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Institute for Prospective Technological Studies

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European Commission

Footwear

2nd AdHoc Working Group Meeting for the revision of EU Ecolabel criteria

14th May 2014, Brussel

May 2014

Joint Research Centre

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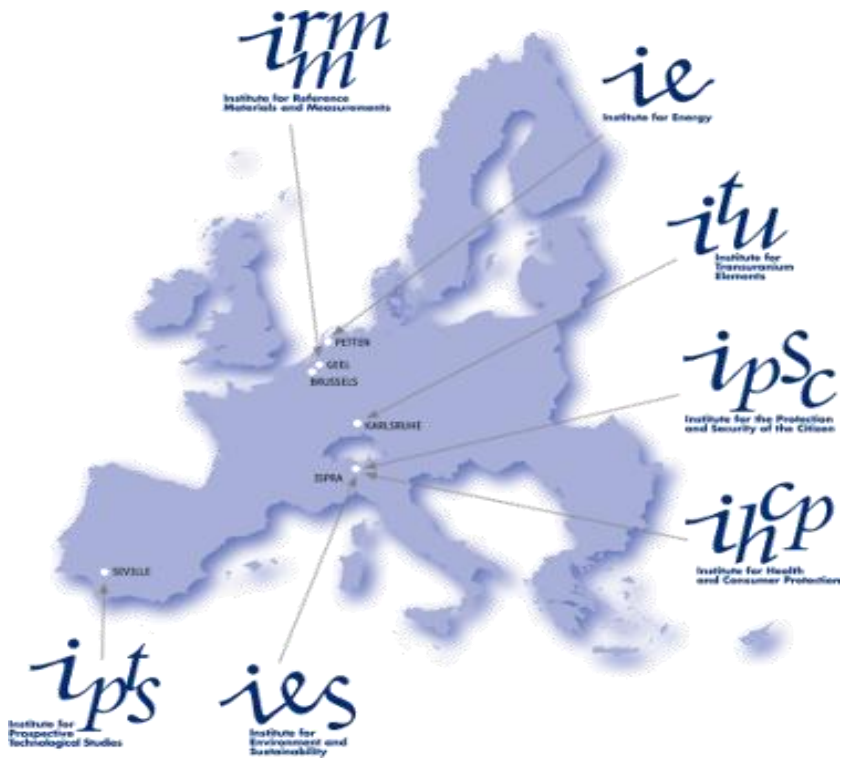
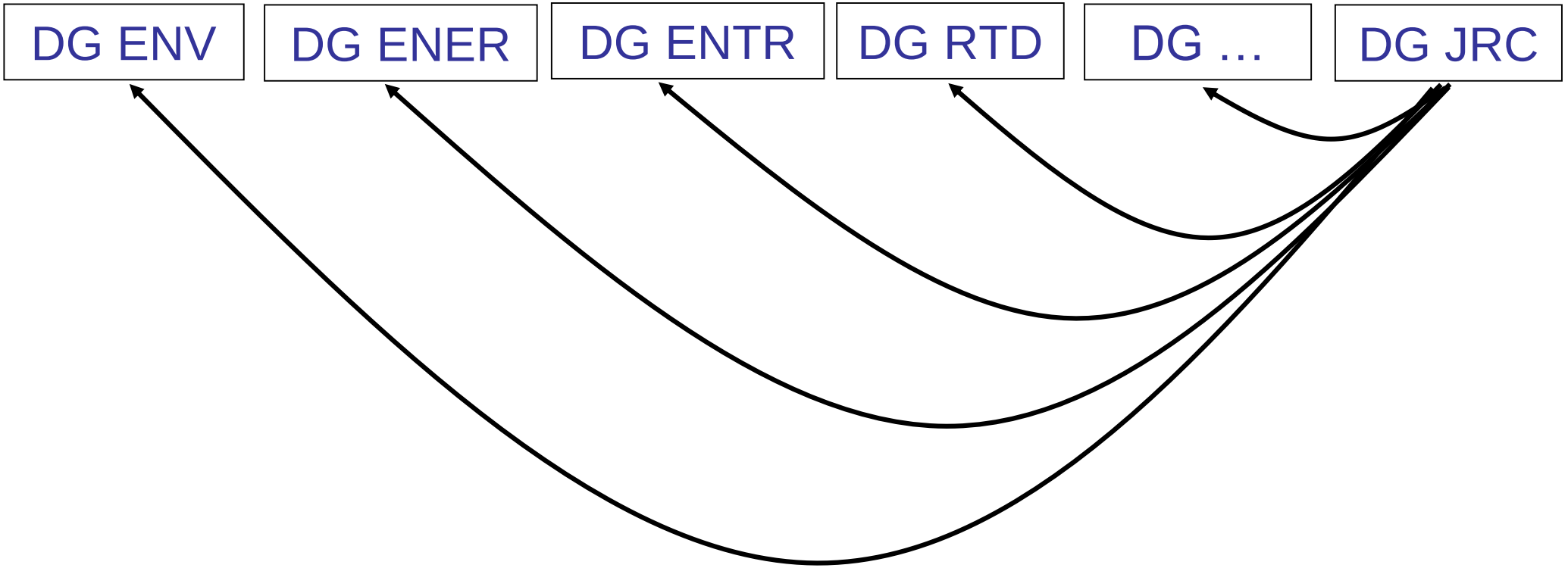


Joint Research Centre in the context of the European Commission:



Activities in support of Product Policy

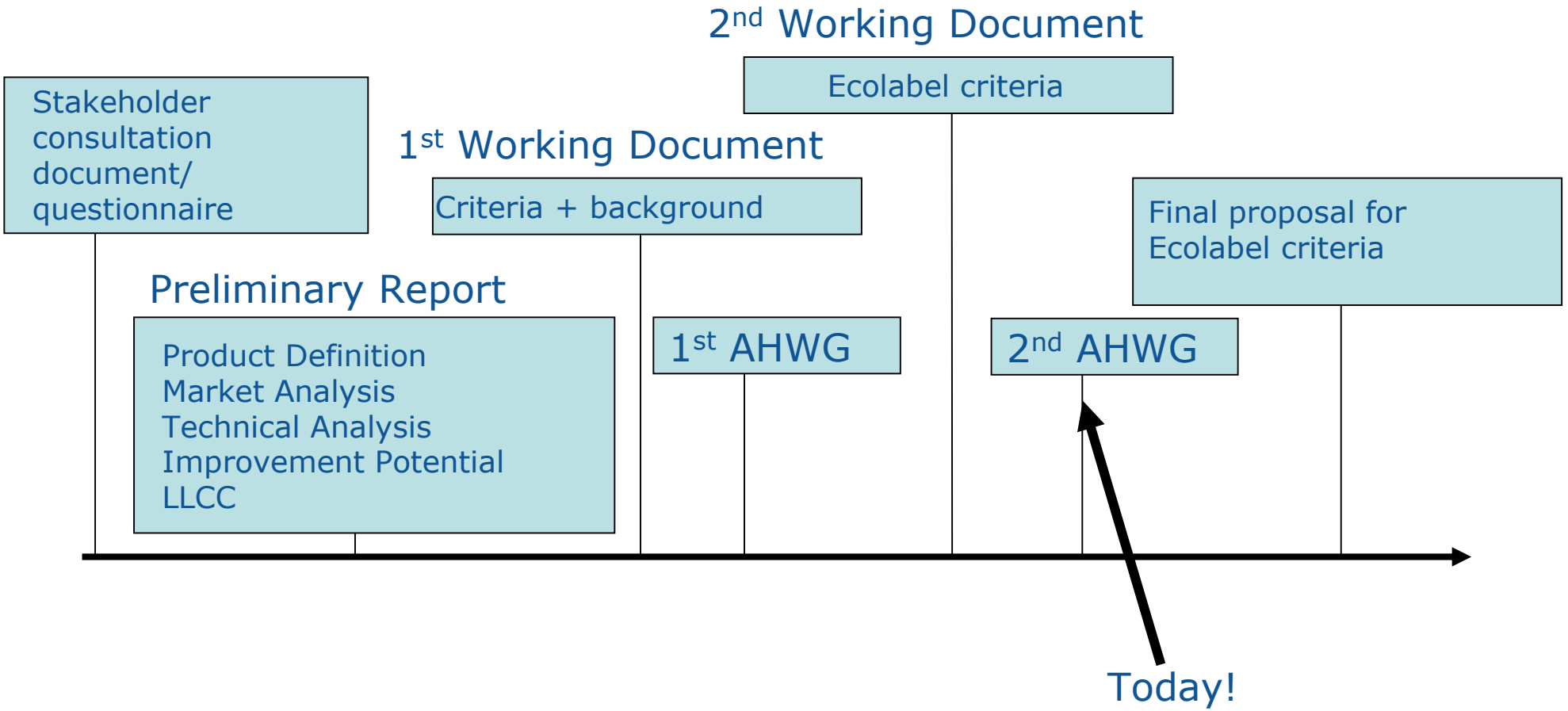
IPTS supports the development and implementation of environmental product policies, amongst them the EU Ecolabel Regulation and the Green Public Procurement Communication.

Analysis of each product group with focus on techno economic and environmental aspects

Aligning criteria with Ecolabel Regulation EC 66/2010

Develop criteria and implementing measures until the stage of voting in committee

Criteria development process



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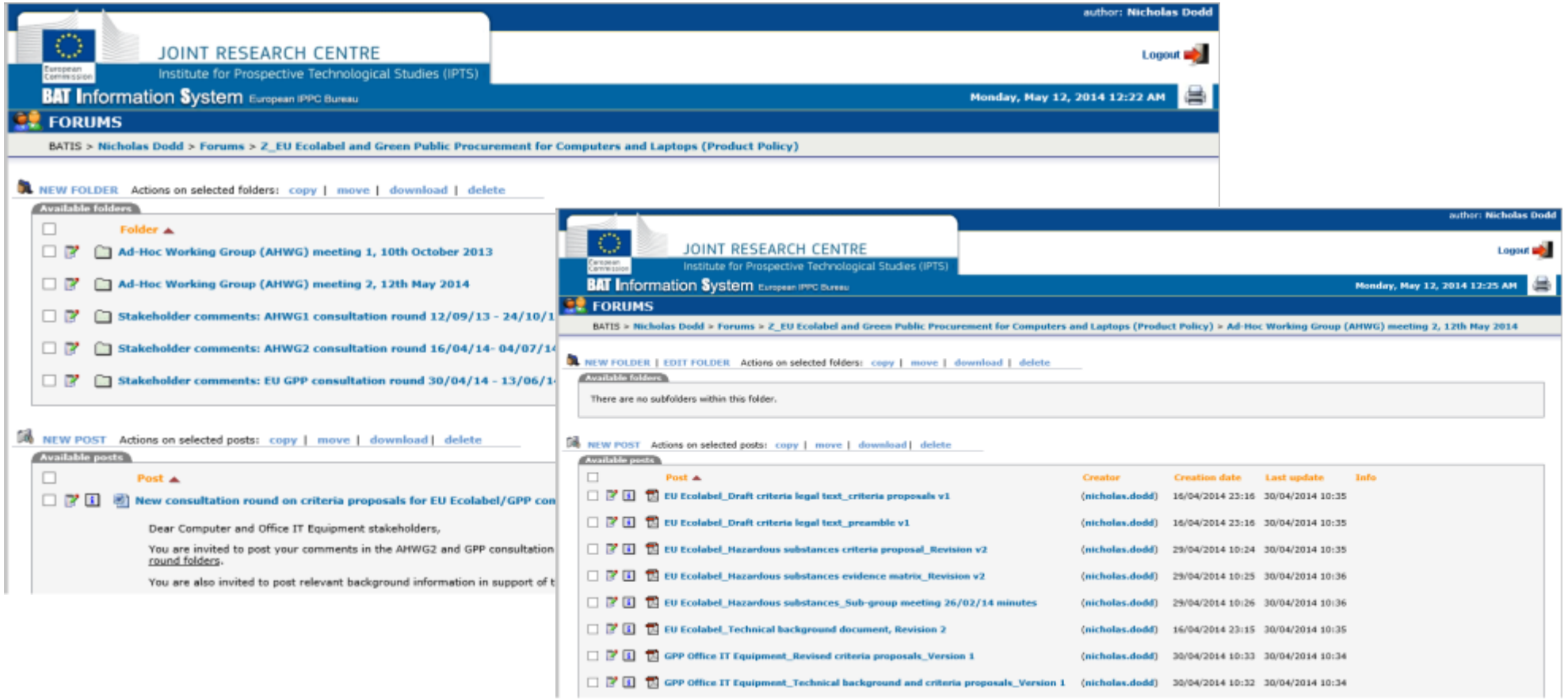
Using the BATIS system



