⁰

*Birth registration is required in order to acquire a legal identity and Maldivian citizenship because a child's national identity card number is issued upon registration of the birth.*³⁶¹

Stemming from discriminatory legislation, children born to non-Muslim parents or inter-faith parents often do not have equal access to birth registration, excluding them from access to Nationality and a Legal identity.³⁶²

A National ID card is required to access a number of government services, including Education, free health care, marriage and divorce registration, passport issuance, loans, and social benefits such as financial support for low-income families, the elderly and persons with disabilities.³⁶³ Non-citizens, including foreigners, refugees, migrant workers and stateless persons, are therefore excluded from accessing these services.

Overview

The eFaas is the Maldives' digital ID platform, which was launched in 2012.³⁶⁴ Developed and

maintained by the Maldives' National Centre for Information Technology (NCIT), the project was undertaken in collaboration with the Global Health Advocacy Incubator and received \$10 million of funding from the World Bank.³⁶⁵ In May 2023, trial implementation of the eFaas platform began.³⁶⁶ In the first three months of this trial period, over 50,000 people began using the eFaas digital ID.³⁶⁷

eFaas is a foundational ID as it allows users to verify their identity digitally as well as access government services such as health services, marriage and divorce form submission, the government job portal, and other services like business registration, licenses and transactions.³⁶⁸ eFaas is also required in order to use OneGov, the Maldives' DPI portal for accessing over 300 government and public services from 11 different government agencies.³⁶⁹ Notably, an eFaas account is required in order to register a birth.³⁷⁰

Maldivian citizenship is not a prerequisite to use eFaas as foreigners and work permit holders can also create an account.³⁷¹

To register with eFaas, citizens need to provide a National ID Number and an ID Card Serial.³⁷² For foreigners to register, they must provide their passport number and or work permit number.³⁷³ There is no option for people without passports or Maldivian citizenship to register for an eFaas account, excluding stateless persons from being able to use the Digital ID and access the OneGov platform and all of the services attached to it.³⁷⁴



Photo : PSM News

Laws

Domestic Law and Policy

Maldives does not currently have any legislation on digital ID specifically and lacks other necessary frameworks to govern digital ID.³⁷⁵ While not available in English, the Birth, Death and National ID Registration Act (2022) covers the National ID, but does not account for digital ID or the use of the National ID in digital applications.³⁷⁶

*Without legislative frameworks, the eFaas privacy policy and terms of service policy can be analyzed as a policy framework for data use and the ability of users to address grievances.³⁷⁷ As such, neither of these policies provide for grievances with the eFaas system to be resolved.*³⁷⁸

Data Protection

Data collected by the eFaas system includes the user's facial biometrics, birth date, address and personal contact information, the user's other identity documents, and data stored by select government agencies.³⁷⁹ There is currently no data protection legislation in the Maldives to inform the use and collection of such data.³⁸⁰ As of May 2023, there is a draft bill, the Personal

Data Protection Act, which is set to establish a framework for the collection, processing and protection of personal data.³⁸¹

The collection of facial biometric data is problematic mainly due to the high risk it poses for potential abuse of the data.³⁸² As an agreement between the user, the eFaas system, the assigned government agency and the ID holder, some data protection measures are dictated by eFaas's Terms of Service and privacy policy.³⁸³ These policies cover user's data collection, use and disclosure.³⁸⁴

Of particular concern for data privacy is the wide range of situations where a user's data may be disclosed without their consent.³⁸⁵ The Maldives partnered with SumSub Ltd, a UK-based private infrastructure company, "to store citizens' biometric face recognition data" collected through eFaas without transparency on the details of the private contract signed between the two or how Legal or policy frameworks cover such a contract.³⁸⁶ While SumSub Ltd does comply with the UK's and European Union's General Data Protection Regulation (GDPR), there are still concerns over the potential misuse of this sensitive data without legislative protection within the Maldives.³⁸⁷

*Human rights groups in the Maldives “have increasingly become targets of surveillance, harassment, threats of violence, and blasphemy allegations”, pointing to concerns of indirect data collection through the eFaas system leading to greater surveillance.*³⁸⁸



Welcome to eFaas, Key to a Digital Maldives

eFaas is the Maldives National Digital Identity, enabling you to identify yourself in-person and online, unlocking a world of digital possibilities



From indirect data collected, such as IP addresses and other records of identity authentication, when and why a user uses their ID can be tracked, which could be used to track an individual’s location and activities.³⁸⁹ Collection of this kind of data has previously been ruled as a violation of user privacy in the Maldives “have increasingly become targets of surveillance, harassment, threats of violence, and blasphemy allegations”, pointing to concerns of indirect data collection through the eFaas system leading to greater surveillance.³⁹⁰ The

indirect data collected, such as IP addresses and other records of identity authentication, can lead to concerns regarding violation of users’ privacy rights due to an increased risk of monitoring and surveillance.³⁹¹

International Commitments

As a party to the ICCPR, the Maldives is obligated to uphold the right to privacy, the right to be recognized before the law, the right to be registered at birth and to acquire a Nationality, as well as the right against discrimination on the basis of religion.³⁹²

*The requirement of using an eFaas account to register a birth excludes stateless persons from registering their children’s births³⁹³ and the denial of access to birth registration children born to non-Muslim parents or inter-faith parents³⁹⁴ in the Maldives can be shown to contradict the country’s obligation to uphold the right to birth registration, as well as its obligations under ICCPR and ICESCR.*³⁹⁵

Birth registration is also required in order to register for a Legal identity³⁹⁶, which further curtails the right to be recognized before the law.³⁹⁷ This also contradicts the Maldives’ obligations as a party to the CRC, which also ensures the child’s right to birth registration and to an identity.³⁹⁸ The exclusion of children from access to Education as a result of not having a National ID card³⁹⁹ also curtails the child’s right to an Education under Article 28 of the CRC.⁴⁰⁰

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Exclusion of stateless persons from access to services attached to the National ID has not been mitigated by the Maldives’ digital ID, eFaas,



Easy



Empowering

Photo : eFaas Official Website

but rather continued in an online format.⁴⁰¹ The requirement of a National ID number in order to access a wide range of government services excludes stateless persons from including Education, public health care, marriage and divorce registration, passport issuance, loans, and social benefits such as financial support.⁴⁰² With the eFaas digital ID system, the exclusion that stateless persons previously faced, still remains. Unable to create an eFaas account, stateless persons are excluded from accessing the OneGov government and public services portal, which excludes them from accessing birth and death registration, local residency registration, work permit services, business registration, among many others.⁴⁰³

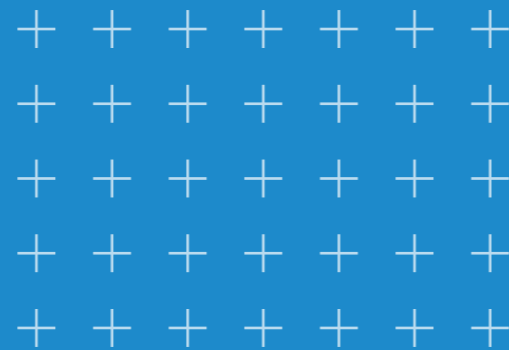
The exclusion of stateless persons and children born to non-Muslim and interfaith parents from access to birth registration is of particular concern.⁴⁰⁴ Without birth registration, a child can lack the documentation required to establish their identity and potential link to a State, which can create barriers for them acquiring citizenship.⁴⁰⁵ As a result, this policy could be contributing to increasing statelessness and making it more difficult for stateless families to access their right to a Nationality.



Photo : Unsplash



NEPAL



Nepal

Legal Identity

Citizenship certificates, issued at age 16, are the main form of Legal identity in Nepal and serve as proof of Nepali citizenship.⁴⁰⁶ Documents required to apply for a citizenship certificate include a birth certificate, citizenship application, the applicant's parents' citizenship certificates and marriage certificate, and certificates from the applicant's school.⁴⁰⁷ First, the applicant must receive approval from their local Ward office to obtain a birth certificate, then a citizenship application is submitted to the Ward office which verifies the applicant is a resident.⁴⁰⁸

Upon approval from the local Ward office, the applicant can then take their application to the federal government for processing.⁴⁰⁹ In this stage, the federal government has the authority to recheck information in the application and issue a decision on the application.⁴¹⁰ If the application is denied, the applicant must then take their case to court.⁴¹¹

The lack of a citizenship certificate leads to exclusion from a wide range of political, social, civil, and economic rights as the document is required to participate in many facets of public life as well as to obtain other identity documents.⁴¹²

Without a citizenship certificate, one cannot vote, open a bank account, own or transfer land, receive higher Education, acquire a drivers' license, social benefits or government employment.⁴¹³ Children are unable to enroll in the Education system without a citizenship certificate.⁴¹⁴ During the COVID-19 pandemic, citizenship certificates were also required for accessing relief packages, leaving these groups more vulnerable to the impacts of the pandemic.⁴¹⁵

Not having a citizenship certificate can even prevent birth registration of the affected person's children, perpetuating the cycle of lack of documentation.⁴¹⁶ The birth registration rate in Nepal was reported at 73% in 2022.⁴¹⁷

Overview

Development of Nepal's digital ID program, the National ID (NID) card, began in 2016 to provide a digital ID to all citizens of Nepal with cards being issued starting in 2018.⁴¹⁸ As of mid-2024, unique NID numbers are now assigned at the time of birth registration,⁴¹⁹ which are later printed on the individual's physical card issued after reaching the age of 16.⁴²⁰ Upon registration, the individual's fingerprint, iris scans, photograph and digital signature are recorded and stored.⁴²¹ The data collection process has moved relatively quickly, with the data of 9 million citizens collected by September 2022⁴²² and 14 million citizens, roughly "90% of the eligible population", by June 2024.⁴²³ Approximately three million NIDs have been printed to date.⁴²⁴

The NID has been intended as a functional ID with its core objective being digital Identification of all citizens.⁴²⁵ Once digitized, its function is to ensure interoperability for accessing public services such as land registration, transportation, and social security allowances; for accessing private services in commercial banks; and for official offline use where necessary.⁴²⁶ The NID card will eventually serve as a voter card and be linked with Nepal's Election Commission database.⁴²⁷ For the government, its main function is to improve surveillance for public security and crime control, including regulations of immigration.⁴²⁸

DPI is relatively very weak in Nepal, ranking 119 out of 193 on the UN's e-Government Development Index.⁴²⁹ There have been reports that implementation of the NID has not been streamlined across all levels of government, with

local ward offices still requiring paper-based citizenship certificates.⁴³⁰ The digitalization of government services was initiated by the Government of Nepal in collaboration with multiNational identity security services company, Idemia, as a part of Nepal's eGovernance Master Plan (2015-2019).⁴³¹ The process of formulating and implementing the NID was undertaken by the government with the support of a pilot with 117,000 citizens in Panchthar and Singhadarbar from the Asian Development Bank.⁴³² During the formulation of the digital policy, no third party consultation took place, neither with organizations working on digital rights nor with any experts on the political, economic, and social dimension of caste and gender discrimination.⁴³³

*While the NID card is intended to be a fundamental document in the State's ambition to develop an integrated digital identification system, it is not a citizenship certifying document.*⁴³⁴

One must provide a citizenship certificate in order to register for an NID.⁴³⁵ This means that the estimated 6.7 million people in Nepal who likely lack citizenship certificates⁴³⁶, as well as uncounted foreign citizens, refugees, and stateless people, are automatically excluded. Although registering for NIDs has been required for all Nepali citizens from the beginning, after the implementation of the NID and Civil Registration Act (2020),⁴³⁷ the government has made it mandatory to register for an NID card in order to acquire a passport.⁴³⁸

Despite facing public controversy, NID enrollment is mandatory in order to access a range of public services,⁴³⁹ including obtaining a passport.⁴⁴⁰ As of January 2025, having a NID card was also required in order to open a bank account.⁴⁴¹ In July

2024, enrolling in the NID was made mandatory for accessing social security allowances, mobile SIM cards, and various public services such as health insurance.⁴⁴² In August 2024, after a writ petition highlighting concerns that imposing the ID card requirement could result in many senior citizens being unable to access their social security allowances, the Supreme Court issued an interim order directing that the NID card not be made mandatory in order to access government services.⁴⁴³ However, by January 2025, the Supreme Court dismissed the writ petitions, solidifying NID enrollment as mandatory to access public services.⁴⁴⁴

As a result of this policy, stateless persons, other non-citizens, and those without access to the internet who are unable to register for the NID, are excluded from accessing the associate government services.



Photo : Nepal_National_ID

For those enrolled in the NID system, their NID number as well as the digitalized version of their NID accessible through the Nagarik App can be used to access such services.⁴⁴⁵ However, there have been significant issues in the rollout of physical NID cards.⁴⁴⁶ Only just under 2 million of the printed NID cards have been distributed out of the almost 16 million cards that have been applied for.⁴⁴⁷ One issue is the slow production of the cards themselves, while another is the insufficient wages paid to workers distributing the cards.⁴⁴⁸ Further, implementation has not matched the policies being set as despite directives to make the NID card mandatory, residents are still asked to provide their citizenship card for accessing public services such as health subsidies, land registration, or even opening a bank account.⁴⁴⁹

Laws

Domestic Law and Policy

The NID operates under the Legal framework of Nepal's National ID and Civil Registration Act (2020)⁴⁵⁰ and the National ID and Civil Registration Regulations (2021).⁴⁵¹ For the government, the digital identity is a "secured smart card that contains biometric and demographic information of a citizen".⁴⁵² The Constitution also mentions in Article 51, on State polices, that the country will pursue "developing an integrated National identity management information system, and manage it in an integrated way for all kinds of information and statistics relating to citizens, and integrate it to the services and facilities provided by the State and the National development planning".⁴⁵³

There are not any systematic mechanisms for filing digital ID-related complaints to resolve governance issues other than administrative. Individuals can fill a form if they find an error in their ID card.

Out of 16.35 million enrolment by November 2024, while the government has distributed the NID

to 1.65 million, the users have rejected 1,61,113 cards citing an "error" in their information.⁴⁵⁴ Once the error is registered while collecting the NID card or later, a request form can be submitted to make necessary changes. The complaints are usually reconfirmed by an operator and verified by a verifying officer.⁴⁵⁵

Data Protection

Article 28 of the Constitution of Nepal guarantees the right to privacy and protection of personal information.⁴⁵⁶ Additionally, the Individual Privacy Act (2018) and the Individual Privacy Regulation (2020) were enacted to give effect to the provisions related to privacy and data protection. The National ID and Civil Registration Act (2020) includes some provisions ensuring the protection of personal privacy.⁴⁵⁷

The rushed pace of developing the NID raised National security concerns in 2019, particularly that it was initiated without proper safeguards for storing personal data.⁴⁵⁸ Cyberlaw experts have identified that there is insufficient data protection in existing Legal frameworks in Nepal, including loopholes that curb obligations to data privacy, and concerns over the security and privacy of data tied to the NID system itself.⁴⁵⁹ Experts have recommended that the Nepali government set up a robust regulatory framework for the digital ID system.⁴⁶⁰ Routine auditing of IT security in the government's data management system and public awareness campaigns for personal data security were also recommended.⁴⁶¹ One barrier to proper security that Parliament members highlighted is the lack of financial and human resources such as staff in the IT department and skilled engineers to oversee the information systems.⁴⁶² In an effort to address these security concerns, government officials hope that the integration of NID with the new Nagaraik app will enhance data security.⁴⁶³

International Commitments

NEPAL

While Nepal is not party to any international or regional treaties pertaining to digital ID or data privacy and protection, it is a party to ICESCR, which enshrines the right to the highest standard of health in Article 12.⁴⁶⁴ Due to Nepal's policies which require Nepali citizenship in order to enroll for an NID⁴⁶⁵ as well as require NID enrollment to access health insurance,⁴⁶⁶ Nepal may be contradicting its obligation under ICESCR. The requirement of citizenship in order to register for a SIM card⁴⁶⁷ may also be imposing on the right to information for stateless people in Nepal. The right to "receive and impart information and IDEAS through any media and regardless of frontiers" is protected under Article 19 of the UDHR.⁴⁶⁸

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

Residents without citizenship cards, foreign residents, immigrants, refugees, and asylum seekers are automatically excluded from enrollment in Nepal's NID card.⁴⁶⁹ The current Legal and policy framework around digital ID in the country is not designed to resolve issues around citizenship and inclusion. The government has not undertaken any special measures for vulnerable and isolated communities such as persons with disabilities, minorities, the elderly, and stateless individuals to ensure access to the digital ID either through specific mobile programmes or free Legal aid. As part of the regular policy framework, However, there are provisions that recognize specific physical challenges of persons with disabilities. But in practice, persons with disabilities have experienced instances of administrative discrimination.⁴⁷⁰

Rather than serving as an opportunity to resolve some of the pre-existing exclusion on the basis of citizenship,⁴⁷¹ Nepal's NID system made the already existing exclusion digital. As it was mentioned in Article 51 of the country has long planned to develop a digital ID system for citizens and "integrate it to services and facilities provided by the State".⁴⁷² The Nepal government needs a massive policy shift from the current mandatory rush for mass digital Identification without any services towards more contextual models based on the principles of right to a Nationality for all and inclusive development, including human rights protection.

