

### Accessible by design

### **Building a legacy of inclusion**

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Suggested reference for this report: El Akoum M, Dyer M. Accessible by design: Building a legacy of inclusion. Doha, Qatar: World Innovation Summit for Health, 2022

ISBN: 978-1-913991-33-3

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WISH 2022 Forum on Accessible Design and Health

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### **FOREWORD**

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By 2050, it is projected that 68 percent of the global population will be living in urban cities, making urbanization one of the defining global trends of the century. Of the 6.25 billion people living in cities, nearly one billion will be people with a disability. Therefore, it is crucial that governments plan for, design, and build the infrastructures, public spaces and services that facilitate and enable equal access and participation of all members of society without exception.

The available evidence tells us that we have a long way to go. As things currently stand, the 15 percent of the global population who currently live with a disability and reside in urban cities generally report experiencing lack of accessibility in built environments – such as housing, roads, public buildings and spaces – as well as information and communications technologies. These barriers affect access to education and employment and contribute to the marginalization and stigmatization faced by this community. In turn, this can negatively affect the health and wellbeing of this community.

Drawing on lessons from the United Nations Convention on the Rights of Persons with Disabilities and from the accessibility planning for the upcoming FIFA World Cup Qatar 2022™ (FWC22), this report highlights the associated challenges while providing examples of innovative solutions for accessible urban design and building a legacy of inclusion.

We hope that the policy recommendations from this report provide solid and practical guidelines for policymakers worldwide to design and redesign cities that are equally accessible to all.

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### **EXECUTIVE SUMMARY**

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About 15 percent of the world's population currently live with a disability, however, most continue to experience a lack of accessibility in built environments and public spaces.\(^1\) This lack of accessibility to physical infrastructure, information and communication, as well as a lack of access to basic services, contributes enormously to the marginalization faced by people living with disabilities. This marginalization, and the social isolation that follows, has the potential to lead to cognitive degeneration as well as other mental health concerns.

To enable people with disabilities to live independently, and ensure that they fully participate in all aspects of life, cities should be designed and redesigned to become more inclusive and accessible. To achieve this goal, the disabled community must have the opportunity to actively participate throughout all stages of the urban design and planning process.

The FIFA World Cup that will be hosted in Qatar in 2022 is considered to be the beginning of a new era of inclusion in Qatar. After pledging to deliver the most accessible World Cup to date, the Supreme Committee for Delivery & Legacy has been working closely with organizations representing people living with disabilities to ensure that the stadiums and the entire experience, inside and outside the stadium, are fully accessible to all. This includes designing and planning for accessible hotels, transportation, tourist attractions and more.

Building on the experience of the World Cup, we propose a set of policy recommendations to continue the momentum after the event, to ensure that accessibility remains a national priority and that relevant Qatar 2030 vision targets are met. The recommendations will also be relevant to policymakers planning accessible cities worldwide, particularly those looking to build on the momentum created by hosting sports mega events.

### SECTION 1. INTRODUCTION TO ACCESSIBILITY AND URBAN DESIGN

### Disability, accessibility and wellbeing

According to the United Nations (UN) Convention on the Rights of Persons with Disabilities, people with disabilities include "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others". These factors combined impede the achievement of various internationally agreed development goals such as the Sustainable Development Goals 2030 and the New Urban Agenda. Disability is often considered a human rights issue because people with disabilities\* are often subject to violations of their rights, such as abuse, prejudice, disrespect, and acts of violence.

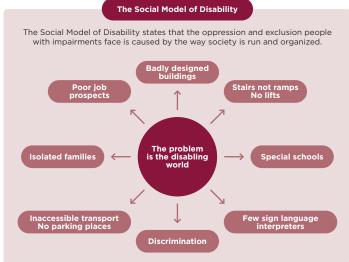
About 1 billion people worldwide (15 percent of the world's population) live with at least one form of disability, of whom about 2 to 4 percent experience significant challenges in functioning. <sup>5,6</sup> People with disabilities are a diverse and heterogeneous population, encompassing children born with congenital conditions such as cerebral palsy, middle-aged people with arthritis, people with amputations, the elderly population with dementia, and many others. <sup>7</sup> Statistics from the Centers for Disease Control and Prevention show that about 14 percent of people people with disabilities have mobility challenges that include difficulty in walking or climbing stairs, while 10.8 percent have a cognitive disability that includes difficulties related to concentration, decision-making, or memory. <sup>8</sup> Other types of disability include vision disability and deafness, along with disabilities that affect independent living or self-care. The number of people with disabilities is increasing due to an aging population and a rise in chronic health conditions. <sup>9</sup>

Experts in the disability rights movement have established two distinct models of societal views towards disabilities: the Medical Model and the Social Model. These models serve as frameworks for societal perception of people with disabilities. The Medical Model views disability as an issue with the human body that causes loss of function and requires medical treatment, while the Social Model argues that the way society is run and organized is disabling (see Figure 1).<sup>10,11</sup>

<sup>\*</sup> For consistency, we use the term "people with disabilities" throughout this report, except when referring to document names or in quotes. However, we acknowledge that preferences and debate around the language used to describe disability is evolving and some people will identify with different language.

