TECHNICAL BOARD

CENELEC/BT by correspondence		**Agenda item:**	7.5.1
For information and possible comments		**Issue date:**	2013-09-04
Simultaneous circulation to CEN/BT	☒	**Deadline:**	**2013-09-24**

SUBJECT

Ecodesign mandate M/495 - Draft amended Annex A

BACKGROUND

Consultation on the draft amended Annex A to M/495 as submitted to CCMC by the European Commission on 2013-08-30.

See Annex 1 for more details.

2013-09-02 – ADF

CEN AND CENELEC TECHNICAL BOARDS
FOR INFORMATION AND POSSIBLE COMMENTS

CEN Reference: BT N 9313
CENELEC Reference: Annex 1 to BT146/DG9210/DC

Ecodesign mandate M/495 - Draft amended Annex A

On 2012-12-13 CCMC informed BT by email that the European Commission had adopted its Ecodesign Working Plan 2012-2014. The latter gave a list of new product groups for which the European Commission intended to launch studies in view of the possible adoption, at a later stage, of specific Ecodesign Regulations implementing Directive 2009/125/EC on the ecodesign of energy-related products.

For some of these product groups, standardization work is expected from the EC. They will therefore be added to the Annex A to M/495, in which a number of products are already listed as a result of the EC's Ecodesign Working Plans 2005-2008 and 2009-2011. As the Annex A was accepted by CEN and CENELEC in October 2011 together with Mandate 495, an amendment to it needs to be issued by the EC in order to add new products to it.

On 2013-08-30 the European Commission sent to CCMC the draft amended Annex A to M/495 (see in annex). The product groups for which new significant standardization needs have been identified by the EC are:

- Pumps for private and public waste water and for fluids with high solids content
- Pumps for private and public swimming pools, ponds, fountains, aquariums, as well as clean water pumps larger than those regulated under Regulation 547/2012
- Steam boilers (< 50 MW)
- Compressors
- Window products
- Power cables
- Enterprises' servers, data storage and ancillary equipment
- Water-related products

It is also to be noted that the EC intends to request CEN and CENELEC to develop standards on horizontal aspects linked to resource efficiency, namely:

- Horizontal standard for measuring the end of life extraction time of key components for some identified products
- Horizontal standard on measuring the reversible disassembly time of key components for some identified products

- Horizontal standard on RRR (recyclability/recoverability/reusability) indexes by mass
- Horizontal standard on RRR indexes by environmental impacts
- Horizontal standard on durability of some identified products or their key components

According to the EC, the final version of the amended Annex A could be delivered to CEN and CENELEC in December 2013 or in early 2014.

Should you wish to submit comments to the EC on the proposed amended Annex A, CEN/BT Members are invited to send them directly to bt@cencenelec.eu with copy to adellafaille@cencenelec.eu. CENELEC Permanent Delegates are invited to submit their comments via the Collaboration Tool. Due to some constraints linked to the EC's regulatory process, the deadline for submitting your comments is set at **2013-09-24**.

CCMC will then forward the comments received to the European Commission's services.

ANNEX A (last updated June 2013)
Product groups

Product Group	State-of-Play	Short description of the expected standardisation work	Target date
PRODUCT GROUPS COVERED BY INDIVIDUAL MANDATES AND NOT COVERED BY THE PRESENT HORIZONTAL MANDATE (Individual mandates issued prior to the acceptance of the present horizontal mandate) Products mentioned in Article 16 of the Ecodesign Directive 2009/125/EC as priority for adoption of implementing measures by the Commission			
Standby and off mode power consumption	Reg. 2008/1275 adopted **Mandate M/439** (accepted) No transitory measurement method has been published but supplementary information can be found in the *Guidelines*[1] *accompanying Reg. 2008/1275* (October 2009)	**Standardisation needs:** • Measurement methods covered under M/439 • Additional needs: o Horizontal standard for measurement of standby power based on EN 62301 o Measurement of standby power for household appliances (currently revised) - same requirements are covered by other standards such as EN 62018. Power Management (specific standards for different products) **Technical Committee(s)**: Joint Working Group (CLC TC108X, 59X and 111X). IEC/TC111/PT62542 for measurement methods. **Consultant**: Fraunhofer Institute for Reliability and Microintegration, IZM, Berlin **Main stakeholder(s)**: DigitalEurope, CECED, Orgalime	Target date for delivery under M/439: 1st quarter 2011 (positive vote on the draft standard in Jan. 2011)
Simple Set Top Boxes	Reg. 2009/107 adopted **Mandate M/451** (accepted in Oct. 2009) Transitory measurement method is included in the Implementing Reg. 2009/107	**Standardisation needs**: ESO are requested to develop Harmonised Standards containing methods to measure the power consumption of simple set top boxes in active and standby modes. ESO are asked to base on the existing standard IEC 62087: 2008 (Edition 2). It should be noted that, in accordance with the criteria laid out in Regulation (EC) No 107/2009, the Harmonised Standard should specify that during measurement the simple set-top boxes should not be powering any external devices, such as Satellite LNB, Terrestrial active antenna, ADSL modem or cable modem.	Target date for delivery under M/451: 12 months after acceptance

[1] http://ec.europa.eu/energy/efficiency/ecodesign/doc/legislation/guidelines_for_smes_1275_2008_okt_09.pdf

		Technical Committee(s): CLC TC 209 and 206 **Consultant**: MVV Energiedienstleistungen, Germany **Main stakeholder(s)**: DIGITAL EUROPE	
External Power Supplies	Reg. 2009/278 adopted **Mandate M/450** (accepted) No transitory measurement method has been published but supplementary information can be found in the *Guidelines*[2] *accompanying Reg. 2008/1275* (October 2009) **Mandate M/455** (concluded)	**Standardisation needs**: • M/450 covers measurement of active and no-load power consumption • M/455 requested the development of Harmonised Standards to ensure the interoperability between data-enabled mobile telephones and a common charger (external power supply), as well as appropriately consider safety risks and electro-magnetic disturbances which could arise from the combination of chargers and mobile telephones produced by different manufacturers. The mandate was concluded in December 2010 with the publication of 2 deliverables: ▫ EN/IEC 62684: interoperability of common external power supply (EPS) with data-enabled mobile telephones ▫ EN 301489-34: electromagnetic compatibility of the common charger **Technical Committee(s)**: M/450: Joint Working Group (CLC TC108X, 59X and 111X). **Consultant**: BIO Intelligence Service, France **Main stakeholder(s)**: Digital Europe	Target date for delivery under M/450:2nd quarter 2011 (draft standard awaiting vote) No activity (concluded)
Televisions	Reg. 2009/642 adopted **Mandate M/477** sent to ESO in December 2010 Transitory measurement method published in OJEU C114, 4 May 2010, p4	**Standardisation needs**: The individual mandate request that ESO develop a Harmonised Standard covering power consumption measurements (likely to be based on IEC 62087) **Technical Committee(s)**: CLC/TC108X, possibly TC206 or a new TC100X **Consultant**: Fraunhofer Institute for Reliability and Microintegration, IZM, Germany **Main stakeholder(s)**: Digital Europe	4th quarter 2011
Electric motors	Reg. 2009/640 adopted **Mandate M/470** (accepted)	**Standardisation needs**: ESO are requested to develop Harmonised Standards containing procedures and methods for measuring the	Target date for delivery under M/470:

