

TOOLKIT ON ACCESSIBILITY

Tools to apply universal design across premises
and programmes and promote access for all



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PROGRAMME- RELATED BUILDINGS



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Acknowledgements

This toolkit was developed by the UNICEF Disability Team, based in the Programme Group Leadership Team at New York Headquarters. It was prepared in close consultation with persons with disabilities, and through consultations and collaboration with accessibility specialists, UNICEF staff and other partners around the world.

The core team at UNICEF included Gopal Mitra (currently serving as Senior Officer at the United Nations Disability Strategy Secretariat, Executive Office of the Secretary-General, United Nations), Megan Tucker and Anna Burlyaeva. The toolkit was developed under the supervision of Rosangela Berman Bieler, Senior Adviser and Chief, Disability Section, UNICEF.

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In addition to the PDF version, the toolkit is also available in a range of accessible formats: EPUB, Braille-ready file and accessible HTML.

Cover photo: © UNICEF/UN0251366/Herwig
Nine-year-old Amal plays with friends on the seesaw in the inclusive playground in her school in Za’atari refugee camp in Jordan.

Feedback and comments: This toolkit is a living document that will be updated and revised as it is used in the field to support UNICEF’s work on accessibility and inclusion of children and adults with disabilities. UNICEF colleagues and partners are invited to send feedback:

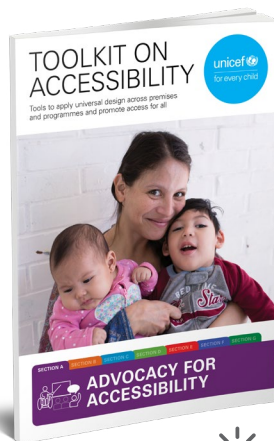
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Toolkits on accessibility

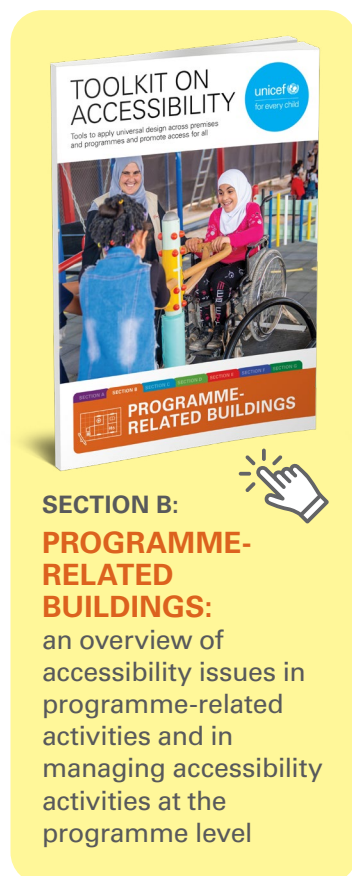
The toolkit is divided into seven sections and one Toolbox:



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ADVOCACY FOR ACCESSIBILITY:

suggestions on how to advocate for accessibility and how to address common objections and preconceived ideas



SECTION B:

PROGRAMME-RELATED BUILDINGS:

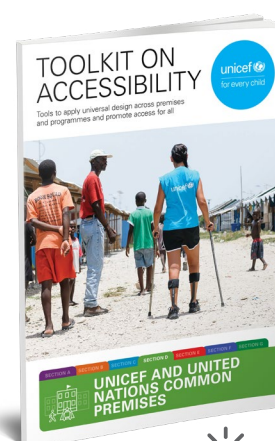
an overview of accessibility issues in programme-related activities and in managing accessibility activities at the programme level



SECTION C:

ACCESSIBILITY IN EMERGENCIES:

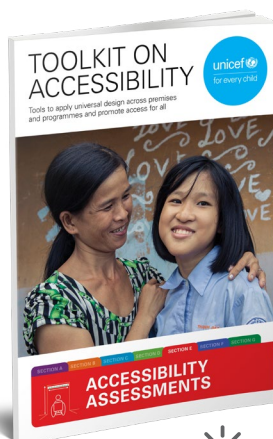
an overview of how accessibility should be taken into account in emergencies and disaster preparedness



SECTION D:

UNICEF AND UNITED NATIONS COMMON PREMISES:

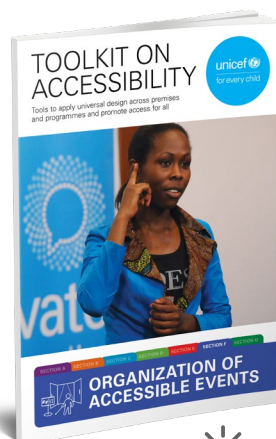
support for managing accessibility improvements in UNICEF offices around the world



SECTION E:

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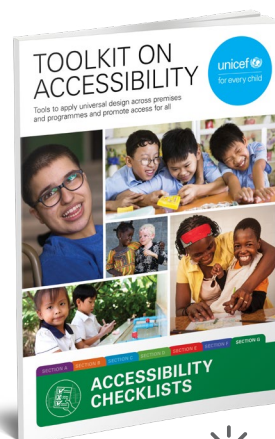
insight on how to conduct accessibility assessments regardless of the specific circumstances



SECTION F:

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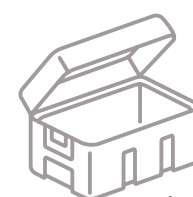
suggestions on how to organize accessible events



SECTION G:

ACCESSIBILITY CHECKLISTS:

17 checklists to use during accessibility assessments



TOOLBOX:

a repository of useful tools, documents and examples for accessibility activities, such as terms of reference or samples of assessment reports





Foreword

Dr Omar Abdi, UNICEF Deputy Executive Director, Programmes:

Each year, UNICEF is responsible for delivering programmes across hundreds of countries, reaching millions of children all around the world. Central to our programmes is a mission to provide opportunities for all children, boys and girls with and without disabilities. Our equity mission is part of our strategic plan (goal 5) and UNICEF recognizes that having schools that are accessible helps to support inclusive education. With the Executive Directive on Accessibility in Programme-Related Construction Activities, UNICEF has affirmed its commitment to the accessibility of all our programmes, including in situations of humanitarian conflict and emergency. Our programme teams and advisers have contributed to this toolkit, which can drive positive change to promote inclusion more broadly.

Hannan Sulieman, UNICEF Deputy Executive Director, Management:

UNICEF is committed to doing more to promote inclusion and to employ talented staff with disabilities as part of its workforce. This toolkit helps to deliver on our commitment to be a UNICEF for all staff, with or without disabilities. In 2014, the UNICEF Supply Division survey on the accessibility of programmes and premises showed that 84 per cent of offices needed information and material on awareness and knowledge on accessibility, and 59 per cent indicated the need to establish partnerships and collaboration in this area. In a 2017 all-staff survey, 39 per cent of respondents felt that their employment space was physically accessible for staff with disabilities. We want to make sure that all staff working with UNICEF have accessible premises. We are making progress. For example, the Greening and Accessibility Fund (GrAF) that has existed for several years has funded initiatives around the world to make premises more accessible and sustainable. It is my hope that this toolkit will be used as a guide as we create an inclusive UNICEF for all.

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“ The path to inclusion starts with accessibility. ”

Introduction to the toolkit

This toolkit was developed so the work of UNICEF programmes can support children like nine-year-old Amal, a girl with a physical disability who lives in Zaatari camp and who can now play with other children because the local playground has been made accessible to all. It can support children like Frinpali, a seven-year-old boy who uses a wheelchair and now receives appropriate education in Burkina Faso because his school has been made accessible. This toolkit has been conceived as an instrument to facilitate the dialogue with partners and the involvement of organizations of persons with disabilities (OPDs) on accessibility-related issues. And it has been developed with UNICEF's current and future employees with disabilities and other organizations in mind, so that the facilities they work in are made more accessible and inclusive for all.

This Toolkit on Accessibility: Tools to apply universal design across premises and programmes and promote access for all was developed to help UNICEF programmes and operations to become more accessible. It facilitates dialogue with partners, including OPDs on accessible construction.



Nine-year-old Amal plays on the seesaw in the new inclusive playground in her school in Zaatari refugee camp, Jordan where she is in third grade.

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Frinpali, a 7 year old boy who is using a wheelchair, and his friend Hassan at the playground of their school in Fada, in eastern Burkina Faso.

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Structure of the toolkit

The toolkit is divided into seven sections and one Toolbox:

- ✓ **Section A. Advocacy for accessibility:** suggestions on how to advocate for accessibility and how to address common objections and preconceived ideas
- ✓ **Section B. Programme-related buildings:** an overview of accessibility issues in programme-related activities and in managing accessibility activities at the programme level
- ✓ **Section C. Accessibility in emergencies:** an overview of how accessibility should be taken into account in emergencies and disaster preparedness
- ✓ **Section D. UNICEF and United Nations common premises:** support for managing accessibility improvements in UNICEF offices around the world
- ✓ **Section E. Accessibility assessments:** insight on how to conduct accessibility assessments regardless of the specific circumstances
- ✓ **Section F. Organization of accessible events:** suggestions on how to organize accessible events
- ✓ **Section G. Accessibility checklists:** 17 checklists to use during accessibility assessments
- ✓ **Toolbox:** a repository of useful tools, documents and examples for accessibility activities, such as terms of reference or samples of assessment reports

This Accessibility Toolkit offers information on how to build or adapt infrastructure both in **UNICEF-supported programmes** and in **UNICEF premises**, for use by all, including persons with disabilities. Its contents can also be applied to non-UNICEF construction processes and facilities as it takes into consideration international standards.

The guidance provided can be used to enhance and promote accessibility when **planning and designing the new construction** of programme facilities and infrastructure both in development and humanitarian contexts, and when **upgrading or adapting existing infrastructure**.

To summarize, information can be used at different points in the accessibility journey, such as:

1. Planning and designing UNICEF's offices, guest houses and other buildings



2. Planning and designing programme-related facilities
3. Remodelling, renovating, extending or repairing UNICEF's offices, guest houses and other buildings
4. Remodelling, renovating, extending or repairing programme-related facilities and premises
5. Selecting facilities for leasing, renting or hosting conferences and events
6. Managing and setting up humanitarian and emergency programmes
7. Preparing construction contracts and agreements
8. Monitoring and evaluating projects involving construction, renovation or repairs
9. Conducting accessibility assessments of existing facilities or premises
10. Advocating for accessibility with donors and partners
11. Developing a curriculum for trainings on accessibility or accessible construction processes

ACCESSIBILITY IS EVERYONE'S TASK

To enable persons with disabilities to access and use a facility with safety, comfort and dignity, the built environment not only must be physically accessible but the relevant personnel must be aware of accessibility-related issues and how to communicate and assist persons with disabilities. The personnel may include people who are in charge of security at entrances and at the reception and of facilities management, as well as those involved in emergency evacuation, etc. While this toolkit addresses issues related to physical accessibility, simultaneous actions are also required to sensitize and train key personnel on the inclusion of persons with disabilities. The following videos developed by the Disability Section could be useful in this regard:

- ✓ Disability Orientation, <https://sites.unicef.org/disabilities/index_66434.html>, accessed 4 November 2021
- ✓ Inclusive Communication Module, <https://sites.unicef.org/disabilities/index_90418.html>, accessed 4 November 2021

Target audience

While this toolkit is primarily for UNICEF employees involved in construction activities, operations focal points or programme colleagues in charge of construction, it can also be useful for UNICEF partners, other United Nations agencies, OPDs, non-governmental organizations, local authorities and other stakeholders.

This toolkit contributes to the implementation of the [United Nations Disability Inclusion Strategy](#) and helps to achieve and exceed most of the strategy's indicators: lack of physical accessibility, specifically recognized as one of the barriers to inclusion in Indicator 6 on Accessibility, 6.1 on Accessibility of conferences and events, Indicator 7 on Reasonable accommodation and Indicator 5 on Consultation with persons with disabilities. The toolkit helps to report on United Nations Country Team scorecards and to build the capacity of implementing partners on accessibility.



Bilal Mohammed, 12, signs during his class in the Inclusive Education Program in Mora, in the Far North of Cameroon. He is in class 5 and his dream is to become a photographer.

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Frameworks and approaches

■ Convention on the Rights of Persons with Disabilities

The Convention on the Rights of Persons with Disabilities (CRPD)¹ is an international human rights treaty of the United Nations intended to protect the rights and dignity of persons with disabilities. It was adopted on 13 December 2006 and describes human rights frameworks linked to accessibility, aspects of universal design, reasonable accommodation and international standards for accessibility. UNICEF's existing commitments and policies to promote accessibility are aligned with the CRPD.

The accessibility of spaces and places determines the extent to which everyone – including persons with disabilities, older persons and children – can live, work and learn independently and participate fully and equally in society. Equal access to transportation, media, information and communication technologies, and public services and facilities, such as schools, libraries and town halls, facilitates the participation of persons with disabilities, in both urban and rural communities. Accessibility is also critical in emergency contexts, such as refugee camps, to ensure access to humanitarian services and facilities.

As of October 2021, 184 countries have ratified the CRPD and, increasingly, countries around the world have adopted standards, codes and laws to mandate accessibility, in line with CRPD requirements.

