



**CEIR comments on the
2nd TECHNICAL BACKGROUND REPORT
Working Document**

For

**SECOND AHWG-MEETING FOR THE DEVELOPMENT OF
ECOLOGICAL CRITERIA FOR SANITARY TAPWARE
– TAPS AND SHOWERHEADS**

Date 18.10.2011

CEIR¹ is the European Committee for the Valve Industry and represents European manufacturers of industrial, building and sanitary taps and valves in EU countries, Switzerland, Russia and Turkey. It represents a majority of EU manufacturers and is the number one voice of the European sanitary valves industry. It prioritises the quality and innovation of its products, the harmonisation of technical, safety and environmental requirements on the EU market.

The following comments also apply to the proposed GPP criteria.

4. PROPOSED ECOLABEL CRITERIA

4.1 Criteria related to water efficiency

Comments: CEIR fully agrees that highest environmental benefit which can be achieved in reference to sanitary tapware is related to water saving and, consequently also indirectly to the reduction of energy consumption for water heating, but also water supply and treatment. It also fully supports the benefits for the end users reducing their water and energy bills.

CEIR understands and agrees that the future ecolabel criteria should not undermine hygienic or safety requirements, nor end-user comfort.

4.1.1 Criterion 1 – Maximum water flow rate and assessment and verification

Kitchen taps without flow limiting device	6.0
Kitchen taps with flow limiting device*	8.0

Comments: Poor terminology - consider changing to something more descriptive. Flow limiting devices i.e. flow regulators will typically be used to manage the maximum flow rate.

Basin taps	6.0
Showerheads**	9.0

Comments: Flow regulated shower heads are problematic, in particular for the UK market. 50% of the UK shower market is electric showers which require an unrestricted outlet to safely function correctly. Additionally the UK still has a large market for low pressure products (approx. 30%). In these cases the best performance with low pressure is to not have any restrictions in the shower handset as this can make the performance very poor. The pressure loss needs to occur at the spray plate to ensure correct spray formation.

From a UK perspective, showering and shower flow rates need to be considered as a system rather than as a single point of control at the shower head. To ignore this will have huge detrimental impacts on the UK market and may even be considered disadvantageous to traditional UK manufacturers in competing with those manufacturers that make high pressure product. This is particularly true of the existing housing stock where there is in theory most to be gained for this exercise.

If this advice is ignored then the products that comply with Ecolabel must carry suitable warnings to not be used with electric showers and to question their suitability for use with low pressure installations.

¹ www.ceir-online.org

*The device shall allow for setting the default water flow rate (i.e. water-saving mode) at the value of max of 6 l/min. Active user intervention shall be required to activate higher water flow for a short period of time. At the end of such period the kitchen taps shall revert back to the default water flow rate of max 6 l/min.

Comments: This means this special “booster” device automatically returns to a default position below 6L/min. 2-steps cartridges are therefore not permitted, unless special arrangements (spring etc.) are added. This criterion could be “softened” to allow 2-steps cartridges as they already exist on the market.

If one accepts the methodology of user activated higher flow rates for kitchen taps, why would one not accept the same principle for basin taps and shower heads. Each products can benefit from short term higher flow rates e.g. to fill the basin for wet shaving or to boost the shower rate to swill soap from long hair.

**Showerheads with more than one spray pattern shall fulfil this requirement for a setting with the highest water flow.

Test in accordance with testing procedure indicated in respective EN standards at pressure of 3.0 ± 0.2 bar.

Comments: This is not a suitable pressure for testing products designed for low pressure applications.

Testing shall be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent (see chapter 3).

Additional description of the solution/device applied for kitchen taps with an option of water-saving mode shall be supplied

Comments: See previous comment re - allowing the use of eco technology for both basin and shower heads.

One of the stakeholders proposed to differentiate criteria for domestic and for non-domestic sanitary tapware (e.g. taps in schools or hospitals), nevertheless no values were proposed and this option can potentially be discussed during the 2nd AHWG meeting in October (e.g. establishing higher maximum water flow values for non-domestic kitchen taps).

