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It would not be fitting to present these guidelines without acknowledging the contribution of various persons and entities in its compilation.

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The basic premise underlying this revised version of the Access for All Design Guidelines is that disabled persons daily encounter various barriers which ‘... may hinder their full and effective participation in society on an equal basis with others.’ (UNCRPD, 2007: Art. 1). These socially constructed barriers add considerably to the difficulties which one has to cope with on account of one’s impairment. But, whereas little can be done to allay the effect of one’s biological impairment, there is much that can be done to alleviate the inequalities created by ‘man-made’ barriers.

The barriers which we encounter take on many forms, for example: lack of access to goods and services, lack of access to means of communication and/or information, or more generally negative attitudes. But perhaps the most familiar barrier in the mind of the general public is widespread lack of physical accessibility.

Article 44(1) of the Maltese Constitution insists that ‘no citizen of Malta shall be deprived of his freedom of movement’. Article 9 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) commits signatories (Malta among them) to provide for full accessibility in their countries. Finally, Act I of 2000, the Equal Opportunities (Persons with Disability) Act makes it illegal for anyone to treat or propose ‘to treat a person who has a disability less favourably than he treats or would treat a person who does not have such a disability’. (Part II, para. 3.1(a)).

But legal instruments, no matter how laudable the sentiments expressed in them, are essentially ineffectual unless they are translated into concrete action. The purpose of these guidelines, then, is to do just that, that is, to ensure that non-discrimination, freedom of movement and the right to live and work and be included in the community (UNCRPD, Art.19) are actually put into practice.
Nowadays, the term ‘access for all’ and its sister concept of universal design no longer apply exclusively to the needs of disabled people, but are seen as a basic building block for a better quality of life for everyone: disabled, or not. Thus, these guidelines should be seen in the wider context of the creation of a built environment which is more inclusive and welcoming to everyone.

Changing times bring with them changing needs, which in turn demand innovative ways of thinking, fresh approaches and a change in attitudes. In this respect the present edition of the Access for All Design Guidelines build on the best from the past, while pointing towards a fairer, more exciting future for all Maltese citizens, including those who have hitherto been excluded from full participation in mainstream activities.

**Joseph M. Camilleri**
Chaiperson, Kummissjoni Nazzjonali Persuni b’Diżabilità
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INTRODUCTION TO THE 3RD EDITION

The Access for All Design Guidelines presented here is in its third edition and has materialised 6 years after the publication of the 2nd edition in 2006. It is the result of a continuous review process that commenced shortly after the publication of its predecessor. It brings together the continuing experience in accessibility auditing which the KNPD has built up since the enactment of the Equal Opportunities Act in 2000 and a rethinking of the focus of the guidelines regarding accessibility in the physical environment. In this edition, the recommended guidelines differ somewhat in content and form from previous editions. A radical change is the elimination of the erstwhile Part III that dealt with accessibility issues related to specific types of buildings. The rationale behind the editing out of this section lies in a process which aims to refocus attention on the dimensional standards which reflect the minimum levels of accessibility. Part III intrinsically contained a combination of exemptions, reinforcement of the basic accessibility standards and their application to specific buildings. It also formed an integral part of the planning process and the vetting of planning applications by KNPD. The intention is to publish a review of the application of the accessibility standards to specific buildings in a separate publication. Until such time the guidelines set in the 2006 edition regarding specific buildings remains valid and will be employed by KNPD when assessing buildings and proposed development as a measure of conformity to accessibility requirements.

Another change in format has been the amalgamation and assimilation of Part I and Part II that featured in the second edition. The reason behind this change in layout is to provide easier reference by incorporating, as far as possible, all the guidance concerning the particular elements in the same place within the document. It has also eliminated a certain amount of repetition resulting from the previous arrangement.

The document has been laid out to provide as much as possible a logical progression through the different elements encountered in the physical environment.
The first two sections deal with the approach route to a building and also apply more widely to outdoor pedestrian routes. The ‘Surfaces Guidelines’ have been expanded to incorporate more guidance regarding accessible routes both in an indoor as well as an outdoor environment. The increased level of guidance is a direct response to enquiries regarding outdoor paths. Enhanced information regarding tactile ground surfaces attempts to address information that was lacking in previous editions. The section concerning ‘Parking’ has been extended to include guidance on drop off points, the significance of which was not clearly identified in the previous edition.

This edition features two new sections which bring together previously scattered information regarding the main entrances to buildings as well as the reception areas on entry into a building. The re-organisation of this guidance is aimed at reflecting the importance of establishing accessibility requirements at the first encounter with a building or facility.

The section on accessibility standards regarding, doors, lobbies and corridors emerges as two separate sections in the revised edition. The reason behind this change was to re-organise the standards regarding doors within one separate section.

The sections regarding vertical circulation have remained unmodified in format, although it is pertinent to point out that the section regarding lifts incorporates the amendments included in a review of the guidelines carried out in 2009 and published on the KNPD website. The section was also extended to feature steps lift which is a relatively recent product on the market and to date had not been included in the accessibility guidelines. Standards regarding handrails and grab rails have been included in the relevant sections in which their use is largely relevant, e.g., stairs, and sanitary facilities and so on. Consequently, the guidelines section concerning hand rails and grab rails that featured in the second edition has been assimilated in other sections.

A new section relating to standards regarding fire safety has been introduced in this edition to address the lack of guidance in previous editions. Other sections regarding control systems, lighting systems, signage and aural environment have remained largely intact.
It is to be noted that the second edition included guidance on the relevant standards that would be taken into consideration during planning application vetting by KNPD. It has transpired that this guidance has become irrelevant because of two main reasons. First, different proposals contained diverse information and hence it was becoming increasingly unwieldy to pursue this approach. Second, the focus of this edition is to provide guidance on accessibility standards irrespective of planning processes.

The overriding objective remains constant and that is to provide a comprehensive guide to the achievement of a physical environment that is inclusive, accessible and adheres to the principles of universal design. In brief, the main aim is towards the achievement of an environment that does not inherently feature obstacles and barriers to anyone, irrespective of ability, age or physical condition. It is acknowledged that no set of guidelines can hope to take account of all imaginable possibilities encountered in the physical environment; cognisant of the fact that essentially all buildings and physical environments are unique. In this context, this document aspires to provide general guidance to the minimum standards of most of the elements and structures likely to form part of the physical environment and that would allow a disabled person to independently enter and make use of the facility. In essence it provides a framework to direct creative efforts in providing an accessible environment in new and existing buildings. Most of the dimensions that appear in these guidelines should be regarded as minimum requirements. Where circumstances permit more generous dimensions should be employed.

The guidance offered in this document covers a wide range of impairments and the use of the built environment by disabled people who may be residents, visitors, spectators, customers or employees.

Joseph Spiteri
1.1 ACCESSIBLE ROUTES AND GROUND/FLOOR SURFACES

1.1.01 All routes that are required to be accessible by virtue of the clauses in these guidelines shall comply with the following standards.

1.1.02 An accessible route shall have a firm, slip resistant and smooth surface.

1.1.03 An accessible route shall be a minimum of 1.2m wide throughout its entire course.

1.1.04 An accessible route shall be level and/or shall where warranted contain ramps in the direction of travel that conform to the recommendations regarding ramps incorporated in these guidelines throughout its entire course.

1.1.05 A turning space of 1500 mm wide and 1500 mm deep shall be provided in all circumstances where the accessible route (including ramps) changes direction by 45 degrees or more.

1.1.06 Cross slopes across accessible routes shall be no steeper than 1:50.

1.1.07 Where paving slabs and blocks are used, the joint between paving slabs /blocks should be flush and level. All joint/edges of the individual blocks shall be flush and provide an even and smooth surface. All joints shall be filled with grouting material to the top surface of the slabs/blocks. There shall be no ridges at the joints or anywhere else in the paving surface.

1.1.08 Gravel, soil or other loose surface material shall be avoided in accessible routes.

In the case of natural pathways which form part of an access route to an entrance of a facility and where it is considered reasonable to feature gravel, soil or loose surface material, the material shall be bound by a free draining cellular binding system. The open
base of the cells should be between 40% and 70%. The surface of the pathway should be even and smooth.

1.1.09 Natural pathways are considered to be accessible to all if they have a smooth surface. A smooth surface is defined as one with compacted aggregate or bound surface with no protrusions greater than 10mm.

1.1.10 An uneven surface of a natural pathway may be considered as an accessible route only if it contains minor variability in the level of the surface (not associated with the gradient or cross slope) and if the variability in the level of the surface is less than 50 mm of height difference within an area of 1 metre squared.

1.1.11 Natural pathways are considered to be accessible to all only if they are well drained.

1.1.12 Tactile paving should be used on accessible routes to provide warning and guidance to blind and partially sighted people. The message this surface indicates is (a) that there is a lack of a kerb height between the road and the footway and, (b) the location of the crossing point across a vehicle carriage way.

1.1.13 Blister (dome type) tactile surface is to be used to signal that one should stop and ascertain it is safe to proceed. Blister type tactile tiling shall be used only to signal a crossing point across a vehicular route and in no other situation.

Tactile paving should contrast with the surrounding paving materials. For safety reasons red coloured tactile blister paving is reserved for controlled crossings.