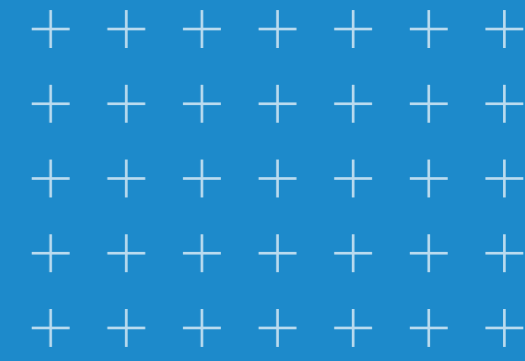


bizmandu
SORRY WE MIND YOUR BUSINESS

Photo : bizmandu.com



Photo : Muhammad Khubaib Sarfraz



Pakistan

Legal Identity

The main document proving Legal identity in Pakistan is the Computerized National Identity Card (CNIC), issued by the National Database and Registration Authority (NADRA), which is mandatory for citizens aged 18 years and older.⁴⁷³ Children under 18 years of age are issued a B-form (also known as Child Registration Certificate), which is the main form of Legal identity for children below the age of 18.⁴⁷⁴ In order to apply for a B-form, one must provide a birth certificate and the CNIC of at least one parent.⁴⁷⁵ To apply for a CNIC, one must present themselves in person at a NADRA office, provide the CNIC of a parent or close relative, and a Computerized Identity Card Form.⁴⁷⁶ If the applicant's parent or close relative is not present with them at the time of application, the applicant will need to provide an additional form of Identification, which may be a CRC, matriculation certificate, local certificate, or passport.⁴⁷⁷ If the applicant is not able to provide one of these secondary Identification documents, they must undergo a vetting process with a case manager.⁴⁷⁸

The CNIC provides an individual with a 13-digit unique identification number.⁴⁷⁹ The CNIC both proves and constitutes Pakistani citizenship, as it serves as official recognition of an individual's citizenship status.⁴⁸⁰

Overview

Pakistan has a Digital ID system managed by the National Database and Registration Authority (NADRA). The primary component of this system is the Computerized National Identity Card (CNIC), which is digitally encoded with biometric data, including fingerprints and photographs.

NADRA has integrated advanced technology into the ID system, allowing for digital verification of personal identity through its National Database.

Pakistan's digital ID, launched in March 2025, is a 'dematerialized digital identity card', meaning physical national ID cards will become obsolete.⁴⁸¹

The digital ID system serves as the main backbone for the ongoing development of Pakistan's DPI.⁴⁸² The system allows citizens to store their Identification documents on their smartphones through the Pak ID mobile app and involves collection of biometric data, including an iris scan, fingerprints, and a high-resolution photograph for facial recognition.⁴⁸³ With Pakistan's new 'all-in-one' digital ID kit, this biometric data is collected by "a single portable unit" to streamline the enrollment process.⁴⁸⁴ The kit is also equipped with GPS technology and mobile internet connection, packed inside a heavy duty case that protects the kit in inclement weather when in rural areas.⁴⁸⁵ NADRA has maintained that it has provided centralized digital IDs⁴⁸⁶ (CNICs) to approximately 96% of the population to around 120 million adults.⁴⁸⁷

The National Digital Commission (NDC) oversees the creation of this comprehensive digital identity system, with NADRA maintaining the biometric database of all individuals.⁴⁸⁸ The Initiative draws inspiration from successful digital models in other countries, such as India's Aadhaar system, the UAE and Estonia.⁴⁸⁹

CNIC not just proves identity, but is also used to verify citizenship of individuals.⁴⁹⁰ The digital ID of Pakistan uses kinship and places individuals within a family tree to constitute registration.⁴⁹¹ While not mandatory in law, CNIC is de facto mandatory in Pakistan. This is because an individual without a CNIC in Pakistan is ineligible to access public services which include banking transactions, casting their vote, obtaining a passport, driving license, train tickets, etc.⁴⁹²



Sources claim that marginalised populations like transgender persons, women, migrant workers, undocumented persons (including stateless populations) are excluded from the CNIC.⁴⁹³ It has been noted that the exclusion faced by communities such as the Bihari community, Bengali-origin residents, and other long-term migrants due to lack of documentation have been due to various factors, including design limitations.⁴⁹⁴ These include the mandatory requirement of associating each ID card to the father/husband, an absence of which would raise significant barriers for women, transgender and other non-binary persons, children, including foundlings outside of institutional care, to access CNICs.⁴⁹⁵ Furthermore, there is a strong linkage between CNIC and citizenship, with the government blocking IDs, without due process, leaving those individuals without access to their fundamental rights.⁴⁹⁶ The reasons to block IDs could include a question on the individual's citizenship status or a suspicion of the status of an individual in the family tree.⁴⁹⁷ The unblocking of CNIC involves undertaking a re-verification process which has been shown to span as long as five years in some cases.⁴⁹⁸

An accompanying digital verification system is planned to be launched in August 2025 as a part of

Pakistan's Digital Economy Enhancement Project (DEEP), supported by the World Bank, which aims to bolster coordination of digital services across the country.⁴⁹⁹ The World Bank has supported the project with \$78 million in funding for development and reforms of Legal frameworks, technical and advisory assistance.⁵⁰⁰ Civil society and digital rights advocates were notably not included in meaningful consultations during the planning and design of Pakistan's digital ID system.⁵⁰¹

Stateless persons are not eligible to access CNICs,⁵⁰² However, until recently, they were eligible to receive other forms of identification, such the Alien Registration Card (ARC).

Yet, the ARC card and other forms of biometric identities do not grant the same privileges as the CNIC. Specifically, the ARC Card grants holders with the following - permission to stay in Pakistan, ability to work in the Private Sector if they have NARA cards and a work permit, a bank account, intercity travel in non-restricted areas, driving license, and exemption from the Foreigner Act 1946.⁵⁰³

To increase access to registration for those in rural areas, where it is difficult to access NADRA

registration centers, NADRA utilizes hundreds of Mobile Registration Vans which collect biometric data and register individuals locally.⁵⁰⁴ NADRA has also developed ‘Rugged Enrollment Kits’, which are portable devices that are designed to support enrollment in rural and hard to reach areas.⁵⁰⁵

The framework for Digital ID in Pakistan, particularly with the CNIC and the ongoing digitisation Initiatives, has been primarily formulated and implemented by the NADRA. NADRA is also supported by NADRA Technologies Limited (NTL), a private, for-profit arm of the public government entity.⁵⁰⁶ NTL has exported some of Pakistan’s digital ID technologies to other countries, including Sudan and Turkey.⁵⁰⁷ NTL has also been involved in renovating Election systems, such as Fiji’s Election management system.⁵⁰⁸

The public arm of NADRA has also collaborated with other governments to implement digital ID technologies in other countries, such as sending 300 Rugged Enrollment Kits to Somalia in support of their digital ID system rollout as well as assisting the country in setting up their digital ID system.⁵⁰⁹

Laws

Domestic Law and Policy

The Legal frameworks for development of Pakistan’s DPI development, including the country’s digital ID system were established in January 2025, two months before the launch of the new digital ID system.⁵¹⁰ The Digital Nation Pakistan Act (2025), enacted in January 2025, is the main Legal framework “to provide for the transformation of Pakistan into a digital nation, enabling a digital society, digital economy, and digital Governance”.⁵¹¹ The Act covers Pakistan’s broader establishment of DPI, including establishment of a digital ID system for all citizens,

and assigns entities responsible for planning and implementing different aspects.⁵¹²

Pakistan’s DPI is regulated by three government bodies, the Pakistan Digital Authority (PDA), the National Digital Commission (NDC), and the Strategic Oversight Committee (SOC), as stipulated by the Digital Nation Pakistan Act (2025).⁵¹³ The Pakistan Digital Authority (PDA) is the government entity responsible for developing, implementing and monitoring the National Digital Masterplan, which is described as a “cohesive framework for digital transformation”.⁵¹⁴ The National Digital Commission (NDC) is assigned as the entity responsible for approving the National Digital Masterplan, providing strategic direction, and coordinating different government bodies “to ensure a unified and collaborative approach to digital transformation across all levels of government”.⁵¹⁵ Finally, the Strategic Oversight Committee (SOC) is responsible for monitoring and evaluating the performance of the PDA, including through independent performance and financial management reviews, review of reports and information, and an annual performance report.⁵¹⁶



The Act defines digital identity as “Legal, secure verifiable credentials issued to an eligible individual, enabling access to digital services, transactions, and interactions which shall be developed, issued and managed by National Database

and Registration Authority under the National Database and Registration Authority Ordinance, 2000.

For Legal entities, it shall be based on data maintained by the Securities and Exchange Commission of Pakistan or other relevant Federal or Provincial Government entities”.⁵¹⁷ Several new rules have been implemented in 2025 with relation to the ID Card, which involve collection of biometric data of all applicants between the age of 10 and 18 as well as compulsory birth registration of children to gain access to the Child Registration Certificate.⁵¹⁸ NADRA provides a formal grievance redressal mechanism, allowing individuals to file appeals in case of blocked, rejected, or misused ID data. Citizens can lodge complaints via the NADRA website or physically at registration centers.⁵¹⁹

Data Protection

Pakistan does not currently have a comprehensive data protection law and the bill is still pending legislative approval as of July 2025.⁵²⁰ The Digital Nation Pakistan Act notably does not establish data protection principles.⁵²¹ There is also no independent oversight established through the Act.⁵²² Under Article 23 of the Act, it is stated that officials of the regulating bodies (PDA, NDC, and SOC) cannot be sued or taken to court for anything they have done as a part of their job as long as they acted in good faith.⁵²³ Article 29 also states that “no decision or action taken under this Act or rule or regulations made thereunder shall be questioned by any agency or challenged in any court or tribunal, nor shall any injunction be granted against such decisions or actions”.⁵²⁴ These provisions are concerning, considering that they remove any means of public accountability over the authorities responsible for Pakistan’s DPI.⁵²⁵

International organisations like Amnesty International have recommended that Pakistan “establish a public accountability and transparency mechanism” to ensure vetting and regulation of the three governing bodies.⁵²⁶

While there are no privacy safeguards in regards to digital ID in particular, the Constitution of Pakistan, through Article 14, guarantees and recognises the right to privacy as a fundamental right.⁵²⁷ However, due to a lack of data protection legislation or privacy law, the security of the data of citizens stored and processed is questionable.⁵²⁸ There are also concerns identified with data breaches that are stored with NADRA, where 2.7 million individuals’ data was found to be compromised between 2019 to 2023.⁵²⁹ This centralised system for Governance purposes raises concerns of surveillance without adequate privacy safeguards and sources caution on the new bill that gives the judiciary limited powers with unfettered powers to the executive.⁵³⁰

Another striking example of how gaps in Legal protections and lack of accountability have enabled problematic digital ID developments in Pakistan is described in the report ‘Paving a Digital Road to Hell?’, which shows that leaked documents indicated that surveillance technology provided by the United States was exchanged in return for expanded access to Pakistani identity data through re-registration Initiatives in the National ID system.⁵³¹

International Commitments

Pakistan is not a signatory to any binding international treaty solely focused on digital ID, but it participates in forums like the ID4D Initiative by the World Bank and the Digital Cooperation Organization (DCO).⁵³²

By excluding undocumented and stateless persons from ID cards and public services, Pakistan risks

violating obligations under Articles 2, 9, and 12 of ICESCR, Articles 17 and 26 of ICCPR, and non-discrimination clauses in CEDAW and CERD.

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

There is a clear and consequential link between exclusion and the implementation of Pakistan's CNIC system, which is issued exclusively to citizens and is required to access nearly all public and private services, including voting, banking, healthcare, welfare, and even to obtain SIM Cards, making CNIC a de facto requirement for participation in civic life.⁵³³ Moreover, the digital identity system is built on a kinship-based model, where citizenship must be verified through family ties. This structure systematically excludes individuals who cannot meet these criteria such as women and children in cases of divorce, single parenthood, or when a male guardian is absent, as well as for foundlings outside of institutional care⁵³⁴, leaving them in Legal and bureaucratic limbo.⁵³⁵



Notably, despite the government's Initiative to provide Alien Registration Cards to undocumented ethnic Bengalis with an aim to register them and

provide them, the measures failed to improve their quality of life. NFA's country stakeholder in Pakistan shared the refugees and those that were provided with the ARC were only allowed work in the private sector, which often resulted in exploitation due to a lack of labor regulations.

*There were no minimum wage standards, forcing those who are stateless and other refugees to work overtime, in unsanitary and deplorable conditions.*⁵³⁶

In Machar Colony, Karachi, most women and children without access to citizenship have been forced to enter the private job sector, peeling shrimp for more than 10 hours a day without gloves, tools, or machines.⁵³⁷

In Pakistan's drive to inclusion of its digital ID system, it is yet to address the challenges it faces due to a lack of digital literacy and internet access for many marginalised groups, especially in remote or underserved areas.⁵³⁸ Furthermore, in terms of inclusion concerns and complaint mechanisms in relation to digital ID systems, there are notable limitations when it comes to marginalised and vulnerable populations. The process can be difficult for those who face unique challenges, such as stateless individuals, refugees, and others without formal proof of citizenship. Stateless individuals, for example, may find it difficult to navigate the complaint system due to their inability to provide the required documentation or citizenship proof, as provided for by the NFA stakeholder in Pakistan.

*For those who have had their CNICs suspended or blocked due to suspicion of being an 'alien', the system may not always provide a swift or fair resolution.*⁵³⁹ *Although appeal processes are in place, these often remain inaccessible for vulnerable populations who may lack the resources and the requisite support needed to navigate these bureaucratic processes.*

It is important to note that in the 2025 CRVS Ministerial Conference, "Pakistan reaffirmed



Photo : Nadeem Geelani

Amnesty International also noted in its recommendations to Pakistan that there are not enough protections against use of data for surveillance in current legislation.⁵⁴⁴ The lack of privacy safeguards and laws combined with the lack of digital literacy, basic internet access,⁵⁴⁵ and data breaches, lead to excluding millions of individuals from accessing basic services in Pakistan.⁵⁴⁶

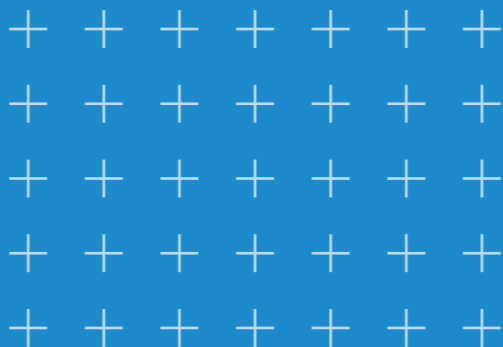
its commitment to ensuring that every citizen is counted and every life event is recorded".⁵⁴⁰ However, to ensure true inclusion in their database and to ensure that the implementation of their domestic laws are in line with their international commitments, the universal inclusion of individuals in the CRVS database needs to be undertaken irrespective of their citizenship status.

