Webinar of 2020-12-01

"European standards addressing material efficiency aspects"

Questions & Answers

Questions asked by Attendees	Answers from the Presenters
EN TR 4550 regarding terms - is that available somewhere. Is it at hearing process?	CLC/TR 45550:2020 'Definitions related to material efficiency' has been made available on 2020-12-04. The implementation at National level of Technical Reports is not mandatory, however, its existence is to be announced by the National Standardization Bodies and/or National Committees. CEN and CENELEC publications can be purchased from CEN and CENELEC's Members, the National Standards Organizations: - CEN National Standards Bodies - CENELEC National Committees
Lighting for domestic tertiary sectors are included. Can you confirm that lighting products for professional B2B purposes are not included? ie. Street lighting, flood lighting, and area lighting for ports and airports.	JTC10 does not define the limits of applicability, the EN 4555X series was created focusing on ErP (Energy-related Products), but may be applied by other industries. In principle B2B is not excluded from the scope of these standards. Legal coverage is set by European Commission Regulations and Standardisation Requests.
I understand it is publicly EN TR 45550 then available from 4 December 2020?	CLC/TR 45550:2020 'Definitions related to material efficiency' has been made available on 2020-12-04. The implementation at National level of Technical Reports is not mandatory, however, its existence is to be announced by the National Standardization Bodies and/or National Committees. CEN and CENELEC publications can be purchased from CEN and CENELEC's Members, the National Standards Organizations: - CEN National Standards Bodies - CENELEC National Committees

A remark regarding reliability and durability. The reliability methodology as we have in ISO/TC67/WG4 do cover reliability and availability (and methodology relates repairable and non-repairable items/systems), and we are well aware of IEC 60050-192 definitions. Whom is the JTC10 contact person on your EN TR 45550 that was to be issued 4 December 2020? The name of speakers was quickly shown in the beginning - are they available... the slide speaking is quite quick, so I did not capture the name of the speakers	CLC/TR 45550:2020 is the document compiling terms and definitions from the EN's in the series. For Durability, where the definition is used, you need to see EN 45552, for feedback on this document you can either contact JTC10 or WG2 who cover this topic (Jens Giegerich is convenor of WG2). The definition will not change in the TR 45550 "dictionary" unless it changes in the EN that uses it.
When released on the market, a product shall comply with the relevant requirements, as applicable. During its lifetime the regulations / standards may be updated with more stringent requirements. A repaired / remanufactured product might be unable to reach the new requirements imposed to all manufacturers. In that case, what happens? Is it allowed to be placed on the market? Is it a fair competition selling products not compliant vs new products compliant to new regulations / standards?	Repairing is not considered as a "place on the market" action, thus potentially changed regulation is not applicable. Whether or not a remanufactured (repaired) product is allowed to be placed on the market is an EC decision. If this is a discussion about safety, then unsafe products would be withdrawn from the market. But if the safety of the product was acceptable before repair/remanufacture it should not have changed in that process. If state of the art has moved on, then again it is down to the industry/EC to decide if existing products need to be withdrawn. But then this would apply to all products, not just those that had been repaired/remanufactured. If we are talking efficiency, then this is one of the big debates about the wider picture of Circular Economy. Does the energy saved by not producing a new product offset the potential energy savings over the lifetime due to a more efficient new product?
Do you envision (and when) the extension of these standards beyond energy-related products?	The EN 4555X series was created focusing on ErP (Energy-related Products), but may be applied by other industries already. But, prior to any EC Regulation that would be down to the decision of that industry.
Are we free to use the slides in our own presentations? Or are there copy-right issues?	The slides are shared in PDF format. We of course agree you use the content as inspiration for your own presentations.

The terms to appear in EN TR 45550, are they appearing in any webpage like ISO Online Browsing Platform?	There is currently no plan to create something similar to ISO Online Browsing Platform or IEC IEV online.
In which standard(s) will switching materials from fossils to renewables (e.g. bio based) be covered for material efficiency?	This is mainly a carbon emissions reduction topic, not something strictly for Material Efficiency. It is an open question and one JTC10 could consider as to whether the EN 4555X guidance should cover material replacement. However, this topic seems relevant if environmental impacts are considered. For the time being this is not in the scope of JTC10.
How to handle with the reparability for instance replace a fan. Is it allowed to replace it by the same fan that fulfil not minimum energetic requirements in the current Eco-design Regulation for fans?	This is not a question JTC10 can answer as it comes down to the legislation in place. The fundamental question would be which saves the most carbon emissions? Again a topic outside the scope of JTC10.
Many energy related products standards are elaborated at IEC level, where EN normative references are difficult to introduce. What are the plans to make all these concepts and requirements available from ISO?	JTC10 think this is a question for CEN-CENELEC and ISO-IEC. JTC10 will support work carried out internationally where it does not interfere with the fundamental principles that these standards were developed to cover.
In EU directive, there is usually some text trying to limit the processes, so that the amount that can be seen as pre-consumer material is not made unusually large. Does this exist here as well?	As you suggest these limits should be set in regulations/directives. JTC10 does not set limits for any of the properties being assessed.
Are EN 4555X applicable to any types of material/products (regardless of the locations where material/products located in the supply chain)?	The EN 4555X series is focused on Energy-related Products, but the implications of applying the standards can affect the whole supply chain. For instance, considering the definitions in EN 45557 of pre-consumer and post-consumer materials, the material might be from any place in the supply chain and even from products that are not ErPs.
A limiting event is an occurrence, which results in a primary or secondary function no longer being delivered. If I understand the definitions correctly, software issues (e.g. updates) leading to limiting events are included in the standards. Can you please confirm?	Yes, we would expect any limiting event, including software/firmware, to be included for consideration.