Figure 1. Comparison of the Medical and Social Models of Disability





Source: Adapted from Inclusion London (2022).

The social model of disability recognizes that it is the socially constructed barriers that create challenges for people with disabilities, and that removing these barriers would create equality and offer people with disabilities more independence and control. These barriers could be physical, they could be linked to information/communication, or they could be attitudinal barriers. Removing these barriers and enabling people with disabilities to acquire the same information and engage in the same interactions is at the very core of the concept and definition of accessibility.

Accessibility is a concept that has been the focus of physical planning and spatial modeling for over 50 years.<sup>13</sup> By definition, accessibility is the careful consideration of people with disabilities in the design or modification of products, services and facilities, so that they can be used by people of all abilities.<sup>14</sup> Accessibility therefore ensures that people with disabilities equitably experience full access and are given the opportunity to fully participate in social, cultural, political, economic and civil life just as individuals without a disability would.<sup>15</sup> Accessibility covers providing solutions for physical barriers – such as making buildings wheelchair-accessible – and it also includes removing all potential hindrances in the life of people with disabilities (see Figure 2).

Figure 2. Barriers to accessibility















Source: Adapted from WeCapable, 2022.16

Without the implementation of this holistic approach to accessibility, people with disabilities will continue to face stigmatization and discrimination across different settings. Studies have shown that children with disabilities are less likely to attend school, and adults with disabilities are more likely to be unemployed, and tend to earn less even when they are employed. Given these factors (among others), poverty can potentially increase the risk of disability, or lead to the onset of health conditions that are associated with disability, such as low birth weight in children, lack of clean water, and malnutrition. Inaccessible environments or barriers to access to appropriate health and rehabilitation services can also increase the likelihood of people with existing health conditions becoming disabled.

#### Accessible urban design

Urbanization will undoubtedly be one of the defining global trends of this century, making it imperative to plan for, design and build environments, facilities, infrastructures and services that enable access and equal participation for all members of society. Currently, more than half of the world's population live in urban cities – up from about one-third in 1960. By 2050, it is projected that this number of city dwellers will rise to 6.25 billion people (representing 68 percent of the global population), with a growth of about 2.5 billion people between the years 2018 and 2050 (see Figure 3). Almost 90 percent of this increase will be concentrated in Asia and Africa<sup>29</sup> (see Figure 4). Of the projected 6.25 billion urban city population, almost 1 billion will be people with disabilities.<sup>30,31</sup>

Urban population — Rural population 4.5 4.0 Number of people (billions) 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0 1970 2010 2020 1960 1980 1990 2000

Figure 3. Global urban and rural population over time



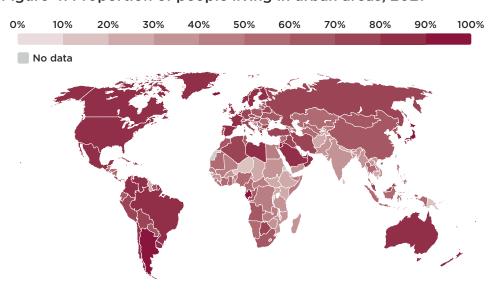


Figure 4. Proportion of people living in urban areas, 2021

Source: UN (2018).<sup>33</sup>

#### Justification for accessible urban design

While we have an idea about the negative effects of social exclusion and lack of accessibility, there is currently a general paucity of data on the positive impact for people with disabilities of inclusive cities that are designed and implemented appropriately. This is largely due to the fact that the majority of these cities are just beginning to be built, although older cities can also become more inclusive and accessible.<sup>34</sup> Additional data are needed to capture the levels of accessibility of cities in relation to access and use of public spaces, urban services, and mobility. How accessible urban cities affect the wellbeing of all residents is another priority study area, despite being more difficult to quantify.<sup>35</sup> Accessible urban cities have the potential to promote social interaction, help transcend social stereotypes, and nurture communal empathy. For example, inclusive public parks and playgrounds could potentially improve the health and wellbeing of children with disabilities and reduce stress for their caregivers.<sup>36</sup> In contrast, social isolation resulting from a lack of accessible and inclusive public spaces is linked to a wide range of other social determinants of health. In some cases, this can lead to cognitive degeneration as well as other mental health concerns.<sup>37</sup>