The profile of the blister tactile surface shall be as shown in Figure 1.
1.1.14 Corduroy type tactile surface should be used either;

To signal that a flight of steps lays ahead (Type 1)

Or

As a directional guide (Type 2)

The profile of the tactile surfaces shall be as shown in Figures 2 and 3.
Figure 2. Corduroy tactile paving (Type 1)

Figure 3. Corduroy tactile paving (Type 2)
1.1.15 Drainage gratings shall preferably be positioned beyond the boundaries of the access route. If unavoidable, gratings within an access route should be set flush with the surrounding surface.

1.1.16 Slots in gratings shall be not more than 13 mm wide and set at right angles to the dominant line of travel. The diameter of circular holes in gratings should be not more than 18 mm.

1.1.17 Where an accessible route crosses an access to a garage or driveway the unimpeded width of the access route across the garage access shall be maintained at 1.2 m width and level and any vehicle ramps shall be incorporated outwith the accessible route width (Figure 4).

![Figure 4. Crossing of accessible routes and driveway/garage access](image)

1.1.18 Polished floors are only acceptable in areas where water or materials giving a similar effect are not likely to be spilled or splashed.

1.1.19 All floors, ramps and stairways within an accessible route shall be designed, specified and constructed to protect pedestrians from significant drops in level.

1.1.20 All flooring surfaces shall be firm, regular, and provide an indication of significant hazards or changes in levels.
1.1.21 Floor surfaces shall be flush at intersections with particular attention paid to the installation of grates and mats.

1.1.22 The use of deep pile, open texture, soft mats or unsecured carpets shall not be used within an accessible route.

1.1.23 People with visual impairment may have difficulty finding their way around spaces if they cannot respond to visual cues. Luminance contrast is more important than colour contrast in helping visually impaired people distinguish between different surfaces.

1.1.24 The minimum height of overhanging obstructions (such as vegetation and signs) over an accessible route shall be no less than 2 m from the ground.

1.1.25 Table 1 contains guidance on the potential for slip on dry/unpolished and wet surfaces.

<table>
<thead>
<tr>
<th>Material</th>
<th>Potential for slip</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry and unpolished carpet</td>
<td>Wet</td>
<td>Loose or worn carpet can present a trip hazard</td>
</tr>
<tr>
<td>Carpet</td>
<td>Very low</td>
<td>Low</td>
</tr>
<tr>
<td>Cast iron</td>
<td>Low</td>
<td>Moderate to low</td>
</tr>
<tr>
<td>Ceramic tiles (highly polished)</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Ceramic tiles (matt)</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Wet slip resistance is dependent on surface roughness. An Rz [din] value of greater than 10 µm is recommended for use in clean water wet areas.</td>
</tr>
<tr>
<td>Material</td>
<td>Potential for slip</td>
<td>Remarks</td>
</tr>
<tr>
<td>------------------------------</td>
<td>--------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Dry and unpolished wet clay</td>
<td>Wet</td>
<td>When surface is wet and polished, the potential for slip can be very high.</td>
</tr>
<tr>
<td>Concrete</td>
<td>Low</td>
<td>Moderate to low If textured finish or a non-slip aggregate is used, potential for slip can be low.</td>
</tr>
<tr>
<td>Linoleum</td>
<td>Low</td>
<td>Moderate to low Edges of sheet liable to cause tripping if not firmly fixed to base.</td>
</tr>
<tr>
<td>Mastic asphalt</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Profiled ceramics</td>
<td>Low</td>
<td>Moderate to low Profiled ceramics are suitable for use in barefoot areas. In shod situations, the comment for matt ceramic tiles applies.</td>
</tr>
<tr>
<td>PVC</td>
<td>Low</td>
<td>High to moderate Ex-factory classes for PVC should be treated with caution. The installed floor is unlikely to be suitable for use in wet conditions.</td>
</tr>
<tr>
<td>PVC, enhanced slip resistance</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Resin, smooth self levelling</td>
<td>Low</td>
<td>High to moderate The anti-slip properties depend upon sufficient, uniformly distributed aggregate. Areas of reduced aggregate can present a serious slip hazard.</td>
</tr>
</tbody>
</table>

Table 1. Potential for slip of surfaces
1.2 PARKING AND DROP-OFF POINTS

1.2.01 When parking is available to the public or staff, a number of spaces shall be designated for disabled motorists, whether they are visitors or permanent staff members.

1.2.02 The number of parking spaces suitable and reserved for disabled persons shall be a proportion of the total number of parking spaces made available as shown in Table 2.

<table>
<thead>
<tr>
<th>Total number of parking spaces</th>
<th>Number of accessible of spaces required</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 – 10</td>
<td>1 space*</td>
</tr>
<tr>
<td>11 - 25</td>
<td>2 spaces or 1 van accessible space**</td>
</tr>
<tr>
<td>26 – 50</td>
<td>2 including 1 van accessible space</td>
</tr>
<tr>
<td>51 – 75</td>
<td>3 including 1 van accessible space</td>
</tr>
<tr>
<td>76-100</td>
<td>4 including 1 van accessible space</td>
</tr>
<tr>
<td>101-150</td>
<td>5 including 1 van accessible space</td>
</tr>
<tr>
<td>151-200</td>
<td>6 including 1 van accessible space</td>
</tr>
<tr>
<td>201-300</td>
<td>7 including 1 van accessible space</td>
</tr>
<tr>
<td>301-400</td>
<td>8 including 1 van accessible space</td>
</tr>
<tr>
<td>401-500</td>
<td>9 including 2 van accessible spaces</td>
</tr>
<tr>
<td>501-1000</td>
<td>2% including 3 van accessible spaces</td>
</tr>
<tr>
<td>More than 1000</td>
<td>20 + 1 per 100 or fraction, including minimum 1 van accessible space per 8 accessible spaces or fraction thereof</td>
</tr>
</tbody>
</table>

* A space refers to the dimensions indicated in paragraph 1.2.04
** A van accessible space should be minimum 7300 mm long and 2900 mm wide with 2300 mm headroom.

Table 2. Accessible for all parking spaces requirements
1.2.03 Designated parking spaces should be located on firm and level ground, as close as is reasonable to the principal accessible entrance to the building with which the parking spaces are associated but no further than 50 m away from the entrance to the building.

1.2.04 A parking space designated as one for persons with disability shall have a minimum width of 3.6 m and a minimum length of 4.8 m for perpendicular parking and a minimum length of 6.6 m for parallel parking. Parking spaces shall have an access aisle at least 1500 mm wide along the entire length of the parking space.

![Figure 5. Accessible for all parking space](image)
1.2.05 A van accessible space is mandatory in parking areas in which more than 25 spaces are made available. A van accessible space shall be a minimum of 7.3 m long and 2.9 m wide, with minimum headroom of 2.3 m and an access aisle width of at least 2m.

1.2.06 Access aisles shall be identified with diagonal markings.

1.2.07 Accessible parking spaces shall be marked with a vertical sign incorporating the international symbol of access that is at least 300 mm wide and 450 mm high, and has its centre 1500-2500 mm from the ground.

1.2.08 Pre-payment machines should be positioned as close as possible to the designated parking space/s.

---

Figure 6. Accessible for all parking layout
1.2.09 The height of ticket, swipe-card or key activated systems for car park barriers shall be accessible to all and conform to the controls guidelines included in this document (section 1.12).

1.2.10 The space in front of a meter or a ticket dispenser associated with designated parking spaces shall be level, free from obstruction and should accommodate a turning circle of 1500 m.

1.2.11 A marked accessible route from the accessible parking spaces to the entrance to the facility it serves shall be provided. This route should be 1200 mm wide and at no point shall be less than 1000 mm wide and shall be the shortest and most direct route to the entrance.

**DROP OFF AREAS**

1.2.12 Where applicable, a drop off area should be provided and be visible from the main entrance.

1.2.13 An access aisle at least 1500 mm wide and 6000 mm long shall be provided adjacent and parallel to the vehicle pull-up space.

1.2.14 The route between the drop-off area and the main entrance shall have a surface as defined in the ground surfaces section of these guidelines.

1.2.15 Where applicable drop down kerbs shall be provided at drop off areas.
1.3 MAIN ENTRANCE TO A BUILDING/FACILITY

1.3.01 The main entrance to a building or facility shall be served by an accessible route as defined in these guidelines, from a public footpath or car parking area.

1.3.02 The main entrance should be clearly visible from the accessible drop off point, or signs should be provided indicating the location of the main entrance.

1.3.03 The main entrance into a new building or facility shall be level.

1.3.04 In some instances, particularly in the context of established street levels/gradients it may be reasonable for the main entrance to include a ramped access. Any such ramp shall conform to the ramps section of these guidelines. It is noted that, even in these instances, a level landing [as per sections 1.7.12 and 1.7.13] shall be provided at the top and bottom of the ramp, i.e, between the edge of the ramp and the door.

1.3.05 At least 50% of the pedestrian entrances (including the main entrance) shall be served by an accessible route and have level access.

1.3.06 In existing buildings a ramped access may be reasonable. Any such ramp shall conform to the ramp guidelines. It is noted that, even in these instances, a level landing [as per sections 1.7.12 and 1.7.13] shall be provided at the top and bottom of the ramp, i.e, between the edge of the ramp and the door.

