ACT NOW! EDF Position on the EN 301 549 (Mandate 376)

The [Standardization Mandate 376 on European accessibility requirements for public procurement of products and services in the ICT domain](#) (M/376) was launched in 2005 by the European Commission, and was made possible by the inclusion of reference to accessibility, design for all and fight against discrimination on the basis of disability in the Public Procurement Directive for which EDF advocated in the past. The European standard (EN) which follows this Mandate also gains importance for the disability movement, due to the proposal for a Directive on Accessibility of Public Sector Bodies' Websites refers to it (WCAG2.0 are incorporated in the EN).

Mainstreaming disability into the European Standards can make a great difference in people's life by ensuring a more inclusive society for all, including the so-called Information Society. For this reason EDF have been involved in the development of this EN especially focused on the needs of persons with disabilities when accessing ICT products and services. After eight years of work, the deliverables of this Mandate, including the EN, have finally been **sent for Formal Vote** to the National Standardisation Bodies (NSBs).

Hence, **we welcome this European Standard** on "accessibility requirements suitable for public procurement of ICT products and services in Europe" as a step towards a more accessible ICT environment for persons with disabilities. However, in the last stage of this standardization process there were some hard discussions among the Joint Working Group (JWG) members and, in some provisions, our -and others'- proposals and objections were completely and openly ignored on the basis that our status was just observers. We were told that consensus could be reached without us; although this EN targets persons with disabilities (minutes of these final meetings are available upon request to EDF Secretariat).

EDF denounced and regretted this situation and requests all its members to contact their NSBs before 27 January 2014 and highlight those requirements that were reduced, and those changes that have damaged this crucial EN. The overall result is obviously positive, and from DPOs we will promote the use of this EN even beyond public procurement, nevertheless we also need to state our concerns in order to be taken into account in the next revision (still undetermined).

In that revision it will also be important to take into account the developments made in other standardization initiatives relevant for persons with disabilities and older people, such as the ISO/IEC Guide 71 for addressing accessibility in standards. These documents ought to be aligned as much as possible in their terminology and approaches.

EDF technical comments on the EN 301 549 final draft

Clarifying what is required and removing unnecessary complexity and ambiguity

Assuming that this is a technical document, we find that some provisions in the standard are **intentionally complex**. This means for instance that some provisions include expressions such as "specified context of use" (see an example below: RTT provision) without defining what this means, which makes that item untestable and will certainly discourage its use. We recommend removing these kinds of expressions.

Another example of deliberate complexity can be found at clauses "13.2 Access to relay services", and "13.3 Access to emergency services", both of vital importance. The current text states:

> "*Where ICT systems support two-way communication and a set of emergency services for such communication is specified, access to those emergency services shall not be prevented for outgoing and incoming calls*"
> > *NOTE 1: Two–way communication may include voice, real-time text, or video, singly or in combinations supported by both the emergency service and the ICT system.*
> > *NOTE 2: The purpose of this requirement is to achieve functionally equivalent communication access to the emergency service by persons with disabilities.*

A more understandable and less ambiguous proposal could be the following, which moves the note (which, as a note, is only advisory) up into the clause so that it is clear that those forms must be supported in the emergency call:

> "*Where ICT systems support two-way communication and this system is specified for use with emergency services, access to those emergency services shall not be prevented for both outgoing and incoming calls involving voice, real-time text, or video, singly or in combinations.*"

[Same solution should be done for clause 13.2]

4. Functional performance[1]

This section has been changed from a set of function performance criteria to a set of statements that are not supposed to be used/tested in order to be in compliance with the EN. In other words, the statements are weak, since they do not require anything:

"*ICT meeting the applicable requirements of clauses 5 to 13 is deemed to have met a level of accessibility conformant with the present document and consistent with the user accessibility needs identified in clause 4.2 (Functional performance statements)*".

Therefore, this causes two main problems: they only address some specific aspects, and describe user needs and not requirements that must be met by the ICT.
- Example:
  - Current text: "*Where ICT provides visual modes of operation, some users need ICT to provide at least one mode of operation that does not require vision.*"
- Proposal:
  - "*Where ICT provides visual modes of operation, at least one mode of operation that does not require vision shall be provided directly and/or by allowing the use of assistive technologies (ATs)*".

Having the Functional Performance Criteria changed to needs statements makes possible to meet the remaining technical requirements and still have products that are inaccessible to one or many disability groups.

Finally, they would have been an essential part of the accessibility standard and would allow it to address future changes in the technical environment by providing the functional test for accessibility.

Apart from this, we believe that the statement "4.2.10 Usage with limited cognition" ought to be reinforced by mentioning high-tech Augmentative Alternative Communication (AAC)[2] aids, which use graphic, auditory, gestural and textural symbols to represent objects, actions and concepts that could make the ICT usage easier to understand and operate.

