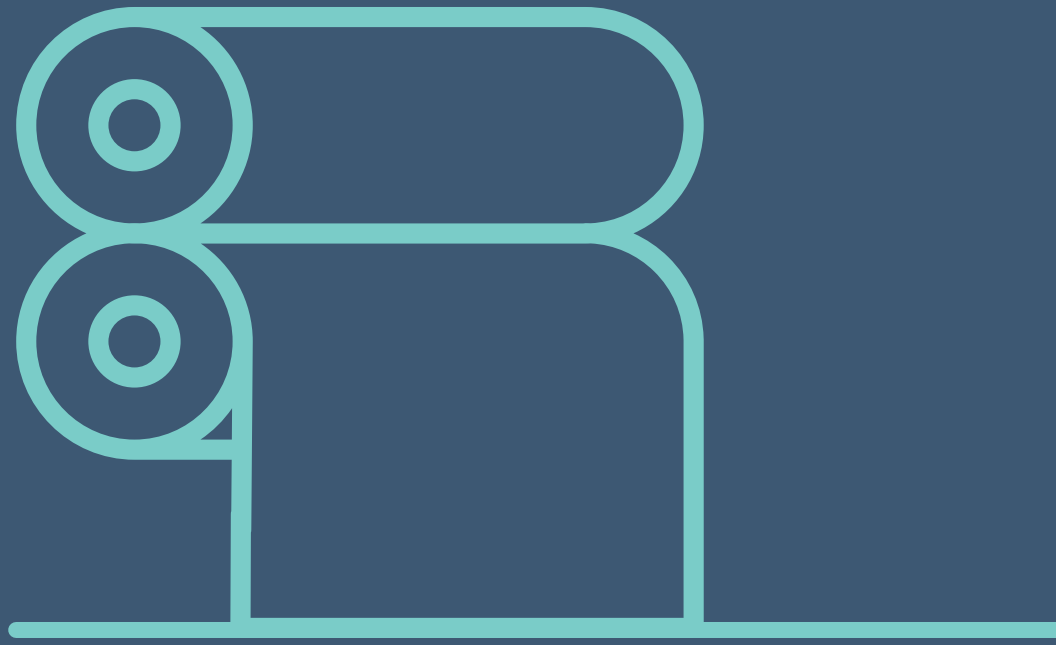
Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Rialtas na hÉireann
Government of Ireland



IRISH GPP CRITERIA:

PAPER PRODUCTS & PRINTING SERVICES

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This document sets out the proposed core and comprehensive GPP criteria for application in the purchase of paper products and printing services by Irish public bodies. For the purposes of these criteria, the category is defined as including the following products and services:

- Graphic and copying paper
- Envelopes and stationery paper products (e.g. notebooks, writing pads, drawing books)
- Printed paper products (e.g. forms, leaflets/brochures, annual reports, labels, diaries, business cards, calendars, posters, books)
- Printing services

NOTE: Criteria for the purchase of tissue paper (kitchen and toilet tissue) are included in the Irish GPP criteria for cleaning and catering services.

The criteria have been developed based on the draft EU GPP criteria for graphic paper prepared in 2016, review of relevant ecolabel criteria and other national GPP criteria for these product groups, relevant Irish and European legislation, and a consultation with a number of Irish public bodies. Further context for the development of the criteria, and advice on how they can be applied and verified within tender procedures, is given in the accompanying EPA guidance document. For an overview of the sector, GPP approach and examples of real tenders, please refer to ***Module 7.2 of the GPP Training Toolkit***.

A key consideration for the procurement of paper products is how demand can be effectively managed to avoid any unnecessary usage. Although digitisation has led to reduced demand for printing paper, demand for paper products as packaging has increased. Specific techniques for reducing demand for printing in offices are discussed in ***this document*** from the World Wildlife Foundation. For an overview of Needs Assessment as part of the procurement process, please refer to the EPA guidance document and to ***Module 4 of the GPP Training Toolkit***.

WHAT DO THE CRITERIA COVER?

The following table summarises the core and comprehensive GPP criteria for Paper Products & Printing Services.

1 SUPPLY OF PAPER PRODUCTS WITH REDUCED ENVIRONMENTAL IMPACT

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
A. **GRAPHIC PAPER (PRINTING AND COPYING PAPER)**	**TS1.** Legal harvest of timber for pulp production	
	TS2. Sustainable sourcing of fibres for pulp production	
		TS3. Energy consumption during pulp and paper production
		TS4. Water consumption during pulp and paper production
		TS5. Bleaching
		TS6. REACH Candidate List substances
B. **CONVERTED PAPER PRODUCTS (ENVELOPES AND STATIONERY PRODUCTS)**	**TS1.** Legal harvest of timber for pulp production	
	TS2. Sustainable sourcing of fibres for pulp production	
	TS3. Waste	
		TS4. Minimising energy consumption during pulp and paper production
		TS5. Minimising water consumption during pulp and paper production
		TS6. Bleaching
		TS7. REACH Candidate List substances
		TS8. Requirements for Board Substrate
		TS9. Energy use
		TS10. Staff training in printing with reduced environmental impact
		TS11. Excluded or limited substances and mixtures for printing, coating and finishing
		TS12. Emissions
		TS13. Recyclability

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
C. **PRINTED PAPER PRODUCTS**	**TS1.** Legal harvest of timber for pulp production	
	TS2. Sustainable sourcing of fibres for pulp production	
	TS3. Waste	
		TS4. Energy consumption during pulp and paper production
		TS5. Water consumption during pulp and paper production
		TS6. Bleaching
		TS7. REACH Candidate List substances
		TS8. Energy use
		TS9. Staff training in printing with reduced environmental impact
		TS10. Excluded or limited substances and mixtures for printing, coating and finishing
		TS11. Emissions
		TS12. Recyclability

2 PROVISION OF PRINTING SERVICES WITH REDUCED ENVIRONMENTAL IMPACT

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
A. **CAPACITY OF SERVICE PROVIDERS** (SC)	**SC1.** Environmental Technical Capacity	
B. **PRINTED PRODUCTS** (TS)	**TS1.** Legal harvest of timber for pulp production	
	TS2. Sustainable sourcing of fibres for pulp production	
	TS3. Waste	

TOPIC	CORE GPP CRITERIA	COMPREHENSIVE GPP CRITERIA
B. **PRINTED PRODUCTS** (TS)		**TS4.** Energy consumption during pulp and paper production
		TS5. Water consumption during pulp and paper production
		TS6. Bleaching
		TS7. REACH Candidate List substances
		TS8. Energy use
		TS9. Staff training in printing with reduced environmental impact
		TS10. Excluded or limited substances and mixtures for printing, coating and finishing
		TS11. Emissions
		TS12. Recyclability

IRISH GPP CRITERIA - HOW TO READ THE TEMPLATE

Scope	Defines the products and services to which the criteria apply.
Exclusions	Identifies any related products or services which are not covered by the criteria.
References	The primary sources consulted to develop the Irish GPP criteria.
Eco-labels	Type I eco-labels and other labels which address relevant environmental characteristics of the products or services and may be used either to define GPP criteria, verify compliance or both. Labels with equivalent criteria must also be accepted.
Legislation and Standards	Relevant EU and Irish legislation which applies within the sector and International, European or Irish standards which may be referenced in technical specifications (accompanied by the words 'or equivalent').
Notes	Practical tips and advice on applying the criteria, and explanations of the environmental impacts being addressed.
Core Criteria	Criteria which can be applied by any Irish public body and which are expected to have minimal effect on costs or verification effort.
Comprehensive Criteria	Criteria which go beyond the core requirements to target enhanced environmental performance and may imply some additional costs or verification effort.
Selection Criteria	Criteria which operators must meet in order to be eligible for tender submission (in a two-stage procedure) or award (in an open procedure).
Specification	Minimum requirements which all tenders must meet. Where multiple specifications are included in the criteria, these may be used together (recommended) or separately.
Specification - Variant	An optional alternative to the specification, which allows alternative solutions to be considered.
Award Criteria	Criteria which target environmental performance beyond the minimum requirements of the specification. These may be qualitative or quantitative in nature and must be weighted for evaluation. It is up to the contracting authority to determine an appropriate weighting based on its priorities and the totality of criteria which it is applying in a specific tender.
Contract Management	Clauses which can be inserted into contracts in order to manage environmental aspects and promote progressive improvements in delivery.

SCOPE, REFERENCES, LEGISLATION AND CERTIFICATIONS/LABELS	
IN SCOPE	• Graphic paper, meaning sheets or reels of not converted, unprinted blank paper or board, whether plain or coloured, made from pulp and fit to be used for writing, printing or conversion purposes. • Envelopes that consist of at least 90% by weight of paper, paperboard or paper-based substrates. • Stationery paper products (e.g. notebooks, writing pads, drawing books) that consist of at least 70% by weight of paper, paperboard or paper-based substrates, except for suspension files and folders with metal fastener subcategories. • Printed paper products that consist of at least 90% by weight of paper, paperboard or paper-based substrates, or 80% by weight of paper for books, catalogues, booklets or forms. This category includes posters, labels, business cards, annual reports, leaflets/brochures, calendars etc. • Printing services which include the supply of any of the above products.
NOT IN SCOPE	• Tissue paper products such as kitchen and toilet paper (Refer to Irish GPP criteria for catering services and cleaning services). • Envelopes, stationery or printed paper products consisting of less than the above stated percentages by weight of paper.
LEGISLATION AND STANDARDS	• Regulation (EU) 995/2010 (***EU Timber Regulation***), Implementing Regulation (EU) ***607/2012*** and SI No ***316/2014***. • Council Regulation (EC) 2173/2005 ***on the establishment of a FLEGT licensing scheme*** as implemented by SI No ***251/2015***. • Convention on International Trade in Endangered Species of Wild Fauna and Flora (***CITES***). • Commission Decision (EU) 2019/70 ***establishing the EU Ecolabel criteria for graphic paper, tissue paper and tissue products***. • Commission Decision (EU) 2014/256 ***establishing the EU Ecolabel criteria for converted paper products***. • Commission Decision 2012/481/EU ***establishing the EU Ecolabel criteria for printed paper products***. • Directive (EU) 2018/2001 on the promotion of the use of energy from renewable sources (***Renewable Energy Directive***). • Consolidated Regulation No. 1907/2006 on the registration, evaluation, authorisation and restriction of chemicals (***REACH***). • Consolidated Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (***CLP***). • ***EN 643*** European List of Standard Grades of Paper and Board for Recycling. • ***ISO 14001:2015*** Environmental Management Systems. • ***EMAS*** EU Eco-management and Audit Scheme. • ***ISO 14024:2018*** Environmental labels and declarations — Type I environmental labelling — Principles and procedures. • ***ISO 14021:2016*** Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling).