Accessibility is one of the primary principles of the CRPD, set out in article 3 as a vital precondition for the effective and equal enjoyment of civil, political, economic, social and cultural rights for persons with disabilities, for example to health, education, information and communication. Other CRPD articles related to accessibility are article 9: Accessibility; article 19: Living independently and being included in the community; article 24: Education; and article 30: Participation in cultural life, recreation, leisure and sport.

Universal design

In the 1980s, the American architect Ron Mace coined the term 'universal design', which means good design that benefits everyone.² Universal design is defined in the CRPD as "the design of products, environments, programmes and services to be usable by all people, to the greatest possible extent, without needing adaptation or specialized design" (article 2).³



Seven principles underpin the concept of universal design, summarized as follows:

- 1 Equitable use:**
Providing the same means of use for all users, with and without disabilities
- 2 Flexibility in use:**
Accommodating individual preferences and abilities, such as left- or right-handedness
- 3 Simple and intuitive use:**
Ensuring easy to understand utilization, including for people with low literacy
- 4 Perceivable information:**
Communicating key information clearly and in multiple ways
- 5 Error tolerance:**
Minimizing hazards and adverse consequences of accidental actions
- 6 Low physical effort:**
Requiring little operating force to use
- 7 Size and space:**
Providing appropriate space for reach and use, if seated or standing

The outcome of using universal design is that environments, buildings and products are inclusive of, usable by and accessible to everyone, to the greatest possible extent, including children, adults and older persons with and without disabilities, pregnant women, parents with children or using baby strollers, and people carrying heavy equipment, suitcases, groceries, etc.

The concept of universal design applies to almost every area of life. While this toolkit focuses on the accessibility of infrastructure and spaces, the concept also applies to many other areas, programmes and services, such as mobility (e.g., accessible cars, buses or trains; inclusive bus stations; accessible communication on mobility-related web platforms), communication (e.g., inclusive events, sign language interpretation; meetings or lessons; easy-to-read publications; accessible posters) and information and communication technology (e.g., accessible web services and mobile apps; audiovisual content with captions and transcriptions; accessible files and software).



Accessibility is one of the core elements of the United Nations Disability Inclusion Strategy. While it is emphasized in all four pillars, accessibility is included also in specific dedicated Indicator 6.



The accessibility continuum

The accessibility continuum is a concept that describes the experience of children, adults with disabilities and older persons departing from their homes, using pathways, crossing roads and taking transportation to reach, enter and use services and facilities. These facilities can be libraries, public meeting halls, sports fields, health care facilities, courthouses, marketplaces, conference rooms, office buildings, etc. A continuous route means that circulating through it is safe, unrestricted and possible using a wheelchair, a walking frame or a service dog, with no obstacles or barriers blocking the way. Such a route must be continuous because, like in a chain, if one link is broken, the chain is compromised.

Four steps ensure the accessibility continuum: reaching a facility; entering a facility; moving around a facility; and using specific features of a facility.⁴ These align with the RECU methodology that stipulates that accessible facilities should be **easy to reach, enter, circulate and use**.⁵

Planning for an accessible environment requires a broad vision of the accessibility continuum perspective. For example, if the route from home to school is accessible for a child who uses crutches but there are stairs at the school entrance and classroom doors are hard to push and pull, the child will have difficulty entering the school or learning and participating in activities with his/her peers.

Similarly, if a UNICEF staff member using a wheelchair has an adjustable desk, an accessible work space with appropriate doorway sizes and accessible toilets, he/she will be able to work on an equal basis with others. However, if he/she is unable to independently access the building because there is no accessible parking space, drop-off zone or kerb (ramp) to get on the sidewalk, the overall accessibility of the workplace is compromised.

At least 10 common pitfalls can be avoided or remedied, often at low or no cost, to achieve an accessibility continuum.



They include the following:

Common pitfall	Plan or remedy
1. Doors are too narrow and the doorway cannot be entered by a standard or larger wheelchair	✓ Design wide doors and/or change the latches on the doors to allow larger openings
2. Entrances have steps only	✓ Install a ramp or consider a lifting platform
3. Ramps are installed but they are steep and unsafe	✓ Consider going beyond the standards and applying recommended values for a gentle ramp slope (the less steep the better, even if local regulations allow steeper slopes)
4. Ramps are installed but key safety features are missing , with no landing space at the top or bottom to move/turn in a wheelchair, or without handrails or kerbs	✓ Add appropriate handrails; make sure a flat, wide and sufficiently long square circulation or landing space allows room to safely open a door or create momentum to move up the ramp
5. An accessible typical building plan is used but the specifications have not been tailored to the actual context , so the slope is steeper or the entrance path is dangerously slanted such that a wheelchair could fall sideways or backwards	✓ Always take the actual environment into consideration, even when using a 'standard' building plan; the nature and topography of the area might affect the accessibility of the overall design
6. Accessible toilets exist but the door opens inwards instead of outwards , which takes up needed moving space	✓ Make sure the toilet door opens outwards and that there is enough moving space in and around the bathroom



Common pitfall	Plan or remedy
7. Accessible toilets exist but they are used as storage space or kept locked, so they are unusable	✓ Raise awareness of the need for accessible toilets to always be available, without needing to request access or having to move things out of toilets
8. The main building is accessible but the pathways leading to it are inaccessible/unreachable or unsafe, for example, unmaintained or steep, or with stepped paths, slippery tiles or construction in or across the pathway	✓ Remember that persons with disabilities must also be able to reach a building; create safe, continuous step-free paths and engage with urban planning officials and people who are blind to review the implemented designs and solutions
9. The pathway leading to the playground or office is accessible and safe but there is fixed furniture at arrival, so persons using a wheelchair do not have room to use the table or area	✓ Use light furniture that can be moved easily or, where furniture is fixed, make sure that it meets measurements that allow comfortable access and usability, including for persons using a wheelchair or who are blind
10. The building, pathways and toilets are physically accessible for persons using a wheelchair but no clear, large signs indicate orientation, so the main buildings and features are difficult to identify and reach	✓ Use clear, large-font, easy-to-read wayfinding signs with high visual contrast and pictograms to make it easy for people to navigate through venues and spaces without having to ask for assistance

Other considerations to promote inclusion include:

Welcoming, respectful attitudes – If a school is physically accessible but the teacher has a negative, discriminatory attitude and does not want to teach a child with a disability, unless the teacher's attitude is changed, the child's access to education will be limited. Attitudes can be improved through role models, interaction with other teachers and students with disabilities, experiential training or campaigns, and programmes to transform harmful social norms.

Culturally appropriate technical resources or assistive devices – If a school is physically accessible but a child with mobility impairments does not have a wheelchair to reach it, or if no pedagogical tools and assistive devices have been adapted to support children who are blind (such as Braille devices or screen-reading software), some children may not attend school at all. Some of these gaps can be filled through access to reasonable accommodation.

Technical accessibility standards

Many of the technical specifications in this toolkit are based on International Organization for Standardization (ISO) standards, developed by a committee of experts. In particular, ISO 21542:2011 'Building construction – Accessibility and usability of the built environment' applies to construction and the modification of new and existing buildings and is available to UNICEF staff via the Supply Division.

Related ISO standards cover accessible lifts (4190-1), emergencies (22320), assistive devices such as tactile walking surface indicators (23599) and graphical symbols for public information and accessibility (7001). Some of the common global symbols used for accessibility are available in the Toolbox.

For UNICEF programmes, ISO 21542 can be applied to all construction-related activities. While dimensions in the standard are geared primarily towards adults, it also recognizes that people across age levels have different needs, so it incorporates, for example, accessibility in toilets designed for children. In addition, accessibility for children is considered in this toolkit based on other existing guidelines and principles.⁶

Sustainable Development Goals

As part of the Sustainable Development Goal (SDG) framework,⁷ accessibility of the built environment is referred to explicitly in the targets and indicators for:



Goal 4 – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Target 4.A – Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all

Indicator 4.A.1 – Proportion of schools with access to (a) electricity; (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities



Goal 11 – Make cities and human settlements inclusive, safe, resilient and sustainable

Target 11.2 – By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

Target 11.7 – By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities



In addition, **Goal 6** (Ensure availability and sustainable management of water and sanitation for all) supports the principle of inclusion in the following targets:

Target 6.1 – By 2030, achieve universal and equitable access to safe and affordable drinking water for all

Target 6.2 – By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations



Nupur takes a computer course and regularly attends counselling services. She receives UNICEF funded Conditional Cash Transfers under the supervision of the Department of Social Services, Nilkamal Union, Char Fasson, Bhola, Bangladesh.

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New Urban Agenda

In 2016 during Habitat III, the United Nations Conference on Housing and Sustainable Urban Development, global leaders came together in Ecuador with local governments, mayors and constituency groups to establish the New Urban Agenda. The New Urban Agenda commits governments to promoting:

- ✓ quality public spaces that are safe, inclusive, accessible and green
- ✓ accessible and well-connected infrastructure
- ✓ adequate investments in protective, accessible and sustainable infrastructure and service provision systems

The New Urban Agenda emphasizes the importance of process and implementation in a “participatory manner”, which considers “innovative, resource-efficient, accessible, context-specific and culturally sensitive sustainable solutions”.⁸

In 2018, as a follow-on to the Habitat III conference, the World Urban Forum in Malaysia issued the Kuala Lumpur Declaration, with an explicit paragraph on universal design, committing governments to “adopt accessibility and universal design as core principles into national, subnational and local action plans for implementing the New Urban Agenda through inclusive, accessible and participatory processes and consultations”.⁹

United Nations commitment to accessibility – UNDIS

During the twelfth Conference of States Parties to the Convention on the Rights of Persons with Disabilities, United Nations Secretary-General António Guterres launched the [United Nations Disability Inclusion Strategy \(UNDIS\)](#).

The policy establishes the highest levels of commitment and a vision for the United Nations system on disability inclusion for the next decade, and aims to create an institutional framework for the implementation of the CRPD and the 2030 Agenda for Sustainable Development, among other international human rights instruments and development and humanitarian commitments.

The accountability framework tracks the implementation of the policy for the entire system. It facilitates the assessment of progress and gaps in the work of the United Nations on mainstreaming disability inclusion with a view to advancing system-wide planning and action, promoting synergies and reducing duplication. The accountability framework comprises two related components: an entity accountability framework and

a United Nations country team accountability scorecard on disability inclusion. Each component includes a set of common system indicators focused on four core areas: leadership, strategic planning and management; inclusiveness; programming; and organizational culture.

Accessibility is one of the core elements of the UNDIS. While it is emphasized in all four pillars, accessibility is included also in a specific dedicated indicator.

UNICEF commitments to accessible programmes and premises

■ UNICEF executive directives

Two executive directives issued by UNICEF relate to disability and inclusion. The first, CF/EXD/2011-005 on disability, sets out the minimum requirements for the accessibility of UNICEF premises and procedures for employing staff with disabilities. A disability accommodation fund was also established by UNICEF to support staff with disabilities.

The second directive, the Executive Directive on Accessibility in UNICEF's Programme-Related Construction Activities, was issued in December 2017 (CF/EXD/2017-004) to systematically address issues related to the accessibility of the physical environment in programmes. This directive requires UNICEF to adopt accessibility and universal design in all projects with governments and partners across all programme areas, and applies to all new construction, remodelling, extensions or repairs both in development and humanitarian contexts. As stated in the directive, "Accessibility is an enabler that allows children and adults with disabilities to enjoy their rights and entitlements. It is also a precondition for children and adults with disabilities to live independently and participate fully and equally in society".

This executive directive supplements the existing requirements for the accessibility of premises in *Property and Equipment Policy, Supplement 6 – Guidelines for Premises Management* and the UNICEF Greening and Accessibility Fund (GrAF) procedures. The GrAF was established in 2015, generated by a 3 per cent air travel surcharge, with 2 per cent of the fund to be used to finance eco-efficiency projects and 1 per cent to be used for accessibility projects (*see also [Section D](#) of the toolkit*).

Accessibility is an enabler that allows children and adults with disabilities to enjoy their rights and entitlements. It is also a precondition for children and adults with disabilities to live independently and participate fully and equally in society.

PROGRAMME-RELATED BUILDINGS



Nine-year-old Amal plays with friends on the seesaw in the inclusive playground in her school in Za'atari refugee camp in Jordan.

Programme-related buildings

Accessibility is an essential aspect of UNICEF's programme-related activities. The needs of persons with disabilities should always be taken into account, both in emergency and in development activities, including whenever infrastructure or equipment is concerned. Depending on the intervention's complexity, the requirements can be connected to the design and construction of new buildings or to the renovation of existing ones.

SECTION B of this toolkit aims to support UNICEF staff and partners in their efforts to ensure accessibility in all construction projects across all programme areas, including education, child protection, and water, sanitation and hygiene (WASH).

Part 1 provides examples that are accessibility-specific to the various sectors of UNICEF's work, such as education, WASH, child protection and health. *NB: Accessibility within humanitarian action is addressed in [Section C](#) of this toolkit.*

Part 2 outlines UNICEF's overall procurement protocol and the actors involved in programme-related accessibility interventions.

Part 3 includes specific guidance for the construction of NEW programme-related buildings.

Part 4 includes specific guidance for accessibility improvements in EXISTING programme-related buildings.



Samira, who is blind, studies in an inclusive school and passed her entrance exams, scoring third highest in her class.

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Part 1: Sector-specific accessibility examples

Accessibility is a cross-cutting condition for inclusion. It concerns the way infrastructure is designed and built, communication is organized and delivered, public events are organized, etc. Therefore, accessibility principles are common to all sectors, and the same recommendations are applicable in almost every situation.