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[1] The number refers to the EN clause

[2] The UN Convention on the Rights of Persons with Disabilities defines "Communication" in article 2 including augmentative and alternative modes, means and formats of communication (AAC), including accessible information and communication technology on it.

5. Generic requirements

The following missing key requirements were left out of the Generic Section because it was said that they were covered by the Functional Performance statements which, as just mentioned, are not requirements:

- All visual information required for operation and use shall be available in non-visual form, directly or through assistive technologies (ATs)
- All auditory information required for operation and use shall be available in visual form, directly or through ATs
- Speech shall not the only means required for operating the product
- All products shall allow operation through keyboard or keyboard interface either directly or through ATs

Forms of some of these appear in other parts of the EN, but only covering specific aspects. Since they are critical for accessibility, they must be included and apply to products or services as a whole rather than just to parts of products or certain types of products.

5.1 Closed functionality

Deaf and hard of hearing persons are not sufficiently covered:
- While the non-visual access is ensured (5.1.3) for people who are blind or visually impaired and cannot use ATs in this kind of ICT, there is not equivalent protection for people who are deaf or hard of hearing, i.e. there is not a provision that requires auditory information to be in visual form.
- There is one provision (5.1.5 Visual output for auditory information), which is restricted to "pre-recorded auditory information", instead of "all auditory information" which is needed for the operation of the ICT or perception of its outputs. All auditory information (pre-recorded and in real-time) shall also be available in an equivalent visual form. (This could have been addressed in the general requirements mentioned above).
- The clause 5.5.2 (Operable parts discernibility) must ensure that when the ICT uses audio feedback to indicate any change in its operation, this shall also have a visual notification for deaf and hard of hearing persons.

Persons with physical disabilities are partially addressed by:
- Provision "5.1.6 Operation without keyboard interface" which states: "where ICT functionality is closed to keyboards or keyboard interfaces, all

functionality shall be operable without vision as required by clause 5.1.3 [non-visual access]"

- Thus, the only way to interact with the product or service is by manual operation, which prevents many persons with restricted mobility from using the ICT. Therefore, it would have been worth recommending best practices such as eye control operation.

6.1 Audio bandwidth for speech (informative recommendation)

As the title already remarks, this is just an advice, when should be a "shall", since it specifies the quality of the sound, which is crucial for hard of hearing persons or with speech disabilities. In addition, with the increasing ageing population, better bandwidth can reduce the need for other forms of support (such as relay services) by allowing more people to be able to use and understand speech directly as a result of better audio quality.

Moreover, high bandwidth audio[3] is increasingly common in phones therefore, if any ICT cannot provide this quality of sound, it should be highlighted as less accessible as, for instance, the majority of phones that nowadays support this.

6.2 Real-Time Text

Real-Time Text (RTT) is critical for those who are deaf or hard of hearing, including many older people.

According to the current EN text a product that has no RTT support at all can meet this provision, which makes this provision completely useless. This provision also exemplifies the intentionally complex and limiting wording that we mentioned before. Current text:

"*Where ICT supports two-way voice communication in a specified context of use, the ICT shall allow a user to communicate with another user by RTT.*
   o *NOTE 1:   The RTT capability can be provided as a factory default or added later.*

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3 Calling it "high-bandwidth audio" is somewhat of an unfortunate label. "High-fidelity audio" is actually what is required, since with modern codecs the bandwidth for "hi-fidelity" audio is higher, but VoIP "high-fidelity audio" now uses less bandwidth than normal fidelity audio did before. In other words, it is not about bandwidth, but audio fidelity.

o *NOTE 2:   Provision of RTT may require additional service provision, additional hardware and/or software which may be provided separately or together.*"

Such "specified context of use" should be removed, since it is not clear what it is referring to and it just creates confusion and it is already included in the "accessibility" definition of the EN (3.1 Definitions).

Notes 1 and 2 allow manufacturers to claim that their products are in compliance with this requirement although no accessibility solution is provided (it can be added *later* or by purchasing *additional hardware or software*). This would mean, for instance, that any phone could be claimed accessible since through buying extra software and/or hardware the RTT can be provided on another device, such as a computer, creating difficult situations of use[4].

That is why this accessibility solution must integrally link voice and text on the same call, so RTT can be used standalone or combined with voice, although specifically or intentionally does not do so. Providing the real-time text and voice on the same call is critical for the person that cannot fully hear and needs real-time text incoming, but uses his/her speech to answer because is not able to use a keyboard (arthritis or other reason). Unfortunately, as currently written in the EN, the RTT does not need to be linked to the voice call at all, therefore, this situation (using text and voice in the same call) could be met by using two different mechanisms concurrently, instead of just one.

