

# The new EN 643

## CEN Standard



- Why a European Standard for Paper for Recycling?
- Identified shortcomings of the old EN 643
- The process
- What's new in the revised EN 643
- Next steps, CEPI guidance and outlook



# Why a standard for Paper for Recycling?

- Define what grades of Paper for Recycling contain and don't contain
- Assist industry professionals in buying and selling of Paper for Recycling
- Inform customs and excise officers
- Secure comparable requirements for a material widely traded in Europe and beyond

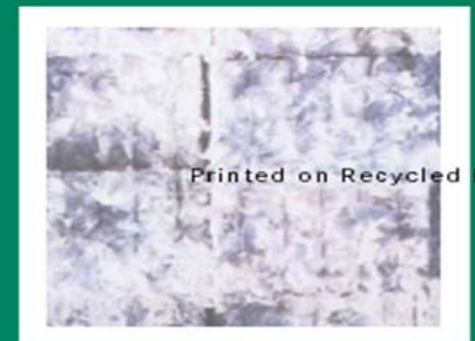


# Identified shortcomings of the old EN 643

- No tolerance levels for non-paper components and unusable material
- Missing detailed grade descriptions
- Need for adaptation to the market reality (new grades, outdated grades)

## European List of Standard Grades of Recovered Paper and Board

June 2002



# The process

- 2008: Start of reflections within CEPI, ERPA and FEAD
- 2009, 2010: negotiations with ERPA and FEAD
- May 2011: joint proposal to CEN
- June 2011: CEN decision to revise the EN 643, with the help of a working group, based on the industry proposal
- Late 2011 to summer 2012: CEN working group 2

EN643 - Proposed revision of grades (ERPA Version 9)						EN643 - Prop		
European List of Standard Grades of Recovered Paper and Board						European List		
- - - Draft revision - - -								
Grade List						Grade List		
	Code	Title	Description	Non-paper components	Total outflows	Code		
	<b>Group 1 - Ordinary grades</b>						<b>Group 1 - Ordin</b>	
striction	1.01 .00	Mixed paper and board No 1	A mixture of various grades of paper and board, without restriction on short fibre content.	2,00%	5,00%	1.01 .00	Mixed pa board wi material	
ng a	1.02 .00	Mixed paper and boards No 2	A mixture of various qualities of paper and board, containing a maximum of 40% of newspapers and magazines.	1,00%	3,00%	1.02 .00	Mixed pi boards (	
ir mixed	1.03 .00	Boxboard cuttings	Printed and unprinted white lined and unlined grey board or mixed board, free from corrugated material.	1,00%	2,00%	1.03 .00	Boxboard	
of 70% of papers.	1.04 .00	Packaging corrugated paper and board	Used paper and board packaging materials containing a minimum of 70% of corrugated board. The remaining material being solid board and wrapping papers.	2,00%	5,00%	1.04 .00	Corrug and Boa	
ities.	1.05 .01	OCC 80:20	Used boxes and sheets of corrugated board of various qualities, may include 20% of other papers and boards.	2,00%	4,00%	1.05 .00	Corrug (OCC)	
	1.05 .02	OCC 90:10	Used boxes and sheets of corrugated board of various qualities, may include 10% of other papers and boards.	1,00%	3,00%			
	1.05 .03	OCC 95:5	Used boxes and sheets of corrugated board of various qualities, may include 5% of other packaging papers and boards.	1,00%	3,00%			
	1.06 .00	Magazines 1	Magazines, principally of mechanical fibres and coated, with or without glue.	0,50%	1,00%	1.06 .00	Unsold r	
	1.06 .01	Magazines 1 without glue	Magazines, principally of mechanical fibres and coated, without glue.	0,50%	1,00%	1.06 .01	Unsold h without j	
	1.06 .02	Magazines 2	Magazines, principally of mechanical fibres and coated, with or without glue. May contain 2% poly and/or non-paper inserts.	1,00%	3,00%	1.06 .02	Unsold h with pro	
	1.06 .03	Magazines 3	Magazines, principally of mechanical fibres and coated, with or without glue, may contain 5% poly and/or non-paper inserts.	1,00%	5,00%			
pages used.	1.07 .00	Telephone books	New and used telephone books, with unlimited content of pages coloured in the mass, with and without glue. Shavings allowed.	1,00%	2,00%	1.07 .00	Telephon	
imum of	1.08 .00	Mixed newspapers and magazines 1	A mixture of newspapers, magazines and other de-inkable mechanical papers, containing a minimum of 50% of newspapers, with or without glue.	0,50%	3,00%			
imum of	1.09 .00	Mixed newspapers and magazines 2	A mixture of newspapers, magazines and other de-inkable mechanical papers, containing a minimum of 60% of newspapers, with or without glue.	0,50%	3,00%	1.09 .00	Newspap magazin	
imum of	1.10 .00	Mixed magazines and newspapers	A mixture of newspapers, magazines and other de-inkable mechanical papers, containing a minimum of 60% of magazines, with or without glue.	0,50%	3,00%			
f is to a gotiated	1.11 .00	Standard graphic papers for deinking	Graphic paper, consisting principally of newspapers and magazines, each at a minimum of 40%.	1,00%	5,00%	1.11 .00	Sorted g for deink	
	1.11 .01	Best graphic papers for deinking	Specially sorted graphic paper, consisting principally of newspapers and magazines, each at a minimum of 40%.	1,00%	3,00%			
	<b>Group 2 - Medium grades</b>						<b>Group 2 - Medi</b>	
or	2.01 .00	Newspapers	Newspapers, containing a maximum of 5% of newspapers or advertisements coloured in the mass.	1,00%	2,00%	2.01 .00	Newspap	
ustrated	2.02 .00	Overissued newspapers	Uncirculated newspapers.	0,50%	1,00%	2.02 .00	Unsold h	