[2] http://ec.europa.eu/energy/efficiency/ecodesign/doc/legislation/guidelines_for_smes_1275_2008_okt_09.pdf

	No transitory measurement method will be published	energy efficiency and associated characteristics such as mechanical output power and electrical input power of electric motors falling into the scope of Reg. 2009/640 • First stage : efficiency of the motors • Second stage: efficiency of systems ESO are requested to ensure cooperation with IEC TC22X and IEC TC2. In IEC the following standard is at FDIS stage: IEC 60034-30 Ed.1: Rotating electrical machines - Part 30: Efficiency classes of single-speed, three-phase, cage-induction motors (IE Code). The Commission will publish the Harmonised Standard EN60034 in the OJ as soon as deliverables are received **Technical Committee(s)**: CLC TC2X WG6, coordinating the work on system metrics; IECTC2 WG28 and WG 31 and CLC TC2 **Consultant**: AEA Technology, the United Kingdom **Main stakeholder(s)**: ORGALIME	• Stage 1 requirement: 12 months after acceptance • Stage 2 and 3 requirements: 48 months after acceptance
Circulators	Reg. 2009/641 adopted **Mandate M/469** (accepted) No transitory measurement methods will be published	**Standardisation needs**: ESO are expected to develop Harmonised Standards to measure and calculate the energy efficiency, hydraulic power, power consumption and associated characteristics of standalone circulators and glandless circulators integrated in products falling into the scope of Reg. 2009/341. The Commission will publish the Harmonised Standard EN 60034 in the OJ as soon as deliverables are received **Technical Committee(s)**: TC2 and TC22X, TC17B, with consultation of TC59X **Consultant**: AEA Technology, the United Kingdom **Main stakeholder(s)**: EUROPUMP	Target date for delivery under M/470: • Stage 1 requirement: 12 months after acceptance • Stage 2 requirements: 36 months after acceptance
Tertiary and office lighting	Reg. 2009/245 adopted **Mandate M/485** sent to ESO on 2 February 2011 Transitory measurement method published in OJEU 2010/C 92/04 of 10th April 2010	**Standardisation needs**: Possible horizontal standardization issues are: • Standby and off mode power • Luminaire efficiency • FL ballast efficiency (amend EN 50294) • HID ballast efficiency measurement method **Technical Committee(s)**: CIE, IEC TC34 and SCs, CLC TC 34Z / IEC TC 34C **Consultant**: VITO - Flemish Institute for Technological Research, Belgium	Target date for delivery under M/485: 12 months after acceptance, except as regards the method to measure the power of electronic ballasts for HID lamps (18 months after acceptance)

		Main stakeholder(s): CELMA, ELC	
Household refrigerating appliances	Ecodesign Reg. 643/2009 and Energy labelling Reg. 1060/2010 adopted. **Mandate M/459** (accepted) Transitory measurement method for the purpose of Ecodesign Reg. 643/2009 published in OJEU 2010/C 16/09 of 22nd January 2010 Transitory measurement method for the purpose of Energy Labelling Reg. 1060/2010 to be published in OJEU-C by end February 2011	**Standardisation needs**: Revision of current performance measurement for cooling appliances **Technical Committee(s)**: CLC TC59X **Consultant**: ISIS - Istituto di Studi per l'Integrazione die Sistemi, Italy **Main stakeholder(s)**: CECED	Target date for delivery under M/459: 18 months after acceptance
Household washing machines	Ecodesign Reg. 1015/2010 and Energy labelling Reg. 1061/2010 adopted **Mandate M/458** (accepted) No transitory measurement method will be published	**Standardisation needs**: Creation of EN60436 in agreement with IEC60456 and including additional characteristics **Technical Committee(s)**: CLC TC59X **Consultant**: ISIS - Istituto di Studi per l'Integrazione die Sistemi, Italy **Main stakeholder(s)**: CECED	Deadline for the voting procedure on prEN standard: 11/02/2011
Household dishwashers	Ecodesign Reg. 1016/2010 adopted **Mandate M/481** sent to ESO on 17/01/2011 Transitory measurement method to be published in the near future	**Standardisation needs**: Revise and modify as necessary EN 50242 and EN 60456. In particular, M/481 specifies that EN standards should identify and control the sources of variability of test results and provide values for measurement uncertainties, notably for market surveillance purposes. **Technical Committee(s)**: CLC TC59X **Consultant**: ISIS - Istituto di Studi per l'Integrazione die Sistemi, Italy **Main stakeholder(s)**: CECED	Target date for delivery under M/481: 12 months after acceptance
Room air conditioning appliances, local air coolers and comfort fans	Preparatory study completed **Mandate M/488** sent to ESO in February 2011	**Standardisation needs**: ESO are requested to develop Harmonised Standards to measure and calculate: • Air conditioners below 12 kW: seasonal energy efficiency ratio (SEER); seasonal coefficient of performance (SCOP); power consumption in auxiliary power modes; indoor and outdoor A-weighted sound power; design refrigerant mass; energy efficiency ratio (EER) ; coefficient of performance (COP) ; cooling and heating capacity; air flow rate	Target date for delivery: 16 months after acceptance

		• comfort fans below 125kW: air flow rate; service value (SV); power consumption in auxiliary power modes; sound power This implies the revision of current standards (EN 14511-1; EN 15218:2006; EN 12102:2008) and the finalisation of prEN 14826:2009 **Technical Committee(s)**: to be decided **Consultant**: ARMINES, France **Main stakeholder(s)**: CECED, EPEE	
Imaging equipment (copiers, faxes, printers, scanners, multifunctional devices)	**Mandate M/462** (accepted)	**Standardisation needs**: No standardisation need is identified. Measurement methods are available in the applicable Commission Decision of 16 June 2009, OJ L 161, p. 16 implementing the Energy Star Programme. The Ecodesign regulation will cross-reference them. **Technical Committee(s)**: CLC/TC 108X, JTC 1 /SC28 and TC42 **Consultant**: Fraunhofer Institute for Reliability and Microintegration, IZM, Germany **Main stakeholder(s)**: Digital Europe	No activity
Variable Speed Drives and Power Drive Systems, including voltage regulators	**Mandate M/476** sent to ESO	**Standardisation needs**: ESO are requested to develop Harmonised Standards containing methods for measuring the energy consumption, energy efficiency, load and speed profiles and associated characteristics of either Variable Speed Drives or Power Drive Systems **Technical Committee(s)**: CLC TC22 and TC2X WG6, coordinating the work on system metrics; in close cooperation with IECTC2 WG28 and WG 31 and CLC TC2 **Main stakeholder(s):** drive manufacturers (no EU federation yet), CEMEP, ORGALIME	Target date for delivery under M/476: 36 months after acceptance
Water Pumps	Individual draft mandate sent to ESO for informal consultation. Final mandate to be sent to ESO shortly	**Standardisation needs**: ESO are requested to develop Harmonised Standards covering the measurement and calculation of the following parameters: • Energy Efficiency • Hydraulic power • Power consumption • Associated characteristics **Technical Committee(s)**: In particular, the standardisation work should be performed in close cooperation with CLC TC 22 X	Target date for delivery: 12 months after acceptance