Comments: The differentiation between domestic/non domestic should be supported. Indeed, taps for communities are very often supplied for very low flow rates and it would be misleading if they can't be awarded with an Ecolabel. However, such ultra-low flow products are not suitable for domestic use.

Questions Criterion 1 – Maximum water flow rate

Summarised questions to the stakeholders – p. 16:

Do you agree with the presented maximum water flow rate values?

Comments: Concerning kitchen taps, “the booster” feature should be allowed to be fully manual. Moreover, in this case, max flow rate could be higher (up to 12L/min).

Generally speaking, there might be an issue of compatibility with instantaneous gas heaters that require a minimum flow rate to ignite. State of the art is 2.5L/min of hot water for new heaters. There is probably no technical solution that would match low flow rates as predicted in the Ecolabel proposal and instantaneous gas heaters. This should be known.

Question of pillar taps should also be addressed. Is the flow rate the sum of the flows coming from the 2 taps?

Shall other flow rates be proposed in reference to some non-domestic products? If yes, which values do you consider appropriate?

Comments: Yes. For basin mixers, max flow rate could be 6L/min, but minimum flow rate lowered to 1.5L/min. This also refers to paragraph 4.1.2

Do you agree with the verification and assessment procedure proposed?

Comments: For “high pressure” products, this seems workable. However, testing at 3 bars is not compatible with low pressure products. This also refers to 4.1.2

4.1.2 Criterion 2 – Minimum water flow rate and Assessment and verification

Kitchen taps	4.0
Basin taps	4.0
Showerheads	6.0

Comments: These minimum water flow rates are too high and also prevent greater innovation in these product groups. In the UK flow rates from low pressure showers and electric showers (when suitably designed and used as a system - see previous note) are often lower than 6l/min. There also exist manufacturers that are developing products at 4 and 5 l/m for shower heads where the flow feels more like 10 l/min. The minimum flow rate stipulated here would unfairly disadvantage the most eco products currently on the market - this seems to defeat the entire premise of the Ecolabel initiative.

For basin taps, again in the UK, cloakroom taps are being installed at around 2 l/min in new homes. The hygiene of the water is maintained in these circumstances by installing these products with a smaller bore supply pipe thus maintaining a suitable velocity (speed of the flow of water). It is velocity and not flow rate that needs to be maintained to ensure adequate water draw off for maintaining suitable water hygiene.

Additionally, the description for shower heads also includes body jets etc... and 6 l/m for body jets and side showers is way too high. Many of these devices can be designed to deliver much lower flow rates than 6 l/m and as such the Ecolabel initiative could actually bring about an increase in water used for showering.

Assessment and verification

The following assessment and verification is proposed for this criterion:

The applicant shall declare the product’s compliance with the requirement and specify the minimum flow rate of the product submitted for labelling procedure together with results of tests conducted in accordance with testing procedure indicated in respective EN standards for the given kind of product (see Table 2 above). The testing shall be conducted at pressure of 3.0 ± 0.2 bar. A mean value of three measurements shall not be lower than the minimum flow rate values given in Table 3. The testing shall be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.

Comments: maximum not minimum: Indeed, the criterion is to verify that the **maximum flow rate of the product is above a certain value** (named minimum flow rate of the criterion).
Moreover, testing at 3 bars is not suitable for low pressure products that should be tested at 0.1/0.2 bar or declared max operating pressure.

Questions Criterion 2 – Minimum water flow rate

Summarised questions to the stakeholders – p. 17:

Do you agree with the presented minimum water flow rate values?

Comments: Generally speaking, there might be an issue of compatibility with instantaneous gas heaters that require a minimum flow rate to ignite. State of the art is 2.5L/min of hot water for new heaters. There is probably no technical solution that would match low flow rates as predicted in the ecolabel proposal and instantaneous gas heaters. This should be known.

Question of pillar taps should also be addressed. Is the flow rate the sum of the flows coming from the 2 taps?