Amnesty International has recommended that Pakistan revise its Digital Nation Pakistan Act to ensure non-digital means to access essential services as the absence of this safeguard can further marginalize people and communities who already face marginalization.⁵⁴¹ Conducting human rights impact and data protection assessments of the digital ID system prior to rollout was also recommended.⁵⁴² Further, the PDA should consistently monitor human rights and data protection developments, including by establishing a mechanism for meaningful participation of human rights advocates.⁵⁴³



Photo: Anton Lecock

SRI LANKA



Sri Lanka

Legal Identity

Sri Lanka's National Identity card (NIC) is the main form of Legal identity in the country.⁵⁴⁷ It is compulsory for citizens aged 15 and above under the Registration of Persons (Amendment) Act (2016).⁵⁴⁸ To apply for an NIC, an individual must provide citizenship – through a citizenship certificate – and typically provide a birth certificate, though other documents certifying the person's name and date of birth may be used for the application.⁵⁴⁹ The requirement of possessing a citizenship certificate to obtain an NIC excludes stateless persons from access to a Legal identity.⁵⁵⁰

While birth registration does not constitute citizenship by itself, it is an important first step in establishing Legal identity. Sri Lanka has a high birth registration rate of 97%.⁵⁵¹ To register a birth, details of both the mother and father are required, including the NIC of at least one parent.⁵⁵² This excludes children whose parents are stateless or lack NICs, placing them at risk of being unable to access basic rights such as Education, as birth certificates are required for enrolment to schools.⁵⁵³

The NIC is widely used, though not universal, with 95% of men and 90% of women in possession of the NIC Legal identity.⁵⁵⁴ Women are not only less likely to obtain an NIC but also face barriers to using their NIC due to cultural norms.⁵⁵⁵ A 2017 World Bank report found that women are less likely “to use their NIC to apply for a mobile SIM” card in particular.⁵⁵⁶ Besides the gender gap in access to the NIC, tea estate workers and war widows are also less likely to obtain an NIC.⁵⁵⁷ War widows, as a result of displacement, often have lost their identity documentation.⁵⁵⁸ Geographic barriers, lack of access to technology and low

literacy rates, particularly among women, have also prevented universal access to the NIC.⁵⁵⁹

Overview

Sri Lanka's digital ID system, established in 2012, is a digital version of the NIC, termed the e-NIC.⁵⁶⁰ The e-NIC stores an individual's family information, biodata, biometric data, including facial, iris, and fingerprint data, and photographs of the individual.⁵⁶¹

In 2022, in support of the e-NIC development, Sri Lanka began a pilot for the Sri Lanka Unique Digital ID (SL-UDI) which aims to assign every citizen a National Unique Digital Identifier. This foundational identity system is designed to eliminate duplication in identity records across government departments and ensure data accuracy and efficiency in government operations.⁵⁶² The SL-UDI system is planned to be launched in 2026.⁵⁶³ In the pilot phase, citizens' participation in the system is voluntary.⁵⁶⁴

In December 2023, the Sri Lankan government launched the country's first digital birth certificate, which assigns each newborn a unique ID number, that will later become their National ID Card number, as part of the digital identity transformation.⁵⁶⁵

e-NICs have already begun being issued to those who are applying for an NIC for the first time or renewing their NIC.⁵⁶⁶ Both the e-NIC and SL-UDIs are currently intended for use by citizens, excluding stateless persons.⁵⁶⁷ The e-NIC is primarily a foundational identity system with the government working to integrate it into other forms of functional identities, such as integration with passports and drivers licence.⁵⁶⁸ A wide range of public and private services are linked to the NIC, including applying for a SIM card, Education, voter registration, paying taxes, social security, and pensions.⁵⁶⁹ Sri Lanka's e-NIC system is mandatory.⁵⁷⁰ Failure to register can result in a 5,000 rupee fine.⁵⁷¹



Photo : Department for Registration of Persons Website

Laws

Domestic Law and Policy

Sri Lanka's civil registration is regulated by the Births and Deaths Registration Act (1954).⁵⁷² The Registration of Persons (Amendment) Act (2016), mandates that all citizens 15 years of age and older must register for an NIC.⁵⁷³ This amended Act also provides that biometrics, including the applicant's fingerprint will be taken.⁵⁷⁴ Under the Act, there is an avenue for addressing grievances related to applications of registration through the Registration of Persons Tribunal.⁵⁷⁵ There is yet to be legislation made specifically for the e-NIC system. There is no definition of the NIC or e-NIC provided by Sri Lanka's legislation.

*With support from the World Bank and Asian Development Bank, Sri Lanka's digital ID system was modeled in collaboration with Indian companies and its Unique ID card project has been funded by India since early 2022.*⁵⁷⁶

This raises concerns for data sovereignty and security.⁵⁷⁷ Sri Lanka's State Technology Minister Kanaka Herath has "emphasized the need to address data security issues and obtain

authorization from the Public Security Ministry before proceeding with the [SL-UID] project".⁵⁷⁸ The India-funded project is yet to be cleared by the Public Security Ministry for full implementation.⁵⁷⁹ When an MOU was signed between Sri Lanka and India solidifying this collaboration in 2022, an opposition lawmaker, Harin Fernando, warned that India's support in the development of SL-UID "could allow the country access to the data of Sri Lankans",⁵⁸⁰ MOSIP, a non-profit inspired by the Aadhaar system and with core advisors who are "some of the original architects of Aadhaar", also partnered with Sri Lanka in the development of its digital ID system.⁵⁸¹

*Moving to a system similar to Aadhaar would raise potential concerns for centralized data storage, and could also lead to "third-party access, authentication records, and real-time surveillance".*⁵⁸²

Data Protection

Sri Lanka's Personal Data Protection Act (2022) stipulates the lawful collection and use of personal data, including the rights of data subjects in line with international standards of data protection.⁵⁸³ It mandates the responsibility of data 'controllers', stipulating that "every controller should ensure that personal data is processed for a specified,

explicit, and legitimate purposes" only.⁵⁸⁴ It is unclear whether the National Register of Citizens, responsible for operating the e-NIC system, is considered to be 'data controllers' under this Act.⁵⁸⁵ Part II of the Act, states that data subjects shall have the right to access their personal data and the right to withdraw their consent for data processing as well as request their personal data be erased, except in cases of National security, public order, investigations, criminal procedures, among others.⁵⁸⁶

*Conditions for lawful processing of personal data include consent from the data subject unless the processing is carried out in public interest, including for health purposes or if "processing of personal data is necessary by official authorities for achieving the purposes or objects laid down by law".*⁵⁸⁷

The Act also includes the information required to be provided to data subjects upon personal data collection in order to gain informed consent of the potential uses of their data.⁵⁸⁸ Data controllers are also mandated under the Act to ensure "integrity and confidentiality of personal data" collected, including through encryption, pseudonymisation, anonymisation, access controls, among other methods.⁵⁸⁹

Under the Personal Data Protection Act (2022), controllers are required to undertake data protection impact assessments, which may entail consulting with the data protection authority who must "ensure compliance by entities with the law, conduct inquiries, hear grievances and appeals, and issue directives on entities which do not adhere to the provisions of the proposed law".⁵⁹⁰ The Act also mandates controllers to notify authorities and/or data subjects of data breaches.⁵⁹¹

There is some contradiction between the Personal Data Protection Act and the Registration of Persons (Amendment) Act, with the latter being an "invasive model of data collection and processing" while the

*former aligns with international standards.*⁵⁹²

Further, there are concerns that "an all-encompassing mandatory digital identity system has the potential to turn into a mass surveillance system of the populace by the State" as a result of it being mandatory and "all-encompassing".⁵⁹³ The Registration of Persons (Amendment) Act (2016) provides that data collection and storage be overseen by the executive government, which could allow for the addition of new categories of data collection "without undergoing the legislative process".⁵⁹⁴

International Commitments

ICESCR, ICERD, and CRC, all of which Sri Lanka is a party to, protect an individual's right to an Education under Article 13, Article 28, and Article 5 respectively.⁵⁹⁵ However, Sri Lanka has contradicted these obligations through administrative barriers which exclude the children of stateless parents from access to birth registration, which is required in order to attend school.⁵⁹⁶ Further, the requirement of an NIC in order to vote disproportionately excludes women, war widows and tea estate workers⁵⁹⁷, contradicting the right to vote under Article 25(b) of the ICCPR.⁵⁹⁸

*The inability of stateless persons and others without access to the NIC to receive a SIM card⁵⁹⁹ also contradicts Article 19 of the ICCPR, which protects the right to "receive and impart information and IDEAS of all kinds".*⁶⁰⁰

Proposed e-NIC

By 2016 the department would issue 15 million new e-NICs to all citizens above the age of 15.
 Project Duration: Two years
 Estimate Project Costs: Rs. 8 billion

The new identity card should be renewed every 15 years.

Electronic NICs will include the person's photograph, biometric authentication, bio data, fingerprints and the blood group

Wider inclusion in the e-NIC system could be achieved by allowing optional enrollment in the system and ensuring it can “accommodate multiple registration methods beyond NIC or birth certificates”.⁶⁰³ This would fulfill Sri Lanka's commitments to the international obligations under international treaty bodies it is a party to. Further, the collection of biometric data should not be mandatory or have legal implications, but should allow for consent of the data subject.⁶⁰⁴ ICCPR, which protects the right to “receive and impart information and IDEAS of all kinds”.

Source: Department of Registration of Persons

Designed to Include? The Impact of Digital ID and Legal Identity on Citizenship and Nationality Rights

While the e-NIC system has not been fully implemented, the exclusion of stateless persons means that when the system is implemented, stateless people will be excluded from the services intended to be linked to it, including drivers' licenses, passports, pensions, banking, public welfare, insurance, employment opportunities, and more.⁶⁰¹ Sri Lanka's Legal identity and digital ID systems have not contributed to or reduced statelessness in the country, However, exclusion of stateless people from access to the NIC bars them from the services currently attached to it, such as obtaining a SIM card, Education, income taxes, social security, and pensions.⁶⁰²

Endnotes

- 1 'Paving a Digital Road to Hell?: A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID' (Center for Human Rights & Global Justice - NYU School of Law 2022) 9-17<https://chrgj.org/2022-06-paving-digital-road-to-hell/>. <
- 2 'ID4D: Identification for Development' (World Bank Group 2019)https://id4d.worldbank.org/sites/id4d.worldbank.org/files/2019-05/ID4D_Overview_Brochure_English_20190508.pdf. <
- 3 'Goal 16' (United Nations Department of Economic and Social Affairs) 16https://sdgs.un.org/goals/goal16#targets_and_indicators accessed 30 May 2025; 'Roadmap for Digital Cooperation' (United Nations 2020)https://www.un.org/en/content/digital-cooperation-roadmap/assets/pdf/Roadmap_for_Digital_Cooperation_EN.pdf; Kanwaljit Singh, 'Digital IDs Are an Effective Tool against Poverty. A Global Solution Is Making Them Available to Millions.' (Gates Foundation, 15 August 2023) <https://www.gatesfoundation.org/ideas/articles/mosip-digital-id-systems> accessed 2 June 2025; 'Digital Technology: Your Questions Answered' (Asian Development Bank)<https://www.adb.org/what-we-do/topics/digital-technology/your-questions-answered> accessed 2 June 2025. <
- 4 'Digital Legal ID Governance' (UNDP Digital Legal ID Governance)<https://www.governance4id.org/> accessed 30 May 2025; Julia Clark and others, 'Digital Public Infrastructure and Development: A World Bank Group Approach' (World Bank 2025) Volume 1<https://documents1.worldbank.org/curated/en/099031025172027713/pdf/P505739-84c5073b-9d40-4b83-a211-98b2263e87dd.pdf>. <
- 5 Julia Clark and others (n 4). <
- 6 'ID4D: Identification for Development' (n 2). <
- 7 'Home Landing' (Identification for Development)<https://id4d.worldbank.org/> accessed 30 May 2025. <
- 8 'Paving a Digital Road to Hell?: A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID' (n 1). <
- 9 'Racial Discrimination and Emerging Digital Technologies: A Human Rights Analysis' (United Nations General Assembly 2020) A/HRC/44/57<https://docs.un.org/en/A/HRC/44/57>. <
- 10 'Racial Discrimination and Emerging Digital Technologies: A Human Rights Analysis' (n 9). <
- 11 'Paving a Digital Road to Hell?: A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID' (n 1). <
- 12 'Paving a Digital Road to Hell?: A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID' (n 1). <
- 13 'Will Digital ID Help Stateless People? The Threat of Digital Administrative Violence' (European Network on Statelessness, 30 November 2023)<https://www.statelessness.eu/updates/blog/will-digital-id-help-stateless-people-threat-digital-administrative-violence> accessed 2 June 2025. <
- 14 'Improving ID' (The World Bank: ID4D)<https://id4d.worldbank.org/> accessed 28 May 2025. <
- 15 'General Data Protection Regulation (GDPR) - Legal Text' (General Data Protection Regulation (GDPR))<https://gdpr-info.eu/> accessed 3 June 2025. <
- 16 'General Data Protection Regulation (GDPR) Compliance Guidelines' (GDPR.eu)<https://gdpr.eu/> accessed 3 June 2025. <
- 17 'UNDP Model Governance Frameworks for Digital Legal Identity System' (Digital Legal ID Governance)<https://www.governance4id.org/> accessed 3 June 2025. <
- 18 'Decisions About Our Identity Should Not Be Made Without Us' (Human Rights for Digital Identity Coalition)<https://hr4id.org/> accessed 3 June 2025. <
- 19 'Glossary | Identification for Development'<https://id4d.worldbank.org/guide/glossary> accessed 14 August 2025. <
- 20 *ibid.* <
- 21 *ibid.* <
- 22 Privacy International, 'Digital National ID Systems: Ways, Shapes and Forms' (2021)<http://privacyinternational.org/long-read/4656/digital-national-id-systems-ways-shapes-and-forms> accessed 14 August 2025. <
- 23 Privacy International, 'Digital National ID Systems: Ways, Shapes and Forms' (2021)<http://privacyinternational.org/long-read/4656/digital-national-id-systems-ways-shapes-and-forms> accessed 14 August 2025. <
- 24 Protection Cluster, Afghanistan (UNHCR), 'Legal Identity and Civil Documentation in Afghanistan' (UNHCR)<https://globalprotectioncluster.org/emergencies/82/Afghanistan> accessed 15 August 2025. <
- 25 Constitution of Nepal (2015) Article 51(f)7. <
- 26 'Fiji's National Digital Identification Program Will Foster Connectivity and Economic Integration' (Fiji's National Digital Identification program will foster connectivity and economic integration, 22 November 2024)<https://www.afi-global.org/old/newsroom/news/fijis-national-digital-identification-program-will-foster-connectivity-and-economic-integration/> accessed 17 June 2025. <
- 27 'The Digital ID Toolkit' (Access Now)<https://www.accessnow.org/guide/digital-id-toolkit/> accessed 15 August 2025. <
- 28 Sophie Yeo, 'Tuvalu: The Disappearing Island Nation Recreating Itself in the Metaverse' (BBC, 21 November 2024)<https://www.bbc.com/future/article/20241121-tuvalu-the-pacific-islands-creating-a-digital-nation-in-the-metaverse-due-to-climate-change> accessed 26 May 2025; World Bank Group, 'Tonga - Digital Government Support Project (English)' para.

- 28 (April 2019)<https://documents1.worldbank.org/curated/en/473751557713173311/pdf/Tonga-Digital-Government-Support-Project.pdf>> accessed 30 November 2024; Nauru National Digital Transformation Strategy 2025-2030' (Republic of Nauru 2025)https://www.nauru.gov.nr/media/204028/nndts_final_version_2025.pdf>; World Bank, 'Project Appraisal Document on a Proposed Grant in the Amount of SDR 8.7 Million to the Republic of Kiribati for a Kiribati Digital Government Project' (World Bank 2022) PAD4752<https://documents1.worldbank.org/curated/en/852781653593751829/pdf/Kiribati-Digital-Government-Project.pdf>> <
- 29 Government of India, 'Birth Registration | Social Welfare' (7 August 2025)<https://socialwelfare.vikaspedia.in/viewcontent/social-welfare/important-documents-for-indian-citizens/birth-registration?lgn=en>> accessed 7 August 2025. <
- 30 'Birth Registration Data' (UNICEF Data Warehouse, December 2024)https://data.unicef.org/resources/data_explorer/unicef_f/> accessed 7 November 2023. <
- 31 'CRVSID Case Studies: Bangladesh' (UNICEF, Vital Strategies 2023)https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf>. <
- 32 Calum Handforth and Matther Wilson, "Digital Identity Country Report: Sri Lanka" (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 33 'Nepal: Vital Documents and Identification' (January 2024)https://iamhere.bakermckenzie.com/-/media/minisites/iamhere/pdf/case3402583i-am-here-nepal.pdf?rev=32197328f0fd4615948a70a6d4b1e2cc&sc_lang=en> accessed 17 November 2025. <
- 34 'The Government Information Center'<http://www.gic.gov.lk/gic/index.php/en/component/info/?id=2441&task=info>> accessed 16 December 2025. <
- 35 "'Without an Aadhaar Card Nothing Could Be Done': A Mixed Methods Study of Biometric Identification and Birth Registration for Children in Varanasi, India' [2025] ResearchGatehttps://www.researchgate.net/publication/347143942_Without_an_Aadhaar_card_nothing_could_be_done_a_mixed_methods_study_of_biometric_identification_and_birth_registration_for_children_in_varanasi_india> accessed 13 November 2025; Atharv Dhiman and Imke Harbers, 'Legal Identity at the Margins: The Impact of Violent Conflict on Birth Registration in India' (2023) 27 Citizenship Studies 779. <
- 36 'National Identity Card (NID) & Voter Registration and Distribution' (Embassy of the People's Republic of Bangladesh Washington, DC)<https://washington.mofa.gov.bd/en/site/page/NID-Service-Details>>.
- 37 'Report: Digital Identification Systems in South and Southeast Asia – EngageMedia' (2023)<https://engagemedia.org/2023/gif-report-digital-identification-systems/>> accessed 17 November 2025. <
- 38 'Annual Progress Report (Fiscal Year 2023/24)' (Department of National ID and Civil Registration, Nepal). <
- 39 Protection Cluster, Afganistan (UNHCR), 'Legal Identity and Civil Documentation in Afghanistan' (UNHCR 2025)<https://globalprotectioncluster.org/emergencies/82/Afghanistan>> accessed 15 August 2025; The National ID and Civil Registration Act (2020) Article 4; The Constitution of Nepal (2015) Article 51(f)7.; 'List of Documents Required For Aadhar Card Update Online and Offline' (Compare & Apply Loans & Credit Cards in India- Paisabazaar.com, 7 November 2024)<https://www.paisabazaar.com/aadhar-card/documents-required-for-aadhar-card/>> accessed 17 January 2025. <
- 40 Durga M Sengupta, 'Guess Who's Getting the World's First Self-Sovereign National Digital ID' (Rest of the World, 6 September 2023)<https://restofworld.org/2023/south-asia-newsletter-bhutan-national-digital-id>> accessed 10 July 2024. <
- 41 'Bhutan, Statelessness Encyclopedia Asia Pacific (SEAP)' (Nationality For All 2025)<https://seap.nationalityforall.org/region/regional-overview/south-asia/bhutan/>>. <
- 42 'Register - eFaas'<https://efaas.egov.mv/account/verify>> accessed 13 November 2025; 'Committee on the Elimination of Discrimination against Women, Concluding Observations on the Eighth Periodic Report of Bangladesh' CEDAW/C/BGD/CO/8https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW%2FC%2FBGD%2FCO%2F8&Lang=en>. <
- 43 'Register - eFaas'<https://efaas.egov.mv/account/verify>> accessed 13 November 2025. <
- 44 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 45 'Pakistan: Digital Nation Pakistan Act 2025 Establishing the Digital Authority Enters into Force' (Digital Policy Alert)<https://digitalpolicyalert.org/event/26626-digital-nation-pakistan-act-2025-establishing-the-digital-authority-enters-into-force>>; The Registration of Persons (Amendment) Act (2016). <
- 46 'NADRA Launches Centralized Complaint Management System for Citizens' (National Database and Registration Authority, Ministry of Interior, Pakistan, 8 February 2022)<https://www.nadra.gov.pk/mediaRelease/nadra-launches-centralized-complaint-management-system-for-citizens-ba50a4ff>> accessed 5 August 2025. <
- 47 'Documentation and Legal Identification in Afghanistan' (The International Organization for Migration (IOM) Afghanistan; Samuel Hall 2023)https://afghanistan.iom.int/sites/g/files/tmzbd11071/files/documents/2023-08/documentation-and-legal-identification-in-afghanistan_0_0.pdf>; 'Bangladesh NID Application System: Frequently Asked Question'<https://nidcardonlinecheckbd.com/common-questions-and-their-answers-about-the-bangladesh-nid/>>; Ghulam Shabir Arain, 'Nepal's Digital Identity Transformation Fosters Challenges' (Biometric Update, 4 June 2024)<https://www.biometricupdate.com/202406/nepals-digital-identity-transformation-fosters-challenges>> accessed 24 January 2025. <