All the same time, it is important to contextualize and adapt the proposed solutions according to the available materials, resources, capacities, deadlines and specific needs.

Education

In development and humanitarian contexts, UNICEF may be directly or indirectly involved in constructing or maintaining education-related facilities, such as schools, preschools, playgrounds, sports facilities, libraries and temporary learning spaces.

Accessibility for schools goes beyond making sure that children with disabilities can access the facilities. Education facilities are often important cultural and community gathering places, where school events, sports competitions, ceremonies, meetings or elections may be held. In humanitarian contexts, school buildings may also be used to provide information to the community and services or as shelters or distribution centres.

School premises that are constructed or renovated to integrate accessibility features make it possible for children, parents, teachers, grandparents and other relatives with disabilities to attend community events on an equal basis with others.

When integrating basic features of accessibility in education-related buildings, the same principles as for any other facility should apply and should follow the RECU (reach, enter, circulate and use) methodology. Specific examples include:



A young girl in an inclusive classroom in General Education School #3, Altai, Gobi-Altai province, Mongolia.

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Schools

- External wayfinding panels in the school courtyard to locate the classes, latrines, teachers' rooms, etc.
- Accessible identification panels close to the classroom doors
- Accessible toilets/latrines that are easy to find and reach from classrooms
- Adaptation of the size and design of latrines to their independent use by children using a wheelchair
- Adaptation of water fittings (taps, fountains, handwashing stations, pumps) to children with disabilities
- Appropriate heights of blackboards and wall mounted supports to help children with mobility impairments to stand at the blackboard
- Sufficient circulation space in the classrooms between tables
- Adaptation of classroom furniture (tables with appropriate height, chairs with backrest and armrests, etc.)
- Sufficient illumination in the classrooms
- Adaptation of education methods and materials to children with different abilities

Preschools

- Adaptation of the above-mentioned measures to the age and size of children, etc.

Playgrounds¹⁰

- Accessible connections between playing equipment (pathways)
- Floor finishes (in appropriate materials, that are flat, even, with no obstacles, etc.)
- Adaptation of existing playing equipment or creation of completely accessible new structures (swings or roundabouts accessible for children using a wheelchair, swings fitted with backrests, armrests and straps, slides equipped with extra side rails, raised sandboxes with appropriate knee clearance for children using a wheelchair, etc.)



- Presence of accessible resting areas for children and parents (benches, quiet spaces, etc.)
- Playing equipment that combines playful activities with stimulation and development (visual equipment, sound equipment, equipment that develops prehension or that enhances mobility, etc.)

Sports facilities

- Accessibility to players but also to the public
- Accessible changing rooms and toilets

Libraries

- Adaptation of book request systems
- Adaptation of the height of shelves for consultation
- Adaptation of learning equipment (easy read documents, books in various formats including DAISY, e-book, etc.)

Temporary learning spaces

- Proximity to accessible restrooms
- Distance from noisy streets
- Easy accessibility from the main road

Child-friendly spaces (in humanitarian settings)

- Accessibility of the space, whether indoor or outdoor (refer to the above recommendations for education-related facilities)
- Proximity to accessible restrooms
- Adaptation of learning materials, following the recommendations for libraries
- Adaptation of furniture

- Adaptation of playing areas and equipment, following the recommendations for playgrounds

For further support on accessible design, please refer to the checklists in [Section G](#) of this toolkit.

In addition to modifying the access to a building and bathroom, to adhere to the principles of universal design and to allow full access, school learning materials must also be provided in accessible formats, and teachers may need training to work with children with disabilities and learning styles. Assistive devices, such as appropriately sized wheelchairs, crutches or magnifying glasses, may need to be made available.¹¹



In Bosnia and Herzegovina, the It's About Ability campaign calls for access to social protection, inclusive services, education and creating a more inclusive environment for all.

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CASE STUDY: ACCESSIBLE SCHOOLS IN INDIA



In 2016, UNICEF India worked with the Accessible India Campaign and Samarthyam, a national centre on accessible environments, to develop guidance on making schools inclusive and accessible for children with disabilities. Along with information based on India's national codes and building regulations on accessibility, the content is backed by Samarthyam's experience of conducting accessibility audits in hundreds of schools across the country.

The guidebook provides a School Accessibility Checklist and practical tools to engage parents, school administrators, teachers and students with disabilities in understanding accessibility and to participate in assessments. The assessment, as described in the publication, "is not simply an exercise in checking and counting boxes in the checklist. After identifying areas for improvement through the checklist, use the guidebook to find out how you can make your school more accessible."¹²

Water, sanitation and hygiene (WASH)

For development and humanitarian WASH programmes, UNICEF is involved in the construction and refurbishment primarily of toilets, showers and handwashing facilities in schools, communities, health care facilities, camps for refugees and internally displaced people, and child-friendly spaces, as well as water points, including pumps, tap stands and distribution points.

Inaccessible water and sanitation facilities can affect children with disabilities beyond meeting basic hygiene and water needs.¹³ Toilets, latrines or washing facilities that are inaccessible can increase the risk of children and adults with disabilities having to defecate in poorly lit or secluded areas or crawl through unclean facilities. This is harmful and leads to potential:

- Injuries, infections or reduced health outcomes
- Abuse (particularly for women and children with disabilities)¹⁴
- Theft or damage of assistive devices or wheelchairs if they have to be left unattended



Hashim, 14, who has a cognitive disability, is assisted by his mother at a disability-friendly latrine in Camp 16, Balukhali refugee camp in Cox's Bazar, Bangladesh.

© UNICEF/UNI346106/



Instead, having accessible facilities promotes dignity, independence, health and safety. Both rural and urban water and sanitation facilities can integrate accessibility at water points, showers and latrines, including by making designated accessible toilets available and incorporating universal design features. It is important for girls with disabilities to have access to facilities that are suitable to manage menstruation in hygienic conditions and with dignity. The provision of accessible bathrooms/toilets and waste bins can help girls with disabilities to avoid dropping out of school.

Integrating basic features of accessibility in WASH-related infrastructure should apply the same principles as for any other facility and should follow the RECU (reach, enter, circulate and use) methodology. Specific adaptations include:

Toilets

- Appropriate internal manoeuvring surface for children using a wheelchair
- Appropriate toilet seat or squat toilet with self-standing handrails
- Grab-bars on the walls to facilitate movements
- Removal of any threshold at the bottom of the entrance door
- Accessible entrance (sufficiently wide door, opening outwards, lever-type handle, easy-to-use lock, extra handle to facilitate opening/closing, etc.)
- Accessible ramp before the entrance if needed
- Wayfinding panels to locate the toilet from a distance
- Accessible identification panel close to the toilet's entrance
- Implementation of gender responsive accessible design: separated accessible toilets for women and girls (whenever possible and appropriate) with space available for hygiene materials (disposal of sanitary pads, washing of reusable ones, etc.), with supplies, such as soap, placed at a height that can be reached by girls and women using wheelchairs (the suggested height is 600–700 mm above the floor)



Handwashing facilities

- Tippy-taps also operable without using the foot
- Taps and handles at an appropriate height and easy to use
- Accessible access area around handwashing stations (flat, even, not muddy or sandy, etc.)
- Clear signposting to identify and locate the facility

Showers

- Removal of any raised shower trays
- Operable and accessible shower seat
- Appropriate height and type of shower fittings
- Easy-to-operate shower handles

Water points, including pumps, tap stands and distribution points

- Handpumps with accessible handles
- Accessible ramp to reach the platform where the pump is installed (if any)
- Sufficient manoeuvring space around the pump
- Raised supports for water buckets/containers
- Easy-to-operate tap handles
- Accessible access area around water points (flat, even, not muddy or sandy, etc.)
- Clear signposting to identify and locate the facility

For further support on accessible design, please refer to the checklists in [Section G](#) of this toolkit, and for further insights to [Inclusivewash.org.au](https://inclusivewash.org.au).



As per the UNICEF Executive Directive, “In some cases (e.g., WASH constructions) complying with standards of accessibility may require going beyond the basic standard design, implying higher costs. In situations when all units cannot be made accessible, a minimum number of units should comply with accessibility standards based on the nature of the facility and the population it serves. For example, [when gender separated accessible toilets are not possible or practical] ensuring that there is at least one accessible unisex latrine in every school.”¹⁵ When applying a universal design approach, an accessible latrine may also be used by teachers.¹⁶ In most countries, standards dictate that there should be separate toilet blocks for boys and girls, often with shower facilities and with accessible features in each toilet/shower area for each gender. This is in line with the UNICEF Gender Action Plan, which aims by 2021 to have 60,000 schools with separate bathrooms for girls and boys. Referring to local standards on accessible constructions if they are available, or to International Organization for Standardization (ISO) standards, may be required.

CASE STUDY: ADAPTED LATRINES



An accessible latrine add-on product that supports persons with disabilities is available through the UNICEF Supply Division.¹⁷ The product is designed to replace squatting plates, commonly used in humanitarian contexts.

This add-on component can be installed inside the latrine directly above the pit. The raised seat together with the side rails make it easier for persons with

disabilities to use the toilet. However, this component has been adapted for persons with mobility impairment but not for persons using a wheelchair (unless specific measures are taken, such as, for example, if the internal space of the latrine is larger than the slab itself and the slab does not create a threshold). Similarly, other factors would have to be taken into account to make a latrine fully accessible, including how the latrine can be reached, if there are steps at the entrance, the type of handles and locks used on the door, etc.

- **To learn more:** Gender-specific accessible toilets are often required. For example, the UNICEF WASH in Schools guidelines developed in Lebanon require that each floor of a school have at least two accessible, separate, gender-specific toilets, or 10 per cent of all toilets be adapted to the needs of children with disabilities.¹⁸



Child protection

In development and humanitarian child protection programmes, UNICEF may be involved in the construction, reconstruction or facilitation of various infrastructure. Integrating basic features of accessibility in child-protection-related infrastructure should apply the same principles as for any other facility and should follow the RECU (reach, enter, circulate and use) methodology. Specific adaptations include:

Child- and baby-friendly spaces

- Furniture adapted to the age and size of children
- Removal of any floor finishes that can hinder movements (carpets, rugs, mats)
- Sufficient manoeuvring space around furniture
- Seats with backrests and armrests
- Nearby accessible toilets
- Smaller, cosier and more private quiet spaces within the main space

Child-friendly interview rooms

- All the above

Social service centres

- All the above

Alternative care facilities¹⁹

- Furniture adapted to the age and size of children
- Removal of any floor finishes that can hinder movements (carpets, rugs, mats)
- Sufficient manoeuvring space around furniture
- Accessible toilets



The Committee on the Rights of Persons with Disabilities finds age-sensitive and adequate support services for girls and boys with disabilities to be 'of vital importance for the equal enjoyment of their human rights'.



For support on accessible design, please refer to the checklists in [Section G](#) of this toolkit.

In addition, UNICEF works to transition children and youth with disabilities from residential care facilities to community-based inclusive care and services, in line with commitments regarding deinstitutionalization. This involves developing support programmes for and by families, establishing accessible community-based alternatives, including child-centred public services within homes, shelters and schools, with the active involvement of parents and community organizations.

The Committee on the Rights of Persons with Disabilities finds age-sensitive and adequate support services for girls and boys with disabilities to be “of vital importance for the equal enjoyment of their human rights”.²⁰ This includes accessible services, inclusive adoption policies, access to information and support to families of children with disabilities to prevent institutionalization and to ensure “equal opportunities to children with disabilities”.²¹

CASE STUDY: MAKANI, ACCESSIBLE SPACES FOR CHILDREN AND YOUTH IN JORDAN

An innovative programme in Jordan called Makani (My Space) adapted existing child-friendly spaces to provide learning opportunities, psychosocial support and life skills training for children and youth.

The Makani project took a comprehensive approach to mandating the accessibility of toilets and rooms in child-friendly spaces. Accessibility standards for the centres cover entranceways, pathways and navigation to create an environment that is safe and supportive for all.

Since 2017, UNICEF has supported 233 Makani sites in refugee camps and host communities, all of which participated in a certification process that ensures ISO accessibility standards are met.²²



Health, HIV/AIDS and nutrition

UNICEF is engaged, directly or indirectly, in initiatives to build or adapt various facilities related to health, HIV/AIDS and nutrition. Integrating basic features of accessibility in this infrastructure should apply the same principles as for any other facility and should follow the RECU (reach, enter, circulate and use) methodology. Specific adaptations include:

Health care facilities and clinics

- Appropriate, accessible and child-friendly orientation systems
- Accessible reception and waiting areas
- Furniture adapted to the size and age of children (e.g., height adjustable examination tables)
- Accessible toilets
- Accessible information materials (health sensitization, schedule for services, useful contacts and referrals, etc.)
- Tactile pathways as guides around the facility

Primary and community health centres

- All the above

Birthing facilities

- All the above

Baby-friendly spaces/breastfeeding rooms

- All the above

Immunization sites

- All the above

Food distribution centres/sites to manage severe acute malnutrition

- Preferential lanes for persons with disabilities
- Accessible resting areas
- Benches and resting spots along the path to and within the site
- Transportation aids (wheelbarrows or human help)
- Items stocked in containers easy to grab and handle

For further support on accessible design, please refer to the checklists in [Section G](#) of this toolkit.

