Frequently Asked Questions (FAQ) on the Ecodesign Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products and its Implementing Regulations

This Frequently Asked Questions (FAQ) document summarises questions and answers of general interest regarding the Ecodesign Directive 2009/125/EC and its implementing Regulations.

The answers provided reflect a common understanding between Commission services and the Market Surveillance Authorities of Member States. The answers as such are not legally binding. A binding interpretation of Community law is the sole competence of the European Court of Justice.

These FAQ cannot go beyond or substitute for the requirements of the Ecodesign Directive or its implementing Regulations. The Ecodesign Directive is addressed to the Member States and must be transposed into national law according to Article 23. The Ecodesign Regulations (implementing measures) are binding in their entirety and directly applicable in all Member States.

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Ecodesign Directive 2009/125/EC of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products

(1) Question on placing on the market and/or putting into service:

Several stakeholders have inquired on the meaning of "be placed on the market and/or put into service", as used in Article 3 of the Ecodesign Directive and its implementing Regulations. Article 2 of the Directive defines ‘placing on the market’ as making a product available for the first time on the Community market with a view to its distribution or use within the Community, whether for reward or free of charge and irrespective of the selling technique and ‘putting into service’ as the first use of a product for its intended purpose by an end-user in the Community.

While the term 'placing on the market' seems clear, the term 'putting into service' has led to confusing interpretations.

(1) Answer on placing on the market and/or putting into service:

The term "putting into service" is used, as the EU legislation also needs to cover products, which are "physically" never placed on the market, but installed directly at the end-user's place. The sentence "be placed on the market and/or put into service", creates the impression that placing on the market and putting into service are cumulative, i.e. that there are two different moments from when on a product has to comply, which is wrong.

The way the concepts should be understood is that "placing on the market" (making a product available for the first time on the EU market) and "putting into service" (first use of a product for its intended purpose by an end-user in the EU) refer to two different 'moments' in the process of bringing a product to the market; compliance for the 'entry' into the market is required only once based either on the moment when the product is placed on the market or when it is put into service. Accordingly, the Article 3 of the Ecodesign Directive should be understood as "products covered by implementing measures may be placed on the market or put into service, or both, only if they comply with those measures and bear the CE marking in accordance with Article 5."

A product has to comply with the requirements for CE marking from the moment that it is placed on the market. Only where a product is "not placed on the market" in the literal meaning, the moment of compliance is the putting into service.

Furthermore, the EU legislation is not retroactive. Products legally placed on the market can stay on the market (i.e. in the distribution chain) and still be sold even if the legislation changes in the meantime; products legally placed on the market can be sold to the end-user and can also be put into service even if the legislation has changed in the meantime.

(2) Question on legal reference in EC declaration of conformity

During inspection of declarations of conformity from various products that have to comply with the standby regulation No 1275/2008 the market surveillance authorities found that several of the producers outside the EU only declared conformity with the Directive 2005/32/EC or the recent version Directive 2009/125/EC. But the standby regulation 1275/2008 is not mentioned.

Article 5 of Directive 2009/125/EC states:
1. Before a product covered by implementing measures is placed on the market/or put into service, a CE marking shall be affixed and a an EC declaration of conformity issued whereby the manufacturer or its authorized representative ensures and declares that the product complies with all relevant provisions of the applicable implementing measure.
2. The EC declaration of conformity shall contain the elements specified in Annex VI and shall refer to the appropriate implementing measure.
Therefore the authority does not consider it sufficient just to declare that the product is in conformity with the Directive; the relevant implementing measures have to be specifically mentioned in the declaration.

(2) Answer on legal reference in EC declaration of conformity

The view is correct. Article 5 (3) of the Ecodesign Directive 2009/125/EC stipulates that the EC declaration of conformity shall refer to the appropriate implementing measure, in the present case to the Regulation No 1275/2008 on standby and off mode electric power consumption of electrical and electronic household and office equipment.

(3) Question on due date of EC declaration of conformity

From which point in time has the manufacturer the obligation to issue an EC declaration of conformity before placing a product on the market covered by an implementing measure? From the entry into force date or from the application date of the relevant implementing measure?

(3) Answer on due date of EC declaration of conformity

The manufacturer or his authorized representative has the obligation to issue an EC declaration of conformity (and providing the technical documentation and affixing a CE marking) before placing a product on the market and/or putting it into service from the first application date of the implementing measure that is relevant for the product.

NB: For certain products (a) requirement(s) may only be set from the second or later application date of an implementing measure. In this case, the first application date is that second or later application date.

NB: Other EU legislation may require EC declaration of conformity, technical documentation and affixing a CE marking for the same product. A common EC declaration of conformity and technical documentation is permissible.

(4) Question on importer versus brand owner

In the case where a manufacturer from the far east does not have a representative in the EU. If a Danish importer imports a product from this manufacturer to the EU and places it on market under his (the importer's) own brand/name and CE-number, the importer has the responsibility as described in Article 4 of the Ecodesign Directive. If a different importer imports the technically identical product to the EU and places it on the EU market under a

different name and CE-number, he also has the obligations of the importer in accordance with Article 4?

(4) Answer on importer versus brand owner

Article 4 of the Ecodesign Directive 2009/125/EC stipulates the responsibilities of the importer: Where the manufacturer is not established within the EEA and in the absence of an authorized representative, the importer has the obligation to ensure that the product from a third country placed on the single market and/or put into service complies with the Ecodesign Directive and the applicable implementing measure(s) and to keep and make available the EC declaration of conformity and the technical documentation. Thus, any importer (regardless if Danish or "different") should require formal assurance in writing from the manufacturer (in the "Far East") with regard to the compliance of the product, the EC declaration of conformity and the technical documentation. The EC declaration of conformity must contain the name of the manufacturer (from the "Far East") and a description of the product sufficient for its unambiguous identification (product name, type or model number, and any relevant supplementary information, such as lot, batch or serial number, sources and numbers of items).

However, placing on the market is considered not to take place where the product is transferred to a manufacturer for further measures (for example assembling, packaging, processing or labeling). Using own brands or different product names, type or model numbers should be considered as “labeling”. In that case, the importer/brand owner (regardless if Danish or "different") will be considered to be the manufacturer, as the product will be made available on the market under his name or trademark. So he will have to fulfill all the obligations of the manufacturer, namely the responsibility for the conformity of the product to the applicable implementing measures, for affixing the CE marking and for issuing the EC declaration of conformity and technical documentation.

NB: There is no CE number, only a CE marking according to Annex III of the Ecodesign Directive.

(5) Question on technical documentation

Most documents that a market surveillance authority receives from companies when asked for the “technical documentation” are no more than test rapport. Several market surveillance authorities have the same experience. However, the technical documentation should comprise more and the market surveillance authority has informed the companies that were visited about the requirements (as mentioned in the directive and regulations).

(5) Answer on technical documentation

A technical documentation should make possible an assessment of the conformity of the product with the requirements of the applicable implementing measure under the Ecodesign Directive 2009/125/EC and must be compiled by the manufacturer or his authorized representative. The technical documentation cannot be a test report only but must contain, in particular:

- a general description of the product and of its intended use;

- the results of relevant environmental assessment studies carried out by the manufacturer, and/or references to environmental assessment literature or case studies, which are used by the manufacturer in evaluating, documenting and determining product design solutions; (NB: only relevant for generic requirements)

- the ecological profile, where required by the implementing measure; (NB: not required so far by any implementing measure)

- a list of the appropriate standards referred to in Article 10 of the Ecodesign Directive, applied in full or in part, and a description of the solutions adopted to meet the requirements of the applicable implementing measure where the standards referred to in Article 10 have not been applied or where those standards do not cover entirely the requirements of the applicable implementing measure;

- a copy of the product information concerning the environmental design aspects of the product set out in the applicable implementing measure; and

- the results of measurements on the ecodesign requirements carried out, including details of the conformity of these measurements as compared with the ecodesign requirements set out in the applicable implementing measure.

(6) Question on justification for inspection by market surveillance

Member States shall regard a product bearing the CE marking referred to in Article 5 as conforming to the relevant provisions of the applicable implementing measure.

Can be concluded that a documented suspicion is necessary to justify an inspection by market surveillance?

(6) Answer on justification for inspection by market surveillance

No. Article 9.1 applies to the free movement of goods and does not restrict CE-marked goods from entering the market. Member States shall take proportional action to ensure that products placed in the market are in conformity with applicable legislation. Random inspections are covered by this provision.

(7) Question on conformity with ecodesign and ecolabel criteria

Products which have been awarded such other ecolabels shall be presumed to comply with the ecodesign requirements of the applicable implementing measure, in so far as those requirements are met by that ecolabel.

Please give the exact difference of the procedures market surveillance authorities shall follow for selection and inspection of a product with ecolabels as opposed to a product with CE marking only. We would need this for our quality management handbook.

(7) Answer on conformity with ecodesign and ecolabel criteria

Product documentation could be used twice to declare compliance with either an ecolabel or an ecodesign requirement, if they are similar. In any case, generally speaking, conformity

with ecolabel requirements does not presume conformity with ecodesign requirements more than the CE marking does

(8) Question on conformity in the case of sale of marketing rights of a trademark

Who is responsible for product conformity if a company sells the marketing rights of a trade mark?

(8) Answer on conformity in the case of sale of marketing rights of a trademark

The market surveillance authorities' opinion is that the obligations of the applicable ecodesign regulations have to be fulfilled by the first marketer – in this case the licensee.

(9) Question on compliance testing

What is to be done when the verification procedure for market surveillance checks can not be carried out due to the fact that required input parameters are not attained by the product? E.g. an external power supply is unable to deliver 100% nameplate output power. Thus, the average active efficiency can not be determined, which is the Ecodesign requirement to be checked.

(9) Answer on compliance testing

Manufacturers should ensure that its product is manufactured in compliance with the design specification described in the technical documentation file (products should be compliant with the technical documentation files and never the opposite).

If a product does not comply with the design specification described in the technical documentation, the market surveillance authority should apply provisions of the safeguard procedure specified in Article 7 of the Ecodesign Directive 2009/125/EC.

Please note that not in every case of the non-compliance, the market surveillance authorities should adopt the measure 'prohibition of the placing on the market'. The procedure stipulated in Article 7 of Directive 2009/125/EC should be followed.

(11) Question on renaming of a product

If the product is non-compliant and the supplier is told to make his product compliant and he instead chooses to give the product a new commercial code, is it then possible for us to take some kind of action?

(11) Answer on renaming of a product

Yes, the legislation says that the product has to be made compliant regardless of the existence of a new commercial code.

(12) Question on sanctions for non-submission of technical documentation

It is the Danish Energy Agency's interpretation that, if a supplier/manufacturer fails to make the technical documentation and declaration of conformity in case of ED available to the market surveillance authority upon request, as required under Article 5 (c) of the ELD, respectively Article 8 (3) of the ED, the market surveillance authority can, in accordance with

Article 3 (2) of the ELD, respectively Article 7 (1) of the ED, taking into account the principle of proportionality, prohibit the placing on the market of further units of the product or make a decision to withdrawn the product from the market, until the supplier/manufacturer submits the requested documentation. Can the Commission confirm this?

(12) Answer on sanctions for non submission of technical documentation

The Commission can confirm that this interpretation is correct.

(13) Question on dealing with test reports from accredited laboratories with different results

Article 19 (1) of Regulation (EC) No 765/2008 states:

Where economic operators present test reports or certificates attesting conformity issued by an accredited conformity assessment body, market surveillance authorities shall take due account of such reports or certificates.What lies in the obligation "take due account"?

The main rule should be that it is the test report produced by the market surveillance authority (MSA) for market surveillance purpose that prevails in case of non-correlation with another test report from a laboratory submitted by the supplier/manufacturer, if the lab of the market surveillance authority is accredited. Whether the lab used by the manufacturer is accredited or not should not alter this principle.

Can the Commission confirm, that the results from tests carried out by MSA at accredited labs as part of markets surveillance should as a main rule prevail over test results from laboratories chosen by the manufacturer?

Could an alternatively be that the Commission administrate and publish an up-to-date list of accredited conformity assessment bodies which reports should automatically be accepted by the Member States surveillance authority? This option would of course, be less costly for the MS.

(13) Answer on dealing with test reports from accredited laboratories with different results

Article 19(1) indicates that a MSA should look into the evidence provided by economic operators issued by an accredited conformity assessment body. Taking into account these reports or certificates does not mean that in its final assessment the MSA could not reach a different conclusion. The economic operator will have the possibility to challenge the MSA decision once adopted (see also Article 21(2) of Regulation 765).

The Commission does not see the relevance of maintaining a list with accredited conformity assessment bodies as the latter anyway normally present themselves as accredited on the basis of a certificate granted by the national accreditation body (there is only one of them per Member State) and those accreditation bodies already have on their website a list of accredited conformity assessment bodies.

(14) Question on the obligations on technical documentation

According to the Ecodesign Directive the manufacturer or authorised representative is obligated to submit the technical documentation upon request (Article 8(3) of the Ecodesign Directive.

According to Regulation (EC) No 765/2008 of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (Regulation 765/2008), market surveillance also apply to products imported from countries within the Community market.

Article 19(1) of Regulation 765/2008 thus provides:
“Market surveillance authorities may require economic operators to make such documentation and information available as appear to them to be necessary for the purpose of carrying out their activities, and, where it is necessary and justified, enter the premises of economic operators and take the necessary samples of products. They may destroy or otherwise render inoperable products presenting a serious risk where they deem it necessary.”

The definition of economic operator is, see Article 2(7):
"economic operators" shall mean the manufacturer, the authorised representative, the importer and the distributor

The definition of distributer is, see Article 2(7):
"distributor" shall mean any natural or legal person in the supply chain, other than the manufacturer or the importer, who makes a product available on the market

(14) Answer on the obligations on technical documentation

The obligation to keep (and present upon request) the technical documentation lies with the economic operator which places a product on the market or that puts it into service, regardless of where the product is imported from.

(15) Set of questions on enforcement actions against national economic operators

Article 3(2) of the Energy Labelling Directive provides:
“Where a Member State ascertains that a product does not comply with all the relevant requirements set out in this Directive and its delegated acts for the label and the fiche, the supplier shall be obliged to make the product compliant with those requirements under effective and proportionate conditions imposed by the Member State.

Where there is sufficient evidence that a product may be non-compliant, the Member State concerned shall take the necessary preventive measures and measures aimed at ensuring compliance within a precise time-frame, taking into account the damage caused.
Where non-compliance continues, the Member State concerned shall take a decision restricting or prohibiting the placing on the market and/or putting into service of the product in question or ensuring that it is withdrawn from the market. In cases of withdrawal of the product from the market or prohibition on placing the product on the market, the Commission and the other Member States shall be immediately informed.”

Article 7(1) of the Ecodesign Directive provides:
“Where a Member State ascertains that a product bearing the CE marking referred to in Article 5 and used in accordance with its intended use does not comply with all the relevant provisions of the applicable implementing measure, the manufacturer or its authorised

representative shall be obliged to make the product comply with the provisions of the applicable implementing measure and/or with the CE marking and to end the infringement under conditions imposed by the Member State.
Where there is sufficient evidence that a product might be non-compliant, the Member State shall take the necessary measures which, depending on the gravity of the non-compliance, can go as far as the prohibition of the placing on the market of the product until compliance is established.

Where non-compliance continues, the Member State shall take a decision restricting or prohibiting the placing on the market and/or putting into service of the product in question or ensure that it is withdrawn from the market."
In cases of prohibition or withdrawal from the market, the Commission and the other Member States shall be immediately informed thereof."

(a) The Nordic countries' understanding of these provisions is that a decision to prohibit the placing of the market (here "prohibition of the placing on the market "also refer to later stages in the distribution chain) can be directed towards a national distributor or economic operator, even though the supplier/manufacturer/authorised representative or importer is situated in another Member State. This is also in line with what is stipulated in Regulation (EC) No 765/2008. Is this interpretation correct?

(b) Are MSAs obliged to, before issuing a national sales ban, to contact the responsible company in the other MS and inform of the result of verification procedure?
The spirit of the applicable Article 19(3) of Regulation 765/2008 is that information about restrictive measures should flow across the supply chain and therefore national market surveillance authorities should make an effort to keep manufacturers/importers in another Member State informed.

(c) When and how shall the Commission and the MS be informed of a decision of prohibition of withdrawal from the market?

(15) Answers on enforcement actions against national economic operators

(a) Decisions prohibiting or restricting the placing in the market of a product can indeed be directed towards a national distributor or economic operator, even though the importer/manufacturer is situated in another Member State.

(b) The spirit of the applicable Article 19(3) of Regulation 765/2008 is that information about restrictive measures should flow across the supply chain and therefore national market surveillance authorities should make an effort to keep manufacturers/importers in another Member State informed.

(c) Article 7 stipulates that the Member States shall inform the Commission and other Member States immediately of any decision pursuant to paragraph 1 (of Article 7).

(16) Question on free access websites

Some Ecodesign Regulations require that certain information be available in a free access website. If you need to subscribe and then use a password – is this to be considered a free access website if anyone can subscribe to the website?

(*16) Answer on free access websites*

No, free access is to be understood as without having to pay or provide personal information (including email address or phone number). If a regulation, however, refers to a part for professionals of free access websites (e.g. Regulation 666/2013) that part for professionals can require subscription through password.

(17) General question on verification tolerances during conformity testing

According to Regulation (EU) 206/2012, single duct room air conditioners with conventional refrigerants (GWP > 150) can only be brought onto the European market if they have an EER > 2.6 from 01.01.2014. This corresponds to the minimum requirements of energy class A from Regulation (EU) 626/2011. Manufacturers declare that they have energy class A, with for example a measured EER = 2.48 (corresponding to the middle of class B) using the arguments of measurement uncertainty during product validation, rounding of measured values and/or permitted tolerances in older classes of harmonized standards (here EN14511). MSAs are of the view that the technical documentation of a product must show the product meets or exceeds the minimum requirements. If relevant changes occur to the harmonized standards, the conformity testing must be repeated.

When products do not meet the threshold value in the technical documentation (here EER < 2.6), the responsible authority prohibits bringing the products onto the market. However, it is not possible to prove this using conformity testing by the market surveillance authority within 10% tolerance margins.

(17) Answer on verification tolerances during conformity testing

The verification tolerances set in the verification annexes of acts should be applied only for conformity verification purposes by Member State authorities, representing the variations of the measurement results of the verification tests compared to the values of the declared or published parameters. Verification tolerances should not be used by the supplier in establishing the values in the technical documentation or in interpreting these values with a view to achieving compliance or a better labelling classification or to communicate better performance by any means. All parameters declared or published by the supplier should not be more favourable for the supplier than the values contained in the technical documentation.

(18) Question on build-to-order products

Several manufacturers/retailers have asked about the applicability of Ecodesign requirements to small numbers of products produced in a customized way only for a specific order. Some Ecodesign regulations have exemptions for these “one-off” products, others do not. The problem seems to be most difficult in the business of customizing computers, where a very large variety of complete products is possible because of the variety of components available. All combinations can – at least theoretically – have different energy performance data.

This raises a number of questions:
Do manufacturers have to know, through measurement or calculation, all product information parameters for each product that they theoretically offer, e.g. through an online shop that allows orders for customized products? Most combinations do not exist before they are actually put together and can only be measured afterwards. Calculations do not always help because of unforeseen issues with power management functions.
How can MSAs check these requirements, do they have to order 1+3 products?

Do retailers who offer a set of computer components (or similar components for other products) count as manufacturer if the user assembles the product? If there is a component retailer and a separate "installer" who assembles the product, who is the manufacturer in the sense of the EDD?

(18) Answer about build-to-order products

Not many regulations have exemptions for "one-off" products. The ecodesign regulation on professional refrigeration products excludes some custom-made products and Ecodesign Regulation 1194/2012 excludes LED modules that "are marketed as part of luminaires that are placed on the market in less than 200 units per year.

With regard to computers:

Manufacturers do not need to report parameters on every single configuration, see Annex II, point 7.1.2: If a product model is placed on the market in multiple configurations, the product information required under point 7.1.1 may be reported once per product category (as defined in Article 2), for the highest power-demanding configuration available within that product category. A list of all model configurations that are represented by the model for which the information is reported shall be included in the information provided.

It is unfeasible for MSA to verify the conformity of every possible assembly result. However, controls may be run by, for instance, purchasing an assembled computer. It should be noted that manufacturers of computers are under a legal obligation to ensure that any computers within scope of the Ecodesign Regulation meet the requirements within that regulation. So a MSA has two options for checking compliance:

i. The MSA may test the exact configuration of a model for which the manufacturer has published its data.
ii. The MSA may choose any configuration of a product and test for compliance. Any configuration of a product that is in scope of the Regulation should comply with the requirements.

Producers or retailers selling single components or spare parts cannot be responsible for the conformity of the final product obtained by a customer if the latter assembles the product, as the assembly phase is beyond control by the former (i.e. the customer may buy components from different producers /resellers). An installer or a system integrator selling an assembled product has to be considered responsible for the conformity. A system integrator or installer simply assembling components purchased and provided by the customer, eventually used or second-hand, cannot be considered as responsible for the conformity.

(19) Question about the requirements in implementing measures in new Member States

Croatia became a member of the EU on 01.07.2013, Bulgaria and Romania in 2007. At the time of joining the EU there were already requirements for energy related products that were not necessary to implement in these states, since the corresponding regulations were not effective there.

What about energy related products which were produced in these states before they became part of the EU, when these are now brought onto the market, put into operation or supplied within the EU?

There is feedback from enforcement activities that large numbers of e.g. incandescent light bulbs are being introduced, which are declared as being produced before the date of EU membership. It is therefore argued that these do not need to conform to the ecodesign requirements, only products which were brought onto the market after the date of membership.

What about energy related products that were supplied by other member states to these countries without fulfilling ecodesign criteria, and are now again being re-imported?

(*19) Answer on the requirements in implementing measures in new Member States*

During the negotiations with Croatia this issue in particular was discussed. In this respect, it was concluded that documents of conformity and products bearing the Croatian conformity marking (C marking) that have been placed on the market before the accession of the Republic of Croatia to the European Union are lawful/valid on the territory of the Republic of Croatia until the stocks last, but not longer than 2 years as of the date of the placing on the market. These transitional provisions were included in the Croatian Law on Technical Requirements for Products and Conformity Assessment (Official Gazette 80/2013). Accordingly, these products which bear the Croatian C marking can be made available in Croatia after accession for 2 years, but when made available in another EU country, they would need to adapt to the requirements of EU legislation and bear the CE marking.

EU harmonisation legislation applies from the moment a product is placed on the market and to any subsequent operation which constitutes making available until the product reaches the end user. Products need to bear the CE marking and comply with EU rules to be sold in any EU country. Therefore, even if these products which bear the C but not the CE marking have already been placed on the market in Croatia prior to accession and can legally remain in the Croatian market for further 2 years, the first making available into other EU countries would qualify as placing on the EU market and require the products to comply with EU legislation.

(*20) Question on requirements mentioned/not mentioned in the verification annex (04-2015)*

Several Ecodesign regulations contain a number of requirements that are not all mentioned in the verification annex. Does that mean that market surveillance authorities are not obliged to verify those requirements? Should market surveillance authorities consider equipment which does not comply with those requirements as non-compliant with ecodesign requirements?

(*20) Answer on requirements mentioned/not mentioned in the verification annex*

It is for the market surveillance authority to decide which requirements to verify. All requirements of ecodesign regulations are legally required for product compliance, so non-compliance with any of them means the product is non-compliant. Usually only some of the ecodesign requirements are addressed in the verification requirements, because only those have a potentially variable quantitative criterion needing a specific verification procedure.

(*21) Question on components of and appliances for means of transport (04-2015)*

Several Ecodesign regulations contain a number of requirements that are not all mentioned in the verification annex. Does that mean that market surveillance authorities are not obliged to verify those requirements? Should market surveillance authorities consider equipment which does not comply with those requirements as non-compliant with ecodesign requirements?

(*21) Answer on components of and appliances for means of transport*

The ecodesign regulations do not specifically mention whether components of and appliances for means of transport fall under their scope, but the Ecodesign Directive specifies in its Article 1(3) that the Directive does not apply to "means of transport for persons or goods". Therefore, products that are specifically constructed only for application in means of transport (including mobile homes and caravans) and no other applications are exempted from ecodesign regulations.

(*22) Question on product information requirements on products integrated into other energy related products (04-2015)*

Most Ecodesign regulations have “Product information requirements” which should be available at “free access websites” of the manufacturers.

Is the manufacturer of the energy related product responsible for making product information available on his free access website for *both* the energy related product *and* for the products integrated into the energy related product? i.e. should a ventilation unit manufacturer put product information regarding the ventilation unit, the fan(s) and the electric motor(s) on *his own* free access website?

(*22) Answer on product information requirements on products integrated into other energy related products*

Given that placing on the market takes place when the motor/fan goes from the manufacturer of the motor/fan to the manufacturer of the ventilation unit, the product information obligation applies to the motor/fan manufacturer. Thus, the manufacturer of the energy related product does not have to provide product information about the products integrated into the energy related product on his free access website.

(*23) Question on used products (10-2015)*

Does ecodesign apply to used products? There is an exemption for second hand products in the energy labelling directive, art 1.3.3 but nothing is stated about this in the Ecodesign Directive

(23) Answer on used products

Ecodesign regulations apply to used products if they are imported from imported from a third country when they enter the Union market for the first time. This applies even to used products imported from a third country that were manufactured before the legislation became applicable. In addition, in some cases used products that are modified can be considered new products to which the regulations apply, for detail see Blue Guide chapter 2.1.

(24) Question on products that are still in the factory (2019)

Does a product have to leave the factory in order to be considered as placed on the market?

(24) Answer on products that are still in the factory

A product is placed on the market e.g. if it has been produced and has been made available on the Union or EEA market by the manufacturer or the importer. According to the Blue Guide1, this requires an offer (e.g. an invitation to purchase, advertising campaigns) or an agreement for the transfer of ownership. This can be free of charge, and does not necessarily require the physical handover of the product. That means that the products placed on the market can still physically be at the factory.

(25) Question about for products with more than one function

As an example, one product has two functions. It can recirculate indoor air and heat the air (with separate heat generator), and be seen as a fan coil, in regulation 2016/2281. But it can also replace the indoor air with heated outdoor air, and therefore be a ventilation unit, according to regulation 1253/2014. The product can switch between these two applications depending on the current need and is marketed as both.

How should a product with two functions, that fits the definitions of two different regulations, be declared?

(25) Answer about for products with more than one function

A product with more than one function, regulated by one or more ecodesign regulation, has to comply with the requirements applicable to each function, unless specifically excluded from one or the other regulation.

[1] Commission Notice — The 'Blue Guide' on the implementation of EU products rules 2016 (Text with EEA relevance) C/2016/1958 - JO C 272 du 26.7.2016, p. 1–149

Commission Regulation (EC) No 642/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for televisions

(1) Question on second tuners (and label regulation 1062/2010)

When does a TV have a second tuner? Do those have to be physically separate electronics or are they "two tuners" when one part of circuitry acts as a "double tuner" providing the same service (able to decode two streams of TV broadcast).

(1) Answer on second tuners (and label regulation 1062/2010)

Because of their functionality, double tuners should qualify for a higher basic power consumption of 24 Watts, as specified in the energy labelling Regulation 1062/2010.

(2) Question on criterion for auto power down

Annex I requires automatic power-down for all televisions and monitors since 20 August 2011. The power-down function on simple monitors seems to be senseless because there is no user interaction resetting the power-down time. (On televisions one can expect channel selection or volume change while the TV is in use.). Is the time after last user interaction the correct criterion for auto power down of TV monitors?

In the opinion of the market surveillance authorities, the text does specify this point for TV monitors. It could be an annoyance for TV monitors used in continuous display functions (TVs in fitness clubs, hotel lobbies, bars, restaurants...) where no user interaction is expected but the display function is nevertheless needed for long periods of time. Users in this field would simply deactivate APD, possibly keeping the monitor always on. The Commission should consider excluding monitors from this requirement or defining an appropriate requirement for monitors, e.g. APD after missing video signal for some time in the revision of the regulation.

(2) Answer on criterion for auto power down

The Commission is aware of the issue of Auto Power Down (APD). In the revision process a requirement will be considered that would allow APD to be deactivated by users in the case of monitors that need to operate for longer period of time than 4 hours (e.g. in the case of public displays).

(3a) Question on guidelines accompanying the revised Commission Regulation (EC) No 642/2009 Standby conditions and requirements (NL/LG)

Does Regulation EC/642/2009 apply to standby conditions other than what is provided as a default standby setting by the television when put on the market?

