

Recommended criteria for clothing and textiles

1. Product group

CPV code: Primary groups 17000000 and 18000000, clothing and accessories. This document also includes textiles.

The criteria are not intended to cover:

- Special clothing or protective equipment designed to protect against lethal hazards or hazards which may be serious and cause permanent damage to health, such as clothing to provide protection against chemicals and shot and stabbing injuries.
- Clothing and shoes made from fur or leather.

2. Environmental impact

Impact		Action
<ul style="list-style-type: none"> • Energy and climate Energy consumption and emissions during production, transport, maintenance and disposal. This causes greenhouse gas emissions, depending on the energy source.	→	During requirement verification, it is important to identify the users' actual requirements, including quality and usage properties, in order to ensure the procurement of clothing and textiles with a long service life. This is discussed in the proposed procurement process in section 3.
<ul style="list-style-type: none"> • Chemicals Impact of chemicals at various stages of the production process and during maintenance. Chemicals can cause damage to health and the environment and affect biodiversity.	→	Requirements are imposed on suppliers in the qualification requirements, as well as on the products in the specification of requirements and award criteria.
<ul style="list-style-type: none"> • Water Water consumption and area usage in connection with the cultivation of cotton, in production processes and in the maintenance of clothing and textiles.	→	The choice of fibre type is of significance to water consumption over the service life of textiles. Synthetic fibres or mixture qualities should be assessed. This is discussed in the proposed procurement process in section 3.
<ul style="list-style-type: none"> • Waste Clothing and textiles may contain environmentally hazardous chemicals which should not "go astray". Waste in landfills (prohibited from 2009) gives emissions of methane and leachate containing environmental toxins.	→	Waste problems are kept to a minimum through the contractual requirement laid down in section 4.5.2.
<ul style="list-style-type: none"> • Resource consumption Excessive resource consumption in the	→	During requirement verification, it is important to identify the users' current requirements, including

<p>production of various fibre types, plus an unnecessarily short service life, cause considerable environmental impact.</p>		<p>quality and usage properties, in order to ensure the procurement of clothing and textiles with a long service life. This is discussed in the proposed procurement process in section 3. In addition, resource consumption is incorporated into sections 4.4.1 and 4.4.2.</p>
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The environmental impact of clothing and textiles is linked to all stages in a textile product's lifecycle. Textile production is often characterised by many production elements and the fact that much of the production takes place in low-cost countries. The production chain consists mainly of fibre production, spinning, dyeing, weaving/knitting (production of textiles by the metre), aftertreatment and ready-made clothing (seams). Substantial quantities of chemicals are used in all production processes, from fibre production to completion, and when using and maintaining the product (washing, cleaning, etc.). These chemicals may cause significant environmental impact as well as health problems for workers who manufacture the products, users and others. The energy and water consumption during both the production process and maintenance is also significant.

3. Proposed procurement process

Examples of textile products procured by the public sector include workwear and protective clothing, bed linen, patient bed linen and interior textiles (curtains, cloths, carpets, etc.). Often, tender rounds for workwear, protective clothing, bed linen and patient bed linen are announced as separate tender competitions. Interior textiles are often purchased in connection with building construction, refurbishment or extension.

It is important in connection with these purchases to meet the needs of users. When purchasing workwear and protective clothing in particular, fulfilling the needs of users is of great importance as regards the service life and hence also the overall environmental impact. Employers will generally treat workwear they are happy with better than something they perceive to be poor. They will also not be as ready to replace it with other clothing. To meet users' needs, it is important ahead of the procurement to review work processes and tasks that are to be performed. It is important in the tender evaluation to check fit, comfort, etc. amongst users.

Good quality will be of major importance to the service life and hence also to overall environmental impact. Quality requirements should therefore be laid down in respect of tensile and tear strength, wear resistance, colourfastness, napping, seams (double/single), comfort, etc.

The choice of materials is also crucial to environmental impact. For instance, using wool in interior textiles could reduce the need to use flame retardants, as wool is less inflammable than many other materials. This is also true of modacrylic, aramide, which are also not very flammable.

When purchasing textiles, it is necessary to take into account the fact that different clothes and textiles have differing maintenance needs (cleaning, washing, impregnation, drying, etc.). This is of major importance to the environmental impact of the products in respect of energy, climate, water consumption, etc. For instance, it has been demonstrated that bed linen in a mixture of 50/50% cotton and polyester is both harder wearing and requires a lot less energy for washing and drying than equivalent pure cotton products. Wool is very resistant to soiling and is therefore easy to wash clean. This saves energy, as wool needs to be washed less frequently and less energy is also used in the washing process.

Application of the criteria must be assessed in each individual case.

As of January 2009, it will be prohibited to send biodegradable waste, including clothing and textiles, to a landfill; cf. the Regulations on waste, section 9.

4. Recommended requirements and criteria

Environmental requirements and criteria that are established should be included in the documentation for competitive tendering for public procurement. This will serve as part of the documentation for competitive tendering together with other requirements and criteria.