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EU Ecolabel Criteria Development for footwear

1. Stakeholders can provide comments on separate draft criteria proposals for EU Ecolabel before 4th July.
2. Comments need to be transmitted in BATIS
3. Derogation request (before 13th June)
4. Hazardous substances Subgroup meeting ~ 25th June
5. June 2014: EUEB progress report
6. November 2014 final draft criteria available
7. Process finalised 1st half 2015

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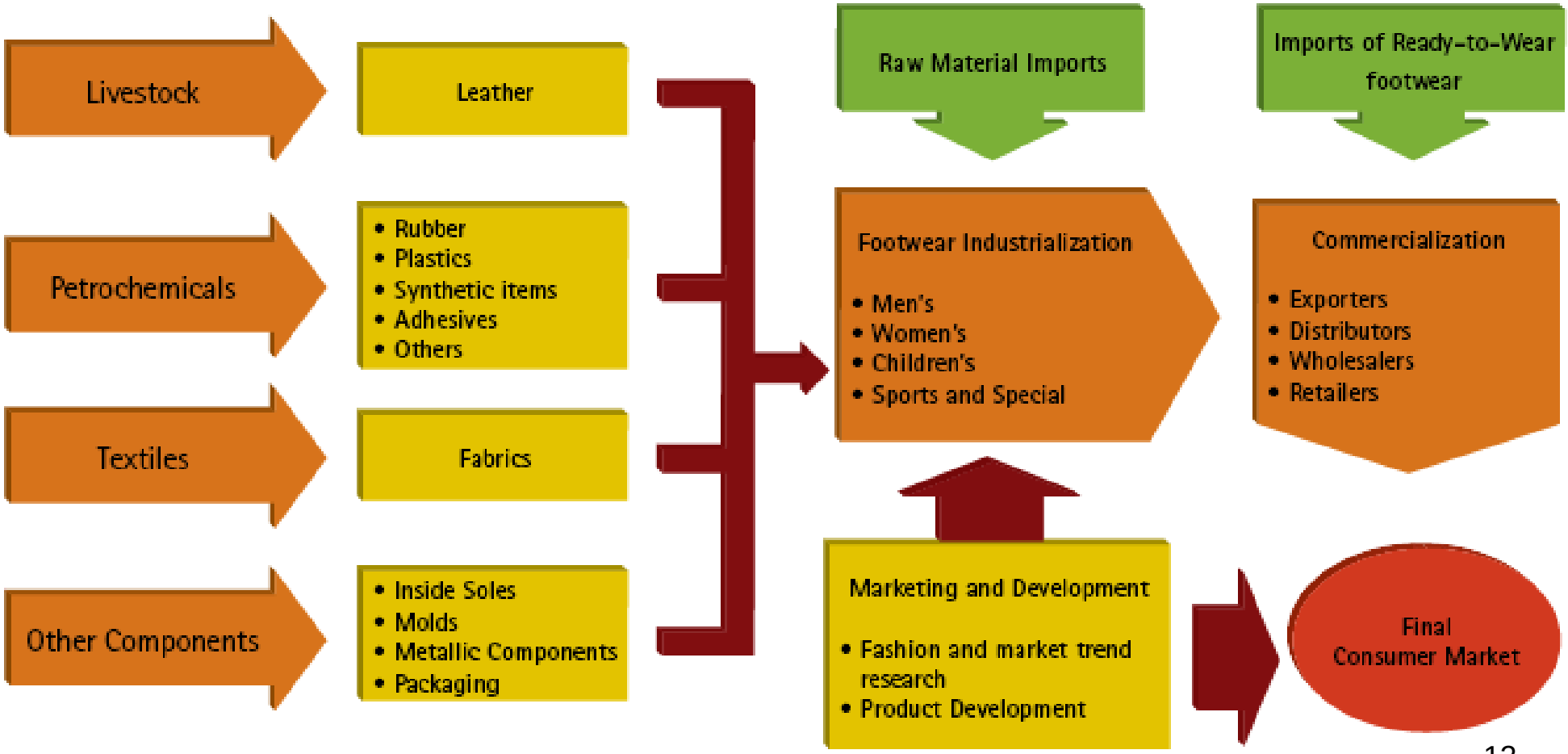
Agenda

1.	Introduction and background:
2.	Materials origin:
3	Emissions from processing
5.	Water consumption
4.	Energy consumption
5.	Hazardous substances criteria
6.	Fitness for use
7.	Waste management system:
8.	Packaging and Consumer Information
9.	Corporate Social Responsibility
10.	Revision of the criteria for Footwear:
11.	Next steps and close of the workshop

Thank you

	PRELIMINARY REPORT
TASK1	European legal framework summary
	Product group analysis (categorization, materials used, assembly technologies)
	Other labels and initiatives
	Questionnaire I
TASK2	Market data analysis: European and global statistics, market segmentation
	Current EU Ecolabel status
	Identification of key innovations and best-practices, available technologies and production methods; BREFs
TASK3	LCA literature review and specific LCA case study. Hot-spots identification
	Non-LCA impact analysis
	Questionnaire II
TASK4	Improvement potential analysis transfer to criteria areas proposals

Footwear Production Chain



Source: Bradesco DEPEC – June 2008

European production, consumption and external trade

(Data expressed in 1000.000 pairs)	2007	2008	2009	2010	2011	Var.% 2007-2011
Production	647	560	471	491	505	-22
Exports (extra-UE27)	176	175	155	171	195	11
Imports (extra-UE27)	2521	2438	2251	2523	2564	+2
Apparent consumption (EU 27) [(product. + imports) – exports]	2992	2823	2567	2843	2874	-4

- *The average European production price has increased from 21.39 EUR in 2007 to 25.65 EUR in 2012*
- *75% of extra-European supply volume comes from China (price increase from 3.14 to 4.52 EUR/pair), other EU suppliers (price increase from 5.06 to 6.78 EUR/pair/2007-2012.*

Footwear segmentation

Material

Rubber, plastics, leather, textile, wood, cardboard…

Destination

e.g. Casual, towns, sport, sandals, boots, indoor, fashion, waterproof,…

Gender

Female, Man, Children

Price category

e.g. Low, middle, high

Statistical nomenclature (NACE 15 20, CN 64» Annex I&II PR)

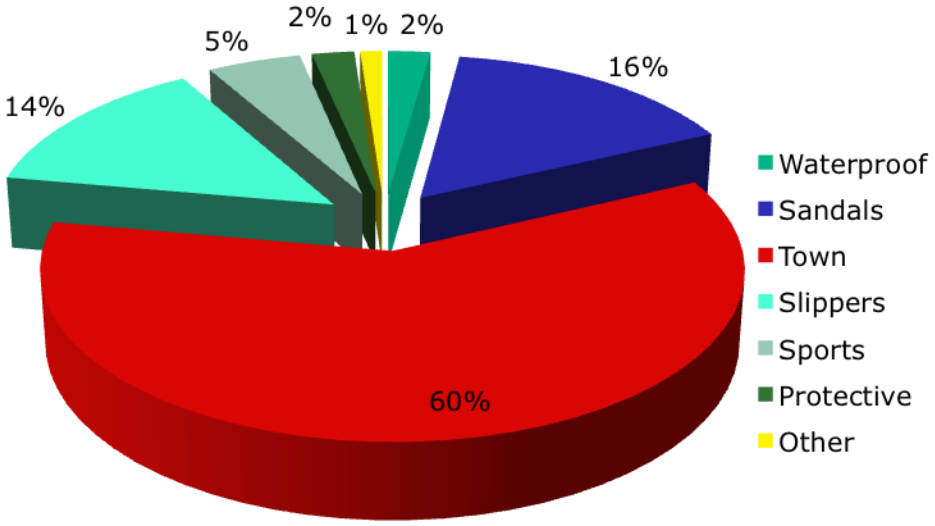
Material for soles	Material for uppers	Use	Gender
Plastic and rubber	Plastic and rubber	Sports / athletic	Men
Leather	Leather	Ski boots	Women
Wood	Textiles	Indoor	Children
Other	Other	Outdoor	
		Waterproof	
		Sandals (only NACE)	
		Protective (only NACE)	

Footwear Classes

(Apparent Consumption: EUROSTAT data/volume/2011)

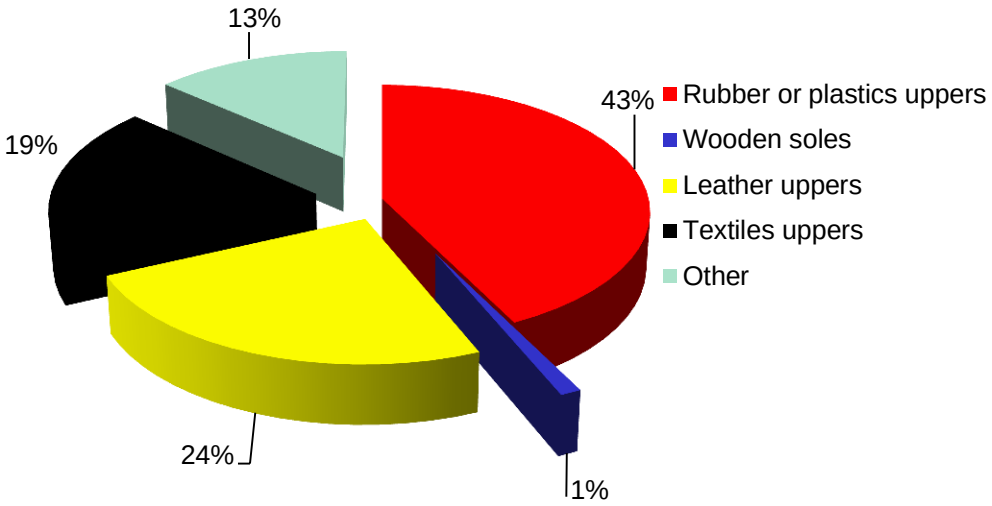
Category "Use"