Children, youths and adults with disabilities have the same health needs for vaccinations, routine check-ups and services as persons without disabilities. In addition to routine health needs, some babies, children or adults with disabilities may require specialized health or rehabilitation services.

All health-related facilities, services, centres, clinics and hospitals need to have safe, accessible entrances, rooms and toilets that can be used by people with disabilities, temporary illness or injuries. Clear, large signs and information with pictograms, sign language, audio announcements and Braille will help people who are blind, deaf, deafblind or with intellectual disabilities. Providing quiet rest areas can also benefit people with intellectual or psychosocial disabilities.

Accessible primary health support and personal support care for girls, women, boys and men with disabilities can reduce the risk of their acquiring secondary conditions. Diagnostic facilities and health or HIV/AIDS clinics that have not integrated accessibility features could lead to delays or discrimination in access to treatment, counselling and care.



Ilídio has made significant progress after physiotherapy and is in school in Mozambique. He reads, writes and has many friends.

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Humanitarian action

For further information about accessibility in humanitarian action, see [Section C](#) of this toolkit.

The World Health Organization's 2013 guidance note on disability and emergency risk management for health states that, "when planning for health facilities and both permanent and temporary shelters, universal design features should be considered and incorporated to the *maximum extent possible* to facilitate access by all people experiencing disability, including elderly people".²³ The checklist for minimum actions asks the question: "Has access for people with disabilities been considered in the planning, design and development of health facilities?"²⁴



A father holding his daughter who was born with microcephaly at Vanuatu Society for People with Disabilities (USPD), Port Vila, Vanuatu.

© UNICEF/UN0224265/SOKHIN



Humanitarian interventions in which UNICEF is involved in relation to construction may include:

- Child-friendly spaces
- Temporary learning spaces
- Baby-friendly spaces
- Temporary health facilities
- Water points and distribution sites
- Toilet and shower facilities

For further support on accessible design, please refer to the checklists in [Section G](#) of this toolkit.

The accessibility of temporary and permanent health care facilities as well as other facilities where nutrition and health services are delivered is important to make sure that everyone in need of essential and life-saving health and nutritional services can receive support to promote and sustain good health.

Having access to humanitarian facilities and services is crucial. For example, parents who are blind may not be able to access nutrition services or feeding programmes if they are in a building without tactile information or guidance information. Children using a wheelchair may be excluded from child-friendly activities and psychosocial support in a refugee camp if the space has inaccessible doorways that they cannot pass through or there are stairs at the entrance.

UNICEF has produced a guidance series with information on the inclusion of children with disabilities in humanitarian action that includes considerations of accessibility.²⁵

- **To learn more:** Accessibility, including of clinics and shelters, is part of the Sphere Project Humanitarian Charter and Minimum Standards in Humanitarian Response and promotes good health and better access to participate in schools and community life for all. The guidelines for child-friendly spaces in emergencies asks the following question: “Is the site accessible for girls, children with disabilities, and other vulnerable children?”²⁶



Part 2: UNICEF's procurement for programmes:

Procedures and partners

While Part 1 of this booklet presents accessibility considerations and examples of UNICEF construction across thematic areas such as education, child protection, WASH and health, Parts 2, 3 and 4 explore procedural and methodological considerations for programme-related infrastructure.

Policies and procedures

When dealing with the construction of a new accessible building or with the accessible refurbishment of existing facilities, UNICEF staff involved in these projects must refer to a series of national and internal standard policies, procedures and tools. Among them are a few that specifically concern accessibility:

United Nations Disability Inclusion Strategy

[This Strategy](#) includes a policy and an accountability framework with benchmarks to assess progress and accelerate change on disability inclusion. The policy establishes a vision and commitment for the United Nations system on the inclusion of persons with disabilities. Indicator 6 specifically focuses on Accessibility, while other indicators, including 5 (Consulting with persons with disabilities) and 8 (Procurement) provide further context.

Accessibility Directive for Programmes

The Executive Directive on Accessibility in UNICEF's Programme-Related Construction Activities (CF/EXD/2017-004) requires UNICEF to adopt accessibility and universal design in all projects with governments and partners across all programme areas, and applies to all new construction, remodelling, extensions or repairs both in development and humanitarian contexts.



Engaging with organizations of persons with disabilities is crucial to ensure the success of all accessibility-related activities.



Contract Review Committee

The Contract Review Committee provides the UNICEF authorized official with a competent, independent and unbiased review of proposals (including the process that led to the proposals) for contracts, purchase orders or agreements involving financial commitments above the limits established for each office.²⁷

Partners

Engaging with organizations of persons with disabilities (OPDs) is crucial to ensure the success of all accessibility-related activities. Recommendations on how to do so are provided in the dedicated chapters in this section.

It is also essential to hire designers and builders with experience in accessibility and universal design. Recommendations on how to do so are provided in the dedicated chapters in this section.



Ten-year-old wheelchair user Lulia attends the mainstream school in the village of Peresecina in the Republic of Moldova.

© UNICEF/UN04436/



Part 3: Guidance for NEW programme-related buildings

The accessibility considerations and participation of persons with disabilities apply to construction across all UNICEF programmes and premises,²⁸ throughout the stages of construction.

When launching the construction of a new building in the frame of a UNICEF programme or project, a good practice is to follow a sequence of steps to make the intervention as participatory, effective and sustainable as possible. These steps are as follows:

A. PRELIMINARY ACTIVITIES:

- Preliminary planning and budgeting
- Participation and sensitization
- Definition of project needs: Brief/terms of reference (ToR)
- Identification and training of the dedicated team

B. DESIGN AND IMPLEMENTATION:

- Production of the technical documents (drawings, BoQs, technical specifications, etc.)
- Construction procurement/tender
- Implementation of the accessibility works

C. QUALITY ASSURANCE AND MONITORING



A. PRELIMINARY ACTIVITIES

■ Preliminary planning and budgeting

Planning is an essential precursor to successful construction projects, which is also the case regarding accessibility considerations. Accessibility requirements (when infrastructure is involved) should be included as general prescriptions in the planning stages of projects and programmes.

Create provisions for accessibility in the high-level implementation plan

The **high-level implementation plan needs** to detail project staffing and the selection of works consultants and contractors, and to specify the overall implementation strategy related to project staffing, budgets and contract tendering, and award procedures. The plan's section that provides an overview of project staffing should stipulate that accessibility monitoring is part of the responsibilities and ToR of programme managers and staff.

An example of ToRs for construction firms/construction-related staff is available in Annex 1 to this document.

Budget for accessibility

The **overall detailed implementation plan, project budget and detailed design** should incorporate cost estimates for accessibility. As most building codes include accessibility requirements, these costs will be part of achieving code compliance.

External studies indicate that the costs of meeting accessibility standards vary between 0.47 per cent and 2.75 per cent when considered in the planning and design phase of new construction activities.²⁹ Estimating costs and setting aside funding are also helpful for projects seeking to achieve universal design and accessibility at a level that is higher than the local code.

Therefore, it is appropriate to allocate an extra 1–3 per cent of funds for this purpose to make sure the design elements and necessary accessibility features are incorporated. (Please note that this is an estimate, which therefore may vary.) Factors that can affect this estimate include the size of the building, the number of floors, the complexity of functions within the building, the extent to which accessibility has to be taken into account, the location and the availability of materials, etc.

**EXAMPLE 1 (WHEN THE BUDGET IS ALREADY ALLOCATED):**

Available budget for construction = \$10,000

Estimated budget needed for accessibility = 1–3 per cent of \$10,000 = \$100 to \$300

Estimated remaining budget for other construction-related items: \$9,900 to \$9,700

EXAMPLE 2 (WHEN THE BUDGET HAS YET TO BE DEFINED):

Estimated cost of construction = \$10,000

Accessibility budget = 1–3 per cent of \$10,000 = \$100 to \$300

Total cost estimation for accessible construction = \$10,100 to \$10,300

As per the UNICEF Executive Directive, “To be consistent with UNICEF’s focus on equity and social inclusion, programming should be designed to accommodate the needs of children and adults with and without disabilities. To achieve this, in cases where UNICEF engages in construction, accessibility standards need to be included [...]. For construction projects, the design and costing should include accessibility provisions as an integral component and not as an add-on. Wherever applicable, accessibility should be clearly mentioned and budgeted in project proposals.”³⁰

Example budget statement for inclusion in detailed design:

This [XX] project has budgeted [Y per cent, e.g., 1–3 per cent] of costs for accessibility and greening provisions to comply with the international standards as set out in ISO 21542:2011, national building codes and UNICEF Executive Directive CF/EXD/2017-004.

Integrate accessibility in contracting and subcontracting processes

Accessibility requirements should be included in the overall procurement procedures and strategies, so they are valid for every situation.

Approaches to tendering for works or contractors may differ from country to country or context to context. Even in humanitarian contexts, it is possible and appropriate to consider accessibility provisions. As such, it is important to request that meeting accessibility standards be a systematically required condition for every project and programme as per ‘Detailed Implementation Plan’ requirements.³¹ For example:

- **Organizations** bidding for projects that also have a construction component should always be required to ensure that these constructions comply with



accessibility principles. (One suggestion is to add a line in the request for proposals stating that proposals with strong access considerations will be weighed more favourably in scoring.)

- **Engineering firms** bidding for the design of a new construction project or the refurbishment of an existing one should always be required to demonstrate how they plan to integrate accessibility in these designs.
- **Construction companies** bidding for construction or refurbishment works should always be required to fully comply with the accessibility features included in the design.

The **procurement of goods that meet accessibility standards** is another way to ensure that accessibility standards are applied as part of construction-related activities (for programmes or premises). For example, to avoid procuring a set of doors that are too narrow for a person using a wheelchair to enter a classroom or toilet, considering accessibility should be required as part of tendering and procurement such that the project and construction will be made accessible from the beginning, and more sustainably.³²

Incorporate direct and indirect costs in planning and procurement

When budgeting for an accessible refurbishment or new construction, costs to be taken into account concern the physical realization of the works but also all the human resources involved in the design and follow up.

Example of direct costs:

If construction is realized by a general contractor:

- Overall cost of the accessible works (including materials, labour and the company's profits)
- Building fees of provincial planning authorities (where applicable)
- Building permit fees, where applicable

If construction is realized by independent workers:

- Cost of standard materials (concrete, wall cladding, plastering, paint, etc.)
- Cost of specific products and materials related to accessibility (signs with symbols and Braille or grab rails for accessible bathrooms)
- Builders' fees



- Building fees from provincial planning authorities (where applicable)
- Building permit fees, where applicable

Example of indirect costs:

- Fees of project designers/architects who developed the project's technical materials (drawings, bills of quantities (BoQs), technical specifications, etc.)
- Time and expertise of the design team and contractors to undertake preliminary training on accessibility
- Time and expertise of an accessibility consultant (if needed) to appraise the designs and confirm that accessibility features have been incorporated effectively at the drawing stage thorough to implementation and review
- Time and expertise of persons with disabilities and necessary arrangements for consultation
- Time and expertise to address gaps, during and after construction
- Time delays if the sourcing of accessible fit-up products is difficult in a particular country context



At General Education School #3, Altai, Gobi-Altai province, Mongolia, in partnership with local government, UNICEF has created classrooms to include children with disabilities and provide training for teachers, school materials and school furniture.



■ Participation and sensitization

Fostering inclusion is vital to promoting accessibility through a process of interaction and engagement. This section outlines three key ways to promote participation:

- Active participation and engagement
- Inclusive consultation with persons with disabilities as stakeholders
- Training of persons with disabilities

Active participation and engagement

Participation is a primary principle of the Convention on the Rights of Persons with Disabilities (CRPD), with article 3 emphasizing “full and effective participation and inclusion in society”. Consultations that include persons with disabilities as integral stakeholders early on and during implementation will contribute to the success of an accessible construction project as well.

According to the UNICEF Supply Manual, “Inputs and advice must be sought from the government and other stakeholders to identify individual responsibilities and facilitate the ownership throughout the process.”³³ Country offices can request design input by stakeholders with disabilities for example, when designing child-friendly facilities.³⁴ Considering accessibility and integrating input from children and adults with disabilities early in the concept and design phase allow approaches to meet accessibility needs. Participation can also include child-friendly approaches for inclusion.³⁵ It is important to include people with different types of disabilities, as people who are blind will raise different accessibility opportunities than people who use wheelchairs, for example.

In addition, a building’s users will include persons with a diverse range of disabilities (such as physical, mental, sensory or learning impairments). Therefore, persons with different kinds of disabilities should be allowed to provide input and advice to architects, civil engineers or designers who are aware of the concepts of universal design and accessibility. This will contribute to the successful completion of a construction project and will avoid the need to make modifications at a later stage.

Creating time and space for consultation on accessibility considerations at the design stage should be integrated into UNICEF Local Procurement Authorization documents, as required, to prevent the need for retrospective adjustments.³⁶



Inclusive consultation with persons with disabilities as stakeholders

To promote the participation of persons with disabilities in the planning and concept stages, staff, partners and contractors working on UNICEF-funded construction-related activities should undertake inclusive public consultation in accessible venues (i.e., on a ground floor with an accessible toilet). During these consultations, persons with disabilities should be invited and provided with useful information in accessible formats (Word documents or PDFs with heading levels and alt text added to images).