(3a) Answer on guidelines accompanying the revised Commission Regulation (EC) No 642/2009 Standby conditions and requirements (NL/LG)

No, the requirements from Commission Regulation (EC) No 642/2009 apply to the conditions in which the product is placed on the market. Therefore, as long as the product is placed on the market with a compliant default standby condition, the product should be considered

compliant. Other standby conditions offered by the product, which are disabled by default but can be enabled by the user according to his or her preference, are not covered by the standby requirement.

(3b) Question on reactivation function

Does a reactivation function by means other than Infrared or Radio-Frequency sensor or timer, providing additional functionalities such as voice recognition, presence sensing, qualify as a standby-mode condition?

(3b) Answer on reactivation function

No, these reactivation functions provide an extra functionality other than simple reactivation by allowing a direct interface between a user and a device to be reactivated without a separate intermediate device such as a remote control, thereby facilitating easier accessibility to the device. In addition, these functions rely on advanced internal sensors such as microphones, cameras, etc, which are different from infrared or Radio-Frequency sensors or timers in their technical configurations.

(4) Question on televisions with Quick Start mode

Full HD, 3D, Smart TVs with function Quick Start mode are available on the Bulgarian market which mode is activated during the Standby mode. This function is activated by the consumer. The manufacturer is declared 0,1W energy consumption in Standby mode in the documentation accompanying the TVs. There isn't energy consumption declared about Quick Start mode. In the manual it is said only that: "Quick Start increases the energy consumption during standby". A model was found, which in this mode consumed much more energy without any warning.

Is the offered Standby condition which is disabled by default but can be enabled by the user according to his or her preference covered by the scope of requirement of Regulation 642/2009?

(4) Answer on televisions with Quick Start mode

The scope of the requirement of regulation 642/2009 does not cover added functions to standby mode enabled by the user according to his or her preference. A “quick start” function is an added function and requires the activity of circuitry in the product, additional to that needed for standby mode as defined in Article 2 (6) of the regulation. If the product, in its default setting, can provide a mode that meets the standby mode power requirements set out in Annex 1 (2) of the regulation it is in conformance with that part of the regulation. There is no requirement under Annex 1 (5) of the regulation (Information to be provided by the manufacturer) to declare the specific power required by any additional function enabled by the user.

(5) Question on the procedure to measure the screen diagonal (04-2015)

What is the proper procedure to measure the screen diagonal (Annex I point 1 and 2)? Is it only part of the screen which displays active image or should the screen diagonal be considered as distance from the corners of TV's frame?

(5) Answer on the procedure to measure the screen diagonal

It is the distance between corners of the visible screen area. Visible screen area refers to the area where pictures and videos are displayed, so the area with pixels. A framework of glass, plastic or metal outside the pixel area does not count as visible screen area. For curved displays, the measuring tool should adhere to the screen (so no Laser/LED beam meters can be used).

(6) Question on the peak luminance ratio (04-2015)

Is there a discrepancy concerning the % number between the following two sections regarding the peak luminance ratio?

- Annex 1, p.4:
  4. PEAK LUMINANCE RATIO
  From 20 August 2010:
  — Televisions without forced menu: the peak luminance of the on-mode condition of the television as delivered by the manufacturer shall not be less than 65 % of the peak luminance of the brightest on-mode condition provided by the television.
  — Televisions with forced menu: the peak luminance of the home-mode condition shall not be less than 65 % of the peak luminance of the brightest on-mode condition provided by the television.

- Annex III p.2. (c):
  The model shall be considered to comply with the provisions set out in Annex I, if:
  (c) the result for the peak luminance ratio set out in Annex I, Part 3 does not fall below 60 %.

(6) Answer on the peak luminance ratio

The figure of 60%, compared to the figure of 65%, takes into account a tolerance for markets surveillance purposes.

Commission Regulation (EC) No 641/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products

Commission Regulation (EU) No 622/2012 of 11 July 2012 amending Regulation (EC) No 641/2009 with regard to ecodesign requirements for glandless standalone circulators and glandless circulators integrated in products (1)

(1) Question on standalone versus integrated circulator

A Market Surveillance Authority has been asked how to define a standalone circulator vis-à-vis an integrated circulator. In equipment installed in buildings for using district heating the difference between stand-alone and integrated circulators is not as obvious as it is in the case of boilers.
Taken the definition of a standalone circulator into consideration, the Market Surveillance Authority's opinion is that it is not the physical location of the circulator that determines whether it shall be treated as standalone; only if it can be operated independently of (the rest of) the product that generates or transfers heat in the building, is it to be considered as a standalone circulator. If the circulator and (the rest of) the system have a shared control, then the circulator is to be considered as integrated.

(1) Answer on standalone versus integrated circulator:

The Commission services and other Market Surveillance Authorities agree to this view.

(2) Question on circulator used with a different profile

A circulator is used in a completely different profile, but still meant to be connected to a heating system. Does it have to fulfill the requirements?

The product in question is technically similar to an integrated circulator but has a different usage pattern. It moves hot water from a heating system buffer tank through a heat exchanger for heating sanitary water. It can be in part load as low as 1% of rated flow for most of the time and has to react quickly to demand (water draw-off). This use pattern is incompatible to the one used for heating circuits, which defines the efficiency required in the regulation.

(2) Answer on circulator used with a different profile

According to Article 2.1, 'circulator' means an impeller pump which has the rated hydraulic output power between 1 W and 2 500 W and is designed for use in heating systems or in secondary circuits of cooling distribution systems.

According to the description provided, the circuit where the circulator is being used is cannot be considered as a "heating system" and in consequence the product used is not covered by Regulation 641/2009.

(3) Question on circulators integrated in other products

In accordance with Article 1, Point 2, the Regulation shall not apply to circulators integrated in products, placed on the market no later than 1 January 2020 as replacement for identical circulators integrated in products placed on the market on later than 1 August 2015

The issue is how to prove specification of these products for replacement as integrated for market surveillance. The Czech supplier, which is responsible to keep stored circulators for replacement suggests to deliver such products to stores determinated as integrated replacement into the products supplied before. This would be check pursuant to the invoice for previous supply assembled product.

(3) Answer on circulator integrated in other products

According to Article 1 2(b), for circulators integrated in products and placed on the market as replacement for other circulators integrated in products, the replacement product or its packaging must clearly indicate the product(s) for which it is intended.

In consequence, after 1 August 2015 all circulators placed on the market must meet the efficiency levels or must indicate on the products or on the packaging that it is a replacement circulator and the product(s) for which it is intended. The indication of the intended product can normally already be expected to give (approximate) information on when that product was placed on the market.

(4) Question on clarification of the scope of Regulations 641/2009 and 547/2009

What products fall under the scope of each of the mentioned Regulations?

(4) Answer on clarification of the scope of Regulations 641/2009 and 547/2009

The differentiation can be found in the definitions on the regulations themselves:

Article 2(1) of Regulation 641/2009: 'circulator' means an impeller pump which has the rated hydraulic output power of between 1 W and 2 500 W and is designed for use in heating systems or in secondary circuits of cooling distribution systems;

Article 2(1) of Regulation 547/2012: 'water pump' is the hydraulic part of a device that moves clean water by physical or mechanical action and is of one of the following designs:
— End suction own bearing (ESOB),
— End suction close coupled (ESCC),
— End suction close coupled inline (ESCCi),
— Vertical multistage (MS-V),
— Submersible multistage (MSS);

(5) Question on information requirements for drinking water circulators

The amendment from 2012 contains the following requirement in Annex I

> '2. PRODUCT INFORMATION REQUIREMENTS
>
> 1. From 1 January 2013:
>
> (a) the energy efficiency index of standalone circulators calculated in accordance with Annex II, shall be indicated on the name plate and packaging of the standalone circulator and in the technical documentation of the standalone circulator as follows: "EEI ≤ 0,[*xx*]";

> (b) the following information shall be provided on standalone circulators and on circulators integrated in products: "The benchmark for the most efficient circulators is EEI ≤ 0,20.";
>
> (c) information concerning disassembly, recycling, or disposal at end-of-life of components and materials, shall be made available for treatment facilities on standalone circulators and on circulators integrated in products;
>
> (d) for drinking water circulators, the following information shall be provided on the packaging and in the documentation: "This circulator is suitable for drinking water only";

(a) A number of different models of circulators within the scope of the regulation were inspected (including tests). 1 of these inspected did not have the declared EEI on the name plate, 1 had an incorrect EEI- value printed on the name plate – Incorrect, because it did not concur with the value in the documentation. Is it correct to declare the circulator without EEI and the circulator with an incorrect EEI on the name plate as non-compliant?

(b) None of the inspected circulators had "the benchmark for the most efficient circulators is EEI ≤ 0,20" on the circulators itself. Can a model be considered compliant if the information on benchmark value of 0,20 is provided in the user's manual or the in other documents accompanying the circulator, although the circulator did not have the benchmark value written on the circulator itself?

(c) Some manufacturers/importers of circulators claimed that their circulators were outside the scope of the EU-regulation, since their circulator were (also) intended for drinking water. However, a circulator announced by the manufacturer as both suitable for pumping drinking water and for use in heating/cooling systems seems inside the scope of the regulations. Only if a circulator is marked on the box, in the documentation and on the website of the manufacturer as being designed only for/specifically for drinking water, would the model be outside the scope of the EU-regulation of circulators. Is this correct?

(5) Answer on information requirements for drinking water circulators

a) Yes, that is a correct interpretation of the Regulation.

b) Yes, the intention of the legislation is that information on the benchmark value of 0,20 is provided (which is also clear from other language version of the regulation). It is sufficient if this is done in the user's manual or the in other documents accompanying the circulator.

c) Article 1 of Regulation 641/2009 reads:

> *Article 1*
>
> **Subject matter and scope**
>
> 1. This Regulation establishes ecodesign requirements for the placing on the market of glandless standalone circulators and glandless circulators integrated in products.
>
> 2. This Regulation shall not apply to:
>
> (a) drinking water circulators, except as regards information requirements of Annex I, point 2(4);

> (b) circulators integrated in products and placed on the market not later than 1 January 2020 as replacement for identical circulators integrated in products and placed on the market no later than 1 August 2015. The replacement product or its packaging must clearly indicate the product(s) for which it is intended.

Information requirements clearly apply to all circulators. In addition, the definition of drinking water circulator reads:

> 5. 'drinking water circulator' means a circulator specifically designed to be used in the recirculation of drinking water as defined in Council Directive 98/83/EC (2).

In consequence, the interpretation is correct as on the definition of drinking water circulator it is mentioned that it has to be "specifically" designed to be used in the recirculation of drinking water, if it has two different uses it cannot be claimed that it is "specific".

(6) Question on product information requirements for integrated circulators (06-2016)

Annex I, 2 lists the "Product Information Requirements". The last two paragraphs of Annex 1, 2 refer to the manufacturer of circulators.

[…]

"Manufacturers shall provide information on how to install, use and maintain the circulator in order to minimise its impact on the environment."
"The information listed above shall be visibly displayed on freely accessible websites of the circulator manufacturer."

Who is responsible for this information in case of products with integrated circulators? Is it the manufacturer of the assembled product (e.g. boiler) or the manufacturer of circulators specifically designed to be integrated in products?

(6) Answer on product information requirements for integrated circulators (06-2016)

Article 1 of Regulation 641/2009 specifies that ecodesign requirements are set for the placing on the market of the products in scope. According to the Ecodesign Directive, the entity placing the product on the market is responsible for compliance with all ecodesign requirements, which it certifies through applying the CE-marking. One of the ecodesign requirements is that the information as presented in Annex I.2.1 is provided; hence, the entity placing the product on the market and applying the CE-mark must ensure compliance with this provision.

Commission Regulation (EC) No 640/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for electric motors

(1) Question on motors used in means of transport:

Article 1 (3) of the Ecodesign Directive states that the Directive does not apply for means for transport for persons or goods. The Commission has in the early stage of the ecodesign process informed Member States that it considers lifts, conveyor belts and other stationary transport machinery to be included in the scope of the Directive.
A Market Surveillance Authority has been asked whether the motor regulation applies for motors onboard ships. Apart from those circumstances where special safety regulations (e.g. IMO-regulations or regulations related to a hazardous (e.g. explosive) environment) are applicable, electrical motors are often used in the same way on a ship as on shore, i.e. lifts, compressed air equipment, conveyor belts etc. In these cases the electrical motor does not contribute to the movement of the ship and is therefore not a means of transport.

(1) Answer on motors used in means of transport:

Article 1 (3) of the Ecodesign Directive stipulates that the Directive does not apply to means of transport for persons or goods. It follows that an implementing Regulation should not apply to products that are designed only for use in a means of transport for persons or goods (for example, electric motors designed only for use on a ship). However, if the same product is designed for use in a means of transport for persons or goods and for a non-transport use, it should comply with all relevant requirements of the applicable implementing measure (for example, standard electric motors designed for use in conveyor belts on ships and for use in conveyor belts in manufacturing assembly lines).

On the other hand, the question if the product itself contributes to the movement of the means of transport for persons or goods is not relevant (for example, car tyres, car radios or car seats could not be covered by an Ecodesign implementing measure as designed only for use in a means of transport for persons or goods).

(2) Question on motors out of scope by using a slight different temperature or elevation range

What if a manufacturer claims his motor is not in scope by using a slightly broader temperature or elevation range? Example: A standard motor that would normally be in scope would be marketed for temperatures up to 45°C or elevations up to 1500 m. The Product is not different in any way. This issue has been brought up by manufacturers who see it being used by their competitors.

(2) Answer on motors out of scope by using a slight different temperature or elevation range

Indeed, only motors that are specifically designed to operate beyond these temperatures are excluded, otherwise the regulation would not make sense.

(3) Question on the obligation to check the veracity of a supplier's CE-marking

If I purchase a CE marked product from a supplier to integrate into my own product where the product from the supplier is not directly an energy-related product, but it could contain one (for example a compressor might include a motor in scope of 2005/32/EC). Do I have any obligation to check the veracity of the supplier's CE-marking, particularly with regard to ErP implementing measures? And would I have any responsibility for implementing measure criteria?

(3) Answer on the obligation to check the veracity of a supplier's CE-marking

A company incorporating a CE marked appliance (e.g. a motor) into its product (e.g. a chiller) may rely on the CE marking of that product (in combination with its declaration of conformity) to represent that the manufacturer, importer or authorised representative of the appliance (motor) has fulfilled all relevant CE marking obligations.

(4) Question on motors completely integrated into another product

Clarification is requested from the Commission on what is the meaning of "Motors completely integrated into a product (for example gear, pump, fan or compressor) of which the energy performance cannot be tested independently from the product" and does the Commission plan to publish guidance in relation to this regulation?

(4) Answer on motors completely integrated into another product

Indeed, Article 1 foresees that the Regulation shall not apply to motors that are built into another product of which the energy performance cannot be tested independently from that of the larger product (e.g. a motor integrated in a compressor). There are no plans for the Commission to publish guidance in relation to this regulation. CEMEP has produced a publicly guide on Regulation 640/2009.

(5) Question on replacement of integrated electric motors

From 16.June 2011 electric motors (EM) placed on the market shall not be less efficient than the IE2 efficiency level in accordance with Annex 1 point 1.

Czech EM manufacturer supplying saw machine producer with EM 75 kW specially designed with reduced frame (chassis), compared with standard size EM, and due to lack of space in last 20 years produced saws.

Saw machine producer is designing new machine size suitable for standard IE2 EM. The issue is replacement in old equipments where standard IE2 EM can´t be integrated due to space reasons. The EM manufacturer is not able to produce special reduced frame EM in IE2.
The question: Can EM manufacturer place on the marked EM in IE1 efficiency level with reduced frame only for replacement in old saw machines after 16. June 2011, in low number of pieces?

(5) Answer on replacement of integrated electric motors

Indeed, the Commission Regulation (EC) No 640/2009 do not allow the placing on the market or putting into service of motors less efficient than IE2 after 16 June 2011.

(6) Question on how to declare the year of manufacture on the rating plate

In which form must the year of manufacture be declared on or near the rating plate of the motor? Can this information be declared in encrypted form (e.g. as part of an serial number)?

In Annex I, No. 2 "Product information requirements on motors" the declaration of the year of manufacture is required. This information shall be durably marked on or near the rating plate of the motor.

Economic operators insist that this information is allowed be missing on the nameplate of the motor when the year of manufacture is included in the engine number in an encrypted way. The year of manufacture is thus identifiable, at least for the manufacturer.

(6) Answer on how to declare the year of manufacture on the rating plate

MSA's suggestion:

The year of manufacture is not only meant for the manufacturer. For market surveillance authorities and consumers the year of manufacture must also be apparent. If it is not practical to declare the full year of production according to the specification (for example, very small motors), the information can be given in code form if this code is explained in an accompanying written information. In this accompanying written information the date must also be declared in an unencrypted form.
(The answer is based on similar labeling requirements of legal terminology, the Machinery Directive 2006/42/EC.)

The Commission agrees with this interpretation.

(7) Question on the meaning of "being equipped with a variable speed drive"

From 1 January 2015 shall motors that do not meet IE3 efficiency class be equipped with a variable speed drive when placed on market? What does "be equipped with" mean? Does the motor manufacturer have to supply a VSD with every motor or can the VSD be supplied in other ways? If the motor is replaced, can the new motor be supplied without VSD, using the old VSD?

(7) Answer on the meaning of "being equipped with a variable speed drive"

The motor manufacturer does not have to supply a VSD with every motor sold. The Regulation applies when the product is "placed on the market" or "put into service". In this case, compliance cannot be checked when the product is "placed on the market", so it will need to be checked when the product is "put into service".

Nevertheless, if an IE2 motor is placed on the market after 1 January 2015 the following information needs to be provided.

- Information on the mandatory requirement to equip motors, which do not meet the IE3 efficiency level with a variable speed drive, shall be visibly displayed on the rating plate, technical documentation of the motor:

  (a) from 1 January 2015 for motors with a rated output of 7,5-375 kW;
  (b) from 1 January 2017 for motors with a rated output of 0,75-375 kW.

When a motor is replaced, it has to be equipped with a VSD, and there are no specific provisions regarding this question.

(8) Question on announcing E1 motors for sale in manufacturers' websites (04-2015)

As from 1 January 2015 electric motors shall be either IE 3 standard or IE 2 and equipped with a Variable Speed Drive. On a number of manufacturers' webpages even EI 1 motors are announced for sale. There is usually no mentioning that these motors are 'not for service /not to be put into service within the EU/EEC'. Is this allowed?

(8) Answer on announcing E1 motors for sale in manufacturers' websites

No, see e.g. the following two clarifications from the Blue Guide (http://ec.europa.eu/enterprise/newsroom/cf/itemdetail.cfm?item_id=7326):

In section 2.1:
A product intended to be placed on the Union market, offered in a catalogue or by means of electronic commerce, has to comply with Union harmonisation legislation when the catalogue or website directs its offer to the Union market and includes an ordering and shipping system. Where a product is not intended for the Union market or is not compliant with the applicable Union legislation, this has to be clearly indicated (e.g. by providing a visual warning).

In section 2.2:
A product is made available on the market when supplied for distribution, consumption or use on the Union market in the course of a commercial activity, whether in return for payment or free of charge. Such supply includes any offer for distribution, consumption or use on the Union market which could result in actual supply (e.g. an invitation to purchase, advertising campaigns).

(9) Question on motors placed on the market with modifications (04-2015)

The major part of all motors sold into market are standard motors (95%) and are delivered of the shelf.

The other 5% are modified motors placed on the market with modifications as listed below. These motors have to be rebuilt back to standard (of the shelf) before they are put up on the test bench for testing, otherwise they have difficulties reaching the required efficiency levels. The reason is that many modifications have effect on the efficiency and the higher up we go in efficiency levels, the tighter will the producer's margin be.

We are focusing on following "stock modifications"

- -Other bearings then the standard motor have.
- -Other painting specification
- -Motors with encoders with/without separate cooling fan, IC416
- -Motors without cooling fan, Air Over Motors to IC 418

When a manufacture or distributor does these kinds of "stock modifications", the stator and rotor are not touched so the motor modified back will get the same efficiency as it had as "standard motor".

Is it OK that the motor, when it is in its standard version reaches the required efficiency levels, is rebuilt back to standard before the testing takes place?

(9) Answer on motors placed on the market with modifications

Either the motor is out of the scope of the regulation due to a modification (e.g. other bearings in order to work at high temperatures) or it needs to be tested as placed on the market, which is including the modification.

(10) Question on integrated motors

Article 1 (Subject matter and scope) of Regulation 4/2014 amending regulation 640/2009 states:

2. This Regulation shall not apply to:

(b) motors completely integrated into a product (for example gear, pump, fan or compressor) of which the energy performance cannot be tested independently from the product;

When will a motor integrated in a product became completely integrated?

(10) Answer on integrated motors

Article 1(2)(b) specifies that a motor which is completely integrated into a product and cannot be tested independently is considered not in scope of Regulation 640/2009. Being completely integrated into a product is a necessary but not sufficient condition; any motor which can be separated from the product in a way that the motor can subsequently be tested according to the Regulation is in scope. The exemption only applies to a sub-group of all motors that are completely integrated into a product: the motors whose extraction from the product they are completely integrated into would render them non-testable on their energy performance. The examples "gear, pump, fan or compressor" represent products in which a motor is usually completely integrated into, but not necessarily examples of products with completely integrated motors exempt from scope.

(11) Question on motors not listed on the importers website (11-2018)

Regulation 640/2009 specifies the product information requirements for motors in Annex I, point 2:

> From 16 June 2011, the information on motors set out in points 1 to 12 shall be visibly displayed on:
> (a) the technical documentation of motors;
> (b) the technical documentation of products in which motors are incorporated;
> (c) free access websites of manufacturers of motors;
> (d) free access websites of manufacturers of products in which motors are incorporated.

Recent inspection revealed an importer not having any of the required information visible on the website, however at the same time the website did not inform about which models were for sale in the assortment. The products were not described or listed on the website, and one could not download a catalogue: the suppliers simply informed in general term about their

assortment of high efficiency standard 3-phased electric motors, however not one single model name was mentioned on the website. It says to call for further information.

Is an importer or a manufacturer obliged to display the assortment and the product information in some format on their public accessible website?

(11) Answer on motors not listed on the importers website (11-2018)

Union harmonisation legislation applies to products that are intended to be placed on the EU market. Obviously, the importer has the intention to place electric motors on the EU market. The ecodesign directive (art 4) stipulates that for imported goods the importer is responsible of compliance, in the absence of an authorized representative.

The importer has to comply with regulation 640/2009, unless he can demonstrate that all products he offers on the EU market are out of scope, or that there is an authorised representative in the EU. Therefore in the absence of a an authorised representative in the EU, the importer is obliged to list motors in scope of 640/2009 he is offering to the EU market, with product information on its free access website. If there is an authorised representative, its details and website should be indicated on the importer's website, so that compliance can be proven.

Commission Regulation (EC) No 643/2009 of 22 July 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for household refrigerating appliances

(1) Question on information requirements in manuals

For refrigerators and a few other products the Regulation demands for information in the booklet to be provided by manufacturers. For example in 643/2009, Annex II, the booklet should provide information regarding "how to minimise the energy consumption of the household refrigerating appliance in the use-phase". When performing market surveillance, how should this be measured? Is it sufficient if the manual just states that the back of the fridge should be vacuum cleaned once a year or is there some kind of list to be fulfilled?

(1) Answer on information requirements in manuals

Manuals should provide relevant guidance in their documentation on minimising the energy consumption of a given product. It would be useful to ask CECED to produce guidance for users.

(2) Question on tolerances for Sound measurements (4/2017)

The regulation (Annex V, table 1) states that there is no tolerance on the declared sound level. When measuring this parameter, there is always a degree of uncertainty in the measured value. How should this uncertainty be handled?

(2) Answer on tolerances for Sound measurements (4/2017)

Parameters without tolerance values should be reviewed when revising the regulations to evaluate whether tolerance values can be added. In other regulations, tolerances of zero, 1.5 and 2dB are used. Until a revision is published, we suggest that a zero tolerance is used.

(3) Question on freezing capacity (4/2017)

Would a household refrigerating appliance with a freezing capacity below 4,5 kg per 100 liters be non-compliant?

(3) Answer on freezing capacity (4/2017)

Only the 'food freezer compartment' (or 'four-star compartment') is capable of freezing foodstuff according to the definitions of the compartments. Hence, a household refrigerating appliance that is not equipped with a compartment that matches the definition of 'food freezer compartment' (not able of freezing at least 4.5 kg of foodstuff per 100 liters and in no case less than 2 kg, from ambient temperature down to – 18 °C over a period of 24 hours) is not able to freeze foodstuff in the sense of the regulation, and cannot be declared as a 'food freezer' or 'refrigerator-freezer', and the concerned compartment cannot be declared as 'food freezer compartment' or 'four star compartment', otherwise it is a non-compliance. Thus in the absence of a compartment that matches the definition of 'food freezer compartment' the freezing capacity is not a relevant parameter (to be declared as not applicable or equal to zero). This is in line with standard EN 62552 which stipulates that the freezing test is meant to check the freezing capacity of food freezers and food freezer compartments.

(4) Question on freezing capacity (4/2017)

With which freezing load should a household refrigerating appliance with a declared freezing capacity below 4,5 kg per 100 liters be tested?

(4) Answer on freezing capacity (4/2017)

As stated above, a household refrigerating appliance with a freezing capacity below 4,5 kg per 100 liters from ambient temperature down to – 18 °C over a period of 24 hours, cannot be considered as able to freeze foodstuff. Hence it does not me sense to test the appliance with a smaller load.

(5) Question on verification tolerance for freezing capacity (4/2017)

The regulation states that the tolerance for freezing capacity is 10 % (Annex V, table 1). The parameter measured on the other hand is the temperature and time for freezing. The central question asked by the regulation is whether the freezer can freeze the amount of load declared to -18 degrees within 24 hours. If the warmest part of the freezer is only -17 degrees after 24 hours, the freezer is non-compliant.
How should the tolerance be used in this case? Should the test be done again, but with 10% less load?

(5) Answer to verification tolerance for freezing capacity (4/2017)

The issue of tolerances on freezing capacity will be clarified more explicitly during the revision of the regulation on domestic refrigeration. To take tolerances into consideration, the freezing capacity may be tested with 10% less test load.

Commission Regulation (EC) No 278/2009 of 06 April 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for no-load condition electric power consumption and average active efficiency of external power supplies

(1) Question on trade-offs between no-load condition power consumption and average active efficiency

In some cases a device is almost always on (telecommunications, alarm systems etc.) and its power supply therefore has to be as efficient as possible. Some manufacturers have the choice between a power supply that does just about reach the values in the regulation and another one that is significantly more efficient (94 v. 84%) but has more than 0.5W no-load power consumption. These manufacturers claim that their solution does in fact save energy as the no-load case seldom appears and the higher on-mode efficiency over-compensates any no-load losses.

(1) Answer on trade-offs between no-load condition power consumption and average active efficiency

The regulation considers no-load condition power consumption and average active efficiency without the possibility of having trade-offs between them. If justified, future revisions of the Regulation could address this point.

(2) Question on power supplies sold as accessories of products not in scope

2.1 Are universal power supplies within scope, if sold as accessory to products not in scope of commission regulation (EC) No 1275/2008?

2.2 In case a product is sold together with the power supply only (one set, one price), the power supply will be out of scope if the product is not listed in Annex I of commission regulation (EC) No 1275/2008.

(2) Answer on power supplies sold as accessories of products not in scope

2.1 No. The market surveillance authority’s opinion is that power supplies with standard connectors are within the scope only if they can be bought and used by the end-user independently of the product and all the elements of the 'external power supply' definition are met. Power supplies intended only for use with a product not in scope of 1275/2008 are not in scope of 278/2009, even if sold separately, but the intended use must be clearly stated.

2.2 Regulation 278/2009 applies to appliances which meet the definition of 'external power supply' provided in Article 2(1) of the Regulation and in particular:
- are intended to be used with a separate device (that constitutes a primary load),
- are contained in a physical enclosure separate from that device,
- are intended for use with the equipment as referred to in Article 2(1) of Regulation (EC) No 1275/2008.

If no intended use is declared and the power supply meets the technical definition, it is considered to be in scope.

(3) Question regarding rechargeable battery powered devices with detachable rechargeable battery (DE 9)

Market surveillance authorities have found household equipment with a rechargeable battery that can either be charged while inside the device or when detached from the device. The device can be mains-operated too. An external power supply is used for charging and/or operating the device. The external power supply is connected directly to the rechargeable battery, even if the device is mains-operated.

Commission Regulation (EC) No 278/2009 excludes battery chargers from the scope, if they are directly connected to detachable batteries. Are such devices within scope of the regulation?