There is also an economic case to be made: building cities that people with disabilities can access is also a good long-term investment. The enablement of access to urban centers would, in turn, expand economic opportunities and productivity. Improving accessibility means more people (and their carers) can participate in the job market.<sup>38</sup> The current costs associated with the exclusion of people with disabilities from the labor force in low- and middle-income countries is estimated at roughly 7 percent of national GDP.<sup>39</sup>

Adopted in December 2006 at the UN Headquarters in New York, the Convention on the Rights of Persons with Disabilities is a human rights instrument that includes an explicit social development dimension.<sup>40</sup> One of the obligations under the Convention is:

"To enable persons with disabilities to live independently and participate fully in all aspects of life, States Parties shall take appropriate measures to ensure to persons with disabilities access, on an equal basis with others, to the physical environment, to transportation, to information and communications, including information and communications technology and systems and to other facilities and services open or provided to the public, both in urban and rural areas".<sup>41</sup>

This global commitment to improve accessibility was further emphasized in the Sustainable Development Goals (SDGs) where disability is specifically referenced in the seven targets, including SDG 11 related to sustainable cities and communities.

#### Accessible design principles

According to the recommendations adopted at the UN expert group meeting in 2015,<sup>42</sup> urban development that is accessible and inclusive can be realized at five levels (shown in Figure 5).

Development of sustainable, accessible housing and built infrastructures as a key component of inclusive cities

Promotion of the notion of accessibility as a collective good, and its presentation as a key component in urban design and policy

Advancements in accessibility in ICT for the development of inclusive and resilient smart cities and communities.

Figure 5. Five levels of accessible and inclusive urban design

Source: Adapted from UN Department of Economic and Social Affairs. 43

## Accessibility in Qatar and the FIFA World Cup Qatar 2022 (FWC22)

The State of Qatar is currently undergoing a redesign in urban planning in preparation for the FWC22. Over the past decade, the country has witnessed extensive changes in roads, infrastructure, connectivity and accessibility.<sup>44</sup> These developments are taking place in line with the Qatar National Vision 2030, which places an emphasis on social and economic inclusivity and the rights of people with disabilities.<sup>45</sup> Through the Supreme Committee for Delivery & Legacy (the responsible authority

for the planning and management of FWC22), the country has promised that this event will be the most accessible World Cup yet.<sup>46</sup> This includes the entire experience – inside the stadiums and beyond.

An accessible and inclusive urban design and development agenda has the potential to benefit the wider population. But to make this a reality, a strong commitment is needed, ideally incorporating inclusive and disability-responsive policy frameworks, substantial resource allocations, appropriate regulatory standards and structures, and a 'design for all' mindset and approach to planning and design. Achieving this goal would also require active participation and representation from the community of people with disabilities, as well as their organizations, and rights-holders throughout all stages of the urban planning and design process.

### SECTION 2. URBAN ACCESSIBILITY AND THE FIFA WORLD CUP QATAR 2022™

### The FIFA World Cup

Every four years, the FIFA World Cup is one of the world's largest and most anticipated events. While the tournament promises to be a sporting pinnacle, the social values, community and legacy that the World Cup inspires are also important. Long before the matches start, the eyes of the world watch to assess and analyze the approach that host countries take. When Qatar was bidding to host the FIFA World Cup Qatar 2022 (FWC22), the country committed to delivering "the most accessible World Cup ever".<sup>47</sup> About 1.5 million people are expected to visit Qatar for the tournament; the country is also committed to delivering a genuine legacy for people with disabilities in Qatar.<sup>48,49</sup>

### Urban planning and accessible cities

Creating an accessible tournament and legacy for people with disabilities means focusing on accessible urban design and planning – not simply accessible stadiums.<sup>50</sup> When urban environments aren't accessible, it is difficult for people living with disabilities to make a full and meaningful contribution to their community. Lack of accessible transport and housing, and poorly designed public realm spaces\* are all factors that can contribute to people with disabilities feeling isolated and experiencing a lack of equality. Inaccessible urban spaces can also make it hard to find and maintain suitable employment. This has a negative impact on the economic prospects for people with disabilities, and limits opportunities and independence for other people too.<sup>51</sup>

The key to creating an accessible environment is connectivity.<sup>52,53</sup> For any person making a journey, there are multiple points where they can be hindered or stopped, affecting their overall experience. This may include failures in transport, public realm areas, buildings, facilities or services.<sup>54</sup> Where accessibility has not been considered in planning, the likelihood of facing barriers at any point is much greater for people with disabilities.<sup>55</sup> In addition, people living with disabilities are far less likely to try a journey again if they have a poor experience, potentially

<sup>\*</sup> The public realm consists of typical urban elements of streets, lanes, plazas, parks and environmental areas of different scales and purposes. These elements of public space are combined to create distinctive and unique places that invite use and activity.<sup>56</sup>

affecting their confidence, safety and dignity.<sup>57</sup> These reactions are common when a person with a disability has a negative experience - regardless of where they live.