# The process

- August 2012 to January 2013: Enquiry among CEN members
- March 2013: CEN Working Group 2 meeting to discuss comments from DE, FR, UK
- April 2013: Working Group recommendations sent to CEN
- In parallel: French and German Translations



# What's new in the revised EN 643?



# Definitions and structure

- Recovered Paper & Board → Paper and Board for Recycling
- Prohibited materials: 0 tolerance
- Unwanted material with a maximum tolerance level

**Prohibited materials**  
(not permitted at all)

**Unwanted material**  
(with tolerance levels)

Non-paper components  
(with tolerance levels)

P&B detrimental to production

P&B not according to grade definition

P&B not suitable for deinking  
(when intended for deinking)



# General quality issues

- Recommendation to use the European Recovered Paper Identification System
- Reference to Recovered Paper Quality Control Guidelines, Responsible Sourcing Guidelines
- Specific requirements for deinking grades
  - Reference to INGEDE Method 7 on visual inspection
  - List of grades, in which non-deinkable papers count as unwanted material
- Problem of shredding is highlighted
- Moisture content and how to deal with it remains unchanged

# Corrugated Paper & Board - 1.04, 1.05 (old)

Code	Name	Description
1.04	Supermarket	Used paper and board packaging, containing a minimum of 70% of corrugated board, the rest being solid board and wrapping papers.
1.05	OCC	Used boxes and sheets of corrugated board of various qualities.

# Corrugated Paper & Board - 1.04, 1.05 (new)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
1.04.00	Corrugated paper and board packaging	Used paper and board packaging, containing a minimum of 70% of corrugated board, the rest being other packaging papers and boards.	1.5	3
1.04.01	Ordinary corrugated paper and board	Used paper and board packaging, containing a minimum of 70% of corrugated board, the rest being other paper and board products.	1.5	3
1.04.02	Corrugated paper and board	Used paper and board packaging, containing a minimum of 80% of corrugated board, the rest being other paper and board products.	1.5	3
1.05.00	Ordinary corrugated board	Used boxes and sheets of corrugated board of various qualities, may include 10% of other packaging papers and boards.	1.5	2.5
1.05.01	Corrugated board	Used boxes and sheets of corrugated board of various qualities, may include 5% of other packaging papers and boards.	1.5	2.5