1.3.07 In existing buildings/facilities, in those cases where it may be reasonable to offer an alternative accessible entrance instead of an accessible main entrance, the alternative entrance shall lead into the same reception area as that from the main entrance.

1.3.08 Where it may be reasonable to offer an alternative accessible entrance, signage giving directions from the main entrance to the alternative entrance shall be posted prominently adjacent to the main entrance, and along the route between the two entrances.
The alternative entrance shall feature all the accessibility requirements of a main entrance as recommended in these guidelines. The alternative shall remain open during the same period as the main entrance is open. The alternative entrance shall feature an intercom connection with the main entrance reception.

1.3.09 Where it is permissible by planning regulations to have an elevated ground floor (for example due to the presence of a semi basement construction), the main entrance route may be provided via a ramp or via a passenger or platform lift.

1.3.10 In a new building where a platform/passenger lift is intended to form part of an accessible entrance route it shall be located internally within the building fabric.

1.3.11 In an existing building where a platform/passenger lift is intended to form part of an accessible entrance route it shall be located either internally within the building fabric or shall be sheltered from the elements by a canopy or a similar structure.

1.3.12 Where a platform/passenger lift is intended to form part of an accessible entrance route, and the entrance is located off a footpath, the width of the footpath may form part of the width of the landing required in the guidelines concerning lifts.

1.3.13 Door bells, entry phones/identification systems shall be sited for convenient use from a wheelchair. Phones and identification systems shall contain a visual display to enable people with impaired hearing to use them.

1.3.14 Revolving doors are not considered as adequate accessible entrance doorways unless specifically designed for persons with disability in terms of space and timing. Unless so specifically designed, an entrance fitted with a revolving door shall have an adjacent door conforming to the guidelines contained in this section.

1.3.15 Exit doors, particularly those intended for emergency egress shall conform to the guidelines indicated for accessible entrances.
1.4 COUNTERS & RECEPTION DESKS

1.4.01 Counters or reception desks should be located so they are easily identifiable from the main entrance.

1.4.02 Where waiting and queuing is the normal pattern of use, permanent or temporary control barriers should allow wheelchairs to turn towards the counter or desk.

1.4.03 The clear manoeuvring space in front of a counter or reception desk or similar fittings should accommodate a turning circle of 1500 mm diameter.

1.4.04 A reception desk or counter should have a working surface height at two heights:
   a) between 950 mm and 1100 mm to accommodate people who are standing;
   b) 760 mm to accommodate wheelchair users

   The lower level counter (i.e., 760 mm above floor) should extend for a distance of at least 1500 mm.

1.4.05 A high seat or stool should be provided so that people with limited standing ability can use both hands for a transaction.

1.4.06 Where a customer and a receptionist are opposite each other (and one is in a wheelchair), a minimum work surface depth of 700 mm should be provided.

1.4.07 Where tickets or coins are involved in transactions, an upward sloping leading edge should be provided at the front of a counter to help people with impaired dexterity to grip coins.

1.4.08 When a glazed security screen is used above a counter or reception desk, an induction loop system should be provided in addition to standard amplification. It should be clearly indicated with the standard symbol.
1.4.09 To facilitate lip reading, lighting design should ensure that a receptionist’s face is evenly lit. Security screens should be so designed to ensure reflections are avoided.

1.4.10 A counter or reception desk should be fully accessible to all from both the visitor’s and the staff’s side.

1.4.11 The clear height from the floor surface to the underside of the counter or its support rail should be at least 700 mm at the staff side.

1.4.12 Signs associated with counters and reception desk should be large enough to be read at a distance and placed at a height that is convenient for wheelchair users to read.
1.5 DOORS

Main entrance doors

1.5.01 The principal main accessible entrance door shall have a minimum clear opening width of not less than 900 mm. Where double leaf doors are fitted, one leaf shall be at least 900 mm wide.

1.5.02 Principal main entrances should be fitted with automatic doors.

1.5.03 The entrance door should contrast in luminance with its immediate surroundings and should be well lit and clearly signed.

Emergency Exits

1.5.04 Emergency exits shall be designed to provide emergency egress for persons with disability particularly wheelchair users.

1.5.05 Emergency exits shall be served by an accessible route linking internal areas to external or safe refuge areas.

Internal Doors

1.5.06 Internal doors in new buildings shall have at least one leaf that provides a minimum clear opening width of not less than 850 mm (except lift doors that should have an opening width of not less than 900 mm).

1.5.07 Internal doors in existing buildings shall have at least one leaf that provides a minimum clear opening width of not less than 800 mm.
Door Features (Entrance, Emergency Exit and, Internal doors)

1.5.08 Door thresholds should be level and flush with the surrounding floor. Where this is reasonably unavoidable, the tolerated change in level shall be not greater than 15 mm and the threshold shall be bevelled or chamfered. Thresholds which are no more than 6 mm high need not be bevelled.

1.5.09 The door should permit an unobstructed space on the side next to the leading edge of the door of at least 300 mm unless the door is controlled by a suitable automatic control. (Figure 7)

Figure 7. Clear opening width and leading edge distance

1.5.10 Internal doors should be provided with a glazed panel giving a zone of visibility from a height of 900 mm to 1500 mm from the finished floor level wherever the opening action of the door could constitute a hazard. If doors incorporate glass panels the height of the lowest edge of the lowest edge of the glass panel shall be no higher than 900 mm above the floor.
1.5.11 Lever handles shall be used, where relevant, in conjunction with an upright mortise lock/latch. Unobstructed access to the handle/keyway should be provided. The cylinder should either be above the lever handle or the minimum distance between the handle and the keyway of the locking system should be 75 mm. Other door ironmongery should be similarly suitable for use by persons with disability.

1.5.12 The location of door opening fittings should be consistent throughout a property.

1.5.13 All door furniture should contrast in colour and luminance with the surface of the door.

1.5.14 Doors should be easily distinguishable from the adjoining wall by colour and luminance contrast.

1.5.15 Where doors are fitted with self-closing mechanisms, the maximum opening force at the leading edge of a door fitted with this device should not exceed 20 Newtons.

1.5.16 Where doors are required to be bolted the system employed shall be easily operable by persons with impaired mobility and dexterity.

One of the following systems should be employed:

- Slide flush or surface bolts with a free moving slide action.
- Rack and pinion mortise bolts fitted with fixed knobs to enable the user to operate them easily.
- A surface mounted or mortised espagnolette bolt with top and bottom shoots or side shoots operated by a single handle positioned at a height between 750 mm and 1000 mm from the finished floor level.
1.5.17 The presence of a glass door shall be made apparent, with permanent strips on the glass (manifestation) within a zone 1400 mm to 1600 mm from the floor, contrasting in colour and luminance with the background seen through the glass in all light conditions. The edge of the glass door should also be apparent when the door is open.

1.5.18 Where applicable, doors should be clearly marked to indicate whether the door is to be pushed or pulled to open.

1.5.19 Door hardware shall be located between 800 mm and 1200 mm above the floor.

1.5.20 Where the approach to a doorway requires a change of direction greater than 45 degrees, the manoeuvring space on each side of doors shall be 1500 mm wide and 1500 mm deep.

1.5.21 Power assisted swinging doors should take at least 3 seconds to swing open from fully closed and remain open for a minimum of 5 seconds.

1.5.22 Power assisted swinging doors that open into a route of travel shall have guardrails or other barriers at right angles to the wall containing the door, which are detectable to a person who is blind using a long white cane.

1.5.23 Controls to open power assisted doors should be; located along the route of travel; clearly visible before reaching the door; clear of the door swing or any other fixture; located 800-1200 mm above the ground or floor surface; incorporate a clear floor space of at least 850mm wide and 1200mm deep in front of the control (with the control centred on the clear space); consist of activation pads at least 25 mm wide and 75 mm high that are operable by touching any part of the surface with a fist or an arm, with one hand, without tight grasping, pinching, or twisting of the wrist; and shall be marked with the international symbol of access.
1.6 **LOBBIES AND CORRIDORS**

**Lobbies**

1.6.01 Minimum dimensions of lobbies shall be as indicated in Figure 8.

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Figure 8. Minimum dimensions of lobbies
1.6.02 Lobby dimensions should be clear of any elements that project into the lobby.

**Corridors**

1.6.03 The design of a corridor or passageway should allow persons with disability to find their way easily and unimpeded.

1.6.04 Corridors and passageways shall have a clear width of at least 1100 mm for corridors of length up to 15 m and a minimum width of 1500 mm for lengths over 15 m.

1.6.05 Corridors must have sufficient space at corners to accommodate the turning movement (1.5 m diameter) of a wheelchair as shown in Figure 9.

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Figure 9. Minimum width of corridor and turning circle
1.6.06 Projections into the circulation routes should be avoided. Wherever this is unreasonable, hazard protection should be provided if objects project more than 100 mm into an access route and their lower edge is more than 300 mm above the ground. Hazard protection should take the form of a kerb or other solid barrier so that a blind or partially sighted person can detect the hazard using a cane.

1.6.07 Any door that opens towards a frequently used corridor should be located in a recess at least as deep as the width of the door leaf.

1.6.08 Doors and apertures with large expanses of glass or similar transparent material shall have adequate manifestation.
1.7 RAMPS

1.7.01 The unobstructed width of a ramps and landings measured between handrails shall not be less than 1000 mm.

1.7.02 The width of flights, landings, and ramps is to be measured as the unobstructed width between walls or handrails, whichever is the narrower.