SCOPE, REFERENCES, LEGISLATION AND CERTIFICATIONS/LABELS

ECOLABELS	• Forest Stewardship Council (FSC) • Programme for the Endorsement of Forest Certification (PEFC) • EU Ecolabel • Nordic Ecolabel • Blue Angel **NOTE:** The EU Ecolabel, Nordic Ecolabel and Blue Angel all rely upon the FSC/PEFC criteria for sustainable forest management.
REFERENCE DOCUMENTS	1. European Commission (2016) ***Revision of the EU GPP criteria for Copying and Graphic Paper – Technical Report 1.0***. 2. Efeca/European Commission (2018) ***Draft proposal: GPP/Ecolabel criteria for timber and timber products***. 3. Irish Department of Agriculture, Food and the Marine ***Environmental Guidelines for Sustainable Forestry Management***. 4. Forest Europe ***Pan-European Indicators for Sustainable Forest Management***. 5. Environmental Paper Network (2018) ***The State of the Global Paper Industry: New challenges and opportunities for forests, people and the planet***. 6. EU Ecolabel Factsheets for ***Graphic Paper***, Printed Paper and ***Converted Paper Products***. 7. UK Department of the Environment, Food and Rural Affairs (2010) ***Government Buying Standards for Paper***. 8. Dutch Ministry of Infrastructure and Environment (2013) ***Criteria for sustainable public procurement of paper***. 9. Danish Ministry of the Environment (2014) ***Criteria for assessment of timber certification schemes and results for FSC and PEFC***.
NOTES	Although there are no current EU GPP criteria for paper products, several European countries have developed national criteria (including the UK, Germany, France, Denmark, Netherlands and Malta) and these have been consulted in the preparation of the Irish criteria. The ***EU Timber Regulation*** requires all operators placing timber products (including pulp and paper) on the EU market to implement a due diligence system to ensure the legality of harvesting. This applies regardless of the country of origin and requires operators to keep records of their suppliers and customers to facilitate the traceability of timber products. Under the ***FLEGT*** scheme, voluntary partnership agreements have been signed with a number of timber-producing countries globally which set the criteria for obtaining licenses for export to Europe. As of August 2020, ***FLEGT licences*** have only been issued to Indonesian exporters, with a number of other Asian, African and South American countries in the process of negotiating or implementing voluntary partnership agreements.

HOW CAN THE CRITERIA BE APPLIED AND VERIFIED?

Information about how each of the criteria can be verified is included. **The verification methods form an essential part of the criteria and must be included in tender documents to ensure that suppliers are aware of how compliance with the criteria will be assessed.**

The criteria for paper products rely heavily on three independent third-party environmental certifications (ecolabels): FSC, PEFC and the EU Ecolabel.

While the precise criteria underlying these certifications differ, they all address the basic requirements of legal and sustainably managed forestry. In addition, the EU Ecolabel addresses other production-related environmental impacts, such as use of water, energy and chemicals in the production process. The below table summarises the requirements of the FSC and PEFC labels regarding the source of paper fibres:

	FSC 100%	FSC MIX	FSC RECYCLED	PEFC CERTIFIED	PEFC RECYCLED
Sustainable virgin	100%	70-100%	0%	0-100%	0-30%
Post-consumer recycled			85%-100%	0-85%	70-100%
Pre-consumer recycled	0%	0-30%	0-15%		
Controlled			0%	0-30%	0-30%

Source: European Commission (2016)

In the EU, approximately 66% of the total timber production area is certified under FSC/PEFC, or 88 million hectares.[1] Worldwide, the figure is 430 million hectares.[2] By setting a threshold of 70% as the ambition level for sustainable fibres (either sustainable virgin and/or recycled), the core GPP criteria match well with the labelling schemes that predominate in the market. The comprehensive criteria align more closely with the EU Ecolabels for paper products. Additional ecolabels or other forms of evidence which can be relied upon to verify compliance are given for each criterion. Some simple market research in advance of tendering should be sufficient to confirm that suppliers, products and services are available which meet the criteria and verification requirements. Further information on techniques for market engagement linked to GPP is available in the EPA guidance document/ Module 6 of the ***GPP Training Toolkit***.

1 ***Efeca*** (2018), p 23
2 ***PEFC*** (2019)

KEY ENVIRONMENTAL IMPACTS – PAPER PRODUCTS

Global paper consumption amounts to some 400 million tonnes per year (55 kg per person), a quarter of which is consumed in Europe.[3]
Production and use of paper products has a heavy environmental footprint, including:

- Forest destruction, loss of biodiversity and climate change effects from unsustainable timber harvesting
- Emissions to air and water during pulp and paper production, conversion and printing
- Energy consumption during pulp and paper production, conversion and printing
- Water consumption during pulp and paper production
- Landfill due to failure to recycle paper products, especially where products also contain non-paper elements

The GPP criteria aim to:

- Safeguard forests to ensure that only paper products from legally and sustainably harvested timber are used
- Promote the appropriate use of recycled paper products
- Reduce emissions to water, air and soil during the production process
- Promote energy-efficient production of paper products
- Reduce environmental damage or risks linked to hazardous chemicals
- Promote responsible waste management for paper products

The **core criteria** focus on the legal and sustainable origin of timber and are aligned with the requirements of the FSC and PEFC labels to facilitate verification and ensure a good market supply of compliant products.

Regarding the use of **recycled paper fibres**, this is generally considered to be a more sustainable option and the use of 100% recycled paper where feasible is recommended. However, for some paper grades a certain amount of virgin fibre input will be required to reach technical parameters as (unlike metals and some plastics) the strength of recycled paper fibres can degrade over time. As noted above, both the FSC Recycled and PEFC Recycled labels allow up to 30% non-recycled or pre-consumer waste fibres. This is also the case for the EU Ecolabels for graphic paper, converted paper and printed paper. For this reason, the GPP criteria (both core and comprehensive) set a 70% threshold for the use of recycled paper fibres.

The **comprehensive criteria** are aligned with the requirements of the EU Ecolabels for graphic paper, converted paper and printed paper. In addition to the above, the comprehensive criteria cover the production of pulp, including all constituent sub-processes from the point at which virgin fibres or recycled fibres enter the production site to the point at which the pulp leaves the pulp mill. For paper production processes, the criteria cover all sub-processes in the paper mill, from pulp preparation for graphic papermaking to winding onto the mother reel.

[3] ***Environmental Paper Network*** (2018), p 4.

KEY ENVIRONMENTAL IMPACTS

- Forest destruction, loss of biodiversity and climate change effects from illegal and unsustainable timber harvesting
- Emissions to water and air during pulp and paper production, conversion and printing
- Energy consumption during pulp and paper production, conversion and printing
- Water consumption during pulp and paper production
- Additional consumption of resources due to waste in production process
- Landfill due to failure to recycle paper products, especially where products also contain non-paper elements

GPP APPROACH

- Require suppliers to demonstrate the legality and sustainability of timber sourcing in line with independent third-party certifications
- Restrictions on emissions to water of silver, chromium and copper and to air of volatile organic compounds during processing
- Require suppliers to have systems in place for the minimisation of energy consumption from grid electricity and fossil fuels
- Require suppliers to have systems in place for the minimisation of water use from mains supply and other sources
- Set limits on paper waste during production processes and ensure products are suitable for recycling

Please note that the order of environmental impacts above does not necessarily correspond to their importance.

1. GPP CRITERIA FOR PAPER PRODUCTS

NB. A merged cell for core and comprehensive criteria indicates that the same criterion is applicable to both. The criteria contain a number of internal cross-references – where they are copied and pasted into tender documents these should be carefully checked.

SUBJECT MATTER
Supply of paper products with reduced environmental impact

A GRAPHIC PAPER (PRINTING AND COPYING PAPER)

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	

TS1. **Legal harvest of timber for pulp production**

The virgin fibre for pulp production shall have originated from timber that has been legally harvested in accordance with Regulation (EU) 995/2010 (the 'EU Timber Regulation').

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of legal harvesting[4] will be deemed to meet the above requirement. Timber covered by a valid EU FLEGT or CITES license shall also be considered to have been legally harvested according to Regulation (EU) No 995/2010. Alternatively, tenderers must provide the following information:

a. The operators[5] or the traders[6] (as defined in Regulation (EU) 995/2010) who will supply either the paper products, the pulp or the timber for pulp production: Furthermore, where applicable, evidence of the means whereby traders further down the supply chain ensure traceability, in accordance with Article 5 of Regulation (EU) 995 of 2010, shall be provided.

b. Evidence of the risk assessment and mitigation procedures put in place by the operator(s) first placing on the EU market the paper products, the pulp or the timber for pulp production, in accordance with Article 6(1) (b) and (c) of Regulation (EU) 995 of 2010. This may include certification or other third party verified schemes.

[4] This may include for example the Nordic Ecolabel or Blue Angel.
[5] 'Operator' means any natural or legal person that places timber or timber products on the market
[6] 'Trader' means any natural or legal person who, in the course of a commercial activity, sells or buys on the internal market timber or timber products already placed on the internal market

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	

TS2. **Sustainable sourcing of fibres for pulp production**

At least 70% (w/w) of the total amount of fibres for pulp production shall either be recycled fibre or virgin fibre originating from timber harvested from sustainably managed forests, as evidenced by any of the below forms of verification.

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of sustainable sourcing[7] will be deemed to meet the above requirement. Alternatively, tenderers must provide a declaration of compliance with the above requirements supported by the following elements, as appropriate:

a. For recycled fibres, data allowing for the reliable tracing back of the recycled fibres to their point of origin, i.e., the point of collection of the reclaimed materials. Without prejudice against other adequate means of proof, a valid chain-of-custody certificate issued by a chain-of-custody system that has been independently certified by a third party will be accepted as data tracing the fibres to their point of origin. Recycled fibres can have originated both from pre-consumer or post-consumer reclaimed materials. Fibres originating from any post-consumer grade of paper and board for recycling defined in EN 643 will be considered recycled fibre. Fibres originated from mill broke (own or purchased) will not be considered as recycled fibres, according to the ISO 14021 definition, as mill broke is a material capable of being reclaimed within the same process that generated it.

b. For virgin fibres originated from timber harvested from sustainably managed forests, evidence of compliance with the FSC or PEFC standards for Forest Stewardship/Sustainable Forest Management, together with chain-of-custody information allowing tracing of the virgin fibres to these sustainable sources.

EXPLANATORY NOTE: Products which are labelled according to one of the listed third-party certifications can be deemed to comply with TS1 or TS2 without further verification. For TS1, production of a valid FLEGT or CITES licence also serves to demonstrate legality. Under Article 43 of Directive 2014/24/EU, tenderers may seek to rely on other appropriate means of proof where they have "demonstrably no possibility of obtaining the specific label indicated by the contracting authority or an equivalent label within the relevant time limits for reasons that are not attributable to [the tenderer]." Points a) and b) or TS1 And TS2 describe the type of alternative evidence which may be considered appropriate with these requirements.

[7] This may include for example the Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS3. **Minimising energy consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of energy consumption from grid electricity and fossil fuels. The system should allow for submetering and include the use of renewable energy sources such as solar panels and wind power. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system. **Verification:** Tenderers must provide an energy minimisation and management plan that details the system for reducing energy consumption at the pulp and/or paper production site and includes information on at least the following points: a. How the use of energy is minimised in the first instance (i.e. at each stage of the manufacturing process); b. Procedures and management systems for monitoring and tracking energy use (including ISO50001 or equivalent); c. Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g., ISO 14001 or EMAS) and Energy Management System (e.g., ISO 50001) procedures can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[8]
	TS4. **Minimising water consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of water use from mains supply and other sources such as boreholes and river abstraction. This should be in keeping with the conditions prevalent at the site(s) in question, for example the system should be more stringent in areas of higher water scarcity. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system.

