

Webinar of 2023-05-15

Webinar 'Inclusive standards: European Commission's study on Anthropometrics in harmonized standards (DG GROW)'

Questions & Answers

1	<p>What do you mean with inclusiveness? Please define.</p>	<p>See second question.</p>
2	<p>What is an "inclusive standard"?</p>	<p>At DG GROW, we are currently working with these characteristics to assess whether a standard is sufficiently inclusive:</p> <ul style="list-style-type: none"> • Equity: Equal performance regarding all essential requirements across the EU's diverse population, i.e. regardless of gender, age, height etc. • The advantages and disadvantages should be fairly distributed. • Based on recent, representative data • Considering the design and testing of products • Ranges rather than averages • Considering all relevant body dimensions and physical capabilities such as body size, body structure, body composition, physical strength limits, operating postures and movements etc. <p>Please also have a look at the UNECE's Declaration on gender-responsive standards: https://unece.org/trade/wp6/gender-responsive-standards</p> <p>The BSI standards on enabling the development of inclusive standards could serve as inspiration, too: https://knowledge.bsigroup.com/products/enabling-the-development-of-inclusive-standards-understanding-the-role-of-data-and-data-analysis-guide/standard</p>
3	<p>There is a difference between mask and respirators. The pictures shown in the first slide are of medical mask, the Sheffield face is for respirators. Apart from these details, I tend to agree that a lot of standards are</p>	<p>Point taken, thank you!</p>

	based on male. So, happy to improve the system :-)	
4	A way the PPE respiratory community is trying to solve the problem of a PPE that shall be fitting any kind of person is to add a "fit testing" for the user during the selection process. The other way, so use ranges, it is a kind of impossible task when you look for 3 dimensions variable. Happy to try, now with AI it may be possible but, in the meantime, people are not safe.	There are many ways to Rome! Any solution that makes products safe for the widest range of people possible is welcome. After all, the state-of-the-art will also evolve, so hopefully we will find increasingly better solutions over time.
5	Please consider that in Europe we have differences between an Italian and a Dutch, but we also have Asian minorities. So, we shall have a worldwide coverage to be fair.	Hopefully, there will be measurement campaign for adults in the future. Such a campaign would not distinguish between ethnicities but would be designed to be statistically representative of the whole European population.
6	Just to confirm, the study relates to anthropometry of the head?	The study screens the harmonised standards supporting the legislation in the remit of GROW.H.2 to first identify all standards with anthropometric provisions. In the second step, it is assessed whether those provisions are sufficiently inclusive. So if the anthropometric provisions in the screened standards related to heads, heads would be covered by the study – which is very likely.
7	For earplugs, we need information on the size of ear canal. Is this also covered?	Hopefully, there will be measurement campaign for adults in the future. If deemed relevant, the dimensions of ears could be part of it.
8	The EN 16186-1 and -5 dedicated to driver's cab from CEN/TC 256 - RAILWAY APPLICATIONS is using the anthropometric data from P5 female to P95 male to design the cabin.	Great to see that some Technical Committees are ahead of the game!
9	What about CEN/TC114 - Safety of Machinery ? There are more and more machines in public areas.. (conveyors in airports, escalators in buildings, machines for retrieval of cans and bottles, paper and cardboard press in publicly accessible spaces etc....	There are several hundreds of harmonised standards that support the Machinery Directive. They will be screened as part of DG GROW's study.

10	<p>What is the age, gender and percentile of kid to take into account to define the right level of gap to avoid entrapment?</p>	<p>The anthropometric study of children covers from 0-16-year-old and includes measurements that are related to entrapments (hand, head, foot, torso). The results will include statistical tables of percentiles for each age group and sex.</p> <p>In addition, anthropometric tables will include guidelines about the application of the data. To determine the right level of gap should consider the application (type of entrapment) and the product (e.g. toy, electric socket, railings).</p>
11	<p>do you provide trends of increase for the different anthropometrics data for the 10 or 20 next years?</p>	<p>The development of body measurements in children in Europe is dramatic in comparison with data 15 or 20 data ago, especially in the area of body weight, circumferences and width measures. For these measures, the changes are definitely relevant for all application cases (product development, product evaluation), which should be based on a diverse and inclusive picture. The biological causes for this development are especially in unfavourable dietary and exercise behaviours. There are health policy and epidemiological measures to stop or reverse this development. Whether and when these measures will lead to an ergonomically relevant change in the overall anthropometric picture cannot be predicted at present. Corresponding forecasts - if necessary for different groups - are only possible on a permanent update.</p>
12	<p>A) Can you share the list of the standards that have been identified by DG Grow to assess their inclusiveness? B) Can you share the method for how the standards are assessed regarding their level of inclusiveness?</p>	<p>The list of standards can be shared upon request (Frauke.HOSS@ec.europa.eu). The methodology is still being finalised but will be published by the end of 2023. If anyone wants to apply the methodology before that time, they are welcome to reach out.</p>
13	<p>Does the studies also include minorities in the population?</p>	<p>The study is meant to identify which standards do not sufficiently take the diversity of human beings into account, for example those that work with 50th percentiles rather than ranges, do not consider both sexes, etc. Hence, the study also covers minorities.</p>

14	Do CEN and CENELC Experts have to contribute to the DG Grow Study as shown on the slide 39?	CEN-CENELEC experts are welcome to have a look at the list of standards that DG GROW's consultant has identified to have an anthropometric dimension. This would be a voluntary contribution.
15	Has ISO 7250-3 2015 been considered to inform these projects?	Only harmonised standards supporting legislation in the remit of GROW.H.2 is subject of the study. Therefore, ISO-only standards are out of scope. But ISO could use the methodology developed as part of our study to screen their standards.
16	We cannot cover children (and we want to !) because we do not have the anthropometric databases (only the ISO 7250)	There is a measurement campaign for children ongoing. This is the recording of a CEN-CENELEC webinar on that project: https://www.youtube.com/watch?v=Q-Rgfc5fnUI
17	The same happens to ISO/TC299 which draft standards for the safety of robotic devices, including service robots, personal care robot etc. The TC299 would like to include requirements for the safety of children and elderly people (e.g. maximum applicable exerting forces of machines to humans)	There is guidance on gender-responsive standards for ISO and IEC technical committees: https://www.iso.org/files/live/sites/isoorg/files/standards/docs/en/Guidance%20on%20Gender%20Responsive%20Standards.pdf Inclusiveness is broader than gender-responsiveness, for example taking into account different ages, but follows similar principles. It would be great if technical committees committed themselves to produce more inclusive standards – there is nothing to stop them.