(3) Question regarding rechargeable battery powered devices with detachable rechargeable battery (DE 9)

It is not entirely clear to what kind of device the question refers to. In any case, it is clear that all operating conditions need to be specified in the technical documentation and that those parts of the devices that are regulated should also meet the requirements of the regulation 1275/2008. The household equipment that is charged through an external power supply should meet the 1275/2008 requirements (unless it is a low voltage-power supply). The batteries would be taken out for the measurements. The function of the battery charger does not imply that the other functions are not subject to the regulations.

(5) Question on simple set-top boxes equipped with removable media in a standard library format (04-2015)

Annex I point 3: Should an apparatus which differs from simple set-top boxes (from Regulation No 107/2009) only by having a function based on removable media in a standard library format be regarded as "other equipment for the purpose of recording or reproducing sound or images, including signals or other technologies for the distribution of sound and image other than by telecommunications"?

(5) Answer on simple set-top boxes equipped with removable media in a standard library format

Yes, indeed. Because of this additional function it is not in scope of Regulation 107/2009, but it is in scope of 1275/2008 and has to comply with its provisions (as complex set top boxes also have to).

(6) Question on different display times in standby and measuring energy consumption (04-2015)

Energy consumption of products which are displaying time (with clocks) in the standby mode depends heavily on current shown time. Energy consumption of the equipment which shows 11:11 is much lower than of one which shows 20:08. Depending on the time set at the beginning of the measurement, energy consumption results may vary for that one equipment. How should the compliance of such products be assessed in these circumstances?

(6) Answer on different display times in standby and measuring energy consumption

If this is not something specified in the measurement standard, then the product would need to comply in all possible combinations.

(7) Question regarding special plugs used by some manufacturers (10-2015)

Some manufacturers use a special plug for the low-voltage connection to their products. Can such a proprietary plug be considered to make the EPS specific for a load, as is required to use the exemption for replacement EPS for products in Art 1, 2f when marketed before entry into force of the regulation?

(7) Answer regarding special plugs used by some manufacturers

These plugs limit the usability of the EPS to one manufacturer's equipment. This is not considered specific for one model, so the replacement parts exemption cannot be claimed here.

The provision in Article 1.2 f) reads:

"external power supplies placed on the market no later than 30 June 2015 as a service part or spare part for an identical external power supply which was placed on the market not later than one year after this Regulation has come into force, under the condition that the service part or spare part, or its packaging, clearly indicates the primary load product(s) for which the spare part or service part is intended to be used with."

To be exempted in the sense of the service/spare part, the EPS needs a specification on the device itself or on the packing establishing for which specific product/model it can be used. It is not sufficiently specific that the proprietary plug limits the application to the product range of a specific manufacturer/brand.

(8) Question on special plugs and measurement tests (10-2015)

For some products a special plug for the low-voltage connection is used which also transmits data to the EPS, determining its behavior (voltage, current etc.). These are used for complex equipment like Notebook computers. The EPS will not function correctly without this plug. The test according to EN 50563 requires removing the plug and connecting the raw cables for measurement. The manufacturer submitted a test report according to a Canadian CAN/CSA-C381.1-08 method. In this standard, the plug remains with the EPS for measurement.

Is the declaration of conformity complete when the measurement was done according to the non-EU standard?

(8) Answer on special plugs and measurement tests

The requirement is that the power consumption shall be established by a reliable, accurate and reproducible measurement procedure, which takes into account the generally recognised state of the art. Manufacturers are not obliged to use the EU harmonised standard and if market surveillance authorities consider that on the basis of the information they have from the manufacturer or other sources that this alternative measurement method is in line with the requirements of the legislation and a reliable, accurate and reproducible measurement procedure , this can be accepted.

Commission Regulation (EC) No 244/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non-directional household lamps - Amended by Commission Regulation (EU) 2015/1428 of 25 August 2015

(1) Question on tolerances:

A Market Surveillance Authority has tested different brands of compact fluorescent lamps (CFLs) through an accredited lab for a number of the functionality requirements laid out in the Regulation's table 4, Annex II. Results show that the number of switching cycles is seemingly a weak point in many of the cheaper models. Combining the requirements for number of switching cycles with the Regulation's tolerance level of 10% (Annex III), gives rise to the following considerations:

The Regulation differentiates between whether a lamp's starting time is below or above 0.3 seconds. If the starting time is below, the lamp is allowed to fulfill only half the number of the switching cycles generally required otherwise. Applying this requires a clear definition of the term 'starting time' (see below). Does the 10% margin apply here too? If it does, then there is given a double tolerance margin; once for the starting time value, and once for the measured number of switching cycles. Is this correct and the intention of the Regulation?

Similar matters of distinction between requirement values are found both in table 3 and in table 4, and similar questions can be asked here:

In table 4:
- Starting time (Stage 5)
- Lamp power factor

In table 3 the following requirements are listed:
- non-clear lamp with colour rendering index ≥ 90 and $P \leq 0{,}5 * (0{,}88\sqrt{\Phi}+0{,}049\Phi)$
- discharge lamp with colour rendering index ≥ 90 and $Tc \geq 5\,000$ K

In the matter of colour rendering index (minimum requirement of 80) it is also suggestive to ask whether it is reasonable to allow for such a high tolerance level as 10%, as this for some lamps can result in only having to fulfil a colour rendering index of merely 72.

How should the lamp start time be measured? According to the text, the lamp has to achieve a stable light emission; what would be the precise definition of a stable light emission? In the definition (Annex I) it is stated that lamp start time is the time needed after the supply voltage is switched on, for the lamp to start fully and remain alight, but this is an imprecise definition.

(1) Answer on tolerances:

The Regulation is drafted in such a way that the 10% tolerance is applicable to all parameters. Manufacturers should avoid placing on the market products that approach the lower limits of the tolerance on a given parameter, as some laboratories might have equipment that will show them as non-compliant. The purpose of the tolerance is to avoid such situations, not to provide a means to escape compliance with the actual requirements. In any case, if the

tolerance value proves to cause problems in forthcoming years, it can be the topic for the revision of the Regulation.

As for the precise definition of a lamp that has "started fully and remains alight", the applicable definition in the Regulation replicates the wording of existing EN standards for fluorescent lamps. If it is necessary to define more precisely what "starting fully" and "remaining alight" mean for the measurement of the lamp start time, such a request could be included in the draft mandate to be given to the European Standardisation Organisations.

(2) Question on lamps marketed for different purposes (heating)

Would a lamp that is marketed for a different purpose (heating) but is technically an incandescent lamp be in scope? See enforcement case and safeguard clause against "Heatballs". The same lamp can be marketed as a special lamp (shock resistant) with correct information displayed.

We see such lamp as still being a lamp and it should be called a special lamp if it is needed on the market. In that case, even if the purpose "heating" is debatable it still has to be marked as not suitable for room illumination and has to carry the product information required for a lamp.

(2) Answer on lamps marketed for different purposes (heating) – updated 27 February 2016 as a result of the application of Commission Regulation (EU) 2015/1428

This view is correct. Just because it is labelled to provide a different service, the same non-compliant product does not become compliant (e.g. a product that fulfils the definition of a fridge is not exempted from minimum requirements for fridges if it is marketed as an "illuminated cupboard" with cooling as an unintended side-effect). The technical parameters decide if a product is in scope, and products can only claim special purpose status if the intended use is in a special application and the product possesses the technical parameters that make the its design specific for the stated intended purpose. To be compliant, special purpose products must state their intended special purpose, the stated application must be a special application, and the actual lamp design must be specific for the use in this special application. Therefore, "heatballs" having the technical characteristics for being considered as incandescent bulbs have to comply with the ecodesign requirements for non-directional household lamps of Regulation 244/2009.

(3) [Question and answer 3 removed 27 February 2016 as it became obsolete as a result of the application of Commission Regulation (EU) 2015/1428]

(4) Question on make your own lamp kit

In Sweden there is a halogen "energy saving" lamp sold along with a G9 adaptor.
Let's say it's compliant with the ecodesign regulations. It's even sold an "adaptor Cover" to make the halogen lamp look like a frosted light bulb. Would this be compliant, and if not, who is responsible, is it the consumer that actually has put the product on the market by mounting the two parts together?

Pictures for question SE2

Question: do the various MSAs interpret this in the same manner?

(4) Answer on make your own lamp kit

The following items are placed on the market separately by the manufacturer or importer. Of the three, only the halogen capsule falls within the scope of Ecodesign Regulation 244/2009. The user who puts into service the halogen capsule does not alter its performance parameters by modifying the product itself, so continued compliance is ensured at the stage of putting into service. The requirements of the Regulation do not cover the obstacles altering the light of the capsule where it is installed (it could be a luminaries optical system or the outer "adaptor cover" depicted above). Therefore, when sold separately, neither of the kit's elements are deemed to be in contradiction with the requirements of Regulation 244/2009.

(5) Question on measuring the lifetime of a lamp model for conformity assessment

How is the lifetime of a lamp model measured for conformity assessment with this regulation (also relevant for labelling directive 98/11)?

The measurement standard defines the following method:
a) Lamp lifetime is the time after which half of the lamps in a sample (10 of 20 lamps) have failed. The test is finished at that time.
The wording “average results of the batch” in the second paragraph of annex III has led some manufacturers to assume that a different method can be used:
b) Testing the lamps until the whole batch has failed and taking the average of the time each of the lamps lasted as lifetime of the lamp model.
Methods a and b can give different results, also b is more time-consuming because it has to be done until the last lamp has failed.

The opinion of the market surveillance authority is that method a is correct for the following reasons:
- It is described in the standard.
- The term “average” is not applicable to the lifetime test, because the sample size (20 lamps) already leads to averaging of the lifetimes of individual lamps.
- The test therefore is done once on “one batch of 20 lamps” with one result, not 20 times on one individual lamp each.
- Method b could result in consumer disappointment because for a batch of 19 lamps failing very early and one very robust specimen one would still be able to claim a reasonable lifetime, this is not possible with method a.

(5) Answer on measuring the lifetime of a lamp model for conformity assessment

The assumption made is right and the method described in a) is the correct one. Furthermore, the lamp survival factor of X per cent would not make sense with method b) where an average time is calculated.
While the lamp survival factor is used directly for compact fluorescent lamp lifetime requirements, for other lamps (e.g. halogens) the requirement is expressed differently (as rated lamp lifetime in hours). Fortunately, the lamp lifetime definition in Annex I.d also builds on the lamp survival factor, so the same argument can be made also for other lamps.
Further, the same Annex III recommends the use of measurement methods set out in European standards, which, as pointed out use method a).

(6a) Question on product information on the packaging – luminous flux value

Market surveillance has found product packaging with nominal luminous flux differing about 10% from the rated value printed in the technical product documentation. Consumers are therefore being misled. Market surveillance has to accept the products due to the 10% range. This can be considered as a loophole in the regulation, as the nominal value luminous should not be higher than the rated luminous flux. The nominal life time information requirement is already implemented this way (Annex II, 3.1. b).

(6a) Answer on product information on the packaging – luminous flux value

The idea in the regulation was that standardized categories of nominal luminous fluxes would spontaneously emerge in the process, the same way as it happened with wattages (25W, 40W, 60W etc). For this, some flexibility is obviously needed between rated and nominal luminous fluxes. However, the spontaneous standardization does not seem to have happened. If the 10% tolerance is used only to claim higher fluxes than the reality, which in addition do not correspond to any user-friendly categorisation, the abuse has to be stopped.
It needs to be considered in any case that a 10% difference in luminous flux is hardly perceptible to the users.

(6b) Question on product information on the packaging – font sizes

Market surveillance has found products with lamp power shown in prominent sizes outside the energy label on e.g. three visible package sides. The luminous flux instead was shown only at the back or bottom side in double size compared to the very small lamp power information on the back side of the packaging. Consumers are being misled.
This can be considered as a loophole, because the requirements are not defined clearly enough.

(6b) Answer on product information on the packaging – font sizes

The requirements are formulated clearly enough. The luminous flux has to be displayed in double the size of the power display outside the label. The requirement applies to the packaging as a whole and thus the fact that there are power displays larger than the flux display make the packaging non-compliant.

(7) Question on tackling the misuse of tolerances

Efficiency class D with halogen lamps is still common: According to EU 244/2009 lamps with efficiency class D should not be placed on the market any more. While in EU 874/2012 the energy efficiency index may differ up to 10% during the post-inspection, in EU 244/2009 the luminous flux and the wattage are mentioned with 10 % tolerance. Manufacturers fulfill the demands of EU 244/2009 by using (exploitation) both tolerances (more power consumption, less light emittance) – but they declare in some cases only class D because they cannot fulfill the 10% demands of the Energy Efficiency Index (EEI) from the label regulation. Nevertheless, no less than class C is declared in the attached case. A way to tackle this misuse of tolerances is in preparation.

(7) Answer on tackling the misuse of tolerances

It is the Commission's view that it is legally allowed for manufacturers to claim two different energy efficiencies indices for lamps, one calculated according to Regulation 244/2009 and one according to Regulation 874/2012. The calculation methods as well as the harmonised and transitory measurement methods also differ. Furthermore, the energy efficiency class is only established in Regulation 874/2012. Each lamp has therefore only one energy efficiency class to be displayed to the consumer but two separate energy efficiency indices according to separate Regulations. The Commission is currently evaluating ways on how best to align both calculation and testing methods in the future.

(8a) Question on the measurement method for mercury content

See answer for question 8b

(8b)Question on the relationship between requirements in 244/2009 and RoHS

What is the relationship between the requirements of Directive 2011/65/EC (RoHS) and the requirements of Regulation (EC) No 244/2009 in regards to the review of the mercury content and the assessment of compliance with the relevant requirements?

Following the test method described in the Regulation (EC) No 244/2009 it could be, that in a lot comprising 20 compact fluorescence lamps the limit specified in RoHS is exceeded by one or more compact fluorescence lamps. Nevertheless it would not be possible to object this, because in Regulation (EC) No 244/2009 not the measurement result of a single CFL but the average value of the lot plus 10% is used for the assessment. In extreme cases, the mercury levels of lamps could be clearly above the threshold of additionally 10%.

(8b) Answer on the relationship between requirements in 244/2009 and RoHS

Regulations 244/2009, 1194/2012, and 874/2012 all require a minimum batch sample of 20 independent lamps for market surveillance testing. Under Regulation 244/2009 the average mercury content is used to assess conformity under ecodesign. Another legislative act, i.e. the

RoHS Directive 2011/65/EC, might impose other requirements such as the allowable mercury content in each single lamp. In such a case a product can be in conformity with ecodesign measures but not with the RoHS Directive, and is therefore not allowed to be placed on the market.

(9) Question on the use of the term "energy saving lamp"

Some manufacturers uses definitions such as "energy efficient", "eco-saver", "eco-bulb", "saves x amount of energy" on lamps that should not be considered Energy saving lamps but claims that these expressions are not covered by the writing in Regulation 244/2009 annex II p. 3.1 (j) where the following text is stipulated:

(j) The term 'energy saving lamp' or any similar product related promotional statement about lamp efficacy may only be used if the lamp complies with the efficacy requirements applicable to non-clear lamps in Stage 1 according to Tables 1, 2 and 3.

Are the above mentioned definitions covered by the writing "or any similar product related promotional statement about lamp efficacy"?

(9) Answer on the use of the term "energy saving lamp"

"Energy efficient", "eco-saver" and "eco-bulb" are similar terms to "energy saving lamp", whereas "saves x amount of energy" is not.

(10) Question on the chromaticity coordinates x and y

According to article 1 point a of the Commission Regulation (EC) no 244/2009 requirements do not apply to special purpose lamps having the following chromaticity coordinates x and y:
$x < 0{,}200$ or $x > 0{,}600$
$y < -2{,}3172\ x^2 + 2{,}3653\ x - 0{,}2800$ or
$y > -2{,}3172\ x^2 + 2{,}3653\ x - 0{,}1000$.

According to article 3 point 2 of the Commission Regulation (EC) no 244/2009 special purpose lamps shall have information clearly and prominently indicated on their packaging and all forms of the product that they are unsuitable for household room illumination. However, can special purpose lamps with different chromaticity coordinates x and y than the above mentioned, be manufactured and placed on the market?
Further, should this parameter not be stated in a technical documentation of a lamp because of its importance?

Finally, the definition of special purpose lamps does not seem precise and should be clarified, e.g. by removing the last part of the definition "or because the related product information indicates that it is unsuitable for household room illumination".

(10) Answer on the chromaticity coordinates x and y

Regulation 244/2009 specifies in Article 1 (a) that all lamps with chromaticity coordinates within the specified ranges are not subject to the requirements set out within this Regulation, even if they would otherwise be considered as normal household or special purpose lamp.

Further, the Commission aligned the definitions of special purpose lamps in Regulation 244/2009 and 1194/2012 through its amending Regulation 2015/1428 to facilitate compliance and reduce the regulatory burden.

(11) Question on lamps/luminaires made by multiple directional LEDs (04-2015)

If a manufacturer produces a lamp/luminaire made by multiple directional LEDs - Is it possible to consider this product as non-directional?

(11) Answer on lamps/luminaires made by multiple directional LEDs

The definitions of "lamp" as well as "directional" and "non-directional" are included in the Regulations. Following these definitions, a lamp can contain multiple LED modules and be either directional or non-directional according to the solid angle of the light output. The same applies to luminaires.

(12) Question on the presentation of colour temperature (04-2015)

Does Regulation 244/2009 Annex II, 3.1.d) require a text defining if the colour temperature as warm or cold white (or other) in addition to the specification in Kelvin:
"3.1. Information to be visibly displayed prior to purchase to end-users on the packaging and on free access websites [..]
(d) Colour temperature (also expressed as a value in Kelvins);"

(12) Answer on the presentation of colour temperature

The Regulation requires the presentation of the colour temperature, either in wording or in any other kind of format such as a picture, as well as the value expressed in degrees Kelvin.

(13) Question on luminous flux higher than declared (04-2015)

Some lamps that have a luminous flux higher than declared (e.g. on the packaging) by more than 10%. Is this is to be seen as non-compliance according to Regulation 244/2009, Annex III, Regulation 1194/2012, Annex IV or any other sections of the Regulations?

(13) Answer on luminous flux higher than declared

Lamps with luminous flux above the 10% tolerance are formally non-compliant, but it is unlikely that market surveillance authorities would act on lamps outperforming the luminous flux claims on the packaging.

(14) Question on free access websites (06-2016)

Regulation 244/2009 Annex II 3.1 states: Information to be visibly displayed prior to purchase to end-users on the packaging and on free access Websites.

(the exact same phrasing is used in regulation 1194/2012, annex III, point 3.1.2)

Some economic operators claim that they do not have to make the required parameters available, as they do not sell the imported lamps directly to consumers themselves.

Why is the wording "prior to purchase" used in this context as ecodesign requirements solely applies to producers and importers?

And, in addition, if the company of a legal representative does not have a free access website, can market surveillance authorities demand them to create one?

(14) Answer on free access websites (06-2016)

Article 1 of Regulation 244/2009 specifies that ecodesign requirements are set for the placing on the market of the products in scope. According to the Ecodesign Directive, the entity placing the product on the market is responsible for compliance with all ecodesign requirements, which it certifies through applying the CE-marking. One of the ecodesign requirements is that the information as presented in Annex II.3.1 needs to be visible for any end-user prior to purchase on the packaging of the product and on a free access website. Hence, if an entity places the product on the market without fulfilling the legal information requirements, the product should be considered non-compliant with the Regulation.

(15) Question on technical documentation for special purpose lamps (11-2016)

Article 3(2) states that "The technical documentation file drawn up for the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC shall list the technical parameters (if any) that make the lamp design specific for the special purpose indicated on the packaging.

Article 4(2) also states that "For the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC, the technical documentation file shall contain a copy of the product information provided in accordance with Annex II, part 3, to this Regulation.

Some economic operators, who place special purpose lamps - lamps resistant to mechanical shock or vibrations on the market, claim that they do not have to make the required information available because there is no ecodesign requirements for special purpose lamps.

Should Article 4(2) of the Regulation be read in conjunction with Article 3(2) and the technical documentation file, drawn up for the purposes of conformity assessment of special purpose lamps, contain a copy of the product information provided in accordance with Annex II, part 3?

(15) Answer on technical documentation for special purpose lamps (11-2016)

Manufacturers of special purpose lamps as defined in Article 2(4) are required to provide the information requirements of Annex II.3 according to Article 4(2), except if these lamps are in general out of scope of the Regulation according to Article 1.

(16) Question on special purpose lamps under 25 Watts (11-2016)

The amendment introduced by Article 1(1)(a) of Regulation 2015/1428 includes the following:

“Incandescent lamps longer than 60 mm are not special purpose lamps, if they are resistant only to mechanical shock or vibrations and are not incandescent traffic signalling lamps; or they possess a rated power higher than 25 W and claim to have specific features that are also present in lamps having higher energy efficiency classes according to Regulation (EU) No 874/2012 (such as zero EMC emissions, CRI value higher or equal to 95, and UV emissions less or equal than 2 mW per 1 000 lm).”

It seems that a lamp under 25 W can be a special purpose lamp, even though the specific features are present in lamps with a higher energy efficiency class. For special purpose lamps

both above and below 25W the technical parameters that make a lamp specific for special purposes must be indicated on the packaging, (EU) 244/2009, article 3, 2.

Could a high colour rendering of 100 Ra is to be considered a special feature/technical parameter for filament lamps under 25 W?

It seems that this cannot be a special feature, since this is the common colour rendering of filament lamps. However, if this is to be regarded as a special feature it would mean that any filament lamps under 25 Watts are for special purposes. That does not seem the intent of the regulation.

Further, what would be examples of technical parameters which would be regarded as special features in the means of lamps for special purposes?

(16) Answer on special purpose lamps under 25 Watts (11-2016)

Regulation 244/2009, amended by Regulation 2015/1428, defines in Article 2(4) so-called special purpose lamps. A special purpose lamp is used in a special application as defined in the article. In addition, further requirements specifically for incandescent lamps are included, such as ones linked to the size or power uptake.

Incandescent lamps shorter than 60mm and with a power uptake of, or less than, 25W only need to fulfil the conditions as any other non-incandescent lamp. A high colour rendering index, expressed as 100 Ra, is neither a special application as stipulated in Article 2(4) nor a specific lamp design for a special application (in a filament lamp).

A technical parameter such as the colour rendering index is per se never sufficient for a special purpose lamp categorisation. Article 2(4) makes clear that the lamp's intended application must be one of the listed. Further, a lamp must have specific technical parameters to allow for such application. It is for this reason that Article 3(2) specifies that a special purpose lamp must specify its intended purpose and the technical parameters that make the lamp design specific for this stated intended purpose. A lamp that is either not used in a special application, or that is used in such application but has no specific design for the application, cannot be a special purpose lamp.

For example, a lamp manufacturer might design an incandescent lamp of 25W or less with a special light filter to make meat look more appealing. These lamps are often used in supermarkets and butcheries. In this case, the incandescent lamp can be marketed as special purpose lamp, because the product is used in a special application according to Article 2(4)(b)(i) and the light-filter is a technical parameter that makes the lamp design specific for the intended purpose. Without the light-filter, the lamp design would not be specific for the intended purpose, and hence the lamp could not be a special purpose product.

(17)Question on Lava 'Lamps' (luminaires) (2019)

Lava Lamps are fitted generally with standard incandescent light bulbs (lamps), for the purpose of providing unique decorative illumination. The incandescent lamps incorporated into this product and any replacement lamps are covered by Commission Regulation 244/2009.

Lava Lamps use heat as a trigger for the unique lava fluid illumination display. Standard incandescent lamps appear to be used as LED's do not produce the heat output required to trigger the fluid display.

The question is whether this display is a special lighting application and the lamp incorporated into the product (including any replacements) can be defined as a special purpose lamp, thus exempt from the energy efficiency measures of 244/2009.

(17) Answer on Lava 'Lamps' (luminaires) (2019)

With the introduction of the EU 2015/1428 amendment, the lamp used within a Lava Lamp cannot simply be defined as a special lighting application or as a special purpose lamp as it does not meet the definitions set out in the amending 2015/1428 regulation. The lamps do not appear to have any technical parameters specific for the purpose, appearing simply to be standard incandescent lamps.

The lamp is also producing a chemical reaction. However, the regulation is specific stating that light emissions must be the agent in the chemical reaction; in this case heat is the agent not light.

The FAQ #2 in this same section indicates that: -

"The technical parameters decide if a product is in scope, and products can only claim special purpose status if the intended use is in a special application and the product possesses the technical parameters that make the its design specific for the stated intended purpose."

As a conclusion, incandescent lamps in lava lamps do not have the characteristics that match the definition of special purpose lamps.

(18) Question on incandescent Traffic Lamps (2019)

Is it allowed to sell special purpose traffic lamps in shops, in the vicinity of household lamps? Is it allowed to market them via *distant selling methods* and subscription email as 'just as useful for everyday lighting in and around the home.'?

(18) Answer on incandescent Traffic Lamps (2019)

Marketing special purpose lamps as suitable for home is not allowed because "*For all special purpose lamps, the intended purpose shall be stated in all forms of product information, together with the warning that they are not intended for use in other applications*." (Article 1(2)(b) of Regulation 244/2009 amended by Regulation 2015/1428). The forthcoming revision of the legislation on lighting products aims as well to reduce loopholes and circumvention of the norms.

(19) Question regarding the standard to be used for the purpose of conformity of 'incandescent traffic signalling lamp' (2019)

If a manufacturer claims that his product is an "incandescent traffic signalling lamp", how can he demonstrate that the lamp has a failure rate of less than 2 % during the first 1 000 hours of operation ?

(19) Answer regarding the standard to be used for the purpose of conformity of 'incandescent traffic signalling lamp' (2019)

In the case of incandescent traffic signalling lamp, since no harmonised standards are currently available, the regulation has to be applied in combination with Commission communication 2014/C 22/02[2], also referred to as the "transitional method"[3]. In the transitional method, it is indicated that for non-directional incandescent light bulbs, premature failure rate should be determined according to EN 60064, 3.5 (a typographical error regarding the provision which is not 3.5, but Article 3.6).

[2] *Commission communication in the framework of the implementation of: Commission Regulation (EC) No 244/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for non- directional household lamps, amended by Commission Regulation (EC) No 859/2009 of 18 September 2009 as regards the ecodesign requirements on ultraviolet radiation of non- directional household lamps (2014/C 22/02)*

[3] This issue of missing harmonised standard in addressed in the new 'guidelines for the implementation of ecodesign and energy labelling requirements for local space heaters' published on 13 Nov 2017, in section 6. See: https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficient-products/local-space-heaters

Commission Regulation (EC) No 245/2009 of 18 March 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps, and repealing Directive 2000/55/EC of the European Parliament and of the Council

(1) Question on LED-fluorescent in regular armatures

We know that it may not be sufficient to rebuild an armature to fit other kinds of fluorescents. The armature is compliant only with a regular fluorescent.

The question is however if it would be compliant to put an LED-fluorescent in an armature where the origin ballast still is used to light the LED-fluorescent. The armature isn't rebuilt in any way, it's just another kind of fluorescent.

(1) Answer on LED-fluorescent in regular armatures

The issue of retro-fitting is being discussed as part of the future regulation on directional lamps.

(2) Question on compliance when changing a product

Who is responsible for the compliance when changing a product?

Some companies are selling lamps, especially LED to be fitted into an armature that is suited for a fluorescent lamp. The armature is compliant with the CE-regulation with the fluorescent lamp. Who is responsible for that the armature isn't compliant anymore with the use of another lamp? And who should give the proper information about the risk of, so to speak, build a new product?

(2) Answer on compliance when changing a product

The luminaire has to comply with the requirements of Commission Regulation 245/2009 on the ecodesign of (among others) fluorescent luminaires when it is placed on the market. The scope of Ecodesign does not extend beyond that point. Safety-related issues are to be addressed within the LVD ADCO, who already deal with LED tubes. Page 15 of the blue guide also provides relevant information.

(3) Question on compatibility with magnetic ballasts

Page 36 of the regulation states:

B. Second stage requirements
Three years after this Regulation comes into force:

Luminaires for fluorescent lamps without integrated ballast and for high intensity discharge lamps shall be compatible with ballasts complying with the third stage requirements, except luminaires with ingress protection grade at least IP4X.

The question is mainly about the word compatible. Does this mean that luminaire, which can be used with magnetic ballasts but also with ballasts complying with the third stage requirements, are ok?

Finnish manufacturer is making luminaires for TC-S-lamps (they have internal starter/charger), and the lamps require magnetic ballasts. However, the luminaires can be used with other ballasts too, but then the lamp also needs to be different. Some of their models have ingress protection grade IP4X or above, but some of them don't. Manufacturer want's to be sure that they can still make the luminaires that are below IP4X.