## The Supreme Committee for Delivery & Legacy

The Supreme Committee for Delivery & Legacy (SC) was established by the State of Qatar in 2011 as the entity responsible for working with national stakeholders to deliver the FWC22 tournament infrastructure, services and legacy. From the outset, it was clear that a substantial infrastructure plan and improvements would be needed, with careful co-ordination and connectivity with a wide range of partners responsible for the day-to-day functioning of Qatar.

To ensure that FWC22 is successful and leaves a lasting, sustainable legacy, the SC is divided into a number of specialized teams that each include subject matter experts. These teams include: business support; communications; host country services (accommodation, mobility, planning and integration, sustainability, and workforce planning); ICT; legacy; marketing; and others.<sup>59</sup> The close co-ordination and co-operation between these teams is essential to achieving the SC's goals and priorities, including those related to accessibility and inclusivity.<sup>60</sup>

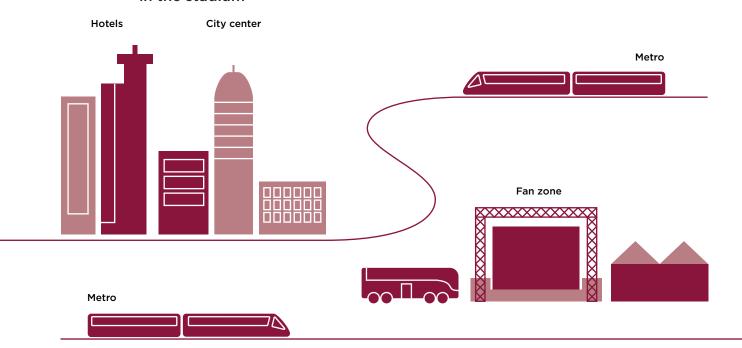
The SC adopted the approach taken at recent sporting events that had successfully embedded inclusive design into their planning. The Social Model of Disability, explained in the previous section, was an important concept that underpinned the SC's approach. This meant recognizing that people are disabled by the environmental, social and attitudinal barriers that prevent them from fully and meaningfully participating in society. Starting in 2013, inclusive design principles were a key part of the vision and planning process, for the built environment, transport, public realm and showpiece stadiums.

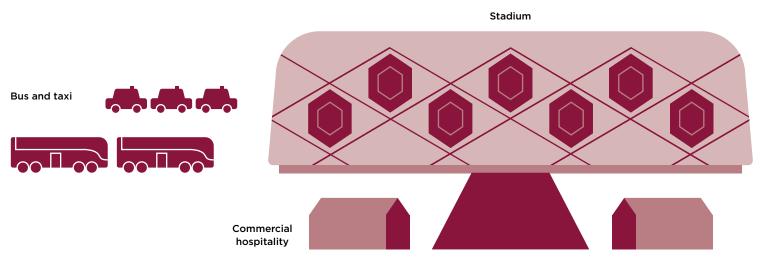
Delivering a tournament experience for people with disabilities that is safe, dignified, integrated, and as independent as possible, requires multisectoral and intersectoral partnership. It requires collaboration across important areas, including airports, accommodation, transport, the public realm and event experiences. Creating awareness and understanding across those sectors is key to delivering a built environment that people with disabilities can use with confidence and assurance that their needs will be met.

### An end-to-end journey

From the early stages of planning the tournament the SC focused on the end-to-end journey (see Figure 6). Designing state-of-the art stadiums that provide facilities and services for people with disabilities is extremely important for Qatar and FIFA. However, equally important is ensuring a seamless experience for people with disabilities when they are not attending a tournament match.