[8] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS4. **Minimising water consumption during pulp and paper production** (continued) **Verification:** The tenderer must provide a water minimisation and management plan that details the system for reducing water consumption at the pulp and/or paper production site(s) and includes information on at least the following points: a. How the use of water is minimised in the first instance at each stage of the manufacturing process; b. How the reuse/recycling of water is maximised; c. Procedures for monitoring and tracking water use; and d. Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g. ISO14001 or EMAS) procedures or permit information (e.g. under Directive 2015/75/EU on industrial emissions – formerly Integrated Pollution Prevention and Control) can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[9]
	TS5. **Bleaching** Chlorine gas (Cl_2) shall not be used for fibre bleaching during pulp and paper production. Elemental chlorine free (ECF) bleaching, totally chlorine free (TCF) bleaching and process chlorine free (PCF) bleaching (where recycled fibres are processed from waste paper – see note below) are all accepted. **Verification:** Products bearing the EU Ecolabel, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Tenderers must provide a declaration that elemental chlorine has not been used in the production process, supported by appropriate means of proof, such as a technical dossier of the manufacturer, their pulp supplier if different, or a test report from a recognised body. **NOTE:** While this requirement also applies to the bleaching of recovered fibres, it is accepted that the fibres in their previous life-cycle may have been bleached with chlorine gas or other chlorinated compounds.

[9] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS6. **REACH Candidate List substances** Paper products shall not contain REACH Candidate List Substances of Very High Concern (Article 57 of Regulation (EC) No 1907/2006) in concentrations greater than 0.1% (w/w). **Verification:** Products bearing the EU Ecolabel, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration that the substances referred to are not retained in the final product, above the concentration limits specified, supported by appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body.

B CONVERTED PAPER PRODUCTS

CORE CRITERIA	COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS1. **Legal harvest of timber for pulp production**

The virgin fibre for pulp production shall have originated from timber that has been legally harvested in accordance with Regulation (EU) 995/2010 (the 'EU Timber Regulation').

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of legal harvesting[10] will be deemed to meet the above requirement. Timber covered by a valid EU FLEGT or CITES license shall also be considered to have been legally harvested according to Regulation (EU) No 995/2010. Alternatively, tenderers must provide the following information:

a. The operators[11] or the traders[12] (as defined in Regulation (EU) 995/2010) who will supply either the paper products, the pulp or the timber for pulp production: Furthermore, where applicable, evidence of the means whereby traders further down the supply chain ensure traceability, in accordance with Article 5 of Regulation (EU) 995 of 2010, shall be provided.

b. Evidence of the risk assessment and mitigation procedures put in place by the operator(s) first placing on the EU market the paper products, the pulp or the timber for pulp production, in accordance with Article 6(1) (b) and (c) of Regulation (EU) 995 of 2010. This may include certification or other third party verified schemes.

TS2. **Sustainable sourcing of fibres for pulp production**

At least 70% (w/w) of the total amount of fibres for pulp production shall either be recycled fibre or virgin fibre originating from timber harvested from sustainably managed forests, as evidenced by any of the below forms of verification.

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of sustainable sourcing[13] will be deemed to meet the above requirement. Alternatively, tenderers must provide a declaration of compliance with the above requirements supported by the following elements, as appropriate:

[10] This may include for example the Nordic Ecolabel or Blue Angel.
[11] 'Operator' means any natural or legal person that places timber or timber products on the market
[12] 'Trader' means any natural or legal person who, in the course of a commercial activity, sells or buys on the internal market timber or timber products already placed on the internal market
[13] This may include for example the Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	

TS2. **Sustainable sourcing of fibres for pulp production** (continued)

a. For recycled fibres, data allowing for the reliable tracing back of the recycled fibres to their point of origin, i.e., the point of collection of the reclaimed materials. Without prejudice against other adequate means of proof, a valid chain-of-custody certificate issued by a chain-of-custody system that has been independently certified by a third party will be accepted as data tracing the fibres to their point of origin. Recycled fibres can have originated both from pre-consumer or post-consumer reclaimed materials. Fibres originating from any post-consumer grade of paper and board for recycling defined in EN 643 will be considered recycled fibre. Fibres originated from mill broke (own or purchased) will not be considered as recycled fibres, according to the ISO 14021 definition, as mill broke is a material capable of being reclaimed within the same process that generated it.

b. For virgin fibres originated from timber harvested from sustainably managed forests, evidence of compliance with the FSC or PEFC standards for Forest Stewardship/Sustainable Forest Management, together with chain-of-custody information allowing tracing of the virgin fibres to these sustainable sources.

EXPLANATORY NOTE: Products which are labelled according to one of the listed third-party certifications can be deemed to comply with TS1 or TS2 without further verification. For TS1, production of a valid FLEGT or CITES licence also serves to demonstrate legality. Under Article 43 of Directive 2014/24/EU, tenderers may seek to rely on other appropriate means of proof where they have "demonstrably no possibility of obtaining the specific label indicated by the contracting authority or an equivalent label within the relevant time limits for reasons that are not attributable to [the tenderer]." Points a) and b) of TS1 and TS2 describe the type of alternative evidence which may be considered appropriate with these requirements.

TS3. **Waste**

3.1 Waste management

The facility where the converted paper products are produced must have in place a system for handling waste, including residual products derived from the production of the converted paper products. The system must be documented and include information on at least the following procedures:

i. handling, collection, separation and use of recyclable materials from the waste stream,

ii. precovery of materials for other uses, such as incineration for raising process steam or heating, or agricultural use,

iii. handling, collection, separation and disposal of hazardous waste, as defined by the relevant local and national regulatory authorities.

Verification: Products bearing the EU Ecolabel for Converted or Printed Paper Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion, together with a description of the procedures adopted for waste management. Where waste management is outsourced, the subcontractor must provide a declaration of compliance with this criterion as well.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
TS3. **Waste** **3.2 Waste paper** The amount of waste paper 'X' produced shall not exceed: • 20% for envelopes • 20% for stationery products Where X = annual tonnes of waste paper produced during the converting (including finishing processes) of the converted paper product, divided by annual tonnes of paper purchased and used for the production of the converted paper product. If the processor carries out finishing processes on behalf of another company, the amount of waste paper produced in those processes shall not be included in the calculation of 'X'. If the finishing processes are outsourced to another company, the amount of waste paper resulting from the outsourced work shall be calculated and declared in the calculation of 'X'. **Verification:** Products bearing the EU Ecolabel for Converted Paper or Printed Paper Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the calculation of the amount of waste paper, together with a declaration from the contractor collecting the waste paper. The outsourcing terms and calculations on the amount of paper waste involved in the finishing processes must be provided. The calculation period shall be based on production over 12 months. In case of new or rebuilt production facilities, the calculation shall be based on at least three months of representative operation.	
	TS4. **Energy consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of energy consumption from grid electricity and fossil fuels. The system should allow for submetering and include the use of renewable energy sources such as solar panels and wind power. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS4. **Energy consumption during pulp and paper production** (continued) **Verification:** Tenderers must provide an energy minimisation and management plan that details the system for reducing energy consumption at the pulp and/or paper production site and includes information on at least the following points: **a.** How the use of energy is minimised in the first instance (i.e. at each stage of the manufacturing process); **b.** Procedures and management systems for monitoring and tracking energy use (including ISO50001 or equivalent); **c.** Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g., ISO 14001 or EMAS) and Energy Management System (e.g., ISO 50001) procedures can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[14]
	TS5. **Water consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of water use from mains supply and other sources such as boreholes and river abstraction. This should be in keeping with the conditions prevalent at the site(s) in question, for example the system should be more stringent in areas of higher water scarcity. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system.

[14] This may include for example the Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS5. **Water consumption during pulp and paper production** (continued) **Verification:** The tenderer must provide a water minimisation and management plan that details the system for reducing water consumption at the pulp and/or paper production site(s) and includes information on at least the following points: **a.** How the use of water is minimised in the first instance at each stage of the manufacturing process; **b.** How the reuse/recycling of water is maximised; **c.** Procedures for monitoring and tracking water use; and **d.** Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g. ISO14001 or EMAS) procedures or permit information (e.g. under Directive 2015/75/EU on industrial emissions – formerly Integrated Pollution Prevention and Control) can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[15]
	TS6. **Bleaching** Chlorine gas (Cl_2) shall not be used for fibre bleaching during pulp and paper production. Elemental chlorine free (ECF) bleaching, totally chlorine free (TCF) bleaching and process chlorine free (PCF) bleaching (where recycled fibres are processed from waste paper – see note below) are all accepted. **Verification:** Products bearing the EU Ecolabel, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration that elemental chlorine has not been used in the production process, supported by appropriate means of proof, such as a technical dossier of the manufacturer, their pulp supplier if different, or a test report from a recognised body. **NOTE:** While this requirement also applies to the bleaching of recovered fibres, it is accepted that the fibres in their previous life-cycle may have been bleached with chlorine gas or other chlorinated compounds.