1.7.03 Ramps shall be constructed of non-slip material. The surface should retain non-slip characteristics even when wet.

1.7.04 The surface of any ramp shall conform to the recommendations in Section 1.1 of this document, with the exception that surfaces consisting of loose material (e.g. soil, turf and gravel) even when bound with cell type containment systems shall not be acceptable.

1.7.05 In new buildings ramps shall be constructed of the same or similar materials as the surrounding floor /ground materials and form a permanent feature of the building or facility.

1.7.06 In existing buildings where ramps are introduced to provide an accessible route, the ramp must be securely and permanently fixed to the existing structure.

1.7.07 In new outdoor development ramps shall be constructed of the same or similar materials as the surrounding ground materials and form a permanent structural feature of the development.

1.7.08 In existing outdoor areas where ramps are introduced to provide an accessible route, the ramp must be securely and permanently fixed to existing structures. The ramp shall be constructed of a durable material that will withstand weathering forces.
1.7.09 Gradients of ramps shall be no steeper than the values indicated in Table 3 for the relevant difference in level between the top and bottom of the ramp.

For differences in height between 250 mm and 500 mm, it may be acceptable to interpolate the maximum permissible gradients, in the case of existing buildings where space is limited.

<table>
<thead>
<tr>
<th>Vertical Height of Ramp</th>
<th>Maximum permissible gradient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100 mm</td>
<td>1:10</td>
</tr>
<tr>
<td>Less than 250 mm</td>
<td>1:12</td>
</tr>
<tr>
<td>Less than 500 mm</td>
<td>1:16</td>
</tr>
<tr>
<td>Greater than 500 mm</td>
<td>1:20</td>
</tr>
</tbody>
</table>

Table 3. Minimum permissible gradients

1.7.10 The maximum horizontal length of a ramp between level landings is 12 m.

1.7.11 Preferably no series of ramps should rise in total more than 2 m. If a series of ramps rise more than 2 m an alternative means of access such as a lift should be provided.

1.7.12 Ramps shall have landings at the top and bottom, each of whose length shall not be less than 1200 mm and, where required, intermediate level landings.

1.7.13 Landings shall be no less than 1200 mm in length where a straight landing is provided and shall accommodate a turning circle of 1500 mm diameter where a change in direction, greater or equal to 45 degrees, occurs in the ramp/landing (figure 10 and 11).

1.7.14 Unless it is under cover, a landing should have a slight cross fall gradient, not exceeding 1:50.
1.7.15 Ramps shall have a raised kerb at least 100 mm high on any open side of a flight or a landing, if no other equivalent protection is provided.

1.7.16 All ramps greater than 1 m in length shall be provided with handrails as indicated in Figure 12 and Paragraph 1.7.19.

1.7.17 The colour of the surface of the ramp should contrast in colour with that of the landing so that its presence is distinguishable by people with impaired vision.

1.7.18 A ramp should have an adjacent flight of steps to negotiate the difference in levels connected by the ramp in those instances where the rise is greater than 500 mm.

Figure 10. Ramp with 90 degree turn
1.7.19 Handrails should have a round or oval profile with a minimum outside diameter of 35 mm and a maximum outside diameter of 50 mm. Oval profile handrails should be 50 mm wide and 40 mm deep, with rounded edges with a radius of at least 15 mm. (Figure 12).
1.7.20 The surface of the handrail should provide a good grip. The surface material should have low-heat conductive characteristics (e.g., wood).

1.7.21 To avoid impeding finger grip, the clear distance between the edge of the handrail and the walls shall not be less than 50 mm.

1.7.22 Ramps shall have a handrail on one side only where its width is less than 1500 mm and on both sides of the ramp where its width is greater than 1500 mm. Provided that ramps that are less than 1000 mm in length are not required to have a handrail.

1.7.23 Ramps, where crowding or heavy volumes of traffic can be anticipated, shall additionally have a central handrail where the flight is wider than 3 m.

1.7.24 Handrails shall extend at least 300 mm beyond the top of the ramp and at least 300 mm beyond the bottom of the ramp.

1.7.25 Handrails shall be fixed at a height of 900 mm above the ground level of ramps and 1000 mm above landings.
1.8 LIFTS

1.8.01 Permitted lifts shall be passenger lifts, vertical platform lifts, inclined (stair) platform lifts or step lifts (in which a flight of steps may be transformed into a platform lift).

A stairlift that incorporates a chair rather than a platform is not considered an acceptable means of providing accessibility in a public building.

1.8.02 In all situations where a lift is required to negotiate a change in level the preference of a vertical circulation shall be, first a passenger lift, if not possible a vertical platform lift is the second preference, and a stairlift (inclined platform lift) will only be considered as a means of final resort where it is demonstrably evident that the other forms of vertical access are not possible.

Passenger Lifts

1.8.03 Multi storey buildings shall have at least one lift that is of sufficient size to be accessible by wheelchair users and shall serve all floors.

1.8.04 The distance between a lift that conforms to these guidelines and the extremity of the floor it serves shall be no greater than 40 metres.

1.8.05 The minimum internal dimensions of the cabin of the passenger lift are as follows:

(i) 1100 mm wide and 1400 mm deep where the lift contains one door or has doors which are facing each other.
(ii) 1400 mm wide and 1600 mm deep, where doors are located at 90 degrees relative to each other.

N.B: Typical minimum internal dimensions of the shaft required to accommodate their lifts are (i) 1.7 m deep and 1.6 m wide and (ii) 2.2 m deep 1.8 m wide, respectively. The dimensions of the lift shaft are provided solely for general guidance and
manufacturer’s specifications may vary.

Figure 13. Passenger cabin dimensions for one door/opposite doors cabin

1.8.06 In an existing public building, a passenger lift featuring internal dimensions of the cabin that are 1000 mm wide and 1250 mm deep (Type 1 lift) may be considered reasonable in those instances where the larger lift size mentioned in 1.8.05 cannot be accommodated. For the purposes of these guidelines, an existing building is defined as one which was constructed before 1st January 2000.

1.8.07 Lifts shall have a clear landing 1500 mm wide and 1500 mm deep in front of the lift doors.

1.8.08 Lift door, or doors, shall have a clear opening width of at least 900 mm. In the case of Type 1 lifts, doors 800 mm wide may be considered reasonable.
1.8.09 Lifts shall incorporate a signalling system that gives a minimum of 5 seconds notification that the lift is answering a call, and a minimum of dwell time of 5 seconds, before its doors begin to close after they are fully open. The system may be overridden by a door reactivating device which relies on photoelectric or infrared sensor, but not a pressure sensitive device, provided that the minimum time for a lift door to remain fully open is 5 seconds.

1.8.10 A lift door should be easily distinguishable from the adjoining wall by colour and luminance contrast.

1.8.11 Where a lift has only one door, a mirror shall be provided on the wall of the lift cabin opposite the lift door. The mirror should not extend below 900 mm from the lift floor.

1.8.12 Persons with disability shall be able to summon and control the lift as well as reach and fully operate any emergency communications device.

1.8.13 The centre line of the highest button of the landing and passenger cabin controls shall be located between 900 mm and 1100 mm above the landing and the cabin floor, and the passenger cabin controls shall be at least 400 mm from the front wall of the passenger cabin.

1.8.14 Call buttons should contrast in colour and luminance with the surrounding faceplate, and the faceplate should similarly contrasts with the wall on which it is mounted.

1.8.15 Lifts shall incorporate a suitable tactile indication on, or adjacent to, the lift buttons within the cabin to confirm the floor selected.

1.8.16 All lifts serving more than two floors shall have an auditory and visual signal to indicate the floor level the lift has reached.
1.8.17 Passenger lifts should be fitted with an emergency communication system that should incorporate an induction coupler for the benefit of people who wear hearing aids. A visual indicator shall be provided to confirm that an emergency call has been received. It is recommended that lift doors have glazing panel extending from 900 mm above the cabin floor.

1.8.18 The floor of the lift cabin shall be slip resistant and have similar frictional qualities to the floor of the lift landing to decrease the risk of stumbling.


Platform (vertical) Lifts

1.8.20 In new buildings platform lifts are not generally acceptable as a means of vertical access.

In extraordinary circumstances (including cases where the building incorporates a semi basement) and where it is not technically feasible to negotiate changes in levels by means of a ramp or a passenger lift, a platform lift may be considered acceptable only if it is proved in writing by a competent person (e.g. warranted perit) that it is not technically feasible to negotiate the difference in level by a ramp or passenger lift and only if it is located within the building fabric and fully sheltered from the elements.

It is noted that in these exceptional cases, a platform lift may be considered as reasonable only in the event that an accessible route cannot be provided utilising a passenger lift serving all floors of the building.
1.8.21 In existing buildings and facilities a platform lift may be considered acceptable, as an entrance, entrance route or accessible route within the building, only if it is proved in writing by a competent person (e.g. warranted perit) that it is not technically feasible to negotiate the difference in level by a ramp or passenger lift and only if it is located within the building fabric and/or fully sheltered from the elements.

It is noted that in the these exceptional cases, a platform lift may be considered as reasonable only in the event that an accessible entrance or route cannot be provided utilising a passenger lift serving all floors of the building.

