



Ergonomics in Design for All/ Newsletter

Dear Members and Friends of the International Ergonomics Association (IEA),
Ergonomics in Design for All Technical Committee,
I hope that you and your loved are well, and that you are not suffering too much from the arrangements that have had to be made for the corona virus. It is a challenging time.

**Welcome to our fifth year and sixteen newsletters:
have a look at it, enjoy it!**

With very best wishes, I wish you good luck with your work,

Isabella T. Steffan
IEA Ergonomics in Design for All TC
Chairperson

CONGRESSES

THE NEXT IEA TRIENNIAL CONGRESS IEA2021—21st triennial congress, June 13-18, 2021

By **Isabella T. Steffan** and **Ken Sagawa**, IEA EinDfA Co-chairs

IEA2021 is coming so close and all the ergonomists over the world are exciting to have it after three years we met at Florence. Despite the hard time due to the pandemic of COVID19, more than sufficient number of scientific contributions have been gathered. **Ian Noy, the congress chair**, says:

You are in for a treat. The Technical Program is strong and exciting with:

- 206 technical sessions over 5 days
- 705 peer-reviewed papers presented within the general sessions
- 39 individual Symposia
- 14 panels
- 11 workshops
- 93 posters
- 6 ECR special sessions
- 7 Plenary sessions (opening, closing, Executive Panel and 10 keynote speakers)

In addition, there are social events and technical tours.

Regarding **Ergonomics in Design for All (DfA)**, we will have **3 technical sessions, 1 workshop, 3 special sessions and 1 special session with Visual Ergonomics**, all expecting interesting and fruitful discussions.

One of the highlights in EinDfA is the **Keynote talk by Fionnuala Rogerson**.

In the special session on “**Opportunities and Challenges of Digital Technology for Inclusion**”, which is split into two sessions (Part 1 and Part 2), will be discussed various issues that bridge modern digital technology and DfA. More fundamental issues on DfA are to be discussed in another special session on entitled “**Different Approaches for Inclusive Design**” focusing on concept and methodology that are adopted differently in various design fields to solve their specific issues concerning DfA.

Vision issues such as vision impairments and contrast are to be discussed jointly with the group of Visual Ergonomics in the special session on “**Accessibility and Usability for All: Indoor Visual Environments**”. Those special session together with other two technical sessions are waiting for your participation for better discussions. Join and enjoy the IEA congress.

Please click on the following links for more details on: symposia ID# 19-20-68, special session ID# 10: iea2021.org/scientific-program and keynote speakers: iea2021.org/news-briefs

THE FIRST EUROPEAN STANDARD ON ACCESSIBILITY AND USABILITY OF THE BUILT ENVIRONMENT

By **Isabella T. Steffan** Ergonomics in Design for All, Milano, Italy

There are many examples in the built environment where buildings or public spaces do not offer an adequate level of accessibility: even though most architectural barriers are mostly found in existing buildings, many new artifacts also continue to be built with a level unsatisfactory accessibility for all users.

In the **European Disability Strategy 2010-2020**, in accordance with the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD), the European Commission set out to use technical legislative and regulatory tools to improve accessibility for people with disabilities (see articles in EinDfA newsletters: 2/2016, 9/2019, 13/2020).

With regard to the built environment, the **European Commission Mandate M / 420 - Accessibility to the built environment**, was issued in 2008 relating in particular to the standardization of requirements for public procurement. The second Phase of this mandate, which began in January 2016, is about to be concluded.

This phase was based on the recommendations of Phase I, and developed standardization documents to form a common basis at European level, with an appropriate approach to the design, procurement and management of access to the built environment.

The **European standard EN 17210 "Accessibility and usability of the built environment - Functional requirements"** provides the performance requirements (without dimensions), to be used as technical specifications of spaces, buildings, structures and transport, in particular for the award of public contracts (with reference to the Public Procurement Directives) and many explanatory drawings. It is accompanied by two Technical Reports, one with some minimum dimensional requirements, in support of the previous document: the **FprCEN/TR 17621 Accessibility and usability of the built environment - Technical requirements**, and one with the relative documents and formats for the declaration and certification of conformity: the **FprCEN/TR 17622 Accessibility and usability of the built environment - Conformity verification**. The formal voting procedure began at the end of January, their approval took place in April 2021.

This European Standard supports the implementation of accessibility and usability in the built environment with the "Design for All" concept:

1.Scope

2.Normative references

3.Terms and definitions

4.Legal and policy background

5. Diversity of users and design considerations

6-15. Basic functional requirements/recommendations on accessibility in the built environment:

6.Wayfinding

7.Access in the outdoor environment (routes, street furniture, squares and plazas, plantings etc.)