Members of the community (including youth and adults with disabilities, parents of children with disabilities and leaders of OPDs) should be invited to participate in discussions on the identification and understanding of:

- Local needs and priorities
- The design and fit-outs of child-friendly spaces
- Key challenges preventing access to:
 - the transportation system
 - the urban area in the public domain (parks, pathways)³⁷
 - buildings (schools, offices, etc.)
- Opportunities to engage in:
 - construction planning
 - appraisals
 - implementation
 - review processes

Asking stakeholders and partners (including people with disabilities) about local sustainable suppliers distributing accessibility-related equipment, technologies and devices, such as tactile markers or accessible signs, is recommended.

For details on how to choose accessible venues for any type of event, see [Section F](#) of this toolkit.



Training of persons with disabilities

To become effective allies for the enhancement of accessibility, persons with disabilities may need training on how to properly conduct an assessment, identify possible solutions, use these findings to advocate for accessibility, etc. In addition, empowering local communities is an essential condition for long-term development, also in terms of accessibility.

Therefore, project and programme managers may wish to include such training within the project's activities.

■ Definition of project needs: Brief/ToR

Programmatic construction (and therefore accessibility improvements) may be directly or indirectly managed by UNICEF, including through partnerships. When initiating a new construction activity, a first step is for the project team to identify the project brief or ToR with partners and beneficiaries. This document will be handed over to the appointed team of designers who will turn the brief into an architectural project ready to be built.

The brief/ToR of an accessible new construction project should include standard information and specific requirements:

- Information on the building's users (number of users, data on users with disabilities and on the type of disability, priorities in terms of accessibility, etc.)
- The purpose of the building (number and type of rooms, dimensions, surface, etc.)
- Particular requirements and opportunities to 'build better'
- The location of the facility
- Accessibility standards to be followed by the designers (local regulations, ISO standards or a combination, other standards, etc.)

Information on the building's users

For designers, knowing as much as possible about who will use the building they are designing is essential to make the new building as efficient as possible.

The purpose of the building

UNICEF may construct facilities and buildings such as schools, health centres and latrines with simple technical designs, often using concrete and brickwork construction. However, many projects that UNICEF supports are complex, particularly in the context of a humanitarian setting. While most of the buildings will require the same accessibility features, some adaptation will be needed based on the purpose and type of facility (health clinic, school, etc.).

With the support of users with disabilities, clearly defining from the beginning the services that will be hosted by the facility, the dimensions, specific features (security, privacy, accessibility, etc.) is crucial to ensure that the design will be effective and that it will respond to the actual needs of the project's beneficiaries.

Particular requirements and opportunities to 'build better'

New construction should be seen as an opportunity to create something new and 'better', and renovations and reconstructions should be used as an occasion to improve on what was available before in order to 'build it back better'. Even though 'better' is a wide concept (that can sometimes be replaced by 'safer'), it can be used to define every improvement in terms of usability, performance, functionality, etc. Accessibility should naturally be part of what is considered 'better', which means that interventions concerning infrastructure at all stages should be devised taking universal design into consideration.



Tasneem, 10, and Asma, 8, on the trampoline with their friends in the new inclusive playground at their school in Za'atari refugee camp in Jordan.

© UNICEF/UN0251358/HERWIG



As part of the design process, it is helpful to understand and identify the context, aims, routines, needs and priorities of the people who will use each building or facility. For example, the appraisal of a primary school design will consider playgrounds or child-friendly toilets and shared spaces, which may not be part of medical facilities or office buildings.

UNICEF staff and partners can prioritize areas for review or assessment, in line with a sequenced approach that demonstrates a commitment to inclusion and accessibility:

- Use sample or model plans that have successfully integrated accessibility features as a reference for the designers/architects, who will then have to adapt them to the specific project under consideration.
- Make sure that safe exits (egress) and evacuation have been considered in designs; it is vital in construction planning that emergency exits for people who may have difficulty evacuating premises independently, such as people using wheelchairs, be considered at the design and construction planning stages. Accessible exits are usually safer exits. Emergency, fire safety and other crisis-related plans should provide clear and accessible information on leaving and evacuating a building (egress) and provide safe and accessible methods of evacuation, including evacuation chairs.
- Consider flexibility and accessibility when designs change; review and assess accessibility whenever the design and use of a space changes, taking into consideration that when a construction project ends and a building is occupied, the spaces may be rearranged by the users. Make sure spaces, including classroom, town halls and offices, remain flexible so layouts can be revised in the future.
- Promote manoeuvrability and longer-term sustainability with less effort using furniture with wheels that also lock for safety; ideally, architects, construction firms and project managers will engage interior designers and emphasize the importance of accessibility – such as making sure that the surfaces of floors are not covered in rugs that are higher than a certain threshold that could make them a tripping hazard for a child or a person who is blind, or that are difficult to move onto for a person who uses a wheelchair.

The location of the facility

Ideally, the location of buildings and facilities should be convenient to community members and children with disabilities: close to safe and accessible road crossings, pathways and transportation routes. They should be located far from hazardous waste or from areas prone to flooding, and should be as flat as possible to facilitate circulation.

Even though typical designs are often used for similar buildings (a standard plan for a school, for instance), it is important to adapt them to the construction location. For

example, if the chosen location is on a slope with access roads at the top and bottom, designs should be adapted so that the main entrance of the building is uphill to minimize the need for stairs or ramps.

Accessibility standards to be followed by the designers

Regarding design, the **UNICEF Supply Manual** states: “Designs shall observe the accessibility standards defined in the existing national legislation/standards on accessibility. In the absence of national legislation on accessibility (or where national legislation falls short of the standards set out in ISO 21542:2011), the ISO 21542:2011 shall be used as a reference while taking into consideration local context).”³⁸

In addition, UNICEF country offices can contact the Supply Division for information and advice on technical issues related to accessibility and universal design.³⁹

Building codes and standards vary for each country. Countries may, or may not, have local or national building codes, regulations or standards that take accessibility into account. In such cases, or where the standards are insufficient, international standards can be used as a reference, in particular **ISO 21542: Building construction – Accessibility and usability of the built environment**,⁴⁰ while noting that, in general, the ISO design specifications were written based on measurements for adults with no specific considerations for children. ISO 21542 includes technical specifications for design elements, such as circulation within buildings, toilet design, ramp provisions, etc. (UNICEF staff can access ISO 21542 by contacting the UNICEF Supply Division. Note that due to copyright restrictions, ISO 21542 should only be used when developing and reviewing infrastructure design exclusively related to UNICEF programme projects and UNICEF premises.⁴¹)

Based on the ISO 21542 standard, UNICEF developed **Accessible Components for the Built Environment: Technical Guidelines (technical cards for accessible construction)**⁴² to inform the

Boys at Ajugopi Primary School in Adjumani district, Uganda, using a new toilet facility constructed by UNICEF with funds from the Government of Iceland.



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If available, national accessibility standards must be used as a main reference.



construction of programmes and premises. These technical cards are also part of the Supply Manual (see Annex 12 of the Manual). The cards are divided into four activity areas: 1) moving around outside buildings; 2) entering and exiting buildings, including during an evacuation; 3) manoeuvring in and around buildings (around, up and down); and 4) using specific rooms and facilities.

UNICEF's technical cards for accessible construction should be included in the ToR for designers and architects, outlining the key design features to be integrated into programme-related construction and UNICEF premises when designing/appraising any type of building, including:

- Schools
- Offices
- Warehouses
- sporting and conference halls
- Early learning facilities
- Health care facilities
- WASH facilities

It needs to be stressed that, if they exist, national accessibility standards must be used as a main reference. In such cases, the ISO 21542:2011 (and UNICEF accessibility cards) can be used to complete national standards that are not sufficient.

Note that national standards can be even more stringent than those of the ISO. For example, the national accessibility standards of India and Serbia stipulate that the minimum width of a door is 900 mm, whereas the ISO specification is 850 mm.



■ Identification and training of the dedicated team

Include accessibility oversight as a project manager responsibility

Two committees assure the compliance of new construction projects with UNICEF's standards, including accessibility: the Contract Review Committee and the Programme Cooperation Agreement Review Committee.

However, **construction programme (or project) managers should not be unaware of accessibility-related issues: they still have overall responsibility to ensure that accessibility is considered in all project stages and implemented according to quality standards.**

Therefore, construction project managers should:

- Maintain basic **knowledge of accessibility issues** and ensure they participate in deeper training on the topic if the project they manage includes extended construction activities
- Oversee and verify that accessibility for persons with disabilities is part of the **implementation plan from the beginning**, including in the budget and detailed design
- Make sure that the appropriate **technical human resources** are planned and budgeted in the project (architects or engineers), including accessibility experts
- Ensure that **appropriate consultation mechanisms** are in place to involve persons with disabilities and gather their input on priorities and solutions for accommodation and accessibility (in line with existing stakeholder consultation mechanisms)

Ensure the project team's preliminary training

Basic sensitization and training

As mentioned, construction project managers should have at least basic knowledge of accessibility. Other members of the project team, even though not indirectly involved in the construction, should also be aware of the topic.

One activity to sensitize the team could be an **experiential training session on accessibility**. Experiential training involves integrating a component that allows staff to experience their own offices, schools or facilities, or to access a toilet/latrine or cafeteria, while using a wheelchair, while being blindfolded or while their hearing is restricted (for instance by using noise-cancelling headphones).



This kind of role play is extremely useful but it must be very well contextualized and explained to participants so the objective is not misinterpreted. In fact, these activities do not intend to make participants better understand what it means to have a disability but only what it means to be in and circulate within an environment that is not fully accessible while using an assistive device. OPDs, along with accessibility specialists, universities or organizations with expertise in universal design and accessibility, should be involved in running these training sessions as facilitators or experts.

Advanced sensitization and training

When the project involves larger construction or staff more directly implicated in construction activities (such as in the design or the works supervision team), it is imperative that their knowledge about accessibility be deeper and more technical. In this case, there are three options:

- **Appoint design teams that already have experience in accessibility.** This may be the easiest option, although it can be difficult to find architects or engineers with this kind of expertise. As an alternative, an internal accessibility expert can be appointed to advise the team.
- **Train design teams on accessibility** after the members are appointed and before they begin working on the project. In this case, the support of an accessibility consultant hired by UNICEF is essential to properly deliver the training to the design team.
- **Supervise and support design teams throughout the design phases.** For particularly complex projects, project managers can consider hiring an accessibility specialist over the longer term to accompany the design teams and provide periodic ad hoc sessions to revise their work on accessibility.

Construction companies and builders would also benefit from training on accessibility, to better understand what it means, why it is important and how to implement it correctly. In general, however, and according to construction best practice, builders bear no responsibility for design activities; their role is to construct a building that is consistent with the project documents (drawings, BoQs, etc.). Therefore, accessibility capacity development should be considered for designers as well.



Select technical teams that have experience in accessibility

According to the first two points above, UNICEF should select and appoint design teams/consultants and construction firms that can demonstrate experience and expertise on accessibility. The following sample criteria can be used as a reference for interviewers during the selection process:

Design teams/consultants:

Do the design teams/consultants have experience in designing accessible spaces? **Yes/No**

Can the design teams/consultants show examples of previously designed accessible spaces? **Yes/No**

Can the design teams/consultants demonstrate that they are familiar with accessibility codes and standards? **Yes/No**

Have the architects and design teams/consultants completed training or studies in universal design or accessibility? **Yes/No**

- If yes, how many years ago?
- If no, can training be arranged for the architectural design team before the beginning of the project?

Will an accessibility consultant or person with accessibility expertise be contracted as part of the design team? **Yes/No**

- If yes, where/when?
- If no, what process will the construction firm use for quality assurance?

Do the design teams/consultants consider the national accessibility standards to be sufficient/good enough? **Yes/No**

- If yes: why?
- If not, what would they undertake to ensure an accessible construction/refurbishment?

**Construction firms:**

Do the construction firms have experience in building accessible spaces? **Yes/No**

Can the construction firms show examples of previously designed accessible spaces? **Yes/No**

Can the construction firms demonstrate that they are familiar with accessibility codes and standards? **Yes/No**

- If no, can training be arranged for the construction firm?

Involve qualified accessibility or universal design consultants

In many contexts, architects, engineers or urban planners with a background in accessibility are rare. In these cases, UNICEF project managers should support design teams and construction firms by appointing accessibility experts to train and/or accompany them during the project's crucial phases, including to:

- **Train** the appointed design teams on accessibility principles, standards and technical specifications
- **Provide support during the needs assessment phase** to consult with persons with disabilities within the community and integrate their input on the design
- **Inform the design** with his/her knowledge of accessibility technical specifications
- **Ensure that the appropriate accessibility standards** are applied to the design
- **Review** the building plans/drawings to understand the structure, expected movement of people, intended use of spaces and facilities, and undertake an accessibility appraisal before the design is complete
- **Share suggestions and best-practice design** options and solutions
- **Set design** requirements for children and adults with disabilities, including people with various types of disabilities (e.g., of small stature, with low or no vision or hearing)
- **Assist during the works supervision** phase, to ensure the quality of the accessibility-related works

Consulting whenever possible with persons with disabilities who have experience in

accessibility as part of the design process presents an invaluable source of information and expertise, and can inspire innovative ideas.