(including different use classes to highlight main footwear market's demands)

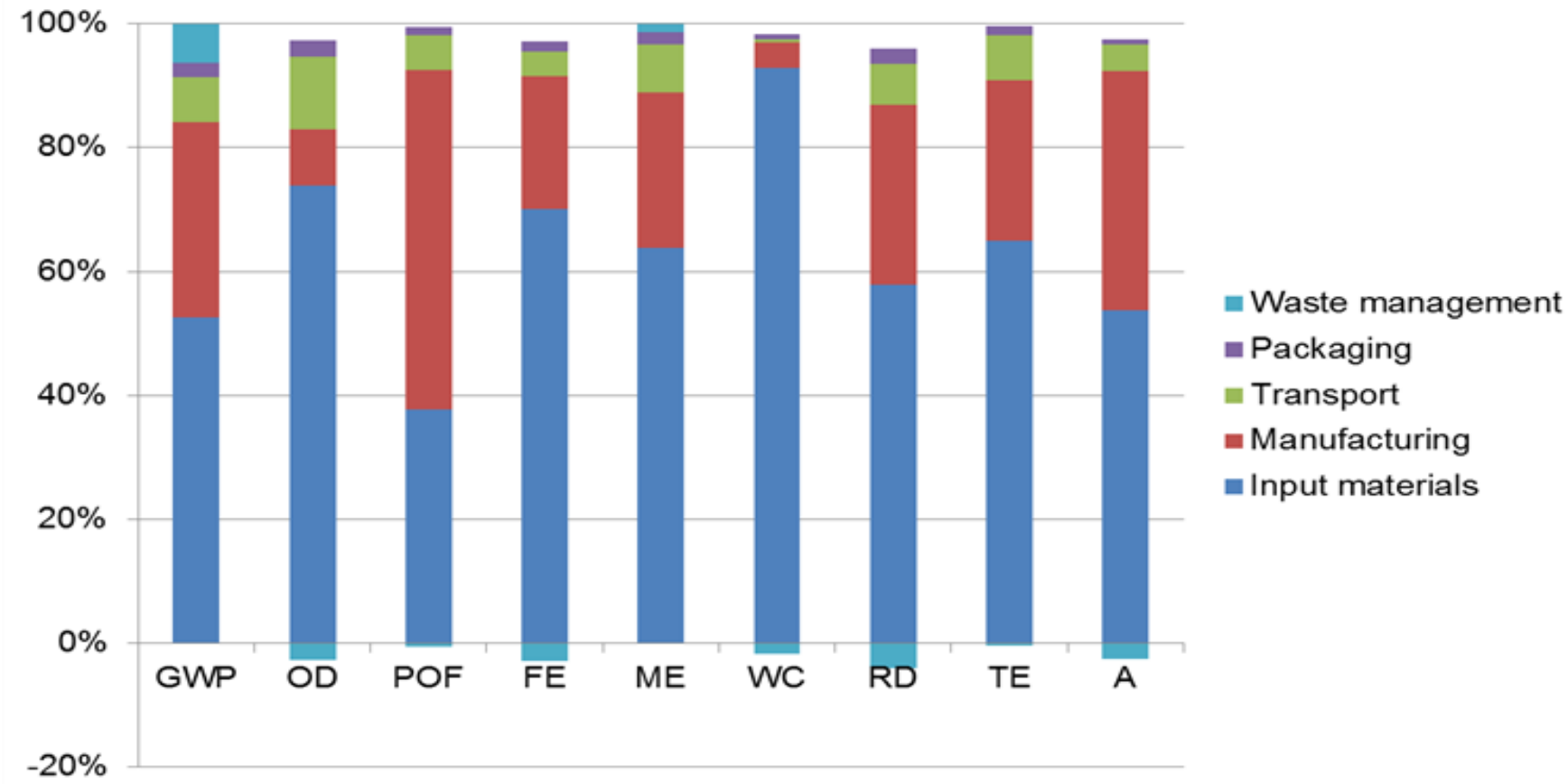


Category "Materials"

(main materials used in the footwear manufacture)



Relative results – Average scenario



GWP: Climate change, OD: Ozone depletion, POF: Photochemical ozone formation, FE: Freshwater eutrophication, ME: Marine eutrophication, WC: Water consumption, RD: Resource depletion, TE: Terrestrial eutrophication, A: Acidification.

Identified key environmental criteria areas are:

- Product durability;
- Energy consumption reduction;
- Focus on materials with reduced environmental impact
- Leather, hides and skins should come from the meat and milk industries in order to attribute the impacts to meat and milk;
- Waste reduction during material processing and footwear manufacturing;
- The VOC emissions should be minimised during footwear manufacturing.

Framework, scope and definitions

According to the current criteria (Decision 2009/563/EC), the product group 'Footwear' shall *comprise all articles of clothing designed to protect or cover the foot, with a fixed outer sole which comes into contact with the ground. Footwear shall not contain any electric or electronic components*.

Criteria applies for components weighting more that 3% separately for upper and sole footwear parts.

Clarification of scope

1. The product group 'footwear' shall comprise all articles of clothing designed to protect or cover the foot, with applied sole which comes into contact with the ground. Protective footwear classified under Council Directive 89/686/EEC is included in the scope.

2. The following products are not covered by these criteria:

   (a) Footwear that contains any electric or electronic components;
   (b) Products that are intended to be disposed of after a single use;
   (c) Socks with applied sole
   (d) Toy footwear

Definitions proposal:

(1) Shoe upper refers the upper structural element, composed of one or more materials, which is attached to the outer sole. For the purpose of this Decision shoe upper includes lining and sock that constitute the inside of the footwear article.

(2) Shoe sole, including midsole, refers to the bottom part of the footwear article which is attached to the upper. The outsole is the footwear part that contacts the ground and includes elements like tap, rand, heel, top pieces, cushioning elements and circles.

(3) Skin contact refers to the entire construction of shoe uppers with the exclusion of external decoration.

Framework of the current criteria (2009/563/EC)

1. Criteria objectives;
   "limiting the levels of toxic residues, the emission of volatile organic compounds and promoting a more durable product."

2. Specification of the background for the assessment and verification requirements (e.g., functional unit, cut-off limit).

Suggested Framework

Criteria objectives:

The criteria aim in particular at identifying products that have a lower environmental impact along their life cycle, with specific improvements so that they are:

-Sourced from more sustainable forms of agriculture and forestry,
-Manufactured using cleaner, less polluting processes,
-Manufactured using less harmful substances,
-Manufactured with improved work safety and social conditions
-Designed and specified to be high quality and durable,

Assessment and verification (1)

- *Functional unit* is one pair of shoes. Referenced in order to fairly compare products of the same category, size being most logical reference unit.

- As highlighted by industry stakeholders, the proposal is to use the most representative sizes , differentiated by gender, European footwear sizes, as follows:

  - *Men: 42 Paris point (size 8 in UK system)*
  - *Women: 38 Paris point (size 5 in UK system)*
  - *Unisex: 40 Paris point (size 6.5 in UK system)*
  - *Children: 32 Paris point (size 13-13.5 in UK system*)

Assessment and verification (2)

- Any upper shoe components made of identical material with total weight of less than 3 % of the whole upper part shall not be taken into account for the application of the criteria.

- Any shoe sole components made of identical material with total weight of less than 3 % of the whole outer sole shall not be taken into account for the application of the criteria.

- In the case of injection moulded footwear processed with the use of the same material and made as one integral element e.g. rain boots, any components weighing less than 3 % of the whole product shall not be taken into account for the application of the criteria.

Assessment and verification (3)

- Testing shall be performed by laboratories that meet the general requirements of European Standard EN ISO 17025, or equivalent.

- Test reports, or other evidence to show compliance with the criteria may originate from the applicant and/or supplier(s) and/or their suppliers, etc., as appropriate

- Notification to CBs of changes in suppliers and production sites pertaining to licensed products, together with supporting information to verify ongoing compliance with the license conditions.

- Use of certification system to provide third party verifications: the chosen system and associated systems for accreditation of verifiers shall meet the general requirements of EN 45011 and ISO 17065.

- Mutual recognition with EU Ecolabel for Textile for criterion 1(b), 3 (b), 6, 7, and 10.

Key open issues as of 14/05/14

- *Are the proposed definitions clear?*
- *Should the skin contact definition be introduced?*
- *Is it substantiated to specify main materials definitions under the legal text of the criteria document?*
- *Is the introduction of skin contact definition necessary?*
- *Is the functional unit clearly defined?*
- *Is the proposed mass threshold appropriate?*
- *Are additional specifications appropriate?*

Revision of EU Ecolabel Criteria for ¨Footwear¨ product group

2nd Ad-hoc Working Group Meeting
14th May 2014, Brussles
Joint Research Centre, Institute for Prospective Technological Studies

Current structure of the criteria (2009/563/EC)

1. Dangerous substances in the final product
2. Reduction of water consumption
3. Emission from the material's production: (Limitation of water pollution)
4. Exclusion of use hazardous substances (up until purchase)
5. Use of VOCs during final assembly of shoes
6. Energy Consumption
7. Use of recycled material for packaging
8. Information on the packaging
9. Information appearing on the eco-label
10. Parameters contributing to durability