8.Arrival and departure areas – Parking areas

9.Horizontal circulation (entrances, doors, windows, patios, terraces, surface finishes and materials)

10.Vertical circulation (ramps, stairs, handrails, lifts, escalators)

11.Specific areas, equipment and provisions (service counters, seating, waiting & storage areas, kitchenettes, facilities for assistance dogs etc.)

12.Sanitary accommodation

13.User interface, controls and switches

14.Fire safety for all – Evacuation and emergency exits

15.Environmental conditions in buildings (lighting, acoustics, indoor climate)

16-20. Specific environments:

16.Accommodation (hotels, student accommodation, adaptable housing)

17.Cultural, leisure and sport buildings (auditoriums, concert halls, libraries, museums, heritage buildings and sites, retail and shopping, sport facilities, restaurants etc., swimming pools, saunas)

18.Administrative, service and employment buildings (conference venues, offices, healthcare and educational buildings, laboratories, banks, post offices, industrial buildings, courts, police stations, religious buildings)

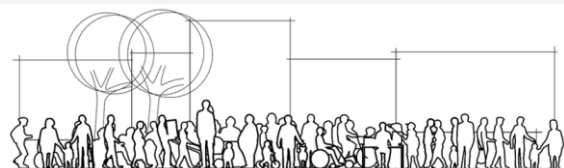
19.Outdoor and urban areas (playgrounds, garden, parks etc., beaches)

20.Transport facilities (taxi, bus and coach, metro/underground, tram/light rail, airport, ports and cable car facilities).

The main reference standard was **ISO 21542 of 2011 "Accessibility and usability of the built environment"**, whose updated version, also drafted with the participation of some editors of EN 17210, including Isabella T. Steffan (Project Team expert), in order to harmonize as much as possible these two rules, was also approved in April 2021.

On March 22, an open workshop was organized by CEN / CLC with the ONCE Foundation and the support of the European Union to emphasize the institutional and technical importance of the results of the 420 mandate, for all decision-makers and professionals involved in standardization en.une.org/la-asociacion/sala-de-informacion-une/noticias/normas-y-politicas-publicas-de-accesibilidad-europa?

As of today, new cutting-edge European documents are available for better accessibility in the built environment, with a Design for All approach, from design to execution of works, including those subjects to public procurement, available through national standardization bodies.



See also: <https://ec.europa.eu/social/main.jsp?catId=1485&langId=en>

AWARDS

2020/2021 UIA FRIENDLY & INCLUSIVE SPACES AWARDS

By **Fionnuala Rogerson**, Ireland, Co-Director UIA Architecture for All Work WP

The **3rd edition of the International Union of Architects (UIA) Friendly and Inclusive Spaces Awards** attracted **91 entries from 35 countries across the world**. Despite widely varying economic, political, social and cultural contexts the submissions demonstrated how sensitive architectural design and collaborative processes can create inclusive, friendly and enabling environments.

Five juries, one from each UIA region, together with a past award winner, assessed the entries which were submitted in **four categories**. The assessment was conducted in two stages with 27 entries proceeding to the second stage. A **separate jury** reviewed the Research Category.

The final jury commended the quality of projects ranging from a small rest area on a U.S. highway to a technologically advanced aquatic centre in Canada, from a complex reconstruction of a group of medieval buildings in Warsaw to a hospital in Afghanistan, from a joyful playspace in Bangladesh to a special school for disabled children in Hong Kong, and to the sheer range of buildings from South Africa and elsewhere in the world which **sensitively and sustainably respected their environments**. In most of the submitted projects the **diversity of human needs** was seamlessly accommodated allowing **people of all cultures, genders and abilities** to participate fully without exclusion.



Photo: Wits Rural Facility, South Africa, Medalist in the New Buildings Category

Medals were presented to Kate Otten Architects for **Wits Rural Facility, South Africa, Kate Otten Architects**; New Buildings Category; to Ewa Wowczak & Jerzy Wowczak for **Modernisation, preservation and digitalisation of the historic headquarters of the Museum of Warsaw, Poland**, Rehabilitation of Existing & Historic buildings Category; to Kazi Arefin together with architecture and design teams and dedicated team of students, workshop participants and volunteers for **Bamboo Playscape: An inclusive playspace as part of a “Cycle of care” project, Bangladesh**; to Architectural Services Department, Hong Kong Special Administrative Region for **Support Ageing through Design**, Research Category.



Photo: Summary of the research methodology, Hong Kong Special Administrative Region, Medalist in the research Category



For more information about the UIA Work Programme Architecture for All, visit the [UIA website](#)

Promoting Ergonomics in Design for All is a core activity of our EinDfa TC.
You can find information about objectives, domains of interest, members of the TC here:

<https://iea.cc/member/ergonomics-in-design-for-all-eindfa/>

16/2021 - If you no longer wish to receive these emails, contact us for unsubscribe: info@studiosteffan.it