Figure 6. The end-to-end journey reaches far beyond the match in the stadium





Source: The Supreme Committee for Delivery & Legacy. 61

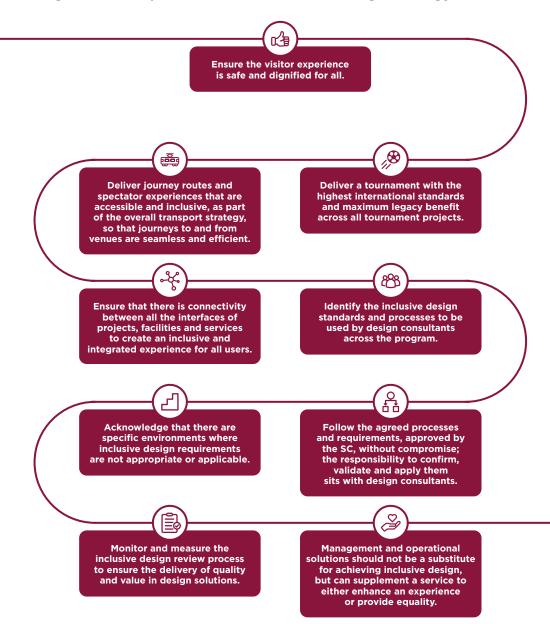
## Supreme Committee inclusive design strategy, principles and requirements

The SC committed to meeting the highest international standards for accessibility and inclusive design including the UK Commission for Architecture and the Built Environment's principles of inclusive design, among others. <sup>62</sup> The London 2012 Inclusive Design Strategy principles were considered the gold standard for sporting mega events and formed the basis of the SC's work. <sup>63</sup> The SC committed to ensure that everyone without exception should be able to use the facilities safely, easily and with dignity by creating facilities that are:

- **Responsive.** The design and development of those facilities should take into account the needs and wants of people, as explained by those people.
- **Flexible.** These facilities need to accommodate all types of people with different needs that can use them in different ways.
- **Convenient.** Facilities should be used in a way that doesn't require too much effort or separation.
- **Accommodating.** All people, regardless of their gender, disability, faith, age or circumstances, should be able to use these facilities.
- **Realistic.** Facilities should offer more than one solution to take into account everyone's needs, recognizing that a 'one size fits all' solution is unlikely to work.

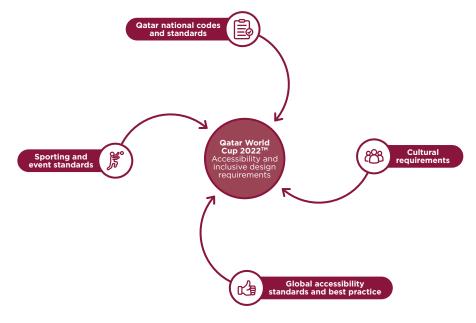
Although the existing national codes were comprehensive in their detail, the World Cup created a focus and an opportunity to review them in light of the latest inclusive design standards and best practice from across the world. As such, the SC developed an inclusive design strategy and requirements to highlight issues around accessibility relating specifically to the stadiums and surrounding areas. While it was never the intention to create a new national standard on accessibility, the process enabled discussion with key partners, such as Ashghal (the Public Works Authority of Qatar), to consider how their standards could evolve in the years leading up to the tournament, and beyond.

Figure 7. Principles of the SC's inclusive design strategy



# Developing accessibility and inclusive design requirements

Figure 8. Creating accessible requirements for the World Cup: Supreme Committee Inclusive Design Strategy



Source: FIFA, the FIFA World Cup Qatar 2022 LLC, and the SC.  $^{64}$ 

To develop overarching principles and a strategy, the SC reviewed accessibility and inclusive design standards for buildings and public realm spaces. Embedding accessibility principles at an early stage of the planning and design process provided better integrated design solutions. Essential accessibility and inclusive design requirements were identified and included to ensure a consistent program approach to design across SC projects.

Research was undertaken in the following areas to inform the Accessibility and Inclusive Design Requirements: Qatar's National Codes and Standards, Global Accessibility Standards and Best Practice, Sporting and Event Standards, and Cultural Requirements (Figure 8). Several other international evidence-based best practices and published guidelines were also reviewed and taken into consideration, including the International Paralympic Committee Accessibility Guide, the Equality Act 2010, the UEFA and CAFE Good Practice Guide to Creating an Accessible Stadium and Matchday Experience, and The Americans with Disability Act, among others.<sup>65-68</sup>

Figure 9 summarizes the areas of accessibility that were considered and reviewed.

Figure 9. Areas of accessibility considered by the Supreme Committee for Delivery & Legacy



Source: The Supreme Committee for Delivery & Legacy. 69

## Working with partners and the Accessibility Forum

The Accessibility Forum was created to make sure that people with disabilities were involved in the design and planning process. The Forum consists of 80 people from more than 25 invited organizations representing the disabled community in Qatar. As relationships have evolved, Forum members have been involved in a wide range of programs, including: assessing new infrastructure; providing awareness training; advising on sensory rooms; developing the audio descriptive commentary; and ensuring that correct standards of accessibility are met in publications and communications.