Restructuring of the DRAFT criteria proposal

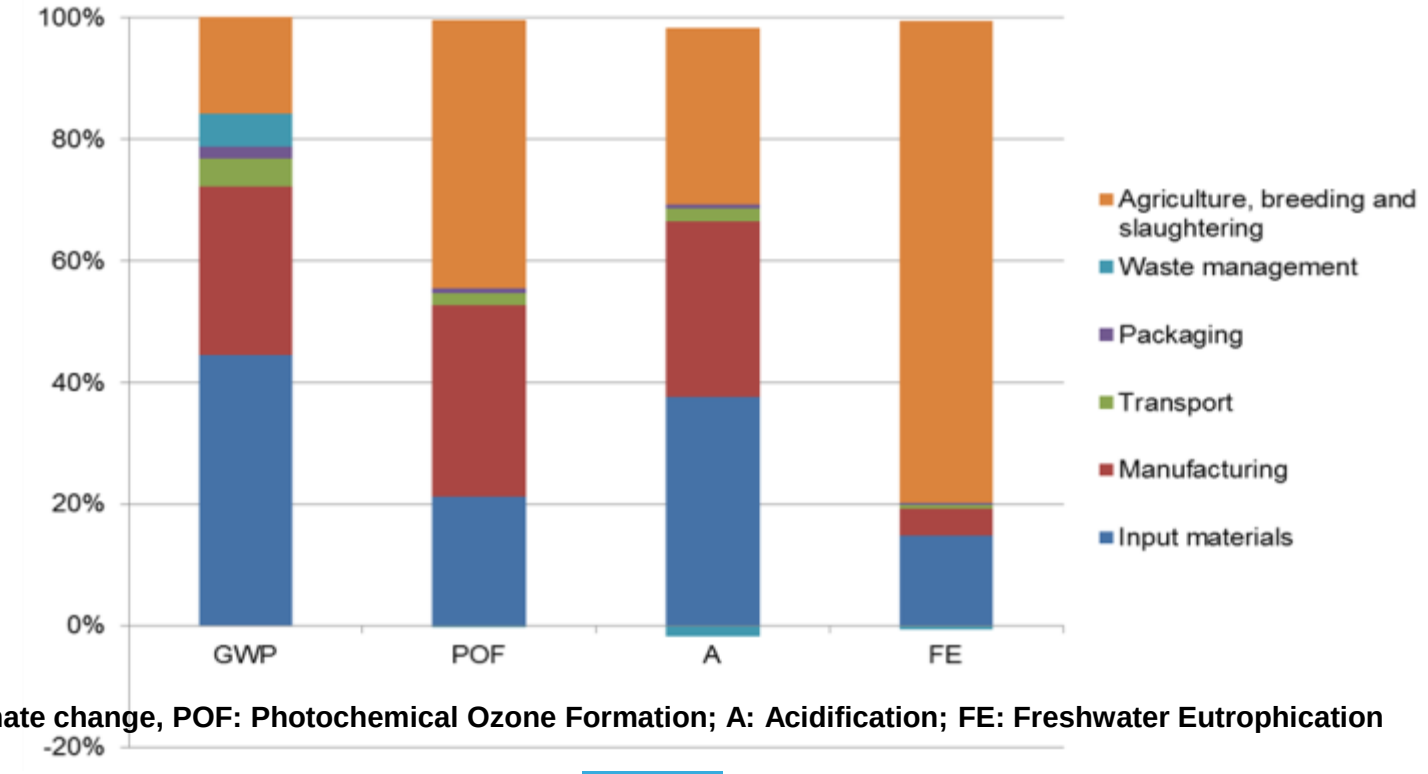
Life cycle phase	Current criteria		Criteria proposal		Status
Origin of raw materials			1	Materials origin	New
	2	Reduction of water consumption	2	Reduction of water consumption	Revised
Processes	3	Emission from the material production (limitation of water pollution)	3	Emissions from the production of materials	Revised
	5	Use of VOCs during final assembly of shoes	4	Volatile Organic Compounds (VOCs)	Revised
	6	Energy consumption	5	Energy consumption	No change
Chemical substances and formulations	1	Dangerous substances in the final product	6	Hazardous substances present in the final product	Revised
	4	Exclusion of hazardous substances	7	Restricted Substances List	
Durability	10	Parameters contributing to durability	8	Parameters contributing to durability	Revised
Resource management/ Waste phase			9	Waste management during footwear assembly	New
Social Requirements			10	Social Requirements	New
Packaging	7	Use of recycled material for packaging	11	Packaging	Revised
Use phase	8	Information on the packaging	12	Information on the packaging	Revised
	9	Information appearing on the Ecolabel	13	Information appearing on the Ecolabel	Revised

Criterion 1 Proposal

Materials origin (new)

Materials origin: LCA Results

- Input materials are responsible for 40-90% of the impact share, depending on the impact category considered;
- Leather allocation rule: Depending on the impact categories and the allocation rule chosen (up to 10 %), the impacts on the environment of agriculture phase, can account to as much as 80 % of the whole life cycle of footwear



GWP: Climate change, POF: Photochemical Ozone Formation; A: Acidification; FE: Freshwater Eutrophication

Key open issue:

AHWG 1 Feedback - Cut off limit proposal

- Footwear Labelling Directive 94/11/EC
  >80% of the surface areas or 80% of the volume of the outer-sole. If several materials account for 80 %, information should be given for the two main materials composing of the footwear.

- EU Ecolabel for Bed Mattresses
  5% w/w of total for the criteria related to latex foam

- Blue Angel for Footwear
  10% w/w of the final product for all bootleg and/or sole materials for origin of raw hides and skins, natural rubber wood and cork.

  3% w/w of the final product for natural textile (e.g. cotton, hemp, flax) shall come from certified organic farming/livestock breeding.

- **Stakeholders proposal: 40% w/w**

Criterion proposal

1. **Leather:** Derived from milk and meat industry. Alignment with ISO/TR 16178* and BREF for Tanning of Hides and skins (2013) concerning possible pesticides´ content and verification

2. **Cotton:** Alignment with EU Ecolabel for textile. Introduction of minimum content standards for both organic (10%) and IPM (20%) cotton reflects the two most significant improvement options available on the market.

3. **Wood, cork and natural rubber:** Alignment with EU Ecolabel for Toilets and Urinals

***ISO/TR 16178** Footwear critical substances potentially present in footwear and footwear components

Materials origin: leather

(i) Only raw hides and skins from animal raised for milk and/or meat production are allowed to be used in the product. Threatened species according to International Union for Conservation of Nature (IUCN) Red List of Threatened Species cannot be used.

(ii) Hides or skins should not have been treated with the following pesticides:

Aldrine, Chlorthalonii, DDT, DDE, DDD, Dieldrine, Endrin, Ethylparathione, Endosulfanes, Isodrin, Mirex, Dichlofluanide, HCH's without Lindane, Heptachloroepoxide, Lindane, Pentachloroanisol, Malathione, Permethrine, Methoxychlor, Tolyfluanide.

Verification:

Proposal: The verification of criterion is required if the footwear structural elements are labelled as leather in line with Directive 94/11/EC.

(a) Declaration of compliance from leather manufacturer.

(b) Pesticides content verification through specification introduced in the supplying contract. The verification can be provided by showing that regulatory requirements that apply to the agriculture site geographical location restrict the use of specified substances (in line with BAT).

Materials origin: Cotton and other natural cellulosic seed fibres

(i) Cotton and other natural cellulosic seed fibres (hereafter referred to as cotton) shall contain a minimum content of 10% w/w either organic cotton or 20%w/w of IPM (Integrated Pest Management) cotton. In addition to this, products meeting specific content thresholds for organic or IPM cotton shall be permitted to display additional text alongside the Ecolabel communicating the content claim.

(ii) The following list of pesticides should not be used in cotton and IPM scheme:
Alachlor, aldicarb, aldrine, campheclor (toxaphene), captafol, chlordane, 2,4,5-T, chlordimeform, chlorobenzilate, cypermethrin, DDT, dieldrin, dinoseb and its salts, endosulfan, endrin, glyphosulfate, heptachlor, hexachlorobenzene, hexachlorocyclohexane (total isomers), methamidophos, methyl-o-dematon, methylparathion, monocrotophos, neonicotinoids (clothianidine, imidacloprid, thiametoxam), parathion, phosphamidon, pentachlorophenol, thiofanex, triafanex, triazophos.

Verification:

Proposal: The verification of criterion is required if the footwear structural elements are labelled as textile in line with Directive 94/11/EC on Footwear Labelling, and contain 40% w/w of cotton.

(a) Declaration of compliance from cotton manufacturer
(b) Mutual recognition with EU Ecolabel for Textile
(c) Certification of organic content in conformity with Regulaiton 834/2007/EC or the US NOP
(d) Pesticides: declaration of no use supported by list of active substances used during plant growing

Materials origin: Natural rubber, wood, and cork

Virgin wood, cork or natural rubber present in the sole for **over 40%** w/w shall not come from illegal felling and trade or from forests that need to be protected for ecological and/or social reasons. The material shall be covered by valid sustainable forest management and chain-of-custody certificates issued by an independent third-party certification scheme such as FSC, PEFC or equivalent. Cellulose for synthetic cellulose fibres must come from sustainable forestry.

Where certification schemes allow mixing of certified material and uncertified material in a product or product line, the proportion of uncertified material shall not exceed 50%. w/w. Such uncertified material shall be covered by a verification system which ensures that it is legally sourced and meets any other requirement of the certification scheme with respect to uncertified material.

Verification:

Proposal verification is required if virgin wood, cork or natural rubber is present in the sole for over 40% w/w

(a) Information on geographic origin should be provided

(b) Certification through third party independent verification scheme e.g. FSC, PEFC

(c) Uncertified material should be less than 50% being covered by the verification system to ensure that is is legally sourced and meets any other requirement of the certification scheme with respect to uncertified material

Key open issue as to 14/05/2014

- Should the cut off limit for criteria verification be introduced? If yes, shall it refer to the final product or separation between upper and sole needs to be introduced?
- Leather: Which is the ability of footwear manufacturer to trace back the possible leather contamination with pesticides? Is the preventive measure introduced through supply contract specification feasible?
- Cotton: Is the alignment with EU Ecolabel for textile accurate?
- Wood, cork and rubber: Is the alignment with EU Ecolabel for Toilets and Urinals accurate?

Emission from the production

Criterion 3 &4

Criterion 3

Emissions from the production of materials

Emissions from the production of materials

AHWG Follow up

- More than 80 % of tanneries in Europe discharge their effluent to public sewers.

- Differences in national requirements concerning chromium content after effluent treatment. Proposals submited to increase the threshold to 2 or to establish more ambitious level such as 0.5 Cr mg/l.

- BAT-AELs values (2013/84/EU) of total chromium content are in range from 0.3 to 1 mg/l, set as average monthly values, The emission levels apply for:

✓ Direct waste water discharge from tanneries on-site waste water treatment plants,

✓ Direct waste water discharge from independently operated treatment of waste water under section 6.11 in Annex 1 to Directive 2010/75/EU treating waste water mostly from tanneries.

Water emissions levels - tanning of hides and skins

	BAT emissions levels	Blue Angel	Nordic Swan	Leather Working Group
COD	200-500 mg/l	250 mg/l	10 kg/t of raw hide	100 ppm (5 points)
BOD5	15-25 mg/l			60 ppm
Total chromium	<0.3-1 mg/l	1 mg/l	1 mg/l	1.2 -0.4 ppm (3-5 points)
Suspended solids	< 35 mg/l			
Ammoniacal nitrogen NH4-N (as N)	< 10 mg/l			
AOX		0.5 mg/l		
Ammonium nitrogen		10 mg/l		
Phosphorous		2 mg/l		
Sulfide	< 1 mg/l	2 mg/l		

Emission from polymers production

Emission values depends on the polymer type

a) One specific limit per polymer

b) One average limit per polymer

Limited Feedback was provided

Blue Angel:

COD of 150 mg/l or at least 90% reduction compared with the inflow on a monthly average,

Textile:

Alignment with EU Ecolabel for Textile was supported by stakeholders

Proposal: Leather

3(a) Waste water from leather tanning sites shall, when discharged to surface waters after treatment (whether on-site or off-site), have a COD content of less than 200 mg/l.

Assessment and verification: the applicant shall provide detailed documentation and test reports in accordance with ISO 6060 showing compliance with this criterion on the basis of monthly averages for the six months preceding the application, together with a declaration of compliance. The data shall demonstrate compliance by the production site or, if the effluent is treated off-site, by the wastewater treatment operator.

3(e) Tannery waste water after treatment shall contain less than 1 mg/l of total Chromium.

Assessment and verification: The applicant shall provide a test report in accordance with the following test methods: ISO 9174 or EN 1233 or EN ISO 11885 for Cr and showing compliance with this criterion on the basis of monthly averages for the six months preceding the application. The applicant should provide a declaration of compliance with BAT 11, and BAT 10 or 12 following Commission Implementing Decision 2013/84/EU for the reduction of chromium content of waste water discharges should be accordingly demonstrated.

