



## **COST ACTION E48 The Limits of Paper Recycling**

### **Working Group 1.-Limits governed by the characterisation of recovered paper & cardboard Minutes of the 2<sup>nd</sup> Working Group Meeting**

**COST Office  
Avenue Louise 149, Brussels, Belgium  
Monday, 28 November 2005,  
Tuesday, 29 November 2005, 11:15-13:00 and 14:30-15:00**

#### **1. WELCOME TO PARTICIPANTS**

Mrs. Blanco opens the Working Group meeting of COST Action E48 and welcomes the participants.

#### **2. ADOPTION OF THE AGENDA**

It was decided to joint the meeting of WG1+ WG3 with WG2 during the technical presentations and to have parallel meetings for each WG at the end for planning the future activities of each group.

#### **3. COMMON WORKING GROUP MEETING**

The following technical presentations have been presented:

**WG1+WG3 meeting** (in the presence of WG2 members) chaired by A. Blanco:

- Harald Grossmann. "Experiences with different collection systems in Germany".
- Andreas Faul. "Comparison of the impact of different collection systems for graphic recovered papers".
- Alf-Mathias Strunz. "Major recovered paper grades for the production of packaging paper grades".
- Ilpo Ervasti. "Recovered paper – basic definitions and a unified approach".

- Maryse Chappin. “Dynamic perspective on the relation between environmental efficiency and eco-efficiency: the case of waste water treatment, waste and energy efficiency in the Dutch paper and board industry”.
- Loud Van Kessel. “Overview of COST E26”.
- Fahrudin Bajric and Jori Ringman. “The legal framework – European law: discrepancies and implementation in the EU member states”.

Angeles Blanco thanks the speakers for their presentations and indicates that all the slices will be available in the Action web-site.

**WG2 meeting** (in the presence of WG1+WG3 members) chaired by Francois J. Saint Amand:

- Juha Saari. “Report on COST E46”.
- Julien-Saint-Amand. “Overview of the EU project ScreenClean”.
- David Beneventi. “Pulp decontamination by flotation: focus on the influence of surfactant structure on bubble size and foaming in bubble columns”.
- Bartek Stawicki and Annita Westenbroek. “Compositions of rejects in Dutch paper recycling mills”.
- Julien-Saint-Amand. “Solid reject analysis and stickies balances in a deinking mill and a paper recycling mill”.

Francois J. Saint Amand thanks the speakers for their presentations and indicates that all the slices will be available in the Action web-site.

Arie Hooimeijer remarked the need of more time for discussions and the need of focussing on technical and non technical aspects of the limits of recycling.

#### **4. MEETING OF WORKING GROUP 1**

The following members have attended the 2<sup>nd</sup> WG1 meeting:

Christina Kirova-Blajeva, Bulgaria  
Isko Kajanto, Finland  
Alain Cochaux, France  
Andreas Faul, Germany  
Alf-Mathias Strunz, Germany  
Szilvia Biro, Hungary  
Giorgio Capretti, Italy  
Elina Bobu, Romania  
Angeles Blanco (chairwoman), Spain  
Ruben Miranda, Spain  
Marianne Jansson, Sweden  
Roland McKinney, United Kingdom  
Jori Ringman\*, CEPI

Jori Ringman is not yet a member of WG1 but arrangements will be done to make him a permanent member of the working group.

## 5. MINUTES OF THE 1<sup>st</sup> WG MEETING

The minutes from the 1<sup>st</sup> WG meeting hold in The Netherlands on 30 June- 1<sup>st</sup> July 2005 were approved without amendments. The most relevant aspects of that meeting were summarised.