For the purposes of these guidelines, an existing building is defined as one which was constructed before 1st January 2000.

1.8.22 Platform lifts without a lift enclosure are acceptable with a vertical travel distance not exceeding 2 m.

1.8.23 Platform lifts shall be accessible at all times and operable without the need to obtain keys on request to third parties unless the third party is in attendance and may be called through an intercom system adjacent to the lift controls. The operating system and controls shall be such that allow for independent use by a wheelchair user without the need for assistance to operate the platform lift.

1.8.24 The centre line of the highest button of the landing and platform lift controls shall be located between 900 mm and 1100 mm above the landing and the platform lift floor, and the platform lift controls shall be at least 400 mm from any return wall.

1.8.25 The minimum clear dimensions of the platform of a platform lift shall be:

(i) 1050 mm wide and 1250 mm deep, where the platform has one door or which are facing each other.
(ii) 1100 mm wide and 1400 mm deep, where two doors are located at 90 degrees relative to each other.
1.8.26 Doors shall have an effective clear width of 900 mm.

1.8.27 Platform lifts shall be provided with clear instructions for use and fitted with an alarm in case of difficulty.

1.8.28 Where a platform lift is installed, a stair access conforming to the relevant standard in these guidelines shall be provided to complement the platform lift.

1.8.29 The platform lift shall have a clear area of 1500 mm by 1500 mm wide at the top and bottom landings.

1.8.30 All platform lifts shall comply with MSA EN81-41.

**Stair (Inclined platform) lifts**

1.8.31 Stairlifts are not an acceptable means of vertical circulation in new buildings or in a new extension to an existing building. For the purposes of these guidelines, a new building is defined as one which was constructed after the 1st January 2000.

1.8.32 Stairlifts shall only be installed in existing commercial and public buildings where it is not reasonably practical to incorporate a passenger lift or a platform lift.

1.8.33 Stairlifts will only be considered as an acceptable form of vertical circulation in an existing building following clear proof by a competent person (e.g. warranted perit) that other forms of vertical access are not technically possible.

1.8.34 A stair lift will only be considered as a means of access to, or as part of an entrance route into, an existing building, after it has been established that the following access routes are not technically feasible (listed in the order of preference of access): level entrance, ramped entrance, entrance via passenger lift serving building, and entrance via a platform (vertical) lift. For the purposes of these guidelines, an existing building is defined as one which was constructed before 1st January 2000.
1.8.35 The maximum permissible vertical rise for a stairlift as part of an approach to an entrance to a building is 4 m.

1.8.36 The maximum permissible vertical rise for a stairlift as part of a vertical circulation route within a building is limited to 4 m or the vertical rise between two floors, whichever may be the greater.

1.8.37 In existing buildings and facilities the use of a stair lift as part of an accessible entrance route shall be considered only if it is located within the building fabric and/or adequately sheltered from the elements.

1.8.38 Stairlifts shall be located within sight of a member of staff who can assist users in case of difficulty.

1.8.39 For a building with a single stairway, the clear stairway width for means of escape shall be maintained between the carriage rail of the stairlift and the handrail opposite.

1.8.40 For a building with two or more stairways between storeys, a stairlift shall only be installed on a stairway that is not intended to be used as a means of escape.

1.8.41 A minimum headroom of 2000 mm or as per manufacturer’s instructions should be maintained throughout the travel of the stairlift.

1.8.42 The stairlift shall have a clear area of 1500 mm by 1500 mm wide at the top and the bottom landings.

1.8.43 The minimum platform size incorporated in a stair lift is 800 mm wide and 1250 mm deep.

1.8.44 In exceptional cases a platform size of 750 mm wide and 1000 mm deep may be considered reasonable, provided that it can be demonstrated that it is technically impossible to install an inclined platform lift incorporating a platform with dimensions cited in paragraph 1.8.43.
1.8.45 Platform lifts shall be accessible at all times and operable without the need to obtain keys on request to third parties unless the third party is in attendance and may be called through an intercom system adjacent to the lift controls. The operating system and controls shall be such that allow for independent use by a wheelchair user without the need for assistance to operate the platform lift.

1.8.46 The centre line of the highest button of the landing and platform lift controls are to be located between 900 mm and 1100 mm above the landing and the platform lift floor, and the platform lift controls are to be at least 400 mm from any return wall.

1.8.47 All inclined platform lifts shall comply with MSA EN81-40:2008.

**Step Platform lifts**

1.8.48 A step platform lift is a vertical platform lift which converts into a flight of steps when not in use.

1.8.49 In new buildings step platform lifts shall not be generally acceptable as a means of vertical access.

In extraordinary circumstances (including cases where the building incorporates a semi basement) and where it is not technically feasible to negotiate changes in levels by means of a ramp or a passenger lift, a step platform lift may be considered acceptable only if it is proved in writing by a competent person (e.g. warranted perit) that it is not technically feasible to negotiate the difference in level by a ramp or passenger lift and only if it is located within the building fabric.

It is noted that in these exceptional cases, a step platform lift may be considered as reasonable only in the event that an accessible route cannot be provided utilising a passenger lift serving all floors of the building.
1.8.50 In existing buildings a step platform lift may be considered acceptable, as an entrance, entrance route or accessible route within the building, only if it is proved in writing by a competent person (e.g. warranted perit) that it is not technically feasible to negotiate the difference in level by a ramp or passenger lift and only if it is located within the building fabric and/or fully sheltered from the elements.

1.8.51 The vertical travel distance of a step platform lift shall not exceed 1.5 m.

1.8.52 Step platform lifts shall be accessible at all times and operable without the need to obtain keys on request to third parties. The operating system and controls shall be such that allow for independent use by a wheelchair user without the need for assistance to operate the step platform lift.

1.8.53 The centre line of the highest button of the landing and the step platform lift controls are to be located between 900 mm and 1100 mm above the landing and the platform lift floor, and the platform lift controls are to be at least 400 mm from any return wall.

1.8.54 The minimum clear dimensions of the platform of a step platform lift shall be:

(i) 900 mm wide and 1250 mm deep, where the step platform lift rise is a maximum of 1 m.

(ii) 1000 mm wide and 1250 mm deep, where the step platform lift rise is greater than 1 m.
1.8.55 The step platform lift shall include a safety feature which prevents a wheelchair from rolling off the platform during use of the lift.

1.8.56 The handrails of the step platform lift shall conform to the standards recommended in these guidelines.

1.8.57 In the steps mode the step platform lift shall comply with the stairs section included in these guidelines.

1.8.58 Step platform lifts shall be provided with clear instructions for use and fitted with an alarm in case of difficulty.

1.8.59 The platform lift shall have a clear area of 1500 mm long by 1500 mm wide at the top and bottom landings.

1.8.60 All step platform lifts shall comply with MSA EN81-41 and the EU Machinery Directive.
1.9 **STAIRS**

1.9.01 Many ambulant disabled persons find it easier to negotiate a flight of steps than a ramp and certain features incorporated in the design of stairs will reduce the risk of tripping or falling.

1.9.02 In any flight of stairs, all steps shall have the same rise height and the same going width throughout the entire flight.

1.9.03 The angle of pitch of staircases shall be limited to 38 degrees.

1.9.04 The rise of each step shall not be greater 170 mm. Steps shall have level treads.

1.9.05 Open risers’ staircases will only be permitted in public areas where an alternative staircase that has closed risers is provided in reasonable close vicinity to the open-riser staircase.

1.9.06 The number of risers in between landings in a flight shall be limited to a maximum of 12 risers.

1.9.07 All stairs shall have clear headroom over the length and width of the stairway and its associated landings of at least 2 m measured vertically from the line of pitch.

1.9.08 Protruding nosings are not acceptable as they may cause persons with disability to trip.

1.9.09 In existing buildings nosing on stairs may be considered acceptable on condition that they do not protrude more than 38 mm and are not configured with abrupt undersides.

1.9.10 A flight of steps or stairs that consists of two or more risers shall be provided with a continuous handrail on each side.

1.9.11 If any stairway consists of two or more flights, separated by a landing or landings, each handrail should, if reasonable, be continuous throughout the series of flights.
1.9.12 The vertical height to the top of the handrail should be between 900 mm and 1000 mm from the pitch line of a flight and between 900 mm and 1100 mm from the surface of the landing.

1.9.13 Handrails shall extend at least 300 mm from the first and last nosing, and as much as possible should be horizontal. The extension should not intrude into a circulation route. (Figure 14)

![Figure 14. Details of handrails flanking steps](image)

1.9.14 Flights of steps less than 3 m in width shall have handrails on both sides. In addition to this, flights of steps up to 6 m in width shall have a handrail in the middle of the flight. Flights greater than 6 m in width shall have handrails at intervals of 3 m along the width of the flight.

1.9.15 Handrails shall have a round or oval profile with a minimum outside diameter of 35 mm and a maximum outside diameter of 50 mm. Oval profile handrails should be 50 mm wide and 40 mm deep, with rounded edges with a radius of at least 15 mm. (Figure 12).

1.9.16 The minimum width of stairs and landings shall be 1000 mm.

1.9.17 The width of flights and landings is to be measured as the unobstructed width between walls or handrails, whichever is the narrower.
A level landing shall be provided at the top and bottom of each flight of steps or stairs. Its length, clear of any door or gate swing, should be at least the stair clear width and in all cases at least 1200 mm. Part of the floor of the building may be considered as a landing.