- 48 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016; The Aadhaar (Enrolment and Update) Regulations 2016. <
- 49 Monica Rai, 'How Does the National Digital Identity System Ensure Privacy and Security for All Citizens' The Bhutanese (21 October 2023). <
- 50 Daryna Antoniuk, 'Bangladesh Government Fixes Website That Leaked Personal Data of 50 Million Citizens' The Record (11 July 2023); Mohiuddin Alamgir, 'Smart NID Data Leak: Voters' Info Now in Telegram Channel' The Daily Star (5 October 2023)<https://www.thedailystar.net/news/bangladesh/crime-justice/news/smart-nid-data-leak-voters-info-now-telegram-channel-3435186>> accessed 26 September 2024. <
- 51 Trikanad (n 21). <
- 52 'New Evidence That Biometric Data Systems Imperil Afghans | Human Rights Watch' (30 March 2022)<https://www.hrw.org/news/2022/03/30/new-evidence-biometric-data-systems-imperil-afghans>> accessed 12 November 2025. <
- 53 Charya Samarakoon and Bhavani Fonseka, 'Right to Privacy in Sri Lanka' (Centre for Policy Alternatives 2020) Discussion Paper<https://www.cpalanka.org/wp-content/uploads/2020/09/Discussion-Paper-Right-to-Privacy-updated-draft-4-1.pdf>> accessed 12 November 2025. <
- 54 'Localising SDGs: Early Lessons from India 2019' (NITI Aayog 2019)https://www.niti.gov.in/sites/default/files/2020-07/LSDGs_July_8_Web.pdf> accessed 12 November 2025. <
- 55 'Identification for Development (ID4D) 2020 Annual Report (English)' (Identification for Development Washington, DC : World Bank Group)<http://documents.worldbank.org/curated/en/625371611951876490>>. <
- 56 ANM Zakir Hossain, 'Educational Crisis of Rohingya Refugee Children in Bangladesh: Access, Obstacles, and Prospects to Formal and Non-Formal Education' (2023) 9 Heliyon e18346; Handforth and Wilson (n 4); 'Vital Statistics Report of Maldives: 2019-2021'. <
- 57 Protection Cluster, Afghanistan (UNHCR) (n 13). <
- 58 Humera Iqbal, Anushay Malik and Maria Rashid, 'Suspended Identity: Statelessness, Citizenship Challenges and the Impermanence of Identity Status Faced by Pakistani Bengalis' (2025) 29 Citizenship Studies 159. <
- 59 Handforth and Wilson (n 4). <
- 60 'Citizenship Identity/Special Resident Card Application Form For Those Reporting for the First Time' (Bhutan Ministry of Home Affairs Department of Civil Registration and Census)https://drcr.moha.gov.bt/wp-content/uploads/2024/08/New-CID_SR-Card-Application-Form-English-18-above.pdf>. <
- 61 'Documentation and Legal Identification in Afghanistan' (n 23). <
- 62 'NADRA, PBS Sign MoU to Use Data Domestically, Internationally'<https://www.nation.com.pk/22-Oct-2024/nadra-pbs-sign-mou-to-use-data-domestically-internationally>> accessed 12 November 2025. <
- 63 Ekta Anuradha and others, 'A Critical Study of India's Digital India Policy and Its Socio-Humanitarian Implications' (2025) 7 Journal of Humanities and Social Sciences (JHASS) 54. <
- 64 '2 Million People Deprived Of Ration Per Month Due To Aadhaar Related Problems: Report - The Logical Indian' (18 May 2018)<https://thelogicalindian.com/2-million-people-ration-aadhaar/>> accessed 16 December 2025. <
- 65 ibid. <
- 66 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 67 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 68 'Afghanistan: Law of 2014 on Registration of Population Records' Article 9<https://www.refworld.org/legal/legislation/natlegbod/2014/en/101981>> accessed 30 April 2025; 'Afghanistan' (Travel.State.Gov)<https://travel.state.gov/content/travel/en/us-visas/Visa-Reciprocity-and-Civil-Documents-by-Country/Afghanistan.html>> accessed 11 June 2025. <
- 69 'Documentation and Legal Identification in Afghanistan' (Samuel Hall, IOM 2023)<https://static1.squarespace.com/static/5cfe2c8927234e0001688343/t/64da2a1864d65d77dc617b7d/1692019252217/Documentation+and+Legal+Identification+in+Afghanistan+250523indd+%281%29.pdf>>. <
- 70 International Organization of Migration, 'Documentation and Legal Identification in Afghanistan: Research Report' (Afghanistan IOM, 2023)https://afghanistan.iom.int/sites/g/files/tmzbd11071/files/documents/2023-08/documentation-and-legal-identification-in-afghanistan_0_0.pdf> accessed 8 July 2024. <
- 71 LandInfo Country of Origin Information Centre, 'Afghanistan: Tazkera, passports and other ID Documents' (Landinfo, 22 May 2019)<https://landinfo.no/wp-content/uploads/2019/08/Afghanistan-Tazkera-passports-and-other-ID-documents-22052019-final.pdf>> (accessed 8 July 2024). <
- 72 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 73 LandInfo Country of Origin Information Centre, 'Afghanistan: Tazkera, passports and other ID Documents' (Landinfo, 22 May 2019)<https://landinfo.no/wp-content/uploads/2019/08/Afghanistan-Tazkera-passports-and-other-ID-documents-22052019-final.pdf>> (accessed 8 July 2024). <
- 74 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 75 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 76 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <

- 77 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 78 International Organization of Migration, 'Documentation and Legal Identification in Afghanistan: Research Report' (Afghanistan IOM, 2023)https://afghanistan.iom.int/sites/g/files/tmzbd11071/files/documents/2023-08/documentation-and-legal-identification-in-afghanistan_0_0.pdf> accessed 8 July 2024. <
- 79 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 80 'Documentation and Legal Identification in Afghanistan' (n 42). <
- 81 'Documentation and Legal Identification in Afghanistan' (n 42). <
- 82 'Afghanistan: Tazkera, Passports and Other ID Documents' (LANDINFO 2019)<https://landinfo.no/wp-content/uploads/2019/08/Afghanistan-Tazkera-passports-and-other-ID-documents-22052019-final.pdf>>. <
- 83 'Afghanistan' (Travel.State.Gov)<https://travel.state.gov/content/travel/en/us-visas/Visa-Reciprocity-and-Civil-Documents-by-Country/Afghanistan.html>> accessed 11 June 2025. <
- 84 'Afghanistan: Tazkera, Passports and Other ID Documents' (n 55). <
- 85 'Documentation and Legal Identification in Afghanistan' (n 42). <
- 86 'Legal Identity and Civil Documentation in Afghanistan' (n 1); Samuel Hall, 'Jogi and Chori Frosh Communities: A Story of Marginalization' (UNHCR 2011)<https://www.refworld.org/reference/countryrep/unicef/2011/en/113452>>. <
- 87 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 88 'Legal Identity and Civil Documentation in Afghanistan' (n 1); Hall (n 59). <
- 89 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 90 Quito Tsui, 'Resisting Patriarchal Logics of Digital ID Systems' (Bot Populi)https://botpopuli.net/?post_type=post&p=6024> accessed 29 April 2025. <
- 91 'New Evidence That Biometric Data Systems Imperil Afghans' (Human Rights Watch, 30 March 2022)<https://www.hrw.org/news/2022/03/30/new-evidence-biometric-data-systems-imperil-afghans>> accessed 9 September 2024. <
- 92 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 93 'Legal Identity and Civil Documentation in Afghanistan' (n 1); Ghulam Shabir Arain, 'Afghanistan Navigates Controversies on Digital Identity Journey' (Biometric Update, 2 July 2024)<https://www.biometricupdate.com/202407/afghanistan-navigates-controversies-on-digital-identity-journey>> accessed 5 September 2024. <
- 94 'Documentation and Legal Identification in Afghanistan' (n 42). <
- 95 'MCIT Signed National ID Project with GTR (Grand Technology Resources)' (Ministry of Communications and IT, 12 December 2010)<https://mcit.gov.af/en/mcit-signed-national-id-project-gtr-grand-technology-resources-8>> accessed 10 September 2024. <
- 96 'Afghanistan: What Now After Two Decades of Building Data-Intensive Systems?' (Privacy International, 19 August 2021)<http://privacyinternational.org/news-analysis/4615/afghanistan-what-now-after-two-decades-building-data-intensive-systems>> accessed 9 September 2024. <
- 97 'Afghanistan: What Now After Two Decades of Building Data-Intensive Systems?' (n 69); Luana Pascu, 'Afghanistan Seeks India's Help to Build National Biometric Database' (Biometric Update, 2 January 2020)<https://www.biometricupdate.com/202001/afghanistan-seeks-indias-help-to-build-national-biometric-database>> accessed 10 September 2024. <
- 98 Pascu (n 70). <
- 99 Arain (n 66). <
- 100 Article 9 (2), 'Afghanistan: Law of 2014 on Registration of Population Records' (n 41). <
- 101 'Identification for Development: Practitioner's Guide' (World Bank)<https://id4d.worldbank.org/guide/glossary>> accessed 12 September 2024. <
- 102 Arain (n 66); 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 103 LandInfo Country of Origin Information Centre, 'Afghanistan: Tazkera, passports and other ID Documents' (Landinfo, 22 May 2019)<https://landinfo.no/wp-content/uploads/2019/08/Afghanistan-Tazkera-passports-and-other-ID-documents-22052019-final.pdf>> (accessed 8 July 2024). <
- 104 Arain (n 66). <
- 105 Arain (n 66). <
- 106 Signpost Project, 'Steps To Obtain an E-Tazkira (NID Card) in Kabul Province' (Beporsed, 22 Oct 2023)<https://www.beporsed.org/en-us/articles/11388492263069>> accessed 8 July 2024. <
- 107 Signpost Project, 'Steps To Obtain an E-Tazkira (NID Card) in Kabul Province' (Beporsed, 22 Oct 2023)<https://www.beporsed.org/en-us/articles/11388492263069>> accessed 8 July 2024. <
- 108 'Documentation and Legal Identification in Afghanistan' (n 42) 28-31. <
- 109 Quito Tsui (n 82); Kaitlin Kelly, 'Marine Corps Fields "Game Changer" Biometric Data Collection System' (United States Marine Corps Flagship, 12 December 2017)<https://www.marines.mil/News/News-Display/Article/1394036/marine-corps-fields-game-changer-biometric-data-collection-system/><https://www.marines.mil/News/News-Display/Article/1394036/marine-corps-fields-game-changer-biometric-data-collection-system/>> accessed 12 September 2024. <

- 110 Tsui (n 82); 'US Collated Biometric Data on Afghans May Turn into Death Warrants in Afghanistan, Here's Why' (Firstpost, 31 August 2021)<https://www.firstpost.com/world/why-us-collated-biometric-data-on-afghans-may-turn-into-death-warrants-in-afghanistan-9926991.html>> accessed 10 September 2024. <
- 111 'Afghanistan: What Now After Two Decades of Building Data-Intensive Systems?' (n 69). <
- 112 'Documentation and Legal Identification in Afghanistan' (n 1). <
- 113 'Documentation and Legal Identification in Afghanistan' (n 1). <
- 114 'Documentation and Legal Identification in Afghanistan' (n 1). <
- 115 Registration of Population Records Act (2014) <
- 116 Ghulam Shabir Arain, 'Afghanistan Navigates Controversies on digital identity journey' (Biometric Update, 2 Jul 2024)<https://www.biometricupdate.com/202407/afghanistan-navigates-controversies-on-digital-identity-journey>> accessed 8 July 2024. <
- 117 Arain (n 66). <
- 118 Arain (n 66); 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 119 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 120 Jim Nash, 'The latest lesson on biometric data privacy could cost people's lives' (Biometric Update, 3 Jan 2023)<https://www.biometricupdate.com/202301/the-latest-lesson-on-biometric-data-privacy-could-cost-peoples-lives>> accessed 8 July 2024. <
- 121 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 122 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 123 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 124 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 125 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 126 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 127 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 128 Tsui (n 82). <
- 129 'New Evidence That Biometric Data Systems Imperil Afghans' (n 64). <
- 130 Universal Declaration of Human Rights (adopted 10 December 1948) UNGA Res 217 A(III) (UDHR) art 7. <
- 131 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 16, 17. <
- 132 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 12; 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 133 Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 8; LandInfo Country of Origin Information Centre, 'Afghanistan: Tazkera, passports and other ID Documents' (Landinfo, 22 May 2019)<https://landinfo.no/wp-content/uploads/2019/08/Afghanistan-Tazkera-passports-and-other-ID-documents-22052019-final.pdf>> (accessed 8 July 2024). <
- 134 International Covenant on Economic, Social, and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) art 11, 12, 13. <
- 135 Convention on the Elimination on All Forms of Discrimination Against Women (adopted 19 December 1979, entered into force 3 September 1981) 1249 UNTS 13 (CEDAW). <
- 136 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 137 Emrys Schoemaker, 'The Taliban Are Showing Us the Dangers of Personal Data Falling into the Wrong Hands' The Guardian (7 September 2021)<https://www.theguardian.com/global-development/2021/sep/07/the-taliban-are-showing-us-the-dangers-of-personal-data-falling-into-the-wrong-hands>> accessed 12 June 2025. <
- 138 Quito Tsui (n 63). <
- 139 Quito Tsui (n 63). <
- 140 'Documentation and Legal Identification in Afghanistan' (n 42) 62. <
- 141 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 142 'Access to Tazkera and Other Civil Documentation in Afghanistan' (Norwegian Refugee Council, Samuel Hall 2016)https://www.nrc.no/globalassets/pdf/reports/af_civil-documentation-study_081116.pdf>. <
- 143 Committee on the Elimination of Discrimination against Women, 'Concluding Observations on the Third Periodic Report of Afghanistan' UN Doc CEDAW/C/AFG/CO/3 (10 march 2020) [37]-[38]; The Constitution of the Islamic Republic of Afghanistan (2004) Article 28. <
- 144 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 145 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 146 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 147 The Constitution of the Islamic Republic of Afghanistan (2004) Article 43. <