## 6. REVIEW OF THE OBJECTIVES AND ACTIVITIES OF WG1

The objectives of WG1 were reviewed. The main objective is to study the **changes in recovered paper quality and its influence on the limits of paper recycling governed by the characteristics of RP**

The list of activities planned to carry out within the WG1 was reviewed:

- 1.- Assessment of collection systems based on specific examples
  - Characterisation of societal aspects
  - Characterisation of the efficiency of the collection systems
  - Attempt to correlate the efficiency of the collecting system- societal boundaries- market environment
  - Drawing conclusions: scenarios for best suited collection systems
- 2.- Assessment of sorting systems
  - Characterisation of sorting systems (Incoming RM, sorting system, RP grades produced, quality of grades, yields, cost)
- 3.- Identification of trends in paper products → development of RP quality → impact on recyclability:
  - Papermaking products:
    - Packaging trends: lower weight, RFI sensors, adhesives,....
      - Electronic sensors: Analysis of CEPI data + definition of further actions
      - Stickies: Topic for a WG meeting. Exchange of information. Definition of remaining issues.
    - Printing trends:
      - Deinkability: collaboration with COST Action E-46
      - Stickies
  - Modelling: market trends
- 4.- Sustainable use of RP
  - Optimise RM use → products LCA assessments
  - Needs of fibre up-grading and use of reinforced fibres
    - Refining for strength increase
  - Wastes
  - Circulation time/Velocity of RP
  - Number of recycling cycles (data available in Germany, Hungary and Romania)

5.- Tools for monitoring RP quality

- Methodologies and procedure
- Sensors: (Presentation: Available sensors in the market)
  - moisture, unusable materials
  - ratio ONP/OM
- Models

6.- Effects of recycling in fibre quality → WG2

## **7. ASSESSMENT OF COLLECTION SYSTEMS BASED ON SPECIFIC EXAMPLES**

The activity 1 was discussed in detail. It is decided the creation of a special task force, with Andreas Faul as the leader, for the analysis of available data at CEPI about collection systems in Europe. This data will be supplied by Jori Ringman. This information is the raw data obtained from a survey conducted by CEPI with the main topic of collection systems in Europe but also some topics about sorting.

Since CEPI has the data but not enough resources for a detail analysis, at this moment, and the information is of high relevance for WG1, the task force will analyse the data and write a report. Based on their main conclusion the need of further actions within this activity will be discussed. At the moment the information has been distributed to the task leader.

## **8. ASSESSMENT OF SORTING SYSTEMS**

It was decided to refine the objective of this task according to the available data at CEPI and then identify few different sorting stations operated by paper industry where to find the answers. In principle it was considered to study 3 companies with very different sorting systems and compare them. The systems could be:

- Manual sorting system within the paper mill
- Semi-automatic sorting system
- A municipal waste automatic sorting system

The CEPI Quality Control Task Force will meet on 21st February and this issue is on the agenda.

## **9. NEXT ACTIVITIES**

It was agreed the topics that will be covered in next WG1 meetings:

- The 3<sup>rd</sup> WG meeting in Milan (Italy), in spring 06, will be focused on collection (and sorting issues). The situation of the task force will be presented. Future plans, definition of additional questions and remaining issues according to MoU will also be discussed.

- The 4<sup>th</sup> WG meeting in Madrid (Spain) will be a conference about the “Limits of paper recycling”. It will be held at the beginning of 2007 in Madrid.
- The 5<sup>th</sup> WG meeting will be focused on sorting issues.

## **10. DATA AND VENUE OF NEXT MEETING**

The next WG1 meeting will be held in conjunction with the other Action meetings, which are scheduled for May 11<sup>th</sup> and 12<sup>th</sup>, 2006, in Milan (Italy). Details will be given in due time.

## **11. CLOSURE**

Angeles Blanco closes the meeting and thanks all the participants for their contributions.

## **12. LIST OF ACTIVITIES**

- Distribution of CEPI data about collection systems (also some information about sorting) to all members.
- Special task force organized (Andreas Faul).
- Preparation of the 3<sup>rd</sup> WGM in Italy (Angeles Blanco).
- Integration of activities within the Action (Angeles Blanco).