- **To learn more:** The UNICEF Disability Section at headquarters (disabilities@unicef.org) can provide names of accessibility specialists around the world. A sample ToR for recruiting an accessibility consultant is available in the Toolbox of this toolkit.

Create a participatory and inclusive ‘accessibility task team’

It is good practice to set up an ‘accessibility task team’ when the construction works to be realized are particularly extensive. This team can be established on an ad hoc or ongoing basis to plan and oversee the accessibility works undertaken by UNICEF.

Along with relevant staff from UNICEF programme sections, accessibility task teams should include persons with disabilities, disability focal points⁴³ and members of the local government, as well as non-governmental organization and community group representatives, partners, community members, operations staff and, ideally, an accessibility consultant.

If involved in the earliest stages of the process, individuals with disabilities or representatives from local disability organizations can provide expertise on the needs assessment and confirm the usability of emerging designs, as part of the construction process. Including persons with different disabilities is recommended. For example, a person who is blind, a person who is deaf and a person who uses a wheelchair will have separate needs, priorities and perspectives on making the built environment accessible.

An accessibility task team can also engage with and raise awareness of the accessibility requirements of stakeholders, such as teachers and parents (for schools), nurses and doctors (for health centres), architects and builders, etc.



Anupriya with her mother Rinku Devi stand outside their Anganwadi center in Cherki, Bihar.

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B. DESIGN AND IMPLEMENTATION

Once the design team is appointed, the needs of persons with disabilities have been identified, the design brief has been defined and the concerned staff has been trained, the architectural design and implementation phase can begin. This is a standard process, well known to professionals of the construction sector (UNICEF procurement officers and construction project managers, architects, engineers, construction companies, etc.). Therefore, these guidelines do not provide suggestions on how to manage the process but focus on the specific requirements concerning accessibility.

■ Production of the technical documents (drawings, BoQs, technical specifications, etc.)

The technical quality of design documents is essential for every construction project, but it is particularly important to ensure that accessibility requirements are properly addressed. Design documents should provide the construction firm with all the needed information about what it must realize but are also useful to avoid disputes between the client (UNICEF, in this case) and the builder.

Therefore, the responsibilities of the design team include to:

- Produce a clear **master plan** showing the entrances to the building/site, paths and walkways with dimensions, the parking bays including the ones for persons with disabilities, the position of ramps (if any), the location of the main wayfinding panels, etc.
- Produce **detailed drawings of new ramps**, including handrails, kerbs, floor finishes and dimensions
- Produce **detailed drawings of accessible toilets/latrines**
- Produce **detailed drawings of doors** (minimum width, opening, type and height of the handle and lock, extra handle if needed, automated closing system if needed, built-in window if needed, etc.)
- **Include all the accessibility features in the BoQs:** handrails, grab rails, ramps, wayfinding panels, tactile paths, etc.
- Produce **technical specifications** describing in detail the design and materials of accessibility-related items (handles and locks, taps and flush mechanisms, sanitary fittings, grab-bars, handrails, switches and sockets, etc.)
- If possible, for data collection purposes, ensure that **accessibility-related items have a dedicated chapter in BoQs** to facilitate the cost analysis



■ Construction procurement/tender

When the technical documents are ready, the design team should support the construction project managers in the procurement of the construction works. Unlike in cases of small refurbishments, new construction very frequently goes through a tender phase to select the best construction company to realize the works. To ensure that accessibility is properly addressed by the builder:

- Invite construction companies that have proven experience in accessibility to the tender
- Include accessibility 'refreshment' training in the contract for the selected bidder before starting the works
- Ask for a methodological offer in which bidders describe their understanding of how accessibility has been taken into account in the architectural project

■ Implementation of the accessibility works

Ensuring a regular follow-up of construction works is as important as providing a detailed architectural project to the construction firm. If not properly supervised, builders may not be able to fully read and interpret architectural documents, or they might attempt easier and cheaper solutions than those described in the project documents. Therefore, to ensure the quality of construction works realized by UNICEF, it is essential for the construction team to:

- Organize frequent site visits during the works (at least once a week, with more frequent visits during delicate phases) and ensure the attendance of a UNICEF accessibility expert
- Make sure the realized accessibility works comply with those described on the design documents (i.e., width of the doors, slope of the ramps, dimensions of the toilets, etc.)
- Ensure the quality of accessibility-related works (i.e., concrete used for ramps, dimensions and materials of grab rails and handrails, type of handles for doors, etc.)
- Ensure the correct installation of accessibility fittings (i.e., make sure that grab rails are well affixed to the toilet wall, or that wayfinding panels are solidly attached to the wall, etc.)

C. QUALITY ASSURANCE AND MONITORING

A process of handover or contract finalization usually takes place once construction is completed. Furnishings (the type and position of counters, tables, bookshelves, etc.) and interior design considerations (the type and position of fitted carpets, built-in furniture, movable partitions, etc.) can add to (or detract from) the accessibility of premises or facilities. Furnishings that are not explicit in the design ToR should be reviewed.

Prior to finalizing the contract with the construction firm, an accessibility consultant or task team should complete a final site visit to substantiate the on-site specifications. The assessment can then be provided to the designated quality inspector from the respective engineering or construction firm.

The quality assurance process should include engaging with the contractors and consultants to check the coherence of the realized works against the project design (drawings, BoQs, technical specifications) and to verify the technical quality of the realized works.

The egress (exiting) provisions and evacuation plans should be evaluated both during routine fire and emergency drills and as part of a post-occupancy assessment to make sure that persons with disabilities are adequately considered and able to safely evacuate in an emergency, with workable procedures and infrastructure in place to alert them and for evacuation. Areas for further attention should be reported to the project manager with an action plan.



"I love coming here. I learned to read and how to write my name, father's, mother's and all the numbers. I also play with my friend Own," says Ammar, 12, at his Makani Centre during an awareness-raising session for children with disabilities and their parents in Jordan.

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For reporting, the UNICEF Supply Manual requires that a report be filed on lessons learned, along with photos as relevant, within six months of the completion of the construction-related project. As part of this report, images and text should highlight how the construction activities incorporated and met or exceeded the accessibility standards, or where there were potential areas for improvement. These reports are maintained by country offices and can be used to share best-practice examples.

Four further action points for consideration are presented in Phase C – quality assurance and monitoring:

Share indicators on accessibility with the monitoring team

Monitoring and reporting on progress on accessibility can be a required feature throughout UNICEF construction-related projects and programmes. Monitoring accessibility all through the planning is important.

Staff that understand monitoring and evaluation policies and principles can provide input to avoid the risk of planning or implementing inaccessible features that would later require retrofitting, which would affect the sustainability, cost and usability of the structure.

The following tools can be considered when planning the monitoring and evaluation:

- Surveys to measure expectations and post-satisfaction surveys (to be completed by users)
- Monitoring to measure the number of users with disabilities accessing the service (education, health, rehabilitation, etc.) before/after the construction of the new building

UNICEF has broad programme information database (PIDB) codes that allow monitoring and reporting on UNICEF's contributions. The codes serve as the basis for results-based management and to set up the programme structure in VISION country programme documents (CPD), regional office management plans (ROMP) and HQ office management plans (OMP). PIDB codes could help to monitor accessible construction or remodelling/retrofitting.

Example quantitative indicators include:

- The number (X) of (schools/facilities/clinics) constructed or renovated that are accessible for persons with disabilities
- The proportion (Y) of accessible toilets at the (school, facility, clinic, office or construction site)



Add accessibility as part of implementation-impact evaluations

According to the UNICEF Supply Manual, an evaluation of the impact and implementation of construction activities is prepared within six months of completion, which can also feature the implementation of accessibility elements.⁴⁴

An example question for impact evaluations is:

In what ways have accessibility features in (construction project Y) benefited the local community and people with disabilities?

Consider sharing successful case studies or nominating innovations for the Zero Project Awards (for innovation on accessibility or disability-inclusion)

Evaluate the accessibility of the new building after use

Accessibility is an evolving feature that can be hindered by several factors:

- **Poor execution of the works by the builder** (ramp surface not properly realized, handrails not properly affixed, toilet seats not properly installed, etc.). In this case, a site visit during the period of warranty can identify the problems that have arisen that fall under the responsibility of the builder to demand their correction (at the charge of the builder).
- **Changes made in the building** by managers/owners (rooms used for different purposes than that described on the wayfinding panels, switches for newly installed fans that are not appropriate for accessibility, etc.). In this case, the site visit can identify the accessibility issues related to these new elements and recommendations can be made to mitigate them.
- **Misuse** of the building by users (vehicles parked in the accessible parking bay, objects stored inside an accessible toilet limiting manoeuvring space, plants growing at the bottom of a ramp hindering its use by persons using a wheelchair, etc.). In this case, the site visit can identify any negative practices and provide users with recommendations on the dos and don'ts.

■ Inclusive safety and security measures

When designing and building new accessible facilities, special attention must be paid to safety and security measures adapted for persons with disabilities. Evacuation procedures, security plans and all emergency strategies in a building realized in the frame of a UNICEF project, regardless of the sector, must take into account the needs of persons with disabilities, to make sure that they are not left behind in case of an emergency.



As a reference, the needs to consider include to:

- Make sure that security plans and standard operating procedures (SoPs) take into account the needs of persons with different disabilities
- Make sure that emergency alerts are provided in different formats: audio alarms, visual alarms, automated text messages by phone or email, etc.
- Deliver training to the users of the building in accessible formats for all; train security focal points on how to take care of persons with disabilities during an emergency or an evacuation
- Make sure that emergency exits are signposted in accessible ways, that emergency doors and staircases comply with accessibility standards, and that alternative escape routes are available for persons using a wheelchair (accessible ramps, evacuation chairs, etc.)
- Involve persons with disabilities in the revision of architectural plans in terms of security, as well as in simulations and training
- Make sure that sufficient evacuation chairs are available in each building and that security focal points know how to use them
- Make sure that assembly areas and safe rooms/spaces (areas where people can gather and wait safely to be rescued) are accessible to all
- Consider accessibility and disability when developing SoPs in case of wider and more complex emergencies in a country (outburst of violence, civil war, natural disaster, etc.)

Useful resources

- Samarthyam, Accessible India Campaign and United Nations Children's Fund, India Country Office, *Making Schools Accessible to Children with Disabilities*, UNICEF, New Delhi, 2016, p. 56 on inclusive emergency preparedness, <www.unicef.org/india/media/1191/file/Making-Schools-Accessible.pdf>, accessed 3 September 2021.
- United States District of Columbia, 'Universal Emergency Response Procedure – Evacuation Procedures for Buildings', in *School Emergency Response Plan and Management Guide*, Emergency and Safety Alliance, Washington, D.C., 2009, Section 4, p. 11, <https://esa.dc.gov/sites/default/files/dc/sites/esa/publication/attachments/school_emergency_response_plan-1-5-10.pdf>, accessed 3 September 2021.
- Specifications for evacuation chairs (in the Toolbox of this toolkit)



Part 4: Accessibility improvements in EXISTING programme-related buildings

When launching accessibility improvements in a building related to a UNICEF programme or project, a good practice is to follow a sequence of steps similar to those taken in the refurbishment of UNICEF offices, to make the intervention as participatory, effective and sustainable as possible. These steps are as follows:

D. PRELIMINARY ACTIVITIES:

- Preliminary planning and budgeting
- Sensitization of the beneficiaries and partners/participation and consultation
- Identification of the dedicated team

E. ACCESSIBILITY NEEDS ASSESSMENT:

- Participatory assessment of the existing building

F. DESIGN AND IMPLEMENTATION:

- Production of the technical documents (drawings, BoQs, technical specifications, etc.)
- Procurement/tender
- Implementation of the accessibility works

G. QUALITY ASSURANCE AND MONITORING

D. PRELIMINARY ACTIVITIES

■ Preliminary planning and budgeting

A project involving accessibility rehabilitation interventions must make sure these are included in the overall budget and procurement plan.

The overall considerations are similar to those provided for new construction:

- Create provisions for accessibility in the high-level implementation plan
- Create an accessibility statement or clause
- Integrate accessibility in contracting and subcontracting processes
- Incorporate direct and indirect costs in planning and procurement

(For further details, please refer to [Part 3](#) of this booklet.)

For budgeting purposes, studies show that accessibility improvements implemented during the renovation of an existing public building can cost around 1–3 per cent of the overall renovation budget.⁴⁵



15-year-old Omar Faruk poses for the camera with his friends at their house at Ahmedpur Union, Char Fasson, Bhola.



■ Sensitization of the beneficiaries and partners/participation and consultation

Increasing the awareness of partners and beneficiaries about the difficulties that persons with disabilities encounter in a non-accessible environment is crucial to promote effective changes towards inclusion. Having people observe the existing environment through an 'accessibility lens' is a particularly effective sensitization method because accessibility barriers are visible, apparent and, most of the time, self-explanatory.

On the other hand, persons with disabilities are essential allies of every effort to improve accessibility, given that they are the ones experiencing barriers the most, and they should be particularly involved in the accessibility assessments of buildings that need to be refurbished.

The overall considerations are similar to those provided for new construction:

- **Active participation and engagement**
- **Inclusive consultation with persons with disabilities as stakeholders**
- **Training of persons with disabilities**

(For further details, please refer to [Part 3](#) of this booklet.)