The fundamental principle of proportionality presented in Section 3-1, fifth paragraph of the Regulations on public procurement (FOA) means that the environmental requirements and criteria that are established must be in relation to the contract that is being established. According to the fundamental principles, the requirements must be relevant for the actual contract and the documentation requirements established should also be in relation to the contract.

This means that some of the environmental requirements and criteria proposed must be adapted to the actual procurement. This also means that documentation requirements and scope must be adapted to the size and type of contract. Some contracts can be complex even if the contract value is not large. This means that there must be a concrete evaluation as to whether or not the proposed requirements and criteria are appropriate for the planned procurement.

4.1. Purpose of the contract

Purchase of clothing and textiles.

4.2. Technical specifications

4.2.1. Chemicals

a) Compliance with legal requirements: The tendered items must be compliant with requirements laid down in the Regulations on restrictions on the use of chemicals and other products hazardous to health and the environment (the Product Regulations), (FOR-2004-06-01-922). This is applicable to the following substances – the relevant paragraph in the Product Regulations is specified in brackets:

- cadmium (Section 2-12)
- short-chain chloroparaffins (Section 2-17)
- pentabromodiphenylether (Section 2-20)
- octabromodiphenylether (Section 2-20)
- decabromodiphenylether (Section 2-20)
- PFOS and PFOS-related compounds (Section 2-23)
- tris-(2,3-dibromopropyl)phosphate (Section 3-4)
- tris-(1-aziridiny) phosphin oxide (Section 3-4)
- polybrominated biphenyls (PBB) (Section 3-4)
- azo dyes which can break down to give any of the following aromatic amines (arylamines) (Section 3-4):
 - 4-aminobiphenyl
 - benzidine (4,4'-diaminobiphenyl)

- 4-chloro-o-toluidine
- 2-naphthylamine (β -naphthylamine)
- 4-o-tolyazo-o-toluidine (4-amino-2',3-dimethylazobenzene, o-aminoazotoluene)
- 2-amino-4-nitrotoluene
- 4-chloroaniline (p-chloroaniline)
- 2,4-diaminoanisol (4-methoxy-m-phenylenediamine)
- 4,4'-diaminodiphenylmethane (4,4'-methylenedianiline)
- 3,3'-dichlorobenzidine
- 3,3'-dimethoxybenzidine (o-dianisidine)
- 4,4'-bi-o-toluidine (3,3-dimethylbenzidine)
- 4,4'-methylenedi-o-toluidine (4,4'-methylenbis-2-methylaniline; 3,3'-dimethyl-4,4'-diaminodiphenylmethane)
- p-cresidine (6-methoxymethylaniline)
- 2,2-dichloro-4,4'-methylendianiline (4,4'-methylenebis(2-chloroaniline))
- 4,4'-oxydaniline (4,4'-diaminodiphenylether)
- 4,4'-thiodianiline
- o-toluidine
- 4-methyl-m-phenylenediamine (2,4-diaminotoluene; 2,4-toluenediamine)
- 2,4,5-trimethylaniline
- 2-methoxyaniline (o-anisidine)
- 4-aminoazobenzene (p-amino-azo-benzene)
- Mixture of: 1: disodium(6-(4-anisidino)-3-sulphonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)(1-(5chloro-2-oxidophenylazo)-2-naphtholato)chromate(1-) and 2: trisodiumbis(6-(4-anisidino)-3-sulphonato-2-(3,5-dinitro-2-oxidophenylazo)-1-naphtholato)chromate(1-) (Section 3-4)
- pentachlorophenol (PCP), maximum permitted concentration 5 ppm (Section 3-4)
- formaldehyde – maximum permitted concentration (Section 3-4):
 - 30 mg/kg textile in textiles for children under the age of two
 - 100 mg/kg textile in textiles which normally come into direct contact with the skin
 - 300 mg/kg textile in textiles which do not normally come into direct contact with the skin
- nickel and nickel compounds (Section 3-5)

b) Substances used must not be classified as carcinogenic in the categories Kreft1 or Kreft2, toxic to reproduction in the categories Rep1 or Rep2, and/or mutagenic in the categories Mut1 or Mut2, in compliance with the Regulations on classification, labelling, etc. of hazardous chemicals, FOR-2002-07-16-1139; see annex¹.

Documentation requirements: Licence from the Nordic Swan eco-label, the EU Flower or other approved environmental labelling systems, or self-declaration stating that the chemicals in question are not present in unlawful concentrations in the finished product.

4.2.2. Frame retardants

Flame retardants must not be used in the garments procured, except where this is absolutely necessary given the functions to be performed by the textiles. If flame retardation is required, this must be specified in the other parts

¹ See also: The list of chemicals for GRIP includes a summary of the legal requirements and regulations applicable to textiles. This list can be found at: <http://www.grip.no/Textiles/Kjemikalieinfo.htm>

of the invitation to tender. In such instances, phosphorus- and/or nitrogen-based organic compounds or other flame retardants with equivalent or better health-related and environmental properties must be used, or flame-resistant textiles must be selected. Halogenated flame retardants must not be used under any circumstances.