(3) Answer on compatibility with magnetic ballasts

Indeed, this is the meaning of the Regulation. Luminaires are allowed on the market if they are compatible with both magnetic and electronic ballasts, even if they are not IP4X or more.

(4) Question on induction lamps

Are induction lamps included in Regulation 245/2009?

(4) Answer on induction lamps

This depends on the type of induction lamp. They are covered if the type of lamp falls into the scope of Regulation 245/2009 (Article 1) and are not exempt according to Annex I. Being an induction lamp is for itself not an exemption criterion.

(5) Question on the colour rendering index (Ra) for fluorescent lamps without integrated ballast

According to annex IV of the Commission Regulation (EC) no 245/2009, Member States shall apply special verification procedure for requirements set out in annex III. With regard to lamps, Member State authorities shall test a sample batch of minimum 20 lamps of the same model from the same manufacturer, randomly selected. The batch is considered to comply with provisions set out in annex III part 1 of the Commission Regulation (EC) no 245/2009 if average results of the batch do not vary from a limit, a threshold or declared values by more than 10%. Otherwise the batch doesn’t comply with the requirements.

Double capped fluorescent lamps T8 without integrated ballast were tested in a laboratory: 3 batches of lamps in the scope of their colour rendering index (Ra). Every tested sample consisted of 20 lamps of the same model. According to annex III, point 1.2.A, since 13.04.2010, fluorescent lamps without integrated ballast shall have a colour rendering index (Ra) of at least 80. Testing showed that two batches had Ra below the required level (from 72 to 73). Consequently, the average results of the testing did not vary from the percentage limit and lamps complied with the requirements of Commission Regulation (EC) no 245/2009.

The Commission Regulation (EC) no 245/2009 aimed withdraw from the market halophosphate fluorescent lamps which pose serious risk to eyes. These lamps could not have a colour rendering index at the required level (80) so they should not be available on the market.

Thus, it seems that the criteria for assessing the conformity set out in the annex III of the Commission Regulation (EC) no 245/2009 are in contrary with a standard EN 60081:1998 Double-capped fluorescent lamps - Performance specifications. The results of colorimetric

measurements should not be evaluated using the percentage range because of complexity of the problem. Therefore, Commission Regulation (EC) no 245/2009 should be changed.

(6) Answer on the colour rendering index (Ra) for fluorescent lamps without integrated ballast

The above understanding of Regulation 245/2009 is correct. While there might be some European standards with different tolerances for the colour rendering index, only the tolerance in the regulatory measure is legally applicable and therefore not in contradiction with a standard. The Commission is nonetheless aware of this problem, and is will consider it in the review of Regulation 245/2009.

Commission Regulation (EC) No 107/2009 of 4 February 2009 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for simple set-top boxes.

(1) Question on set-top boxes and USB memory sticks

Is a Set Top Box that offers recording to an integrated disc but also to a USB memory stick in the scope of the regulation?

(1) Answer onset-top boxes and USB memory sticks

Regulation 107/2009 does not apply to devices which offer 'recording based on removable media in a standard library format'. USB sticks are considered to be removable media.

(2) Question on standard library format (04-2015)

The definition of "simple set top box" in Article 2 uses the term "a standard library format". Which formats can be defined as "a standard library formats"?

(2) Answer on standard library format (04-2015)

The wording in the regulation is: “offers no recording function based on removable media in a standard library format” in which "a standard library format" means a standard physical recording medium format for A/V programme material (e.g. in 2009, DVD, CD, VHS cassette, Hi8 and Standar8 cassette, Audio cassette). The purpose of this was to exclude VHS, DVD, and CD recorders with tuners from the regulation since they were to be the subject of the sound and imaging equipment ecodesign study.

Commission Regulation (EC) No 1275/2008 of 17 December 2008 implementing Directive 2005/32/EC of the European Parliament and of the Council with regard to ecodesign requirements for standby and off mode electric power consumption of electrical and electronic household and office equipment

Commission Regulation (EU) No 801/2013 of 22 August 2013 amending Regulation (EC) No 1275/2008 with regard to ecodesign requirements for standby, off mode electric power consumption of electrical and electronic household and office equipment, and amending Regulation (EC) No 642/2009 with regard to ecodesign requirements for televisions

(1) Question on audio products used in networks:

Since the standby requirements went into force a Market Surveillance Authority has experienced several attempts from manufacturers to define the standby mode of their audio product to be either network standby or at least some kind of non-standalone-standby.

Below are two examples:

1. A product which is designed and equipped to be part of a network is placed on the market as a single product, i.e. not as a part of a network. The particular product can be used together with audio products from other manufacturers without forming a network. The standby power consumption of this product exceeds 1 W, the network facility is always on and cannot be switched off neither by the end user nor by the dealer/installer.
Should this product be considered to lie beyond the scope of regulation 1275/2008, even when it is sold as a standalone product and not as an element of a network?

2. An I-Pod docking station/loudspeaker has a power consumption exceeding 1W. The manufacturer claims that the product is not in a standby mode since it is searching for the item.
How should the products in the examples above be viewed in terms of the Regulation?

(1) Answer on audio products used in networks:

1. A product is in the scope of Regulation 1275/2008 when the criteria set out in its Article 2(1) are met, regardless of the marketing channel. As the product appears to be used together with consumer electronics products, it is likely that it falls into the scope or Regulation 1275/2008 too. Judging from the information given, there appears to be no reason why standby and/or off-mode would be inappropriate for the intended use of that product.

2. Judging from the information given, there appears to be no technical justification that standby/off-mode is inappropriate for the intended use of an iPod docking station. However, the "final judgement" should be based on the technical justification provided by the manufacturer.

(2) Question on appropriateness of off/standby mode:

Equipment that has a normal operation intended to be only plugged in during operation (such as an electric iron). Does an electric iron have to have an off switch or would Annex II (1.c) (inappropriate for intended use) be reasonable to apply to an iron?

Our view is as described below. Would this be a reasonable approach?

“Some products are intended to be plugged in, used and unplugged after use. The normal operational intent is for the equipment to be stored unplugged when not in use. Items such as steam irons have been historically manufactured typically without an off switch.

Regulation 1275/2008 states in annex II (1.c) "except where this is inappropriate for intended use". It would therefore be reasonable to suggest that under normal use an iron is plugged in for use and unplugged when not in use.

Therefore it would seem reasonable to apply the exception in Annex II (1c) to irons.

However, other household items such as sandwich makers, deep fat fryers, rice cookers, hair curlers and straighteners and steam cleaning products may be more of a challenge to apply the same argument where these products are concerned. Reviews of the market suggest a significant proportion of these items are manufactured with off switches and therefore there is an expectation at least for a proportion of the users for them to be plugged in and dormant.

Annex II (2d) sets power management requirements from 2013. This requires equipment to have a standby/power off mode or equivalent after an elapsed time of inactivity. Although the same "except where this is inappropriate for intended use" exists, it could be difficult to argue that if an iron is left on and not in use for an extended period it should not switch off. The same could apply to the other suggested items.

Therefore any application of Annex II (1.c) as an exclusion for steam irons is only short term because of the future more stringent requirements.”

(2) Answer on appropriateness of off/standby mode:

The appropriateness/inappropriateness of off/standby mode should be considered on a product-by-product basis on the basis of the technical justification for "inappropriateness for the intended use", if that "design option" is chosen. In order to come to a common view in ADCO anecdotal market data and examples of concrete technical justifications for "inappropriateness" could indeed be useful, in particular with a view to the review of the regulation, although a "market review" appears to be somewhat disproportionate. At this stage, however, the decision on the appropriateness/inappropriateness is to be taken by the manufacturer.

(3) Question on products with small power consumption:

Some simple products such as kettles have a clear mains disconnect by design. Annex II 3 suggests power consumption MUST be measured and reported with uncertainties. A Market Surveillance Authority has had an industry request enquiring whether they must pay for very simple items to be tested. The suggestion is that this may be in some situations an unnecessary burden adding little or no value. The Market Surveillance Authority has tested some sample items and recognised that these simple items have zero or close to zero off power.

The Market Surveillance Authority's view is as described below. Would this be a reasonable approach?

“Commission Regulation (EC) No 1275/2008 on Standby and off mode requires under Annex II 3 that the power consumption is measured and sets limits of the uncertainty of that measurement. Annex II 4 requires the data and measurement method is included in the technical documentation file.

Some pieces of equipment have off switches that physically break the mains input (usually the live rail). Where the design is such that the equipment is isolated from live, has no residual operational function and the nature of the equipment is that any power loss would be undetectable when considering the uncertainties identified in Annex II 3. In these situations the risk of off power use would be very low and it would be appropriate not to test the equipment for off power but to declare a measurement based on design assessment.”

(3) Answer on products with small power consumption:

Annex II applies to any product falling under the Regulation, including kettles ("Other appliances for cooking and other processing of food", water is considered to be food.) That means also the power consumption of kettles has to be established according to Annex II, point 3, and the information has to be provided in the technical documentation file according to Annex II, point 4. The Regulation does not provide an exemption of Annex II for "simple" products or products with small power consumption.

However, according to preliminary results on standardisation mandate M/439, it may be appropriate to review the uncertainties set out in point 3 of Annex II.

(4) Question on electricity consumption of stereo players with digital clocks

In case there is a digital clock on a stereo player which is visible in the standby mode of that stereo player, may electricity consumption in standby mode exceed 1W?
A clock is considered to be information, so the energy consumption in standby mode may exceed 1W but shall not exceed 2W.

(4) Answer on electricity consumption of stereo players with digital clocks

This is an acceptable reading of the ecodesign requirements established in Regulation 1275/2008.

(5) Question on various products covered by Annex I

5.1 Are treadmills, cross-trainers and vibration platforms within scope?

5.2 Are sewing machines within the scope?

5.3 Are high-pressure cleaners within the scope?

5.4 Is a state of the device preparing active mode to be considered as standby? – An Example would be a washing machine prepared for running the programme but the start button has not been pressed.

(5) Answer on various products covered by Annex I

5.1 Such products are within the scope of the regulation even though they are medical devices according to council directive 93/42/EEC. The reason is that these products are used also in households and fitness studios. They are sold directly to end-users and can be found in Annex I No 4 “Sports equipment with electric or electronic components”. If there were equipment with an additional special medical functionality that would make it impossible to send the equipment into standby/off, it might qualify for "inappropriate for the intended use".

5.2 Sewing machines are within the scope of the regulation. Annex I No 1 mentions “Other appliances for … maintenance of clothes”. Sewing machines can be used for production and maintenance (repair, alteration) of clothes.

5.3 It would depend on whether they are non-household equipment; in that case they would be outside the scope. Further guidance is necessary whether this product group falls under the scope of the standby regulation, not referring to the categories in the ROHS and the WEEE Directives.

(6) Question on state preparing active mode

Is a state of the device preparing active mode to be considered as standby? – An Example would be a washing machine prepared for running the programme but the start button has not been pressed.

(6) Answer on state preparing active mode

No, this state does not correspond to a reactivation function in the sense of the regulation. It only occurs if consumers have forgotten to launch the active mode.

(7) Question on ecodesign requirements for household washing machines and standby

From the two Regulations (washing machines and standby), which requirements are applicable after 1st of December 2011? Specific ecodesign requirements are listed in Annex I point 2 paragraph (1) of Regulation 1015/2010 (standby).

(7) Answer on ecodesign requirements for household washing machines and standby

Both commission regulations, (EC) No 1275/2008 and (EU) No 1015/2010, are applicable. The declaration of conformity shall list both regulations.

(8) Question on whether electronic mixer taps are within scope

Are electronic mixer taps within the scope?

(8) Answer on whether electronic mixer taps are within scope

As water is not being mixed for food processing purposes (but for cleaning), mixer taps should not be considered within scope, as they do not fall under “other appliances for cooking and other processing of food”.

(9) Question on glandless standalone circulators

Are glandless standalone circulators (DE: “Umwälzpumen”) for drinking water within the scope of regulation 1275?

(9) Answer on glandless standalone circulators

The primary purpose of glandless circulators is not the preparation/processing of food even if drinking water is used as a carrier. They are therefore outside the scope, regardless of whether they incorporate a time function or not.

(10) Question on video recorders for professional purposes

Are video recorders for professional purposes (security services) within the scope?

(10) Answer on video recorders for professional purposes

Video recorders belong to category 3 (consumer equipment). There are two possible cases:

a) There is technically a real difference vis-à-vis the consumer product and it is marketed as professional equipment: The video recorder for professional use would still be in the scope of regulation 1275/2008 but the manufacturer might have more right to claim that standby/off and the power management are "inappropriate for the intended use".

b) The product is technically identical but the users are different: The default setting would need to be compliant with 1275/2008. However, the (professional) users are able to change the settings.

(11) Question on Annex I and types of scales in scope

Regarding the scope of Annex I, are all types of scales covered by the regulation?

(11) Answer on Annex I and types of scales in scope

No, postal scales and precision scales are professional use and not typically used in a domestic environment. Therefore household scales such as bathroom scales are in scope but non-household scales are out of scope.

(11) Question on main function definition and CD players

Should a CD player automatically power-down if CD playing finished or if the CD is loaded into the device but playing is not started by the user?

(11) Answer on main function definition and CD players

Yes, the CD player should automatically power down.

(12) Question on audio amplifiers and automatic power down

Should an audio amplifier automatically power-down after appropriate time when there is no input signal any more?

(12) Answer on audio amplifiers and automatic power down

Yes, it should. (We know that at least oneIf a manufacturer might claim that an additional circuit can harm the audio quality for the more sophisticated devices, t. They would then need to prove that the power management is "inappropriate for the intended use")

(13) Question on coffee machines and automatic power down

Should a coffee machine automatically power-down after an appropriate time when brewing coffee is finished and warming the beverage timed out?

(13) Answer on coffee machines and automatic power down

It would seem to make sense to include such requirement through a forthcoming amendment on 1275/2008. Manufacturers of coffee machines are advised to start preparing already for this case.

(14) Question regarding Annex II and power management

The wording “When equipment is not providing the main function, or when other energy-using product(s) are not dependent on its functions, equipment shall, unless inappropriate for the intended use, offer a power management function […]” can be interpreted ambiguous. If the “or” is meant logically, the equipment needs to switch off even the main function(s) (if appropriate, after reasonable time) in case no other energy-using-products depend on its function. E.g. coffee machines need to switch off the warming function after a certain time. (Still possible to define this is not appropriate, because coffee needs to be warmed forever?!) Other interpretation is that power management is required for two listed cases: a) main function is off or b) no other ErP rely on the product.

(14) Answer regarding Annex II and power management

It would seem to make sense the change the "or" by "and when”, so that both conditions need to be fulfilled. This would be done through a forthcoming amendment of the networked standby regulation.

(15) Question regarding charging stations of tooth brushes

Is an inductive charging station of an electric tooth brush in state “off” or “standby” while the brush is removed from the charging station?

(15) Answer regarding charging stations of tooth brushes

The brush and the charging station form a functional unit. When the brush is removed from the charger there is no main function (no charge) provided by the charger for an infinite time. When the tooth brush is not being charged, the device must therefore meet the “standby/off”-mode requirements.

(16) Question on coffee machines

Are coffee machines within the scope for Standby, step 2? In that case, should they have a power down function after a specified time? There seems to be a problem with the percolator brewers due to high temperature.

(16) Answer on coffee machines

Yes, they are in the scope. A regulation amending the standby regulation that is in the planning for adoption in 2013 could specify the power management requirements for coffee machines. In particular, it could introduce (besides ecodesign requirements for networked standby) specifications for the application of the power management requirements for coffee machines, i.e. specifying the delay time after which the coffee machines need to switch into standby/off.

(17) Question on standby/off mode of coffee machines/percolators

A manufacturer of percolators who claims that one of the percolators main functions is to keep the coffee warm and should therefore be exempted from the stand-by requirements.

1. Can keeping the coffee warm in a percolator can be regarded as a main function?

2. Can a product have more than one main function?

3. With regard to the verification and test of standby requirements for coffee machines: should the maximum time allowed correspond to the time required by the machine to brew coffee using *the maximum water/brewing capacity*?

(17) Answer on standby/off mode of coffee machines/percolators

1. Yes, there can be more than one main function. But this does not (any longer) affect coffee machines nor perculators (referred to in the regulation as 'drip filter coffee machines').

2. Exactly because there were recurring discussions on whether the hot plate function was to be considered a main function or not, specifications for coffee machines (including percolators), were included in Regulation 1275/2008 via Regulation 801/2013. It is now clear that as from 2015 coffee machines need to go into standby/off as stipulated in the regulation.

3. Yes, in order to make sure that certain coffee machines are not implicitly required to enter into standby/off within less than the 40 minutes, the verification should be based on the maximum brewing capacity. (Coffee machines of the low-price segment implement the auto power down function into standby with the help of a simple timer that starts when the brewing cycle is started. The brewing cycle has different durations depending on the number of cups that are brewed. This means in practice that in order to allow the full 40 minutes of delay time - the minimum that consumers can accept - it is necessary to take as a basis the longest possible brewing time/the maximum brewing capacity).

(18) Question on LED tubes/luminaries falling under the scope of standby

Do battery powered LED rod/bar luminaires fall under **other leisure equipment** as detailed in Annex 1 point 4 of Regulation 1275/2008? How ‘broadly or strictly’ should the applicable scope of regulation (EC) No. 1275/2008 be interpreted?

It is problematic when trying to fit certain products in the product categories of Annex 1, particularly the category 'other leisure equipment' in Annex 1 point 4.

According to Article 1(1), the scope of regulation (EC) No. 1275/2008 covers:
"electrical and electronic household and office equipment' (hereafter referred to as

'equipment'), means any energy-using product which:

(a) is made commercially available as a single functional unit and is intended for the end-user;

(b) falls under the list of energy-using products of Annex I;

(c) is dependent on energy input from the mains power source in order to work as intended;

and

(d) is designed for use with a nominal voltage rating of 250 V or below,

also when marketed for non-household or non-office use;"

Due to the catch-all term 'leisure equipment', a large number of devices are covered which are neither explicitly stated in Annex 1, nor directly comparable with the other products listed there. LED rod lights for camping etc. are one such product that suffers from this problem.

(18) Answer on LED tubes/luminaries falling under the scope of standby

LED luminaires are clearly lighting and lighting is not covered by 1275/2008 even if certain features/applications might have a leisure- or sport-dimension. LED tubes/luminaries are covered under the ecodesign regulation 1194/2012 even if operating on battery.

(19) Question on EMC Class A IT products

The Regulation recognizes explicitly only information technology (IT) equipment of class B devices according to the standard EN 55022:2006. Products classified as "Class A device" are apparently excluded intentionally from the scope of the Regulation 1275/2008, intending to exclude industry products. The marking "class A device" on a product turns out to be a loophole: Manufacturers can declare their IT products for household and office use as a "class A device" at their sole discretion. In such case, there is only the obligation that the consumer shall be informed by "clearly legible" information in form of sentences as the following: The device is a "class A device". "The device may cause electromagnetic interference near the environment of 10 meters". Is this an unintended loophole in the Regulation?

(19) Answer on EMC Class A IT products

Regulation 1275/2008 intentionally does not apply to A-IT equipment, and the scope was deliberately maintained as it was. Manufacturers always aimed for reasons of public procurement to have their equipment labelled as Class-B-equipment. If, however, the possibility of Class A-labeling will prove to be a loophole, this can be addressed in the review in 2016.

(20) Question on HiNA and LoNA applicability

Some products have multiple functions, where only some of these functions the fall under the definition of HiNA products. Can these products use the HiNA allowances for network standby?

Definition 18 states " "networked equipment with high network availability" (HiNA equipment) means equipment with one or more of the following functionalities, but no other, as the main function(s): router, network switch, wireless network access point, hub, modem, VoIP telephone, video phone;" What is a main function and is the intended consequence of the networked standby requirements in conjunction with this definition that a product offering more functions should use less power?

(20) Answer on HiNA and LoNA applicability

In this case, the relevant definition would be Definition 19 (networked equipment with HiNA-functionality). Regarding the allowances, it would depend on whether the HiNA-functionalities are activated when the product is placed on the market. If yes, the device would need to meet the HiNA-limits. In order to keep potential loopholes as small as possible, the VoIP, hub and modem functions which are easy to add to a LoNA-device, were not included in this definition.

(21) Question on the relation between Regulations 1275/2008, 801/2013 and 278/2009 and the Voluntary Agreements

Some of the regulated products are also in scope of voluntary agreements which include provisions on standby of the covered products (imaging equipment, set-top-boxes). Some manufacturers think these are not in scope of the regulation(s) any more.

(21) Answer on the relation between Regulations 1275/2008, 801/2013 and 278/2009 and the Voluntary Agreements

These products are clearly in scope of the Regulations, because there is no explicit exemption in the regulations and the voluntary agreement cannot change the regulations. It has been clarified over and over again (e.g. in meetings of the Ecodesign Consultation Forum) that equipment which is in the scope of 1275/2008 and not expressively exempted due to being subject to another Ecodesign Regulation (like TVs and certain computers) is indeed in the scope of 1275/2008 and thus of 801/2013 and needs to fulfill the requirements stipulated there. The Regulations prevail over Voluntary Agreements.

(22) Question on mini-screwdrivers and the standby Regulation

A distributor sells a "mini screwdriver", but does not consider it an "external power supply" according to Regulation 278/2009. This seems correct. To be regarded as an "external power supply" (EPS) Regulation 278/2009 stipulates that the product must fulfil all of the criteria in Article 1(1) a) – g). Criteria1(1) b) is that the product must be intended for household and office equipment as referred to in Article 2(1) of Regulation 1275/2008. According to Article 2(1) b) in Regulation 1275/2008, the energy-using products must fall under Annex I. When looking at the list in Annex I, is seems that "mini screwdrivers" are not covered. However, could it be regarded as consumer equipment or leisure equipment?

Further, why no lightning products are covered by 1275/2008 and therefore not their EPS either?

(22) Answer on mini-screwdrivers and the standby Regulation

Tools like screw drivers (mini or not mini) are not in the scope of the standby Regulation 1275/2008, and hence Regulation 278/2009 does not apply to screw drivers. The appropriateness of the scope of Regulation 1275/2008 will be reviewed by January 2016.

Lightning products are not covered by Regulation 1275/2008, because the energy efficiency requirements for the standby-power consumption and no-load power are addressed in Annex III.1.2 of Regulation 1194/2012.

(23) Question on DECT cordless phones with a FXO port connected to the PSTN (04-2015)

Should a DECT (Digital Enhanced Cordless Telecommunications) cordless telephone with FXO port (phone jack) connected to PSTN, (according to p.8 of the guideline accompanying Commission Regulation (EU) No 801/2013 of 22 August 2013, PSTN is defined as network https://ec.europa.eu/energy/sites/ener/files/documents/Guidance%20document_Lot%2026_Networked%20Standby_clean%20FIN.pdf) fulfill the networked standby requirement stipulated in “Commission Regulation (EU) No 801/2013 of Regulation (EC) No 1275/2008 ?

(23) Answer on DECT cordless phones with a FXO port connected to the PSTN

On the basis of the description, it seems that the product in question is a normal (cordless or corded) telephone connected to the normal public telecom network (so not VoIP).

Article 2 of Regulation 1275/2008 (which is amended by 801/2013) defines "electrical and electronic household and office equipment" in scope of the regulation if the criteria mentioned in the definition are met. One of the criteria is that the product falls under the list of energy-using products of Annex I. Annex I lists the equipment in scope of the regulation. It says regarding consumer equipment: "Radio sets, Television sets; Videocameras; Video recorders; Hi-fi recorders; Audio amplifiers; Home theatre systems; Musical instruments; And other equipment for the purpose of recording or reproducing sound or images, including signals or other technologies for the distribution of sound and image other than by telecommunications."

Hence, normal telephones are not in the scope of Regulation 1275/2008 (nor is any other telephone placed on the market with a low voltage power supply).

(24) Question on USB power supplies (04-2015)

Do USB power supplies fall under regulation 278/2009? Is this also valid when other functions are offered in the same product?

Example: A power strip with three plug sockets and a switch, which also has an integrated 5 volt power supply that supplies two USB ports wired in parallel with a total current output of 2 amps.

The producer proposes that 278/2009 is not applicable, since according to article 2, section 1 b 2, different output voltages are provided by the device at the same time. An AC supply output of over 250 W is also to be expected.

Questions:
a) Is the power supply excluded because two voltages can be supplied simultaneously? (230 V AC and 5 V DC)

b) Does this product qualify as a power supply in the sense of regulation 278/2009?
c) Similar products are built into the wall with fixed wiring to mains power, creating "USB Wall Plug Sockets". Are these also external power supplies?

(24) Answer on USB power supplies

a) The power supply is not excluded. The regulation establishes criteria that qualify a device as EPS. In Article. 2, point 1 (b) it reads: "it is able to convert to only one DC or AC output voltage at a time". One of the outputs corresponds to the mains, i.e. the mains voltage is not converted, this means that the device only converts to one output voltage at a time; the criterium in the definition is met.

b) Yes, the definition is met; see explanation in a)

c) Yes, we agree, the definitions are met.

(25) Question on paper shredders being in scope (10-2015)

Are paper shredders inside the scope of regulation 1275/2008?

(25) Answer on paper shredders being in scope

Paper shredders are currently not in scope of 1275/2008. They are not listed in Annex I and they would not be considered ICT-equipment in the sense of the definition of the regulation.

(26a) Question on deactivated network ports (06-2016)

There are a number of provisions in Regulation 1275/2008 in relation to deactivated network ports:

Point 7b) of Regulation 801/2013, Article 1 introduces the requirements:

a. To give the user the power to turn off (deactivate) wireless connections (some exceptions)

b. To offer a power management switching into network standby after 20 minutes when at least one network port is active

c. To comply with the relevant standby limit value when all network ports are deactivated.

Chapter 5 of the network standby guidelines4 also mentions that provision a) does not mean that the user has to be able to deactivate all ports. However, it is not really clear whether they have to be deactivated for measurements.

Testing for compliance with the networked standby limit value has to be done (according to the verification procedure) by disconnecting all ports and the randomly reconnecting one of them before making the power consumption measurements.

[4] https://ec.europa.eu/energy/sites/ener/files/documents/Guidance%20document_Lot%2026_Networked%20Standby_clean%20FIN.pdf

Question a: When testing for provision c), what will be the limit value when not all ports can be deactivated?

(26a) Answer on deactivated network ports (06-2016)

If not all network ports can be reactivated, like in the case of equipment which relies on just one wireless network port and which has wired connection, then the product is not required to switch into normal standby and thus the limit value is the one for networked standby.

(26b) Question on deactivated network ports (06-2016)

Question b: If there is a network port present, without it being able to reactivate the product and this port cannot be deactivated by the user, which limit value applies?

(26b) Answer on deactivated network ports (06-2016)

This should be the (non-networked) standby value because in that case the port would not be considered a "network port" in the sense of the definition (Art. 2 (13)), thus the equipment would not be considered networked equipment and would need to switch into normal standby.

(26c) Question on deactivated network ports (06-2016)

Another uncertainty arises from the wording of the product information requirements. In point 9 of article 1 the last phrase:

“If no information is provided, the equipment is considered not to be networked equipment unless it provides the functionalities of a router, network switch, wireless network access point (not being a terminal), hub, modem, VoIP telephone, video phone.”

suggests that a manufacturer can somehow choose whether their equipment is networked or not. This could lead to a loophole if the words “Networked equipment” in the requirements are misunderstood in the way that incomplete product information establishes an exemption. Question c: If the product information leads to the conclusion that the equipment is not networked equipment, but there are network ports present which do consume power, which limit value applies? (This is not a purely theoretical possibility; many products like blu-ray players are marketed with network connectivity physically present but are often used without.)

(26c) Answer on deactivated network ports (06-2016)

The normal standby power consumption limits apply. The reasoning behind the wording was to ensure that manufacturers would have any interest to declare their networked products properly in order to be able to claim the higher allowances for networked standby and to avoid extra-burden for market surveillance to judge whether equipment was networked or not. Only later there were indications that some manufacturers would seek to meet the tighter standby allowances but in return could avoid the network connection deactivation- and the delay-time requirements. So far, the Commission services consider that it is a good incentive for manufacturers to reach the even more ambitious (normal) standby level, but a future review (not the ongoing one) focusing more on networked standby, would have to address this issue.

(27) Question on descaling drip filter coffee machines (06-2016)

Using the definitions 29, 32 and 34, there are different requirements for the required maximum time to standby in Annex II, point 6. If the coffee is stored in a non-insulated jug, the time after a brewing cycle is 40 minutes and the time after descaling / self-cleaning is 30 minutes.