Proposal: Textile

3(b) Wastewater discharges from textile weaving, dyeing, printing and finishing shall not exceed 20 g COD/kg textiles processing. This requirement shall apply to wet-processes used to manufacture the product(s). The requirement shall be measured downstream of on-site wastewater treatment plant and/or municipal wastewater treatment plant receiving wastewater from these processing sites.

If the effluent is treated on site and discharged directly to surface waters, it shall also meet the following requirements:
(i) pH between 6 and 9 (unless the pH of the receiving water is outside this range)
(ii) Temperature of lower than 35° C (unless the temperature of the receiving water is above this value)
If colour removal is required, then the following spectral absorption coefficients shall be met:

(i)	436	nm	(yellow sector)	7	m^{-1}
(ii)	525	nm	(red sector)	5	m^{-1}
(iii)	620	nm	(blue sector)	3	m^{-1}

Assessment and verification: the applicant shall provide detailed documentation and test reports in accordance with ISO 6060 and ISO 7887 when relevant, and showing compliance with this criterion on the basis of monthly averages for the six months preceding the application, together with a declaration of compliance. The data shall demonstrate compliance by the production site or, if the effluent is treated off-site, by the wastewater treatment operator.

As proof of compliance to this requirements is also accepted the award of the EU Ecolabel for textiles when it is based on the EC Decision XX/XX/XXXX

Proposal: Rubber and synthetic rubber

3(c) Waste water from processing of natural rubber and/or manufacturing of synthetic rubber sites shall, when discharged to surface waters after treatment (whether on-site or off-site), have a COD content of less than 150 mg/l. This requirement shall apply to wet-processes used to manufacture the product(s).

Assessment and verification: the applicant shall provide detailed documentation and test reports, using ISO 6060, and showing compliance with this criterion on the basis of monthly averages for the six months preceding the application, together with a declaration of compliance. The data shall demonstrate compliance by the production site or, if the effluent is treated off-site, by the wastewater treatment operator.

Proposal: Leather, textile, and rubber

3(d) If the waste water from activities covered by Criterion 3 (a), (b) and (c) are released into a municipal waste water treatment plant/facility, then Criterion 3 (a), (b) and (c) shall not apply, as long as it can be demonstrated that:
(i) the discharge of waste water from the site into the municipal waste water treatment plant is authorised and,
(ii) the municipal waste water treatment facility is operational and that the subsequent discharge of treated water into the fresh water system is in line with minimum Community requirements according to Council Directive 91/271/EEC.

Assessment and verification: The applicant/or material supplier shall declare the compliance with the criterion supported by the documentation that prove the compliance with the criterion.

Key open issue as to 14/05/2014

- How should the national requirements be reflected in the criterion?
- What levels of COD should be set for natural rubber/synthetic rubber?
- Should assessment and verification test reports be updated?
- Is it feasible for footwear manufacturers to collect/compile information related to emissions from materials production?

Criterion 4

Volatile Organic Compounds

LCA findings

VOCs emission is responsible for **about 35 % of photochemical ozone** formation during the manufacturing stage of footwear and **of 6 % during** the production of leather.

Improvement potential

Potential reduction of photochemical ozone formation **by 3%** could be achieved by setting the VOC emission threshold at **18** pair. (reference scenario 20g VOCs/pair of shoes).

AHWG 1 Follow up

- Applicability of the solvent-free systems depends on the type of footwear, materials and expected product performance.
- About 40-50% of soles attachment technology is based on gluing (better grease-resistance and higher tensile strength)
- About 10 % of adhesives used in the upper department are solvent-based. The remaining adhesives are either dispersions (70 %) or hot-melt (10%) .
- Finishing: Colouring, brilliant varnishing, etc – is responsible for 20 % of the total VOCs.
-
- The average VOCs emission reported for EU Ecolabel license is 18 g VOC/pair.

VOC emission, Proposal**:** <18 g/pair, : Determination according to EN 14602:2012

$$M_{VOCtotal} = \sum (M_{adhesives} \times C_{VOCa}) + \sum (A_{finishes} \times M_{finishes} \times C_{VOCf})$$

$M_{VOCtotal}$ is the total amount of VOCs used in the production of the pair of shoes, in g;

$M_{adhesives}$ is the amount of adhesives applied to the pair of shoes considered, in g; only adhesives with solvents have to be taken into account; water based and hot melt adhesives are exempted;

C_{VOCa} is the VOC content of the adhesives applied, in g of VOCs per g of adhesive;

$A_{finishes}$ is the area of the pair of shoes onto which the finish[1)] is applied, in m^2;

$M_{finishes}$ is the amount of finish applied per metre square, in g/m^2;

C_{VOCf} is the VOC content of the finishes applied, in g of VOCs per g of finish.

Proposal: Volatile organic compounds (VOCs)

VOCs are any organic compound having at 293.15 K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.

The total use of VOCs during final footwear production shall not exceed, on average, 18 gram VOC/pair.

Assessment and verification: the applicant shall provide a calculation of the total use of VOCs during final shoe production in accordance with EN 14602 and specified in Appendix I. Calculation should be supported by test results and documentation as appropriate. Calculation should be provided for the period of at least six months prior the application (Registration of purchased leather, adhesives, finishes and production of footwear during at least the last six months is required).

Key open issue 14/05/2014

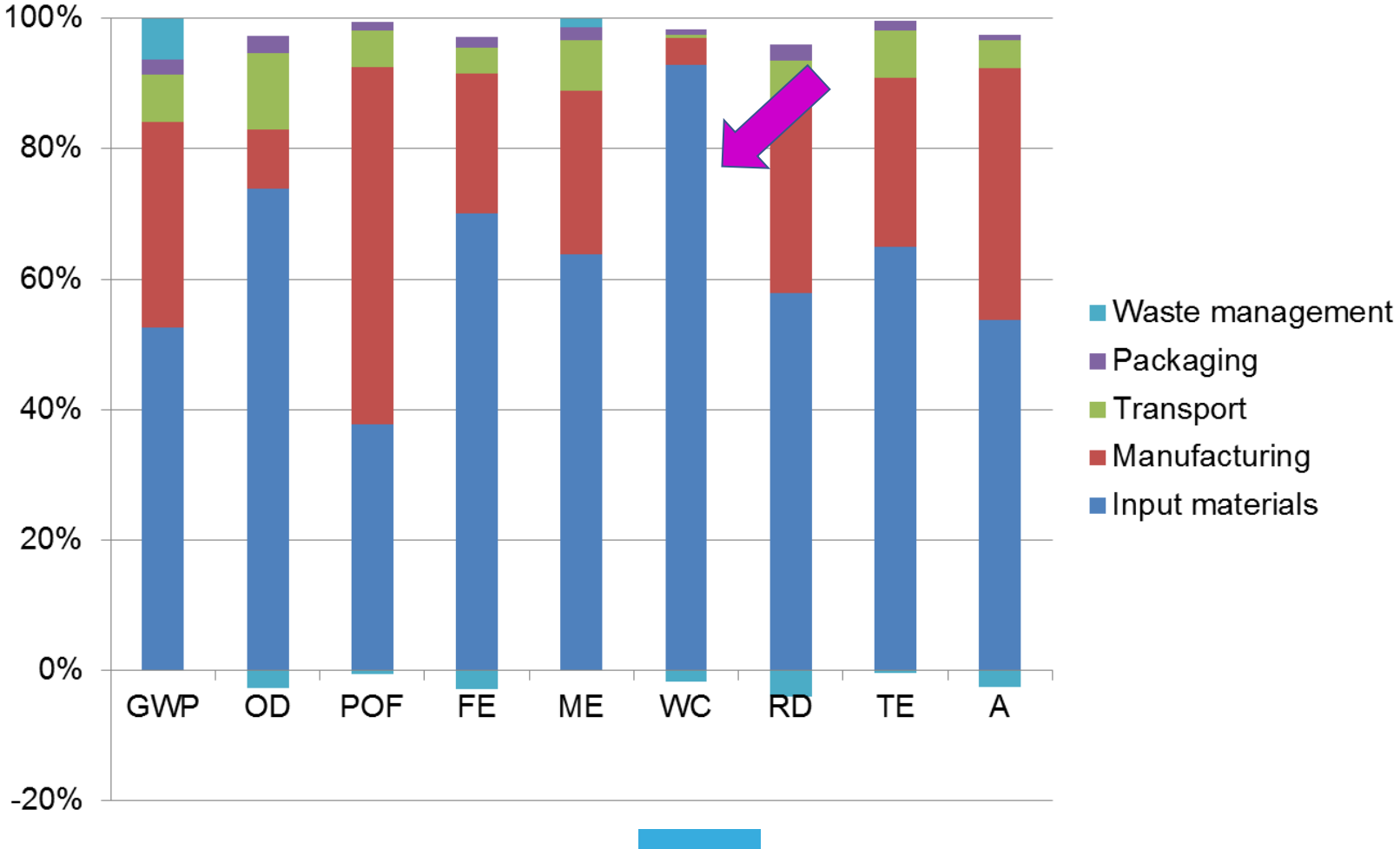
-Is the EN 14602 suitable for the purpose of the EU Ecolabel?

-Is the proposed revised limit value (18 g VOC/pair) and verification procedure acceptable?

Criterion 2

Water consumption

Water consumption hotspot: materials production



Leather processing: BAT water consumption levels

Sheepskins

Processes stages	Specific water consumption (litres/skin)
Raw to pickle	65 to 80
Pickle to wet blue	30 to 55
Post-tanning processes and finishing	15 to 45
Total	110 to 180

Raw hides

Process stages	Water consumption per tonne of raw hide (m³/t)	
	Unsalted hides	Salted hides
Raw to wet blue/white	10 to 15	13 to 18
Post-tanning processes and finishing	6 to 10	6 to 10
Total	16 to 25	19 to 28

Modern tanneries: average water consumption 12 – 30 m³/tonne for bovine hides/skins, and approx. 34-40 m³/tonne for calfskin

Other schemes:

Blue Angel- Footwear:
- 25 m³/t for raw skins of cattle;
- 45 m³/t for hides of calves, goats and kangaroos;
- 80 m³/t for skins of pigs and;
- 120 m³/t for hides of sheep;

Nordic Swan: 25m³ water/tonne hides/skins and leather, Textile processing: water consumption reporting

Leather Working Group 19.4-36.1 m³/tonne of raw hide is classified as good range

EU Ecolabel for footwear licenses: Average value 44,61 m3/t of skin

AHWG1 Follow-up

1. The Commission Implementing Decision 2013/84/EU established the relation between the leather origin (animal type) and the quantity of water consumed.
   - Hides: the pelts of large animals, such as cattle or horses.
   - Skin: the pelt of a small animal, such as calf, pig or sheep.

2. The water consumption levels given in the BAT are the ones measured by waste water discharges (BREF for Tanning of Hides and Skins, 2013)

3. Sheepskins processing: BAT-associated water consumption levels are between 110-180 litres/skin for sheepskin. Blue Angel specifies water consumption level for sheepskin as 120 m3/t of skin.

