## **WORKING DOCUMENT**

## In the framework of the implementation of Commission Regulation (EU) No.../...implementing Directive 2009/125/EC of the European Parliament and of the Council with regard to ecodesign requirements for refrigerated commercial display cabinets

Product type	Parameter(s) described	Organisation	Reference /Title /Year	Notes
Supermarket segment refrigerated display cabinets	Daily energy consumption, E24h	ISO / CEN	EN ISO 23953-1: Vocabulary; 23953-2: classification requirements and test conditions /2005	This standard classifies supermarket segment refrigeration cabinets, and describes in detail how to measure the energy consumption, expressed in kWh/24h, and the total display area. Measurement takes place using test packages fitted with temperature measurement devices ('M-packages') of known thermal behaviour. A review of the standard is expected to close in the end of 2014.
	Total display area			
Beverage cooler	Daily energy consumption, E24h	CEN TC 44–WG6	-/-/2014	There is no European standard specifically dealing with beverage coolers. A number of company standards developed by beverage companies (Coca- Cola, Pepsi, Heineken, etc) are used nowadays, each with different specifications.
	Net volume			A working group (WG 6) was created in 2014 in CEN TC 44 to develop a specific standard. The standard will likely be based on ISO 23953. Some of the issues to address in the WG are: - how to measure the effect of energy management devices, which have a considerable

## TRANSITIONAL METHODS

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				saving potential; - how to measure dynamic behaviour, such as the speed of refrigeration after reloading, which is a key parameter for beverage companies; - how to define net volume; - which test item to use for measurement (e.g. M-packages as in ISO 23953, or cans or bottles).
Small ice- cream freezer	Daily energy consumption, E24h Net volume	CEN TC 44–WG6	-/-/2014	There is no European standard specifically dealing with small ice-cream freezers. A working group (WG 6) was created in 2014 in CEN TC 44 to develop a specific standard. The standard will likely be based on ISO 23953. However, ISO 23953 does not include a definition of volume, the metric used customarily for defining the capacity of small ice-cream freezers. The new standard would have to define volume, posibly based on the standard for Household Refrigeration IEC 62552 part 3 (currently under review), or on the standard for professional refrigeration (DG ENTR Lot 1, under development).
Soft scoop ice-cream cabinets	Daily energy consumption, E24h Total display area	CEN TC 44 WG 5	-/-/2014	There is no European standard dealing with soft scoop ice- cream cabinets. A working group (WG 5) was created in 2014 in CEN TC 44 to develop a specific standard. The standard will likely be based on ISO 23953.

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Vending machines	Daily energy consumption, E24h	CENELEC CLC/TC59x/ WG11	Performance of household and similar electrical appliances – Energy consumption of vending machines/2014	There is no European standard dealing with vending machines. CENELEC TC59X WG11 is currently developing a specific standard for vending machines based on the protocol EVA- EMP 3.0a developed by the industry association EVA. The new standard will define how to measure the energy consumption and the net
	Net volume			A positive vote to this standard is expected in 2014, but it may be formally adopted only after the current review of ISO 23953 finishes, with the purpose of ensuring harmonization regarding the conditions of test rooms. Energy consumption may be expressed per week instead of per 24h. This can be converted directly to kWh/24h.