Landings shall be level or may slope to a maximum gradient of 1:50 when located outdoors.

Each flight and landing of steps and stairs shall be well illuminated, by means of artificial lighting providing a clear distinction between each step and riser. The illuminance at tread level should be a minimum of 100 lux. Lighting that will cause glare (e.g., poorly located spot lights, floodlights or low level light sources) should be avoided.

The top and bottom landings of all flights of steps shall have (corduroy type) tactile warning (Figure 2). Detectable warning surfaces commence one tread depth back from the top of the stair, have a depth of no less than 900 mm, and extend the full width of the stair.

Preferably the first and last step in each flight of steps should contrast in colour with the adjacent landing and the other steps in the flight.

Unless the whole tread is of a slip-resistant material, the leading edges of steps shall be slip resistant and feature a 40-60 mm long strip across the width of the step which is colour-contrasted with the tread and riser.

All landings in flights of steps should contrast in colour and luminance with the treads.
1.10 FIRE SAFETY

1.10.01 All buildings shall have emergency exit routes that are accessible to all. The level of provision of emergency egress features will depend on the size of the building and the number of floors as well as the proportion of persons with disabilities that may be reasonably expected to occupy a building. [e.g. Hospitals, homes for the elderly can be expected to have a higher proportion of wheelchair users inside a building].

1.10.02 Emergency egress for persons with disabilities shall form part of emergency egress management plans where they exist.

1.10.03 Visual alarms (lights that flash in conjunction with the audible emergency alarms) shall be provided throughout the primary circulation routes.

1.10.04 Visual alarms shall be installed in all locations served by audible alarms.

1.10.05 Areas of refuge shall be provided in all floors other than the floors that have a direct exit route to safe outdoor areas.

1.10.06 Areas of refuge shall be separated from the building floor by a fire separation having a fire-resistance rating of at least 60 minutes. Doors leading to refuge areas shall be designed to resist the passage of smoke for the same period of time.

1.10.07 Areas of refuge shall be served by an exit via an emergency staircase or a fire-fighters lift.

1.10.08 A refuge area shall be located within an escape staircase or have direct access to one.

1.10.08 Areas of refuge shall accommodate at least one space, at least 900 mm wide and 1200 mm deep, for a wheelchair which shall not encroach on the escape route. [Figure 15].
1.10.09 Areas of refuge shall be equipped with a telephone or communication system connected to an emergency response system.

1.10.10 Areas of refuge shall have their locations identified by directional signs.

Figure 15. Example of fire refuge area
1.11 SANITARY FACILITIES/CHANGING ROOMS

1.11.01 For the purposes of this section of the guidelines, the recommendations for new buildings are applicable to development whose application for development permission was formally lodged after the 1st June 2012.

Location of accessible sanitary facilities

1.11.02 All public buildings shall have provision for accessible to all sanitary facilities.

1.11.03 Persons with disability shall be able to find and use suitable lavatory accommodation as easily as non-disabled persons.

1.11.04 Accessible sanitary facilities shall be located on an accessible route within a building or any other development in which sanitary facilities are provided.

Doors leading to accessible sanitary facilities

1.11.05 Sanitary facilities entry doors shall feature a sign which incorporates the International Symbol of Access. (Figure 22).

Where sanitary facilities do not incorporate entry doors, signs which incorporate the International Symbol of Access shall be located on the walls outside of the entrance opening.

1.11.06 Doors to all accessible sanitary facilities and changing rooms shall have a door with a clear opening width of 900 mm, and feature a single leaf door lockable from the inside fitted with a lever handle and horizontal pull rail.
Toilet Cubicles

1.11.07 Accessible toilet facilities in new buildings shall be made separately from any provision made for male and female sanitary accommodation.

1.11.08 Integral provision within the male and female areas of sanitary accommodation may be acceptable in existing buildings.

1.11.09 Toilet ante-rooms shall be in conformity with the guidelines section regarding lobbies.

1.11.10 At least one wheelchair accessible WC compartment shall be provided at each location in a building where toilet facilities are provided.

1.11.11 Travel distances to accessible sanitary accommodation from any point in the building shall be no greater than 40 m.

1.11.12 An accessible corner WC compartment shall have minimum internal dimensions of 2200 mm long by 1500 mm wide. To be suitable for wheelchair users WC compartments shall have as a minimum, the dimensions, equipment and fittings as set out in Figures 16 and 17. Fittings shall be laid out to allow for a 1500 mm diameter turning circle within the cubicle. (NB The size of the cubicle shall be increased if any fixture or obstruction impinges on the 1500 mm turning circle)

Alternatively:

1.11.13 An accessible corner WC compartment shall have minimum internal dimensions of 2150 mm long by 1650 mm wide. To be suitable for wheelchair users WC compartments shall have as a minimum, the equipment and fittings as set out in Figures 16 and 17. Fittings shall be laid out to allow for a 1500 mm diameter turning circle within the cubicle. (NB The size of the cubicle shall be increased if any fixture or obstruction impinges on the 1500 mm turning circle.)
Figure 16. Accessible corner WC (Plan)

Figure 17. Accessible corner WC (sectional elevation)
1.11.14 If a building contains more than one accessible corner WC compartment for wheelchair users, the opportunity should be taken to provide both left-and right-handed transfer layouts.

1.11.15 Locks on cubicle doors shall be capable of being latched on the inside, using one hand and without tight grasping, pinching or twisting of the wrists, and released from the outside in case of emergency. Locking systems shall be opened using lever handles.

1.11.16 Toilet cubicle doors shall feature a D-type pull on the inside which is at least 140 mm long, located with its midpoint 200-300 mm from the hinged side of the door and at a height between 900-1000 mm from the floor.

1.11.17 Toilet cubicle doors shall feature a D-type pull on the outside which is at least 140 mm long, located with its midpoint 200-300 mm from the hinged side of the door and at a height between 900-1000 mm from the floor.

1.11.18 Sanitary facilities floors shall be slip resistant and level (subject to the minimum fall for draining water to a floor drain).

1.11.19 The WC compartment should have a WC installed as follows: the front to be 750 mm from the wall behind it, the top of the WC 400-460 mm (including the plastic moveable seating) from the finished floor, and the centre line to be no closer to the side wall than 460 mm.

1.11.20 The toilet shall feature a clear space for a wheel chair beside the toilet of at least 900 mm wide and at least 1500 mm deep (measured from the side wall/partition to the edge of the toilet seat).

1.11.21 Preferably the flush control should be electronic.

1.11.22 The flush control shall be mounted on the transfer side of the toilet, located at a height between 600-1100 mm above the floor.
1.11.23  The flush control shall be operable using one hand without tight grasping, pinching, or twisting of the wrist.

1.11.24  All accessible sanitary facilities shall have a number of (rust free) grab rails as indicated in Figures 16 and 17.

1.11.25  The toilet cubicle shall feature a horizontal side grab rail at least 900 mm long, preferably extending at least 450 mm in each direction from the most forward point of the toilet bowl.

1.11.26  The toilet cubicle shall feature a vertical side grab rail at least 600 mm long, located no more than 250 mm in front of the toilet seat with its lower end 50-60 mm above the horizontal grab rail.

1.11.27  The toilet cubicle shall feature a fold-down grab rail on the wheelchair transfer side of the toilet bowl, at least 760 mm long, mounted on the rear wall. The centre line of the grab rail shall be located 320-420 mm from the centre line of the toilet, and at a height between 680-840 mm from the floor.

1.11.28  Hand basin, toilet paper holder, rails and other fittings shall be located close to the toilet bowl at the heights included in Figures 16 and 17. A hot air hand drier is preferred to a towel.

1.11.29  The toilet cubicle shall feature toilet paper dispensers in line with the front of the toilet seat, mounted at a height between 600-700 mm from the floor.

1.11.30  A shelf shall be provided in a position that can be reached by a wheelchair user before and after transfer and should be located at a height of not more than 1200 mm above the floor.

1.11.31  The WC compartment shall have a wash hand basin and the top rim of the basin shall be between 810 mm and 865 mm from the floor.

1.11.32  The knee clearance at a point 200 mm back from the front edge of the wash hand basin, the knee clearance shall be at least 760 mm wide and 685 mm high.
The knee clearance in the area 200 mm to 430 mm back from the front edge of the wash hand basin shall be at least 760 mm wide and 230 mm high.

The toe clearance underneath the wash hand basin shall be at least 760 mm wide and 230 mm high. [See Figure 18].

Figure 18. Clear distances below sinks

1.11.33 The WC cubicle shall have a clear floor space in front of the wash hand basin of at least 760 mm wide and 1200 mm deep (of which a maximum of 480 mm in depth may be under the wash hand basin.

1.11.34 Wash hand basins shall be equipped with vertical grab rails at least 600 mm long located on either side of the wash hand basin side wall with seat, mounted with its lower end 700-740 mm from the floor, 50-80 mm out from the outside edge of the wash hand basin.
1.11.35 Taps shall be lever operated. The lever should be no less than 75 mm long. They shall be operable using one hand without tight grasping, pinching or twisting the wrist.