Documentation requirements: Licence from the Nordic Swan eco-label, the EU Flower or other approved environmental labelling systems, or a self-declaration stating that the undesirable chemicals are not present in the finished product.

4.3. *Qualification requirements*

4.3.1. *Quality assurance procedures*

The supplier must have procedures in place for ensuring that the finished products do not contain prohibited substances or more than the maximum permitted concentrations of hazardous chemicals which are strictly regulated in Norway.

Documentation requirements: Report on existing procedures which documents fulfilment of the requirement. A self-declaration may be presented which describes how the procedures are executed and work. If the procedures are described in the enterprise's quality or environmental management system in accordance with ISO 14001, it is sufficient to enclose a valid certificate. A licence from the Nordic Swan eco-label or other approval system which documents compliance with the requirements.

4.4. *Award criteria*

4.4.1. *Chemical substances*

If chemicals on the authorities' priority list are not present in the finished product, this will be regarded as positive.²

State which of the substances named below from the authorities' priority list (of very undesirable substances) are actively added to the products or could be present in the products in concentrations in excess of 0.01% by weight (100 ppm – 100 mg/kg textile)³.

Name of the chemical	Present in the product in more than 0.01% (yes/no)	If Yes, state the value in NOK of the tendered garments in which the specified substances are present in concentrations above the limit relative to the value of the entire tender. ⁴
Arsenic		
Bisphenol A		
Lead		
Highly chlorinated medium		

² The authorities' priority list can be found here: http://www.miljostatus.no/templates/pagewide___2828.aspx

³ Here, the client may set the weighting between the various chemicals on the basis of its criteria.

⁴ Using the tendered value of garments which contain the undesirable substances, relative to the total value of the tendered product consignment, gives an indication of the extent of undesirable chemicals, making it possible to rank the tenders.

chain paraffins		
Chromium, trivalent (Cr(III))		
Mercury		
Musk xylene		
Nonylphenol and nonylphenoethoxylates ⁵		
Octylphenol and octylphenoethoxylates ⁶		
Organic tin compounds		
Perfluorooctanecarboxylic acid (PFOA)		
Polyaromatic hydrocarbons (PAH)		
Tetrachloroethylene (PER)		
Trichlorobenzene (TCB)		

Documentation requirements: Self-declaration.

4.5. Contractual requirements

1. In the case of large deliveries, the supplier must on request submit relevant tests and analyses by way of documentation of this.
2. Depending on the scope and geographical distance of the contract, requirements may be laid down which require the supplier to undertake to accept returns of worn out/discarded textiles containing environmentally hazardous chemicals (such as membrane clothing, flame-retardant clothing and textiles and textiles deemed to constitute hazardous waste)⁷.
3. Packaging: If a Norwegian supplier (manufacturer or importer) uses packaging, documentation must be presented by no later than establishment of the contract indicating that the supplier is a member of a recycling scheme or meets the obligation by means of its own recycling scheme with its own scheme for final disposal where the packaging is dealt with in an environmentally aware manner (Grønt Punkt Norge AS or similar scheme).

5. Background documentation

The following background material has been used in the preparing of this proposal for criteria:

⁵ These are substances (highly restricted in Norway) which are used in particular in detergents. However, these substances are found in relatively high concentrations in analyses of clothing and textiles.

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⁷ Textiles with built-in electronics are classified as EE waste and must be handled as such. The Supplier undertakes to destroy these in an appropriate manner.

- Description of textiles in the Panel's recommendation dated 3/2006 – see http://www.innkjopspanelet.no/Interne_dok/2006-11-08_Innkjopspanelet_-_Anbefaling_3-2006_-_Produktomrader.pdf
- Criteria document for the Flower: <http://www.svanemerket.no/cgi-bin/svanen/imaker?id=284>
- Criteria document for the Nordic Swan eco-label: <http://www.svanemerket.no/cgi-bin/svanen/imaker?id=253>
- Øko-Tex 100 and Øko-Tex 1000: <http://www.oeko-tex.com/en/1/philosophie/info2.html>
- Swedish criteria: <http://www.msr.se/sv/Upphandling/Kriterier/Inredning-och-textil/Textilier-och-lader/>
- Danish criteria: <http://www.miljoevejledninger.dk/index.aspx?articleid=+525+525>
- Bra Miljöval: <http://www.snf.se/bmv/textil-kriterier.cfm>

Background to the work

In June 2007, the Norwegian Government launched an action plan for environmentally and socially aware procurement. State procurements in particular are being targeted. This action plan came into force on 1 January 2008. Textiles is one of the selected product areas in this action plan. A recommended set of criteria must be prepared for the range of products selected. The task of preparing these criteria has been delegated to a Panel for environmentally aware procurement, with GRIP acting as secretariat.