[15] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS7. **REACH Candidate List substances** Paper products shall not contain REACH Candidate List Substances of Very High Concern (Article 57 of Regulation (EC) No 1907/2006) in concentrations greater than 0.1% (w/w). **Verification:** Products bearing the EU Ecolabel, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration that the substances referred to are not retained in the final product, above the concentration limits specified, supported by appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body.
	TS8. **Requirements for Board Substrate** Board substrate included in the products must meet the requirements set out in Commission Decision (EU) 2014/256 ***establishing the EU Ecolabel criteria for converted paper products*** (Criteria B1-B4) relating to emissions to water and air, energy use, excluded or limited substances and mixtures, and waste management. **Verification:** Products bearing the EU Ecolabel for Converted Paper Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the information for assessment and verification set out in Decision (EU) 2014/256 required in respect of the above criteria.
	TS9. **Energy use** The facility or facilities used to produce the converted paper products under this contract must have in place a register of all energy-consuming devices (including imaging equipment and other machinery, lighting, air conditioning, cooling) and a programme of measures for improvement of energy efficiency. **Verification:** Tenderers must provide the register of energy-consuming devices at the facility or facilities to be used to fulfil the contract, together with the improvement programme. Products bearing the EU Ecolabel for Converted Paper or Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Staff training in processes with reduced environmental impact** Staff who will be directly involved in fulfilling the contract must have appropriate training to ensure they can comply with the environmental requirements set out in these technical specifications, including waste management and energy use. Verification: A copy of the induction training provided to staff which covers the above points, together with any supplementary/specialised training, must be submitted with the tender. Products bearing the EU Ecolabel for Converted Paper or Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply.
	TS11. **Excluded or limited substances and mixtures for printing, coating and finishing** The non-paper components (up to 20 % in weight) that are part of the final paper product shall not contain the following substances: **TS 11.1 Hazardous substances and mixtures** Consumables that could end up in the final converted paper product, and that contain substances and/or mixtures meeting the criteria for classification with the hazard statements or risk phrases specified in Annex I in accordance with Regulation (EC) No 1272/2008 or Council Directive 67/548/EEC, or substances referred to in Article 57 of Regulation (EC) No 1907/2006, shall not be used for printing, coating, and finishing operations of the final printed paper product. This requirement shall not apply to toluene for use in rotogravure printing processes where a closed or encapsulated installation or recovery system, or any equivalent system, is in place to control and monitor fugitive emissions and where the recovery efficiency is at least 92%. UV varnishes and UV inks classified H412/R52-53 are also exempted from this requirement.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **Verification:** Products bearing the EU Ecolabel for Converted Paper Products, Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the following evidence: • Appropriate documentation on the recovery efficiency of the closed/ encapsulated installation/recovery system, or any equivalent system, that has been put in place to deal with the use of toluene in rotogravure printing processes. • For substances not already classified in accordance with Regulation (EC) No 1272/2008: i. a declaration that the non-paper components that are part of the final product do not contain the substances referred to in these criteria in concentration above the authorised limits; ii. a declaration that consumables that could end up in the final printed paper product and used for printing, coating, and finishing operations do not contain the substances referred to in these criteria in concentration above the authorised limits; iii. a list of all consumables used for the printing, finishing and coating of the printed paper products. This list shall include the quantity, function and suppliers of all the consumables used in the production process. • For substances listed in Annexes IV and V to REACH, exempted from registration obligations under Article 2(7)(a) and (b) of Regulation (EC) No 1907/2006 REACH, a declaration to this effect will suffice to comply with the requirements set out above.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **TS 11.2 Substances listed under Article 59(1) of Regulation (EC) No 1907/2006** No derogation from the prohibition set out in Article 6(6)(a) of Regulation (EC) No 66/2010 shall be granted concerning substances identified as substances of very high concern and included in the list provided for in Article 59 of Regulation (EC) 1907/2006, present in mixtures in concentrations higher than 0.1 %. Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall apply where the concentration is lower than 0.1 %. The list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found ***here***. Reference to the list shall be made at the time of submitting a tender. Verification: Products bearing the EU Ecolabel for Converted Paper Products, Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers may provide data on the amount of substances used for the printing of the printed paper products and a declaration stating that the substances referred to in this criterion are not retained in the final product above the concentration limits specified. The concentration shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No 1907/2006. **TS 11.3 Biocides** Biocides, either as part of the formulation or as part of any mixture included in the formulation, that are used to preserve the product and that are classified H410/R50-53 or H411/R51-53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation (EC) No 1272/2008, are permitted only if their bioaccumulation potentials are characterised by log Pow (log octanol/water partition coefficient) < 3.0 or an experimentally determined bioconcentration factor (BCF) ≤ 100.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **Verification:** Products bearing the EU Ecolabel for Converted Paper Products, Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide copies of the material safety data sheets for all biocides used during the different production stages, together with documentation of the concentrations of the biocides in the final product. **TS 11.4 Washing agents** Washing agents used for cleaning in printing processes and/or sub-processes that contain aromatic hydrocarbon shall only be allowed if they are in compliance with TS 11.2 and if one of the following conditions is fulfilled: i. The amount of aromatic hydrocarbons in the washing agent products used does not exceed 0.1 % (w/w); ii. The amount of aromatic hydrocarbon-based washing agent used annually does not exceed 5 % of the total amount of washing agent used in one calendar year. This criterion shall not apply to toluene used as washing agent in rotogravure printing. **Verification:** Products bearing the EU Ecolabel for Converted Paper Products, Printed Products or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the Safety Data Sheet for each washing agent used in a printing house during the year to which the annual consumption refers. The washing agent suppliers shall provide declarations of the aromatic hydrocarbon contents in the washing agents.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **TS 11.5 Alkyl phenol ethoxylates — Halogenated solvents — Phthalates** The following substances or preparations shall not be added to inks, dyes, toners, adhesives, or washing agents or other cleaning chemicals used for the printing of the printed paper product: i. Alkyl phenol ethoxylates and their derivatives that may produce alkyl phenols by degradation. ii. Halogenated solvents that at the time of application are classified in the hazard or risk categories listed in Annex 1. iii. Phthalates that at the time of application are classified with risk phrases H360F, H360D, H361f in accordance with Regulation (EC) No 1272/2008. Verification: Products bearing the EU Ecolabel for Converted Paper Products, Printed Products or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion. **TS 11.6 Printing inks, toners, inks, varnishes, foils and laminates** The following heavy metals or their compounds shall not be used in printing inks, toners, inks, varnishes, foils and laminates (whether as a substance or as part of any preparation used): cadmium, copper (excluding copper-phthalocyanine), lead, nickel, chromium VI, mercury, arsenic, soluble barium, selenium, antimony. Cobalt can only be used up to 0.1 % (w/w). Ingredients may contain traces of those metals up to 0.01 % (w/w) deriving from impurities in the raw materials. Verification: Products bearing the EU Ecolabel for Converted Paper Products, Printed Products or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion as well as declarations from ingredient suppliers.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS12. **Emissions** **12.1 Emissions to water** a) Rinsing water containing silver from film processing, as well as from plate production, and photo-chemicals shall not be discharged to a sewage treatment plant. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver-containing rinsing water on site. Where the film processing and/or the plate production are outsourced, the sub-contractor shall provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver containing rinsing water at the subcontractors. b) The amount of chromium (Cr) and copper (Cu) discharged into a sewage treatment plant must not exceed, respectively, 45 mg per m^2 and 400 mg per m^2 of printing cylinder surface area used in the press. Verification: Products bearing the EU Ecolabel for Converted Paper Products, Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, discharges of Cr and Cu into sewage must be checked at rotogravure printing plants after treatment and before their release. A representative sample of Cr and Cu discharges shall be collected each month. At least one annual analytical test shall be carried out by an accredited laboratory to determine the content of Cr and Cu in a representative sub-sample of these samples. Compliance with this criterion shall be assessed by dividing the content of Cr and Cu, as determined by the annual analytical test, by the cylinder surface used in the press during the printing. The cylinder surface used in the press during printing is calculated by multiplying the cylinder surface (= $2\pi rL$, where r is the radius and L the length of the cylinder) by the number of printing productions during a year (= number of different printing jobs).

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS12. **Emissions** (continued) **12.2 Emissions to air** Volatile Organic Compounds (VOC) The following criterion must be met: $(P_{VOC} - R_{VOC})/P_{paper} < 5$ [kg/tonnes] Where: • P_{VOC} = the annual total kilograms of VOC contained in the purchased chemical products used for the annual total production of printed products • R_{VOC} = the annual total kilograms of VOC destroyed by abatement, recovered from printing processes and sold, or reused • P_{paper} = the annual total tonnes of paper purchased and used for the production of printed products. Where a printing house uses different printing technologies, this criterion shall be fulfilled for each one separately. **Verification:** Products bearing the EU Ecolabel for Converted Paper Products, Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of the VOC content in alcohols, washing agents, inks, damping solutions or other corresponding chemical products shall be provided by the chemical supplier. The applicant shall provide evidence of the calculation according to the method set out below. The period for the calculations shall be based on production over 12 months. In the case of new or rebuilt production facilities, the calculations shall be based on at least three months of representative operation. The P_{VOC} term shall be calculated from SDS information related to VOC content or from an equivalent declaration provided by the supplier of chemical products. The R_{VOC} term shall be calculated from the declaration on the content of VOC contained in the chemical products sold or from the internal counting register (or any other equivalent document) reporting the annual amount of VOC recovered and reused on site.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS12. **Emissions** (continued) **Specific conditions for heat-set printing:** i. For heat-set offset printing with an integrated after-burner unit in place for the drying unit, the following calculation method shall apply: P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85 % of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products. ii. For heat-set offset printing, without an integrated after-burner unit in place for the drying unit, the following calculation method shall apply: P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85 % of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products + 10 % of annual total kilograms of VOC contained in the printing inks used for the annual production of printed products. For (i) and (ii), proportionately lower percentages than 90% and 85% may be used in this calculation if more than 10% or 15% respectively of annual total kilograms of VOC contained in the damping solutions or washing agents used for the annual production of printed products are shown to be abated in the treatment system for combusting gases from the drying process.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS12. **Emissions** (continued) **12.3 Emissions from publication rotogravure printing** a) Publication rotogravure printing emissions of VOC to air shall not exceed 50 mg C/Nm^3. Verification: Products bearing the EU Ecolabel for Converted Paper or Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide appropriate documentation showing compliance with this criterion. b) Equipment for reduction of emissions to air of Cr6 + shall be installed. Emissions of Cr6 + to air shall not exceed 15 mg/tonne paper. Verification: Products bearing the EU Ecolabel for Converted Paper Products, Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a description of the system in place, together with documentation on the control and monitoring of Cr6 + emissions. The documentation shall include the test results related to the reduction of Cr6 + emissions to the air. **12.4 Printing processes to which no legislative measures apply** Volatile solvents from the drying process of heat-set offset and flexography printing shall be managed by means of recovery or combustion or any equivalent system. In all cases where no legislative measures apply, the emissions of VOC to air must not exceed 20 mg C/Nm^3. This requirement does not apply to screen printing and digital printing. Moreover, it does not apply to heat-set and flexography installations with solvent consumption lower than 15 tonnes per year. Verification: Products bearing the EU Ecolabel for Converted Paper, Printed Products or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a description of the system in place together with documentation and test results related to the control and monitoring of emissions to air.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS13. **Recyclability** The converted paper product must be recyclable. The non-paper components of the converted paper product must be easily removable to ensure that those components will not hinder the recycling process. a. Wet strength agents may be used only if the recyclability of the finished product can be proved. b. Non-soluble adhesives may be used only if their removability can be proved. c. Coating varnishes and lamination, including polyethene and/or polyethene/ polypropylene, may be used only for binders, folders, exercise books, notebooks and diaries. **Verification:** Products bearing the EU Ecolabel for Converted Paper, Printed Products or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide test results showing recyclability of wet strength agents and removability of adhesives. The reference test methods are PTS method PTS-RH 021/97 (for wet strength agents), INGEDE Method 12 (for non-soluble adhesive removability), or equivalent test methods. Tenderers must provide a declaration that coated and laminated converted paper products are in compliance with point (c). Where a part of a converted paper product is easily removable (for instance a metal bar in a suspension file or a plastic cover or reusable exercise book cover), the recyclability test may be made without this component. Samples of products must be provided to demonstrate ease of removal of the non-paper components. Test methods giving equivalent results by a competent and independent third party as may also be used.

C PRINTED PAPER PRODUCTS

CORE CRITERIA	COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS1. **Legal harvest of timber for pulp production**

The virgin fibre for pulp production shall have originated from timber that has been legally harvested in accordance with Regulation (EU) 995/2010 (the 'EU Timber Regulation').