Normally, descaling is done in these machines by filling the tank with descaling agent (e.g. citric acid) and starting a brewing cycle. We have not seen a drip filter machine that has a separate descaling or self-cleaning setting. Thus the machine has no way of "knowing" that it is operated in a descaling function.

Is a drip filter coffee machine compliant with the requirements if the manual recommends using the standard brewing cycle for descaling and the heating function switches off 39 minutes after this cycle has finished?

(27) Answer on descaling drip filter coffee machines (06-2016)

The coffee machine is considered to be compliant. The function is indistinguishable from the brewing function and regarding definition 34 it can be argued that the machine does not perform the process alone (automatically), but the user does by filling it with descaling agent.

The question is less relevant for machines using an insulated jug, because their time to standby is 5 minutes after brewing coffee, which is shorter than 30 minutes.

(28) Question on the role of battery maintenance in portable appliances (06-2016)

In regulation 1275 there is a requirement on power management (Annex II, 2d):

"[…] When equipment is not providing the main function, and other energy-using product(s) are not dependent on its functions, the power management function shall switch equipment after the shortest possible period of time appropriate for the intended use of the equipment, automatically into […]."

Many questions have dealt with the main function aspect. It is not defined in the regulation, but "active mode" is, quite recursively, by stating in definition 5 that it is a condition in which the main function is activated.

Is a condition that offers battery maintenance a main function? In the standby guidelines document5 it is explained that it is not a standby condition (page 12):

"The role of battery maintenance"

The maintenance mode of the battery load in portable appliances (e.g. portable vacuum cleaners) is one of the key functions of the system (battery charge and portable appliance) to avoid discharge of the battery. This is a function beyond reactivation function and information display, and therefore not considered to be standby-mode."

(28) Answer on the role of battery maintenance in portable appliances (06-2016)

[5] https://ec.europa.eu/energy/sites/ener/files/documents/guidelines%20for%20SMEs%201275_2008_oct_09.pdf

The standby operating mode is defined rigorously as a mode that provides only the functions of reactivation + indication + information display, so the battery maintenance would not be considered standby.

(29) Question on standby requirements for coffee machines (04-2017)

Article 1, point 7 of regulation 801/2013 amending Annex II, point 6 of regulation 1275/2008 provides that a coffee machine should turn itself off within 40 minutes after the brewing cycle is complete. If the 40 minutes is interrupted by pouring coffee for example would this reset the timing and would then another 40 minutes be applied?

(29) Answer on standby requirements for coffee machines (04-2017)

The 40 minutes are not be interrupted by lifting the coffee pot.

(30) Question on MESH network (11/2017)

A MESH network is a communication network consisting of a router and a number of access points. The MESH access points are able to communicate with each other in a MESH structure. The access points communicate with electronic devices for instance computers and mobile phones. For instance, MESH networks are used in wireless audio systems.
Are routers and access points placed on the market for use in wireless MESH network systems covered by the requirements in regulation (EU) No 801/2013? The question only covers equipment types included in the scope of the regulation i.e. electrical and electronic household and office equipment.

(30) Answer on MESH network (11/2017)

A MESH network is basically a system of routers and access points communicating with each other in a mesh or star structure. A MESH network is a communication infrastructure in line with the definition of network in the regulation. In addition, routers and wireless access points designated for MESH network do not differ from the definitions of routers and wireless access points in the regulation.

Therefore products designated for MESH networks are covered by regulation 801/2013 as long as they are within the scope and in line with the definitions in the regulation. According to the definitions in the regulation the equipment will be categorized as HiNA equipment.

(31) Question on set-top boxes traded under the service provider's name (11-2018)

It is common for set-top boxes, that the manufacturer's name/trademark is stated on the physical box, whereas the service provider often names and in addition changes the software before the product reaches the end-user.

Below two examples:

(1) A product where the manufactures trademark is stated on the box, but the dealers name is stated on the remote control, but not on the box. Furthermore, when the box is turned on the dealer's trademark appears on the screen.

(2) A product where the manufactures trademark is stated on the box. The service provider trademark is not mentioned on the box or remote control. However, the box is marketed under the dealer's name. Furthermore, when the box is turned on the service provider's trademark appears on the screen.

Many of the service providers do not see themselves as the legal responsible for the products on the market. Who is the responsible of the conformity with the regulation of the boxes?

(31) Answer on set-top boxes traded under the service provider's name (11-2018)

A product, which has been subject to important changes or overhauls aiming to modify its original performance, purpose or type, after it has been put into service, may be considered as a new product. This has to be assessed on a case by case basis. The person who carries out the changes becomes then the manufacturer with all the corresponding obligations.

In addition, a modified product sold under the name or trademark of a natural person different from the original manufacturer should be considered as new, and the person under whose name or trademark the product is sold is responsible for ensuring compliance with all relevant regulations.

(32) Question on set-top boxes that have more than one standby setting (11-2018)

Some complex set-top boxes have more than one standby setting, whereof not all of them comply with the regulation demands towards energy consumption. And although the suppliers refer to the different modes in the manual to guide end-users regarding settings and energy consumption, some suppliers have chosen to name these non-compliant standby modes with "normal" or "standard" and not giving additional information about the additional standby consumption. Is it allowed to name a standby-setting as "normal" or "standard" when this setting doesn't comply to the regulation demands? Some suppliers even recommend using the setting with the non-compliant energy consumption, not giving information about the actual use of energy.

(32) Answer on set-top boxes that have more than one standby setting (11-2018)

The Standby Regulation 1275/2008 defines the networked standby mode and requires the presence of a power management function that switches the equipment into that mode (unless inappropriate for its intended use). Some complex products could indeed have other low-power modes, which do not comply with the provisions for networked standby. Those other modes, which could be of a very wide variety depending on the product, are not regulated therefore no specific provisions apply either in terms of name or energy consumption.

However, the presence of such modes (customized by the producers) should not prevent the equipment to comply with the legal provisions regarding off-mode, standby and networked standby (including the power-down mechanism employed by the power management function). Non-compliant low-power modes shall not be called 'standby' or 'networked standby'.

(33)Question on touch sensors in relation to reactivation function (2019)

'Reactivation function', as defined in the Regulation, means a function facilitating the activation of other modes, including active mode, by remote switch, including remote control, internal sensor, timer to a condition providing additional functions, including the main function. Many appliances, such as electric hot plates, are often designed with finger touch sensors to turn on/off the product. Are these touch sensors considered 'internal sensors' in the sense of the definition of reactivation function?

(33)Answer on touch sensors in relation to reactivation function

An internal sensor, as considered by the definition of reactivation function, is a sensor that is incorporated in the product and can reactivate it without the need of a direct physical intervention of the end user on the product itself. The reactivation is realised either by the end user acting remotely, or by the product itself acting upon preset parameters. Examples of internal sensors include: infrared sensor, temperature sensor, voice activation sensor.

The touch sensors need the end user to directly touch the product. When integrated in soft switches (as is the case of many household appliances, including electric hot plates) they act in relation to placing a product in off mode rather than in standby, and alternatively turning it back on. Therefore, such sensors should not be considered 'internal sensors' that are contributing to the reactivation function, as mentioned in Regulation (EC) 1275/2008. In these cases the requirements on maximum power consumption in off mode should be observed.

(34)Question on product settings when placed on the market

If an appliance (e.g. steamer or oven) has an integrated display indicating (among others) time, but the display and related clock is not activated by default when the product is placed on the market, should the standby consumption still include the consumption of the display?

(34)Answer on product settings when placed on the market

The product should comply with the requirements on power consumption of equipment with information or status display, which is a continuous function providing information, including clocks, as specified in definition 4 (article 2). This shall not exceed 1,00 W.

The standard EN 50564 on measurement of low power modes provides, in clause 5.2 Preparation of product, that:

"The product shall be prepared and set up in accordance with the instructions for use".

"The product modes tested should be consumer relevant and representative of expected normal use. Where instructions for use provide configuration options, each relevant option should be separately tested."

Thus, the measurement test does not refer to testing only a specific configuration (in which the product happens to be placed on the market by the producer). Instead all the relevant product modes and configuration options expected to be employed by the final users, as could also be documented in the user manuals, are to be tested.

Furthermore, according to the provisions of the Regulation 1275/2008, for each of the product modes specified above the power management function should switch the product into standby or off mode, as applicable, after a period of inactivity in which the product is not providing its main function(s). In these cases the ecodesign requirements for standby and off mode shall apply.

Commission Regulation (EU) No 1015/2010 of 10 November 2010 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household washing machines

(1) Question on multi-drums in separate units (11-2016)

Are multi-drums washing machines covered by the Regulations and if so, how?

(1) Answer on multi-drums in separate units (11-2016)

The multi-drums washing machines currently reaching the EU market are basically multi-drums in separate units or multi-drums in one casing machine. The ecodesign and energy labelling regulations on washing machines currently do not contain specific provisions for these kinds of washing machines (when reviewing the regulations such specific provisions will be considered).

Multi-drums in separate units

In these machines, the main drum part can be completed optionally with separate extensional units ('modules'), which may or may not be able to operate individually without the main unit.

The main unit of this type of multi-drums washing machine is clearly in the scope of the ecodesign and energy labelling legislation. However, there is some uncertainty concerning the coverage of the additional washing modules.

Different cases should be considered:

- If the additional washing module is not capable of functioning as a stand-alone unit (i.e. physically separated from the main unit) and has a limited number of washing programmes that are not able to clean normally soiled cotton laundry or similar fabric/textile (and thus not suitable for common use and associated programme cycles used for determination of compliance), then **this module cannot be considered as a separate washing machine** but as a functional complement to a primary washing machine appliance (and the primary washing machine appliance is subject to the ecodesign and energy labelling regulations 1015/2010 and 1061/2010). **This washing module is not subject to power consumption, washing performance or other requirements of the regulations.** With the aim to consider individually the main drum disregarding any synergetic effects from multi-drum operation, the module should be deactivated when assessing the compliance of the primary washing machine with the ecodesign and energy labelling regulations:
  - by means of selection knobs, if this is feasible, or
  - by physically disconnecting it from the primary washing machine.
- If the washing module is not capable of functioning as a stand-alone unit but it is able to clean normally soiled cotton laundry or similar fabric/textile, then **this module should be considered as a separate washing drum** which should have the programme cycles used for the determination of compliance (i.e. programme cycles

for cleaning normally soiled cotton laundry at 40°C and 60°C, as mentioned in the booklet of instructions provided by the manufacturer) and comply with the ecodesign and the energy labelling requirements. In this case, the main drum and the additional washing module should be considered individually and separately disregarding any synergetic effects from multi-drum operation. **Each drum should comply individually and separately with the ecodesign and the energy labelling requirements** (including a label for each drum).

- If the module is capable of functioning as a stand-alone unit, then **it should be considered as a washing machine** and **should comply with the ecodesign and the energy labelling requirements**.

Multi-drums in one casing machine

In these machines, different drums are located within one casing and have the possibility to share the use of the same internal components and resources. See below an example of such a machine.

There are *a priori* various possibilities to deal with these machines and to apply the ecodesign and energy labelling requirements, as for instance:

- To consider only the main drum;
- To deal with each drum individually and separately;
- To consider the adding performance of all drums running at the same time one single 'standard cotton programme';
- To consider the weighted average performance (energy efficiency index, washing performance, noise, remaining moisture content) of the various drums to determine a single level of performance for the complete machine (for which the rated capacity, energy and water consumption have been summed up);
- To combine some of these approaches.

Each drum could, *a priori*, fall under '*an automatic washing machine which cleans and rinses textiles using water which also has a spin extraction function*', the definition of household washing machine in the ecodesign and energy labelling legislation.

For that reason, it appears reasonable to consider individually and separately the various drums disregarding any synergetic effects from multi-drum operation. **This would imply that each drum should comply individually and separately with the ecodesign and the energy labelling requirements** including a label for each drum (see the similarity to domestic ovens with different cavities for which separate labels are issued for each cavity) and the availability for each drum of the standard programme cycles used for cleaning normally soiled cotton laundry at 40°C and 60°C (which should be indicated in the booklet of instructions provided by the manufacturer).

However, if one of the drums has a limited number of washing programmes that are not able to clean normally soiled cotton laundry or similar fabric/textile (and thus not suitable for common use and associated programme cycles used for determination of compliance), then **that drum cannot be considered separately** and should be considered as a functional complement to a primary drum (and the primary drum is subject to the ecodesign and energy labelling regulations 1015/2010 and 1061/2010). **This secondary drum is not subject to power consumption, washing performance or other requirements of the regulations.** With the aim to consider individually the main drum disregarding any synergetic effects from multi-drum operation, the complementary drum should be deactivated by means of selection knobs when assessing the compliance of the primary washing machine with the ecodesign and energy labelling regulations.

In the case where multiple drums are suitable for cleaning normally soiled cotton laundry or similar fabric/textile, but there is no possibility to run them separately, only in parallel, then all such drums should be considered as one single washing machine in which the 'standard cotton programme' should cover all such drums. One single energy label should cover this multiple-drum washing machine. The ecodesign requirements for energy and water consumption should be met by multiple-drum washing machine as a whole. The energy and water consumption of the overall washing machine should be evaluated as the total performance of all those drums (summing up rated capacity and considering overall energy and water consumption). The Energy Efficiency Index (EEI) should be calculated considering the overall rated capacity and energy consumption, and the related low mode powers. For the spinning performance, the weighted average (according to each drum load capacity) should be considered. Each drum should, however, comply individually and separately with minimum washing performance requirements according to individual load capacity of the drums.

Finally for information, current standards are able to perform tests on the various drums of the multi-drums machine.

Commission Regulation (EU) No 1016/2010 of 10 November 2010 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for household dishwashers

(1) Question on the "eco" and the standard programme

What should the standard programme be marked as to meet EU/1016/2010? The regulation says "standard programme" the standard says "ECO". The regulation refers to the standard for test methodology but not marking. However, industry seems to be marking "ECO" or "standard programme". Which is correct?

(1) Answer on the "eco" and the standard programme

The Commission asked CEN, CENELEC and ETSI in standardisation mandate M481 (Jan 2011) inter alia "to ensure that the prospective harmonised standard(s) defines univocal and common word(s), sign(s), pictogram(s) or symbol(s) to be displayed on the programme selection device of the machines and on the machines display (if any) or both, to clearly and easily identify the standard programme(s) referred to in the Commission Regulation 1016/2010 and in the Commission delegated Regulation 1059/2010." This was included in the mandate on the suggestion of a Member State. The Commission harmonised the standard mid-2013 (with the exception of its clause on tolerances and control procedures) including this aspect. The term 'eco' is not ideal and the Commission will consider this issue in the review of the energy labelling regulation on dishwashers.

Commission Regulation (EC) No 327/2011 of 30 March 2011 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for fans driven by motors with an electric input power between 125 W and 500 kW

(1) Set of questions on the relation between components and final assembly

The fan regulation has two calculation schemes, one for the complete fan (with motor and drive) and one for the rotor only (non-final-assembly). Also, a fan integrated in another product is affected by the regulation. This raises a number of questions in practice, regarding responsibility for the product.

The following scenarios are possible:

1. The complete fan with motor is placed on the market. In our view there has to be a DOC for regulation 327, and if applicable with regulation 640 for the integrated motor. The complete fan has to meet the requirements.

2. The rotor is placed on the market separately. This is also clear, it has to have a DOC for regulation 327, and meet the requirements calculated as non-final assembly.

3. The rotor is made by one manufacturer and is sold (strictly B2B) to another company that adds the motor and drive. There are several possibilities:

    a) The manufacturer of the complete fan issues the DOC according to regulation 327 for a final assembly. Is this correct? Do the rotor and the fan then have to comply separately with the requirements or are these just valid for the complete fan?
    b) What happens, if the rotor itself does not meet the requirements, but the final assembly does when built with a more efficient motor or other improvements? Can the final assembly then be placed on the market? How can the rotor manufacturer make sure he does not violate the regulation in this case?

4. The rotor is placed on the market, meeting the requirements for regulation 327 as non-final assembly, complete with DOC. Another company buys it and creates a complete fan, which is then placed on the market. Does the second company have to issue a second DOC and comply again with the requirements for a complete fan?

5. A complex product (machine tool, Air handling unit, large boiler…) includes many fans, motors, pumps, circulators etc.. Who is responsible for all the DOCs, does the manufacturer of the complex product collect them or does he have to issue a consolidated document?

(1) Answers on the relation between components and final assembly

1. Interpretation is correct.

2. Interpretation is correct.

3a. Yes, the manufacturer of the complete fan issues the DOC. The final assembly (motor + impeller) has to comply with Regulation 327/2011.

3b. Yes it can as the complete fan complies with the Regulation. The rotor manufacturer is not placing a product on the market and thus is not legally concerned with the regulation.

4. The company placing the final fan on the market will need to issue a DOC and need to ensure that the requirements of Regulation 327/2011 are met.

5. The company placing on the market the final product is responsible for all the DOCs of the fans integrated into its energy related product.

The basic principle for addressing all scenarios is that the company placing the fan on the market (as independent product or integrated on an energy related product) is responsible for the compliance of the fan with Regulation 327/2011.

(2) Question on motors containing an integrated fan

Most electric motors have a cooling fan mounted on the drive shaft, which is part of the motor. The energy consumption of this fan is included in the measurement for regulation 640/2009 for electric motors. Regulation 327 only exempts fans in a product with a single motor (valid here) with a power of less than 3 kW (not always valid) mounted on the same shaft as the main function (valid here).

Is the motor's own fan supposed to fulfil the requirements when the motor has a higher power rating than 3 kW? The opinion of the market surveillance authorities is that the exemption was meant to cover additional fans, like the example of a chain saw, but the motor's fan would be considered part of the motor.

(2) Answer on motors containing an integrated fan

The rotor integrated in the motor, used for cooling and placed inside the casing of the motor, is considered to be a part of the motor. It cannot be considered as a fan integrated into a product because it will never have an independent motor, this rotor is a part of the motor and not a fan by itself.

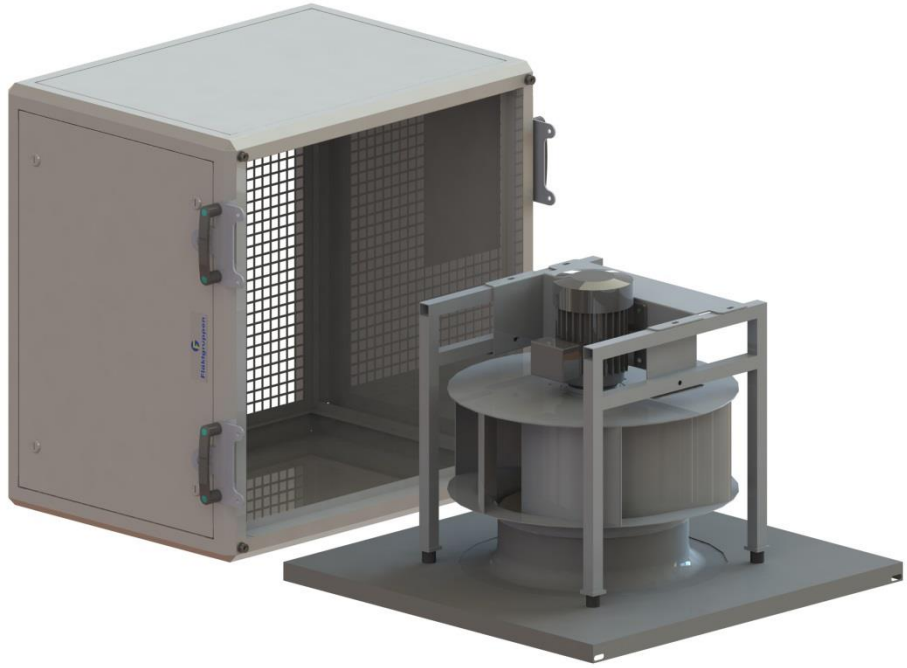
If the rotor is outside the casing of the motor, it cannot be considered to be part of the motor, in consequence, if the power output of the motor is above 3 kW, the rotor will be within the scope of the Regulation.

(3) Question on roof fans (04-2015)

What classification of fans should 'roof fans' fall under: are they axial fans or radial fans? The classification is important due to the different types having different efficiency requirements. The roof fans are typically used in large buildings and are > 550 W. In these fans, the air moves axially, but the impeller is of radial type.

(3) Answer on roof fans

The Regulation indicates that this is an axial fan as the fan propels the gas in the direction axial to the rotational axis. The shape of the impeller is not relevant in the definition.



(4) Question on measurement parameters for fans efficiency (11-2018)

Many large fans are supplied without a variable speed drive and can be connected to the three-phase-grid in different ways. The regulation 327/2011 and the (non-harmonized) standard EN ISO 5801:2008 contain no provisions on which type of connection to choose for performance measurements.

Similarly, the rotor blade pith can be adjustable in some fans and the method does not specify which angle is to be used. Annex II 3.1 of the regulation just states that the fans has to be measured "at its optimum energy efficiency point". The FAQ states in point 10.2 that the manufacturer should document which pith angle was used but there is no indication on the type of connection to the grid, either. Which parameters shall the MSA use in these cases?

(4) Answer on measurement parameters for fans efficiency (11-2018)

The parameters used for measurement shall be those that the manufacturer states in the technical documentation for the best efficiency point, including information on blade angle, grid connection VSD, housing and other variables. In the ongoing review of the regulation and in the standard setting process these issues could be made clearer.

Commission Regulation (EC) No 547/2012 of 25 June 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water pumps

(1) Question on pumps that can be used for chemicals

Are pumps which **CAN** be used for chemicals covered by the regulation? The definitions all apply to pumps for clean water. This is read as pumps specifically designed (or declared to be) not for use with clean water are exempted. Technically, however, most pumps that can cope with chemicals will also be able to pump clean water.

(1) Answer on pumps that can be used for chemicals

The scope of the Regulation is clearly set out in Article 1 and using the definitions in Article 2. The ecodesign requirements are for rotodynamic water pumps for pumping clean water. These products might also be used by the end-user for pumping other fluids – however, it is important that the intended use of the product at the placing on the market is for pumping clean water.

(2) Question on pumps designed for pumping clean water

Are water pumps for the food industry included in the scope of the regulation 547/2012? It seems pumps designed for pumping clean water that do not fall into one of the categories mentioned in Article 1 section 2 (a) – (d) are within the scope of the regulation. Thus water pumps to be used in the food industry are included in the scope, unless they are among the pumps mentioned in Article 1 section 2 (a) – (d).

(2) Answer on pumps designed for pumping clean water

Indeed, roto-dynamic water pumps for pumping clean water, and not specifically excluded, are within the scope regardless of the industry which uses it.

Commission Regulation (EC) No 1194/2012 of 12 December 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for directional lamps, for light emitting diode lamps and related equipment

(1) Question on how to deal with torches under Regulation 1194/2012

A torch is made out of a lamp (LED, Halogen etc.) and a luminaire (Housing, reflector, batteries, switch, etc.). The luminaire is not met by the regulation, because in Article 1 c) luminaires are only meant as "equipment designed for installation between the mains and the lamp" and torches do not operate from the mains. Is this correct?

The lamp is however covered by regulation 1194, which in Article 1 applies to "electrical lighting products: (a) directional lamps; (b) light-emitting diode (LED) lamps; […] including when they are integrated into other products."

The definition in Article 2(3) "'electrical lighting product' means a product designed for use with electricity and intended for use in lighting;", states electricity, not just mains electricity. This means that battery power, solar power and many other possibilities of electricity provision are covered, i.e. torch power setups. Torch lamps produce visible light which is used to light a scene for humans, so they further fall under definitions of lighting article 2(1) and light source article 2(5), and they contain light sources which can be tested, covered by article 2(6). Torch lamps are therefore in scope and must comply to ecodesign requirements in Article 3.

Since torches are mobile and often designed to operate in winter, they are generally built to withstand vibrations and extreme temperatures. Is it correct that torch lamps therefore qualify as special purpose products and must therefore adhere to the information requirements in Annex 1(2) as stated in the summarised answer above?

(2) Answer on how to deal with torches under Regulation 1194/2012

Torches, as every battery operated lamp and luminaire, are covered by regulation 1194/2012 and 244/2009. However, only the lamps are covered as the torch is not connected to the mains. The fact that a lamp (or LED module) is used in a torch does not automatically mean it is a special purpose lamp. It can be considered a special purpose lamp if it fulfils the requirements for it in the respective regulation and the manufacturer indicates in the technical documentation the technical parameters that make it a special purpose lamp.

(2) Question on product information requirements for LED tubes

For "LED Tube Lighting" the following is required by 1194/2012 Annex III, point 3.2: "3.2. Additional product information requirements for LED lamps replacing fluorescent lamps without integrated ballast

In addition to the product information requirements according to point 3.1 of this Annex or point 3.1 of Annex II to Regulation (EC) No 244/2009, as from stage 1, manufacturers of LED lamps replacing fluorescent lamps without integrated ballast shall publish a warning on publicly available free-access websites and in any other form they deem appropriate that the

overall energy efficiency and light distribution of any installation that uses such lamps are determined by the design of the installation."

From this we can say:

Directional LED tubes: Product information according to point 3.1. of this Annex
Non-directional LED tubes: Product information according to Annex II, no. 3.1 of regulation No. 244/2009.

In 1194/2012 under point 3.1 all product information (packaging, websites etc) is listed, whereas under point 3.1 of regulation 244/2009, only the product information that must be on the packaging is listed.

Is there a reason for this deviation? Or should it instead read Annex II, point 3 of regulation No. 244/2009?

(2) Answer on product information requirements for LED tubes

The reason for the split is that directional lamps are dealt with in 1194/2012 and non-directional ones in 244/2009. We wanted to keep this split, i.e. not include further requirements for non-directional lamps in 1194/2012. Further, the provisions in point 3.2 of 1194/2012 do not lift the requirements of point 3.2 in 244/2009. While the sentences could read more accurate "In addition to the product information requirements according to point 3.1 of this Annex or point 3 of Annex II to Regulation (EC) No 244/2009, […]", it does not change the meaning as it only introduces additional requirements.

(3) Question on classifying luminaires as lamps

In regulation 1194/2012 there is stated a possibility to classify a luminaire as a lamp, but how exactly can this be made? I.e. when is a luminaire a lamp?

(3) Answer on classifying luminaires as lamps

The definitions of luminaire and lamp can be found in Article 2, making it clear if a product is a lamp or a luminaire. Furthermore, according to Annex IV.2.(1), luminaires with (a) built-in LED module(s) should be tested as if they would be a lamp if the technical documentation file of the product specifies this. Hence the manufacturer needs to decide and declare this in the technical documentation file, which of the testing options presented in Annex IV.2 is applicable for that luminaire.

(4) Question on chromaticity coordinates x and y (to be red together with question (11) under Regulation 244/2009)

According to annex I point 1 of the Commission Regulation (EC) no 1194/2012, special purpose lamps have the following chromaticity coordinates x and y:

$x < 0{,}270$ or $x > 0{,}530$
$x < -2{,}3172\,x^2 + 2{,}3653\,x - 0{,}2199$ or
$y > -2{,}3172\,x^2 + 2{,}3653\,x - 0{,}1595$

The Commission Regulation (EC) no 1194/2012 indicates the chromaticity coordinates x and y which apply to special purpose lamps very precisely. This seems contrary to the Commission Regulation (EC) no 244/2009. This parameter is very important as it can influence on a colour temperature of a lamp, although it cannot determine whether a lamp is directional or non-directional. Consequently, it seems Commission Regulation (EC) no 244/2009 and the Commission Regulation (EC) no 1194/2012 need to change to standardize the scope of chromaticity coordinates x and y for special purpose lamps. Changes are necessary to assure the integrity of the European Union harmonized legislation.

(4) Answer on chromaticity coordinates x and y (to be red together with question (11) under Regulation 244/2009)

Because both Regulations have a different scope and are not applicable to the same products, they cannot be in legal contradiction to each other. Nonetheless, the Commission will be evaluating this in the review of the lighting regulations.

(5) Question on special purpose lamps (also applicable to Regulation 244/2009) (04-2015)

The lamp regulation require the lamp's packaging to have a symbol or text stating that the special lamp is not fit for household room illumination. While the "special" application has to be declared and documented, there are many cases where the lamp in question is in fact a standard GLS lamp. For example, GLS declared as shock proof lamps are not shock proof at all and this is used as a loophole to sell GLS incandescent lamps.

Is it possible to declare a product non-compliant because of it being not fit for its stated special purpose? What would be needed to prove this kind of non-compliance when all "paper requirements" are met?