- 148 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 149 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 150 'Legal Identity and Civil Documentation in Afghanistan' (n 1). <
- 151 LandInfo Country of Origin Information Centre, 'Afghanistan: Tazkera, passports and other ID Documents' (Landinfo, 22 May 2019)<https://landinfo.no/wp-content/uploads/2019/08/Afghanistan-Tazkera-passports-and-other-ID-documents-22052019-final.pdf> > (accessed 8 July 2024). <
- 152 Tariq Ahmad, 'Afghanistan: Distribution of Controversial Electronic Identity Cards Launched' (Library of Congress, 19 July 2018)<https://www.loc.gov/item/global-legal-monitor/2018-07-19/afghanistan-distribution-of-controversial-electronic-identity-cards-launched/> > accessed 13 September 2024. <
- 153 Ahmad (n 126). <
- 154 Arain (n 66). <
- 155 'Access to Tazkera and Other Civil Documentation in Afghanistan' (n 116). <
- 156 'New Evidence That Biometric Data Systems Imperil Afghans' (n 63). <
- 157 'New Evidence That Biometric Data Systems Imperil Afghans' (n 63). <
- 158 "Distribution of Machine-Readable NID Cards for Bangladeshi Citizens Inaugurated," *bdnews24.com*, March 29, 2019, <https://web.archive.org/web/20190329074521/https://bdnews24.com/bangladesh/2016/10/02/distribution-of-machine-readable-nid-cards-for-bangladeshi-citizens-inaugurated>; Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," *Biometric Update*, June 15, 2023, <https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh> >. <
- 159 Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," *Biometric Update*, June 15, 2023, <https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh> >. <
- 160 "Distribution of Machine-Readable NID Cards for Bangladeshi Citizens Inaugurated." <
- 161 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <
- 162 Committee on the Elimination of Discrimination against Women, Concluding observations on the eighth periodic report of Bangladesh, 25 November 2016, CEDAW/C/BGD/CO/8, available at: https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW%2FC%2FBGD%2FCO%2F8&Lang=en <
- 163 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <
- 164 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 165 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 166 "BND (Bangladesh National Digital Architecture)" (Bangladesh National Digital Architecture, n.d.), https://mopme.portal.gov.bd/sites/default/files/files/mopme.portal.gov.bd/news/12cb8483_c197_4ee6_ae7d_c1b7c2db247d/BND.pdf. <
- 167 "BND (Bangladesh National Digital Architecture)." <
- 168 "Bangladesh NID Application System: Frequently Asked Question," Bangladesh Election Commission, accessed October 25, 2024, <https://services.nidw.gov.bd/nid-pub/faq?locale=en>; "Distribution of Machine-Readable NID Cards for Bangladeshi Citizens Inaugurated"; Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," *Biometric Update*, June 15, 2023, <https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh> >. <
- 169 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 170 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 171 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 172 Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," *Biometric Update*, June 15, 2023, <https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh> >. <
- 173 Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," *Biometric Update*, June 15, 2023, <https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh> >. <

- bangladesh >. <
- 174 "Cabinet Clears Draft of NID Registration Act," *BSS News*, June 12, 2023, <https://www.bssnews.net/news-flash/130719>. <
- 175 "People's Unspeakable Sufferings Due to Errors in NID," Prothom Alo, January 7, 2021, <https://en.prothomalo.com/opinion/editorial/peoples-unspeakable-sufferings-due-to-errors-in-nid>. <
- 176 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 177 "People's Unspeakable Sufferings Due to Errors in NID." <
- 178 Sultanuzzaman Md Saleh Uddin, "Service Delivery Through National Identity System in Bangladesh" (National Defence College, June 2018), <https://ndcjjournal.ndc.gov.bd/ndcj/index.php/ndcj/article/download/226/203>. <
- 179 "NID Mandatory for Buying Train Ticket," *daily sun*, February 10, 2023, <https://www.daily-sun.com/post/674236>. <
- 180 "Bangladesh NID Application System: Frequently Asked Question." <
- 181 "Bangladesh NID Application System: Frequently Asked Question." <
- 182 "Bangladesh NID Application System: Frequently Asked Question." <
- 183 Sultanuzzaman Md Saleh Uddin, "Service Delivery Through National Identity System in Bangladesh." <
- 184 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <
- 185 "People's Unspeakable Sufferings Due to Errors in NID." <
- 186 "People's Unspeakable Sufferings Due to Errors in NID." <
- 187 FM Mizanur Rahaman, "Syndicate Helps Rohingyas Get NID, Passports," *The Daily Star*, September 7, 2019, <https://www.thedailystar.net/frontpage/syndicate-helps-rohingyas-get-nid-passports-1796749>. <
- 188 Sheikh Shahariar Zaman, "Govt Eyes UN Rohingya Database to Prevent NID Forgery," *Dhaka Tribune*, March 29, 2024, <https://www.dhakatribune.com/bangladesh/342972/govt-eyes-un-rohingya-database-to-prevent-nid>. <
- 189 Sharid Bin Shafique, "Digital ID in Bangladesh refugee camps; A case study," *The Engine Room*, <https://www.digitalid.theengineroom.org/>, <https://digitalid.theengineroom.org/assets/pdfs/%5BEnglish%5D%20Bangladesh%20Case%20Study%20-%20DigitalID%20-%20The%20Engine%20Room.pdf>, accessed 21st January, 2025 <
- 190 "Registration and profiling," *unhcr*, <https://reporting.unhcr.org/registration-and-profiling-43>, accessed 21st January, 2025 <
- 191 Activity at a Glance, Office of the Refugee Relief and Repatriation Commissioner, Cox's Bazar, 28 May 2024, https://rrrc.portal.gov.bd/sites/default/files/files/rrrc.portal.gov.bd/notices/fb62c271_de6f_4bc7_bf38_f055e9034a96/2024-05-28-04-28-3c985e981c40c23b3d532d195c255733.pdf >, Accessed 23 January, 2025 <
- 192 "How blockchain is helping WFP's fight against coronavirus in Bangladesh," *World Food Programme*, 16 April 2020, accessed 24 January 2024 <https://medium.com/world-food-programme-insight/how-blockchain-is-helping-wfps-fight-against-covid-19-in-bangladesh-d2b466a8becf> > <
- 193 "How blockchain is helping WFP's fight against coronavirus in Bangladesh," *World Food Programme*, 16 April 2020, <https://medium.com/world-food-programme-insight/how-blockchain-is-helping-wfps-fight-against-covid-19-in-bangladesh-d2b466a8becf> >, Accessed 24 January 2025. <
- 194 Azfar Adib, "Time to make digital identity a nationwide reality," *Daily Star*, 17 December, 2021, <https://www.thedailystar.net/views/opinion/news/time-make-digital-identity-nationwide-reality-2919206> >, Accessed 24 January 2025. <
- 195 "UN shared Rohingya data without informed consent," *Human Rights Watch*, 15 June 2021, <https://www.hrw.org/news/2021/06/15/un-shared-rohingya-data-without-informed-consent> >, Accessed 24 January 2025 <
- 196 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 197 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 198 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 199 "National Identity Registration Act, 2023 repealed," *Daily Sun*, 17 January 2025, <https://www.daily-sun.com/printversion/details/787130> >, Accessed 26 January 2025. <
- 200 UNB (n 30); Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 201 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

202 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

203 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

204 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

205 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

206 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

207 'Personal Data Protection Act, 2024 (Draft)' (Article 19 and Transparency International Bangladesh 2024)<https://www.ti-bangladesh.org/upload/files/position-paper/2024/Personal-Data-Protection-Act-Review-TIB-Article-19.pdf>>; 'Bangladesh: Freedom on the Net 2024 Country Report' (Freedom House, 2024)<https://freedomhouse.org/country/bangladesh/freedom-net/2024>> accessed 12 November 2024. <

208 'Personal Data Protection Act, 2024 (Draft)' (n 50). <

209 Dr Md Toriql Islam, "Revisiting the Draft Personal Data Protection Act 2023," The Daily Star, December 20, 2024,<https://www.thedailystar.net/law-our-rights/news/revisiting-the-draft-personal-data-protection-act-2023-3780596>. <

210 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <

211 Personal Data Protection Ordinance, 2025 (Draft), Section 2 (d)https://www.linkedin.com/posts/luisalbertomontezuma_bangladesh-dpl-activity-7335688794521661440-8FZ9<

212 Personal Data Protection Ordinance, 2025 (Draft), Section 2 (e)https://www.linkedin.com/posts/luisalbertomontezuma_bangladesh-dpl-activity-7335688794521661440-8FZ9 <

213 Shruti Trikanad, "State of Digital Identification Systems in South and Southeast Asia" (Engage Media, August 2023), <https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>; 'Bangladesh: Freedom on the Net 2024 Country Report' (n 50). <

214 Personal Data Protection Ordinance, 2025 (Draft), Section 28.https://www.linkedin.com/posts/luisalbertomontezuma_bangladesh-dpl-activity-7335688794521661440-8FZ9 <

215 'Bangladesh: Freedom on the Net 2024 Country Report' (n 50); 'Personal Data Protection Act, 2024 (Draft)' (n 50). <

216 'Personal Data Protection Act, 2024 (Draft)' (n 50). <

217 'Personal Data Protection Act, 2024 (Draft)' (n 50). <

218 Daryna Antoniuk, 'Bangladesh Government Fixes Website That Leaked Personal Data of 50 Million Citizens' (The Record, 11 July 2023)<https://therecord.media/bangladesh-government-data-leak-50-million>> accessed 26 September 2024; Mohiuddin Alamgir, 'Smart NID Data Leak: Voters' Info Now in Telegram Channel' (The Daily Star, 5 October 2023)<https://www.thedailystar.net/news/bangladesh/crime-justice/news/smart-nid-data-leak-voters-info-now-telegram-channel-3435186>> accessed 26 September 2024. <

219 Daryna Antoniuk, 'Bangladesh Government Fixes Website That Leaked Personal Data of 50 Million Citizens' (The Record, 11 July 2023)<https://therecord.media/bangladesh-government-data-leak-50-million>> accessed 26 September 2024; <

220 Daryna Antoniuk, 'Bangladesh Government Fixes Website That Leaked Personal Data of 50 Million Citizens' (The Record, 11 July 2023)<https://therecord.media/bangladesh-government-data-leak-50-million>> accessed 26 September 2024; <

221 Mohiuddin Alamgir, 'Smart NID Data Leak: Voters' Info Now in Telegram Channel' (The Daily Star, 5 October 2023) <https://www.thedailystar.net/news/bangladesh/crime-justice/news/smart-nid-data-leak-voters-info-now-telegram-channel-3435186>> accessed 26 September 2024. <

222 Mohiuddin Alamgir, 'Smart NID Data Leak: Voters' Info Now in Telegram Channel' (The Daily Star, 5 October 2023) <https://www.thedailystar.net/news/bangladesh/crime-justice/news/smart-nid-data-leak-voters-info-now-telegram-channel-3435186>> accessed 26 September 2024. <

223 Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," Biometric Update, June 15, 2023,<https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh>>; Khan (n 33); 'EC Secretary: NID Service Transfer Could Lead to Data Breach' (Dhaka Tribune, 17 September 2024)<https://www.dhakatribune.com/bangladesh/358730/ec-secretary-nid-service-transfer-could-lead-to>> accessed 26 September 2024. <

224 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 12. <

225 "NID Mandatory for Buying Train Ticket," daily sun, February 10, 2023, <https://www.daily-sun.com/post/674236>. <

226 Committee on the Elimination of Discrimination against Women, Concluding observations on the eighth periodic report of Bangladesh, 25 November 2016, CEDAW/C/BGD/CO/8, available at: https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW%2FC%2FBGD%2FCO%2F8&Lang=en <

227 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 24. <

228 'Distribution of Machine-Readable NID Cards for Bangladeshi Citizens Inaugurated' (n 1); Ayang Macdonald, "Home Affairs Dept to Become National ID-Issuing Authority in Bangladesh," Biometric Update, June 15, 2023,<https://www.biometricupdate.com/202306/home-affairs-dept-to-become-national-id-issuing-authority-in-bangladesh>>; 'Bangladesh NID Application System: Frequently Asked Question' (n 8). <

229 'People's Unspeakable Sufferings Due to Errors in NID' (n 15); "NID Mandatory for Buying Train Ticket," daily sun, February 10, 2023, <https://www.daily-sun.com/post/674236>; Sultanuzzaman Md Saleh Uddin (n 18). <

230 'People's Unspeakable Sufferings Due to Errors in NID' (n 15); "NID Mandatory for Buying Train Ticket," daily sun, February 10, 2023, <https://www.daily-sun.com/post/674236>; Sultanuzzaman Md Saleh Uddin (n 18). <

231 'People's Unspeakable Sufferings Due to Errors in NID' (n 15); "NID Mandatory for Buying Train Ticket," daily sun, February 10, 2023, <https://www.daily-sun.com/post/674236>; Sultanuzzaman Md Saleh Uddin (n 18). <

232 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <

233 Committee on the Elimination of Discrimination against Women, Concluding observations on the eighth periodic report of Bangladesh, 25 November 2016, CEDAW/C/BGD/CO/8, available at: https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CEDAW%2FC%2FBGD%2FCO%2F8&Lang=en; 'Joint Submission to the Human Rights Council: Universal Periodic Review: 44th Session - Bangladesh' (n 69). <

234 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <

235 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <

236 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <

237 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <

238 "CRVSID Case Studies: Bangladesh" (UNICEF, Vital Strategies, September 2023), https://www.unicef.org/media/147171/file/Bangladesh_CRVSID%20Case%20Studies_2023.pdf. <

239 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 6<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

240 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 6<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

241 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 6<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

242 Section 15, Immigration Rules and Regulations of the Kingdom of Bhutan 2023,https://www.doi.gov.bt/wp-content/uploads/2023/11/IRRs_11_Nov_2023.pdf> <

243 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 7<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

244 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 6<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

245 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 6<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

246 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 7<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

247 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 7<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

248 'Citizenship Identity/Special Resident Card Application Form For Those Reporting for the First Time' (Bhutan Ministry of Home Affairs Department of Civil Registration and Census)https://drcr.moha.gov.bt/wp-content/uploads/2024/08/New-CID_SR-Card-Application-Form-English-18-above.pdf>. <

249 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 9<https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <

250 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) 9<https://www.unicef.org/>