		WG6 **Consultant**: AEA Technology, the United Kingdom **Main stakeholder(s):** EUROPUMP	
Fans	Individual draft mandate sent to ESO for informal consultation. Final mandate to be sent to ESO shortly	**Standardisation needs**: ESO are asked to translate ISO 12759 into a Harmonised Standard containing methods to measure the energy efficiency and associated characteristics of fans driven by motors with an electric input power between 125 W and 500 kW, with special attention to in-situ testing and testing of fans with housing, as necessary **Technical Committee(s)**: CEN TC 159 **Consultant**: AEA Technology, the United Kingdom **Main stakeholder(s):** Eurovent, AMCA Europe	Target date for delivery: 12 months after acceptance
Vacuum cleaners	**Mandate M/353** (accepted) GRANT AGREEMENT SA/CLC/ENTR/353/2007-05 "Measurement standard concerning household electrical appliance: Vacuum Cleaner"	**Standardisation needs**: pr EN 60312 covers the main element included in the mandate in particular measurement of • Dust re-emission (small particulates) • Cleaning efficiency • Energy consumption **Technical Committee(s)**: CLC TC59X WG6 **Consultant**: AEA Technology, the United Kingdom **Main stakeholder(s)**: CECED	Target date for delivery is specified under M/353
PRODUCT GROUPS COVERED BY THE PRESENT HORIZONTAL MANDATE (Additional technical details for the expected standardisation work will be provided through updates of Annex B)			
PRODUCTS MENTIONED IN ARTICLE 16 OF THE ECODESIGN DIRECTIVE 2009/125/EC AS PRIORITY FOR THE ADOPTION OF IMPLEMENTING MEASURES BY THE COMMISSION			
Boilers and combi-boilers (gas and oil fired boilers, heat pumps and mCHP)	Adoption of the Ecodesign Implementing Reg. is planned in 2nd half 2011 Technical details on expected standardisation work will be specified in an update to Annex B at the time when the Ecodesign Implementing Reg. is adopted	**Standardisation needs**: ESO are expected to develop harmonised standards covering: • Measurement of space heating energy efficiency of fossil fuel boilers, mCHP and heat pumps • Classification of controls • Energy performance of solar thermal parts • Emissions of nitrogen oxides and carbon monoxide • Methods for calculating the seasonal room heating energy efficiency of fossil fuel boilers, mCHP and heat pumps, their combinations, and their combinations with controls, solar thermal parts, pumps and storage tanks	4th quarter 2012

		• Measurement of water heating energy efficiency of combi-boilers • Methods for calculating the water heating energy efficiency of combi-boilers, and their combinations with solar thermal parts, pumps and storage tanks Available standards include EN 50465 for mCHP and EN 303 for gas boilers. **Technical Committee(s)**: CEN/TC 109 (central heating boilers using gaseous fuels), CEN TC/299 (gas-fired appliances) CEN TC 113, CEN TC/57 and TC/228 (heating systems); CEN/TC 312 (thermal solar systems and components) and Joint Working Group CEN/CLC FCGA as regards mCHP **Consultant**: Van Holstejn en Kemna B.V. (VHK), the Netherlands **Main stakeholder(s)**: EHI, Eurovent, EHCA, AEGPL, ESTIF, Europump, Eurofuel, Marcogaz, EHPA, COGEN, OPENTHERM, EPEE	
Water heaters (gas, electric, oil)	Adoption of the Ecodesign Implementing Reg. is planned in 2nd half 2011 Technical details on expected standardisation work will be specified in an update to Annex B at the time when the Ecodesign Implementing Reg. is adopted	**Standardisation needs**: ESO are expected to develop harmonised standards covering: • Measurement of water heating energy efficiency of fossil fuel water heater, electric water heaters and heat pump water heaters • Energy performance of solar thermal parts • Standing losses of hot water storage tanks • Emissions of nitrogen oxides and carbon monoxide • Methods for calculating the water heating energy efficiency of water heaters and their combinations with solar thermal parts, pumps and storage tanks Parts of the standardisation needs described above are covered by the on-going work under mandate M/324, prEN 50440 (electric storage water heaters) and draft prEN 50193 (electric instantaneous water heaters) Available standards include EN 15033 for GPL water heaters and EN 13203 (parts 1 to 5) for domestic gas appliances for hot water **Technical Committee(s)**: CLC/TC59X; CEN/TC312 (thermal solar systems and components); CEN/TC 109 (Central heating boilers using gaseous fuels); CEN/TC48 (Domestic gas-fired water	4th quarter 2012

		heaters), CEN/TC 181 (dedicated liquefied petroleum gas appliances) **Consultant**: Van Holstejn en Kemna B.V. (VHK), the Netherlands **Main stakeholder(s)**: CECED, EHI, EHCA, AEGPL, ESTIF, EHPA, Marcogaz, Eurofuel, EPEE	
Personal computers (desktops and laptops) and computer monitors		**Standardisation needs**: No standardisation need has been identified. Measurement methods are available in the applicable Commission Decision of 16 June 2009, OJ L 161, p. 16 implementing the Energy Star Programme. The Ecodesign regulation will cross-reference them. **Technical Committee(s)**: CLC/TC 108X or TC100 **Consultant**: Industrial Research and Development Corporation (IVF), TCO Development and Swedish Environmental Research Institute Ltd. (IVL) **Main stakeholder(s)**: Digital Europe	No activity (no specific standardisation work expected from ESO)
Complex Set Top Boxes	Draft voluntary agreement by the Digital Interoperability	**Standardisation needs**: No standardisation need has been identified. The applicable measurement method is included in the Voluntary Agreement **Technical Committee(s)**: CLC TC209 and 206 **Consultant**: BIO Intelligence Service, France **Main stakeholder(s)**: the Digital Interoperability	No activity (no specific standardisation work expected from ESO)
Non directional household lamps	Reg. 2009/244 adopted Technical details on expected standardisation work will be specified in an update to Annex B at the time when the future Ecodesign Implementing Reg. on directional lamps is adopted (in 2011) Transitory measurement methods are published in Annex III of the Regulation	**Standardisation needs**: • Lamp energy efficiency • Lamp functionality parameters ESO are expected to develop Harmonised Standards for the purpose of the Ecodesign Implementing Reg. on the basis of the EN standards listed in Annex III of the Regulation. The EN standards will have to be extended to the lamp types covered by the Regulation but not yet by the standards in question or separate standards will have to be developed and/or harmonised to measure the same parameters in those lamps types. Measurement methods listed in Annex III but which are not EN standard will have to be harmonised as EN standards. ESO will be able to build on the several related international standards currently under development or revision **Technical Committee(s)**: CLC/34A	2nd half 2013

		Consultant: VITO - Flemish Institute for Technological Research, Belgium **Main stakeholder(s)**: CELMA, ELC	
Directional lamps and household luminaires	Adoption of the Ecodesign Implementing Reg. is planned in 2011 Technical details on expected standardisation work will be specified in an update to Annex B at the time when the future Ecodesign Implementing Reg. is adopted, jointly with details for standardisation work under Regulation 244/2009 Transitory measurement methods will be published in the OJ in 2011	**Standardisation needs**: ESO are expected to develop harmonised standards covering: For directional lamps (all technologies): • energy efficiency • power • luminous flux • voltage • cap type • life time in hours • premature failure rate • number of switching cycles before failure • colour temperature • colour rendering • colour consistency (for LEDs) • starting time • warm-up time up to 60% of the full light output • dimmability; • dimensions in millimetres (length and diameter); • peak intensity in candela • beam angle in degrees [°] • power factor • lumen maintenance factor at the end of the nominal life • mercury content • UVA, UVB, UVC and blue light emissions For other products: • standby power of lighting transformers • standby power of household luminaires Many related international standards are currently under development or revision. **Technical Committee(s)**: CLC/34A **Consultant : :** VITO - Flemish Institute for Technological	End of 2012