4. The EU Ecolabel for textiles does not introduce any limits on water consumption.

Proposal:

1. To refer to the BAT-associated water consumption levels: 16-25, and 19-28 m³/tonnes for bovine unsalted and salted hides, respectively.

2. A separated requirement for sheepskins is proposed to be introduced:
   - BAT associated value: 180 m3/skin
   - Blue Angel 120 m3/t of skin

3. For skins:
   - Average value from EU Ecolabel application: 44,61 m3/t,

Proposal: Reduction of water consumption

The following limits to water consumption for the tanning of hides and skins based on the monthly average values during twelve months before the application and measured by waste water discharge shall not be exceeded:

— Hides: 28 m³/t,

— Skins: 45 m³/t,

— Sheepskins: 180 l/skin

Assessment and verification: The applicant, leather supplier or leather manufacturing company shall provide appropriate documentation that the referenced limits have not been exceeded. Documentation should include information on the annual leather production and related water usage based on the monthly average values during twelve months. The data should refer to the entire tanning process.

If leather production process is conducted in different geographical location, the supplier of semi-finished leather should provide information on the quantity of water used (l) for the quantity of semi-finished leather produced (tonnes) based on the monthly average values during twelve months.

Key open issue as to 14/05/2014

- How should the possible data collection regarding total quantity of water consumed during leather processing be addressed?
- Should a specific requirement for water consumption in sheepskin processing be introduced?
- Are the proposed revised limit values and verification procedure acceptable?

Criterion 5

Energy consumption

Improvement potential analysis

Use of renewable energy (wind and hydropower) instead of European average grid

Impact category	1 pair of footwear
Climate change	13 %
Ozone depletion	6 %
Photochemical ozone formation	5 %
Freshwater eutrophication	17 %
Marine eutrophication	7 %
Water consumption	7 %
Resource depletion	13 %
Terrestrial eutrophication	12 %
Acidification	18 %

Reduce energy consumption (from 2 to 0.5 kWh / pair)

Impact category	1 pair of footwear
Climate change	12 %
Ozone depletion	2 %
Photochemical ozone formation	6 %
Freshwater eutrophication	8 %
Marine eutrophication	9 %
Water consumption	-
Resource depletion	11 %
Terrestrial eutrophication	10 %
Acidification	18 %

AHWG Follow – up

- Energy consumption varies with the factory size, and geographical location.
- To reduce energy consumption is economically driven,
- Establishing threshold value: Energy consumption depends on the type of footwear and technology and processes used: range from stakeholders feedback 0.5 – 7 kWh/pair
- Energy consumption within supply chain: very limited verification capacity was reported
- Stakeholders proposed to maintain the criterion without changes as the best practices approach
- The formula to calculate the average energy consumption during final process of shoe assembly: EN 14062

(EN 14062 Footwear: test method for the assessment of ecological criteria)

Proposal: Energy consumption

The energy consumption at the manufacturing stage shall be declared.

Assessment and verification: the applicant is requested to provide the relevant information according to the Appendix II

Key open issue as to 15/05/2014

- How energy consumption criterion should be addressed?
- Is introduction of the threshold value for energy consumption feasible?
- Shall the criterion be maintain as currently defined?
- Should the criterion be withdrawn?

Hazardous substances and mixtures

Hazardous substances and mixtures

In accordance with Article 6(6) of Regulation (EC) No 66/2010 on the EU Ecolabel, the product or any component of it shall not contain:

- Restricted or authorised by reference to them in Article 57 of Regulation (EC) 1907/2006 (REACH);
- Identified as Substances of Very High Concern (SVHC) according to the procedure described in Article 59(1) of Regulation (EC) No 1907/2006 and included in ECHA's Candidate List;
- Classified as carcinogenic, mutagenic or toxic for reproduction (CMR), toxic and hazardous to the environment in accordance with Regulation (EC) No 1272/2008 or Directive 67/548/EC which are identified in the form of Hazard Statements.http://echa.europa.eu/web/guest/candidate-list-table

Verification

The applicant shall select the most appropriate form of verification:

(i) Articles manufactured according to a specific chemical formulation or treatment (e.g. textile, leather, PUR): Safety Data Sheet shall be provided for the final article or for the substances and mixture composing the final article above the cut-off limit of 0.10 % w/w

(ii) Homogenous parts and any associated treatments or impurities (e.g. plastics, metal accessories): Safety Data Sheet shall be provided for the materials composing the par of the product and for substances and mixtures used in the formulation and treatment of the materials remaining in the final product above a cut off limit of 0.10% w/w

(iii) Chemical recipes used to impart specific function to the final product or product components (e.g. glues, adhesives, water repellents, biocides, dyes, plasticisers): Safety Data Sheet shall be provided for substances and mixtures used in the assembly of the final product or substances and mixtures applied to component materials during their processing and remaining in the final product

Hazardous substances and mixtures

Derogations of specific substances are allowable in exceptional circumstances where inclusion would prevent take up of the EU Ecolabel or shift the environmental burden to other life cycle phases or impacts (Art. 6.7 of the EU Ecolabel Regulation).

- Standardise feedback form

Substitution request for specific substances:

- are safer and provide sufficient environmental protection;
- can provide the same technical function;
- are present in a sufficient number of products.

http://www.echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database

Hazardous substances and mixtures

No derogation shall be given concerning substances that meet the criteria of Article 57 of Regulation (EC) No 1907/2006 and that **are identified according to the procedure described in Article 59(1) of that Regulation**, and are present in mixtures, in an article or in any homogeneous part of a complex article in concentrations higher than 0,1 % (weight by weight).

Splitting hazard statement into two hazard categories: A (the most significant hazards according to CLP Guidance and those corresponding to the criteria in Article 57 of Regulation (EC) No 1907/2006); and B (lower level hazards according to CLP guidance).

It should be discussed with stakeholders which classes of substances can be derogated and which cannot using the definitions of two hazard categories.

AHWG Follow up

Stakeholders have not submitted any official request for any derogation

Derogated hazard classifications by substance group (Proposal)

Substances that impart function to the final product			**Applicability**
Substance group	Derogated hazard classifications	Derogation conditions	
All materials	All hazard statements	The material threshold of 3% w/w as specified in the framework	Final product
Nickel	H317, H351, H372	Nickel in stainless steel	Metal toe-caps and accessories

DEROGATIONS: Cross check with other EU Ecolabel PGs

- Dyes
- Flame retardants
- Water, dirt and stain repellents
- Glues and adhesives
- Optical brighteners
- Auxiliaries (carriers, levelling agents, dispersing agents, surfactants, thickeners, binders)

Should any derogation from the list of H/R phrases be made for specific substances, material?

We require quantitative data to demonstrate that a substance should be derogated

Key open issues as to 15/05/2014

- Is the derogation alignment with other EU Ecolabel product groups substantiated?
- Is there any derogation requirement that should be analysed?
- Shall we allow derogation for Hazard statement H317 considering direct and prolonged skin contact of footwear.
- Possible derogation should further be discussed with stakeholders after submitting respective derogation request

Restricted Substances List

AHWG1 Follow up (1)

The former criterion 4 is proposed to be integrated into Criterion 7 and renamed to "Restricted Substances List" specified in the Appendix to the criteria document

- Specific requirements for each substance according to the production stage/material to which the restriction applies,
- Setting minimum instead of "not detectable" values was considered necessary,
- Alignment with Horizontal Task Force Approach

AHWG Follow up (2): Verification

- ***Specific test report:*** *Setting limit values* for residual substances and specific functional groups of compounds
- **Declaration of no-use from supplier supported by Safety Data Sheet**
- Possible development of '**compliance statements'** as declarations coming from secondary suppliers
- **Acceptance of equivalent testing carried out for other schemes should be discussed,** e.g. Blue Angel, Nordic Swan,

Methodology

- Characterisation of the main materials, parts and components relevant to product group Footwear;
- Screening of functional additives, coatings and treatments applied to materials or components for their potential hazards and/or exposure risk along the products lifecycle. Process residues and contaminants of concern are also addressed;
- Identification of the main parts of the product in which hazardous substance substitution and/or restrictions have been implemented by manufacturers in mainstream products;
- Identification of relevant Candidate List and Article 57 substances by reference to European Commission initiatives, and Member State intentions;
- References to industry Restricted Substances Lists, Ecolabel types I of relevance to the product group Footwear have also been analysed

RSL: structure

1. **All production stages:**

- Surfactants, softeners and complexing agents (SDS, test)
- Auxiliaries e.g. APEOs (test), complexing agents (SDS)
- Colophony (SDS)
- Solvents (SDS)
- Chloroaklens (SCCPS, MCCPS) (Test)
- Biocides (SDS)
- Other specific substances e.g. PCB, TEPA (SDS)

2. **Dyehouse and printing process:**

- Dyes and pigments (SDS/test for azo dyes)
- Carriers (SDS)

3. **Finishing process:**

- Biocides (product anti-microbial treatment),
- Water repellents (SDS)
- Flame retardants (SDS)

4. **Final product:** (material applicability specification):

- N-nitrosamines (test)
- PAHs (test)
- Tinorganic substances (test)
- Phtalates (test)
- Extractable metals (test)
- Chromium VI (test)
- Nickel (test)
- Formaldehyde, (test)
- TDA and MDA (test)
- VM (test)

Use of biocides and biocidal products:

1. Transportation and storage of raw or semi-finish material (all production stages):

- Reference to active substances authorised under Biocidal Directive 528/2012 is proposed. *Reference to substances authorized for use in footwear is proposed*.

2. Referring to finishing process (finishing process, anti-microbial treatment): Declaration of no use

3. Substances specifically restricted (all production stages/finishing process/final product):

Chlorophenols (their salts and esters), organo-tin compounds (including TBT, TPhT, DBT and DOT) diemthyl fumarate (DMFu), triclosan, and nanosilver shall not be used during the transportation or storage of the product, any article of it and any homogeneous part of it and should not be incorporated into the final product.

Triclosan (CAS: 3380-34-5)

-Harmonised classification of H400 and H410

-Restricted in some RSLs: 50 mg/kg

-US EPA re-opened the review of Triclosan (March 2013),

-Member State experts agreed with European Commission proposal not to approve Triclosan use for three product groups under the EU's 2012 Biocides Regulation (March, 2014)

- Candidate for the Water Framework Directive's priority list

Triclosan is commonly used in footwear

is this restriction feasible?
Shall specific testing requirement for triclosan be introduced?

Key open issues as to 14/05/2014

- Is the criterion clarity improved by the proposed division of functional use of biocides?
- Is there any reason to apply biocidal treatment to final product (excluding specific medical requirements)?
- Is the list of biocidal substances that requires specific restricted accepted?

APEOs:

To introduce specific threshold:

- 25 mg/kg sum in line with other EU Ecolabel PGs
- 100 mg/kg sum as proposed by stakeholders, in line with Blue Angel for Footwear

Verification:

The ISO/DIS 18218-1 (Direct method) and ISO/DIS and 18218-2 (Indirect method) have been released in January 2013.

How should specific verification threshold be addressed?

Flame retardants

The use should be permitted only in case of safety footwear when particular product performance requirements need to be met

- Different technologies according to product techcnial requirements
- Limited feedback on specific substances used.