# Newspapers and magazines (old)

Code	Name	Description
1.06	Unsold magazines	Unsold magazines, with or without glue.
1.06.01	Unsold magazines without glue	Unsold magazines, without glue.
1.08	Mixed newspapers and magazines 1	A mixture of newspapers and magazines, containing a minimum of 50% of newspapers, with or without glue.
1.09	Mixed newspapers and magazines 2	A mixture of newspapers and magazines, containing a minimum of 60% of newspapers, with or without glue.
1.10	Mixed magazines and newspapers	A mixture of newspapers and magazines, containing a minimum of 60% magazines, with or without glue.
1.11	Sorted graphic paper for deinking	Sorted graphic paper from households, newspapers and magazines, each at a minimum of 40%. The percentage of non.deinkable paper and board should be reduced over time to a maximum level of 1.5%. The actual percentage is to be negotiated between buyer and seller.
12		

# Newspapers and magazines (new)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
1.06.00	Magazines	Magazines, with or without glue.	0.5	1
1.06.01	Magazines without glue	Magazines without glue.	0.5	1
1.06.02	Magazines with product samples	Magazines, with or without glue, may contain non-paper components as attached product samples (percentage to be agreed between seller and buyer in addition to the percentages in the columns to the right).	1	2
1.09.00	Newspapers and magazines	Mixture of newspapers and magazines (predominantly unsold); each of them with a minimum of 30%.	0.5	1
1.11.00	Sorted graphic paper for deinking	Sorted graphic paper, consisting of a minimum of 80% newspapers and magazines. It has to contain at least 30% newspapers and 40% magazines. Print products which are not suitable for deinking are limited to 1.5%.	0.5	2.5

# Unsold newspapers (old)

Code	Name	Description
2.02	Unsold newspapers	Unsold daily newspapers, free from additional inserts or illustrated material coloured in the mass.
2.02.01	Unsold newspapers, no flexo-graphic printing allowed	Unsold daily newspapers, free from additional inserts or illustrated material coloured in the mass, strings allowed. No flexo-graphic printed material allowed.

# Unsold newspapers (new)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
2.02.00	Unsold newspapers not intended for deinking	Unsold newspapers, which may contain inserts originally circulated with the publication. No additional inserts allowed. <b>Paper products not suitable for deinking are allowed.</b>	0.5	1
2.02.01	Unsold newspapers	Unsold newspapers, which may contain inserts originally circulated with the publication. No additional inserts allowed.	0.5	1

# Office paper (old)

Code	Name	Description
2.05	Sorted office paper	Sorted office paper.
2.06	Coloured letters	Correspondence, in mixed papers coloured in the mass, with or without print, of printing or writing paper. Free from carbon paper and hard covers.



# Office paper (new)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
2.05.00	Ordinary sorted office paper	Paper, as typically generated by offices, shredded or unshredded, printed, may contain coloured papers, with a minimum 60% woodfree paper, free of carbon and principally free from carbonless copy paper (ccp)/no carbon required (NCR), less than 10% unbleached fibres including manila envelopes and file covers, less than 5% newspapers and packaging.	1	2
2.05.01	Sorted office paper	Paper, as typically generated by offices, shredded or unshredded, printed, may contain coloured papers, with a minimum 80% woodfree paper, free of carbon and principally free from carbonless copy paper (ccp)/no carbon required (NCR), less than 5% unbleached fibres including manila envelopes and file covers.	1	2
2.06.00	Ordinary sorted coloured letters	Paper, as typically generated by offices, shredded or unshredded, lightly printed, mass coloured paper allowed, but no deep coloured papers, with a minimum of 70% woodfree paper, free of carbon and principally free of carbonless copy paper (ccp)/no carbon required (NCR), free of manila envelopes, file covers, newspapers and cardboard.	1	2
2.06.01	Sorted coloured letters	Paper, as typically generated by offices, shredded or unshredded, lightly printed, mass coloured paper allowed, but no deep coloured papers, with a minimum of 90% woodfree paper, free of carbon and principally free of carbonless copy paper (ccp)/no carbon required (NCR), free of manila envelopes, file covers, newspapers and cardboard.	1	2