		Research, Belgium **Main stakeholders:** CELMA, ELC	
Household tumble dryers	Adoption of the Ecodesign Reg. expected before 31/12/2011 Technical details on expected standardisation work will be specified in an update to Annex B before 30/05/2011 The Commission considers reviewing the Energy labelling Directive 95/13/EC	**Standardisation needs**: Alignment to the possible modifications of the new standard for household washing machines EN 60456 and IEC 61121. Tasks will include: • procedures and methods for measuring the energy consumption, condensation efficiency, programme time, power consumption and duration of the low power modes, in particular of the left-on mode where the household tumble dryer is equipped with a power management system; and airborne acoustical noise emissions • alignment of the test procedures for electric mains-operated and gas fired household tumble dryers • identifying and reducing uncertainty of measurements • evaluation of the right number of test cycles • taking into account lower loads (referring to 60456) For washer-dryers EN 50229 should be adapted accordingly (washer-dryers should be dealt with separately). **Technical Committee(s)**: CLC TC59X; CEN/TC299 for gas fired household tumble dryers **Consultant**: PriceWaterHouseCoopers **Main stakeholder(s)**: CECED	31/12/2012.
Commercial refrigeration (display cabinets and cold vending machines)	Update of preparatory study is on-going. Adoption of an Ecodesign Reg. is planned in 2015. Technical details on the expected standardisation work will be specified in an update to Annex B	**Standardisation needs**: Display cabinets: EN ISO 23953 covers the basic needs for measurement of energy consumption, total display area and volume. Cold Vending Machines: ESO are expected to develop a new EN standard (basis: EVA-EMP protocol) **Technical Committee(s)**: CEN/TC 44 **Consultant**: BIO Intelligence Service, France and Joint Research Centre, Spain. **Main stakeholder(s)**: Eurovent, Cecomaf, EPEE	
Solid fuel boilers	Preparatory study completed (as well as background study in view of impact assessment). Adoption of regulations foreseen late 2013/early	**Standardisation needs**: In view of the adoption of an Ecodesign Implementing Reg., ESO are expected to develop harmonised standards covering:	Mid-2015

	2014.	• Measurement of space heating energy efficiency of solid fuel boilers • Emissions of NOx, CO, Organic Gaseous Compounds • Emissions of Particulate Matter, and its particle size distribution (subdivided in relevant size classes) • Methods for calculating the seasonal room heating energy efficiency of solid fuel boilers and their combinations with controls, if appropriate **Technical Committee(s)**: TC 57 **Consultant**: BIO Intelligence Service, France, and Van Holsteijn en Kemna (VHK), the Netherlands **Main stakeholder(s)**: EHI, ECOS	
Professional washing machines, dryers and dishwashers	Preparatory study ending by 28/02/2011	**Standardisation needs** For washing machines, dryers and dishwashers, standardisation work should define: • Ambient temperature and humidity; • Input water temperature; • Input temperature for the wash ware; • Selection of program ('standard' washing and drying programmes) and program duration; • Cleaning capacity; • Type (formulation) and dosage of detergent (and rinse aid for dishwashers); • Standard wash ware and laundry; • Soiling of the items including dry-on time of the soiling; • Type and dosage of detergents. Measurement methods for the following parameters should be developed: • Cleaning and possibly rinsing results and hygienic performance; • Energy and water consumption during continuous use or per cycle at full and partial loads; possibly consumption in other than 'standard' program • Energy demand in standby modes (ready-to-use, left-on, and if applicable: off mode);	2013

		• For professional washing machines: residual moisture content and spinning efficiency The standardisation work should aim at giving results close to real-user behaviours and include an estimate of measurement variation, which should be reduced to the minimum possible. **Technical Committee(s)**: CLC TC 59X (except for hygienic performance), CEN/TC 299 (gas-fired household appliances) **Consultant**: BIO Intelligence Service, France and Öko-Institut, Germany **Main stakeholder(s) (for the three major producing EU Member States):** • Germany: HKI (Industrieverband Haus-, Heiz und Küchentechnik e.V. – German association of domestic heating and cooking appliances); and VGG (Vereinigung Gewerbliches Geschirrspülen – Association of commercial dishwashing); • Italy: CECED Italia (national association of producers of domestic and professional appliances); • Spain: FELAC (Federación Española de Asociaciones de Fabricantes de Maquinaria para Hostelería, Colectividades e Industrias Afines – Spanish Federation of Associations of Manufacturers of Machinery for Hospitality, Collectivities and Allied Industries)	
PRODUCT GROUPS LISTED IN THE FIRST ECODESIGN WORKING PLAN COM (2008)660			
Professional refrigeration (service cabinets, blast cabinets, walk-in cold rooms, chillers, remote condensing units)	Preparatory study to be finalised before end of February 2011 Adoption of an Ecodesign Implementing Reg. is planned before mid-2012	**Standardisation needs**: • Service cabinets: adaptation of EN ISO 23953 to the measurement and testing of energy consumption of storage refrigerated cabinets to replace EN411:1995 (adaption is necessary for at least 3 basic parameters: door openings; M-package positioning; ambient temperature). A first agreement on the main parameters of the future measurement method between the major stakeholders is expected before June 2011. • Blast cabinets: ESO are expected to develop a Harmonised Standard containing methods and testing procedures for measuring the energy consumption of blast cabinets, on the basis of the French standard AC D40-003	Mid-2013

		• Walk-in Cold Rooms: ESO are expected to develop a Harmonised Standard covering the following parameters: o Measurement of the overall energy performance of cold rooms (existing approaches include the draft US Department of Energy test protocol, the ATP standard for refrigerated transport, and the EN ISO 23953 for display refrigerated cabinets) o Measurement of the overall thermal performance of the insulated envelope of the cold room (excluding the measurement and testing of the energy consumption of the refrigeration system). Available standards include ETAG 021 for measuring the thermal performance of insulating panels and cold room kits; EN 13163:2009, EN 13164:2009, EN 13165:2009 and EN 13166:2009 for measuring the thermal performance of insulating materials; the US Department of Energy test protocol as regards the heat load of the insulated envelope o As necessary, measurement and testing of the energy performance of fan motors (on the basis of EN60034 defining efficiency classes for electric motors and related work in IEC TC 2 and TC 22, to be adapted for small motors <0.75kW) and fans (on the basis of ISO12759 defining efficiency grades for fans). • Remote condensing units (packaged): o Update, as necessary, of EN 13215 and EN 13771 to ensure accurate measurement of nominal COP (e.g. as regards ambient temperatures). o Revision, as necessary, of EN 13215 and EN 13771 to take seasonality (ESEER, SCOP) and partial loading into account • Chillers: development of a Harmonised Standard containing methods and test procedures to measure the energy performance, COP and refrigerant charge of chillers, on the basis of EN 14511 and prEN 14825 **Technical Committee(s)**: CEN/TC 44 (household refrigerated appliances and commercial refrigeration equipment), CEN/TC 113	