Restriction applies exclusively to specific PPE Footwear with incorporated flame ratardance function

Proposed verification: specification of substances added to enhance the flame retarding properties, together with concentrations and related H statements / R phrases. Compliance with the criterion 6 should be declared.

Should a specific fitness for use test be required?

Water repellents

Use of PFCs water repellents to achieve specific product performance

No PFCs-free alternatives were identified in case of:

-very high water repellency, or water pressure resistance
-combined soil, oil, and dirty repellency

Shall specific derogation be considered?
Could we introduced specific water repellency classes to which derogation could refer?

Water repellents

PFCs Applicability: Footwear with integrated water repellence function	(i) Fluorinated water, stain and oil repellent treatments shall not be used for footwear impregnation. These shall include perfluorinated and polyfluorinated treatments. Non-fluorinated treatments shall be readily biodegradable and non-bioacumulative in the aquatic environment including aquatic sediment. Assessment and verification: Declaration of compliance from membrane or laminate manufacturer with respect to the polymer production supported by test results CEN/TS 15968:2010.	Not used
	ii. Fluopolymer membranes and laminates may be used only in case when specific water resistance is required (e.g. tracking footwear). They should not be manufacturer using PFOS or PFOA or any of its higher homologous as defined by the OECD[1]. Assessment and verification: Declaration of compliance from membrane or laminate manufacturer with respect to the polymer production supported by test results CEN/TS 15968:2010.	Restricted use

Isocyanate

- Complete chemical reaction of isocyanate during PU formation.
- Reference to CERTIPur scheme was suggested

Applicability: PU foam, PU coatings	The following limits value should apply to footwear that contain PU foam or PU coatings 2,4 Toluenediamine (2,4-TDA, 95-80-7) 4,4'-Diaminodiphenylmethane (4,4'-MDA, 101-77-9) Assessment and verification: The applicant and/or his supplier(s) shall provide a test report according to test method EN ISO 10283.	Lower than 5 mg/kg each

N-Nitrosamines: List update

N-nitrosamine	CAS
N-nitrosodiethanolamine (NDELA)	1116-54-7
N-nitrosodimethylamine (NDMA)	62-75-9
N-nitrosodipropylamine (NDPA)	621-64-7
N-nitrosodiethylamine (NDEA)	55-18-5
N-nitrosodiisoprpylamine (NDiPA)	601-77-4
N-nitrosodibutylamine (NDBA)	924-16-3
N-nitrosopiperidine (NPIP)	100-75-4
N-nitrosodiisobutylamine (NDiBA)	997-95-5
N-nitrosodiisononylamine (NDiNA)	1207995-62-7
~~N-nitrosodibenzylamine (NDBzA)~~	~~5336-53-8~~
N-nitrosomorpholine (NMOR)	59-89-2
N-nitroso N-methyl N-phenylamine (NMPhA)	614-00-6
N-nitroso N-ethyl N-phenylamine (NEPhA)	612-64-6
N-Nitrosopyrrolidine	930-55-2

- European Commission. Scientific Committee on Consumer Products. 2007
- The 'Report on Carcinogens 2011. 12th Ed.
- TRGS 552 Technische Regeln fur Gefahrstoffe. N-Nitrosamine. 2007 (BMAS)
- N-nitrosamine specified in EN 71-12 :2013

Extractable heavy metals

The following limits value should apply to footwear children <36 months

Antimony (Sb)	30.0 mg/kg
Arsenic (As)	0.2 mg/kg
Cadmium (Cd)	0.1 mg/kg
Chromium (Cr)	1.0 mg/kg (for textile)
Cobalt (Co)	1.0 mg/kg
Copper (Cu)	25.0 mg/kg
Lead (Pb)	0.2 mg/kg
Nickel (Ni)	1.0 mg/kg
Mercury (Hg)	0.02 mg/kg

The following limits value should apply to all other footwear

Antimony (Sb)	30.0 mg/kg
Arsenic (As)	1.0 mg/kg
Cadmium (Cd)	0.1 mg/kg
Chromium (Cr)	2.0 mg/kg (for textile)
Cobalt (Co)	4.0 mg/kg
Copper (Cu)	50.0 mg/kg
Lead (Pb)	1.0 mg/kg
Nickel (Ni)	1.0 mg/kg
Mercury (Hg)	0.02 mg/kg

Verification: test methods: EN ISO 17072-1 for leather, EN 1122 for plastics (cadmium and lead), and EN ISO 105-E04 ICP-MS for textiles. The sample preparation shall follow EN ISO 4044.

Cr (VI) and total extractable chromium

Applicabiity: chromium tanned leather

Cr (VI)

There shall be no Chromium (VI) in the final product.

Assessment and verification: test report, using test method EN ISO 17075 (detection limit 3 ppm).

The sample preparation must follow the indications of the EN ISO 4044.

Cr total

Total Chromium content in the final product shall be lower than 200 mg/kg

Assessment and verification: Test method EN ISO 17072-1. The sample preparation shall follow EN ISO 4044.

Formaldehyde:

Existing requirement

The amount of free and hydrolysed formaldehyde of the components of the footwear shall not exceed the following limits:

— textile: <n.d. (20 mg/kg),

— leather: < n.d. (20 mg/kg) (children footwear), 75 mg/kg (with skin contact), 150 mg/kg for others

Assessment and verification: The applicant and/or his supplier(s) shall provide a test report, using the following test methods: Textiles: EN ISO 14184-1; Leather: EN ISO 17226-1 or 2.

	Formaldehyde
Nordic Swan	• Leather: **75ppm**
The New Zealand Trust	• Direct skin contact: **30ppm** • No direct skin contact: **300ppm**
Japan Eco Mark	• Under 36 months: **16mg/kg** • Direct skin contact: **75mg/kg** • No direct contact: **300mg/kg**
Blue Angel	• Under 36 months: **20mg/kg** • Other materials: **75mg/kg**
BLC guidelines	• Under 36 months: **20mg/kg** • Skin contact**: 75mg/kg** • Others: **200 mg/kg**

Tinorganic substances (final product)

- PVC, PUR, Silicon materials, other synthetic materials,

-Test that specifically refers to organotin compounds in footwear is: ISO/TS 16179:2012.

- Alignment with EU Ecolabel for Bed Mattraces in line with CertiPur scheme

Tributyltin (TBT)	50 ppb
Dibutyltin (DBT)	100 ppb
Monobutyltin (MBT)	100 ppb
Tetrabutyltin (TeBT)	-
Monooctyltin (MOT)	-
Dioctyltin (DOT)	-
Tricyclohexyltin (TcyT)	-
Triphenyltin (TPhT)	-
Sum	500 ppb

PAHs

Name	CAS NO	REACH Annex XVII	US EPA	GS MARK
Naphthalene	91-20-3		X	X
Acenaphthylene	208-96-8		X	X
Acenaphthene	83-32-9		X	X
Fluorene	86-73-7		X	X
Phenanthrene	85-1-8		X	X
Anthracene	120-12-7		X	X
Fluoranthene	206-44-0		X	X
Pyrene	129-00-0		X	X
Chrysene	218-01-9	X	X	X
Benzo[a]anthracene	56-55-3	X	X	X
Benzo[b]fluoranthene	205-99-2	X	X	X
Benzo[k]fluoranthene	207-08-9	X	X	X
Benzo[a]pyrene	50-32-8	X	X	X
Dibenzo[a,h]anthrancene	53-70-3	X	X	X
Indeno[1,2,3-c,d]pyrene	193-39-5		X	X
Benzo[g,h,i]perylene)	191-24-2		X	X
Benzo[j]fluoranthen	205-82-3	X		X
Benzo[e]pyren	192-97-2	X		X

PROPOSAL: to refer to 18 PAHs listed in ZEK 01.4-08 in the course of GS-Mark Certification

Skin contact

- Total of 18 PAHs: 10 mg/kg
- BaP: 1 mg/kg

- Children products < 36 months
  Total of 18 PAHs: 0.2 mg/kg
- BaP: 0.2 mg/kg

Should a specific requirements for children be adopted?

Verification:

- CEN ISO/TS 16190:2013 specifies methodology to quantitatively determine PAHs in Footwear materials. 18 PAHs are considered.
- ISO 21461 (Nuclear Magnetic resonance) was perceived as too expensive and of limited use (mainly research area).
- industry standard test: ZEK 01.4-08

Dyes and pigments

- Alignment with EU Ecolabel for Textile and Bed Mattraces is proposed for restriction that applies to dyes and pigments
- Alignment with EU Ecolabel for Paints and Varnishes is proposed to apply to specific metal based pigments

Verification azodyes and azocolourants

- Specific testing according to EN 14362-1:2012 and 3:2012 for textile, and CEN ISO/TS 17234-1 and 2 for leather. Limit value is 30 mg/kg for each arylamine. (Note: false positives may be possible with respect to the presence of 4-aminoazobenzene, and confirmation is therefore recommended).

Phtalates

(i) Only phthalates that at the time of application have been risk assessed and fulfil the requirement 1(a) may be used in the product (if applicable).
Assessment and verification: The applicant shall provide and shall make suppliers to provide a list of phthalates used within the production process of plastic elements, coatings, and artificial leather.

(ii) The presence of specified substances shall be specifically restricted

Assessment and verification: Declaration of non-use supported by SDS for the plasticisers used in the formulation. Otherwise the results according to ISO/TS 16181 or EN ISO 14389 should be provided.
Limit value:
0.1 % w/w (0,05% w/w for children <36 months products) sum total

DnHP (CAS: 84-75-3 was added to the list, as being inserted into Candidate List on 10/12/1013 as toxic for reproduction in accordance with Article 57 (c) of

Chlorinated paraffins

Applicability: Leather, rubber, textile components	C10-C13 chloralkanes shall not be used in the production of leather, rubber or textile components. Assessment and verification: the applicant and/or his supplier(s) shall provide a declaration that such chloralkanes have not been used. The declaration should be supported by a test report from the EN ISO DIS 18219.	*Not used*
	The use of C14-C17 chloralkanes shall be restricted in the production of leather, rubber or textile components. Assessment and verification: the applicant and/or his supplier(s) shall provide a declaration that such chloralkanes have not been used. The declaration should be supported by a test report from the EN ISO DIS 18219.	*1000 mg/kg*

Vinyl monomer in children products

- Vinyl chloride monomer is classified under REACH as carcinogenic: category 1A (H350).
- German Consumer Goods Ordinance sets the mandatory limit value for vinyl chloride monomer of 1 ppm in consumer goods.
- American Apparel and Footwear Association (AAFA) sets the limit value of 1 mg/kg on the vinyl monomer content in the final product.

If the PVC material is used in footwear it should not contain residual vinyl monomer.

Assessment and verification: The applicant and/or his supplier(s) shall provide a test report according to test method headspace GC-MS according to BVL B 80.32-1

Key open issues as to 15/05/2014

- Which exposure pathways are more relevant along the supply chain and during the use phase?
- What is the capacity of industry to respond to proposed restrictions?
- Are the proposed test methods appropriate?