EN 45558: CRM: will the work done by CEWASTE be adopted in this standard?	From a quick look the CEWASTE work looks like an important link not just for EN 45558 but for some of the other JTC10 EN's as well. If the CEWASTE team would like to suggest anything specific for inclusion JTC10 will be happy to listen. Further to this JTC10 will consider the work reported by CEWASTE.
Is there already an overview of intended products / product groups?	The intended products/product groups are those listed under Energy-related Products. But the EN 4555X series guidance may be applied to other products/product groups.
Looks like the JTC10 work is completed according to the current mandate, so what will be the future of JTC10?	JTC10 think further improvements can be made to the current documents and looks forward to receiving feedback from TC's using the EN 4555X series. So, the group will continue to maintain the series and support TC's using the documents. Additionally under the three EC aims (extending product lifetimes, ability to re-use components or recycle materials from products at end-of-life, use of re-used components and/or recycled materials in products) there are potentially gaps left which JTC10 can produce standardisation documents to give further guidance on.
The use of pre- and post-consumer-recycled-material is desirable, but depending on the availability and quality of these materials. It might not be possible to keep the good parameters, if the market does not allow it. What does this uncertainty mean for the declaration of my product?	JTC10 agree that an enforced requirement for the use of recycled materials may result in reduced availability and quality of these materials. This uncertainty is the reason why EN 45557 discusses an "average" recycled content of the products, which can be established via a mass balance over, e.g. one year. Ensuring material quality standards are maintained should be part of the wider picture related to the recycling and certification of the quality of these materials. Legislators will need to take in to account the potential for limited supply of recycled materials in their requirements. Unrealistic requirements could result in "using" materials just with the aim of creating recycled materials producing additional carbon emissions contrary to the overall aim of the legislation.

CEN/TC 249 Plastics is revising definitions of post and pre consumer waste. How to ensure they are coherent with JTC 10 definitions of post and pre consumer materials?	To ensure the definitions are coherent CEN/TC 249 should make use of EN 45557 and contact JTC10 and/or JTC10 WG5 with any feedback, questions or potential improvements.
Why not create a CO2 load for standard materials for both original state and (various) recycling stage(s) in a table?	JTC10 covers Material Efficiency but does not go to the level of considering this relative to carbon emissions. Although this is a good proposal, setting CO2 loads is more a legislative task to guide improvements (carbon reductions).
DIN maintains a DIN-Terminology Portal which is also available in English and can be used free of charge (after a registration). Besides ISO/IEC terms also CEN/CLC Terms are listed: https://www.din.de/en/services/din-term	Thank you for the information (and the link), we are sure all the people registered for this webinar will appreciate this.
Could you please give an example of recyclability criteria for qualitative and quantitative?	Qualitative: Depollution, e.g. extracting refrigerant gases from a cooling product. Removing batteries from a product. (Criterion on both could be the accessibility) Quantitative criteria could be: Recyclability factor for ABS according to established end of life treatment scenario = 0.65 (arbitrary number)
How to implement "Material Efficiency" in ErP regulations for example for fossil fuel boilers where the efficiency is based only on the "use period"?	Material Efficiency is separate from Energy Efficiency in use. Some Material Efficiency topic should already have been considered by industry under EcoDesign, but most industries have concentrated on Energy Efficiency in use where there were big gains to be made. Material Efficiency requirements will be implemented by the EC targeting the industries which will give the biggest gains.
Is there also a cross-cutting consideration of Rohs and REACH requirements in the processing? The manufacturers of end products are currently already very busy with the complete documentation. In the end, each industry has to decide for itself how large	The EN 4555X standards do not take into account Rohs and REACH, but JTC10 is aware of the potential overlap. The IEC 62474 system used for Critical Raw Material declaration is linked to these two areas with a view to avoiding the need to use two systems