		(heat pumps and air conditioning units) **Consultant**: BIO Intelligence Service, France **Main stakeholder(s)**: EFCEM, AREA, CECED, EPEE, ASERCOM	
Distribution transformers	Preparatory study completed Adoption of an Ecodesign Implementing Reg. is planned before mid-2012	**Standardisation needs**: • Standard to measure the load and no load losses for smaller industrial transformers with a high-voltage winding below 1 kV, with a similar method as in the EN 60076-x series. • Standard to define and include fire behaviour of distribution transformers filled with silicon liquid or biodegradable natural esters. • Standard on oil-immersed power transformers from 3150 kVA up to at least 350000 kVA and HV up to at least 400kV including reference series for load and no load losses, inspired by standard DIN 42508. • Add extra no-load classes in standard EN 50464-1 to take account of better performing transformers. • Extend the range from 32 kVA to 3150 kVA and add the inter- and extra-polation method for unlisted ratings in standard EN 50464-1. • Add extra more ambitious no-load and load classes in draft standard prEN50541-1 and standard EN 50464-1. • Introduce EN standards corresponding to the existing IEC standards, as necessary (e.g. IEC 60076-1) • In particular, develop a standard corresponding to IEC 60076-1 and reconsider the maximum allowable tolerances of total losses.. • Modify relevant standards to include the values of the load and no-load losses of the transformer on the rating plate. **Technical Committee(s)**: CENELEC TC 14, TC96 **Consultant**: VITO NV, BIO Intelligence Service **Main stakeholder(s):** T & D Europe, Eurelectric, ENTSOE	Mid-2013
Sound and imaging equipment	Preparatory study completed	**Standardisation needs**: To be defined after clarification whether and which ecodesign requirements should be set. Possibly measurement of power consumption and environmental performance standards for:	2013

		1) Video players/recorders: revise/modify IEC / EN 62087; consider U.S. ENERGY STAR on audio/video 2.0 2) Projectors: revise/modify IEC / EN 62087, IEC/ EN 61947; address Watts / light output (brightness), including issues of IEC/EN illuminance, colour gamut, white/colour light testing, special lens characteristics (e.g. wide/short throw) and special light path filtering 3) Game consoles: no existing standard; address Watts / FLOPS or other computational performance metric; consider draft U.S. ENERGY STAR on computers 5.1 (game consoles) 4) Horizontal for the three products: revise/modify IEC 62075 Audio/video, information and communication technology equipment – Environmentally conscious design; including a declaration along the line of ECMA 370 **Technical Committee(s)**: possibly CLC TC100. IEC TC 100 should be consulted **Consultant**: AEA, United Kingdom (preparatory study finished 11/2010) **Main stakeholder(s):** Digital Europe	
Laboratory and industrial ovens and furnaces	Preparatory Study ending in Nov. 2011	**Standardisation needs**: ESO are expected to develop Harmonised Standards covering the following equipments and parameters: • <u>Industrial ovens and furnaces:</u> o Translation of the draft ISO 13579-1 into an EN standard covering furnaces and ovens of all types and sizes, in coordination with the ongoing work in ISO TC 244 o As necessary, development of an EN standard containing methods to measure the insulation performance of the chamber (possibly on the basis of EN 13732-1 if insulation performance is controlled through the outer wall surface temperature) o As necessary, development of an EN standard containing methods to measure the gas to air ratio in burners	2014

		○ As necessary, development of an EN standard containing methods to measure the rate of waste heat recovery (related parameters such as exhaust gas temperature and preheated air temperature should be taken into account) • Laboratory ovens and furnaces: development of a Harmonised Standard containing methods and testing procedures to measure the energy consumption and energy efficiency (possibly on the basis of the wet brick test included in the ENAK standard for commercial steam ovens) **Technical Committee(s)**: CEN TC/186, CLC/SR27, CLC/TC62 **Consultant**: Cobham (ERA Technology Limited, UK) **Main stakeholder(s):** CECOF, ORGALIME, VDMA, BIFCA, GAMBICA, FME	
Machine tools	Preparatory Study ending in Nov. 2011	**Standardisation needs**: At the moment no specific standardisation which could significantly influence the ecological performance is readily available for the product scope of the study. However, the ongoing work by ISO TC 39 on environmental evaluation of machine tools should be carefully taken into consideration. The potential need for standards supporting regulation is identified in the field of power consumption, power modes, and power management as well as on consumption of lubricants, compressed air, water, and waste. However certain noise measurement standards exist which could provide a sound basis for environmental standards. **Technical Committee(s)**: Indicatively CEN TC121, TC123, TC142, TC143, TC145, ISO TC39 **Consultant**: Fraunhofer institute **Main stakeholder(s): CECIMO, EUROMAP, ORGALIME, EUMABOIS, CEMEP, EWA**	2014
Air conditioning and ventilation systems	Preparatory Study ending in Nov. 2011	**Standardisation needs**: To be defined when scope of the foreseen measure is clear. Preliminary scope of preparatory study, possibly measurement and calculation of power consumption and environmental performance standards for:	2014

		Air conditioning products, except air-to-air air conditioners ≤ 12kW covered separately: 1) Cooling generators: Package, split and multi split air conditioner [air-to-air > 12 kW, water-to-air, evaporatively cooled], Roof tops [air-to-air], VRF systems (centralized air conditioning systems with refrigerant fluid as the main media to circulate and extract heat from the building) [air-to-air and water-to-air], Chillers for air conditioning applications [air-to-water, water-to-water, evaporatively cooled], Renewable cooling: evaporative and desiccant cooling, solar cooling; existing standards: EN 14511, prEN 14825, EN 12309, EN 15218, EN 12102 2) Air circulation and air treatment: Air Handling Units including energy consuming subsystems as air to air heat recovery air conditioning units, Cooling coils; existing standards: EN 13053, EN 1216 3) Terminal units to extract heat from the space to be conditioned: Fan coils, active ceiling beams, water-to-air air conditioners, existing standards: EN 1397, EN 14240, EN 14518, EN 15116, EN 1264, EN 15377 4) Heat extraction means from the cooling system: Cooling towers, Dry coolers; existing standards: EN 1048, EN 14705, EN 13741 5) Controls to minimize energy consumption of air conditioning systems including Building Energy Management Systems (BEMS) *Non-domestic ventilation products:* 1) Dedicated ventilation exhaust air handling units, rooftop and box fans, including controls 2) Dedicated ventilation supply air handling units, including controls 3) Combined mechanical supply and exhaust ventilation air handling units, including controls and heat recovery 4) Units acc. nrs 1 to 3, incorporating the capability of switching from mechanical to natural mode 5) Controls used to optimize ventilation rates 6) Electrically operated inlet/outlet openings/grids Existing standards: EN 13053, EN 1886, ISO 5801, ISO 12248,	