The SC's Accessibility and Inclusive Design Requirements were implemented in SC projects to ensure a consistent approach. This also allowed for design performance to be measured and monitored. Other delivery partners working in Qatar were encouraged to adopt the SC's Accessibility and Inclusive Design Requirements wherever applicable. This was particularly important in areas that interfaced with SC precincts, or where responsibility was shared, to ensure connectivity through all phases of the spectator experience.

There is the opportunity in the future for inclusive design standards to evolve and develop into a formally recognized national standard on inclusive design. This would be a significant statement by Qatar, demonstrating to the world its commitment to inclusive design.

After the World Cup tournament, the accessibility program will be assessed, including the effectiveness and impact of the strategy and standards.

### SECTION 3. WHAT TO EXPECT AT THE TOURNAMENT

### **Stadiums**

During the FWC22 tournament, 1.5 million fans are expected to visit Qatar. Eight stadiums will be used in the event, and Qatar's compact nature means that fans who travel to the tournament will have the chance to attend more than one match per day – a unique opportunity in the modern history of the competition.

Alongside FIFA, there was an assurance from the State of Qatar and the Supreme Committee of Delivery & Legacy to deliver stadiums that were among the finest in the world. Most importantly, that meant recognizing the value of an inclusive tournament for everyone. Encouraging people with disabilities to share in the World Cup experience was a key message. Working with designers and architects on the development of each stadium, the approach was to look at the accessibility standards in 2013, when Qatar won the bid for the World Cup, but to also try and anticipate the expectations and aspirations of people with disabilities in 2022 and beyond.

A great deal of time was spent in discussion with football clubs, disabled supporter associations and disabled individuals to understand the issues they faced when attending a football match and how issues could be addressed. In addition, during the 24th Arabian Gulf Cup, where a record number of special access ticketholders were in attendance, attendees were surveyed for their feedback on the fan experience for people with disabilities.<sup>71</sup>

Some of the facilities and services that were embedded into the World Cup stadiums were rarely seen 10 years ago, but are now an expectation (see Figure 10).

Figure 10. Accessibility in and around football stadiums



Disabled people will be supported with a trained spectator services team to provide information, advice and assistance when required. A fleet of 96 dedicated buggies, 46 of which will be wheelchair accessible, will support people with disabilities on the final part of their journey to the stadium and official fan zones. There will also be a manual wheelchair service when required.



Every World Cup stadium is providing 1 percent of the seating capacity for people with disabilities; half of these spaces are for people using wheelchairs.



Audio description commentary will be provided for all matches so that spectators with visual impairments can experience the full excitement of a match.



Each stadium has appropriate prayer and wash facilities accessible to all.



Each stadium has a provided a ratio of one wheelchairaccessible toilet for every wheelchair user.



Concession areas provide access for people with disabilities, including lower height serving areas and induction loops.



Main male and female toilet blocks in the stadiums have an adapted cubicle fitted with handrails to assist people with mobility difficulties.



Adult changing toilet facilities have been provided in every stadium so that people who can't use a standard wheelchair-accessible toilet will be able to use a specialist facility with a hoist, ensuring their needs are met in a safe, dignified and hygienic way.



Permanent sensory rooms with a pitch view in the stadiums at Al Bayt, Education City and Lusail have been installed so that autistic children, and those with associated disabilities, will be able to enjoy the matches in an environment that provides comfort, calmness and reassurance.

### Web accessibility

To ensure that the FWC22 website is accessible for all, the SC measures its accessibility against the internationally recognized Web Content Accessibility Guidelines (WCAG) 2.0 standards.<sup>72</sup> The SC also works closely with Mada, the Qatar Assistive Technology Center, to develop and improve the site using Mada's accessibility monitor.<sup>73</sup>

### Beyond the stadium

The inclusive approach that Qatar has taken is projected to generate significant interest from people with disabilities who want to be part of the World Cup experience. The more people who visit Qatar for the tournament, the greater the demand on the accessible infrastructure, facilities and services needed for an equitable experience. This is a challenge that

was recognized and welcomed early - by the SC, but also by other key stakeholders and delivery partners involved in the transport system (see Figure 11), accommodation, spaces, and visitor attractions.

Qatar has also taken significant steps to recognize the importance of identifying legacy opportunities. These are opportunities that will enhance the lives of people with disabilities living in Qatar, and enrich the experience of those visiting the country far beyond 2022. It is the commitment of the delivery partners that will ensure and protect the legacy moving forward beyond the end of the tournament.

Figure 11. Accessibility beyond the stadiums: Transport



The Doha Metro, which opened in 2020, brings all major tournament locations within easy reach. The network of stations across Qatar has essential accessibility features, including level access for boarding and alighting trains, tactile paving and dedicated seating for people with mobility difficulties, and spaces for wheelchair users.