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of legal harvesting[16] will be deemed to meet the above requirement. Timber covered by a valid EU FLEGT or CITES license shall also be considered to have been legally harvested according to Regulation (EU) No 995/2010. Alternatively, tenderers must provide the following information:

a. The operators[17] or the traders[18] (as defined in Regulation (EU) 995/2010) who will supply either the paper products, the pulp or the timber for pulp production: Furthermore, where applicable, evidence of the means whereby traders further down the supply chain ensure traceability, in accordance with Article 5 of Regulation (EU) 995 of 2010, shall be provided.

b. Evidence of the risk assessment and mitigation procedures put in place by the operator(s) first placing on the EU market the paper products, the pulp or the timber for pulp production, in accordance with Article 6(1) (b) and (c) of Regulation (EU) 995 of 2010. This may include certification or other third party verified schemes.

TS2. **Sustainable sourcing of fibres for pulp production**

At least 70% (w/w) of the total amount of fibres for pulp production shall either be recycled fibre or virgin fibre originating from timber harvested from sustainably managed forests, as evidenced by any of the below forms of verification.

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of sustainable sourcing[19] will be deemed to meet the above requirement. Alternatively, tenderers must provide a declaration of compliance with the above requirements supported by the following elements, as appropriate:

a. For recycled fibres, data allowing for the reliable tracing back of the recycled fibres to their point of origin, i.e., the point of collection of the reclaimed materials. Without prejudice against other adequate means of proof, a valid chain-of-custody certificate issued by a chain-of-custody system that has been independently certified by a third party will be accepted as data tracing the fibres to their point of origin. Recycled fibres can have originated both from pre-consumer or post-consumer reclaimed materials. Fibres originating from any post-consumer grade of paper and board for recycling defined in EN 643 will be considered recycled fibre. Fibres originated from mill broke (own or purchased) will not be considered as recycled fibres, according to the ISO 14021 definition, as mill broke is a material capable of being reclaimed within the same process that generated it.

16 This may include for example the Nordic Ecolabel or Blue Angel.
17 'Operator' means any natural or legal person that places timber or timber products on the market
18 'Trader' means any natural or legal person who, in the course of a commercial activity, sells or buys on the internal market timber or timber products already placed on the internal market
19 This may include for example the Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	

TS2. **Sustainable sourcing of fibres for pulp production** (continued)

b. For virgin fibres originated from timber harvested from sustainably managed forests, evidence of compliance with the FSC or PEFC standards for Forest Stewardship/Sustainable Forest Management, together with chain-of-custody information allowing tracing of the virgin fibres to these sustainable sources.

EXPLANATORY NOTE: Products which are labelled according to one of the listed third-party certifications can be deemed to comply with TS1 or TS2 without further verification. For TS1, production of a valid FLEGT or CITES licence also serves to demonstrate legality. Under Article 43 of Directive 2014/24/EU, tenderers may seek to rely on other appropriate means of proof where they have "demonstrably no possibility of obtaining the specific label indicated by the contracting authority or an equivalent label within the relevant time limits for reasons that are not attributable to [the tenderer]." Points a) and b) or TS1 And TS2 describe the type of alternative evidence which may be considered appropriate with these requirements.

TS3. **Waste**

3.1 Waste management

The facility where the printed paper products are produced must have in place a system for handling waste, including residual products derived from the production of the printed paper products. The system must be documented and include information on at least the following procedures:

i. handling, collection, separation and use of recyclable materials from the waste stream,

ii. precovery of materials for other uses, such as incineration for raising process steam or heating, or agricultural use,

iii. handling, collection, separation and disposal of hazardous waste, as defined by the relevant local and national regulatory authorities.

Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion, together with a description of the procedures adopted for waste management. Where waste management is outsourced, the subcontractor must provide a declaration of compliance with this criterion as well.

CORE CRITERIA	COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS3. **Waste** (continued)

3.2 Waste paper

The amount of waste paper 'X' produced shall not exceed:

Printing method	Maximum waste paper (%)
Sheet offset	23
Coldset, newspaper	10
Coldset, form printing	18
Coldset rotation (except newspapers and forms)	19
Heatset rotation	21
Gravure printing	15
Flexography (except corrugated fibreboard)	11
Digital printing	10
Flexography, corrugated fibreboard	17
Screen printing	23

WHERE:

X = annual tonnes of waste paper produced during the printing (including finishing processes) of the ecolabelled printed paper product, divided by annual tonnes of paper purchased and used for the production of ecolabelled printed paper product.

Where the printing house carries out finishing processes on behalf of another printing house, the amount of waste paper produced in those processes shall not be included in the calculation of 'X'.

Where the finishing processes are outsourced to another company, the amount of waste paper resulting from the outsourced work shall be calculated and declared in the calculation of 'X'.

Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the calculation of the amount of waste paper, together with a declaration from the contractor collecting the waste paper from the printing house. The outsourcing terms and calculations on the amount of paper waste involved in the finishing processes must be provided. The calculation period shall be based on production over 12 months. In case of new or rebuilt production facilities, the calculation shall be based on at least three months of representative operation.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS4. **Energy consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of energy consumption from grid electricity and fossil fuels. The system should allow for submetering and include the use of renewable energy sources such as solar panels and wind power. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system. **Verification:** Tenderers must provide an energy minimisation and management plan that details the system for reducing energy consumption at the pulp and/or paper production site and includes information on at least the following points: a. How the use of energy is minimised in the first instance (i.e. at each stage of the manufacturing process); b. Procedures and management systems for monitoring and tracking energy use (including ISO50001 or equivalent); c. Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g., ISO 14001 or EMAS) and Energy Management System (e.g., ISO 50001) procedures can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[20]
	TS5. **Water consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of water use from mains supply and other sources such as boreholes and river abstraction. This should be in keeping with the conditions prevalent at the site(s) in question, for example the system should be more stringent in areas of higher water scarcity. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system.

[20] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS5. **Water consumption during pulp and paper production** (continued) **Verification:** The tenderer must provide a water minimisation and management plan that details the system for reducing water consumption at the pulp and/or paper production site(s) and includes information on at least the following points: a. How the use of water is minimised in the first instance at each stage of the manufacturing process; b. How the reuse/recycling of water is maximised; c. Procedures for monitoring and tracking water use; and d. Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g. ISO14001 or EMAS) procedures or permit information (e.g. under Directive 2015/75/EU on industrial emissions – formerly Integrated Pollution Prevention and Control) can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[21]
	TS6. **Bleaching** Chlorine gas (Cl_2) shall not be used for fibre bleaching during pulp and paper production. Elemental chlorine free (ECF) bleaching, totally chlorine free (TCF) bleaching and process chlorine free (PCF) bleaching (where recycled fibres are processed from waste paper – see note below) are all accepted. **Verification:** Tenderers must provide a declaration that elemental chlorine has not been used in the production process, supported by appropriate means of proof, such as a technical dossier of the manufacturer, their pulp supplier if different, or a test report from a recognised body. Products carrying the EU Ecolabel will be deemed to comply. Type I ecolabels fulfilling the above criterion will also be accepted. **NOTE:** While this requirement also applies to the bleaching of recovered fibres, it is accepted that the fibres in their previous life-cycle may have been bleached with chlorine gas or other chlorinated compounds.

[21] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS7. **REACH Candidate List substances** Paper products shall not contain REACH Candidate List Substances of Very High Concern (Article 57 of Regulation (EC) No 1907/2006) in concentrations greater than 0.1% (w/w). **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration that the substances referred to are not retained in the final product, above the concentration limits specified, supported by appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body.
	TS8. **Energy use** The facility or facilities used to produce the printed products under this contract must have in place a register of all energy-consuming devices (including imaging equipment and other machinery, lighting, air conditioning, cooling) and a programme of measures for improvement of energy efficiency. **Verification:** Tenderers must provide the register of energy-consuming devices at the facility or facilities to be used to fulfil the contract, together with the improvement programme. Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply.
	TS9. **Staff training in printing with reduced environmental impact** Staff who will be directly involved in fulfilling the contract must have appropriate training to ensure they can comply with the environmental requirements set out in these technical specifications, including waste management and energy use. **Verification:** A copy of the induction training provided to staff which covers the above points, together with any supplementary/specialised training, must be submitted with the tender. Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** The non-paper components (up to 20% in weight) that are part of the final paper product shall not contain the following substances: **TS 10.1 Hazardous substances and mixtures** Consumables that could end up in the final printed paper product, and that contain substances and/or mixtures meeting the criteria for classification with the hazard statements or risk phrases specified in Annex I in accordance with Regulation (EC) No 1272/2008 or Council Directive 67/548/EEC, or substances referred to in Article 57 of Regulation (EC) No 1907/2006, shall not be used for printing, coating, and finishing operations of the final printed paper product. This requirement shall not apply to toluene for use in rotogravure printing processes where a closed or encapsulated installation or recovery system, or any equivalent system, is in place to control and monitor fugitive emissions and where the recovery efficiency is at least 92%. UV varnishes and UV inks classified H412/R52-53 are also exempted from this requirement. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the following evidence: • Appropriate documentation on the recovery efficiency of the closed/ encapsulated installation/recovery system, or any equivalent system, that has been put in place to deal with the use of toluene in rotogravure printing processes. • For substances not already classified in accordance with Regulation (EC) No 1272/2008: (i) a declaration that the non-paper components that are part of the final product do not contain the substances referred to in these criteria in concentration above the authorised limits; (ii) a declaration that consumables that could end up in the final printed paper product and used for printing, coating, and finishing operations do not contain the substances referred to in these criteria in concentration above the authorised limits; (iii) a list of all consumables used for the printing, finishing and coating of the printed paper products. This list shall include the quantity, function and suppliers of all the consumables used in the production process.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) • For substances listed in Annexes IV and V to REACH, exempted from registration obligations under Article 2(7)(a) and (b) of Regulation (EC) No 1907/2006, a declaration to this effect will suffice to comply with the requirements set out above. **TS 10.2 Substances listed under Article 59(1) of Regulation (EC) No 1907/2006** No derogation from the prohibition set out in Article 6(6)(a) of Regulation (EC) No 66/2010 shall be granted concerning substances identified as substances of very high concern and included in the list provided for in Article 59 of Regulation (EC) 1907/2006, present in mixtures in concentrations higher than 0.1 %. Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall apply where the concentration is lower than 0.1 %. The list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found ***here***. Reference to the list shall be made at the time of submitting a tender. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers may provide data on the amount of substances used for the printing of the printed paper products and a declaration stating that the substances referred to in this criterion are not retained in the final product above the concentration limits specified. The concentration shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No 1907/2006. **TS 10.3 Biocides** Biocides, either as part of the formulation or as part of any mixture included in the formulation, that are used to preserve the product and that are classified H410/R50-53 or H411/R51-53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation (EC) No 1272/2008, are permitted only if their bioaccumulation potentials are characterised by log Pow (log octanol/water partition coefficient) < 3.0 or an experimentally determined bioconcentration factor (BCF) ≤ 100.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide copies of the material safety data sheets for all biocides used during the different production stages, together with documentation of the concentrations of the biocides in the final product. **TS 10.4 Washing agents** Washing agents used for cleaning in printing processes and/or sub-processes that contain aromatic hydrocarbon shall only be allowed if they are in compliance with TS 10.2 and if one of the following conditions is fulfilled: i. The amount of aromatic hydrocarbons in the washing agent products used does not exceed 0.1 % (w/w); ii. The amount of aromatic hydrocarbon-based washing agent used annually does not exceed 5 % of the total amount of washing agent used in one calendar year. This criterion shall not apply to toluene used as washing agent in rotogravure printing. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the Safety Data Sheet for each washing agent used in a printing house during the year to which the annual consumption refers. The washing agent suppliers shall provide declarations of the aromatic hydrocarbon contents in the washing agents.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **TS 10.5 Alkyl phenol ethoxylates — Halogenated solvents — Phthalates** The following substances or preparations shall not be added to inks, dyes, toners, adhesives, or washing agents or other cleaning chemicals used for the printing of the printed paper product: i. Alkyl phenol ethoxylates and their derivatives that may produce alkyl phenols by degradation. ii. Halogenated solvents that at the time of application are classified in the hazard or risk categories listed in Annex 1. iii. Phthalates that at the time of application are classified with risk phrases H360F, H360D, H361f in accordance with Regulation (EC) No 1272/2008. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion. **TS 10.6 Printing inks, toners, inks, varnishes, foils and laminates** The following heavy metals or their compounds shall not be used in printing inks, toners, inks, varnishes, foils and laminates (whether as a substance or as part of any preparation used): cadmium, copper (excluding copper-phthalocyanine), lead, nickel, chromium VI, mercury, arsenic, soluble barium, selenium, antimony. Cobalt can only be used up to 0.1 % (w/w). Ingredients may contain traces of those metals up to 0.01 % (w/w) deriving from impurities in the raw materials. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion as well as declarations from ingredient suppliers.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** **11.1 Emissions to water** a) Rinsing water containing silver from film processing, as well as from plate production, and photo-chemicals shall not be discharged to a sewage treatment plant. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver-containing rinsing water on site. Where the film processing and/or the plate production are outsourced, the sub-contractor shall provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver containing rinsing water at the subcontractors. b) The amount of chromium (Cr) and copper (Cu) discharged into a sewage treatment plant must not exceed, respectively, 45 mg per m^2 and 400 mg per m^2 of printing cylinder surface area used in the press. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, discharges of Cr and Cu into sewage must be checked at rotogravure printing plants after treatment and before their release. A representative sample of Cr and Cu discharges shall be collected each month. At least one annual analytical test shall be carried out by an accredited laboratory to determine the content of Cr and Cu in a representative sub-sample of these samples. Compliance with this criterion shall be assessed by dividing the content of Cr and Cu, as determined by the annual analytical test, by the cylinder surface used in the press during the printing. The cylinder surface used in the press during printing is calculated by multiplying the cylinder surface (= $2\pi rL$, where r is the radius and L the length of the cylinder) by the number of printing productions during a year (= number of different printing jobs).