		ISO 5221, ISO 5136, ISO 3746, EN 1751, EN 1216, EN 779, EN 308 **Technical Committee(s)**: **to be decided**, consult ISO/TC 205/WG9 **Consultant**: ARMINES, France **Main stakeholder(s):** Eurovent, EPEE, EVIA	
Domestic ventilation	Preparatory study completed in 2009. Additional stakeholder study completed in 2010.	**Standardisation needs:** More details on the expected standardisation work will be provided once the scope of the future Implementing Measure is clarified. Standardisation work will include at least measurement methods for energy efficiency and sound power of appliances such as exhaust fans, heat recovery appliances (or systems) and/or kitchen hoods, taking into account standards such as CEN prEN 13141-7:June 2010, prEN 13141-8:July 2010, EN 13141-6:Jan.2004, prEN 13142: Jan.2010 (Rev. V7), CENELEC EN 61591:1997 + A1:2006 + A2: 2010, EN 60704-2-13:2000 + A1:2006 + A2:2008, EN 60704-3:2006. **Technical Committee(s)**: to be decided **Consultant**: ARMINES, France **Main stakeholder(s):** Eurovent, EPEE, EVIA	1st quarter 2012
Local space heaters room heating products This product group comprises products from the scope of the DG ENER Lot 20 study of local room heating products, with direct heating products from DG ENER Lot 15.	ENER Lot 20 Preparatory study finalised May 2012 ENER Lot 15 preparatory study finalised September 2009 Commission Services Working Document presented and discussed 20 September 2012	**Standardisation needs:** ESO are requested to develop Harmonised Standards containing procedures and methods for establishing product characteristics and features for the provision of (ie.) a seasonal efficiency value and information requirements. The product scope covers: • Domestic local space heaters (using solid, gaseous or liquid fuels or electricity as energy input) with typical products being: solid fuel fired stoves and fireplaces, gas or liquid fuel fired stoves and fireplaces and electric heaters (fixed or	Indicatively two years after entry into force of Regulation, foreseen for 2014

		portable); • Commercial local space heaters (using gaseous or liquid fuels as energy input) with typical products being: luminous heaters for commercial markets. Performance and chracteristics are to be established for standard rating conditions (or nominal operating conditions) and non-nominal load conditions (at least minimum load conditions). The following parameters are to be addressed: Domestic solid fuel fired local space heaters • Useful heat output, energy input and thermal efficiency in nominal and part load (minimum load) conditions; • Emissions to air for particulate matter (PM), organic gaseous compounds (OGC), carbon monoxide (CO), nitrogen oxides (NOx), whereby for both PM and OGC the heated sample, without dilution of flue gas method (mg/Nm3) and the natural draft with dilution tunnel method (in g/kg dry fuel) are to be described; • Electric energy input at nominal, part load and standby mode conditions; • Method to verify the type of heat output control, including options for room temperature control; • Power requirement for a (permanent) pilot flame Domestic gaseous or liquid fuel fired local space heaters • Useful heat output, energy input and thermal efficiency in nominal and part load (minimum load) conditions;	

		• Emissions to air for nitrogen oxides (NOx, in mg/kWh fuel input, GCV) • Electric energy input at nominal, part load and standby mode conditions; • Method to verify the type of heat output control, including options for room temperature control; • Power requirement for a (permanent) pilot flame Domestic electric local space heaters • Useful heat output in nominal and part load (minimum load) conditions; • Electric energy input at nominal, part load and standby mode conditions; • (for electric storage heaters) Method to verify the type of heat input and output control, such as options for charge control in relation to room temperature and/or other parameters such as form of heat emission (fan-assisted or not); • Method to verify the type of heat output control, including options for room temperature control; • Method to verify the type of other control options, including options for use of timers, presence detection, distance control and/or adaptive start; Luminous heaters • Useful heat output, energy input and thermal efficiency in nominal and part load (minimum load) conditions; • Envelope losses and method to verify intended installation	

		• Radiant factor at in nominal and part load (minimum load) conditions - also if placed on market as tube heating system; • Method to verify the type of heat output control • Electric energy input at nominal, part load and standby mode conditions • Power requirement for a (permanent) pilot flame **Technical Committee(s):** • CEN/TC 295 Residential solid fuel burning appliances • CEN/TC 62 Independent gas-fired space heaters • CEN/TC 46 Fireplaces for liquid fuels • CEN/TC 181 Dedicated liquified petroleum gas appliances • CEN/TC 180 Decentralized gas heating • CEN/TC 228 Heating systems in buildings • CLC TC59X as regards electric room heating appliances **Consultant: BIO Intelligence Service, France, VHK research-design-engineering, Netherlands** **Main stakeholder(s):** ELVHIS, CECED, CEFACD, ECOS, ANEC, BEUC	
Central heating products using hot air to distribute heat (other than CHP) This product group comprises products from the scope of the DG ENER Lot 21 study of central air heating products, with cooling products from DG	Preparatory study ongoing ENER Lot 21 Preparatory study finalised July 2012 ENTR Lot 6 preparatory study finalised July/September 2012 Commission Services Working Document to be during 2013	**Standardisation needs:** ESO are requested to develop Harmonised Standards containing procedures and methods for establishing product characteristics and features for the provision of (ie.) a seasonal efficiency value, and information requirements. The product scope covers:	2014

ENTR Lot 6.		• Warm air heaters (using gaseous or liquid fuels or electricity as energy input) with typical products being: domestic central warm air heaters and non-domestic warm air heaters (central and local); • Chillers, airconditioners and heat pumps (using gaseous or liquid fuels or electricity as energy input) with typical products being: water-cooled chillers, air-coolded chillers, air conditioners and heat pumps, (both air-to-air and water/brine-to-air). Performance and chracteristics are to be established for standard rating conditions (or nominal operating conditions) and non-nominal load conditions (ie. part load conditions). The following parameters are to be addressed: Warm air heaters • Useful heat output, energy input and thermal efficiency in nominal and part load (minimum load) conditions; • Envelope losses and method to verify intended installation • Flow rate and air temperature inlet/outlet in nominal and part load (minimum load) conditions to establish emission efficiency; • Method to verify the type of heat output control • Electric energy input at nominal, part load and standby mode conditions • Power requirement for a (permanent) pilot flame • Method to verify the type of flue venting (gravity vented or forced draft); Chillers, air-conditioners and heat pumps, for both electric motor	

		driven and fuel driven (gas engine or sorption process) products: • Useful heat output or cooling power, energy input and related performance (for cooling: energy efficiency ratio, for heating: coefficient of performance) in nominal and part load conditions; • Cycling interval cooling or heating output power; • Cycling interval energy input; • Cycling degradation coefficient; • Electric power requirement when in off mode, thermostat-off mode, crankcase heater mode; • Rated air flow rate (air-to-water, outdoor heat exchanger flow); • Rated water flow rate (for water/brine-to-water, outdoor heat exchanger flow); • Method to verify the type of capacity control; • Sound power level indoor and/or outdoor (where relevant); • Emissions to air for nitrogen oxides (NOx, in mg/kWh fuel input, GCV), where relevant; **Technical Committee(s):** CEN/TC 180 Decentralized gas heating (ie. Warm air heaters) CEN TC 57 Central heating appliances CEN/TC 113 heat pumps and air conditioning units CEN/TC 299 Gas-fired sorption appliances, indirect fired sorption appliances, gas-fired endothermic engine heat pumps and domestic gas-fired washing and drying appliances **Consultant:** BIO Intelligence Service, France, VHK research-design-engineering, Netherlands **Main stakeholder(s):** Eurovent, EPEE, EHPA, Euro-Air, ECOS, ANEC, BEUC	