1.11.36 The water temperature in taps shall not exceed 55 degrees Celsius.

1.11.37 A self-locating plug and chain, or a pop-up waste mechanism operated from the mixer tap should be provided, with special consideration for person with restricted hand dexterity.

1.11.38 Where soap dispensers are provided they shall be located close to the sink, at a maximum height of 1200 mm above the floor and within reach of a person seated in a wheel chair.

1.11.39 Hot water and other pipes shall be lagged or boxed beneath basins.

1.11.40 The toilet cubicle shall feature at least one coat hook located not more than 1200 mm high and projecting no more than 40 mm from the wall.

1.11.41 A mirror shall be provided with its bottom edge no higher than 1000 mm above the floor.

**Dressing Cubicles and Changing Rooms**

1.11.42 Dressing cubicles/changing rooms shall have a minimum internal width of 2 m and internal length of 2.2 m. Fittings shall be laid out to allow for a 1500 mm diameter turning circle within the cubicle. (NB The size of the cubicle shall be increased if any fixture or obstruction impinges on the 1500 mm turning circle).
1.11.43 Dressing cubicles/changing rooms shall be provided with the facilities as follows:
- Horizontal grab rail 700 mm from the floor at the side of the seat.
- A mirror from 550 mm to 1450 mm above floor level.
- A zone for switches etc. at between 900 mm and 1200 mm above floor level.
- A minimum unobstructed internal height of 2.2 m.
- Non slip floors
- Shower rooms

1.11.44 Shower cubicles shall have a minimum internal width of 2000 mm and internal length of 2200 mm. (Figures 19 and 20).

1.11.45 Preferably a cubicle should contain both the shower facilities as well as the toilet (WC) facilities.

1.11.46 Shower cubicles that incorporate a shower tray and a toilet (WC) shall have a minimum internal width of 2400 mm and internal length of 2500 mm.

1.11.47 Sanitary ware in shower cubicles shall be laid out to allow for a 1500 mm diameter turning circle within the cubicle. (NB The size of the cubicle shall be increased if any fixture or obstruction impinges on the 1500 mm turning circle).

1.11.48 Showers shall be of the roll-in type and the shower `tray´ area should be flush with the floor of the shower cubicle. The roll-in threshold shall not exceed 6 mm.

1.11.49 Roll in showers shall have a clear interior area of at least 1200 mm wide and 1200 mm deep.

1.11.50 Shower cubicle floors shall be slip resistant even when wet.

1.11.51 Shower cubicles shall feature a hinged seat that is not spring loaded, at least 450 mm wide and 400 mm deep, mounted between 430 - 480 mm from the floor.
1.11.52 Shower cubicles shall be equipped with at least 4 grab rails as detailed below:

Shower cubicles shall be equipped with a horizontal grab rail (1) at least 600 mm long, mounted at a height between 750-850 mm on the side wall of the shower. The grab rail shall have not less than 300 mm of its length at one side of the seat.

Shower cubicles shall be equipped with a vertical grab rail (2) at least 1000 mm long located on the side wall with seat, mounted with its lower end 600-650 mm from the floor, 50-80 mm in from the outside edge of the shower tray.

Shower cubicles shall be equipped with a horizontal grab rail (3) located on the back wall, at least 1000 mm long, 750-850 mm from the floor.

Shower cubicles shall be equipped with a vertical grab rail (4) at least 750 mm long, mounted with its lower end 50-60 mm above the horizontal grab rail 3, 400-500 mm from the side wall on which grab rail 2 is mounted.

1.11.53 The shower shall be controlled by a lever operated, thermostatic mixer that delivers water at a temperature not exceeding 40 degrees Celsius. The markings on the shower control should be clear to visually impaired persons.

1.11.54 The mixer should be mounted above the grab rail and at a height no higher than 1200 mm from the floor and should be reachable from the seated position.

1.11.55 The shower cubicle shall feature a hand held shower head with at least 1500 mm of flexible hose, located so it does not obstruct the use of grab rails. It shall be reachable from the seated position, and equipped with a holder so that it can be operated as a fixed shower head.

1.11.56 The shower cubicle should feature fully recessed soap holders that can be reached from the seated position.
1.11.57 A shower curtain/suitable closure door operated from a shower seat should enclose the seat and rails when they are in horizontal position.
Bathrooms

1.11.58 Bathrooms intended for independent use by persons with disability shall have a minimum internal width of 2.5 m and internal length of 2.7 m. Sanitary ware shall be laid out to allow for 1500 mm diameter turning circle within the bathroom.

N.B: The size of the bathroom shall be increased if any sanitary ware, fixture or obstruction impinges on the 1500 mm turning circle.

1.11.59 The bath in an accessible bathroom should have a minimum length of 1600 mm and a minimum width of 700 mm with a slip resistant, flat base.

1.11.60 The bath rim of a bath for independent use should be 480 mm above floor level at the transfer end. Any grab rails fitted to the rim should not project above this height.

1.11.61 Where space is available, a securely fixable transfer seat the same width as the bath and extending beyond the head of the bath by at least 400 mm should be provided for ambulant disabled users and wheelchair users with the top surface set at bath rim height.

1.11.62 In the case of irregular configuration of a room containing any of the above sanitary services, access to the specific facilities should allow for a turning circle of 1500 mm.

Grab Rails

1.11.63 Grab rails should be 25 to 32 mm in diameter, fixed with a clearance between the rail and the wall of 50 mm to 60 mm, and with a good grip when wet. The grab rails should be made of material that does not rust.
1.12 CONTROL SYSTEMS

1.12.01 Controls should be positioned as indicated in Table 4.

<table>
<thead>
<tr>
<th>Position of controls</th>
<th>Height above floor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical/light switches</td>
<td>Between 750 mm and 1200 mm from the floor.</td>
</tr>
<tr>
<td>Landing and car controls of lifts</td>
<td></td>
</tr>
<tr>
<td>Controls of ATMs</td>
<td></td>
</tr>
<tr>
<td>Ticket dispensers</td>
<td></td>
</tr>
<tr>
<td>Card operated door entry system</td>
<td></td>
</tr>
<tr>
<td>Card swiping mechanism</td>
<td></td>
</tr>
<tr>
<td>Doorbells</td>
<td></td>
</tr>
<tr>
<td>Window fastenings</td>
<td></td>
</tr>
<tr>
<td>Letterboxes</td>
<td></td>
</tr>
<tr>
<td>Telephone buttons</td>
<td></td>
</tr>
<tr>
<td>PC/Internet outlets</td>
<td></td>
</tr>
<tr>
<td>Any other mechanism than needs to be operated by a wheelchair user.</td>
<td></td>
</tr>
<tr>
<td>Power sockets</td>
<td>Between 400 mm and 1000 mm above the floor.</td>
</tr>
<tr>
<td>TV sockets</td>
<td></td>
</tr>
<tr>
<td>Telephone sockets</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Position of controls

1.12.02 Controls should contrast in colour and luminance with the surrounding faceplate and the faceplate should similarly contrast with the wall on which it is mounted.

1.12.03 Meters should be mounted between 1200 mm and 1400 mm from the floor so that the readings can be viewed by a person standing or sitting.
1.12.04 Outlets, switches and other controls shall be at least 400 mm from room corners

1.12.05 Where control systems are located within a panel, such as phones, PC/internet outlets, and ATMs these should have a knee recess at least 500 mm deep and 700 mm high and the space in front of the panel should accommodate a turning circle of 1500 mm diameter.

1.12.06 Card swiping mechanism should be oriented vertically.

1.12.07 The positioning of controls should follow the guidance provided in Figure 21.

Figure 21. Position of controls

1.13 LIGHTING

1.13.01 Lighting levels shall be adequate to allow persons with impaired vision to navigate safely within the internal environment.

1.13.02 Sufficient lighting levels are required in areas where lip or sign reading may be required. Lighting should be designed to illuminate the face of the person to make it easier to lip or sign read.
1.13.03 Artificial lighting should give good colour rendering of all surfaces.

1.13.04 The information in Table 5 indicates the lighting levels required in accessible to all environments.

<table>
<thead>
<tr>
<th>Area</th>
<th>Minimum luminance (lx)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading rooms and offices</td>
<td>500</td>
</tr>
<tr>
<td>Assembly and conference rooms</td>
<td>300</td>
</tr>
<tr>
<td>Entrance halls and corridors, canteens and control devices (e.g., coin or card operated devices)</td>
<td>200</td>
</tr>
<tr>
<td>Sanitary facilities</td>
<td>150</td>
</tr>
<tr>
<td>Stairs/ramps/lifts, bus shelters</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 5: Minimum lighting levels

1.14 SIGNAGE

1.14.01 The location of signs should be part of the process of planning the building.

1.14.02 Signs should be well lit and of non-glare finish type.

1.14.03 Directional signs should indicate the route to a destination, paying particular attention to potential points of uncertainty.
1.14.04 The minimum headroom of directional signs suspended from ceilings or posts, or projected from walls should be 2 m.

1.14.05 Detailed signs or instructions, especially safety notices should be duplicated at high and low level, at 1400 mm to 1700 mm for a visually impaired person when standing and 1000 mm to 1100 mm for convenient close viewing by a wheelchair user.

1.14.06 The height of lettering for visual signs should be chosen to suit the type of sign and the viewing distance in accordance with Table 6.