Sometimes, lamps are encountered without any markings on the packaging, which appear to be special "decorative" lamps. It seems that these are non-compliant for not providing the necessary product information, which is very limited for special purpose lamps.

(5) Answer on special purpose lamps (also applicable to Regulation 244/2009)

Special purpose products not fulfilling the information requirements (i.e. no marking) are not compliant. Further, there are criteria for a product being special purpose, and being "decorative" is not one of them. Hence, lighting for artistic or decorative purposes is not used in a special purpose. On the other hand, if all the ecodesign requirements are met there is no legal basis to declare a normal incandescent claiming to be "shock-proof" to be non-compliant with ecodesign regulations.

(6) Question on colour-changing-ability of modern LED lamps (06-2016)

According to Ecodesign Preparatory Study[6], colour-changing-ability including white is included in scope, which is important for modern LED lighting. However, as we have measured on colour tunable RGB LED-strips and RGB LED-lamps with white light options, the white colour coordinates are outside 1194/2012 chromaticity (x,y) range, since the colour

[6] http://ecodesign-lightsources.eu/sites/ecodesign-lightsources.eu/files/attachments/Presentation%20Lightsources%20-5%20feb%202015%20-%201st%20stakeholder%20meeting.pdf

temperature is high (>100000K). The xy coordinates are positioned on an imagined extension of the black body locus (which typically ends at ca 10000-25000K) so the light appears white with strong blue tint.
The high colour temperature (>100000K) has consequences on the calculation of the CRI which are not executed in typical lighting analysis softwares.

The market surveillance authority suggests that an upper limit of the colour temperature (for example ca 17550K, which coincides with the xy-range limit x=0.27. y=0.25 in 1194/2012) is included in the definition of white and in accordance with reference to applicable standards. If a product capable of emitting white light outside the xy-range in 1194/2012 and the product claims to show white light – the product is suggested to be non-compliant as a white source and cannot be labelled as such. Is this correct?

(6) Answer on colour-changing-ability of modern LED lamps (06-2016)

It is understood that this question refers to the definition of coloured lighting as special purpose product (see Article 2(4)(b)(i)). There, lamps emitting light in the chromaticity range presented in Annex I.1 are considered coloured lamps and therefore special purpose products. The Commission services presented its view during the stakeholder meeting that lamps with the capability of emitting light in the "white" range, i.e. outside of the range mentioned in Annex I.1, should not be considered a special purpose product.

If a product such as a RGB LED-strip emits a colour outside of the "white range", it means that it is a coloured lamp and the product needs to fulfil the requirements of Annex I. Hence, it would be considered a special purpose product and the technical feature, i.e. the emission of coloured light, needs to be communicated in all forms of product information. An advertisement as "white light" should therefore not be allowed.

(7) Question on lamps with luminous fluxes below 30 and 60 fluxes (06-2016)

Regulation 244/2009 states in article 1c that lamps with a luminous flux below 60 lumen are not in the scope of the regulation, whereas regulation 874/2012 states that lamps with a luminous flux below 30 lumen are out of the regulation's scope.

However, Regulation 1194/2012 does not mention any lamps to be excluded from the scope of this regulation.

Are all LED lamps and directional lamps, regardless of their rated luminous flux (lumen) in the scope of regulation 1194/2012?

(7) Answer on lamps with luminous fluxes below 30 and 60 fluxes (06-2016)

Regulation 1194/2012 does not contain any provision in relation to the exemption of products based on their maximum luminous flux. Hence, lamps below 60 lumen or 30 lumen that are otherwise in the scope of the Regulation are not exempt.

(8a) Question on product information on lamp and led modules (06-2016)

Annex II, 3.1.3 h requires the manufacturer to publish the color rendering index on free access websites. The heading of 3.1.3 says “[…] expressed at least as values” Some manufacturers just state “Ra ≥ 80”, instead of e.g. “Ra = 87”.

Question a: Is this information considered to be given in a correct way on the website if stated as “Ra ≥ 80”?

(8a) Answer on product information on lamp and led modules (06-2016)

Annex II.3.1.3.(h) specifies that the colour rendering shall be shown. The actual value should be expressed, not a range of possible values.

(8b) Question on product information on lamp and led modules (06-2016)

If "Ra ≥ 80" is stated on the packaging, would this be considered a problem?

(8b) Answer on product information on lamp and led modules (06-2016)

As there are no requirements concerning the presentation of the colour rendering on the packaging, the presentation of a range is considered acceptable if the actual value falls into this range (otherwise, this would be a case of false advertising).

The verification procedure defines a tolerance for compliance with the required value, as Annex IV, 1c only includes the wording "non-compliance for any of the parameters" and the relevant entry in table 9 for parameter Colour rendering says "Compliance: the average Ra of the lamps in the test batch is not lower than three points below the required value, and no lamp in the test batch has a Ra value that is more than 3,9 points below the required value."

(8c) Question on product information on lamp and led modules (06-2016)

Can it be assumed that the same tolerance shall be used for declared values of Ra?

(8c) Answer on product information on lamp and led modules (06-2016)

The verification procedure presented in Annex IV applies to all ecodesign requirements, of which product information requirements are a part.

Commission Regulation (EU) No 206/2012 of 6 March 2012 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for air conditioners and comfort fans

(1) Question on wrong setting data given to surveillance authorities (04-2015)

What happens if a manufacturer gives the wrong setting data when a market surveillance authority wants to test a product, such as an air-to-air heat pump. May this be considered a non-compliance case if this is detected after the product is already tested? Can the market surveillance authority then charge the manufacturer for the testing costs?

(1) Answer on wrong setting data given to surveillance authorities (04-2015)

If the technical documentation is not correct, the product is formally non-compliant. The Ecodesign Directive does not specifically address charges to manufacturers for testing costs, but does require Member States to lay down penalties for infringement of national provisions adopted pursuant to the Directive.

(2) Question on power consumption in thermostat-off (10-2015)

Annex I point 3 (d) Table 2 of Ecodesign Regulation No 206/2012 specifies information requirements for technical documentation of single duct and double duct air conditioners. One of the information it requires is the ”power consumption in thermostat-off mode”. However the ecodesign requirements for single duct and double duct air conditioners specified in Annex I point 2 (d) Table 7 do not include “power consumption in thermostat-off mode”, instead, it specifies requirement for “power consumption in off mode”. It seems that Ecodesign Regulation No 206/2012 Annex I point 3 (d) Table 2 has an editorial mistake, “power consumption in thermostat-off mode” should be replaced by “power consumption in off mode”. Is this correct?

(2) Answer on power consumption in thermostat-off (10-2015)

Indeed, power consumption in thermostat-off mode is for these types of air conditioners not relevant to the specific ecodesign requirements, whereas power consumption in off-mode is.

(3) Question on wine cellars (11-2018)

Are wine cellar conditioners covered by Regulation 626/2011?

(3) Answer on wine cellars (11-2018)

Air conditioners intended (and marketed) for other purposes than comfort cooling or comfort heating are outside of the scope of the regulation.

Commission Regulation (EU) No 617/2013 of 26 June 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for computers and computer servers

(1) Question on minimum efficiency limits for internal power supplies sold separately

The regulation sets minimum limits for the efficiency of internal power supplies.
Do these values apply for power supplies sold separately?

(1) Answer on minimum efficiency limits for internal power supplies sold separately

The requirements in the regulation are for placing on the market of computers and computer servicers. They do not apply to internal power suppliers sold separately, not as part of a computer/computer server.

(2) Question on frequency for the efficiency test (04-2015)

The measurement methods stated in the corresponding Commission Communication seem to prescribe an efficiency test at 60Hz frequency. This is strange when for the EU market, almost all equipment will be operated at 50Hz.

(2) Answer on frequency for the efficiency test

As indicated in the Guidelines, " The "Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies Revision 6.6" shall be used as reference standard, as stated in the Commission Communication 2014/C 110/05 of 11.4.2014. The product shall be tested at the following voltage and frequency combination: 230V at 50Hz." A footnote clarifies that "A typo present in the Commission Communication (2014/C 110/05 of 11 April 2014) erroneously indicating 230 V at 60 Hz.". Note that the transitional methods refer to the "Generalized Test Protocol for Calculating the Energy Efficiency of Internal Ac-Dc and Dc-Dc Power Supplies - Revision 6.6 ". Version 6.7 of the same test protocol, includes a "Table 4-1 Alternate Voltage and Frequency Combinations" with the possibility of testing at 50Hz.

Commission Regulation (EC) No 666/2013 of 8 July 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for vacuum cleaners

(1) Question on the wattage of vacuum cleaners

Regulation 666/2013 sets the requirement that from 1 September vacuum cleaners rated input power shall be less than 1600 W. But manufacturers does not produce the vacuum cleaners with rated input power 1599 W, they round up the rated power to 1600 W in promotion reason. So the question will be is it a serious infringement of economic operator to sell the oddment of the vacuum cleaners with 1600 W rated power and what market surveillance acts must be taken in that case?

(1) Answer on the wattage of vacuum cleaners

As from 1 September 2014 vacuum cleaners with 1600 W rated input power cannot be placed on the EU market anymore. 1599 W is allowed, but 1600 W not. Promotional reasons cannot be used as exception. In fact, one of the purposes of the regulation (and the accompanying energy labelling regulation) is to move away from marketing based on power rating as it does not provide the consumer with information on energy efficiency nor performance. Market surveillance authorities have the power to take action against vacuum cleaners of 1600 W rated input power or higher.

(2) Question on the placing of the market of vacuum cleaners

The regulation sets the requirement for the placing on the market of electric mains-operated vacuum cleaners, including hybrid vacuum cleaners. The Decision No. 768/2008/EC explain that the ‘placing on the market’ shall mean the first making available of a product on the Community market (Chapter R1 Article R1 Definitions). Does the 666/2013 regulation's “placing on the market” mean not only import, but also the sale of such devices that are already on the market?

(2) Answer on the placing of the market of vacuum cleaners

The relevant legislation for this issue is not Decision 768/2008/EC, but the Ecodesign Directive 2009/125/EC, which contains a definition of 'placing on the market': *"making a product available for the first time on the Community market with a view to its distribution or use within the Community, whether for reward or free of charge and irrespective of the selling technique"*. This applies both to imports and EU production. However, the ecodesign requirements do not affect vacuum cleaners that have already been placed on the market before 1 September 2014. Stock in store has already been placed on the market. Stock in warehouses of retailers would normally also have been placed on the market, but note that some other stocks (manufacturer, importer) may not yet have been placed on the market. Further explanations on the concept of placing on the market can be found in the Guide to the Implementation of Directives based on the New Approach and the Global Approach (The Blue Guide 2014).

Commission Regulation (EU) No 813/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for space heaters and combination heaters

(1) Question on different temperature controls (10-2015)

In the definition text of the different temperature controls – show below - it is anticipated that the temperature control is controlling one single space heater. In case of packages of more space heaters - or e.g. a package containing a cogeneration space heater and a storage tank for accumulating heat for space heating - will it still be possible to add a temperature control to the package, if the temperature control is controlling the whole package, and the purpose of the control is the same as if there was only one single heater?

Definition from Regulation 813/2013: 'temperature control' means the equipment that interfaces with the end-user regarding the values and timing of the desired indoor temperature, and communicates relevant data to an interface of the heater such as a central processing unit, thus helping to regulate the indoor temperature(s)

- and supplementary hereto:

Can a 'Class II' temperature control (Weather compensator control, for use with modulating heaters) be used with a package of more space heaters - or e.g. a package containing a cogeneration space heater and a storage tank for accumulating heat for space heating - if the individual space heaters are not modulating, but the whole package can operate as and with the same purpose as one single modulating heater?

Definition of Commission communication 2014/C 207/02: 'modulating heater' means a heater with the capability of vary power output whilst maintaining continuous operation.

(1) Answer on different temperature controls

Yes, nothing prevents (nor should it be prevented) to add such temperature control to be added to the package.

(2) Question on declaration of conformity for integrated products (06-2016)

Heat pump space heaters and heat pump combination heaters are products that are covered by several pieces of Union harmonisation legislation requiring an EU Declaration of Conformity, not only EU No 813/2013. This is true since heat pumps contain fans (EU No 327/2011) and circulation pumps (641/2009). When the heat pump supplier establishes a declaration of conformity for the heat pump, should this reflect the fact that the heat pump has an integrated circulation pump and/or fan?

(2) Answer on declaration of conformity for integrated products (06-2016)

Based on the documents Frequently asked questions to Commission regulation (EU) No 327/2011 of 30 March 2011 and Discussion Paper Ecodesign for energy related products integrated into other energy related products, the following conclusion can be drawn:

The supplier of the heat pump, placing the heat pump on the market, is responsible for establishing a single declaration of conformity for the heat pump and its integrated products. The declaration of conformity should include all the required information for both the heat pump and all the integrated products. The single declaration of conformity can be made up of a dossier containing all relevant individual declarations of conformity.

(3) Question on declaration of conformity for air-to-water heat pumps (06-2016)

An air-to-water heat pump consists of an outdoor unit and an indoor unit. The outdoor unit contains the heat generator and should be labelled as a heat pump. The indoor unit does not need a separate energy label if sold in combination with the outdoor unit, only if it is sold separately. It could then be labelled as a water heater for example. To be defined as a combination heat pump, able to provide hot tap water, the outdoor unit has to be sold together with an indoor unit, labelled as a combination heat pump.

There seems to be two options on how to establish an EU Declaration of Conformity for an air-to-water combination heat pump:

- The supplier establishes a single EU Declaration of Conformity, covering both the outdoor and indoor unit, with reference to the Commission regulation (EU) No 813/2013 and the standards used for measuring space heating, water heating and noise

- The supplier establishes two different EU Declaration of Conformities, one covering the outdoor unit with references to the standards used for measuring space heating and noise, and one covering the indoor unit with references to the standards used for measuring water heating and noise.

Which of the alternatives above is the preferred? Or are the suppliers able to choose either one of the two alternatives above?

(3) Answer on declaration of conformity for air-to-water heat pumps (06-2016)

The first option is preferable, in particular as the combination heat pump is sold as a single product.

(4) Question on products that could be classified as water heater housing and/or storage tanks (11-2016)

How does one classify a water heater housing vs. a storage tank? The definitions in the regulation are:

'water heater housing' means the part of a water heater designed to have a heat generator fitted;

'hot water storage tank' means a vessel for storing hot water for water and/or space heating purposes, including any additives, which is not equipped with any heat generator except possibly one or more back-up immersion heaters;

a heat generator designed for a water heater and a water heater housing to be equipped with such a heat generator shall be also considered a water heater;

'back-up immersion heater' means a Joule effect electric resistance heater that is part of a hot water storage tank and generates heat only when the external heat source is disrupted (including during maintenance periods) or out of order, or that is part of a solar hot water storage tank and provides heat when the solar heat source is not sufficient to satisfy required comfort levels.

Manufacturers state that their products are storage tanks. Usually the manufacturers' vessels or tanks has however many connections that can be used to insert different types of heat generators (sold separately) or back-up immersion heaters. Thus the connections can be used as a water heater vessel or as a hot water storage tank. The products are often called "water heater", or similar, in promotional material. The product can also be used as a storage tank if a heat generator is not fitted at all (or a back-up immersion heater is fitted) in the vessel.

How will this type of product be classified? As a water heater housing or as a storage tank, or both? What separates a storage tank from a water heater housing technically? And how should this be assessed as a majority of the storage tanks can be fitted with a heating element and thus be classified as a water heater housing? (And a water heater housing can be fitted with a back-up immersion heater.)

(4) Answer on products that could be classified as water heater housing and/or storage tanks (11-2016)

It is possible for a product to fall under both definitions, in which case the ecodesign requirements for both product types apply as indicated in question and answer 20 of the Guidelines on Regulations 811-814/20137:

In the case of products that can be marketed and used in more than one way (for instance indoor units of heat pumps or water storage tanks that can be connected to different hydronic heat sources, how should they be labelled?

They shall be labelled according to how they are marketed. This means that the same product can be marketed and labelled in two or more different ways. The product also needs to fulfil the ecodesign requirements for the different applications.
If two different labels apply, both can be shown.

(5) Question on heat pumps with separate hot water storage (11-2016)

This concerns water heating using heat pumps, on which clarification is necessary for the Energy Performance of Buildings methodology for dwellings and use of Ecodesign technical data therein. A national methodology is used for calculating Energy Performance Certificates (EPCs) and also demonstrating compliance with relevant parts of Building Regulations related to Conservation of Fuel and Energy. Ecodesign technical data is used and EN15316-4-2:2008 to derive seasonal efficiency figures for space and water heating using heat pumps. Preference is to use EN14825/EN16147 based test data to feed into the calculation. This maximises accuracy rather than relying on EN14511-2 based data for space and/or water heating.

Water heating efficiencies as calculated by EN 16147 are applicable to combination heater heat pumps and water heating heat pumps (as per documents "2014/C 207/02" which refers to

[7] https://ec.europa.eu/energy/sites/ener/files/documents/GuidelinesSpaceWaterHeaters_FINAL.pdf

"2014/C 207/03"). Current question relates to heat pumps without integrated hot water storage, but which are clearly being used for space and water heating. These units are typically designed and installed to heat space and water but are regularly only declared as space heaters in ErP documentation. EN16147 scope covers testing of electric heat pumps providing drinking hot water (DHW) connected to or including a domestic hot water storage tank (so covers the type installation in question).

The concern is that in many dwellings (especially those built in the last decade or so, and increasingly so as we approach Near-Zero Energy Buildings) the water heating energy demand is likely to be similar to or more than the space heating energy demand. To not represent this water heating demand from the heat pump appliance in Ecodesign data or energy labels is inaccurate and can mislead the consumer. To only call this a space heater in ErP documentation is also misrepresenting the system.

Typically, heat pumps may achieve a label of A+ or A++ for space heating, but the same heat pump will only achieve a B or C label for hot water. To not highlight this difference to the consumer, particularly where water heating may be the primary energy use in new dwellings, is misleading.

Further detail: In a case where a heat pump is being installed to provide space heating and water heating (DHW) via a standalone hot water cylinder: Some manufacturers are of the view that this would not be classed as a combination or water heater and therefore does not require a display of water heating information on the ErP label or associated Ecodesign technical data for water heating. However, as the unit is installed to provide space and water heating, even using a separate hot water cylinder, it seems it should be classed as a combination heater for the purposes of labelling/Ecodesign and should therefore have the associated EN16147 test data.

There are a number of possible outcomes:

a. It is a space heater only with no requirement under ecodesign/labelling directives for the water heating to be represented in the directives label/technical data. The space heater is covered under 811/2013 & 813/2013 regulations. So the entire energy for the heat pump toward DHW provision is not represented in the Eco design or energy labelling directives.

b. It is a combination heater with requirement for both space and water heating to be covered under the ecodesign and labelling directives under regulations 811/2013 & 813/2013.

c. It is a space heater covered by regulation 811/2013 & 813/2013 and also as a water heater covered by regulations 812/2013 & 814/2013.

(5) Answer on heat pumps with separate hot water storage (11-2016)

Given the indication that "These units are typically designed and installed to heat space and water but are regularly only declared as space heaters in ErP documentation." they would fall under the definition of a combination heater in Regulation 813/2013 and 811/2013 (outcome 'b' of the possibilities presented).

(6) Question on low temperature heat-pumps versus low temperature application (11-2018)

What is the minimum seasonal space heating energy efficiency of heat pumps that are capable for low and medium temperature application?

(6) Answer on low temperature heat-pumps versus low temperature application (11-2018)

Low and medium temperature applications should not be confused with the requirements for low temperature heat pumps. Low temperature heat pumps are specifically designed for low temperature application and are NOT able to deliver heating water with an outlet temperature of 52 °C at an inlet dry (wet) bulb temperature of – 7 °C (– 8 °C) in the reference design conditions for average climate. The seasonal space heating energy efficiency of low temperature heat pumps shall not fall below 125 %. For low- temperature heat pumps, parameters shall be declared for low-temperature application.

For all other heat pumps, the seasonal space heating energy efficiency shall not fall below 110 %. Parameters shall be declared for medium-temperature application. Manufacturers can declare values for low temperature application on a voluntary basis, but there is no requirement attached to this declaration.

(7) Question about the term «identical» (2019)

Article 1, 2. (g) of regulaiton 813/2013 provides an exemption for heat generators designed for heaters and heater housings to be equipped with such heat generators placed on the market before 1 January 2018 to replace identical heat generators and identical heater housings. The replacement product or its packaging shall clearly indicate the heater for which it is intended.

A guidance document has been circulated in 2017 and revised in 2018. The 2017 version indicated that identical replacements could be of equal or better design specification to the original component part i.e. heat generator. This has been omitted from the 2018 version.

What is the correct understanding of the term “identical”?

(7) Answer about the term «identical» (2019)

The guidelines of 2017 were a draft to which many stakeholders commented, the 2018 version is to be seen as the final version. In the 2017 draft, the word ‘identical’ was interpreted broader than its meaning, i.e. it could be the same or better design characteristics. For this reason Q61 was removed. Identical should be interpreted as the same design characteristics.

Commission Regulation (EU) No 814/2013 of 2 August 2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks

(1) Question on hot water storage tanks sold uninsulated (04-2015)

Are hot water storage tanks that are sold uninsulated included in the scope of 814/2013 and 812/2013? These hot water storage tanks will probably not be compliant according to the ecodesign requirements of standing losses of 814/2013. Will the installer or the customer who does the insulation be considered as a supplier, obliged to show that the product meets the ecodesign requirements? Can the supplier of the uninsulated tank provide information together with the tank, about what minimum amount and type of insulation that is necessary for the tank to be compliant with the ecodesign requirements?

(1) Answer on hot water storage tanks sold uninsulated

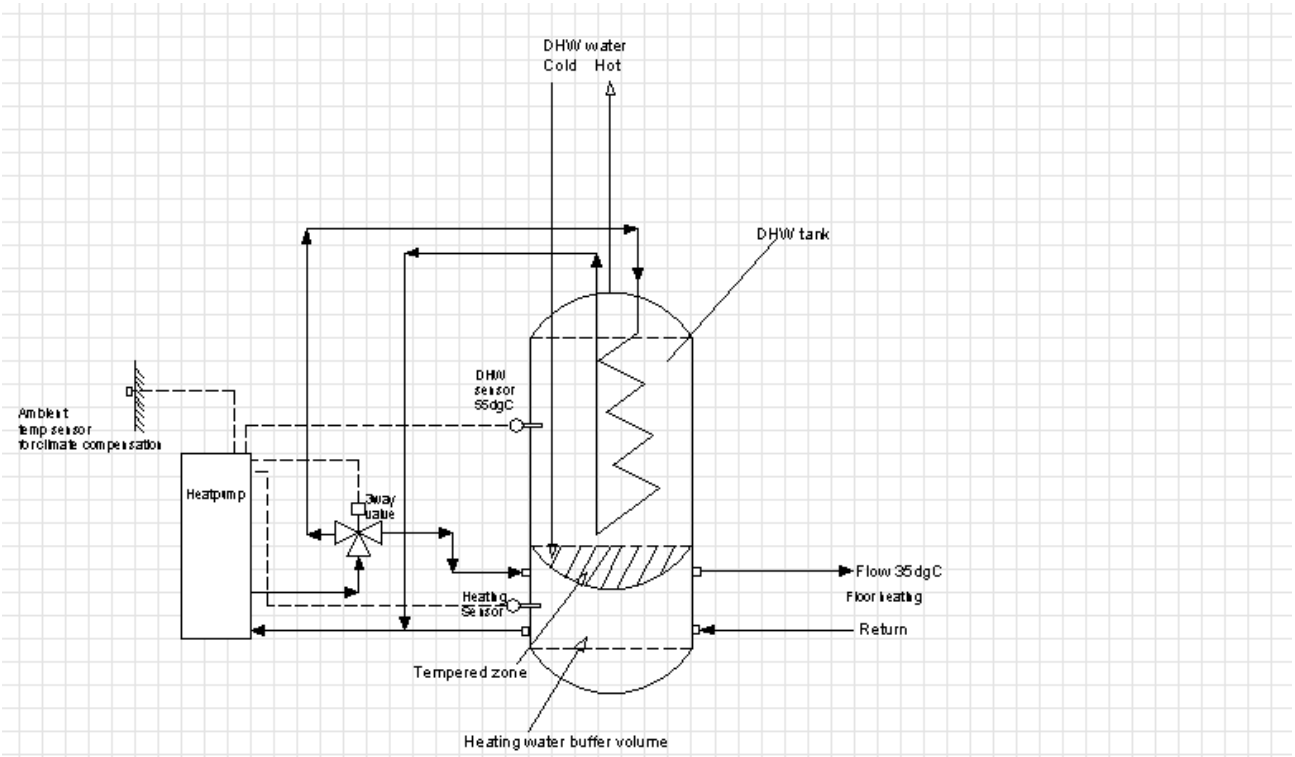
"Hot water storage tanks need to comply with ecodesign requirements and have an energy label when placed on the market or put into service. If a tank is placed on the market uninsulated, the manufacturer has to provide the information on how to insulate the tank so that it complies with the requirements when putting it into service. This is specified in Annex II, point 2.2(c) of Regulation 814/2013 in the information requirement of "any specific precautions that shall be taken when the hot water storage tank is assembled, installed or maintained" (also included in Regulation 812/2013 Annex V, point 2(g))."

(2) Question on hot water storage tanks without heating elements (10-2015)

What is the test procedure for the product displayed below?

The product is a hot water storage tank without heating elements. The source is in this case a heat pump and the product is heated both in the lower volume directly and via a coil in the upper volume. The tank is sold stand-alone and can be used in combination with many heating sources.

Is the correct test method standing heat-loss? If not, what is the correct method?



The product is a stand- alone, hot water storage tank, for combined DHW water and heating water.
It is designed for use with heat pumps with climate compensation, hot water priority and buildt-in heating elements for legionella program and backup.

(2) Answer on hot water storage tanks without heating elements

Since the product is a tank sold alone it should be tested according to any of the methods described in the transitional methods: http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.C_.2014.207.01.0022.01.ENG

(3)Question on measuring standing heat losses of Hot water storage tanks (2019)

Commission communication (2014/C 207/03)8 gives references to several transitional methods for measuring standing heat losses, S, for hot water storage tanks. One of these methods, EN 12987:2006, has been withdrawn and replaced by a new version, EN 12897:2016.

Question: Which version should be used for market surveillance tests? Does a new version automatically replace the withdrawn version as transitional method?

(3)Answer on measuring standing heat losses of Hot water storage tanks (2019)

No, they are not automatically replaced. The standards are currently under evaluation for publication in the OJ, once they are approved the transitional method will be replaced by the harmonized standards. Until then the previous transitional method should be used.

[8] Commission communication in the framework of the implementation of Commission Regulation (EU) No 814/2013 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for water heaters and hot water storage tanks and of Commission Delegated Regulation (EU) No 812/2013 supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to the energy labelling of water heaters, hot water storage tanks and packages of water heater and solar device - (2014/C 207/03)

Commission Regulation (EC) No 66/2014 of 14 January 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for domestic ovens, hobs and range hoods

(1) Question on ventilation systems equipped to capture fumes above stoves

There are ventilation systems in buildings (some for heat recovery), that also can evacuate fumes and odours from cooking as they have a unit for capturing fumes and odours above the stove. They are in other words used around the clock for ventilation and for limited time also for evacuating fumes and odours from cooking. Are these units excluded from the range hood requirements in ecodesign regulation 66/2014 as the main function and construction is meant for ventilation?

(1) Answer on ventilation systems equipped to capture fumes above stoves

The Regulation 66/2014 covers the ecodesign requirements for range hoods defined specifically as appliances intended to collect contaminated air from above a hob. Ventilation systems cannot be considered as range hoods even if they can collaterally evacuate fumes and odours from cooking processes; their function is broader than just evacuate fumes from cooking. They are covered by the Regulation 327/2011 on ecodesign requirements for ventilation fans.

(2) Question on AEC_{hood} measurement (11-2018)

In which position/setting should AEC_{hood} (annual energy consumption) be measured? Boost or highest below boost?

(2) Answer on AEC_{hood} measurement (11-2018)

The calculation of the AEC is based on the electric power input (W_{BEP}) of the domestic range hood at the best efficiency point BEP (i.e. at the maximum value of the efficiency of a range hood). For fixing the BEP, the highest possible speed setting of the fan is to be used, including the boost position, if any.

(3) Question on WL and WBEP measurement (11-2018)

Some argue that the power consumption of some controllers would be included in the measurement of both W_L and W_{BEP}, and therefore accounted for twice when calculating the AEC. Should W_L include controllers and drivers? And if not how should it be measured?