- media/147176/file/Bhutan.pdf>. <
- 251 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) <https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <
- 252 Evie Kim Sing, 'Bhutan's digital identity system goes live on September 27, 2023' (Identity Week, 12 Oct 2023) <https://identityweek.net/bhutans-digital-identity-system-goes-live-on-september-27-2023/>> accessed 10 July 2024. <
- 253 Trust over IP Foundation, 'Bhutan NDI (National Digital Identity) & ToIP Digital Trust Ecosystems' (2024) https://trustoverip.org/wp-content/uploads/Case-Study-Bhutan-NDI-National-Digital-Identity-ToIP-Digital-Trust-Ecosystems-V1.0-2024-05-21.ext_.pdf>. <
- 254 Trust over IP Foundation, 'Bhutan NDI (National Digital Identity) & ToIP Digital Trust Ecosystems' (2024) https://trustoverip.org/wp-content/uploads/Case-Study-Bhutan-NDI-National-Digital-Identity-ToIP-Digital-Trust-Ecosystems-V1.0-2024-05-21.ext_.pdf>. <
- 255 Lhakpa Quendren, 'NDI Bill goes to joint-sitting' (Kuensel, 1 Jul 2023) <https://kuenselonline.com/ndi-bill-goes-to-joint-sitting/>> accessed 10 July 2024. <
- 256 ToIP Ecosystem Foundry Working Group, 'Bhutan NDI (National Digital Identity) & ToIP Digital Trust Ecosystems' (Trust Over IP, 21 May 2024) https://trustoverip.org/wp-content/uploads/Case-Study-Bhutan-NDI-National-Digital-Identity-ToIP-Digital-Trust-Ecosystems-V1.0-2024-05-21.ext_.pdf> accessed 10 July 2024. <
- 257 Bhutan NDI, 'Bhutan NDI Privacy Policy' (31 January 2024) <https://www.bhutanndi.com/>> accessed 19 December 2024. <
- 258 Bhutan NDI, 'Bhutan NDI Privacy Policy' (31 January 2024) <https://www.bhutanndi.com/>> accessed 19 December 2024. <
- 259 Royal Government of Bhutan, 'Citizen Services Portal' (Citizen Services Portal) <https://www.citizenservices.gov.bt/g2cportal/ListOfLifeEventComponent>> accessed 19 December 2024. <
- 260 Monica Rai, 'Bhutan's National Digital Identity struggles with judicial acceptance of digital documents' (The Bhutanese, 16 Mar 2024) <https://thebhutanese.bt/bhutans-national-digital-identity-struggles-with-judicial-acceptance-of-digital-documents/>> accessed 10 July 2024. <
- 261 'Bhutan NDI' <https://www.bhutanndi.com/>> accessed 10 January 2025. <
- 262 'Bhutan NDI' <https://www.bhutanndi.com/>> accessed 10 January 2025. <
- 263 'Bhutan Dual Citizenship Report' (Dual Citizenship) <https://www.dualcitizenshipreport.org/dual-citizenship/bhutan/>> accessed 10 January 2025. <
- 264 Durga M Sengupta, 'Guess who's getting the world's first self-sovereign national digital ID' (Rest of the World, 6 Sep 2023) <https://restofworld.org/2023/south-asia-newsletter-bhutan-national-digital-id/>> accessed 10 July 2024. <
- 265 <https://kuenselonline.com/bhutan-ndi-system-to-put-individual-in-control-of-their-data/#:~:text=While%20not%20mandatory%20for%20all,and%20usage%20advantageous%20for%20users.> <
- 266 Bhutan NDI, 'Governance: Bhutan NDI Act' (Bhutan NDI) <https://www.bhutanndi.com/governance>> accessed 10 July 2024. <
- 267 Parliament of Bhutan, 'National Digital Identity Act, 2023' (Parliament of Bhutan, 2023) <https://parliament.bt/uploads/topics/17049488557050.pdf>> accessed 10 July 2024. <
- 268 Bhutan NDI, 'Governance: Bhutan NDI Act' (Bhutan NDI) <https://www.bhutanndi.com/governance>> accessed 10 July 2024. <
- 269 Monica Rai, 'How does the National Digital Identity system ensure privacy and security for all citizens' (The Bhutanese, 21 Oct 2023) <https://thebhutanese.bt/how-does-the-national-digital-identity-system-ensure-privacy-and-security-for-all-citizens/>> accessed 10 July 2024. <
- 270 Monica Rai, 'How does the National Digital Identity system ensure privacy and security for all citizens' (The Bhutanese, 21 Oct 2023) <https://thebhutanese.bt/how-does-the-national-digital-identity-system-ensure-privacy-and-security-for-all-citizens/>> accessed 10 July 2024. <
- 271 'Bhutan NDI' <https://www.bhutanndi.com/>> accessed 10 January 2025. <
- 272 'Bhutan NDI' <https://www.bhutanndi.com/>> accessed 10 January 2025. <
- 273 'Bhutan NDI' <https://www.bhutanndi.com/>> accessed 10 January 2025. <
- 274 Parliament of Bhutan, 'National Digital Identity Act, 2023' (Parliament of Bhutan, 2023) <https://parliament.bt/uploads/topics/17049488557050.pdf>> accessed 10 July 2024. <
- 275 Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 7-8. <
- 276 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) <https://www.unicef.org/media/147176/file/Bhutan.pdf>>; 'Citizenship Identity/Special Resident Card Application Form For Those Reporting for the First Time' (Bhutan Ministry of Home Affairs Department of Civil Registration and Census) https://dcrc.moha.gov.bt/wp-content/uploads/2024/08/New-CID_SR-Card-Application-Form-English-18-above.pdf>. <https://www.unicef.org/media/147176/file/Bhutan.pdf>>; Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 7. <
- 277 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) <https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <
- 278 2022 Human Rights Report: Bhutan. <
- 279 Nationality for All, 'Joint Submission to the Human Rights Council for Universal Periodic Review: Bhutan' (NFA, 8 April 2024), https://nationalityforall.org/wp-content/uploads/2024/04/JSTMP2_UPR47_BTN_E_Main-1.pdf> <
- 280 Act on Grant of Citizenship in Bhutan, 1977, <https://www.refworld.org/legal/legislation/natlegbod/1977/en/14453>> accessed 6 January 2024. <
- 281 UNICEF/UN-LIA and Vital Strategies, 'CRVSID Case Studies: Bhutan' (UNICEF 2023) <https://www.unicef.org/media/147176/file/Bhutan.pdf>>. <
- 282 '2022 Human Rights Report: Bhutan' (United States Department of State, 2022) <https://www.state.gov/reports/2022-country-reports-on-human-rights-practices/bhutan/>> accessed 10 December 2023. <
- 283 Pallavi Sharma, 'Balancing digital inclusion and data-privacy trust levels: a Bhutan perspective' (DigiconAsia) <https://digiconasia.net/features/balancing-digital-inclusion-and-data-privacy-trust-levels-a-bhutan-perspective>> accessed 10 July 2024. <
- 284 Monica Rai, 'Bhutan's National Digital Identity struggles with judicial acceptance of digital documents' (The Bhutanese, 16 Mar 2024) <https://thebhutanese.bt/bhutans-national-digital-identity-struggles-with-judicial-acceptance-of-digital-documents/>> accessed 10 July 2024. <
- 285 Sherab Lhamo, 'Bhutan NDI Conference discusses user concerns' (Kuensel Online, 25 Jun 2024) <https://kuenselonline.com/bhutan-ndi-conference-discusses-user-concerns/#:~:text=Data%20privacy%2C%20a%20concern%3F,commonly%20associated%20with%20centralised%20systems>> accessed 10 July 2024. <
- 286 Pallavi Sharma, 'Balancing digital inclusion and data-privacy trust levels: a Bhutan perspective' (DigiconAsia) <https://digiconasia.net/features/balancing-digital-inclusion-and-data-privacy-trust-levels-a-bhutan-perspective>> accessed 10 July 2024. <
- 287 'Statelessness among Resettled Bhutanese Refugees in Europe: An Unresolved Problem' (European Network on Statelessness, 10 June 2021) <https://www.statelessness.eu/updates/blog/statelessness-among-resettled-bhutanese-refugees-europe-unresolved-problem>> accessed 9 January 2025. Also see, Bill Frelick, 'Bhutan's Ethnic Cleansing | Human Rights Watch' (1 February 2008) <https://www.hrw.org/news/2008/02/01/bhutans-ethnic-cleansing>> accessed 9 January 2025. <
- 288 Atharv Dhiman and Imke Harbers, 'Legal Identity at the Margins: The Impact of Violent Conflict on Birth Registration in India' (2023) 27 Citizenship Studies 779. <
- 289 Government of India, 'Birth Registration | Social Welfare' <https://socialwelfare.vikaspedia.in/viewcontent/social-welfare/important-documents-for-indian-citizens/birth-registration?lgn=en>> accessed 7 August 2025. <
- 290 Election Commission of India, 'Form 6, Application for New Voters' 6 <https://www.eci.gov.in/eci-backend/public/api/download?url=LMAhAK6sOPBp%2FNFF0iRfXbEB1EVSLT41NNLRjYJJP1KivrUxbfqkDatmHy12e%2FzVx8fLfn2ReU7TfrYobgluPup0Lu3AMSDFW9y%2FJwhJM9eC3fHZbwu5VWRAYIwMnQRVmeM99kM%2F8t7DYpZ%2BS8sjdN%2Ftv25bzRMO6tj8r%2B8bcMbUbmZ9k5%2BxXfobv4yif>> accessed 7 August 2025. <
- 291 'About Your Aadhaar' (Unique Identification Authority of India | Government of India) <https://uidai.gov.in/en/my-aadhaar/about-your-aadhaar.html>> accessed 8 August 2025. <
- 292 'List of Documents Required For Aadhar Card Update Online and Offline' (Compare & Apply Loans & Credit Cards in India- Paisabazaar.com, 7 November 2024) <https://www.paisabazaar.com/aadhar-card/documents-required-for-aadhar-card/>> accessed 17 January 2025. <
- 293 Dhiman and Harbers (n 1). <
- 294 Nandan Nilekani, 'Data to the People' (2018) 97 Foreign Affairs <https://www.foreignaffairs.com/articles/asia/2018-08-13/data-people>> accessed 5 August 2025. <
- 295 'Aadhaar: A Unique Identity For The People' <https://www.pib.gov.in/www.pib.gov.in/Pressreleaseshare.aspx?PRID=2067940>> accessed 5 August 2025. <
- 296 (United Nations, Sustainable Development Goal 16.9: By 2030, provide legal identity for all, including birth registration, 2015) <
- 297 Saumyaa Naidu, 'Digital ID in India: Insights from Exploratory Research Mapping' (Digital Identities Design and Uses, 6 November 2020) <https://digitalid.design/research-maps/india-insights.html>>. <
- 298 'Analysing the Design and Implementation Goals for Aadhaar - The Digital Identity' (India Science, Technology & Innovation - ISTI Portal) <https://www.indiasciencetechnology.gov.in/featured-science/analysing-design-and-implementation-goals-aadhaar-%E2%80%93-digital-identity>> accessed 5 August 2025. <
- 299 Justice KS Puttaswamy v Union of India WP (C) 494/2012 <
- 300 Justice KS Puttaswamy v Union of India WP (C) 494/2012, para 203; Amit Bhardwaj, 'Here's What Prashant Bhushan and Usha Ramanathan Have to Say on #AadhaarVerdict' (Newslaundry, 26 September 2018) <https://www.newslaundry.com/2018/09/26/heres-what-prashant-bhushan-and-usha-ramanathan-have-to-say-on-aadhaarverdict>> accessed 5 August 2025. <
- 301 *ibid.* <
- 302 Srijoni Sen, 'A Decade of Aadhaar: Lessons in Implementing a Foundational ID System' (orfonline.org, 3 May 2019) <https://www.orfonline.org/research/a-decade-of-aadhaar-lessons-in-implementing-a-foundational-id-system>> accessed 5 August

2025. <
- 303 'Direct Benefit Transfer (DBT)' (Unique Identification Authority of India | Government of India)<https://uidai.gov.in/en/contact-support/have-any-question/308-english-uk/faqs/direct-benefit-transfer-dbt.html>> accessed 5 August 2025. <
- 304 'Aadhaar Enabled Payment System (AePS) – Aadhaar Pay | NPCI'<https://www.npci.org.in/what-we-do/aeps/product-overview>> accessed 5 August 2025. <
- 305 Arya Raje and Ganesh Pandey, 'Unseen and Unrecognised: The Indians Excluded from Aadhaar' (Haqdarshak, 23 August 2023)<https://haqdarshak.com/2023/08/24/unseen-and-unrecognised-the-indians-excluded-from-aadhaar/>> accessed 5 August 2025. <
- 306 Justice KS Puttaswamy v Union of India WP (C) 494/2012 <
- 307 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016, Preamble <
- 308 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016, s 7. <
- 309 Livemint, 'Aadhaar Number Mandatory to Receive Govt Benefits, Subsidies. Check Details Here | Today News' (mint, 16 August 2022)<https://www.livemint.com/news/india/aadhaar-number-mandatory-to-receive-govt-benefits-subsidies-check-details-here-11660666638016.html>> accessed 7 August 2025. <
- 310 *ibid.* <
- 311 *ibid.* <
- 312 'Resident Foreign Nationals' (Unique Identification Authority of India | Government of India)<https://uidai.gov.in/en/contact-support/have-any-question/1461-english-uk/faqs/enrolment-update/resident-foreign-nationals.html>> accessed 5 August 2025. <
- 313 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016, s 9. <
- 314 Aroon Deep, 'Government Makes Its Clear That Aadhaar No Proof of Citizenship, Birth Date' The Hindu (27 January 2024)<https://www.thehindu.com/news/national/government-makes-citizenship-disclaimer-on-new-aadhaar-cards-more-prominent/article67780076.ece>> accessed 5 August 2025. <
- 315 The Aadhaar (Enrolment and Update) Regulations 2016https://uidai.gov.in/images/The_Aadhaar_Enrolment_and_Update_Regulations_2016_with_Schedules.pdf; Please note that the UIDAI in a case before Calcutta High Court in July 2024 also stated that hat an Aadhaar card is meant for residents staying in India for at least 182 days, primarily to facilitate targeted government subsidies, and does not constitute proof of citizenship or domicile; 'Aadhaar Card "not" Proof of Citizenship or Domicile, Says UIDAI in HC. Here's Why' The Economic Times (5 July 2024)<https://economictimes.indiatimes.com/news/india/aadhaar-card-not-a-proof-of-citizenship-or-domicile-says-uidai-in-hc-heres-why/articleshow/111504535.cms?from=mdr>> accessed 5 August 2025. <
- 316 'List of Acceptable Documents for Enrolment and Update'https://uidai.gov.in/images/commdoc/List_of_Supporting_Document_for_Aadhaar_Enrolment_and_Update.pdf> accessed 5 August 2025. <
- 317 Bhagwan Chowdhry, Amit Goyal and Syed Anas Ahmed, 'Digital Identity in India' in Raghavendra Rau, Robert Wardrop and Luigi Zingales (eds), *The Palgrave Handbook of Technological Finance* (Springer International Publishing 2021)https://doi.org/10.1007/978-3-030-65117-6_30> accessed 5 August 2025. <
- 318 Rajesh Kumar, 'UNHCR Card Holders Not Entitled for Aadhaar: MHA' (The Pioneer, 9 October 2018)<https://www.dailypioneer.com/2018/india/unhcr-card-holders-not-entitled-for-aadhaar--mha.html>> accessed 5 August 2025. <
- 319 'India | Stateless Hub'<https://www.statelesshub.org/country/india>> accessed 5 August 2025. <
- 320 *ibid.* <
- 321 *ibid.* <
- 322 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016, s 2(b). <
- 323 <https://egovstandards.gov.in/sites/default/files/2021-07/Guidelines%20on%20Mobile%20as%20Digital%20identity.pdf> <
- 324 The Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act 2016, s 9. <
- 325 The Aadhaar (Enrolment and Update) Regulations 2016https://uidai.gov.in/images/The_Aadhaar_Enrolment_and_Update_Regulations_2016_with_Schedules.pdf <
- 326 CJP Team, 'Assam Citizenship Crisis: Aadhaar Unlocked, Lives Shackled' (CJP, 23 October 2024)<https://cjp.org.in/assam-citizenship-crisis-aadhaar-unlocked-lives-shackled/>> accessed 12 May 2025. <
- 327 *ibid.* <
- 328 Soumyarendra Barik, 'MoS IT on Concerns around Digital Personal Data Protection Act: There Will Be Checks & Balances to Ensure Personal Data Is Not Misused' (The Indian Express, 14 August 2023)<https://indianexpress.com/article/business/economy/concerns-around-contentious-provisions-of-data-protection-law-mos-it-8889933/>> accessed 5 August 2025. <
- 329 'Data Protection Laws in India' (DLA Piper, 6 January 2025)<https://www.dlapiperdataprotection.com/?t=law&c=IN>> accessed 5 August 2025. <
- 330 'Data Protection Laws in India' (DLA Piper, 6 January 2025)<https://www.dlapiperdataprotection.com/?t=law&c=IN>> accessed 5 August 2025; Office of Ethics, Risk, and Compliance Services, 'India Privacy Law' (UC Berkley)<https://oerccs.berkeley.edu/privacy/international-privacy-laws/india-privacy-law>> accessed 5 August 2025. <
- 331 Justice KS Puttaswamy v Union of India WP (C) 494/2012, para 417 <

- 332 The Constitution of India 1950, art 14. <
- 333 Apar Gupta and others, 'IFF's Response to MEITY on the Draft Data Protection Rules' (Internet Freedom Foundation, 5 March 2025)<https://internetfreedom.in/iffs-response-to-meity-on-the-draft-data-protection-rules/>> accessed 5 August 2025. <
- 334 *ibid.* <
- 335 *ibid.* <
- 336 *ibid.* <
- 337 Sen (n 15). <
- 338 *ibid.* <
- 339 *ibid.* <
- 340 Naman Kumar, 'Voting on Thin Ice: How Bihar's E-Voting App Risks Democracy' (Internet Freedom Foundation, 4 August 2025)<https://internetfreedom.in/voting-on-thin-ice-how-bihars-e-voting-app-risks-democracy/>> accessed 7 August 2025. <
- 341 *ibid.* <
- 342 *ibid.* <
- 343 *ibid.* <
- 344 *ibid.* <
- 345 NITI Aayog, 'LOCALISING SDGs EARLY LESSONS FROM 2019' (2019)https://www.niti.gov.in/sites/default/files/2020-07/LSDGs_July_8_Web.pdf> accessed 5 August 2025. <
- 346 The Constitution of India 1950, Part III. <
- 347 Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A(III) (UDHR) art 12, International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 17. <
- 348 International Covenant on Economic, Social, and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) art 13. <
- 349 International Covenant on Economic, Social, and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) art 2. <
- 350 Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 2. <
- 351 Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 7. <
- 352 'About Us - Digital India | Leading the Transformation in India for Ease of Living and Digital Economy | MeitY, Government of India' (Digital India | Leading the transformation in India for ease of living and digital economy | MeitY, Government of India) <https://www.digitalindia.gov.in/about-us/>> accessed 6 August 2025. <
- 353 Sen (n 15). <
- 354 *ibid.* <
- 355 *ibid.* <
- 356 *ibid.* <
- 357 Kumar (n 53). <
- 358 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 359 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 360 'Obtain a National Identity Card' (eGov Portal - Maldives)https://citizen.egov.mv/G2CWeb/CMSPages/NCITG2C/DNR/English/ObtainNationalIdentityCard_ENG_FNL.html> accessed 13 December 2024. <
- 361 'Maldives Enacts a New Act Pertaining to Birth and Death Registration and the Issuance of Birth Certificates & Maldivian National Identity Cards [Law No. 23/2022]' (Maldives Moot Court Society, 14 January 2023)<https://maldivesmootcourtsociety.org/maldives-act-pertaining-to-birth-and-death-registration/>> accessed 28 December 2023; 'Vital Statistics Report of Maldives: 2019-2021' (Maldives Bureau of Statistics 2024) 2<https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2024/11/Vital-Statistics-Report-of-Maldives-2024.pdf>>. <
- 362 'Submission to the Human Rights Council at the 36th Session of the Universal Periodic Review - Republic of Maldives' (Institute on Statelessness and Inclusion 2020)https://files.institutesi.org/UPR36_Maldives.pdf>. <
- 363 'Vital Statistics Report of Maldives: 2019-2021' (Maldives Bureau of Statistics 2024) 2<https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2024/11/Vital-Statistics-Report-of-Maldives-2024.pdf>>. <
- 364 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast->