its contribution will be. Is this correct or are there already specifications available.	and minimising “double” work.
Is the scope of interest in these standards limited to assemblies/machinery/equipment, or could it extend to products made wholly or largely from a single material, e.g. some types of packaging?	The work within JTC10 and its working groups was focused on Energy-related Products, but the principles described could be applied to almost anything.
A remark regarding the Terms EN TR 45550, I am appreciating the answer. In an ISO standard, all terms and the definitions of the terms in Clause 3 of an ISO document will appear on ISO Online Browsing Platform (OBP). But thanks for informing and from ISO/TC67/WG4 convenor point of view, I look forward to familiarize with the EN TR 45550. High reliability will also favour extend product lifetime and life time extension (LTE) is possible. Ref LTE addressed in ISO 20815:2018.	Thank you for the comment. If you have any feedback when you have familiarized yourself with the JTC10 standards, please let us know. JTC10 will continue to support and improve these documents where we can.
Response to previous question: The EN 4555x horizontal series of standards will allow now TC's in charge of Energy-related-product (ErP) to draft product oriented standards on Material Efficiency aspects derived from the EN 4555x series and well adapted to a specific ErP. Some TC's start now (or will start soon) to draft such ErP standards. Also a coming CEN-CLC/Eco-CG/TF 6 team will start a work to draft a guidance to support TC's in drafting such ErP Mat-Eff. oriented standards. ErP TC Officers and Material Efficiency experts could still join this team for starting work on Guidance."	The guidance for Technical Committees to draft product/product group specific standards on Material Efficiency already exists within the EN 4555X standards for the specific topic covered. The guidance/marketing document which Eco-CG TF6 will create does not have an agreed scope and has not started work yet. The TF6 document should not contradict the guidance within the JTC10 documents. The main aim for the TF6 document should be to help with some of the questions within this Q&A about how to decide which EN 4555X standards to implement first and how to understand the balance between Energy Efficiency, Material Efficiency and Resource Efficiency. JTC10 is sure CEN-CLC EcoDesign Coordination group will welcome any new members to this Task Force.
How will JTC10 standards address verification of CO2 reduction contribution by materials/components/assemblies to be circulated/recycled for their longevity, vs to be one-way used but with saving energy consumption of products (i.e. with new design)?	JTC 10 does not cover CO2 reduction, only the efficient use of the material. The overall question is one of the big debates about the wider picture of Circular Economy. Does the CO2 (or energy) saved by not producing a new product offset the potential CO2 (energy) savings over the lifetime due to a more efficient new product? This needs to be considered and evaluated at a

	product/product group level. JTC10 covering generic/horizontal topics cannot address this.
Have products been tested with EN 45552 criteria? If so, are there documents available on the result/methodology?	EN 45552 does not include specific tests to assess a product against. To allow it to be flexible enough to cover all ErP it instead helps product/product group Technical Committees to identify the areas to be tested and the conditions which their tests should take into account.
How are vertical product specific groups able to obtain copies of the EN4555x Standards that are applicable to their work? The work is to respond to a COM Standardisation Request where they list out some of the EN4555x Standards as references.	The EN 4555X series can be purchased from CEN and CENELEC's Members, the National Standards Organizations: - CEN National Standards Bodies; - CENELEC National Committees. In case of specific queries, we invite you to contact the CEN-CENELEC Management Centre.
In order to assess industry applicability of JTC10 standards across life cycle stage, with respect A) Technology development, B) Fabrication and C) Operations/Maintenance and D) Abandonment/ Decommissioning.....WHICH of EN455xx standards will have such overview if such exists? They are all quite new (issued 2019/2020) I presume they might cover all these life cycle stages?	There is no single document giving an overall view across the lifecycle in the JTC10 documents. Each standard in the EN 4555X series deals with an individual topic. They do not cover the use phase (operation) which would come under Energy Efficiency or fabrication which would probably come under Resource Efficiency. A guidance/overview document is going to be drafted by Ecodesign coordination group TF6.
Is there a timeline for product specific standards development that use 4555X as a guidance? Are there product standards already being developed in line with 4555X?	There is no specific timeline, individual requests will be sent out to each industry/product/product group. Work has already started in some areas to produce standards covering Material Efficiency (EN 4555X) topics.
What about the "energy balance" to be considered for recycling of material i.e. to account for the energy used. Could this be a gap to cover for future standardization work?	JTC10 covers Material Efficiency, so considering the energy used to actually recycle the material is borderline for our coverage. But it is a reasonable gap to be considered.
Do you think it is likely to anticipate a new European Legislation obliging CEN/TC's to address Efficiency aspects in a product standard in the future?	JTC10 think it is very likely that the EC will target specific industries with regulations and Standardisation Requests that will mean product standards for Material Efficiency will need to be written.

The "same process" is linked to the definition of by-products in the Waste Framework Directive. Isn't there relevant court case helping to define it?	The by-products are a specific case, which will need more discussion/insight in the future.
Is CEN involved in the revision of the Eco-design methodology where reference is made to material efficiency?	As far as JTC10 knows, CEN and CENELEC experts are involved in the revision of the Eco-design methodology.
Are their metrics in place for products consisting of several individual regulated products? PUMP system (pump / motor / drive)	There are no specific metrics to cover this and this is a common issue. In theory the individual components should also be fulfilling any legal requirements, but this may need support from the manufacturer assembling the components into the final product and the other way round.