CRITERION 8:

Fitness for use

AHWG Follow up

- The current limit values and existing methods are perceived as ambitious and up-to-date. No proposal for the values update was received.
- Footwear categories are specified in respective norms. The additional specification were perceived as not necessary.
- Articles moulded in one piece were advised to be integrated in existent categories using respective limit values.
- For shoe insoles abrasion, the technical centres suggested the limit values >= 25 600 dry and >=12 800 wet for the infant category.
- The values for shoe insoles abrasion were added on the base of EN 17704 and additional information provided by footwear industry.
- The values proposed should be subjected to further consultation.

Criterion proposal

Occupational and safety footwear shall carry the EC mark (in accordance with Concil Directive 89/686/EEC).

All other footwear shall meet the requirements indicated in the table overleaf. *Assessment and verification:* the applicant shall provide a test report corresponding to the parameters indicated in the table overleaf, using the following test methods:

— EN 13512 — Upper — Flex resistance,
— EN 13571 — Upper — Tear strength,
— EN 17707 — Outsoles — Flex resistance,
— EN 12770 — Outsoles — Abrasion resistance,
— EN 17708 — Whole sole — Sole adhesion,
— EN 12771 — Outsoles — Tear strength,
— EN ISO 17700 — Test methods for uppers, linings and in socks — Colour fastness to rubbing.
— EN 17704 —Insoles - abrasion resístanse

Proposal: CRITERION 8

		General sports	School footwear	Casual	Men's town	Cold weather footwear	Women's town	Fashion	Infants	Indoor
Uppers flex resistant: (kc without visible damage)		Dry = 100 Wet = 20	Dry = 100 Wet = 20	Dry = 80 Wet = 20	Dry = 80 Wet = 20	Dry = 100 Wet = 20 – 20° = 30	Dry = 50 Wet = 10	Dry = 15	Dry = 15	Dry = 15
Uppers tear strength (Average tear force, N)	Leather Other materials	≥80 ≥40	≥60 ≥40	≥60 ≥40	≥60 ≥40	≥60 ≥40	≥40 ≥40	≥30 ≥30	≥30 ≥30	≥30 ≥30
Outsoles flex resistance	Cut growth (mm) Nsc = no spontaneous crack	≤4 Nsc	≤4 Nsc	≤4 Nsc	≤4 Nsc	≤4 Nsc at – 10 °C	≤4 Nsc			
Outsoles abrasion resistance	D ≥0,9 g/cm³ (mm³) D < 0,9 g/cm³ (mg)	≤200 ≤150	≤200 ≤150	≤250 ≤170	≤350 ≤200	≤200 ≤150	≤400 ≤250			≤450 ≤300
Upper-sole adhesion (N/mm)		≥4,0	≥4,0	≥3,0	≥3,5	≥3,5	≥3,0	≥2,5	≥3,0	≥2,5
Outsoles tear strength (Average strength, N/mm)	D ≥ 0,9 g/cm³ D < 0,9 g/cm³	8 6	8 6	8 6	6 4	8 6	6 4	5 4	6 5	5 4
Colour fastness of the inside of the footwear (lining or inner face of the upper). Grey scale on the felt after 50 cycles wet		≥2/3	≥2/3	≥2/3	≥2/3	≥2/3	≥2/3		≥2/3	≥2/3
Linings and socks abrasion cycles		≥25 600 dry ≥12 800 wet	≥25 600 dry ≥12 800 wet	≥25 600 dry ≥12 800 wet	≥25 600 dry ≥6 400 wet	≥ 25 600 dry ≥12 800 wet	≥25 600 dry ≥6 400 wet	≥25 600 dry ≥3 200 wet	≥=25 600 dry ≥=12 800 wet	≥8 400 dry ≥4 600 wet

Key open issues as to 14/05/2014

- Shall other testing methods be used?
- Should additional tests be required?
- Are the proposed limit values shoe insoles abrasion appropriate?
- Shall injection moulding footwear be included in an existent category?

CRITERION 9:

Waste management during footwear assembly (new)

Post AHWG

- No consensus on quantitative threshold proposal was achieved
- Operations included in footwear assembly should be further specified to improve criterion clarity

Improvement potential analysis (Waste reduction (15 % -> 5%)

Impact category	Environmental improvement for 1 pair of footwear
Climate change	5 %
Ozone depletion	8 %
Photochemical ozone formation	3 %

Footwear assembly stages

Manufacturing stage	Possible processes
Upper fabrication	Hand-cut, vibrating cutting machine, die cutting machine, cutting machine in continuous fixed blade, ultrasonic cutting machine, laser cutting machine, jointing preparation, splitting, skiving, trimming, hemming.
Insole fabrication	Hand-cut, vibrating cutting machine, die cutting machine, cutting machine in continuous fixed blade, ultrasonic cutting machine, laser cutting machine.
Outsole fabrication and preparation	Injection moulding, cutting hell, wedge application, heeltap application, welt preparation.
Production of other auxiliary components	Pieces cutting, stamping, splitting, textile and fabrics coupling, box manufacturing.
Assembly of the upper with the other parts	Rope warping, tacks warping, staple warping, double warping, turned warping, warping with iron wire, Strobel warping, gluing, stitching, nailing, vulcanization, injection.
Finishing and packing	Insole application, Accessories application, Polishing, Details painting. Laces application

Waste management during footwear assembly

The implementation of the waste management scheme at the footwear manufacturing stage should be demonstrated. The waste management plan should at least meet the following conditions:

(i) Dedicated storage space to cater for recyclable materials generated during the production phase shall be provided. The waste collection area provided with the different containers shall be clearly labelled for recycling and adequately dimensioned according to the plant operation.

(ii) A waste management plan shall be developed containing information on, the estimated amount of waste generated broken down by type according to the Directive 2008/98/EC on Waste, how to collect the waste generated and giving instructions on how to dispose of the separated waste streams.

Proposal: CRITERION 9

Assessment and verification: The applicant shall declare the compliance with the criterion supported by the following documentation:

(i) Short description of waste management programme implemented; and
(ii) Report on the quantity of waste generated together with quantitative information on applied collection, transportation, treatment, disposal, recycling and recovery for all waste streams. Report should refer to the period of 12 months prior to the date of application on the annual base.

Key open issues as to 15/05/2014

- How should footwear assembly site be specified?
- Is the introduction of qualitative criterion perceived as the right approach?
- Are there any further specification and/or verification procedures that should be listed

CRITERION 10:

Social requirements (CSR) (new)

AHWG 1 Follow up

- Alignment with EU Ecolabel for textile CSR criteria is proposed, being based on the discussions that took place during the Horizontal Task Force on social criteria
- It is proposed to introduce minimum criteria based on adherence to the eight ILO Core Conventions.

Proposal CRITERION 10

The criteria in this section apply to textile and leather processing for Footwear products and to the final product assembly site.
Applicants shall ensure that the fundamental principles and rights at work as described in the International Labour Organisation's (ILO) Core Labour Standards, the UN Global Compact and the OECD Guidelines for Multi-National Enterprises shall be observed by textile and leather production sites used to manufacture the licensed product(s) and by the site of final assembly of the product. For the purpose of verification the following ILO Core Labour Standards shall be referred to:
029 Forced Labour
087 Freedom of Association and Protection of the Right to Organise
098 Right to Organise and Collective Bargaining
100 Equal remuneration
105 Abolition of Forced Labour
111 Discrimination (Employment and Occupation)
155 Occupational safety and health
138 Minimum Age Convention
182 Elimination of the Worst Forms of Child Labour
These standards shall be communicated to respective production sites used to manufacture the final product.
Assessment and verification: the applicant shall demonstrate third party verification of compliance, using independent verification or documentary evidence, including site visits by auditors during the Ecolabel verification process for textile and leather production sites used to manufacture the materials for the licensed product(s) and by the site of final assembly of the product. This shall take place upon application and subsequently during the license period if new production sites are introduced. For textiles, as proof of compliance to this requirements the award of the EU Ecolabel for textiles when it is based on the EC Decision XX/XX/XXX is also accepted.

Key open issues as to 15/05/2014

- Which is the capacity of footwear manufacturer to introduce social requirements into specification of materials to be supplier?
- Is the proposed criteria verification appropriate?

CRITERION 11:

Packaging of the final product

AHWG Follow up

- For corrugated boxes, the average recycled content in Europe was 94.2% in 2012.
- The manufacturers in high recycling areas improve the quality by either mixing in other types of used paper products with stronger fibres or virgin pulp
- The introduction of criterion on 100% recyclability instead of recycled content was suggested: EN 13430:2004 (Packaging - Requirements for packaging recoverable by material recycling).
- Reference to biodegradable or compostable plastics was withdrawn
- It is suggested to avoid excessive use of packaging: How could this requirement be verified?

European Commission

Criterion proposal

11 (a) Where cardboard boxes are used for the final packaging of footwear, they shall be made of 100 % recycled material.

Where bags are used for the final packaging of footwear, they shall be made of at least, 75 % recycled material and/or they should be 100% recyclable

Packaging shall be so manufactured that the packaging volume and weight is limited to the minimum adequate amount to maintain the necessary level of safety, hygiene and acceptance for the packed product and for the consumer.

11 (b) The product packaging may not contain dimethylfumarate.

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Assessment and verification: Only primary packaging, as defined in the Directive 94/62/EC is subjected to the criterion.

i. A sample of the product packaging and its picture shall be provided on application, together with a supportive declaration of compliance with this criterion.
ii. The applicant should demonstrate compliance with the criterion 10 (b) by providing test results for dimethylfumarate content in the packaging according to the specification set in Criterion 7. The laboratory testing should be conducted on random sampling

CRITERION 12:

Information on the packaging

Information on the packaging

12(a) User Instructions

The following information (or equivalent text) shall be supplied with the product:

— Cleaning and care instruction following the specific product requirements.

— 'These shoes have been treated to improve their water resistance. They do not require further treatment.' (This criterion is applicable only to footwear that has been treated for water-resistance)

— 'Repair your footwear rather than throw them away. This is less damaging to the environment.'

— 'Please use appropriate local recycling facilities to dispose of your footwear.'

12(b) Information about the eco-label

The following text (or equivalent text) shall appear on the packaging:

'For more information visit the EU Ecolabel website: http://www.ecolabel.eu'

12(c) Information to consumers

An information box in which the applicant explains its approach to environmental sustainability should be put on the packaging.

Assessment and verification: the applicant shall provide a picture of the product packaging, accompanying by information supplied with the product, together with a declaration of compliance with each part of this criterion.

Key open issues as to 14/05/2014

- Should additional information be added?
- What are the most appropriate instructions to the user to improve footwear durability?
- What are the most appropriate information to the consumer to be displayed?
- How could requirement on the quantity of packaging material used be verified?

CRITERION 13:

Information appearing on the Eco-label

Information appearing on the Eco-label

Box 2 of the eco-label shall contain the following text:

(i)More sustainable material origin (in case Criterion 1 applies)
(ii)Less polluting production processes
(iii)Restrictions on hazardous substances
(iv)Tested for durability

Assessment and verification: the applicant shall provide a picture of the product packaging showing the label, together with a declaration of compliance with this criterion.

Key open issues as to 14/05/2014

- Should any additional information be added?

Post AHWG1

Criteria not to be considered within the on-going revision revision:

1. Use of recycled materials
2. Post-consumer waste
3. PVC usage

Thank you for your attention

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