6.2.3 (RTT) Interoperability

This provision does not require any interoperability. It states: "*Where ICT with RTT functionality interoperates with other ICT with RTT functionality (…) they shall support at least one of the four RTT interoperability mechanisms described*". Parts *a), b)* and *c)* describe the mechanisms created by industry for doing RTT on each of the three main communication systems. However part *d)* states: "*ICT interoperating with other ICT using a relevant and applicable common specification for RTT exchange that is published and available*". In other words, any technology can claimed to meet this requirement, despite not accomplishing interoperability between the products.

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[4] Such as a person having to make voice call and then a separate RTT call to the same place at the same time, which means two different calls. What would happen when the call is to a company or emergency services and two different people answer the voice and the text calls? In that scenario, how do you transfer two separate calls to another person?

For voice, each piece of equipment on a system must support a minimum set of codecs that are specified, yet for real-time text this is not fully required.

To ensure interoperability our proposal would be:

> *"Where ICT interoperates for two-way voice communication with ICT networks, it shall also interoperate in real-time text on the same voice call using the real-time text format specified for that network as follows, and convert between the established real-time text formats for the two systems where two systems interface with each other:*
> - *[parts a, b and c]*
> - *d) ICT interoperating with ICT in environments other than those specified in a, b, or c <u>shall use the published and available common specification for RTT exchange specified for that environment</u>. This common specification shall include a method for indicating loss or corruption of characters."*

6.5.3 Framerate

We believe that with the current technology, instead of requiring 12 frames per second (fps) for ICT that provides two-way voice communication and includes real-time video functionality, it shall set the minimum in 20 fps, as recommended (but not required) by the EN.

6.6 Alternatives to video-based services (informative)

Once again it is regrettable that this provision is just informative and does not ensure an accessibility solution for persons with disabilities.

7.1.1 Captioning playback

This requirement lacks the possibility of featuring the captions, in other words, their font size, contrast and/or border. This can be complementary with the other presentational aspects of the text that convey meaning, such as screen position, text colours, style and fonts.

7.2.1 Audio description playback

In the same line of thought, users shall be able to play the audio description of a video having the possibility of selecting the volume of the audio description track independently from the video one.

These last two missing requirements could have been included in the clause 7.3 User controls for captions and audio description.

Final note

Clause "8. Physical access to ICT" became informative since there were some differences with national legislation (Germany in this case) and because Mandate 420 to develop an EN on built environment will cover this in depth.

Overview of the Standard approval procedure

The Mandate required five deliverables (D): the EN, three technical reports (TR) and one online toolkit (all documents are available upon request to EDF Secretariat):

- D1, FprEN 301 549, Accessibility requirements suitable for public procurement of ICT products and services in Europe
- D2, FprTR 101 550, Human Factors (HF); Documents relevant to EN 301 549 "Accessibility requirements for public procurement of ICT products and services in Europe"
- D3, FprTR 101 551, Human Factors (HF);Guidelines on the use of accessibility award criteria for publicly procured ICT products and services in Europe
- D4, Guidance for the application of conformity assessment to accessibility requirements for public procurement of ICT products and services in Europe
- D5, Accessible ICT Procurement Toolkit

Focusing on the main document (the **EN**), the **next steps are** the following:

- Submitted for Formal Vote under ETSI arrangements, which means that CEN and CENELEC members will have to address their vote and comments to ETSI NSOs (the list of ETSI NSOs is available at http://portal.etsi.org/nso).
- The ETSI NSOs possible votes:
  - **abstentions** or failures to submit written votes shall not count as votes cast
  - **negative vote**: comments required,
  - **positive vote**: no comments required, but whether editorial comments received, they will be taken into account, if relevant, at the elaboration of the final version of the standard for its publication. If technical comments are received, they will be taken into account in the future first revision of the published standard, but will not be considered in the publication of the current final version.
- The deadline to submit the formal votes is **27 January 2014**.
- **If the project is approved**, the EN 301 549 will be published in English within 15 days of the vote closure (i.e., nearby 15 February 2014).
- **If the project is rejected** and there is a massive reception of technical comments, the document could be redrafted, and possibly submitted to a second Public Enquiry (public consultation) plus a new subsequent second Formal Vote process, with the relevant delay. In this scenario, due to the lack of budget, the project and the Joint Working Group in charge of it could also be disbanded.

- If the Final Draft is rejected with minor technical comments, the documents could be submitted to a UAP (Unique Acceptance Procedure) vote. (More information about ETSI approval process).

The approval process of the rest of deliverables is slightly different. Do not hesitate to contact EDF Secretariat, should you need further information on this.

What to do?

- Check your ETSI NSO. You can find the list here: http://portal.etsi.org/nso
- Contact the person in charge of the EN 301 549 "Accessibility requirements suitable for public procurement of ICT products and services" (from Mandate 376)
- Express EDF position about the EN:
  - We recommend a positive vote and
  - The submission of the comments mentioned above
- Follow-up your ETSI NSO vote and inform EDF Secretariat. Their deadline is 27 January

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