Mowasalat, the ground transport operator under Qatar's Ministry of Transport and Communication a new fleet of 50 dedicated accessible taxis through their 'Karwa' fleet. These specialist taxis operate with a loading ramp, enabling a wheelchair user to remain in their wheelchair while traveling.



A fleet of 50 accessible minibuses provide connectivity in key areas where accessible transport services are needed. Each minibus can carry up to three wheelchairs.



The Lusail Tram is a service for convenient travel within the new city of Lusail. It is built to the same accessibility standards as the Doha Metro. This network includes four lines and 25 stations above ground and underground.



Mowasalat has been a key player in developing the bus and driver-led services that will increase the availability of public transport. When the tournament starts, there will be more than 850 low-floor buses in operation. The fleet provides ramped access to wheelchair users and pushchairs.

### Accommodation

Delivering the quantity of accessible accommodation needed for a mega sports tournament is challenging. Demand for accessible accommodation in Doha is usually low, particularly for wheelchair users, whereas the number of wheelchair users arriving for the tournament will be unprecedented. Great efforts have been made to secure accessible accommodation in a range of accommodation types, across a variety of locations. Achieving the volume of hotel rooms and apartments with the appropriate facilities – such as accessible bathrooms – remains

an ongoing process that will continue up to the start of the tournament. Matching suitable accessible accommodation appropriately to a person with a disability is an additional challenge.

#### Public realm

The Public Works Authority, Ashghal, was established in 2004 to be responsible for the planning, design, procurement, construction, delivery and asset management of all infrastructure projects and public buildings in Qatar. Ashghal has been responsible for the development of Qatar's public realm and, in recent years, has evolved its approach: it now applies the Americans with Disabilities Act standards across its various projects. The application of these standards improves critical points of connectivity in public spaces – such as ramp gradients, road crossings, seating and pedestrian flows – and gives people with disabilities improved access, more integration with transport networks and routes that are safe and dignified.

The Doha Corniche is a good example – it is a seven-kilometer promenade that runs adjacent to the dual carriageway and extends around Doha's sea front. From an early stage it was identified as a marquee location for events and activities during the World Cup. Extensive redevelopment of the area has been undertaken over the last few years, incorporating a number of connectivity and accessibility improvements. The Corniche itself has become more accessible with gradients, seating, places to gather and dropped kerbs for better accessibility for wheelchairs and mobility aids.

During the tournament, the Corniche will be a major location for people to gather and celebrate. The facilities and activities, including sensory rooms, will provide an inclusive experience for everyone.

#### Fan zones

Spectators with disabilities watching a match in a fan zone or visiting other tournament entertainment areas should expect similar facilities and services to the stadiums. There will be two sites providing mobile sensory rooms and there will be a mobile adult changing toilet facility serving both the Corniche and FIFA Fan Fest. The mobile facilities will remain after the World Cup as part of a long-term legacy for other events and activities in Qatar beyond 2022.

#### Visitor attractions

Many of the visitor attractions across Qatar have been developing their experiences for people with disabilities. Examples include the addition of a sensory room in the National Museum of Qatar, and the extensive developments at the Museum of Islamic Art in Doha, which has improved facilities and visitor flows to benefit people with disabilities. The development of other cultural attractions has been completed in a sympathetic way that doesn't detract from the area's unique character. For example, the traditional Souq Waqif marketplace has new integrated level routes for wheelchair users and people with mobility difficulties.

A specialized operator is providing tours designed for people with disabilities, to enable them to enjoy an experience in the desert, kayaking in the mangroves, or a boat trip on an accessible dhow sailing vessel.

### SECTION 4. CONCLUSION AND POLICY RECOMMENDATIONS

The FWC22 has potentially marked the beginning of a new era of social inclusion and accessibility for Qatar. Over the past decade, the country has undergone extensive (and, in some ways, drastic) changes in infrastructure and connectivity to enhance accessibility and promote inclusion. It is widely believed that people with disabilities will be important beneficiaries of this mega sporting event's legacy.<sup>74</sup>

Delivering a tournament that is accessible requires more than accessible seats at the stadiums – it is also about making sure each individual's journey is connected, accessible, and with as few barriers as possible, from the moment they arrive at the host country airport to the moment they leave. To achieve this, the Supreme Committee for Delivery & Legacy and its partners have been working to revise, design and redesign this urban city – from its infrastructure to its buildings, transport hubs and beyond, to ensure they meet visitors' needs.

Therefore, there are two important questions relating to accessibility that will remain at the end of the tournament:

- 1. Did people with disabilities attending FWC22 enjoy a safe, dignified, integrated and independent experience, on an equal basis to everyone else?
- 2. Did the tournament influence infrastructure, facilities, service and behavioral change and leave a lasting legacy?