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** (continued) **11.2 Emissions to air** Volatile Organic Compounds (VOC) The following criterion must be met: $(P_{VOC} - R_{VOC})/P_{paper} < 5$ [kg/tonnes] Where: P_{VOC} = the annual total kilograms of VOC contained in the purchased chemical products used for the annual total production of printed products R_{VOC} = the annual total kilograms of VOC destroyed by abatement, recovered from printing processes and sold, or reused P_{paper} = the annual total tonnes of paper purchased and used for the production of printed products. Where a printing house uses different printing technologies, this criterion shall be fulfilled for each one separately. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of the VOC content in alcohols, washing agents, inks, damping solutions or other corresponding chemical products shall be provided by the chemical supplier. The applicant shall provide evidence of the calculation according to the method set out below. The period for the calculations shall be based on production over 12 months. In the case of new or rebuilt production facilities, the calculations shall be based on at least three months of representative operation.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** (continued) The P_{VOC} term shall be calculated from SDS information related to VOC content or from an equivalent declaration provided by the supplier of chemical products. The R_{VOC} term shall be calculated from the declaration on the content of VOC contained in the chemical products sold or from the internal counting register (or any other equivalent document) reporting the annual amount of VOC recovered and reused on site. **Specific conditions for heat-set printing:** i. For heat-set offset printing with an integrated after-burner unit in place for the drying unit, the following calculation method shall apply: P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85 % of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products. ii. For heat-set offset printing, without an integrated after-burner unit in place for the drying unit, the following calculation method shall apply: P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85 % of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products + 10 % of annual total kilograms of VOC contained in the printing inks used for the annual production of printed products. For (i) and (ii), proportionately lower percentages than 90% and 85% may be used in this calculation if more than 10% or 15% respectively of annual total kilograms of VOC contained in the damping solutions or washing agents used for the annual production of printed products are shown to be abated in the treatment system for combusting gases from the drying process.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** (continued) **11.3 Emissions from publication rotogravure printing** a) Publication rotogravure printing emissions of VOC to air shall not exceed 50 mg C/Nm^3. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide appropriate documentation showing compliance with this criterion. b) Equipment for reduction of emissions to air of Cr6 + shall be installed. Emissions of Cr6 + to air shall not exceed 15 mg/tonne paper. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a description of the system in place, together with documentation on the control and monitoring of Cr6 + emissions. The documentation shall include the test results related to the reduction of Cr6 + emissions to the air. **11.4 Printing processes to which no legislative measures apply** Volatile solvents from the drying process of heat-set offset and flexography printing shall be managed by means of recovery or combustion or any equivalent system. In all cases where no legislative measures apply, the emissions of VOC to air must not exceed 20 mg C/Nm^3. This requirement does not apply to screen printing and digital printing. Moreover, it does not apply to heat-set and flexography installations with solvent consumption lower than 15 tonnes per year. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a description of the system in place together with documentation and test results related to the control and monitoring of emissions to air.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS12. **Recyclability** The printed paper product must be recyclable. The printed paper shall be de-inkable and the non-paper components of the printed paper product shall be easily removable to ensure that those components will not hinder the recycling process. a. Wet strength agents may be used only if the recyclability of the finished product can be proved. b. Adhesives may be used only if their removability can be proved. c. Coating varnishes and lamination, including polyethene and/or polyethene/ polypropylene, may be used only for covers of books, magazines and catalogues. d. The de-inkability shall be proved. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide test results demonstrating the recyclability of wet strength agents and removability of adhesives. The reference test methods are PTS method PTS-RH 021/97 (for wet strength agents), INGEDE Method 12 (for non-soluble adhesive removability), or equivalent test methods. The de-inkability shall be proven by using the 'Deinking Scorecard' of the European Recovered Paper Council or equivalent test methods. Testing shall be performed on three types of paper: uncoated, coated and surface-sized paper. If a type of printing ink is only sold for one or two specific types of paper, it is sufficient to test the paper type(s) in question. Tenderers must provide a declaration that coated and laminated printed paper products are in compliance with point (c). Where a part of a printed paper product is easily removable (for instance a plastic cover), the recyclability test may be made without this component. The easiness of removal of the non-paper components shall be proven via a declaration of the paper collecting company, the recycling company or an equivalent organisation. Test methods shown by a competent and independent third party as giving equivalent results may also be used.

2. GPP CRITERIA FOR PRINTING SERVICES

SUBJECT MATTER
The provision of printing services with reduced environmental impact

CORE CRITERIA	COMPREHENSIVE CRITERIA
SELECTION CRITERIA	

SC1. **Environmental technical capacity**

Evidence must be provided of the equipment, expertise, documented procedures and management systems[22] in place which are appropriate to address the main environmental impacts of the printing service, including:

- Sourcing of legal and sustainable paper and other materials
- Minimisation of waste during printing, finishing and other processes
- Energy efficiency at the production site(s)
- Efficient use of water at the production site(s)
- Avoidance of hazardous substances, and correct handling and disposal of any which cannot be avoided
- Staff training in each of the above aspects

Verification: Tenderers must describe the equipment, procedures and management systems which they and any subcontractors have in place to minimise the impact of the printing services. Evidence in the form of a certified environmental management system (e.g. ISO 14001, EMAS) may be provided. Examples of the application of these procedures in previous contracts should be provided. Where it is deemed appropriate, the contracting authority reserves the right to carry out site visits and inspections, or to request third party inspections, in order to confirm the tenderer's capabilities.

EXPLANATORY NOTE: The above selection criterion may be evaluated either on a pass/fail or scored basis, and so can be used in both open and two-stage procedures. If scoring will be applied, the contracting authority should indicate the marks available in respect of this criterion.

[22] The possibility to require evidence of supply chain management capabilities was introduced by Part II (d) of Annex XII to Directive 2014/24/EU on Public Procurement.

CORE CRITERIA	COMPREHENSIVE CRITERIA

TECHNICAL SPECIFICATIONS

TS1. **Legal harvest of timber for pulp production**

The virgin fibre for pulp production shall have originated from timber that has been legally harvested in accordance with Regulation (EU) 995/2010 (the 'EU Timber Regulation').

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of legal harvesting[23] will be deemed to meet the above requirement. Timber covered by a valid EU FLEGT or CITES license shall also be considered to have been legally harvested according to Regulation (EU) No 995/2010. Alternatively, tenderers must provide the following information:

a. The operators[24] or the traders[25] (as defined in Regulation (EU) 995/2010) who will supply either the paper products, the pulp or the timber for pulp production: Furthermore, where applicable, evidence of the means whereby traders further down the supply chain ensure traceability, in accordance with Article 5 of Regulation (EU) 995 of 2010, shall be provided.

b. Evidence of the risk assessment and mitigation procedures put in place by the operator(s) first placing on the EU market the paper products, the pulp or the timber for pulp production, in accordance with Article 6(1) (b) and (c) of Regulation (EU) 995 of 2010. This may include certification or other third party verified schemes.

TS2. **Sustainable sourcing of fibres for pulp production**

At least 70% (w/w) of the total amount of fibres for pulp production shall either be recycled fibre or virgin fibre originating from timber harvested from sustainably managed forests, as evidenced by any of the below forms of verification.

Verification: Paper which is certified under the FSC, PEFC, EU Ecolabel or other third-party certification schemes which provide equivalent assurance of sustainable sourcing[26] will be deemed to meet the above requirement. Alternatively, tenderers must provide a declaration of compliance with the above requirements supported by the following elements, as appropriate:

a. For recycled fibres, data allowing for the reliable tracing back of the recycled fibres to their point of origin, i.e., the point of collection of the reclaimed materials. Without prejudice against other adequate means of proof, a valid chain-of-custody certificate issued by a chain-of-custody system that has been independently certified by a third party will be accepted as data tracing the fibres to their point of origin. Recycled fibres can have originated both from pre-consumer or post-consumer reclaimed materials. Fibres originating from any post-consumer grade of paper and board for recycling defined in EN 643 will be considered recycled fibre. Fibres originated from mill broke (own or purchased) will not be considered as recycled fibres, according to the ISO 14021 definition, as mill broke is a material capable of being reclaimed within the same process that generated it.

b. For virgin fibres originated from timber harvested from sustainably managed forests, evidence of compliance with the FSC or PEFC standards for Forest Stewardship/Sustainable Forest Management, together with chain-of-custody information allowing tracing of the virgin fibres to these sustainable sources.