# Additional grades in group 2 (Medium grades)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
2.13.00	Multigrade	A blend of coloured and white letters, coloured woodfree magazines and other woodfree papers and shavings. Free from newsprint but 10% of other wood containing papers are permitted. May contain 2% paper with plastic layer.	0.25	1
2.14.00	Coloured log end tissue	Unused coloured tissue including soft cores. May contain printed material.	0.25	1
2.14.00	White log end tissue	Unused white tissue including soft cores. May contain printed material.	0.25	1

# Changes in group 3 (High grades)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
3.03.00	Woodfree binders	White woodfree lightly printed shavings with glue, free from paper coloured in the mass. May contain 2% paper with plastic layer and a maximum of 10% of mechanical pulp-based paper.	0.5	1
3.03.01	Special woodfree binders	White woodfree lightly printed shavings with glue, free from paper coloured in the mass. Plastic layered and mechanical pulp-based papers not permitted.	0.5	1
3.05.00	White woodfree letters	Sorted uncoated white woodfree printing and writing papers, printed, free from cash books, carbon paper and non-water soluble adhesives. May contain 5% mechanical pulp-based paper.	0.5	1
3.05.01	White woodfree letters unprinted	Sorted uncoated white woodfree printing and writing papers, unprinted, free from carbon paper, carbonless paper (NCR) and non-water soluble adhesives.	0.5	1
3.10.00	Multi printing	Lightly printed woodfree coated papers in sheets or trim, free from wet-strength paper and from paper coloured in the mass.	0.5	1
3.10.01 19	Medium printed multi printing	Medium and heavily printed woodfree coated papers in sheets or trim, free from wet-strength paper and from paper coloured in the mass.	0.5	1

# Changes in group 3 (High grades)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
3.11.00	White heavily printed multiply board	New cuttings of heavily printed white multiply board, containing woodfree or wood containing plies, but without grey and brown plies.	0.25	0.5
3.11.01	Mixed white heavily printed multiply board	New cuttings of heavily printed white multiply board, containing woodfree or wood containing plies, with a maximum of 20% grey and brown plies.	0.25	0.5
3.16.00	White coated woodfree paper	Shavings and sheets of white unprinted woodfree coated paper. Without glue.	0.25	0.5
3.16.01	White woodfree papers	Shavings and sheets of white unprinted woodfree coated and uncoated papers without glue.	0.25	0.5

# Changes in group 3 (High grades)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
3.18.00	White woodfree shavings	Shavings and sheets of white unprinted woodfree paper, may contain a maximum of 5% of coated paper. Without glue.	0.25	0.5
3.18.01	White woodfree uncoated shavings	Shavings and sheets of white unprinted woodfree paper, free from coated paper. Without glue.	0.25	0.5
3.18.02	White envelope cuttings	Shavings and sheets of white unprinted woodfree paper, free from coated paper. May contain some glue.	0.25	0.5
3.20.00	Unprinted tissue coloured in the mass	Unused unprinted tissue coloured in the mass free of packaging materials.	0.25	1
3.20.01 21	White unprinted tissue	Unused white unprinted tissue free from packaging materials.	0.25	1

# Changes in group 4 (Kraft grades)

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
4.01.00	Unused board and shavings of corrugated material	Unused boxes, sheets and shavings of corrugated board, with liners of kraft and/or testliner.	0.25	0.5
4.01.01	Unused corrugated kraft	Unused boxes, sheets and shavings of corrugated board, with kraft liners only, the fluting made from chemical or chemo thermo mechanical pulp.	0.25	0.5

**Former subgrade 4.01.02 removed**

4.04.00	Used kraft sacks	Clean used kraft sacks. May be printed or unprinted or may be wet strength and/or non wet-strength.	1	2
4.05.00	Unused kraft sacks	Unused kraft sacks. May be printed or unprinted and may be wet strength and/or non wet-strength.	0.5	1

**Former subgrades moved to group 5**

# Changes in group 5 (Special grades)

More complex paper products, improved recycling processes, avoidance of mixing such grades in other groups

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
------	------	-------------	---------------------------------	------------------------------------

**Group 5 contains 2 grades that can exceed the 1.5% maximum tolerance level for non-paper components**

5.01.00	Mixed papers	A mixture of various paper grades that can be found in the groups 1 to 5.	3	3
5.03.00	Used liquid packaging board	Used liquid packaging board with plastic layer (with or without aluminium content), containing a minimum of 50% by weight of fibres.	3	3