While it is difficult to evaluate the impact of the program until the tournament is complete, there have been significant infrastructure changes in Qatar that have improved experiences for people with disabilities. We know that there is greater connectivity than ever before, and in some locations a truly inclusive experience can be enjoyed by everyone. The developments of Al Bayt stadium with the surrounding park, the Corniche, and West Bay public realm improvements are examples of this.

There is a greater awareness of specific disability groups and it is hoped that the increased visibility of people with disability during the tournament will continue to be embraced. It is important that the value, profile and status placed on accessibility is retained long beyond the end of the tournament.

One of the greatest threats to continuity and sustainability is that the expertise and knowledge on accessibility across many partners could potentially disperse once the FWC22 ends. The reality is that those human resources will quickly move onto other roles – or return to their previous role in their home countries. It is therefore vital that the lessons from these projects and individuals are captured to inform the future of Qatar.

An exciting prospect would be further major tournaments coming to Qatar following a successful World Cup - maybe a future Olympic bid. For this to be achieved, there needs to be a solid demonstration of vision and process for further commitments on accessibility. This will need to begin as soon as there has been a period of reflection on the World Cup.

There is still some way to go, but the next phase of this journey has the potential to be even more exciting and inclusive.

### Policy recommendations

An accessible and disability-inclusive urban design and development agenda can be realized anywhere in the world. To ensure the sustainability and continuity of accessibility in Qatar after the FWC22, and for other countries striving to do the same, we propose that governments and policymakers take into consideration the following policy recommendations and commitments.

- Establish a centrally recognized body representing and responsible for accessibility and inclusive design within the governmental structure. This body should be tasked with convening and monitoring all relevant delivery partners, using a strategic and consistent approach. They should also be responsible for the implementation of universal design as a concept and principle. They should ensure that these principles are reflected in the designs and plans for new infrastructure and built environments as well as in renovations to existing facilities to secure that they are accessible for all.
- Form an expert consultation group that includes representatives from disability and inclusion organizations. These key organizations that have expertise, knowledge and experience with accessibility and inclusion should act as champions on national and international levels, providing independent advice to government.

- Create a formally recognized advisory group of people with disabilities. Members should be experts by experience and include a variety of ages, genders, ethnicities, and those with diverse experiences of disability. This group should meet quarterly to provide feedback and advice to government on urban design plans for accessibility.
- Clearly define and embed formalized accessibility targets into national strategies (as in the case of the Qatar 2030 vision). These targets should include building standards, public infrastructure, transportation and public services, and ICT. The progress towards achieving these targets should be reviewed annually, and future plans made accordingly.
- Introduce and enforce monitoring and evaluation measures. The governmental body representing people living with disabilities and inclusive design should review progress on urban design planning annually to make sure infrastructure programs always achieve the highest international standards for accessibility.
- Align accessibility targets for future projects with high-profile
  events and activities within a country. Each organizing committee
  assigned to high-profile event management and execution should
  include a designated team that oversees and ensures accessibility standards.

### **ACKNOWLEDGMENTS**

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The Forum advisory board for this paper was chaired by Mark Dyer, Accessibility and Inclusive Designer, Supreme Committee for Delivery & Legacy. Sincere thanks are extended to the members of the advisory board of the WISH 2022 Forum on Accessible by Design who contributed their unique insights to this paper:

- Dr Sadriya Al Kohji, Primary Health Care Corporation, Qatar
- Maha Al Mansouri, Mada Assistive Technology Center Qatar
- Nihal Mohamed Al Saleh, Qatar Foundation
- Dr Darryl Jarvis, College of Public Policy, Hamad Bin Khalifa University, Qatar
- Niki Georgiou, Primary Health Care Corporation, Qatar
- Dr Achraf Othman, Mada Assistive Technology Center Qatar
- Annabel Short, Institute for Human Rights and Business, USA
- Dr Lisa Thornton, Sidra Medicine, Qatar
- Jason Twill, Green Sports Alliance, USA

We also extend our thanks for the contributions to this report made by:

- Maha El Akoum, WISH, Qatar
- Lalitha Bhagavatheeswaran, The BMJ, UK
- **Dr Paul J Simpson**, The BMJ, UK
- **Didi Thompson**, WISH, UK

The authors alone are responsible for the views expressed in this report and they do not necessarily represent the views, decisions or policies of the institutions with which they are affiliated. Any errors or omissions remain the responsibility of the authors.

BMJ Partnerships provided organizational and technical editorial support for this report.

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### WISH RESEARCH PARTNERS



WISH gratefully acknowledges the support of the Ministry of Public Health







































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