(3) Answer on WL and WBEP measurement (11-2018)

W_L is defined as the nominal electric power input of the lighting system of the domestic range hood on the cooking surface. It is understood as being the sum of the power consumption values of each lighting point directed on the cooking surface.

(4) Question on Ps and Po for hoods without a standby or off mode (11-2018)

Both Ps and Po need to be declared for hoods. However, most hoods have either a standby or an off mode, but not both. How should a hood without an off mode declare Po? And vice versa?

(4) Answer on Ps and Po for hoods without a standby or off mode (11-2018)

In these situations it is suggested to declare Po or Ps as "-".

(5) Question on ovens that reach the selected temperature only for a short time (11-2018)

Does an oven that reaches the selected temperature only for a short time at the beginning of the heating process satisfy the criteria set out in Annex II (1) of the regulation ("*that the temperature inside the oven cavity reaches the temperature setting of the thermostat and/or the oven control display within the duration of the test cycle*")?

(5) Answer on ovens that reach the selected temperature only for a short time (11-2018)

An oven cavity which reaches the temperature setting of the thermostat within the duration of the test cycle even only for a short time satisfies the specific criterion set out in Annex II (1) of the Regulation ("*that the temperature inside the oven cavity reaches the temperature setting of the thermostat and/or the oven control display within the duration of the test cycle*"). However, this behaviour is not considered to be consumer-friendly and this issue should be addressed in standardization and/or in the upcoming review of the regulation.

(6) Question on type of hob and heating technologies (11-2018)

What is the meaning and the differences of the following two parameters referred to Annex I, point 2.2:

1) Type of hob
2) Heating technology (induction cooking zones and cooking areas, radiant cooking zones, solid plates)?

Is it allowed to use other terms such as "High Light" or "Ceramic Glass Suppliers" instead of "radiant cooking zones"?

(6) Answer on type of hob and heating technologies (11-2018)

The 'type of hob' refers to the nature of the energy used by the appliance. It shall be either 'domestic electric hob' or 'domestic gas-fired hob' or 'domestic mixed gas and electric hob'. 'Heating technology' refers to the technology used in the electric appliances, either induction or radiant or solid plates. It is not possible to accept a change of the wording used in the Regulation without revising it. This is an issue to be addressed in the future revision of the Regulation.

(7) Question about an oven that does not reach the set temperature during the first part of the test cycle (with the brick in the oven) (2019)

There are ovens on the market that do not reach the set temperature during the first part of the test cycle (with the brick in the oven) but do reach it after the door was opened to remove the brick. This second part of the test does not contribute to the energy consumption measurement. Does such an oven satisfy the criterion set out in Annex II Nr. 1 of the delegated act ("It shall be verified that the temperature inside the oven cavity reaches the temperature setting of the thermostat and/or the oven control display within the duration of the test cycle")?

(7) Answer about an oven that does not reach the set temperature during the first part of the test cycle (with the brick in the oven). (2019)

If the product meets the criterion for temperature check set in section 7.4.3 of harmonised standard EN IEC 60350-1:2016, then the product should be regarded as complying with the temperature requirement set in annex II (1), because application of harmonised standards provides presumption of conformity. However if there is evidence that the product has been designed so that its "performance is automatically altered in test conditions with the objective of reaching a more favourable level for any of the parameters specified in the relevant delegated act or included in any of the documentation provided with the product" then the product is in breach with article 3(5) of the energy labelling framework regulation 2017/1369 and cannot be placed on the market.

(8) Question about range hood with centrifugal filtering system (2019)

How shall the grease filtering efficiency of a range hood with centrifugal filtering system be measured ?

(8) Answer about range hood with centrifugal filtering system (2019)

The applicable standard DIN 61591 contains no defined method for this kind of product. The Regulation does not specify this issue explicitly. This is an issue to be considered in the revision of the Regulation or through standardisation. In the absence standardised methods, manufacturers shall perform measurements and calculations using other reliable accurate and reproducible methods which take into account the generally recognised state-of-the-art and, meeting the technical definitions, conditions, equations and parameters set out in the regulation. This is to be assessed on a case-by-case basis by market surveillance authorities.

(9) Question about an oven with a 'Dual Cook' function (2019)

The oven itself is a single cavity that can be inserted with a thin metal divider to provide a 'Dual Cook' function. The dual cook function allows for easier cooking of meals requiring different temperatures, thus eliminating the need for more than one cavity. There are heaters that operate in the two potential different sections of the cavity, however when one section of the cavity is heated in 'dual cook' the other is also heated as the separator doesn't have the same insulating characteristics of the walls of a cavity. As a result, a maximum of 80°C difference can therefore be achieved.

Is such an oven considered as a multi-cavity oven?

(9) Answer about an oven with a 'Dual Cook' function (2019)

As such each section is not technically heated separately and, as regulation 65/2014 defines, a 'multi-cavity oven' means an oven with two or more cavities, each of which is heated separately. According to the current legislation, this oven cannot be considered as a multi-cavity device. Consequently, only one label shall apply.

This kind of new technologies and the concept of "dual cook" function will have to be taken into account in the review of the legislation in 2021.

(10) Question about the fan-forced mode (forced air convection) (2019)

According to regulations 66/2014 (ecodesign) and 65/2014 (energy labelling) the definition of fan-forced mode is when a built-in fan circulates heated air in the cavity. Which setting should be used to test the fan-forced mode (forced air convection) for the label? Could it be misleading that another mode is called "ECO" than the one tested for the label?
For the fan-forced mode on the label, the setting to be used is the one related to the forced air circulation function in accordance with the test procedures in the harmonized standard EN 60350-1:2016.

It could indeed be misleading that another mode than the one tested for the label is called "ECO".

(10) Question on range hoods used in combination with a ventilation system or a central fan (2019)

If a product intended to collect contaminated air from above a hob has an internal motor, but is always used in combination with a ventilation system or a central fan, is it still covered by the scope in the range hood regulation (66/2014)9 or should it be considered a ventilation unit?

(10)Answer on range hoods used in combination with a ventilation system or a central fan (2019)

The fact that a range hood (with an internal motor) is used in combination with a ventilation system or a central fan does not withdraw the functionality of the range hood which is defined by the Regulation (EU) No 66/2014 as an appliance, operated by a motor which it controls, intended to collect contaminated air from above a hob.

If the function of the referred product is to collect contaminated air from above a hob, it cannot be considered as a ventilation unit but as a range hood covered by Regulation (EU) No 66/2014.

Moreover, FAQ #9 on ventilation units gives indications on how to deal with ventilation units in professional kitchens.

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[9] Definition from regulation:

13) 'range hood' means an appliance, operated by a motor which it controls, intended to collect contaminated air from above a hob, or which includes a downdraft system intended for installation adjacent to cooking ranges, hobs and similar cooking products, that draws vapour down into an internal exhaust duct;

(11) Question on range hoods used in combination with a ventilation system or a central fan (2019)

If the internal motor is controlled by the range hood, it is within the scope of the range hood regulation. But if the range hood also controls the central fan, is it still considered a range hood?

(11) Answer on range hoods used in combination with a ventilation system or a central fan (2019)

In that case, it would be necessary to determine if the action on the central fan is restricted to the range hood function (i.e. collecting contaminated air from above a hob) or if it is a broader function (i.e. collecting air from the dining area for instance). See FAQ 9 - Answer on ventilation units connected to a professional kitchen (11-2016) – of the 'FAQ on the Ecodesign Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products and its Implementing Regulations'.

(12) Question on range hoods used in combination with a ventilation system or a central fan (2019)

Is a range hood sold without a motor a range hood, and does it have to be labelled as such?

(12) Answer on range hoods used in combination with a ventilation system or a central fan (2019)

Yes, it marketed as such a range hood without a motor is a range hood, and the label should show the most common combination and other possible combinations should be made available upon request (or at the website). This is in line with the provisions of the Commission Guidelines for cooking appliances:

https://ec.europa.eu/energy/en/topics/energy-efficiency/energy-efficient-products/cooking-appliances

> *[3.2.4 Labelling for multiple combination hoods - Range hoods may be combined with different external fans and thus more than one label could be applicable. For each domestic range hood, suppliers shall provide at least one printed label with the product representing the most likely combination. For other combinations – the hood/control with associated fan – the information is provided by suppliers on a free access web site.]*

Commission Regulation (EC) No 548/2014 of 21 May 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for small, medium and large power transformers

(1) Question on cooling and rated power

With regard to "rated power", which is defined in Article 2 (12) and is used in Annex 1 for determining the requirements on maximum load losses and maximum no-load losses, is the power consumption needed for cooling of the transformer is included or excluded, when the energy efficiency performance is determined according to Annex 1, section 1 and 2?

Apparently, there is a difference of 30-35 % in the rated power if cooling is included as compared to exclusion of power consumption used for cooling the transformer. According to Article 2 (13) of the regulation:

'rated power' is a conventional value of apparent power assigned to a winding which, together with the rated voltage of the winding, determines its rated current.
This definition does not mention power consumption for cooling, which is necessary when the transformer is loaded continuously.

However, the definition in 548/2014 is identical with the definition i IEC standard 60076-1, and the IEC standard contains a section 5, which provides more details on how rated power is calculated:

The rated power refers to continuous loading. This is a reference value for guarantees and tests concerning load losses and temperature rises. If different values of apparent power are assigned under different circumstances, for example, with different methods of cooling, the highest of these values is the rated power'.

Since the regulation 548/2014 is based on the IEC standard 60076-1, can the energy consumption for the cooling of the transformer when it is loaded continuously be included in the 'rated power', when the energy efficiency of the transformer is determined?

(1) Answer on cooling and rated power

Yes. The definition of rated power in the relevant IEC/EN standard is more precise that the one in the Regulation and does not contradict it in anyway, but only qualifies it. Therefore the explanation offered in the standard is adequate to consider if the power consumption needed for cooling is to be included in the rated power when the energy efficiency of the transformer is being determined.

(2) Question on transformers used in solar farms to set up DC into AC current

Regulation 548/2014 (Article 1) excludes transformers with low-voltage windings specifically designed for use with rectifiers to provide a DC supply. Can transformers used in solar farms to step up DC current into AC current, through the use of a rectifier, be considered to be part of this exception?

(2) Reply on transformers used in solar farms to set up DC into AC current

No. Even if transformers used in solar farms may, during the night, reverse the flow and convert a certain level of AC current from the transmission and distribution grid into a DC current in solar photovoltaic installations, they are not specifically designed for this purpose, and therefore cannot be considered part of the said exception. The exception is meant to cover transformers designed for use with rectifiers to provide a DC supply in certain industrial applications.

(3) Question on what is meant by purchase in the Regulation (04-2015)

In Article 1, the regulation contains the provision "The Regulation is only applicable to transformers purchased after the entry into force of the Regulation." Questions arise as to when a transformer counts as purchased before entry into force.

(3) Answer on what is meant by purchase in the Regulation

The purchasing contract has to be signed before that date. If it contains an option for delivery of transformers in the future with parameters not meeting the requirements of the regulation, these transformers are only exempt if the contract specifies their number and a clearly limited period in which this option is valid. An agreement between manufacturer and customer just indicating the intention to buy non-compliant transformers for indefinite time cannot be considered to create "purchased" transformers that would be exempted.

(4) Question on obligations for special large power transformers (04-2015)

In Regulation 548/2014: power transformers, the last two points of the article 1.2 (exemptions from the application of the Regulation) are:

- large power transformers for a particular application and
- replacements for the same physical location.

Is the producer obliged to ask for some sort of evidence for that transformer, which is not comply with the request of this Regulation, in this category?

Is it enough to have some sort of statement from the purchaser or should the producer ask for some official document and from whom?

(4) Answer on obligations for special large power transformers

Manufacturers of large power transformers are still required to produce the technical documentation and to meet the product information requirements set out in Annex 1, points 3 and 4, even if they consider that such transformers are exempt from the energy efficiency requirements on the basis of the last two points in Article 1.2 of the Regulation. In such cases, manufacturers should provide all the necessary technical

and economic evidence to the national market surveillance authorities to prove their case.

(5) Question on transformer connected to a rectifier to provide a DC supply (10-2015)

Two questions are raised regarding magnetizing equipment for generators in hydroelectric power. The magnetizing transformer is a dry epoxy insulated transformer typically in the range 60-600kVA. The primary side is typically high voltage and connected to the generator. The secondary side is low voltage connected to a rectifier and produces DC.

a) Are these transformers within the scope of 548 or do the fall into the category of exceptions in Article 1.2 "transformers with low-voltage windings specifically designed for use with rectifiers to provide a DC supply"?

b) Is a transformer with only one low voltage side considered a "transformer with low voltage windings"?

(5) Answer on transformer connected to a rectifier to provide a DC supply

From the information provided, it would seem that the transformer is question can be considered as an exemption from the regulation, on the basis of the provision in Article 1.2, as it is connected to a rectifier and provides a DC supply. A hydroelectric power plant is certainly an industrial application.

(6) Question on transformers with three winding connections (10-2015)

In Norway it is commonplace to use three-winding transformers both in the distribution- and high voltage grid. In the distribution grid the three-winding transformer is used to produce 240 V and 415 V from high voltage in one combined transformer. A typical high voltage three-winding transformer ≤3150 kVA is a 500/500/500kVA, which means that all three windings operate at 100% kVA load. This is a Norwegian variant of the distribution network, due to our operation of the 240V NET, at the same time with the new developments of 415V NET.

As of today, there is no defined IEC testing requirements for 3-winding transformers. In Norway they are tested twice, one for each LSP (415 and 240 V) where there is a full load (100%) on the part that is being tested.

When it comes to capitalization the 3-winding transformers are kept out of calculation, as there is no policy that says something about how the load should be distributed. In that this actually is two transformers in one, it will necessarily be considerably larger than the core by a 2-winding transformer. Typically a 1250/1250/1250 kVA have a core that is the size of between 1600 and 2000 kVA.

Are these type of three-wining transformers in the scope of the regulation?

(6) Answer on transformers with three winding connections

EU Regulation 548/2014 does not explicitly exclude transformers with three or more windings. The definition of transformer refers to "a static piece of apparatus with two or more windings which, by electromagnetic induction, transforms a system of alternating voltage and current into another system of alternating voltage and current usually of different values and at the same frequency for the purpose of transmitting electrical power". It can therefore not be concluded that three-winding transformers are outside the scope of the Regulation. Tables 1.1 and 1.2 in Annex 1 are therefore applicable to this type of transformers.

However, existing harmonised standards do not describe explicitly how to measure load and no-load losses in three-winding transformers. While these standards (adopted in 09/2015) incorporate specific testing provisions for three-winding transformers, testing methods should follow, as closely as possible, existing standards.

(7) Question on transformers specially designed for emergency installations (10-2015)

In the Swedish version of 548/2014 there is an exception, as follows:
"— transformatorer som särskilt konstruerats för reservinstallationer," (spare inatallations)

In the English version
"— transformers specially designed for emergency installations,"

In case of a need to replace an existing non-eco design transformer with an identical new unit, is it compulsory that the new emergency or spare transformer complies with ecodesign requirements?

(7) Answer on transformers specially designed for emergency installations

Article 1.2 of EU Regulation 548/2014 foresees exemptions for transformers designed for specific purposes. This includes transformers specifically designed for emergency installations, which are exempted. It follows logically that a transformer that is replacing an identical unit designed specifically for an emergency installation is also exempted.

(8) Question on transformers for use with rectifiers (10-2015)

In the Swedish version of 548/2014 there is an exception, as follows:

"—transformatorer med nedspänningslindningar som särskilt konstruerats för användning med likriktare för att tillhandahålla likström,"

In the English version
"— transformers with low-voltage windings specifically designed for use with rectifiers to provide a DC supply,"

Is this exception to be considered also for transformers connected to and for direct supply of variable speed drives and/or converters, as the first part in such a device, directly connected to the transformer, is set up with a rectifier providing a DC supply?

(8) Answer on transformers for use with rectifiers

As long as the transformer in question has been designed specifically for use with rectifiers to provide a DC supply, it does not matter if the rectifier is part of a larger device, such as a variable speed drive and/or converter.

COMMISSION REGULATION (EU) No 1253/2014 of 7 July 2014 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for ventilation units

(1) Question on information requirements for customer specific/catalogue units (04-2015)

According to regulation 1253/2014, article 4 manufacturers, their authorised representatives and importers of NRVUs shall comply with the information requirements set out in Annex V. The 19 parameters listed in Annex V shall be displayed on the manufacturers free access website.

The main part of Non Residential Ventilation Units (NRVUs) are customer specific models (OEM), contrary to the Residential Ventilation Units (RVUs), where the supplied models are most often part of the manufacturers' product range. As the information on the NRVU is customer specific, the data for it should not be of "public interest", is it therefore required and appropriate for these requirements to apply to customer specific NRVUs? Of course, the customer of a customised NRVU must be presented with all the required data prior to a purchase.

(1) Answer on information requirements for customer specific/catalogue units

As from Annex V of Regulation (EU) 1253/2014, NRVUs (non-residential ventilation units) manufacturers shall present the values/descriptions of the information requirements on free access websites. In the case of models, of which less than 5 units per year are produced, manufacturers are exempted to make available the disassembly instructions (referred to in Annex V.3)

(2) Question on standard configurations and other product combinations (04-2015)

Furthermore, configuration programmes for the NRVUs result in a very large number of possible product combinations. Is the manufacturer allowed to only provide data for the standard configurations they have developed, while they could voluntarily they decide to make the data for all of the other possible combinations publicly available as well?

(2) Answer on standard configurations and other product combinations

The information to be provided for NRVUs (non-residential ventilation units) according to Annex V of Regulation (EU) 1253/2014 should be based on the "reference configuration" of the product as indicated in Annex IX concerning measurements and calculations for NRVUs. Definitions for "reference configuration" are provided in Annex I, part 2, definition 3 and 4.

Nevertheless, manufacturers are under a legal obligation to ensure that any ventilation unit (i.e., deriving from any possible product combination) within the scope of the Ecodesign Regulation, shall meet the requirements within that regulation.

(3) Question on the scope of the Ecodesign and the Energy Labelling Regulations (04-2015)

Regulation (EU) 1253/2014 describes the following exemptions:

- (a)are unidirectional (exhaust or supply) with an electric power input of less than 30 W, except for information requirements;

- (b)are bidirectional, with a total electric power input for the fans of less than 30 W per air stream, except for information requirements;

However, Regulation (EU) 1254/2014 on energy labelling only excludes bidirectional units below 30 W from the scope.

Exemption of the bidirectional models below 30 W was not mentioned neither in the impact assessment nor the draft regulations. Further, the introductory remarks in both regulations argue on the reasons for exempting the small units, however there is made no distinction between the unidirectional and bidirectional models.
Is it correct that there is a difference in the scope of the ecodesign and the energy labelling regulations?

(3) Answer on the scope of the Ecodesign and the Energy Labelling Regulations

Concerning the exemptions of Regulation (EU) 1253/2014 (Ecodesign), by means of the provisions laid down in Art 1, 2(a) and Art 1, 2(b), the following products are out of scope:

- unidirectional (exhaust or supply) ventilation units, with an electric power input of less than 30 W, except for information requirements;
- bidirectional ventilation units, with a total electric power input for the fans of less than 30 W per air stream, except for information requirements.

Concerning the exemptions of the delegated Regulation (EU) 1254/2014 (Energy labelling), by means of the provisions laid down in Art2(a) and Art2(b), the following products are out of scope: unidirectional (exhaust or supply) ventilation units, with an electric power input of less than 30 W.

Therefore, indeed the scope of the Ecodesign Regulation differs on this aspect from the scope of the Energy Labelling Regulation. The difference is intentional as a the result of the meetings of the Member States Expert Group on Energy Labelling on 16 December 2013 and the Ecodesign Regulatory Committee on 17 December 2013, though no specific reasons for the difference were not recorded.

(4) Question on distinction between residential (RVU) and non-residential units (NRVU) (10-2015)

How to distinguish between residential or non-residential ventilation units? Who is responsible for the CE marking when the ventilation unit is delivered without control system: the manufacturer of the ventilation unit, or the one who connects the control system? Is a RVU without control allowed to be sold, as it not allowed using the energy label?

(4) Answer on distinction between residential (RVU) and non-residential units (NRVU)

The distinction between residential or non-residential ventilation units is based on the maximum flow rate and, for certain flow rates on the declaration by the manufacturer, as indicated in Article 2 of the regulation.

The expression "control system" could refer to the "indoor climate control system" or the "motor control system". The first one is e.g. related, for RVUs, to the choice of the control factor, (Annex IV-1-n of Regulation 1253/2014), whereas the second one is related to the declared type of drive (Annex IV-1-e (for RVUs) or Annex V-1-d (for NRVUs)).

Specific categories of drive are explicitly addressed by the Ecodesign Regulation 1253/2014: as an effect of the provisions laid down in annex II for RVUs and Annex III for NRVUs, ventilation units have to be equipped with a multi-speed drive or variable speed drive. In case it is opted for the variable speed drive (VSD), as from definition 4 of Annex I (of Regulation 2531/2014), the VSD can be a separate delivery.

Concerning the "indoor climate control systems", specifically for RVUs, several options are possible (e.g. "manual control", "demand control"). The "indoor climate control system" is not subject to (generic) ecodesign requirements, but it affects the results of the SEC (Specific Energy Consumption) calculation, via the CTRL factor. Therefore, if a ventilation unit is placed on the market without the "indoor climate control system" or the "motor control system", the manufacturer has to provide the information on which system has to be installed on the ventilation units (cf. Annex IV-1-n), so that it complies with the requirements when putting it into service.
The manufacturer has to CE-mark the product showing he has complied with all his obligations. The installer is responsible for ensuring that the product is put into service in accordance with the information provided by the manufacturer pursuant to Annex IV or V.

Suppliers also need to supply an energy label when the placing the ventilation unit on the market, even if without indoor climate control system(s), in which case the calculation of the label class needs to take into account the information provided by the manufacturer pursuant to Annex IV-1-n of the ecodesign regulation.

(5) Question on scope for various types of ventilation units (06-2016)

Many questions regarding the scope have arisen since regulation 1253/2014 went into force.

The FAQ document on ventilation units10, question 10, states that data storage is out of scope due to it is not designed for human occupancy. According to the same justification, what is the interpretation of ventilation units for:

- Public swimming pools (indoor)
- Bus garages
- Waste water treatment plants, for ventilation of basin halls

Are ventilation units for these facilities also out of scope?

(5) Answer on scope for various types of ventilation units (06-2016)

As a general guidance principle, in order to decide whether a ventilation unit is – or not – in the scope of Regulation 1253/2014 one should check the two following main aspects:

- product functionality (i.e. if the ventilation units is intended replace utilised air by outdoor air);

- if the building (or its part) where the ventilation units will be installed, is designed for/foresees human occupancy.

FAQ 10 ("What is meant by ‘to replace utilised air by outdoor air’) also deals with these aspects.

Swimming pools

Whether or not ventilation units to be used in swimming pools are to be considered in the scope of Regulation 1253/2014, is basically related to what is the functionality of the product (on a case by case analysis).

As an example, ventilation units designed to ensure dehumidification and the replacement of indoor air by outdoor air, are to be considered in the scope of Regulation 1253/2014, as the product functionality is, as from the ventilation unit definition (Article 2.1 of Regulation 1253/2014): " ‘ventilation unit (VU)’ means an electricity driven appliance…. intended to replace utilised air by outdoor air". However, should the product be only for dehumidification/de-chlorination (e.g. in the case of a ventilation unit in a swimming pool environment used to remove the build-up of chlorine), this would mean that the product functionality would be, specifically, dehumidification/de-chlorination, and not the replacing of utilised air; in this specific case, the product should be considered to be out of the scope of Regulation 1253/2014.

Bus garage

As a general principle, and in the absence of a specific description (which could lead to make a more informed choice, on the basis of the abovementioned principles),

[10] http://www.ventilationunits.eu/media/1062/final_draft_faq_vu_21122015.pdf

ventilation units for these applications would tend to be in the scope of Regulation 1253/2014.

Waste water treatment plants, for ventilation of basin halls

Ventilation units for these kind of applications are in the scope of Regulation 1253/2014 if the building (or its part) where the ventilation units will be installed, is designed for/foresees human occupancy.

(6a) Question on heat recovery systems – pressure drop (06-2016)

For buildings with excess heat, a heat recovery system will only generate a pressure drop, and the thermal bypass will be used throughout the year. This is the case for crematoriums, bakeries, and restaurant kitchens for example. Would ventilation units in this case be within the scope, without requirement for heat recovery or would they be out of the scope?

(6a) Answer on heat recovery systems – pressure drop (06-2016)

The criterion hereby presented ("For buildings with excess heat, a heat recovery system will only generate a pressure drop) cannot be taken as such into consideration for assessing whether a product is in the scope of Regulation 1253/2014, or which ecodesign requirements apply (e.g. the obligation to install a heat recovery system, in this specific case). To do so, one should refer to the definitions and scope exemptions of Regulation 1253/2014, complemented, where available, with the clarifications of the ventilation units FAQ document11.

(6b) Question on heat recovery systems – industrial painting boxes (06-2016)

In some environments the Heat Recovery Systems will be clogged by particles, as for example with industrial painting boxes. If the paint is solvent based, the ventilation unit is out of the scope due to the operating in a potentially explosive atmosphere (article 1; 2(d)). If the paint is water based the ventilation unit is within scope. But how should a ventilation unit for an industrial painting box that operates with both solvent and water based paint be treated? Could a painting box with water based paint be interpreted as an abrasive environment and therefore be out of the scope of the regulation?

(6b) Answer on heat recovery systems – industrial painting boxes (06-2016)

To assess if a ventilation unit to be installed in industrial painting boxes is in the scope of Regulation 1253/2014, first of all the general guidance principle laid down in the above question and answer should be considered (product functionality and presence of human beings).

Moreover, concerning the specific questions:

[11] http://www.ventilationunits.eu/media/1062/final_draft_faq_vu_21122015.pdf

if a ventilation unit is to be installed in an industrial painting box that operates with both a potentially explosive atmosphere (under the sense of the ATEX Directive), as it is normally the case of solvent-based paintings, and a non-explosive atmosphere, as it is normally the case of water-based paintings, such ventilation unit is in scope of Regulation 1253/2014 (as the scope exclusion under its article 1.2.d is about ventilation units which are exclusively specified as operating in a potentially explosive atmosphere);

a painting box with water-based paint cannot be interpreted as an abrasive environment unless clear evidence is provided that this environment causes accelerated wear on the fan / impeller blades of the ventilation unit.

(6c) Question on heat recovery systems – potentially explosive extract air (06-2016)

Another question regarding industrial painting boxes is how to handle a bidirectional unit where the supply air is not potentially explosive but the extract air is? Is it in or out of scope?

(6c) Answer on heat recovery systems – potentially explosive extract air (06-2016)

Based on the given information, this bidirectional ventilation unit is considered out of scope of Regulation 1253/2014, provided that it is exclusively specified as operating in a potentially explosive atmosphere.

(7) Question on central/local demand control

For Local Demand Control a common way is to have sensors and throttle functionalities out in the system, and to have a pressure controlled unit. The manufacturer cannot be sure what system the unit will be installed with. Can they assume a certain system, and specify how the unit should be installed?

(7) Answer on central/local demand control

Q&A no. 4 contains the answer for this specific question (emphasis added):

[..] the manufacturer has to provide the information on which system has to be installed on the ventilation units [..] so that it complies with requirements when it is put into service.

The installer is responsible for ensuring that the product is put into service in accordance with the information provided by the manufacturer[..].

(8) Question on a combination of a supply UVU and an exhaust UVU being considered as a BVU (11-2016)

There are instances where installers buy separate (CE marked) UVU's that are already put on the market. In the building one UVU is installed for supply and another for exhaust of air. Is this combination considered as a BVU and who is responsible for compliance to regulation (EU) 1253/2014?

The same question arises in case of restoration of a building when a new (supply) UVU is installed besides an already existing (exhaust) UVU.