**Unused beverage cartons**

5.03.01 23	Unused liquid packaging board	Printed or unprinted shavings or sheets of liquid packaging board (with or without aluminium and/or plastic layer), containing a minimum of 50% by weight of fibres.	0.5	1
---------------	-------------------------------	--	-----	---

# Changes in group 5 (Special grades)

More complex paper products, improved recycling processes, avoidance of mixing such grades in other groups

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
<b>Labels</b>				
5.05.01	Dry labels	Labels made from wet-strength papers.	0.5	1
5.05.02	Labels with base layer	Label paper, release paper and label stock as well as from converting and dispensing of labels.	0.5	1
5.05.03	Paper release liner for self-adhesive labels	Release liner materials from the converting and dispensing of self-adhesive labels. Materials shall be free from labels, cores, and other contaminants.	0.5	1
<b>Coloured wet-strength</b>				
5.06.01	Unprinted white and coloured wet-strength papers	Unprinted white and coloured in the mass wet-strength papers.	0.5	1
5.07.01	Printed white and coloured wet-strength woodfree papers	Printed white and coloured in the mass wet-strength woodfree papers.	0.5	1



# Changes in group 5 (Special grades)

More complex paper products, improved recycling processes, avoidance of mixing such grades in other groups

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
<b>New grades</b>				
5.08.00	Cores	Shredded, hogged or unshredded solid cores from paper reels without metal ends.	1	2
5.09.00	Carbonless copy paper (NCR)	Sheets or shavings of new carbonless copy paper (NCR).	0.25	1
5.10.00	Printed white envelope	White envelopes, printed on the inside with or without water soluble or latex glue and windows (plastic or glassine).	0.5	1
5.10.01	Mixed envelopes	Mixed white or coloured in mass envelopes with or without water soluble or latex glue and windows (plastic or glassine).	0.5	1
5.11.00 25	Blister pack	Packaging board with flat or moulded plastic part. May be board with plastic layers and inserts.	1	2

# Changes in group 5 (Special grades)

More complex paper products, improved recycling processes, avoidance of mixing such grades in other groups

Code	Name	Description	Non-paper components in % (max)	Total unwanted material in % (max)
<b>Grades containing plastic layers and carbonless copypaper moved to Group 5</b>				
5.12.00	Used kraft sacks	Clean used kraft sacks. May be printed or unprinted or may be wet strength or non wet-strength. May include plastic layer papers.	1	2
5.12.01	Used kraft sacks with plastic layer papers	Clean used kraft sacks with plastic layer. May be printed or unprinted and may contain wet-strength or non wet-strength plies.	0.5	1
5.13.00	Unused kraft sacks	Unused kraft sacks. May be printed or unprinted and may be wet-strength or non wet-strength, and may also include papers with a plastic layer.	0.5	1
5.13.01 26	Unused kraft sacks with plastic layer papers and polyliners	Unused kraft sacks with plastic layer and poly liners. May be printed or unprinted and may contain wet-strength or non- wet-strength plies.	0.5	1

# Outlook

- Standard will be published during 1<sup>st</sup> quarter 2014
- Link to purchase standard:  
<http://www.cen.eu/cen/Members/Pages/default.aspx>
- CEPI guidance available:  
<http://www.cepi.org/en643>
- Where the standard is applicable:  
Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, The Former Yugoslav Republic of Macedonia, Turkey and the United Kingdom



# Thank you!

## **CEPI aisbl / Confederation of European Paper Industries**

250 Avenue Louise, Box 80, B-1050 Brussels

Tel: +32 2 627 49 11 / Fax: +32 2 624 81 37

mail@cepi.org

[www.cepi.org](http://www.cepi.org) / [www.paperonline.org](http://www.paperonline.org) / [www.paperforrecycling.eu](http://www.paperforrecycling.eu)

Follow us :



@EuropeanPaper



<http://www.youtube.com/cepi250>



<http://www.flickr.com/photos/cepiindustry>



<http://www.linkedin.com/company/cepi>



<http://www.cepi.org/news-feed.xml>