- Asia-2023.pdf>. <
- 365 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>; Ghulam Shabir Arain, 'Ambitious Projects, Global Support Transform ID Management in the Maldives' (Biometric Update, 8 July 2024)<https://www.biometricupdate.com/202407/ambitious-projects-global-support-transform-id-management-in-the-maldives>> accessed 16 December 2024. <
- 366 Ghulam Shabir Arain, 'Ambitious Projects, Global Support Transform ID Management in the Maldives' (Biometric Update, 8 July 2024)<https://www.biometricupdate.com/202407/ambitious-projects-global-support-transform-id-management-in-the-maldives>> accessed 16 December 2024. <
- 367 Ghulam Shabir Arain, 'Ambitious Projects, Global Support Transform ID Management in the Maldives' (Biometric Update, 8 July 2024)<https://www.biometricupdate.com/202407/ambitious-projects-global-support-transform-id-management-in-the-maldives>> accessed 16 December 2024. <
- 368 NCIT, 'eFaas: The key to digital Maldives' (eFaas)<https://efaas.egov.mv/Home/About>> accessed 10 July 2024; *ibid.* <
- 369 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>; 'oneYear of oneGov' (10 July 2024)<https://www.tradenet.com.mv/newsroom/oneyear-of-onegov>> accessed 17 December 2024. <
- 370 'Vital Statistics Report of Maldives: 2019-2021' (Maldives Bureau of Statistics 2024) 2<https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2024/11/Vital-Statistics-Report-of-Maldives-2024.pdf>>. <
- 371 'Your Key to a Digital Maldives' (eFaas)<https://efaas.egov.mv>> accessed 16 December 2024; 'Register' (eFaas eGov Portal) <https://efaas.egov.mv/Account/Verify>> accessed 16 December 2024. <
- 372 'Register - eFaas' (eFaas)<https://efaas.egov.mv/Account/Verify>> accessed 24 July 2024. <
- 373 'Register - eFaas' (eFaas)<https://efaas.egov.mv/Account/Verify>> accessed 24 July 2024. <
- 374 'Register - eFaas' (eFaas)<https://efaas.egov.mv/Account/Verify>> accessed 24 July 2024; 'OneGov' (OneGov)<https://one.gov.mv/>> accessed 17 December 2024. <
- 375 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 376 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 377 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 378 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 379 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 380 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 381 'Personal Data Protection Act' (Digital Maldives for Adaptation, Decentralisation and Diversification 2023)<https://dmadd.gov.mv/storage/8roOerYP/gvfk3r4x.pdf>>. <
- 382 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 383 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 384 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 385 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 386 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <

- engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>. <
- 387 'Full Security & Compliance' (SumSub)<https://sumsub.com/security-compliance/>> accessed 17 December 2024; Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 388 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 389 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 390 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 391 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 392 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) arts 16, 17, 24. <
- 393 'Vital Statistics Report of Maldives: 2019-2021' (Maldives Bureau of Statistics 2024) 2<https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2024/11/Vital-Statistics-Report-of-Maldives-2024.pdf>>. <
- 394 'Submission to the Human Rights Council at the 36th Session of the Universal Periodic Review - Republic of Maldives' (n 5). <
- 395 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 24. <
- 396 'Maldives Enacts a New Act Pertaining to Birth and Death Registration and the Issuance of Birth Certificates & Maldivian National Identity Cards [Law No. 23/2022]' (n 4); 'Vital Statistics Report of Maldives: 2019-2021' (n 4) 2. <
- 397 International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 16. <
- 398 Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) arts 7, 8. <
- 399 'Vital Statistics Report of Maldives: 2019-2021' (n 4). <
- 400 Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 28. <
- 401 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 402 'Vital Statistics Report of Maldives: 2019-2021' (Maldives Bureau of Statistics 2024) 2<https://statisticsmaldives.gov.mv/mbs/wp-content/uploads/2024/11/Vital-Statistics-Report-of-Maldives-2024.pdf>>. <
- 403 'Services' (OneGov)<https://one.gov.mv/services>> accessed 17 December 2024; Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 404 'Submission to the Human Rights Council at the 36th Session of the Universal Periodic Review - Republic of Maldives' (n 5); 'Vital Statistics Report of Maldives: 2019-2021' (n 4). <
- 405 'Statelessness & Human Rights: Convention on the Rights of the Child' (Institute on Statelessness and Inclusion 2018)<https://www.institutesi.org/statelessness-and-crc.pdf>>. <
- 406 Yogendra B Gurung and Padma Prasad Khatiwada, 'Legal Identity in Nepal: An Assessment of Existing Database and Recommendations for Future Directions' (National Planning Commission 2015)https://www.researchgate.net/publication/280216396_Legal_Identity_in_Nepal_An_Assessment_of_Existing_Database_and_Recommendations_for_Future_Directions>. <
- 407 'FAQ' (Ministry of Home Affairs) <https://www.moha.gov.np/page/citizenship-10>. <
- 408 'FAQ' (Ministry of Home Affairs)<https://www.moha.gov.np/page/citizenship-10>>. <
- 409 'FAQ' (Ministry of Home Affairs)<https://www.moha.gov.np/page/citizenship-10>>. <
- 410 'FAQ' (Ministry of Home Affairs)<https://www.moha.gov.np/page/citizenship-10>>. <
- 411 'FAQ' (Ministry of Home Affairs)<https://www.moha.gov.np/page/citizenship-10>>. <
- 412 'Joint Submission to the Human Rights Council: Universal Periodic Review - Nepal' (n 45). <
- 413 Yogendra B Gurung and Padma Khatiwada (n 119). <
- 414 'Joint Submission to the Human Rights Council: Universal Periodic Review - Nepal' (n 45). <

- 415 'Together We Can: The COVID-19 Impact on Stateless People & a Roadmap for Change' (CESF Consortium 2021)https://files.institutesi.org/together_we_can_report_2021.pdf. <
- 416 Thomas Latschan, 'Stateless in Nepal' (DW, 29 January 2015)<https://www.dw.com/en/stateless-in-nepal-how-a-patriarchal-system-denies-citizenship-to-millions/a-18223750> accessed 19 December 2023. <
- 417 'Birth Registration Data' (UNICEF Data Warehouse, December 2024)https://data.unicef.org/resources/data_explorer/unicef_f/ accessed 7 November 2023. <
- 418 'A Multi-Purpose Biometric eID for Nepal' (Idemia 2021)<https://www.idemia.com/wp-content/uploads/2021/02/idemia-multi-purpose-biometric-eid-nepal-success-story-201906.pdf>; 'National ID Details' (Department of National ID and Civil Registration)<https://donidcr.gov.np/Home/NationalIDDetails> accessed 22 January 2025. <
- 419 Ghulam Shabir Arain, 'Nepal's Digital Identity Transformation Fosters Challenges' (Biometric Update, 4 June 2024)<https://www.biometricupdate.com/202406/nepals-digital-identity-transformation-fosters-challenges> accessed 24 January 2025. <
- 420 'A Multi-Purpose Biometric eID for Nepal' (n 132). <
- 421 'A Multi-Purpose Biometric eID for Nepal' (n 132). <
- 422 Anup Ojha, 'A Legion of Safety Concerns Surrounds National ID Scheme' (23 September 2022)<https://kathmandupost.com/national/2022/09/23/a-legion-of-safety-concerns-surrounds-national-id-scheme> accessed 24 January 2025. <
- 423 Ghulam Shabir Arain (n 133). <
- 424 Ghulam Shabir Arain (n 133). <
- 425 'Annual Progress Report (Fiscal Year 2023/24)' (Department of National ID and Civil Registration). <
- 426 DoNIDCR. Annual Progress Report (Fiscal Year 2023/24). Kathmandu: Department of National ID and Civil Registration (DoNIDCR). <
- 427 'A Multi-Purpose Biometric eID for Nepal' (n 132). <
- 428 DoNIDCR. Annual Progress Report (Fiscal Year 2023/24). Kathmandu: Department of National ID and Civil Registration (DoNIDCR). <
- 429 'UN E-Government Knowledgebase' (United Nations Division for Public Institutions and Digital Government, 2024)<https://publicadministration.un.org/egovkb/en-us/Data/Country-Information/id/120-Nepal> accessed 28 January 2025. <
- 430 Joel R McConvey, 'Nepal to Assign Unique ID Number at Birth as Part of Digital ID Program' (Biometric Update, 4 March 2024)<https://www.biometricupdate.com/202403/nepal-to-assign-unique-id-number-at-birth-as-part-of-digital-id-program> accessed 24 January 2025. <
- 431 'A Multi-Purpose Biometric eID for Nepal' (n 132). <
- 432 'Annual Progress Report (Fiscal Year 2023/24)' (n 139). <
- 433 Shubha Kayastha and Sapana Sanjeevani, 'Digitization of Identities: Efforts, Experiences and Effects' (Body & Data 2023) https://bodyanddata.org/wp-content/uploads/2023/10/BiometricReport_2023_07_31_Final_compressed.pdf accessed 22 January 2025. <
- 434 The National ID and Civil Registration Act (2020) Preamble. <
- 435 The National ID and Civil Registration Act (2020) Article 4; The Constitution of Nepal (2015) Article 51(f)7. <
- 436 'Joint Submission to the Committee on the Elimination of Discrimination Against Women at the 90th Session - Nepal' (n 6). <
- 437 The National ID and Civil Registration Act (2020). <
- 438 'FAQ' (Department of National ID and Civil Registration)<https://donidcr.gov.np/Home/NationalIDFAQ>. <
- 439 Bhasa Sharma, 'National ID Card Mandatory to Avail Govt Services' (MyRepublica, 21 January 2025)<https://myrepublica.nagariknetwork.com/news/national-id-card-made-mandatory-for-all-govt-assigned-jobs-678f8b28d3f9e.html> accessed 28 January 2025. <
- 440 'FAQ' (n 152). <
- 441 Ayang Macdonald, 'Nepal Grapples with National ID Distribution Challenges as Banks Make Card Mandatory' (Biometric Update, 3 February 2025)<https://www.biometricupdate.com/202502/nepal-grapples-with-national-id-distribution-challenges-as-banks-make-card-mandatory> accessed 10 April 2025. <
- 442 'Nepal Gazette' (2024) 10<http://rajpatra.dop.gov.np/welcome/book?ref=25655>. <
- 443 'SC Issues Interim Order Not to Make National ID Card Mandatory for Social Security Allowances' (Republica, 8 August 2024)<https://myrepublica.nagariknetwork.com/news/sc-issues-interim-order-not-to-make-national-id-card-mandatory-for-social-security-allowances> accessed 28 January 2025. <
- 444 Bhasa Sharma (n 153). <
- 445 Macdonald (n 155). <
- 446 Macdonald (n 155). <
- 447 Macdonald (n 155). <
- 448 Macdonald (n 155). <
- 449 Kathmandu Post, 'Supreme Court Clears Way for National ID Card Implementation, but People Continue to Face Hassles'

- (Kathmandu Post, 2 February 2025)<https://kathmandupost.com/national/2025/02/02/supreme-court-clears-way-for-national-id-card-implementation-but-people-continue-to-face-hassles> accessed 10 April 2025. <
- 450 The National ID and Civil Registration Act (2020). <
- 451 The National ID and Civil Registration Regulations (2021). <
- 452 'National ID Details' (n 132). <
- 453 Constitution of Nepal (2015) Article 51(f)7. <
- 454 'Quarterly Report of Department of National ID and Civil Registration 2024/2025' (Department of National ID and Civil Registration 2024)<https://donidcr.gov.np/Files/DOC-1be14c7d3-7216-445b-898a-a845ffd2de27.pdf>. <
- 455 Interview with an officer at the Department of National ID and Civil Registration, 12 December 2024. <
- 456 Constitution of Nepal (2015) Article 28. <
- 457 The National ID and Civil Registration Act (2020) Section 35 and 41. <
- 458 Bhrikuti Rai, 'Government's Hurried Decision to Push Digitised National Identity Cards Nationwide Has Raised Security Concerns' (The Kathmandu Post, 3 March 2019)<https://kathmandupost.com/national/2019/03/03/data-security-concerns-over-national-identity-card-project> accessed 24 January 2025. <
- 459 Anup Ojha (n 136); Ayang Macdonald (n 150); Ghulam Shabir Arain (n 133). <
- 460 Ayang Macdonald (n 150); Ghulam Shabir Arain (n 133). <
- 461 Anup Ojha (n 136); Ayang Macdonald (n 150). <
- 462 Ayang Macdonald, 'Nepal MPs Want Assurance on National ID System Data Security' (Biometric Update, 24 January 2025) <https://www.biometricupdate.com/202501/nepal-mps-want-assurance-on-national-id-system-data-security> accessed 29 January 2025. <
- 463 Ayang Macdonald, 'Nepal Integrates National ID with Digital Govt App to Expand Public Service Access' (Biometric Update, 30 January 2025)<https://www.biometricupdate.com/202501/nepal-integrates-national-id-with-digital-govt-app-to-expand-public-service-access> accessed 10 April 2025. <
- 464 International Covenant on Economic, Social, and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) art 12. <
- 465 The National ID and Civil Registration Act (2020) Article 4. <
- 466 'Nepal Gazette' (n 156); Bhasa Sharma (n 153). <
- 467 'Nepal Gazette' (n 156). <
- 468 Universal Declaration of Human Rights (adopted 10 December 1948) UNGA Res 217 A(III) (UDHR) art 19. <
- 469 'Annual Progress Report (Fiscal Year 2023/24)' (n 139). <
- 470 Body & Data. Forthcoming. Nepal's Biometric Present: Governance, Accessibility and Accountability. <
- 471 'Joint Submission to the Human Rights Council: Universal Periodic Review - Nepal' (n 45). <
- 472 Constitution of Nepal (2015) Article 51(f)7. <
- 473 'National Identity Card' (NADRA Pakistan)<https://www.nadra.gov.pk/national-identity-card/> accessed 4 June 2025. <
- 474 'NADRA' (Consulate General of Pakistan New York)<https://pakistanconsulateny.org/nadra> accessed 9 June 2025. <
- 475 'Child Registration Certificate (CRC)' (NADRA Pakistan)<https://www.nadra.gov.pk/child-registration-certificate-crc/> accessed 9 June 2025. <
- 476 'What Are the Documents Required for CNIC in Pakistan?' (Legal Point, 3 June 2024)<https://legalpoint.pk/documents-required-for-cnic-in-pakistan/> accessed 10 June 2025. <
- 477 'What Are the Documents Required for CNIC in Pakistan?' (n 4). <
- 478 'What Are the Documents Required for CNIC in Pakistan?' (n 4). <
- 479 'National Identity Card' (n 1). <
- 480 Osama Khalil, 'NADRA's Role in Citizenship Verification & CNIC Process – A Complete Guide' (Osama Khalil Lawyer & Legal Consultant, 21 April 2025)<https://osamakhalilaw.com/nadra-cnic-verification/> accessed 16 June 2025. <
- 481 'Pakistan Launches First Digital Identity Card System Through NADRA' (Mobile ID World, 11 March 2025)<https://mobileidworld.com/pakistan-launches-first-digital-identity-card-system-through-nadra/> accessed 16 June 2025; 'Pakistan Launches 1st Dematerialized Digital Identity Card' (XinhuaNet Asia & Pacific, 11 March 2025)<https://english.news.cn/asiapacific/20250311/f1b03e11de2f46beb9c11800aaf286af/c.html> accessed 18 June 2025. <
- 482 Ayang Macdonald, 'NADRA Welcomes World Bank to Discuss Digital Identity, Economy' (Biometric Update, 11 November 2024)<https://www.biometricupdate.com/202411/nadra-welcomes-world-bank-to-discuss-digital-identity-economy> accessed 16 June 2025. <
- 483 'Pakistan Launches First Digital Identity Card System Through NADRA' (n 9); 'Pakistan Launches All-in-One Digital ID Kit with Advanced Biometric Features' (ID Tech, 4 March 2025)<https://idtechwire.com/pakistan-launches-all-in-one-digital-id-kit-with-advanced-biometric-features/> accessed 18 June 2025. <
- 484 'Pakistan Launches All-in-One Digital ID Kit with Advanced Biometric Features' (n 11). <
- 485 'Pakistan Launches All-in-One Digital ID Kit with Advanced Biometric Features' (n 11). <