■ Identification of the dedicated team

Accessibility refurbishment works in an existing building involve specific parts of the building and most often are limited to internal areas. They are generally easy and quick to realize, they do not require permits from local authorities and they cause very little disruption in the daily activities of the building's users.

However, refurbishment works are still an essential component of accessibility improvements; they must be addressed with the same professionalism as applied to new construction.

The overall considerations are similar to those provided for new construction:

- **Include accessibility oversight as a project manager responsibility**
- **Ensure the project team's preliminary training**



- Select technical teams that have experience in accessibility
- Involve qualified accessibility or universal design consultants
- Create a participatory and inclusive 'accessibility task team'

(For further details, please refer to [Part 3](#) of this booklet.)

E. ACCESSIBILITY NEEDS ASSESSMENT

■ Participatory assessment of the existing building

The definition of the project's brief is not needed in accessibility refurbishments of existing buildings. Instead, a specific and crucial phase of an accessibility refurbishment is the initial needs assessment that will identify the barriers in the buildings that need to be addressed.

An accessibility assessment should be conducted in two steps:

- A participatory site visit
- The drafting of an accessibility assessment report

The participatory site visit should be conducted by someone with an extensive understanding of accessibility issues, together with relevant actors (the owner or manager of the building, representatives of users with and without disabilities, representatives of local authorities, etc.).

After the visit, the person in charge should prepare an assessment report highlighting the identified accessibility barriers in the building and recommending actions.

The assessment report should be used to prioritize and agree on the necessary interventions with the owner of the building, and to inform the development of more detailed project documents (drawings, BoQs, specifications, etc.).

For further details, please refer to [Section E](#) of this toolkit.



F. DESIGN AND IMPLEMENTATION

Even though the extent and nature of accessibility refurbishments are often limited, attention should nonetheless be paid to the quality of the relative technical documents to ensure the quality of the realized works.

Refurbishments are more frequent than new construction projects but they are often underestimated and entrusted to people without appropriate qualifications, and are not properly followed up.

Often at the end of accessibility refurbishments, the project managers discover that the ramps are too steep, that the new doors are an obstacle for persons with visual impairments, that the renovated toilets are too narrow for wheelchair access, etc.

Various factors cause these problems, including:

- Lack of understanding of accessibility issues
- Poor design documents
- Poorly trained construction workers or builders
- Lack of follow-up during the accessibility works

These problems should be avoided because they suggest the overall project's poor quality and a lack of interest in the needs of persons with disabilities. They also waste donors' funds and can contribute to degrading UNICEF's image.

■ Production of the technical documents (drawings, BoQs, technical specifications, etc.)

The technical quality of design documents is essential for every refurbishment project, but it is particularly important to ensure that accessibility requirements are properly addressed. Design documents should provide the construction firm with all the needed information about what it must realize but are also useful to avoid disputes between the client (UNICEF, in this case) and the builder.

Therefore, the responsibilities of the design team include to:

- Produce a clear **master plan** defining the refurbishment works within the building or the complex, and showing the accessibility interventions around the building itself: paths and walkways with dimensions, the parking bays including the ones



for persons with disabilities, the position of ramps (if any), the location of main wayfinding panels, etc.

- Produce **detailed drawings of new ramps**, including handrails, kerbs, floor finishes and dimensions
- Produce **detailed drawings of accessible toilets/latrines**
- Produce **detailed drawings of doors** (minimum width, opening, type and height of the handle and lock, extra handle if needed, automated closing system if needed, built-in window if needed, etc.)
- **Include all the accessibility features in the BoQ:** handrails, grab rails, ramps, wayfinding panels, tactile paths, etc.
- Produce **technical specifications** describing in detail the design and materials of accessibility-related items (handles and locks, taps and flush mechanisms, sanitary fittings, grab-bars, handrails, switches and sockets, etc.)
- If possible, for data collection purposes, ensure that **accessibility-related items have a dedicated chapter in BoQs** to facilitate the cost analysis

■ Procurement/tender

When the technical documents are ready, the design team should support the construction project managers in the procurement of the construction works. Unlike in cases of new construction, refurbishments are frequently executed using simple procedures like a bidding process or the direct appointment of builders. Regardless of the procurement process, the recommendations to ensure that accessibility is properly addressed by the builder include to:

- Invite construction companies or builders that have proven experience in accessibility
- Include accessibility 'refreshment' training in the contract for the selected builders before starting the works
- Ask for a methodological offer in which bidders describe their understanding of how accessibility has been taken into account in the architectural project

■ Implementation of the accessibility works

Ensuring a regular follow-up of accessibility rehabilitation works is as important as providing a detailed architectural project to the construction firm. If not properly supervised, builders may not be able to fully read and interpret architectural documents, or they might attempt easier and cheaper solutions than those described in the project documents. Therefore, to ensure the quality of construction works realized by UNICEF, it is essential for the construction team to:

- Organize frequent site visits during the works (at least once a week, with more frequent visits during delicate phases) and ensure the attendance of a UNICEF accessibility expert
- Make sure the realized accessibility works comply with those described on the design documents (i.e., width of the doors, slope of the ramps, dimensions of the toilets, etc.)
- Ensure the quality of accessibility-related works (i.e., concrete used for ramps, dimensions and materials of grab rails and handrails, type of handles for doors, etc.)
- Ensure the correct installation of accessibility fittings (i.e., make sure that grab rails are well affixed to the toilet wall, or that wayfinding panels are solidly attached to the wall, etc.)



Maria Alexandrova, 17 years old, is an advocate for the rights of persons with disabilities in Bulgaria.

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G. QUALITY ASSURANCE AND MONITORING

As already mentioned, closely checking the accessibility refurbishment aspects is essential during the works, but it is also important after the works are finished and the renovated building has been occupied for some time.

The overall considerations are similar to those provided for new construction:

- **Share indicators on accessibility with the monitoring team**
- **Add accessibility as part of implementation-impact evaluations**
- **Evaluate the accessibility of the new building after use**

(For further details, please refer to [Part 3](#) of this booklet.)

This part on the post-occupancy evaluation is particularly important because accessibility is an evolving feature that can be hindered by several factors:

- **Poor execution of the works by the builder** (ramp surface not properly realized, handrails not properly affixed, toilet seats not properly installed, etc.). In this case, a site visit during the period of warranty can identify the problems that have arisen that fall under the responsibility of the builder to demand their correction (at the charge of the builder).
- **Changes made in the building** by managers/owners (rooms used for different purposes than that described on the wayfinding panels, switches for newly installed fans that are not appropriate for accessibility, etc.). In this case, the site visit can identify the accessibility issues related to these new elements and recommendations can be made to mitigate them.
- **Misuse** of the building by users (vehicles parked in the accessible parking bay, objects stored inside an accessible toilet limiting manoeuvring space, plants growing at the bottom of a ramp hindering its use by persons using a wheelchair, etc.). In this case, the site visit can identify any negative practices and provide users with recommendations on the dos and don'ts.



Ensuring a regular follow-up of accessibility rehabilitation works is as important as providing a detailed architectural project to the construction firm.





INCLUSIVE SAFETY AND SECURITY MEASURES

When renovating existing facilities to make them more accessible, special attention must be paid to safety and security measures adapted for persons with disabilities. Evacuation procedures, security plans and all emergency strategies in a building refurbished in the frame of a UNICEF project, regardless of the sector, must take into account the needs of persons with disabilities, to make sure that they are not left behind in case of an emergency.

As a reference, the needs to consider include to:

- Make sure that security plans and SoPs take into account the needs of persons with different disabilities
- Make sure that emergency alerts are provided in different formats: audio alarms, visual alarms, automated text messages by phone or email, etc.
- Deliver training to the users of the building in accessible formats for all; train security focal points on how to take care of persons with disabilities during an emergency or an evacuation
- Make sure that emergency exits are signposted in accessible ways, that emergency doors and staircases comply with accessibility standards, and that alternative escape routes are available for persons using a wheelchair (accessible ramps, evacuation chairs, etc.)
- Involve persons with disabilities in the revision of architectural plans in terms of security, as well as in simulations and training
- Make sure that sufficient evacuation chairs are available in each building and that security focal points know how to use them (*see the specification for these chairs under the Toolbox*)
- Make sure that assembly areas and safe rooms/spaces (areas where people can gather and wait safely to be rescued) are accessible to all
- Consider accessibility and disability when developing SoPs in case of wider and more complex emergencies in a country (outburst of violence, civil war, natural disaster, etc.)

Useful resources

- Samarthyam, Accessible India Campaign and United Nations Children's Fund, India Country Office, *Making Schools Accessible to Children with Disabilities*, UNICEF, New Delhi, 2016, p. 56 on inclusive emergency preparedness, <www.unicef.org/india/media/1191/file/Making-Schools-Accessible.pdf>, accessed 3 September 2021.
- United States District of Columbia, 'Universal Emergency Response Procedure – Evacuation Procedures for Buildings', in *School Emergency Response Plan and Management Guide*, Emergency and Safety Alliance, Washington, D.C., 2009, Section 4, p. 11, <https://esa.dc.gov/sites/default/files/dc/sites/esa/publication/attachments/school_emergency_response_plan-1-5-10.pdf>, accessed 4 September 2021.
- Specifications for evacuation chairs (in the Toolbox of this toolkit)



Tobias, a 13-year-old 6th grader, uses sign language in school for children with and without disabilities in Limpio, Paraguay.

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Annex 1

Example of ToRs for construction firms/construction-related staff:

The project/programme manager will oversee the programme and will monitor accessibility provisions, including quality checks, to confirm compliance with the standards for accessibility as set out in ISO 21542:2011, national building codes and laws related to accessibility [YX], and UNICEF CF/EXD/2017-004.

Create an accessibility statement or clause

For ease of reference, programme, supply and construction officers should incorporate an accessibility statement that identifies relevant standards and that confirms that programme or project managers and design and construction staff have a role to play in implementing and monitoring accessibility provisions.

An accessibility statement or clause can form part of standard documents (such as procurement and other contracts, the definition of need, feasibility study and high-level plan) to explain how accessibility will be addressed throughout the project, including identifying local, regional, national and international codes, standards and regulations for accessibility:

- Building codes or standards that the project is obliged to meet
- Accessibility standards and regulations, e.g., ISO 21542:2011; European accessibility standard EN 301 549
- UNICEF's policies and practices related to accessibility (CF/EXD/2017-004)

Example of accessibility statements:

This [XX] project will comply with the international standards as set out in ISO 21542:2011, national building code [YX], laws related to accessibility [ZX] and UNICEF CF/EXD/2017-004.

An accessibility [consultant/expert/team] will provide input into the project's design, implementation and monitoring, and the participation of people with disabilities will be integrated into the project scope.



Glossary and abbreviations

accessibility	“Accessibility is a precondition for persons with disabilities to live independently and participate fully and equally in society. Without access to the physical environment, to transportation, to information and communication, including information and communications technologies and systems, and to other facilities and services open or provided to the public, persons with disabilities would not have equal opportunities for participation in their respective societies.” (Source: General Comment N°2 of the CRPD)
accessibility of buildings	The provision of buildings or parts of buildings for people, regardless of disability, age or gender, to be able to approach, enter, use and exit from and evacuate a building independently, in an equitable and dignified manner and to the greatest extent possible⁴⁶
alternative formats	Formats of documents and other information that include options that can be read via touch, sound or sight, e.g., the format can be read easily by screen-reading software, such as EPUB, DAISY, HTML or Braille readable format, or has been designed with pictures or icons and simple, large letters/type or font
Braille	A system of raised dots that people who are blind can use to read with their fingers
built environment	Defined by the ISO as “external and internal environments and any element, component or fitting that is commissioned, designed, constructed and managed for use by people”;⁴⁷ examples include schools, playgrounds, toilets, health centres and UNICEF premises