Domestic and commercial ovens (electric, gas, microwave)	Preparatory study ending in March 2011	**Standardisation needs**: • Domestic Electric Ovens: Common modifications to IEC 60350-1 Ed. 1.0 to measure the "cooling down period" to be prepared for the calculation of a yearly energy consumption. • Domestic Microwave ovens: Common modifications to IEC 60705 Ed 4.0 to measure the energy consumption per cooking cycle and cooling down period. First agreement on procedure within TC 59 X (TC59X/535/DC) • Domestic Combination microwave ovens: Find a solution how to proceed with combination ovens (primary and secondary function. (Adaption of IEC 60350-1 Ed. 1.0 and IEC 60705 Ed. 4.0.) • Identify oven relevant requirements additional to EN 62301 Ed. 2.0 to measure low power modes • Electric ovens for commercial use: no activity Available standards include EN 203-2-1 for gas devices with open flames, EN 484 for gas stoves, EN 203-2-3 for gas ovens **Technical Committee(s)**: CEN/TC 180 (non-domestic gas-fired overhead radiant heaters), CEN/TC 181 (dedicated liquefied petroleum gas appliances), CLC TC59X, CEN TC 49, CEN /TC 106 (large kitchen appliances using gaseous fuels) **Consultant**: BIO Intelligence Service, France and Cobham (ERA Technology Ltd), the United Kingdom **Main stakeholder(s)**: CECED, AEGPL, MARCOGAZ, EFCEM	2012 No activity
Domestic and commercial hobs and grills	Preparatory study ending in March 2011	**Standardisation needs**: • Grills and roasters: Creation of new EN standards to deal with energy performance. • Domestic Electric hobs: Common modifications to IEC 60350-2 Ed. 1.0 to measure the energy consumption of a hob applicable for different technologies (induction, radiant, solid plates). First agreement within CLC TC 59 X	work not started yet 2012

		on procedure for one cooking zone. (TC59X/534/DC) • Domestic Gas hobs: Modification to EN 30-2-1 to include measurement of energy needed to maintain a given temperature, in addition to heating up time that is already covered. • Identify hob relevant requirements additional to EN 62301 Ed. 2.0 to measure low power modes • Electric hobs for commercial use: no activity **Technical Committee(s)**: CLC TC59X, CEN TC 49 (for domestic gas cooking appliances), CEN TC 106 (for Commercial Cooking Appliances), CEN/TC 181 (dedicated liquefied petroleum gas appliances) **Consultant:** BIO Intelligence Service, France and Cobham (ERA Technology Ltd), the United Kingdom **Main stakeholder(s)**: CECED, EFCEM	2012 no activity
Non-tertiary coffee machines	Preparatory study ending in April 2011	**Standardisation needs**: ESO are expected to develop Harmonised Standards containing methods for measuring the performance of electric household coffee makers. EN 60661 European standard was issued 2001 and IEC 60661 International standard in 2006 • Test method for pressure machines: almost finished • Test method for drip filter machines: discussion is ongoing. The Ecodesign preparatory study by BIO Intelligence Service recently provided further information to feed into the work of the TC. Round robin test to be performed and planned to be presented mid-April 2011. **Technical Committee(s)**: CLC TC59X **Consultant**: BIO Intelligence Service, France and Cobham (ERA Technology Ltd), the United Kingdome **Main stakeholder(s)**: CECED	End of 2012
Networked standby losses	Preparatory study ending in February 2011	**Standardisation needs**: ESO are expected to develop Harmonised Standards including: • Horizontal standard for measurement of power consumption of low power consumption operating conditions of household and office equipment involving data exchange of products in communication networks under several communication	1st quarter 2012

		standards • Definition of operating conditions for measurements of energy consumption of variable power consumption characteristic for relevant network communication standards, such as Wi-Fi • Revised EN 62301 expected to contain relevant elements, e.g. as related to measurement instruments **Technical Committee(s)**: To be decided **Consultant**: Fraunhofer Institute for Reliability and Microintegration, IZM, Berlin **Main stakeholder(s)**: Digitaleurope, CECED, Orgalime	
Uninterruptible Power Supplies	Preparatory study launched in February 2012	**Standardisation needs**: **Technical Committee(s)**: To be decided **Consultant**: **Main stakeholder(s)**:	2015-2016
Pumps for private and public waste water and for fluids with high solids content	Preparatory study launched in February 2012 Finalisation expected by February 2014	**Standardisation needs**: **Technical Committee(s)**: To be decided **Consultant**: BIO IS **Main stakeholder(s)**: EUROPUMP, ECOS, ANEC, BEUC	2015-2016
Pumps for private and public swimming pools, ponds, fountains, aquariums, as well as clean water pumps larger than those regulated under Regulation 547/2012	Preparatory study launched in February 2012 Finalisation expected by February 2014	**Standardisation needs**: ISO9906 shall be used for measuring the energy efficiency, hydraulic power, power consumption and associated characteristics of pumps. If needed the standard shall be adapted to cover the final scope and requirements: ESO are requested to take into account standards and technical specifications developed on power drive systems, motor starters and their driven applications developed at European and IEC level. The standards shall cover pumps for private and public swimming pools, ponds, fountains, aquariums and pumps larger than those covered under Regulation 547/2012. The standards shall provide a methodology for measuring the	2015-2016

		efficiency of the pumps when considered as an extended product integrated into a system. ESOs are requested to ensure cooperation with IEC TC22X and IEC TC2. **Technical Committee(s):** CEN TC 197, CLC TC 22 X WG6 **Consultant:** BIO IS **Main stakeholder(s):** EUROPUMP, ECOS, ANEC, BEUC	
Steam boilers (< 50MW)	Preparatory study launched in June 2013	**Standardisation needs:** ESO are expected to develop/amend/adapt harmonized standards covering: • Measurement of containing procedures and methods for measuring the energy efficiency and associated characteristics such as mechanical output power and electrical input power of electric motors within the final scope of steam boilersthe Regulation fed by a converter or a soft starter. • Classification of steam boilers • Emissions of nitrogen oxides and carbon monoxide **Technical Committee(s)**: To be decided **Consultant**: PriceWaterhouseCoopers **Main stakeholder(s)**: EHI, Orgalime	2015-2016
Compressors	Preparatory study launched in February 2012 Finalisation expected by February 2014	**Standardisation needs**: ESO are requested to develop Harmonised Standards containing procedures and methods for measuring the energy efficiency (possibly expressed as isentropic efficiency) at certain operating points (to be decided), and associated characteristics such as flow rate, absolute pressure difference and (electric) power input, at standard rating conditions (or nominal operating	Target date for delivery under M/495: 12 months after finalisation of preparatory study

		conditions) and non-nominal load conditions (idle mode, part load, etc.), possibly using expressions such as free air delivery, absolute pressure at inlet and outlet, electric input power for described conditions, including definitions for duty cycles (possibly in accordance with IEC 60034-1), for compressors (incl. compressor packages) driven by electric motors. **Technical Committee(s)**: On the performance of displacement (volumetric) compressors: ISO 1217 was prepared by Technical Committee ISO/TC 118, Compressors and pneumatic tools, machines and equipment, Subcommittee SC 6, Air compressors and compressed air systems On the performance of turbocompressors (dynamic compressors): ISO 5389 was prepared by Technical Committee ISO/TC 118, Compressors and pneumatic tools, machines and equipment, Subcommittee SC 1, Process compressors On safety requirements of compressors and vacuum pumps: The EN 1012 series is prepared by CEN/TC 232 Compressors, vacuum pumps and their systems On noise by compressors and vacuum pumps: the EN ISO 2151 is prepared by ISO TC 118/SC6 in collaboration with CEN/TC 232 Compressors, vacuum pumps and their systems **Consultant**: VHK **Main stakeholder(s)**: PNEUROP; ECOS, ANEC, BEUC	
Window products	Preparatory study to be launched in	**Standardisation needs:** To be decided	