For basin mixers for non-domestic uses, max flow rate could be 6L/min, but minimum flow rate lowered to 1.5L/min

Do you agree with the verification and assessment procedure proposed?

Comments: No, it needs to be reworded.

4.1.3 Criterion 3 – Temperature management and Assessment and verification

Products shall be equipped with a device/technical solution which allows temperature/hot water management, e.g. through limiting water temperature/hot water supply. Some possible solutions are for example hot water barrier, cold water supply in middle position, thermostat valves.

Comments: This criterion does not work. While it may be acceptable to stipulate some sort of temperature control on basin and kitchen taps, this is not possible on shower heads. It should be stated clearly that temperature management device is not applicable to showerheads. It could of course apply to complete shower systems.

Additionally this requirement would stop the use of pillar taps and traditional time flow taps that only have one water path connection as they are designed to be used on already blended water supplies. This is nonsensical. It should be stated that 2-handle mixers are by nature managing temperature as they require separate action on hot & cold. This criterion is only applicable to single control and thermostatic mixers.

Assessment and verification: The applicant shall declare compliance with the requirement and provide a documentation describing the technology/device applied in the product to the awarding competent body as part of the application.

4.1.4 Criterion 4 – Time limit/Volume limit for non-domestic basin taps and showerheads and Assessment and verification

Basin taps and showerheads installed in non-domestic premises for multiple users and high frequency use (e.g. in schools, hospitals, swimming-pools, etc., but not e.g. in bathrooms of hotel rooms or dormitories) shall allow for limiting time of a single water use (i.e. water volume consumed). This can be done by equipping the products with devices which stop water flow after certain time if they are not used

(e.g. sensors stop water flow when a user leaves the sensor range) or after set time of use (e.g. time limiters, which stop water flow when the maximum flow time is exceeded).

Comments: This criterion does not work. While it may be acceptable to stipulate some sort of time/volume control on basin and kitchen taps, this is not possible on shower heads. It could of course apply to complete shower systems. It should be stated that this criteria is not valid for showerheads. Any time-limiter should be part of the valve and not the showerhead. If part of the showerhead, there is a huge risk that the valve stays open and the showerhead blocks the water : risk of pollution by backflow and damages of the hose/showerhead => damage to the building.

Additionally, if a time element is still considered then it may be prudent to limit the amount of run-on time once the user has moved away from the tap.

Assessment and verification: The applicant shall declare the product's compliance with the requirement and specify the type of solution used and its technical parameters as appropriate (e.g. water flow time for time limiters) to the awarding competent body as part of the application.

Questions Criterion 4 – Time limit/Volume limit for non-domestic basin taps and showerheads

Summarised questions to the stakeholders – p. 20:

Shall this proposed EU Ecolabel criterion include indications for maximum flow times, respectively maximum sensor response time? Or is the requirement of applying the device (leaving the freedom to end-user/owner to define the values – adjusting them best to the intended use purpose) sufficient, as proposed above?

Comments: The requirement of having a device that limits time/volume or allows detection should be enough.

Criterion 5 – Manufacturing processes – surface treatment

Manufacturing processes, independently on their location, shall be conducted complying with the respective current EU legislation. The applicant shall specify which manufacturing plants make the surface treatment and also shall demonstrate that the treatment is made following good environmental practices, as indicated in the last available version of the Reference Document on Best Available Techniques for the Surface Treatment of Metals and Plastics (BREF)2.

To evaluate good environmental practices the competent body can check particularly aspects like reuse of the Chromium VI or use of Chromium III, zinc processing without cyanide, water recirculation systems, not using chlorinated solvents when alternative less toxic is available, etc.

Assessment and verification: The applicant shall declare compliance with the requirement and provide a documentation describing the production technologies used and their reference to the technologies described in the abovementioned BREF document and/or attach respective declaration(s) and documentation from relevant supplier(s), if appropriate.