[23] This may include for example the Nordic Ecolabel or Blue Angel.
[24] 'Operator' means any natural or legal person that places timber or timber products on the market
[25] 'Trader' means any natural or legal person who, in the course of a commercial activity, sells or buys on the internal market timber or timber products already placed on the internal market
[26] This may include for example the Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	

EXPLANATORY NOTE: Products which are labelled according to one of the listed third-party certifications can be deemed to comply with TS1 or TS2 without further verification. For TS1, production of a valid FLEGT or CITES licence also serves to demonstrate legality. Under Article 43 of Directive 2014/24/EU, tenderers may seek to rely on other appropriate means of proof where they have "demonstrably no possibility of obtaining the specific label indicated by the contracting authority or an equivalent label within the relevant time limits for reasons that are not attributable to [the tenderer]." Points a) and b) or TS1 And TS2 describe the type of alternative evidence which may be considered appropriate with these requirements.

TS3. **Waste**

3.1 Waste management

The facility where the printed paper products are produced must have in place a system for handling waste, including residual products derived from the production of the printed paper products. The system must be documented and include information on at least the following procedures:

i. handling, collection, separation and use of recyclable materials from the waste stream,

ii. precovery of materials for other uses, such as incineration for raising process steam or heating, or agricultural use,

iii. handling, collection, separation and disposal of hazardous waste, as defined by the relevant local and national regulatory authorities.

Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion, together with a description of the procedures adopted for waste management. Where waste management is outsourced, the subcontractor must provide a declaration of compliance with this criterion as well.

CORE CRITERIA	COMPREHENSIVE CRITERIA

AWARD CRITERIA

TS3. **Waste** (continued)

3.2 Waste paper

The amount of waste paper 'X' produced shall not exceed:

Printing method	**Maximum waste paper** (%)
Sheet offset	23
Coldset, newspaper	10
Coldset, form printing	18
Coldset rotation (except newspapers and forms)	19
Heatset rotation	21
Gravure printing	15
Flexography (except corrugated fibreboard)	11
Digital printing	10
Flexography, corrugated fibreboard	17
Screen printing	23

WHERE:
X = annual tonnes of waste paper produced during the printing (including finishing processes) of the ecolabelled printed paper product, divided by annual tonnes of paper purchased and used for the production of ecolabelled printed paper product.

Where the printing house carries out finishing processes on behalf of another printing house, the amount of waste paper produced in those processes shall not be included in the calculation of 'X'.

Where the finishing processes are outsourced to another company, the amount of waste paper resulting from the outsourced work shall be calculated and declared in the calculation of 'X'.

Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the calculation of the amount of waste paper, together with a declaration from the contractor collecting the waste paper from the printing house. The outsourcing terms and calculations on the amount of paper waste involved in the finishing processes must be provided. The calculation period shall be based on production over 12 months. In case of new or rebuilt production facilities, the calculation shall be based on at least three months of representative operation.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS4. **Energy consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of energy consumption from grid electricity and fossil fuels. The system should allow for submetering and include the use of renewable energy sources such as solar panels and wind power. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system. **Verification:** Tenderers must provide an energy minimisation and management plan that details the system for reducing energy consumption at the pulp and/or paper production site and includes information on at least the following points: a. How the use of energy is minimised in the first instance (i.e. at each stage of the manufacturing process); b. Procedures and management systems for monitoring and tracking energy use (including ISO50001 or equivalent); c. Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g., ISO 14001 or EMAS) and Energy Management System (e.g., ISO 50001) procedures can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[27]
	TS5. **Water consumption during pulp and paper production** Pulp and/or paper production sites shall have a system in place for the minimisation of water use from mains supply and other sources such as boreholes and river abstraction. This should be in keeping with the conditions prevalent at the site(s) in question, for example the system should be more stringent in areas of higher water scarcity. For pulp production, it is deemed sufficient that 90% of the pulp used has been manufactured in sites having such a system.

[27] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS5. **Water consumption during pulp and paper production** (continued) **Verification:** The tenderer must provide a water minimisation and management plan that details the system for reducing water consumption at the pulp and/or paper production site(s) and includes information on at least the following points: a. How the use of water is minimised in the first instance at each stage of the manufacturing process; b. How the reuse/recycling of water is maximised; c. Procedures for monitoring and tracking water use; and d. Continuous improvement objectives and targets. Where appropriate, Environmental Management System (e.g. ISO14001 or EMAS) procedures or permit information (e.g. under Directive 2015/75/EU on industrial emissions – formerly Integrated Pollution Prevention and Control) can be used as part of the evidence. Products carrying a Type I ecolabel fulfilling the above criterion will be deemed to comply.[28]
	TS6. **Bleaching** Chlorine gas (Cl_2) shall not be used for fibre bleaching during pulp and paper production. Elemental chlorine free (ECF) bleaching, totally chlorine free (TCF) bleaching and process chlorine free (PCF) bleaching (where recycled fibres are processed from waste paper – see note below) are all accepted. **Verification:** Tenderers must provide a declaration that elemental chlorine has not been used in the production process, supported by appropriate means of proof, such as a technical dossier of the manufacturer, their pulp supplier if different, or a test report from a recognised body. Products carrying the EU Ecolabel will be deemed to comply. Type I ecolabels fulfilling the above criterion will also be accepted. **NOTE:** While this requirement also applies to the bleaching of recovered fibres, it is accepted that the fibres in their previous life-cycle may have been bleached with chlorine gas or other chlorinated compounds.

[28] Including the EU Ecolabel, Nordic Ecolabel or Blue Angel.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS7. **REACH Candidate List substances** Paper products shall not contain REACH Candidate List Substances of Very High Concern (Article 57 of Regulation (EC) No 1907/2006) in concentrations greater than 0.1% (w/w). **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration that the substances referred to are not retained in the final product, above the concentration limits specified, supported by appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body.
	TS8. **Energy use** The facility or facilities used to produce the printed products under this contract must have in place a register of all energy-consuming devices (including imaging equipment and other machinery, lighting, air conditioning, cooling) and a programme of measures for improvement of energy efficiency. **Verification:** Tenderers must provide the register of energy-consuming devices at the facility or facilities to be used to fulfil the contract, together with the improvement programme. Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply.
	TS9. **Staff training in printing with reduced environmental impact** Staff who will be directly involved in fulfilling the contract must have appropriate training to ensure they can comply with the environmental requirements set out in these technical specifications, including waste management and energy use. **Verification:** A copy of the induction training provided to staff which covers the above points, together with any supplementary/specialised training, must be submitted with the tender. Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** The non-paper components (up to 20 % in weight) that are part of the final paper product shall not contain the following substances: **TS 10.1 Hazardous substances and mixtures** Consumables that could end up in the final printed paper product, and that contain substances and/or mixtures meeting the criteria for classification with the hazard statements or risk phrases specified in Annex I in accordance with Regulation (EC) No 1272/2008 or Council Directive 67/548/EEC, or substances referred to in Article 57 of Regulation (EC) No 1907/2006, shall not be used for printing, coating, and finishing operations of the final printed paper product. This requirement shall not apply to toluene for use in rotogravure printing processes where a closed or encapsulated installation or recovery system, or any equivalent system, is in place to control and monitor fugitive emissions and where the recovery efficiency is at least 92%. UV varnishes and UV inks classified H412/R52-53 are also exempted from this requirement. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the following evidence: • Appropriate documentation on the recovery efficiency of the closed/ encapsulated installation/recovery system, or any equivalent system, that has been put in place to deal with the use of toluene in rotogravure printing processes. • For substances not already classified in accordance with Regulation (EC) No 1272/2008: (i) a declaration that the non-paper components that are part of the final product do not contain the substances referred to in these criteria in concentration above the authorised limits; (ii) a declaration that consumables that could end up in the final printed paper product and used for printing, coating, and finishing operations do not contain the substances referred to in these criteria in concentration above the authorised limits; (iii) a list of all consumables used for the printing, finishing and coating of the printed paper products. This list shall include the quantity, function and suppliers of all the consumables used in the production process.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) • For substances listed in Annexes IV and V to REACH, exempted from registration obligations under Article 2(7)(a) and (b) of Regulation (EC) No 1907/2006, a declaration to this effect will suffice to comply with the requirements set out above. **TS 10.2 Substances listed under Article 59(1) of Regulation (EC) No 1907/2006** No derogation from the prohibition set out in Article 6(6)(a) of Regulation (EC) No 66/2010 shall be granted concerning substances identified as substances of very high concern and included in the list provided for in Article 59 of Regulation (EC) 1907/2006, present in mixtures in concentrations higher than 0.1 %. Specific concentration limits determined in accordance with Article 10 of Regulation (EC) No 1272/2008 shall apply where the concentration is lower than 0.1 %. The list of substances identified as substances of very high concern and included in the candidate list in accordance with Article 59 of Regulation (EC) No 1907/2006 can be found ***here***. Reference to the list shall be made at the time of submitting a tender. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers may provide data on the amount of substances used for the printing of the printed paper products and a declaration stating that the substances referred to in this criterion are not retained in the final product above the concentration limits specified. The concentration shall be specified in the safety data sheets in accordance with Article 31 of Regulation (EC) No 1907/2006. **TS 10.3 Biocides** Biocides, either as part of the formulation or as part of any mixture included in the formulation, that are used to preserve the product and that are classified H410/R50-53 or H411/R51-53 in accordance with Directive 67/548/EEC, Directive 1999/45/EC or Regulation (EC) No 1272/2008, are permitted only if their bioaccumulation potentials are characterised by log Pow (log octanol/water partition coefficient) < 3.0 or an experimentally determined bioconcentration factor (BCF) ≤ 100.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide copies of the material safety data sheets for all biocides used during the different production stages, together with documentation of the concentrations of the biocides in the final product. **TS 10.4 Washing agents** Washing agents used for cleaning in printing processes and/or sub-processes that contain aromatic hydrocarbon shall only be allowed if they are in compliance with TS 10.2 and if one of the following conditions is fulfilled: i. The amount of aromatic hydrocarbons in the washing agent products used does not exceed 0.1 % (w/w); ii. The amount of aromatic hydrocarbon-based washing agent used annually does not exceed 5 % of the total amount of washing agent used in one calendar year. This criterion shall not apply to toluene used as washing agent in rotogravure printing. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide the Safety Data Sheet for each washing agent used in a printing house during the year to which the annual consumption refers. The washing agent suppliers shall provide declarations of the aromatic hydrocarbon contents in the washing agents.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS10. **Excluded or limited substances and mixtures for printing, coating and finishing** (continued) **TS 10.5 Alkyl phenol ethoxylates — Halogenated solvents — Phthalates** The following substances or preparations shall not be added to inks, dyes, toners, adhesives, or washing agents or other cleaning chemicals used for the printing of the printed paper product: i. Alkyl phenol ethoxylates and their derivatives that may produce alkyl phenols by degradation. ii. Halogenated solvents that at the time of application are classified in the hazard or risk categories listed in Annex 1. iii. Phthalates that at the time of application are classified with risk phrases H360F, H360D, H361f in accordance with Regulation (EC) No 1272/2008. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion. **TS 10.6 Printing inks, toners, inks, varnishes, foils and laminates** The following heavy metals or their compounds shall not be used in printing inks, toners, inks, varnishes, foils and laminates (whether as a substance or as part of any preparation used): cadmium, copper (excluding copper-phthalocyanine), lead, nickel, chromium VI, mercury, arsenic, soluble barium, selenium, antimony. Cobalt can only be used up to 0.1 % (w/w). Ingredients may contain traces of those metals up to 0.01 % (w/w) deriving from impurities in the raw materials. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion as well as declarations from ingredient suppliers.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** **11.1 Emissions to water** a) Rinsing water containing silver from film processing, as well as from plate production, and photo-chemicals shall not be discharged to a sewage treatment plant. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver-containing rinsing water on site. Where the film processing and/or the plate production are outsourced, the sub-contractor shall provide a declaration of compliance with this criterion, together with a description of the management of photo-chemicals and silver containing rinsing water at the subcontractors. b) The amount of chromium (Cr) and copper (Cu) discharged into a sewage treatment plant must not exceed, respectively, 45 mg per m^2 and 400 mg per m^2 of printing cylinder surface area used in the press. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, discharges of Cr and Cu into sewage must be checked at rotogravure printing plants after treatment and before their release. A representative sample of Cr and Cu discharges shall be collected each month. At least one annual analytical test shall be carried out by an accredited laboratory to determine the content of Cr and Cu in a representative sub-sample of these samples. Compliance with this criterion shall be assessed by dividing the content of Cr and Cu, as determined by the annual analytical test, by the cylinder surface used in the press during the printing. The cylinder surface used in the press during printing is calculated by multiplying the cylinder surface (= $2\pi rL$, where r is the radius and L the length of the cylinder) by the number of printing productions during a year (= number of different printing jobs).