- 486 Hamza Waqas and Amna Khan, 'Privacy and Digital Identity: The Case of Pakistan's NADRA' (OpenGlobalRights, 4 February 2022)<https://www.openglobalrights.org/privacy-and-digital-identity-the-case-of-pakistans-nadra/>> accessed 23 July 2025. <
- 487 'Millions in Pakistan without Digital ID Card: Rights Activists' (Al Jazeera, 26 July 2022)<https://www.aljazeera.com/news/2022/7/26/millions-in-pakistan-without-digital-id-card-rights-activists>> accessed 23 July 2025. <
- 488 Ghulam Shabir Arain, 'Pakistan Law Proposed to Transform Digital Identity System and Governance' (Biometric Update, 17 December 2024)<https://www.biometricupdate.com/202412/pakistan-law-proposed-to-transform-digital-identity-system-and-governance>> accessed 23 July 2025; 'Millions in Pakistan without Digital ID Card: Rights Activists' (n 15). <
<https://www.dawn.com/news/1879244> <
- 490 Rida Qadri, 'When Databases Get to Define Family' [2021] Wired<https://www.wired.com/story/pakistan-digital-database-family-design/>> accessed 23 July 2025. <
- 491 Qadri (n 18). <
- 492 Ratnadeep Choudhary Mondal Manisha, 'Aadhaar vs CNIC: How Different Are India and Pakistan's ID Systems?' (ThePrint, 24 June 2018)<https://theprint.in/india/governance/aadhaar-vs-cnic-how-different-are-india-and-pakistans-id-systems/73812/>> accessed 23 July 2025; 'Millions in Pakistan without Digital ID Card: Rights Activists' (n 15). <
- 493 'Millions in Pakistan without Digital ID Card: Rights Activists' (n 15). <
- 494 Waqas and Khan (n 14). <
- 495 Waqas and Khan (n 14). <
- 496 Qadri (n 18). <
- 497 Qadri (n 18). <
- 498 Qadri (n 18); Zehra Hashmi, 'Thinking with a Database | Platypus' (Platypus, 6 May 2021)<https://blog.castac.org/2021/05/thinking-with-a-database/>> accessed 23 July 2025. <
- 499 'Pakistan Launches First Digital Identity Card System Through NADRA' (n 9); 'Islamic Republic of Pakistan: Digital Economy Enhancement Project' (The World Bank 2025) P174402<https://documents1.worldbank.org/curated/en/099011525100510857/pdf/P174402-c583176c-1d59-45ef-a8f4-a906c8730eca.pdf>>. <
- 500 'Pakistan: Two New World Bank Projects to Support the Digital Economy and Increase Resilience to Floods' (World Bank Group, 22 March 2024)<https://www.worldbank.org/en/news/press-release/2024/03/21/pakistan-two-new-world-bank-projects-to-support-the-digital-economy-and-increase-resilience-to-floods>> accessed 18 June 2025; 'Pakistan - Digital Economy Enhancement Project (English)' (World Bank Group 2024) PAD4355<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099030524162525956/bosib1287c6c220cb1a4bb19c909ebf3cb9>>. <
- 501 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (Amnesty International 2025) TG ASA 33/2025.6504<https://www.amnesty.org/en/wp-content/uploads/2025/04/ASA3392442025ENGLISH.pdf>>. <
- 502 Frank Hersey, 'Pakistan Gymnastics Team Fights for ID in Case Which Could Bring It to 3 Million' (Biometric Update, 8 November 2021)<https://www.biometricupdate.com/202111/pakistan-gymnastics-team-fights-for-id-in-case-which-could-bring-it-to-3-million>> accessed 23 July 2025. <
- 503 'All You Need To Know About Alien Registration Card In Pakistan' (ACCO PAKISTAN, 20 August 2021)<https://acco.com.pk/all-you-need-to-know-about-alien-registration-card-in-pakistan/>> accessed 22 July 2025. <
- 504 'NADRA, PBS Sign MoU to Use Data Domestically, Internationally' (Ministry of Information and Broadcasting (Government of Pakistan), 22 October 2024)<https://moib.gov.pk/News/64988>> accessed 16 June 2025. <
- 505 'NADRA, PBS Sign MoU to Use Data Domestically, Internationally' (n 37). <
- 506 Ghulam Shabir Arain, 'NADRA Technologies Exporting Pakistan Digital ID to the World' (Biometric Update, 13 March 2025) <https://www.biometricupdate.com/202503/nadra-technologies-exporting-pakistan-digital-id-to-the-world>> accessed 16 June 2025. <
- 507 Arain (n 39). <
- 508 Arain (n 39). <
- 509 'NADRA, PBS Sign MoU to Use Data Domestically, Internationally' (n 37); Ayang Macdonald, 'NADRA and NIRA Work to Advance Somalia's Digital Identification Program' (Biometric Update, 18 March 2025)<https://www.biometricupdate.com/202503/nadra-and-nira-work-to-advance-somalias-digital-identification-program>> accessed 16 June 2025. <
- 510 Digital Nation Pakistan Act (2025); 'Pakistan Launches First Digital Identity Card System Through NADRA' (n 9). <
- 511 Digital Nation Pakistan Act (2025) Preamble; Editorial, 'Digital ID Bill' (DAWN.COM, 17 December 2024)<https://www.dawn.com/news/1879244>> accessed 4 August 2025. <
- 512 Digital Nation Pakistan Act (2025); Nadir Guramani, 'Digital Nation Pakistan Bill Tabled in National Assembly' (Dawn, 16 December 2024)<https://www.dawn.com/news/1879138>> accessed 21 June 2025. <
- 513 Digital Nation Pakistan Act (2025) Chapter 2-4. <
- 514 Digital Nation Pakistan Act (2025) Chapter 3, Article 8. <
- 515 Digital Nation Pakistan Act (2025) Chapter 2, Article 5(a). <

- 516 Digital Nation Pakistan Act (2025) Chapter 4, Article 10. <
- 517 Digital Nation Pakistan Act (2025) Chapter 1, Article 2(i). <
- 518 Ayang Macdonald, 'New NADRA ID Card Rules Redefine Biometrics, Mandate Birth Registration with Union Councils | Biometric Update' (23 June 2025)<https://www.biometricupdate.com/202506/new-nadra-id-card-rules-redefine-biometrics-mandate-birth-registration-with-union-councils>> accessed 23 July 2025. <
- 519 <https://www.nadra.gov.pk/e-services/grievance-redressal-mechanism/>; 'NADRA Launches Centralized Complaint Management System for Citizens' (National Database and Registration Authority, Ministry of Interior, Pakistan, 8 February 2022)<https://www.nadra.gov.pk/mediaRelease/nadra-launches-centralized-complaint-management-system-for-citizens-ba50a4ff>> accessed 5 August 2025. <
- 520 'Data Protection and Privacy Legislation Worldwide | UN Trade and Development (UNCTAD)'<https://unctad.org/page/data-protection-and-privacy-legislation-worldwide>> accessed 16 July 2025; 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 521 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 522 'Data Protection and Privacy Legislation Worldwide | UN Trade and Development (UNCTAD)' (n 53). <
- 523 Digital Nation Pakistan Act (2025) Chapter 8, Article 23. <
- 524 Digital Nation Pakistan Act (2025) Chapter 8, Article 29. <
- 525 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 526 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 527 Article 14, Constitution of Pakistan, <https://www.pakistani.org/pakistan/constitution/part2.ch1.html> <
- 528 Editorial (n 44). <
- 529 Iftikhar A Khan, '2.7m Citizens' Data Compromised over Five Years, Probe Finds' (DAWN.COM, 27 March 2024)<https://www.dawn.com/news/1824026>> accessed 5 August 2025. <
- 530 Editorial (n 62); Majid Burfat, 'Digital Pakistan: A Leap Forward Or A Step Into Surveillance?' (Daily Parliament Times, 30 January 2025)<https://www.dailyparliamenttimes.com/2025/01/30/digital-pakistan-a-leap-forward-or-a-step-into-surveillance/>> accessed 5 August 2025. <
- 531 'Paving a Digital Road to Hell?: A Primer on the Role of the World Bank and Global Networks in Promoting Digital ID' (Center for Human Rights & Global Justice - NYU School of Law 2022)<https://chrgj.org/2022-06-paving-digital-road-to-hell/>>. <
- 532 Identification for Development (ID4D) 2020 Annual Report (English). Identification for Development Washington, D.C. : World Bank Group. <http://documents.worldbank.org/curated/en/625371611951876490> <
- 533 Ratnadeep Choudhary Mondal Manisha, 'Aadhaar vs CNIC: How Different Are India and Pakistan's ID Systems?' (ThePrint, 24 June 2018)<https://theprint.in/india/governance/aadhaar-vs-cnic-how-different-are-india-and-pakistans-id-systems/73812/>> accessed 23 July 2025; 'Millions in Pakistan without Digital ID Card: Rights Activists' (n 15). <
- 534 Waqas and Khan (n 14). <
- 535 Qadri (n 18). <
- 536 Gaity Khan, 'Society: The Prawn Peelers of Machhar Colony' (DAWN.COM, 4 November 2018)<https://www.dawn.com/news/1443447>> accessed 5 August 2025. <
- 537 Khan (n 75). <
- 538 Burfat (n 63). <
- 539 Without a Trace - Tahera Hasan video <
- 540 NADRA, 'Pakistan Shares Its Progress and Vision on CRVS at Ministerial Conference in Bangkok' (National Database and Registration Authority, Ministry of Interior, Pakistan, 27 June 2025)<https://www.nadra.gov.pk/mediaRelease/pakistan-shares-its-progress-and-vision-on-crvs-at-ministerial-conference-in-bangkok-31a1069e>> accessed 4 August 2025. <
- 541 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 542 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 543 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 544 'Amnesty International Recommendations for Rights-Respecting Artificial Intelligence and Digital Nation Acts' (n 30). <
- 545 Burfat (n 63). <
- 546 Burfat (n 63). <
- 547 'Identity Card, the Trusted Personal Identity' (Department for Registration of Persons)<https://drp.gov.lk/en/home.php>> accessed 13 September 2024; 'No ID, No Security - the Dilemma of Sri Lanka's Returnees' (The New Humanitarian, 17 July 2013)<https://www.thenewhumanitarian.org/feature/2013/07/17/no-id-no-security-dilemma-sri-lanka-s-returnees>> accessed 13 September 2024. <
- 548 'Obtaining the NIC' (Department for Registration of Persons)<https://drp.gov.lk/en/normal.php>> accessed 13 September 2024. <
- 549 'Obtaining the NIC' (Department for Registration of Persons)<https://drp.gov.lk/en/normal.php>> accessed 13 September 2024. <

- 550 'Obtaining the NIC' (Department for Registration of Persons)<https://drp.gov.lk/en/normal.php>> accessed 13 September 2024. <
- 551 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 552 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 553 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 554 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 555 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 556 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 557 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 558 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 559 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 560 'Electronic National Identity Card Project (e-NIC)' (Department for Registration of Persons)<https://drp.gov.lk/en/slu.php>> accessed 15 September 2024. <
- 561 'Electronic National Identity Card Project (e-NIC)' (Department for Registration of Persons)<https://drp.gov.lk/en/slu.php>> accessed 15 September 2024; 'Sri Lanka to Have Own E-NIC Project amid Privacy Concerns over Indian Deal' (EconomyNext, 6 January 2024)<https://economynext.com/sri-lanka-to-have-own-e-nic-project-amid-privacy-concerns-over-indian-deal-147872>> accessed 15 September 2024. <
- 562 'Sri Lanka Unique Digital Identity (SLUDI)' (Information and Communication Technology Agency of Sri Lanka)<https://www.icta.lk/>> accessed 15 September 2024. <
- 563 'Sri Lanka Unique Digital Identity (SLUDI)' (Information and Communication Technology Agency of Sri Lanka)<https://www.icta.lk/>> accessed 15 September 2024. <
- 564 'Sri Lanka Unique Digital Identity (SLUDI)' (Information and Communication Technology Agency of Sri Lanka)<https://www.icta.lk/>> accessed 15 September 2024. <
- 565 'First Digital Birth Certificate in Sri Lanka Issued' (Newswire, 5 December 2023)<https://www.newswire.lk/2023/12/05/first-digital-birth-certificate-in-sri-lanka-issued/>> accessed 15 September 2024. <
- 566 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 567 'Sri Lanka Unique Digital Identity (SLUDI)' (n 19); 'Electronic National Identity Card Project (e-NIC)' (n 17). <
- 568 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019) 10<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 569 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 570 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 571 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <

- 572 Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- 573 Registration of Persons (Amendment) Act (2016) Part 1A (5(2)). <
- 574 Registration of Persons (Amendment) Act (2016) Part 1B (12(3)). <
- 575 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 576 'Sri Lanka's Digital Identity Transformation Seeks Balance of Speed and Assurance' (Biometric Update, 13 May 2024)<https://www.biometricupdate.com/202405/sri-lankas-digital-identity-transformation-seeks-balance-of-speed-and-assurance>> accessed 15 September 2024; Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 577 'Sri Lanka's Digital Identity Transformation Seeks Balance of Speed and Assurance' (Biometric Update, 13 May 2024)<https://www.biometricupdate.com/202405/sri-lankas-digital-identity-transformation-seeks-balance-of-speed-and-assurance>> accessed 15 September 2024 <
- 578 'Sri Lanka's Digital Identity Transformation Seeks Balance of Speed and Assurance' (Biometric Update, 13 May 2024)<https://www.biometricupdate.com/202405/sri-lankas-digital-identity-transformation-seeks-balance-of-speed-and-assurance>> accessed 15 September 2024 <
- 579 'Sri Lanka's Digital Identity Transformation Seeks Balance of Speed and Assurance' (Biometric Update, 13 May 2024)<https://www.biometricupdate.com/202405/sri-lankas-digital-identity-transformation-seeks-balance-of-speed-and-assurance>> accessed 15 September 2024 <
- 580 Ayang Macdonald, 'Sri Lanka Seals Deal with India for National Digital ID Support, Opposition MP Concerned' (Biometric Update, 31 March 2022)<https://www.biometricupdate.com/202203/sri-lanka-seals-deal-with-india-for-national-digital-id-support-opposition-mp-concerned>> accessed 15 September 2024. <
- 581 'MOSIP, the Unneglectable Force in the Global South' (Medium, 5 March 2024)<https://medium.com/@identitywoman-in-business/mosip-the-unneglectable-force-in-the-global-south-a7866535b46e>> accessed 15 September 2024; 'Sri Lanka's Digital Identity Transformation Seeks Balance of Speed and Assurance' (n 33). <
- 582 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 583 Personal Data Protection Act (2022); Charya Samarakoon and Bhavani Fonseka, 'Right to Privacy in Sri Lanka' (Centre for Policy Alternatives 2020)<https://www.cpalanka.org/wp-content/uploads/2020/09/Discussion-Paper-Right-to-Privacy-updated-draft-4-1.pdf>>. <
- 584 Personal Data Protection Act (2022) Part I (5(c)). <
- 585 Charya Samarakoon and Bhavani Fonseka, 'Right to Privacy in Sri Lanka' (Centre for Policy Alternatives 2020)<https://www.cpalanka.org/wp-content/uploads/2020/09/Discussion-Paper-Right-to-Privacy-updated-draft-4-1.pdf>>. <
- 586 Personal Data Protection Act (2022) Part II (13-17). <
- 587 Personal Data Protection Act (2022) Schedule I (a,e,g). <
- 588 Personal Data Protection Act (2022) Schedule V. <
- 589 Personal Data Protection Act (2022) Part I (10). <
- 590 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 591 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 592 Charya Samarakoon and Bhavani Fonseka, 'Right to Privacy in Sri Lanka' (Centre for Policy Alternatives 2020)<https://www.cpalanka.org/wp-content/uploads/2020/09/Discussion-Paper-Right-to-Privacy-updated-draft-4-1.pdf>>. <
- 593 Charya Samarakoon and Bhavani Fonseka, 'Right to Privacy in Sri Lanka' (Centre for Policy Alternatives 2020)<https://www.cpalanka.org/wp-content/uploads/2020/09/Discussion-Paper-Right-to-Privacy-updated-draft-4-1.pdf>>. <
- 594 Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- 595 International Covenant on Economic, Social, and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) art 13; Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (CRC) art 28; International Covenant on the Elimination of All Forms of Racial Discrimination (adopted 21 December 1965, entered into force 4 January 1969) 160 UNTS 195 (ICERD) art 5. <

- ⁵⁹⁶ Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- ⁵⁹⁷ Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- ⁵⁹⁸ International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 25(b). <
- ⁵⁹⁹ Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- ⁶⁰⁰ International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) art 19(2); Universal Declaration of Human Rights (adopted 10 December 1948) UNGA Res 217 A(III) (UDHR) art 19. <
- ⁶⁰¹ 'Electronic National Identity Card Project (e-NIC)' (Department for Registration of Persons)<https://drp.gov.lk/en/slu.php>> accessed 15 September 2024; <
- ⁶⁰² Calum Handforth and Matther Wilson, 'Digital Identity Country Report: Sri Lanka' (GSM Association 2019)<https://www.gsma.com/solutions-and-impact/connectivity-for-good/mobile-for-development/wp-content/uploads/2019/02/Digital-Identity-Country-Report-Sri-Lanka.pdf>>. <
- ⁶⁰³ Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <
- ⁶⁰⁴ Shruti Trikanad, 'State of Digital Identification Systems in South and Southeast Asia' (Engage Media 2023)<https://engagemedia.org/wp-content/uploads/2023/07/Report-on-the-State-of-Digital-Identification-in-South-and-Southeast-Asia-2023.pdf>>. <

ENDNOTES