Questions Criterion 5 – Manufacturing processes – surface treatment

Summarised questions to the stakeholders – p. 22:

The Catalan Ecolabel adds additionally in their verification procedure that " Manufacturers (and/or their suppliers, if applicable) being certified/registered under EMAS or certified under ISO 14001 are considered to comply with the requirements of this criterion". Shall a similar verification and assessment proposal be accepted under the EU Ecolabel scheme?

Comments: Yes, this seems a much more pragmatic proposal than trying to impose BREF on facilities that will often be located out of Europe, and likely constrained to other environmental regulations.

Criterion 6 – Material requirements

a) Chemical and hygienic characteristics of materials

Substances and materials used in products in contact with drinking water shall comply with the requirements of the Article 10 of the Drinking Water Directive³. These substances or materials or impurities associated with them shall not release to water intended for human consumption compounds in concentrations higher than necessary for the purpose of their use and do not, either directly or indirectly, reduce the protection of human health. All materials in contact with water intended for human consumption shall present no health risk up to the temperature of 90°C. They shall not cause any deterioration in water intended for human consumption with regard to food quality, appearance, odour or taste. Within the recommended limits for correct operation (i.e. conditions of use as given in respective EN standards) the materials shall not undergo any change which would impair the performance of the product. Materials without adequate resistance to corrosion shall be protected.

Assessment and verification: To be discussed during the 2nd AHWG meeting

Comments: At this point in time where the Commission has ceased activity on harmonising standardisation for materials in contact with drinking water, the method of complying with the DWD is by use of current National Requirements.

For the UK this is compliance with Water Regulations, for Germany it is different, for France it is different and for Netherlands it is different etc... This does not present a suitable level playing field for manufacturers that sell product in many countries. Some EU countries may also have no requirements for materials in contact with drinking water in which case this criterion is not pragmatic for an EU wide scheme.

b) Exposed surface condition and quality of Ni-Cr coating

Sanitary product which has a metallic Ni-Cr coating (whatever the nature of the substrate material is) has to comply with the standard EN 248:2003 Sanitary tapware. General specification for electrodeposited coatings of Ni-Cr.

Assessment and verification: The applicant shall declare the product's compliance with the requirement and provide results of test conducted in accordance with testing procedure indicated in respective EN standard. The testing shall be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.

Questions Criterion 6 – Material requirements

Summarised questions to the stakeholders – p. 27:

Stakeholders input is awaited whether the criterion on materials in contact with drinking water shall be included in the first criteria set for sanitary tapware or whether it shall be considered for the revision

process in four years. Until then several harmonised EN standards shall be available making verification of this criterion feasible. Existence of harmonised standards will reduce costs and efforts producers have to bear at present willing to sell their products in countries where very different requirements or testing methods are used.

Comments: If it is added, it should be a simple reminder that “products need to be compliant with local regulations”. Self declaration is the only option to avoid extraordinary extra burden and costs. At no way Ecolabel should add complexity to the process of fitness for contact with drinking water which is already extremely complicated, resource and time-consuming, and costly for manufacturers.

Criterion 7 – Product quality and lifetime extension

a) General requirements

Product shall comply with the general requirements of the respective EN standards (listed in Table 2).

Where applicable, cleaning of the product elements, which might be necessary under normal use conditions, shall be possible with use of simple tools/agents.

b) Reparability and availability of spare parts

Product shall be designed in the way that its exchangeable components can be replaced easily by the end-user and information which elements can be replaced should be clearly indicated in the information sheet attached to the product. The applicant shall provide also clear instructions to the end-user to enable basic repairs to be undertaken.

The applicant shall further ensure that spare parts are available for at least ten years from the end of production.

Comments: Supply of spare parts during 10 years after end of commercialization is the use for “big companies” it might be difficult for SMEs. It also may be problematic for manufacturers that have product cycles of less than 10 years.

c) Warranty

The applicant shall ensure guarantee for repair or replacement of minimum five years.