	2013	**Technical Committee(s):** To be decided **Consultant:** VITO **Main stakeholder(s): EuroWindoor, Glass for Europe, European Builders Confederation**	
Power cables	Preparatory study launched in June 2013	**Standardisation needs**: Develop usage patterns and efficiency classes that could underpin the introduction of minimum efficiency requirements and an EU labelling scheme **Technical Committee(s)**: To be decided **Consultant**: VITO **Main stakeholder(s)**: EuropaCable, European Copper Institute	
Enterprises' servers, data storage and ancillary equipment	Preparatory study launched in June 2013	**Standardisation needs**: ESO are expected to: • Develop metrics for measuring energy efficiency of enterprise servers and ancillary equipment, including cooling units **Technical Committee(s)**: To be decided **Consultant**: BIO **Main stakeholder(s)**: Digitaleurope,	
Smart appliances/meters			
Wine storage appliances (c.f. Ecodesign regulation 643/2009)			
Water-related products		**Taps and Showers** *Quality performance criteria* Develop test(s) to assess the quality performance of Taps and Showers irrespective of their water consumption (e.g. user satisfaction, spray force, spray coverage, cleaning of surfaces such as skin and hair)	2015

		Calculating energy efficiency of Taps and Showers Develop a methodology to uniformly calculate the energy savings derived from water efficient Taps and Showers **Toilets and Urinals** *Quality performance criteria* For EN 997 and EN 13407 develop a common way to assess different aspects of performance of toilets and urinals thus eliminating current differences in assessing quality performance (cleansings, functioning, leak tightness, etc) between: - different classes (e.g. Class I and Class II) - different Types (e.g. amount of litres of water consumed, type IV and type V) *Flush Free Urinals* Develop standard assessing minimum level of performance (quality, functionality, smell free, etc) of flush free urinal *Volume of reduced flush for Toilets (EN 997)* Removal of unnecessary minimum volume consumption limits for reduced flush toilets of 5l and 6l toilets (all classes) and at the same time develop test(s) to assess performance of reduced flush so that minimum volume consumption limits arbitrarily set in EN 997 are no longer necessary.	2015
Product Group	**State-of-Play**	**Short description of the expected standardisation work**	**Target date**
HORIZONTAL STANDARDS			
Horizontal standard for measuring the end of life extraction time of key components for the following products (some vertical aspect may be required):	Scoping study to be launched in July 2013; Preparatory study could be launched in 2014	Definition of a general procedure for the measurement of the time for extraction for some identified key components **at the end of life** (in order to improve resource/material efficiency). The procedure should include the definition of some key aspects as: experience of workers, pre-conditions for the measurement, sequence of steps for the extraction, tools/machines to be used for the extraction, tools used for the measurement, tolerance of the	2015

▪ Washing machines ▪ Dishwasher ▪ Electronic displays ▪ Computers/Notebooks ▪ Food preparing ▪ Power generating equipment ▪ Imaging equipment ▪ Network, data processing and data storing equipment ▪ Refrigerating and freezing ▪ Set-top boxes ▪ Sound and imaging equipment under 50 MW		measurements. Some of these key aspects such as the key components, tools to be used, and tolerances could be differentiated (i.e. vertical aspects) for some product groups. **Standardisation needs**: To be decided **Technical Committee(s)**: To be decided **Consultant**: VITO **Main stakeholder(s)**: depends on scope	
Horizontal standard on measuring the reversible disassembly time of key components for the following products (some vertical aspects may be required): ▪ Air conditioning and ventilation ▪ Computers/Notebooks ▪ Dishwasher ▪ Washing machines ▪ Electronic displays ▪ Food preparing equipment ▪ Imaging equipment ▪ Refrigerating and freezing ▪ Set top box	Review of durability requirements by September 2016; general review by July 2018	Definition of a general procedure for the measurement of the time for reversible disassembly, substitution and re-assembly of some identified key components **<u>for durability of the product</u>** (i.e. during maintenance, for re-use or remanufacturing). The procedure should include the definition of some key aspects as: experience of workers, pre-conditions for the measurement, sequence of steps for the disassembly/substitution/re-assembly of key components, tools/machines to be used for the process, tools used for the measurement, tolerance of the measurements. Some of these key aspects such as key components, tools to be used, tolerances, could be differentiated (i.e. vertical aspect) for some product groups. **Standardisation needs**: • Develop methods for full size battery operated vacuum cleaners • Develop measurement method for annual energy consumption, dust pick-up and dust re-emission with a partly loaded bag/receptacle **Technical Committee(s)**: CLC TC59X WG6 (?) **Consultant**: To be decided **Main stakeholder(s)**: CECED, EUnited Cleaning, ECOS, ANEC,	2015

▪ Sound and imaging equipment		BEUC	
Horizontal standard on RRR indexes by mass	Some work already down under IEC/TR 62635	Calculation of recyclability/recoverability/reusability **indexes by mass.** Mass-based indicators assess the amount of reusable / recyclable / recoverable (RRR) materials compared to the overall product mass. Advancements of the proposal made in IEC/TR 62635 concern the verification of these indices. Moreover, the calculation of mass-based and environmental-based indicators requires also the definition of calculation tables about recycling and recovery rates of some specific materials and components for ErP. These tables will have to be built on the basis of literature references and on field surveys at representative EU recycling plants and could be product-group specific. Recyclability/recoverability/reusability indexes could be set at the product level and also for a sub-set of the product (e.g. for parts made of polymers).	2016
Horizontal standard on RRR indexes by environmental impacts	Some work already down under IEC/TR 62635	Calculation of recyclability/recoverability/reusability (RRR) indexes **by environmental impacts**. Environmental-based indicators are calculated upon mass-based indicators including life cycle impacts of materials and components, and related to the overall product life cycle impacts The standard will have also to define appropriate quality-assured Life Cycle Inventory data to be used for the calculations.	2016
Horizontal standard on durability of the following products or their key components: ▪ Washing machine ▪ Dishwasher ▪ Laundry driers ▪ Air conditioning and ventilation	Examples of methods developed by industries for the assessment of durability of products (or some of their critical components for durability).	▪ Develop method for measuring the **durability of products or its key components** (horizontally and or product specific). ▪ Identification of key issues for the measurements (including common steps adopted by different subjects in the measurement). Definition of a product's specific procedure for the measurement/assessment of the durability of products (or some of their critical components for durability).	2015

▪ Heating equipment ▪ Refrigerators ▪ Machine tools ▪ Electric motors ▪ Televisions ▪ Imaging equipment ▪ Computers			