<table>
<thead>
<tr>
<th>Viewing distance</th>
<th>Type of sign</th>
<th>Letter height (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long distance</td>
<td>External fascia sign</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>External location sign</td>
<td>90-120</td>
</tr>
<tr>
<td></td>
<td>External direction signs</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>House numbers</td>
<td>90</td>
</tr>
<tr>
<td>Medium distance</td>
<td>Location and direction</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Identification signs</td>
<td>40</td>
</tr>
<tr>
<td>Close range</td>
<td>Room identification signs</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Directories</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Wall mounted information</td>
<td>15</td>
</tr>
</tbody>
</table>

Table 6: Size of lettering on signs
1.14.07 The character proportions of signs should be within the range of 3:5 to 1:1.

1.14.08 Signboards should contrast in colour and luminance with their backgrounds.

1.14.09 Where the required signboard colours match the wall colour and cannot be changed, a contrasting border should be placed around the sign, equal in width to at least half the letter height of the text used for the sign.

1.14.10 Directional signs and signs identifying functions or activities within a building should incorporate embossed letters in a sans serif type face with a depth of 1.25 mm +/- 0.25 mm, a stroke of 1.75 mm +/- 0.25 mm, the edges slightly rounded but not half round in section, and a letter height of between 15 mm and 50 mm.

1.14.11 Where Braille is to be provided the following recommendations apply:
Grade 1 Braille should be used for single word signs; and Grade 2 contracted Braille should be used to reduce the length of multi-word signs. A marker (e.g. a notch) should be located at the left hand edge of the sign to help locate the Braille message.

1.14.12 The international symbol of access must be adopted within all signs depicting this pictogram. The wheelchair figure must always face towards the right unless used in a directional sign indicating to the left. (Figure 22).

The outer dimensions of the square should be 65 mm square for indoor applications with a visibility requirement of up to 9 m.

The outer dimensions should be 115 mm square for indoor applications with visibility requirements greater than 9 m and outdoors applications up to 18 m. For applications where the visibility requirements exceed 18m, the outer dimensions should be 200 mm square.
1.14.13 Symbols should be used to supplement written signs especially for sanitary facilities.

1.14.14 Visual signs should comprise simple words, clearly separated from one another and short sentences should be used to convey the required information.

1.14.15 Sentences or single word messages should begin with an upper case letter and continue with lower case letters. Words entirely in upper case (capital) should be avoided.

1.14.16 Road Signs should have the following characteristics:
   - Type should have lines of uniform thickness
   - Type should have no flourishes
   - Underlining should be avoided
   - A large contrast between letters and their background.

1.14.17 Road signs should be affixed at least 2 m above the ground level, well lit and located as not to cause obstruction and should not encroach on the minimum path width.

1.14.18 Written instructions should be accessible to people with visual impairment and should be at least of type (font) 14.
1.15 **Aural Environment**

1.15.01 In order to have full benefit of attending a public performance or playing a proper part in discussions, a person with impaired hearing needs to receive a signal some 20 dB higher than that received by a person with normal hearing. Whichever system is selected it should be capable of suppressing reverberation and audience and other environmental noise and provide sound without loss or distortion through bad acoustics or extraneous noise.

1.15.02 Aids to communications for the benefit of those with hearing aids shall be provided at:
- Booking and ticket offices and the like where the customer is separated from the vendor by a glazed screen.
- In large reception rooms, auditoria, and meeting rooms in excess of 100 metres squared in area.

1.15.03 Audible alarm systems (e.g., buzzers and bells) to call for attention shall incorporate, or be supplemented with, a visible/illuminating device to indicate to alert people with impaired hearing that the buzzer has been pressed. Any internal audible alarm system in a building should be supplemented with an illuminating device to alert people with impaired hearing.

1.15.04 A building should be designed to ensure that any spill over from one induction loop does not affect another loop, or compromise confidentiality. This so because induction loops are based on magnetic fields, transmissions that can be picked up by other hearing aid users in adjacent rooms or spaces either side of a room, or on floors immediately above or below the space in which the induction loop is being used. This may be a problem in multi-screen cinemas and in locations where confidentiality is required, such as council chambers or courtrooms.
1.15.05 A room which provides acoustic characteristics having a reverberation time of 0.4 seconds will provide the optimum aural environment for speech clarity and should be provided in rooms where sound clarity is important, such as auditoriums, assembly halls and in class or lecture rooms.

1.15.06 Rooms in which the floor and walls are finished with soft surfaces (e.g. curtains and carpets) will provide an optimum aural environment for persons with impaired hearing and also for those with visual impairments who have to rely on the character of reflected sounds. In particular, it is recommended that buildings, in particular schools, should have at least one room on every floor in which the walls and floors are finished with materials with high sound absorbencies.
REFERENCES


BS8300:2009, Design of buildings and their approaches to meet the needs of disabled people – Code of Practice (BSI)


Research into the provision of path attribute information (Scottish Natural Heritage Commissioned Report No. 442. [2011]

The Building Regulations 2010. Access to and use of buildings (HM Government [UK]).


City of Toronto Accessibility Design Guidelines.

Designing for Accessibility. Centre for Accessible Environments and, RIBA [2004

Accessibility for All. Works Division, Government of Malta [unpublished].


Liġi Opportunijiet Indaqs (Persuni b’Diżabilità), Gvern ta’ Malta (2000).
# Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessible</td>
<td>Able to be accessed by persons with disability.</td>
</tr>
<tr>
<td>Accessible route</td>
<td>Any route that is used to approach, or move between or within a building, and is accessible to disabled people.</td>
</tr>
<tr>
<td>Chair stairlift</td>
<td>Lift that travels from one level to another along a line parallel with the pitch line of the stair and incorporates a chair. Such a lift is not considered an acceptable means of providing Access for All in a building open to the public.</td>
</tr>
<tr>
<td>Effective clear width</td>
<td>Available width measured at 90 degrees to the plane of the doorway for passage through a door opening, clear of all obstructions, such as handles and weather boards on the face of a hinged door, when such a door is opened through 900 or more, or when a sliding or folding door is opened to its fullest extent.</td>
</tr>
<tr>
<td>Flight</td>
<td>Ramp or a continuous series of steps between two landings.</td>
</tr>
<tr>
<td>Going</td>
<td>Horizontal distance between two consecutive nosings of a step, measured on the walk-line or the horizontal distance between the start and finish of a flight of a ramp.</td>
</tr>
<tr>
<td>Handrail</td>
<td>Component of stairs, steps or ramps that provides guidance and support at hand level.</td>
</tr>
<tr>
<td>Illuminance</td>
<td>Amount of light falling on a surface, measured in lumens per square metre (lm/m²) or lux (lx).</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Landing</td>
<td>Platform or part of a floor structure at the end of a flight or ramp, or to give access to a lift.</td>
</tr>
<tr>
<td>Luminance</td>
<td>Brightness or light intensity of a surface, measured in candelas per square metre (cd/m²).</td>
</tr>
<tr>
<td>Nosing</td>
<td>Projecting front edge of a tread or landing that may be rounded, chamfered or otherwise shaped.</td>
</tr>
<tr>
<td>Platform lift</td>
<td>Lift with a platform and low walls and which travels vertically between two levels and is intended for use standing up or seated on a chair or a wheelchair</td>
</tr>
<tr>
<td>Principal entrance</td>
<td>Entrance to a building that a visitor or staff member would normally expect to approach.</td>
</tr>
<tr>
<td>Ramp</td>
<td>Construction, in the form of an inclined plane 1:20 or steeper from the horizontal or a series of such planes and an intermediate landing or intermediate landings that make it possible to pass from one level to another.</td>
</tr>
<tr>
<td>Rise</td>
<td>Vertical distance between the upper horizontal surfaces of two consecutive treads, or of a landing and the next tread above or below it, or of a flight between two consecutive landings.</td>
</tr>
<tr>
<td>Riser</td>
<td>Vertical component of a step between tread or landing or the tread or landing above or below it.</td>
</tr>
<tr>
<td>Stair clear width</td>
<td>Unobstructed minimum distance on plan perpendicular to the walking line of a stair.</td>
</tr>
<tr>
<td>Stair platform lift</td>
<td>Lift that travels from one level to another along a line parallel with the pitch line of the stair and incorporates a horizontal platform that accommodates a wheelchair user.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tactile paving</td>
<td>Profiled paving surface providing guidance or warning to blind and partially sighted people.</td>
</tr>
<tr>
<td>Tread</td>
<td>Horizontal component of a step.</td>
</tr>
<tr>
<td>Unisex</td>
<td>Facility designed for use by either sex with or without assistance by people of the same or opposite sex.</td>
</tr>
</tbody>
</table>
This publication is supported by the European Union Programme for Employment and Social Solidarity - PROGRESS (2007-2013). This programme is implemented by the European Commission. It was established to financially support the implementation of the objectives of the European Union in the employment, social affairs and equal opportunities area, and thereby contribute to the achievement of the Europe 2020 Strategy goals in these fields. The seven-year Programme targets all stakeholders who can help shape the development of appropriate and effective employment and social legislation and policies, across the EU-27, EFTA-EEA and EU candidate and pre-candidate countries. For more information see: http://ec.europa.eu/progress. The information contained in this publication does not necessarily reflect the position or opinion of the European Commission.