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** (continued) **11.2 Emissions to air** Volatile Organic Compounds (VOC) The following criterion must be met: $(P_{VOC} - R_{VOC})/P_{paper} < 5$ [kg/tonnes] Where: P_{VOC} = the annual total kilograms of VOC contained in the purchased chemical products used for the annual total production of printed products R_{VOC} = the annual total kilograms of VOC destroyed by abatement, recovered from printing processes and sold, or reused P_{paper} = the annual total tonnes of paper purchased and used for the production of printed products. Where a printing house uses different printing technologies, this criterion shall be fulfilled for each one separately. **Verification:** Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a declaration of the VOC content in alcohols, washing agents, inks, damping solutions or other corresponding chemical products shall be provided by the chemical supplier. The applicant shall provide evidence of the calculation according to the method set out below. The period for the calculations shall be based on production over 12 months. In the case of new or rebuilt production facilities, the calculations shall be based on at least three months of representative operation.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** (continued) The P_{VOC} term shall be calculated from SDS information related to VOC content or from an equivalent declaration provided by the supplier of chemical products. The R_{VOC} term shall be calculated from the declaration on the content of VOC contained in the chemical products sold or from the internal counting register (or any other equivalent document) reporting the annual amount of VOC recovered and reused on site. **Specific conditions for heat-set printing:** i. For heat-set offset printing with an integrated after-burner unit in place for the drying unit, the following calculation method shall apply: P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85 % of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products. ii. For heat-set offset printing, without an integrated after-burner unit in place for the drying unit, the following calculation method shall apply: P_{VOC} = 90% of the annual total kilograms of VOC contained in damping solutions used for the annual production of printed products + 85 % of the annual total kilograms of VOC contained in washing agents used for the annual production of printed products + 10 % of annual total kilograms of VOC contained in the printing inks used for the annual production of printed products. For (i) and (ii), proportionately lower percentages than 90% and 85% may be used in this calculation if more than 10% or 15% respectively of annual total kilograms of VOC contained in the damping solutions or washing agents used for the annual production of printed products are shown to be abated in the treatment system for combusting gases from the drying process.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS11. **Emissions** (continued) **11.3 Emissions from publication rotogravure printing** a) Publication rotogravure printing emissions of VOC to air shall not exceed 50 mg C/Nm^3. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide appropriate documentation showing compliance with this criterion. b) Equipment for reduction of emissions to air of Cr6 + shall be installed. Emissions of Cr6 + to air shall not exceed 15 mg/tonne paper. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a description of the system in place, together with documentation on the control and monitoring of Cr6 + emissions. The documentation shall include the test results related to the reduction of Cr6 + emissions to the air. **11.4 Printing processes to which no legislative measures apply** Volatile solvents from the drying process of heat-set offset and flexography printing shall be managed by means of recovery or combustion or any equivalent system. In all cases where no legislative measures apply, the emissions of VOC to air must not exceed 20 mg C/Nm^3. This requirement does not apply to screen printing and digital printing. Moreover, it does not apply to heat-set and flexography installations with solvent consumption lower than 15 tonnes per year. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide a description of the system in place together with documentation and test results related to the control and monitoring of emissions to air.

CORE CRITERIA	COMPREHENSIVE CRITERIA
TECHNICAL SPECIFICATIONS	
	TS12. **Recyclability** The printed paper product must be recyclable. The printed paper shall be de-inkable and the non-paper components of the printed paper product shall be easily removable to ensure that those components will not hinder the recycling process. a. Wet strength agents may be used only if the recyclability of the finished product can be proved. b. Adhesives may be used only if their removability can be proved. c. Coating varnishes and lamination, including polyethene and/or polyethene/ polypropylene, may be used only for covers of books, magazines and catalogues. d. The de-inkability shall be proved. Verification: Products bearing the EU Ecolabel for Printed Products, or another Type I Ecolabel addressing the above requirements, will be deemed to comply. Alternatively, tenderers must provide test results demonstrating the recyclability of wet strength agents and removability of adhesives. The reference test methods are PTS method PTS-RH 021/97 (for wet strength agents), INGEDE Method 12 (for non-soluble adhesive removability), or equivalent test methods. The de-inkability shall be proven by using the 'Deinking Scorecard' of the European Recovered Paper Council or equivalent test methods. Testing shall be performed on three types of paper: uncoated, coated and surface-sized paper. If a type of printing ink is only sold for one or two specific types of paper, it is sufficient to test the paper type(s) in question. Tenderers must provide a declaration that coated and laminated printed paper products are in compliance with point 3(c). Where a part of a printed paper product is easily removable (for instance a plastic cover), the recyclability test may be made without this component. The easiness of removal of the non-paper components shall be proven via a declaration of the paper collecting company, the recycling company or an equivalent organisation. Test methods shown by a competent and independent third party as giving equivalent results may also be used..

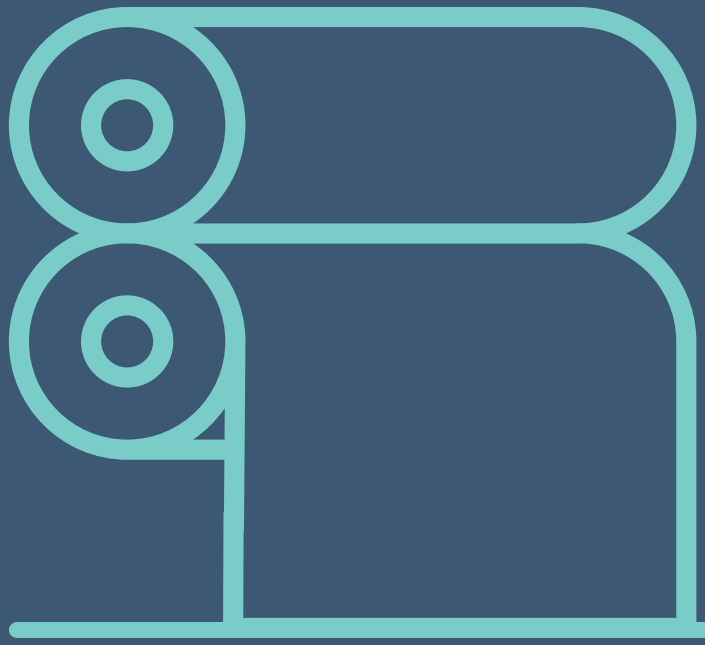
ANNEX 1: LIST OF HAZARD STATEMENTS AND RISK PHRASES

Hazard Statement[29]	Risk Phrase[30]
H300 Fatal if swallowed	R28
H301 Toxic if swallowed	R25
H304 May be fatal if swallowed and enters airways	R65
H310 Fatal in contact with skin	R27
H311 Toxic in contact with skin	R24
H330 Fatal if inhaled	R26
H331 Toxic if inhaled	R23
H340 May cause genetic defects	R46
H341 Suspected of causing genetic defects	R68
H350 May cause cancer	R45
H350i May cause cancer by inhalation	R49
H351 Suspected of causing cancer	R40
H360F May damage fertility	R60
H360D May damage the unborn child	R61
H360FD May damage fertility. May damage the unborn child	R60; R61; R60-61
H360Fd May damage fertility. Suspected of damaging the unborn child	R60-R63
H360Df May damage the unborn child. Suspected of damaging fertility	R61-R62
H361f Suspected of damaging fertility	R62
H361d Suspected of damaging the unborn child	R63
H361fd Suspected of damaging fertility. Suspected of damaging the unborn child	R62-63

[29] As provided for in Regulation (EC) No 1272/2008 of the European Parliament and of the Council
[30] As provided for in Council Directive 67/548/EEC

Hazard Statement[29]	Risk Phrase[30]
H362 May cause harm to breast fed children	R64
H370 Causes damage to organs	R39/23; R39/24; R39/25; R39/26; R39/27; R39/28
H371 May cause damage to organs	R68/20; R68/21; R68/22
H372 Causes damage to organs through prolonged or repeated exposure	R48/25; R48/24; R48/23
H373 May cause damage to organs through prolonged or repeated exposure	R48/20; R48/21; R48/22
H400 Very toxic to aquatic life	R50
H410 Very toxic to aquatic life with long-lasting effects	R50-53
H411 Toxic to aquatic life with long-lasting effects	R51-53
H412 Harmful to aquatic life with long-lasting effects	R52-53
H413 May cause long-lasting harmful effects to aquatic life	R53
EUH059 Hazardous to the ozone layer	R59
EUH029 Contact with water liberates toxic gas	R29
EUH031 Contact with acids liberates toxic gas	R31
EUH032 Contact with acids liberates very toxic gas	R32
EUH070 Toxic by eye contact	R39-41
No commercial dye formulation, colorants, surface-finishing agents, auxiliaries and coating materials shall be used on either pulp or board that has been assigned or may be assigned at the time of application the hazard statement H317: May cause allergic skin reaction.	R43

[29] As provided for in Regulation (EC) No 1272/2008 of the European Parliament and of the Council
[30] As provided for in Council Directive 67/548/EEC



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