Comments: Five years guarantee on many fittings is not normal. In particular for many SMEs this could be difficult to meet. On the other hand, 5 years warranty is too long for non-domestic products that can be “mistreated”. It should also be stated that the warranty is limited (i.e. basic maintenance is excluded, and so is the aspect which is linked to the cleaning procedures)

Assessment and verification: The applicant shall declare the product’s compliance with these requirements and provide samples of the product information sheet and warranty terms to the awarding competent body as part of the application. With regard to criterion a) the applicant shall provide additionally test results conducted according the abovementioned EN standard to the awarding competent body as part of the application. The testing should be performed by laboratories that meet the general requirements of EN ISO 17025 or equivalent.

Criterion 8 – Packaging

Packaging shall meet the following requirements:

- (a) all packaging components shall be easily separable by hand into individual materials to facilitate recycling,

Comments: Does this mean that plastic blister packs are not acceptable?
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- (b) where used, cardboard packaging shall consist of at least 80 % recycled material,
- (c) made out of one of the following:

- easily recyclable materials,
- materials from renewable resources.

Comments: this criterion is very problematic. What is “easily recyclable material”? Cardboard, plastic? The role of packaging in LCA should be mentioned. For showerheads for instance, blister packaging reduces shipment volume and therefore transportation impact, compared to cardboard packaging. It is necessary that blisters or LDPE is accepted, even in small quantity, for example, for the packaging of screws... What about the use of quadric-chromia or color-printed packaging in general?

Assessment and verification: The applicant shall declare the product’s compliance with the requirement and provide a sample(s) of the packaging to the awarding competent body as part of the application.

Criterion 9 - User information

The product shall be supplied with relevant user information, which provides advice on the product's proper and environmentally friendly use, as well as its maintenance. It shall bear the following information on the packaging and/or on documentation accompanying the product:

- (a) Information that the main environmental impacts are related to the use phase of the product, i.e. to consumption of water and energy for water heating,
- (b) Information that the product has been awarded the EU Ecolabel, together with a brief yet specific explanation as to what this means in addition to the general information provided at the EU Ecolabel logo,
- (c) Information on proper product's use to minimise water consumption and related energy consumption for water heating,
- (d) Information on maximum flow rate in l/min (tested as indicated in criterion 1).
- (e) Recommendations on the proper use and maintenance (including cleaning and decalcification) of the product.

This information shall highlight all relevant instructions, particularly referring to the maintenance and use of products, e.g. information which spare part can be replaced, instruction concerning

replacement of washers if taps drip water, advice on cleaning taps and showerheads with appropriate materials in order to prevent damaging its surface, etc.

- (f) Installation instruction, including information on recommended, minimum and maximum pressure the product is intended for.

Assessment and verification: The applicant shall declare the product's compliance with the requirement and provide a sample(s) of the user information to the awarding competent body as part of the application.

Questions Criterion 9 - User information

Summarised questions to the stakeholders – p.32:

Do you consider necessary/useful to add any additional information in this point?

Comments: Not sure that additional statements are of added value. Manufacturers are free of their communication, if it is not misleading.

Criterion 10 – Information appearing on the EU Ecolabel

The logo should be visible and legible. The use of the EU Ecolabel logo is protected in primary EU law. The EU Ecolabel registration/license number must appear on the product, it must be legible and clearly visible.

The optional label with text box shall contain the following text:

- *Improved water efficiency*
- *Improved hot water management*
- *...(to be discussed further during the meeting)*

The guidelines for the use of the optional label with text box can be found in the "Guidelines for use of the Ecolabel logo" on the website:

http://ec.europa.eu/environment/ecolabel/promo/logos_en.htm.

Assessment and verification: The applicant shall declare the product's compliance with the requirement and provide a copy of the label as it will appear on the packaging and/or product to the awarding competent body as part of the application.

Questions Criterion 10 – Information appearing on the EU Ecolabel

Summarised questions to the stakeholders – p.33:

Do you find any additional statement which shall be added at the Ecolabel placed on the product and/or packaging?