(8) Answer on a combination of a supply UVU and an exhaust UVU being considered as a BVU (11-2016)

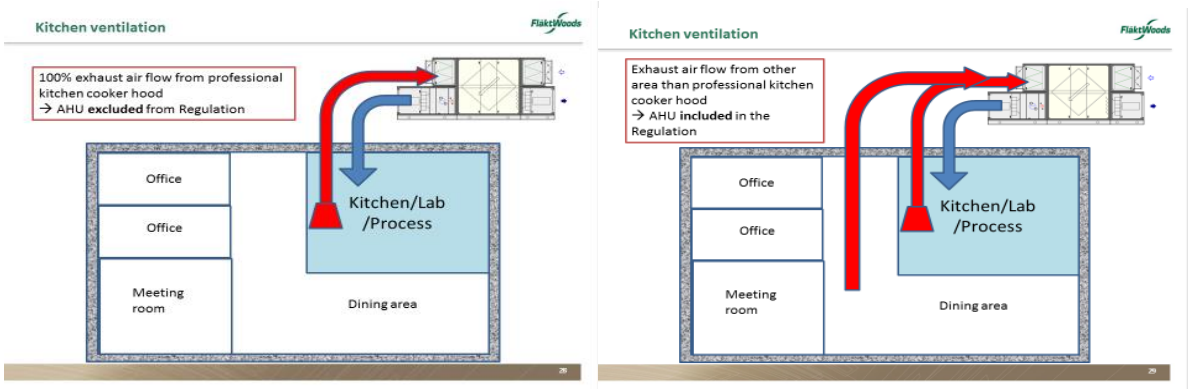
If a whole ventilation unit is designed, manufactured and delivered under the approach that it is a bidirectional ventilation unit (in line with the relevant definitions given in Regulations 1253/2014 and 1254/2014), it derives that is should be considered as a bidirectional ventilation unit. Therefore, the energy label and the compliance with the ecodesign requirement should be evaluated accordingly.

If several different components, among which various UVUs, are assembled on site (into a ventilation system, parts of which might have already been installed; this could be e.g. the case of an already existing ventilation system, where it is needed to only replace the supply – or exhaust – unit), and each UVU is delivered separately and capable to work independently from the others, in this case each UVU should be assessed separately.

(9) Question on ventilation units connected to a professional kitchen (11-2016)

Is a ventilation unit connected to a professional kitchen included in the scope of Regulation 1253/2014? The heat recovery system has trouble to become efficient enough due to high content of grease etc. in the air and we have received questions if this unit is included in the scope.

In FAQ no 10 of the guidelines for ventilation[12] utilised air is described. According to this one could conclude that since the grease etc. from cooking is not due to the presence of human beings but from the cooking process itself and therefore exclude the ventilation unit.



(9) Answer on ventilation units connected to a professional kitchen (11-2016)

To assess if a ventilation unit to be installed in/in connection with a professional kitchen is in the scope of Regulation 1253/2014, the general guidance principle laid down in the reply to the question 5 should be considered on a case by case analysis:

[12] https://ec.europa.eu/energy/sites/ener/files/documents/implementation_guide_-_ventilation_units_with_cover.pdf

one should check the two following main aspects:

- product functionality (i.e. if the ventilation units is intended replace utilised air by outdoor air);
- if the building (or its part) where the ventilation units will be installed, is designed for/foresees human occupancy.

Moreover, the reply to question 8 of the Guidelines on Regulations 1253/2014 and 1254/201413 is meant to specifically clarify that the professional range hoods per se are not in scope to Regulation 1253/2014:

8. Are professional range hoods within the scope of Regulation 1253/2014? Professional range hoods are not within the scope of Regulation 1253/2014.

Hence, based on the information displayed in the above figure, and provided that the ventilation unit under analysis does not fall into any of the scope exclusions laid down in Article 1.2 of Regulation 1253/2014, it can be concluded that:

- the ventilation unit in the left part of the figure is not in scope of Regulation 1253/2014
- the ventilation unit in the right part of the figure is in scope of Regulation 1253/2014.

(10) Question on ventilation units for clean rooms (11-2016)

Do ventilation units installed to service process/production buildings, or where the design is driven by code requirements (e.g. GMP, ATEX, etc) rather than human occupancy requirements, have to comply with Regulation 1253 / 2014? The example in question is for a clean room in a pharmaceutical setting where the ventilation requirements are primarily process driven and where human occupancy will be very low.

(10) Answer on ventilation units for clean rooms (11-2016)

Yes, in general terms they do have to comply with Regulation 1253/2014 (with the caveats/clarifications given in the Guidelines on Regulation 1253/2014 and 1254/2014[14]), except in the case of ATEX ventilation units, i.e. ventilation units "exclusively specified as operating in a potentially explosive atmosphere as defined in Directive 94/9/EC", which are out of scope of the Regulation 1253/2014, as specified in its Article 1.2.d.

(11) Question on ventilation units with mixing box (11-2016)

Where a heat recovery system (HRS) is required, is an Air Handling Unit mixing box utilising re-circulated air for heating and outside air for free cooling (air side economiser) an

[13] https://ec.europa.eu/energy/sites/ener/files/documents/implementation_guide_-_ventilation_units_with_cover.pdf
[14] https://ec.europa.eu/energy/sites/ener/files/documents/implementation_guide_-_ventilation_units_with_cover.pdf , from page 12 onwards

acceptable approach under 1253 / 2014? If not, why not, as we understand that this is a common design approach and that it is more energy efficient and less costly that a HRS for the client.

(11) Answer on ventilation units with mixing box (11-2016)

The question can be considered as follows: is the non-residential BVU (described in the question) equipped with a device which can be considered a heat recovery system, as from the definitions laid down in Regulation 1253/2014 (see in particular Annex I.1.5)?

From the description it is not fully possible to grasp the specific features/characteristics of a mixing box utilising re-circulated air for heating and outside air for free cooling (air side economiser), but it would not seem to be a heat recovery system, because:

A mixing box (if it means a section of an air handling unit used to mix the return air flow with the outside air flow) is not, per se, a heat recovery system. The air side economiser installed on the outside air flow for free cooling (if it means a "duct-and-damper arrangement and automatic control system that together allow a cooling system to supply outdoor air to reduce or eliminate the need for mechanical cooling during mild or cold weather") seems not to be a heat exchanger designed to transfer the heat contained in the (contaminated) exhaust air to the (fresh) supply air, as from the definition laid down in Annex I.1.5 to Regulation1253/2014.

(12) Question about classification of filters

Commission Regulation (EU) No 1253/2014 requires that the reference configuration of a bidirectional NRVU is configured with at least one clean fine filter and one clean medium filter (Annex I, point 2.3)). For unidirectional NRVU the reference configuration shall be with a clean fine filter if the product is intended to be equipped with a filter (Annex I, point 2.4)).

Fine and medium filters are defined in Annex I, 2.18) and 19), stating that filters have to meet the conditions described in Annex IX.

Commission communication (2016/C 416/06) states that (fine and medium) filter performance has to be determined according to EN 779:2012, on which also terms and data used in annex IX are based. However, EN 779:2012 has recently been withdrawn and superseded by EN ISO 16890 - part 1 to 4:2016. Both standards evaluate the filtration efficiency of coarse to fine filters, but according to different methods, having the consequence that classification of filters according to these standards cannot be compared directly.

On this basis, how are manufacturers expected to determine and declare the filter classification for the NRVUs ?

(12) Answer about classification of filters

The filter classification procedure under Annex IX to Regulation 1253/2014 is aligned with the EN 779:2012 standard. This procedure is integral part of the legal text, therefore it cannot be changed even if the related standard 779:2012 has been superseded, and no other procedures can be used. The relevance of adapting the procedure will be examined during the review of the regulation.

COMMISSION REGULATION (EU) 2015/1185 of 24 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel local space heaters

(1) Question about solid fuel local space heaters with casings of different colors (2019)

What about the technical documentation in the case of solid fuel local space heaters with casings of different colors?

(1) Answer about solid fuel local space heaters with casings of different colors (2019)

As far as the content of the technical documentation is concerned, testing one combination for each separate space heaters heat generator and housing is sufficient where only the color differentiates the housings.

COMMISSION REGULATION (EU) 2015/1189 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for solid fuel boilers

(1) Question on assessing compliance in different possible combinations (11-2016)

Many heat generators (burners) are suitable for many types of vessels and as replacement in boilers already installed in households, thus they do not always have a specified appropriate vessel. In the eco-design regulation it is required that:

ANNEX II Ecodesign requirements, 2.a.4) Requirements for product information for solid fuel heat generators designed for solid fuel boilers, and solid fuel boiler housings to be equipped with such heat generators, their characteristics, the requirements for assembly (to ensure compliance with the ecodesign requirements for solid fuel boilers) and, where appropriate, the list of combinations recommended by the manufacturer;

ANNEX III, Measurements and calculations, 2. c. General conditions for measurements and calculations:

Any solid fuel heat generator designed for a solid fuel boiler, and any solid fuel boiler housing to be equipped with such a heat generator, shall be tested with an appropriate solid fuel boiler housing and heat generator.

Is the manufacturer obliged to assess the compliance of all possible appropriate combinations, or only combinations suggested by the manufacturer?

(1) Answer on assessing compliance in different possible combinations (11-2016)

The Regulation requires each separate solid fuel heat generator and solid fuel boiler housing to be tested with an appropriate solid fuel boiler housing and solid fuel heat generator, respectively. Thus, for each separate solid fuel heat generator and solid fuel boiler housing testing one combination is sufficient. An appropriate choice would be from the list of combinations recommended by the manufacturer, which is required by point 2(a)(4) of Annex II.

COMMISSION REGULATION (EU) 2015/1095 of 5 May 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers

(1) Question on the operating temperature of process chillers (11-2016)

This regulation places ecodesign measures on process chillers. Process chillers are defined as low temperature (-25°C), medium temperature chillers (-8°C) and high temperature chillers (7°C). Only low and medium temperature process chillers are in scope of this regulation. There seems to be a gap in the understanding of the ecodesign regulation 2015/1095 that includes process chillers. Many process chillers placed on the market are designed to operate between the temperature ranges of -7°C and +7°C.

These products may be capable of reaching -8°C in some circumstances. However, this will impact on their original and intended declared design rated cooling capacity. As they are capable of reaching -8°C is the intention of the Regulation to include these products as medium temperature process chillers, therefore, needing to comply with the Regulation or not?

(1) Answer on the operating temperature of process chillers (11-2016)

Concerning the process chillers' operating temperature, two possibilities are given under Regulation 2015/1095: medium temperature or low temperature, in line with the definitions given in Article 2.1.t and article 2.1.u of the Regulation. This means that for the purposes of the Regulation no other choices are given to the manufacturer in terms of intended operating temperature, and, therefore, in terms of which requirements apply for a certain process chillers (i.e. either those for medium temperature or those for low temperature).

In terms of process chillers operating temperature, there is also a third possible case, i.e. the one of high temperature (article 2.1.v of Regulation 2015/1095); the process chillers with this operating temperature are in scope of the forthcoming regulation on air heating products, cooling products, high temperature process chillers and fan coil units.

These categories (low, medium and high temperature) were defined and identified also in collaboration with stakeholders, and there was a good agreement in terms of the chosen temperature levels. However, there can be specific situations of products sold for cooling temperatures which are somehow on the boundaries of the temperature limits defined in Regulation 2015/1095 such as the case mentioned in the question, i.e. process chillers "designed to operate between the temperature ranges of -7°C and +7°C and capable of reaching -8°C in some circumstances". In those cases, freedom is left to the manufacturer to identify and declare the process chiller operating temperature, under Regulation 2015/1095 (or, under the regulation on air heating products, cooling products, high temperature process chillers and fan coil units, in the case of high temperature process chillers).

COMMISSION REGULATION (EU) 2015/1188 of 28 April 2015 implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for local space heaters

(1) Question on external controls being considered week timers (11-2016)

Annex I, definition (20) says: “the product is equipped with an electronic device, either integrated or external …”

Automatic programming (self-learning) external controls are becoming more commonly used with electric local space heaters, are they considered as a ”week timer” within the regulation?

(1) Answer on external controls being considered week timers (11-2016)

Auto programmable devices capable of generating a weekly-customized profile can be considered as weekly timers.

(2) Question on controls functions being provided by external controls (11-2016)

Can each control function specified in Annex I, definitions (21)-(26) be provided by the external control?

(2) Answer on controls functions being provided by external control (11-2016)

For 'presence detection', 'open window detection' and 'black bulb sensors' the definitions specifically indicate that the control can be external. For 'distance control option', 'working time limitation' and 'adaptive start control' there is no specification on whether it should be integrated or external, so both are possible.

(3) Question on auxiliary electricity consumption in standby mode (11-2016)

Basically a controller provides periods of “on” and periods of “off”. During “Off” periods the control and consequently the appliance is working. Should “Off” periods be considered as “stand by”?

(3) Answer on auxiliary electricity consumption in standby mode (11-2016)

The Regulation defines in point 30 of Annex I standby mode as "*a condition where the product is connected to the mains power source, depends on energy input from the mains power source to work as intended and provides only the following functions, which may persist for an indefinite time: reactivation function, or reactivation function and only an indication of enabled reactivation function, and/or information or status display*". What is presented as so-called 'off' falls under the definition of stand-by, assuming the product can be re-activated. The fact that in such 'off' the control is

working (and presumably consuming some energy) is precisely why standby is addressed in the regulation.

(4) Question on towel racks (11-2016)

Are towel rails in the scope of 2015/1188?

(4) Answer on towel racks (11-2016)

If a 'towel heater' is not capable of reaching and maintain a certain thermal comfort within an enclosed space in which the product is situated then it is not a 'local space heater' as defined Article 2(1) of the Regulation in and not covered by the regulation. If it is capable of doing so, it is covered by the regulation, unless it is "specified for purposes other than indoor space heating to reach and maintain a certain thermal comfort of human beings by means of heat convection or heat radiation" as specified in Article 1(b) of the Regulation, i.e. clearly advertised and offered for sale to be for heating towels. Article 1(b) was intended for e.g. mirror heaters for avoiding condensation, but could also cover certain types of 'towel heaters'.

(5) Question on portable electric heaters with wall fixing options (11-2016)

There are portable electric heaters sold with features which can be used to fix it on a wall and there are fixed electric heaters sold with a kit of castors. Does the regulation consider these electric fixed local space heaters, electric portable local space heaters, or both?

(5) Answer on portable electric heaters with wall fixing options (11-2016)

According to the definitions of ‘electric fixed local space heater’ and ‘electric portable local space heater’ these two types are mutually exclusive, so no product can be required to meet requirements for both categories. Local space heaters sold with features which can be used to fix it on a wall or a fixed appliance sold with a kit of castors fall under the description are 'designed to be used while fastened or secured in a specific location or wall mounted' even though they have an alternative possible use. They are therefore electric fixed local space heaters (for which information requirement of Annex II.3.b(ii) do not apply).

(6) Question on slave heaters (11-2016)

Regulation 2015/1188 does not apply to slave heaters and there is a concern that the current definition will allow manufacturers to design their products such that the regulation will not apply. This category was added at a very late stage in the drafting of the regulation and it is not clear why it was added.

A local space heater is a slave heater if it put on the market and is not capable of autonomous operation. To operate, it needs to receive a signal from an external master controller which is not part of the product which will regulate the emission of heat into the room in which it is installed.

Would it not seem logical that once a slave heater is connected to a master controller it would fall within the scope of the 2105/1188 and have to comply with the appropriate ecodesign requirements? The current definition does not specifically state this.

(6) Answer on slave heaters (11-2016)

Slave heaters are completely exempted from the requirements of the regulation. It was considered that this provision was unlikely to provide a loophole because the cost savings of trying to use it as a loophole would be very limited, if any, and an additional installation would be required.

(7) Question on emission requirements for NOx (2019)

Industry has concerns that from 1st January 2018, several types of gas space heaters such as closed fronted gas fires along with others heaters will not be able to meet the requirements for NOx emissions while mutually ensuring energy efficiency.

Is there any exemption possible until the review of the legislation takes place?

(7) Answer on emission requirements for NOx (2019)

Since this is how the regulation is formulated, it is not possible to provide a derogation for products that do not comply.

COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 implementing Directive 2009/125/EC of the European Parliament and of the Council establishing a framework for the setting of ecodesign requirements for energy-related products, with regard to ecodesign requirements for air heating products, cooling products, high temperature process chillers and fan coil units

(1) Question on draught beer systems with flow chilling (11-2016)

Is a draught beer system where the beer is cooled through flow chilling to be covered by the regulation, and hence to be considered as a high temperature chiller?

The following is described as point 10) under article 2 - definitions:

'high temperature process chiller' means a product:

(a) integrating at least one compressor, driven or intended to be driven by an electric motor, and at least one evaporator;

(b) capable of cooling down and continuously maintaining the temperature of a liquid, in order to provide cooling to a refrigerated appliance or system, the purpose of which is not to provide cooling of a space for the thermal comfort of human beings;

(c) that is capable of delivering its rated refrigeration capacity, at an indoor heat exchanger outlet temperature of 7 °C, at standard rating conditions;

(d) that may or may not be integrate the condenser, the coolant circuit hardware or other ancillary equipment.

These draught beer systems are not specifically excluded in the regulation text, however, it seems that this product category was not intended to be regulated through this regulation.

(1) Answer on draught beer systems with flow chilling (11-2016)

The term "flow chilling" is not one used in the Regulation. If the beer is cooled directly, the system is not covered by the Regulation, because in point (b) it specifies that a high temperature process chiller cools down a liquid with the purpose of providing cooling to a refrigerated appliance or system, whereas a draught beer system cools the liquid with the purpose of directly using it.

However, if the beer is cooled through a cooling system using a refrigerant, the cooling system would be indeed a high temperature process chiller and would be covered by the Regulation. In this case, the product is a general one that could cool anything with any purpose and it is therefore appropriate that it would be covered by the Regulation.

(2) Question on Air to Water heat pumps, driven by an electric motor with capacity above 400KW (11-2018)

What is the minimum seasonal space heating energy efficiency according to Annex II Table 1 for an Air to Water heat pumps, driven by an electric motor with capacity above 400KW?

(2) Answer on Air to Water heat pumps, driven by an electric motor with capacity above 400KW (11-2018)

The following definitions in Regulation (EU) 2016/2281 have to be considered:

> *(1) 'air heating product' means a device that:*
>
> > *(a) incorporates or provides heat to an air-based heating system;*
> > *(b) is equipped with one or more heat generators; and*
> > *(c) may include an air-based heating system for supplying heated air directly into the heated space by means of an air-moving device.*
>
> *A heat generator designed for an air heating product and an air heating product housing designed to be equipped with such a heat generator shall, together, be considered as an air heating product;*
>
> *(2) 'air-based heating system' means the components and/or equipment necessary for the supply of heated air, by means of an air-moving device, either through ducting or directly into the heated space, where the purpose of the system is to attain and maintain the desired indoor temperature of an enclosed space, such as a building or parts thereof, for the thermal comfort of human beings;*

Air to water heat pumps are not in the scope of this Regulation, because they are not covered by the definition of an air heating products. The same applies to 'water to water' heat pumps.

(3)Question on minimum seasonal space heating energy efficiency for Air to Water heat pumps (2019)

What is the minimum seasonal space heating energy efficiency according to Annex II Table 1 for an Air to Water heat pump, driven by an electric motor with capacity above 400KW?

(3)Answer on minimum seasonal space heating energy efficiency for an Air to Water heat pumps (2019)

The definition of an air heating product in Regulation (EU) 2016/2281 is as follows:

(1) 'air heating product' means a device that:

(a) incorporates or provides heat to an air-based heating system;
(b) is equipped with one or more heat generators; and
(c) may include an air-based heating system for supplying heated air directly into the heated space by means of an air-moving device.

A heat generator designed for an air heating product and an air heating product housing designed to be equipped with such a heat generator shall, together, be considered as an air heating product;

(2) ‘air-based heating system’ means the components and/or equipment necessary for the supply of heated air, by means of an air-moving device, either through ducting or directly into the heated space, where the purpose of the system is to attain and maintain the desired indoor temperature of an enclosed space, such as a building or parts thereof, for the thermal comfort of human beings.

Air to water heat pumps are not in the scope of this Regulation, they are not covered by the definition of an air heating products. The same applies to ‘water to water’ heat pumps.

COMMISSION REGULATION (EU) 2019/424 of 15 March 2019 laying down ecodesign requirements for servers and data storage products pursuant to Directive 2009/125/EC of the European Parliament and of the Council and amending Commission Regulation (EU) No 617/2013

(1) Question on the market surveillance of randomly selected or ordered model configurations of servers (09-2019)

How to deal with the market surveillance (i.e. verification and testing) of randomly selected or ordered model configurations of servers (in the case of servers declared by the manufacturer as being part of a server product family)?

(1) Answer on the market surveillance of randomly selected or ordered model configurations of servers (09-2019)

As foreseen in the provisions laid down in Annex II to Regulation 2019/424, manufacturers can – on a voluntary basis – declare a product model as being part of a server product family. For these product models, the manufacturer shall report certain (actually, most of the) information, such as idle state power or the active state efficiency, for the low-end and high-end performance configurations of the server product family (as laid down in Annex II.3.1).
In terms of market surveillance of product models declared as being part of a server product family, Annex IV.1 to Regulation 2019/424 foresees that the Member State authorities can verify:

- the low-end performance configuration, or
- the high-end performance configuration, or
- a randomly selected or ordered model configuration.

In the case of a randomly selected or ordered model configuration, the declared values to be verified shall be the values for the high-end performance configuration only.
In terms of testing, Annex IV.2.c foresees that the Member State authorities, in case the manufacturer declared the server to be represented by a server product family, test the low-end performance configuration or the high-end performance configuration of the server product family.
In the specific case of a randomly selected or ordered model configuration, this implies that the Member State authorities will test the high-end performance configuration of the server product family and, consequently, verify compliance with the Ecodesign requirements only for this configuration.

(2) Question on network switches (09-2019)

Is a network switch, which is capable of being configured to operate either at data center level or within a data storage product architecture, considered to be in scope of Regulation 2019/424?

(2) Answer on network switches (09-2019)

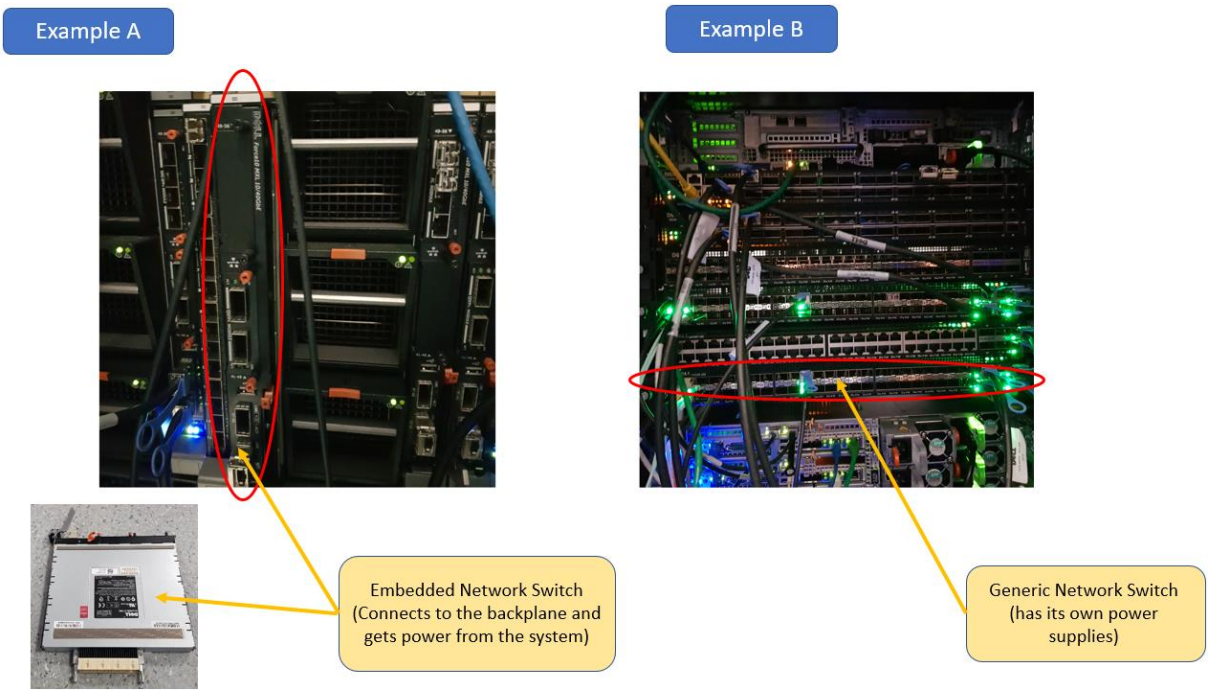
There are only two categories of products in scope to Regulation 2019/424: servers and data storage products. Concerning the latter, Article 2.1.(10) of Regulation 2019/424 states that ‘‘*data storage product' means a fully-functional storage system that supplies data storage services to clients and devices attached directly or through a network. Components and subsystems that are an integral part of the data storage product architecture (e.g., to provide*

internal communications between controllers and disks) are considered to be part of the data storage product. In contrast, components that are normally associated with a storage environment at the data centre level (e.g. devices required for operation of an external storage area network) are not considered to be part of the data storage product '.

This implies that, to understand whether a component belongs – or not- to a data storage product, one must determine whether the component is integral part of the data storage product architecture, or it is associated with the storage environment at data center level.

An embedded network switch, connected to the backplane of the data storage product and getting power from it, would be considered as part of the data storage product (example A).

A generic network switch, capable to operate as a standalone device at the data center level and with its own power supplies, would not be considered as part of the data storage product (example B).



COMMISSION REGULATION (EU) 2019/1782 of 1 October 2019 laying down ecodesign requirements for external power supplies pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulation (EC) No 278/2009

(1) Question on information provided by manufacturers (09-2019)

Manufacturers, importers or authorised representatives have to provide information on freely accessible websites and in instruction manuals for end-users (where applicable). What does "where applicable" mean? Is it sufficient to include a link (URL) in the instruction manual pointing to the website where the complete information can be found?

(1) Answer on information provided by manufacturers (09-2019)

"Where applicable" means where there is an instruction manual supplied for an EPS, which is placed on the market as a standalone product. In these cases, the end-users should have readily available information for facilitating their purchasing decision. This does not apply to: (i) EPSs sold bundled with their main load product, and (ii) EPS sold as spare parts (as provided for by Article 1, point 2.h). In these cases, there is less need to provide users with information in written format and information published on the freely accessible web sites of manufacturers, importers or authorised representatives is considered sufficient. However, in these cases is still recommended to provide in written format an URL to the relevant website (containing the full set of information) or the related QR code.

(2) Question on information about output power (09-2019)

When including information about output power, voltage and current on the EPS nameplate:
a) Can only basic units of measurement (W, V and A) be used?
b) Can both comma ',' and point '.' be used to indicate decimal places?
c) Is only one decimal place allowed?

(2) Answer on information about output power (09-2019)

a) Yes, only the basic units of measurement indicated in the Regulation shall be used. For example, output current shall be expressed in A for both currents higher than 1 A and lower than 1 A.
b) Yes, both comma and period can be used to indicate decimal places. The nameplate values for output power, voltage or current are not higher than 1 000, therefore there is no danger of confusion between separators for thousands and decimals.
c) More than one decimal place is allowed, for instance "0,05 A".

(3) Question on EPSs with battery charging function (09-2019)

For products that provide both battery charging and power supply functions, is the battery charger part of the product in scope of the regulation?

(3) Answer on EPSs with battery charging function (09-2019)

Yes, the whole product is in scope of the regulation. However, the requirements of Annex II shall apply only to the power supply part of the product.

(4) Question on adaptive EPSs (09-2019)

a) Adaptive EPSs are able to provide a wide range of output voltages but, due to the reduced size of nameplates, it would be physically impossible to mention all of them. What information shall be included on the nameplates of adaptive EPSs?
b) The European standard EN 50563 ("External a.c.-d.c. and a.c.-a.c. power supplies – Determination of no-load power and average efficiency of active modes") published in 2013 does not provide a testing methodology for adaptive EPSs that utilise the USB-C protocol. How shall the adaptive EPSs be verified for compliance with the Regulation?
c) Adaptive EPSs provide different output voltages and related powers. The same EPS may provide an output power lower than 49 W in some cases and an output power above 49 W in some other cases. In this situation, what is the applicable requirement regarding the no load condition – 0,10 W (as for EPS with a nameplate output power of maximum 49 W) or 0,210W (as for EPS with a nameplate output power of more than 49 W)?

(4) Answer on adaptive EPSs (09-2019)

a) Only the lowest and the highest output voltage, together with the related output current and power shall be included on the nameplate of adaptive EPSs.
b) Annex II point 3 specifies that measurements and calculations shall be made using harmonised standards the reference number of which have been published for this purpose in the Official Journal of the European Union, or other reliable, accurate and reproducible methods, which take into account the generally recognised state of the art. Thus, a (future) harmonised European standard that would allow the measurement of adaptive EPSs, or any other generally recognised state-of-the-art testing methods could be used, provided that they are duly mentioned in the laboratory test reports. An example of such alternative method is the US DOE test method for adaptive EPSs.
c) In this situation the applicable maximum power consumption for the no-load condition shall be 0,21 W.

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