CART	Communication Access Realtime Translation; the instantaneous translation of spoken language into text that can be displayed in various forms and on a screen or monitor
clear headroom	Space above walkways to prevent hazards, particularly for tall people, persons with low vision or who are blind (from, e.g., cupboards, signposts, the bottom of stairways or tree branches)
cm	Centimetre (1 cm = 0.393 inches)
colour blindness	The inability to determine some colours; for example, green or red colours may appear to be grey
CRPD	Convention on the Rights of Persons with Disabilities
DAISY	Digital Accessible Information System; a global standard for digital books with audio supporting people who are blind or have other disabilities, such as dyslexia
EPUB	Electronic publishing; the current standard is 3.2 ⁴⁸
flush	Completely level or even with another surface (not raised)
going	The horizontal part of a stair or step; also the horizontal distance between the start and end of a ramp
grab-bars/railings	Bars/railings that are placed beside bus seats, toilet seats, showers or bedsides to provide support, e.g., for transfer from a wheelchair to a toilet or for passengers to safely stand on a bus
GrAF	UNICEF's internal Greening and Accessibility Fund

hearing loop (audio induction loop)	A sound system (built-in or portable) that produces an electromagnetic signal in an area of a building that can be received directly by hearing aids
HTML	HyperText Markup Language
ISO	International Organization for Standardization; a worldwide federation of national standards bodies that prepares widely used standards through its technical committees
JAWS	Job Access With Speech; a computer screen-reader program for Microsoft Windows that allows blind and visually impaired users to read the screen either with a text-to-speech output or by a refreshable Braille display
kerb ramp	A lowered kerb that provides a ramp for easier access to roads at sidewalk crossings; also called a 'dropped kerb', 'sidewalk cut-out' or 'curb ramp'
km	Kilometre (1 km = 0.62 miles)
landing space	Space at the top and bottom of stairs, ramps, or in between and in front of lifts that helps persons to safely rest or manoeuvre; there can be intermediate landings if a ramp or a flight of stairs is very long
leaf	The main part of a door or window, which may swing outwards or inwards, or slide sideways
LRV	Light Reflectance Value; a measure of colour contrast, which makes it easier for people with vision impairment to differentiate hazards and objects (on a scale of 0–100: 0 = black, 100 = white)
lux	The unit of measuring light (= to 1 lumen per square metre)



m	Metre (1 m = 1.09 yards = 3.28 feet)
manoeuvring space	Space needed to make a U-turn or to change position or direction of movement, especially for persons using wheelchairs or walking frames, or when a person is being carried on a stretcher during an emergency
mm, mm²	Millimetre, square millimetre
OPD	Organization of Persons with Disabilities; sometimes referred to as Disabled People's Organization (DPO)
persons with disabilities	Includes those persons with long-term physical, mental, intellectual or sensory impairments that in interaction with attitudinal and environmental barriers may hinder their full and effective participation in society on an equal basis with others
PIDB	Programme Information Database; a UNICEF database with codes to report financial expenditure on activities
ramp	Sloped pathway/surface that allows easy level change for people using bikes, strollers, wheelchairs and other objects with wheels
RECU	The reach, enter, circulate, use concept
rise/riser	The vertical part between each stair/step
SDGs	Sustainable Development Goals
SRV	Slip Resistance Value; a form of measuring slip resistance
tactile	A raised or bumpy surface that can be felt through touch



threshold	A low step (less than 2.5 cm) that can be found at the bottom of a doorway
ToR	Terms of reference
tread	The horizontal part of a step, excluding the step nose
TWSI	Tactile Walking Surface Indicators; tactile guiding pavements (tiles, strips) often required before hazards like roads or stairs that provide bumpy patterns on the ground or surface, which assist people who are blind or have vision impairment to feel (using a cane or feet) a clear pathway to walk or to alert them to hazards
universal design	The designing of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design
upstand	A vertical support piece alongside a path/ramp for safety and guidance
WASH	Water, sanitation and hygiene



Endnotes

- 1 For more information, including the full text of the CRPD in multiple languages and the list of countries that have ratified it, see United Nations, Department of Economic and Social Affairs, Disability, Convention on the Rights of Persons with Disabilities (CRPD), United Nations, New York, 2006, <www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>, accessed 7 September 2021.
- 2 Ronald L. Mace Universal Design Institute (UDI), 'A Brief History of Universal Design', UDI, 2018, <www.udinstitute.org/ud-history>, accessed 7 September 2021.
- 3 United Nations, Convention on the Rights of Persons with Disabilities, United Nations, New York, 2006, article 2, <www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-2-definitions.html>, accessed 7 September 2021.
- 4 These considerations are covered for each type of facility in the accessibility checklists ([Section G](#)).
- 5 For more information on RECU, see Plantier-Royon, Eric, Priscille Geiser and Hugues Nouvellet, 'Accessibility: How to design and promote an environment accessible to all', Policy Brief 2, Handicap International (now Humanity for Inclusion), Lyon, 2009, <https://handicap-international.ch/sites/ch/files/documents/files/accessibilite_anglais.pdf>, accessed 17 February 2022.
- 6 See, for example, United Nations Children's Fund, *Accessible Components for the Built Environment: Technical Guidelines embracing Universal Design*, UNICEF, New York, <<https://docplayer.net/73698977-Accessible-components-for-the-built-environment-technical-guidelines-embracing-universal-design.html>>, accessed 29 October 2021.
- 7 For the complete set of SDGs, targets and indicators, see United Nations, Department of Economic and Social Affairs, Sustainable Development, 'Make the SDGs a Reality', United Nations, New York, <<https://sustainabledevelopment.un.org>>, accessed 29 October 2021.
- 8 United Nations, United Nations Conference on Housing and Sustainable Urban Development, 'New Urban Agenda', United Nations, Ecuador, 2017, open PDF, paras. 37, 52, 53, 119, <<http://habitat3.org/wp-content/uploads/NUA-English.pdf>>, accessed 29 October 2021.
- 9 United Nations, World Urban Forum, 'Kuala Lumpur Declaration on Cities 2030', United Nations, Kuala Lumpur, 13 February 2018, <<https://unhabitat.org/sites/default/files/2018/04/Agenda-10-WUF9-KL-Declaration-English-1.pdf>>, accessed 29 October 2021.
- 10 Playground accessibility can be addressed in schools that are already inclusive and attended by children with disabilities or if they are close to inclusive schools not equipped with playing areas. Larger playgrounds are generally easier to adapt due to the availability of space.
- 11 An example of work to apply the principles of universal design to learning resources is UNICEF's Accessible Digital Textbooks for All project, 'Accessible Textbooks for All', <www.accessibletextbooksforall.org>, accessed 23 August 2021.
- 12 Samarthayam, Accessible India Campaign and United Nations Children's Fund, India Country Office, *Making Schools Accessible to Children with Disabilities*, UNICEF, New Delhi, 2016, p. 10, <www.unicef.org/india/media/1191/file/Making-Schools-Accessible.pdf>, accessed 23 August 2021.
- 13 The COVID-19 pandemic that began in 2020 has made the need for accessible WASH infrastructure (including handwashing stations) even greater because it is crucial to reduce the risk of infection in children with disabilities.



- 14 Wilbur, J., and H. Jones, 'Disability: Making CLTS Fully Inclusive', *Frontiers of CLTS: Innovations and Insights*, no. 3, Institute of Developing Studies, Brighton, 2014, <www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/Frontiers_of_CLTS_Issue3_Disabilities.pdf>, accessed 23 August 2021.
- 15 United Nations Children's Fund, Executive Directive on Accessibility in UNICEF Programme-Related Construction Activities, Executive Directive CF/EXD/2017-004, UNICEF, New York, 2017, para. 4.3.
- 16 United Nations Children's Fund, *Accessible Components for the Built Environment: Technical Guidelines embracing Universal Design*, UNICEF, New York, <<https://docplayer.net/73698977-Accessible-components-for-the-built-environment-technical-guidelines-embracing-universal-design.html>>, accessed 15 September 2021.
- 17 United Nations Children's Fund, Supply Catalogue, 'Latrine Add-On, child & disabled people', S0005848, UNICEF, <<https://supply.unicef.org/catalogsearch/advanced/result/?sku=0005848&name=&description=>>, accessed 23 August 2021.
- 18 United Nations Children's Fund Lebanon, *WASH in Schools Guidelines for Lebanon*, UNICEF, 2012, p. 34, available in Arabic and English, <<https://reliefweb.int/report/lebanon/wash-schools-guidelines-lebanon-enar>>, accessed 23 August 2021.
- 19 For more information, see United Nations Children's Fund, 'Definitions, Children in alternative care', <www.unicef.org/eca/definitions>, accessed 23 August 2021.
- 20 United Nations, Convention on the Rights of Persons with Disabilities (CRPD), Committee on the Rights of Persons with Disabilities, General Comment No. 5 (2017) on living independently and being included in the community, United Nations, New York, 27 October 2017, p. 14, <https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=CRPD/C/GC/5&Lang=en>; United Nations, Department of Economic and Social Affairs, Disability, Convention on the Rights of Persons with Disabilities (CRPD), Article 7 – Children with disabilities, <www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-7-children-with-disabilities.html>, accessed 23 August 2021.
- 21 United Nations, Convention on the Rights of Persons with Disabilities (CRPD), Committee on the Rights of Persons with Disabilities, General Comment No. 5 (2017), p. 14; In line with the Convention on the Rights of the Child (CRC), see also United Nations, Department of Economic and Social Affairs, Disability, Convention on the Rights of Persons with Disabilities (CRPD), Article 23 – Respect for home and the family, <www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities/article-23-respect-for-home-and-the-family.html>, accessed 23 August 2021.
- 22 United Nations Children's Fund Jordan, *Makani Standard Operating Procedures*, UNICEF, Amman, 2019, <www.unicef.org/jordan/media/1541/file/Jordan-UNICEF.pdf>, accessed 15 September 2021; Child Protection Working Group, 'Makani ("My Space") Approach in Jordan: Integrating child protection, education, youth empowerment and psychosocial support for Syrian children', Alliance for Child Protection in Humanitarian Action, <https://resourcecentre.savethechildren.net/sites/default/files/documents/cp_mainstreaming_education_final.pdf>, accessed 23 August 2021.
- 23 World Health Organization, et al., *Guidance Note on Disability and Emergency Risk Management for Health*, WHO, Geneva, 2013, p. 25 (emphasis added), <http://apps.who.int/iris/bitstream/10665/90369/1/9789241506243_eng.pdf?ua=1>, accessed 23 August 2021.
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- 25 United Nations Children's Fund, *Including Children with Disabilities in Humanitarian Action*, UNICEF, New York, 2017, <<https://sites.unicef.org/disability/emergencies>>, accessed 24 August 2021.



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- 27 United Nations Children's Fund, Executive Directive on Accessibility in UNICEF's Programme-Related Construction Activities, Executive Directive CF/EXD/2017-004, UNICEF, New York, 2017, para. 7.2 (internal link): <<https://unicef.sharepoint.com/sites/portals/RF/Regulatory%20Framework%20Library/Forms/AllItems.aspx?id=%2Fsites%2Fportals%2FRF%2FRegulatory%20Framework%20Library%2FExecutive%20Directive%20%2D%20Accessibility%20in%20UNICEF%27s%20Programme%2Drelated%20Construction%20Activities%2Epdf&parent=%2Fsites%2Fportals%2FRF%2FRegulatory%20Framework%20Library>>, accessed 19 January 2022.
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- 29 Ratzka, Adolf, 'A brief survey of studies on costs and benefits of non-handicapping environments', International Congress on Accessibility, Rio de Janeiro, June 1994, Independent Living Institute Library; Steven Winter Associates, *Cost of accessible housing*, United States Department of Housing and Urban Development, Washington, D.C., 1993, ch. 6 in *World Report on Disability*, World Health Organization and World Bank, Geneva, 2011, p.173; Steinfeld, Edward, *Education for All: The Cost of Accessibility*, World Bank, Washington, D.C., 2005, p. 3.
- 30 United Nations Children's Fund, Executive Directive on Accessibility in UNICEF's Programme-Related Construction Activities, Executive Directive CF/EXD/2017-004, UNICEF, New York, 2017, para. 3.1.
- 31 See 'Supply Manual', Section 8.3.1 d), which includes procurement and subcontracting processes.
- 32 United Nations System Chief Executives Board for Coordination (CEB), High-Level Committee on Management (HLCM) Procurement Network, 'Guidelines on the Implementation of Indicator 8, Procurement', HLCM, Copenhagen, 2020, <www.un.org/sites/un2.un.org/files/2020_un_disability_inclusion_strategy_guidelines_indicator_8.pdf>, accessed 24 August 2021.
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- 35 United Nations Children's Fund, 'Take Us Seriously! Engaging Children with Disabilities in Decisions Affecting their Lives', UNICEF, New York, June 2013, <www.unicef.org/disabilities/files/Take_Us_Seriously.pdf>, accessed 30 August 2021.
- 36 As part of the Local Procurement Authorization process for projects valued above \$100,000, the UNICEF Supply Division should highlight the need to include accessibility requirements at the design stage, for projects under direct implementation, or through implementing partners. See Executive Directive CF/EXD/2017-004, para 7.4.
- 37 See United Nations Children's Fund, 'Shaping urbanization for children: A handbook on child-responsive urban planning', UNICEF, New York, 2018, <www.unicef.org/media/47616/file/UNICEF_Shaping_urbanization_for_children_handbook_2018.pdf>, accessed 30 August 2021.
- 38 'Supply Manual', Ch. 6, Section 11, para. 9.9.
- 39 'Supply Manual', Ch. 6, Section 11, para. 1.6.



- 40 International Organization for Standardization, 'ISO 21542:2011, Building construction – Accessibility and usability of the built environment', <www.iso.org/standard/50498.html>, accessed 31 August 2021.
- 41 'Supply Manual', Ch. 6, Section 11, para. 9.9.
- 42 United Nations Children's Fund, *Accessible Components for the Built Environment: Technical Guidelines embracing Universal Design*, UNICEF, New York, <<https://docplayer.net/73698977-Accessible-components-for-the-built-environment-technical-guidelines-embracing-universal-design.html>>, accessed 31 August 2021.
- 43 Many UNICEF offices have dedicated accessibility disability focal points who are people usually appointed by the Representative or Deputy Representative.
- 44 'Supply Manual', 14.1 2, states that: "within six months after the completion of the works, an evaluation of the impact and implementation of the construction activities should be prepared. A copy should be submitted to supply division".
- 45 Independent Living Institute, 'A brief survey of studies on costs and benefits of non-handicapping environments', 1994, <www.independentliving.org/cib/cibrio94access.html>, accessed 3 September 2021.
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- 48 W3C, 'EPUB 3.2', <www.w3.org/publishing/epub3/epub-spec.html>, accessed 4 September 2021.



SECTION B

PROGRAMME-RELATED BUILDINGS

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