



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

**Minutes of the**  
**1st Meeting of WG 1**

**Hotel De Zoete Inval**  
**Haarlemmerstraatweg 183**  
**2065 AE Haarlemmerliede, The Netherlands**

**Thursday, 30 June 2005, 17:00 – 18:30 hrs**  
**Friday, 1 July 2005, 09:00 – 12:00 hrs**

## **1 Attendees**

The following members attended the 1<sup>st</sup> WG1 meeting

Christina Kirova-Blajeva , Bulgaria	Isko Kajanto, Finland
Nathalie Marlin , France	Alain Cochaux , France
Andreas Faul, Germany	Alf-Mathias Strunz, Germany
Harald Grossmann*, Germany	Zoltan Dobovari, Hungary
Szilvia Biro, Hungary	Lubova Belkova, Latvia
Angeles Blanco (chairwoman), Spain	Angels Pelach, Spain
Ruben Miranda, Spain	Anna Jacobs, Sweden
Ania Stawicka, The Netherlands	Henry Vermeulen**,The Netherlands
Giorgio Capretti, Italy	

\* Harald Grossmann is not a member of WG1 but participated in order to substitute the chairperson in parts of the meeting.

\*\* Henry Vermeulen, head of CEPI's Recycling Committee, is not a permanent member of WG1 but attended the meeting as an invited expert.

## **2 Welcome**

Angeles Blanco, the chairperson of this working group opens the meeting and welcomes the participants. She announces that – due to urgent other obligations – she will not be able to chair the 2<sup>nd</sup> part of the WG meeting on Friday morning. Harald Grossmann will then substitute her.

Angeles Blanco points out that the main and only items of this 1<sup>st</sup> meeting are to develop a precise idea concerning the content of the work programme for WG1 and to prepare the programme for the next meetings.

The discussion on these topics is based on suggestions for the work programmes of the WGs which had been established in a meeting between Angeles Blanco, Jan-Erik Levlin, Arie Hooimeijer and Harald Grossmann following the kick-off meeting on March 30 in Brussels. A corresponding document had been distributed earlier and was as well tabled.

### **3 Results of the discussion concerning the content of the work programme of WG1**

Angeles Blanco reminds the participants of the main objectives of WG1 which were the identification of the

#### **Limits of paper recycling governed by the characteristics of RP.**

After intensive discussions the participants agree, that WG1 should accomplish its mission predominately by collecting information (based on nationally funded projects) and drawing conclusions in the following areas:

#### **1. Assessment of collecting systems based on specific examples (as many as possible):**

- **Characterisation of societal aspects like**
  - Population density
  - Infrastructure of the region
  - Paper industry structure of the region (potential RP consumers and their requirements)
  - other societal aspects (rural/urban, housing structure, income level, education level)
  - Paper consumption in terms of total amount and grades
  - The reasons for choosing a specific collection strategy
  - Acceptance by the society
  
- **Characterisation of the efficiency of the collection systems in terms of**
  - Exploitation of the theoretical potential available (kg recovered Paper/kg consumed paper/c·y)
  - Cleanliness of the paper recovered (amount of undesirable components)
  - Composition of the paper recovered (graphic paper, packaging papers, other grades)
  - Cost and cost structure of the collecting system (and related costs)
  - Total amount of recovered paper collected per time unit
  - Collecting system's impact on the environment.
  - What percentage of the paper recovered can economically be turned into a new paper
  
- **Attempt to correlate the efficiency of the collecting system characterised above, the societal boundary conditions as well as the market environment**
  
- **Drawing conclusion (generating scenarios) for best suited collecting systems as a function of the theoretical potential as well as societal and market boundary conditions**

#### **2. Assessment of sorting systems**

- **Characterisation of sorting systems with respect to**
  - Characterisation of the incoming raw material (mixed dry recyclables, "blue bin")
  - Sorting technique (positively, negatively, automatically, semi-automatically or manually)
  - RP grades produced according to EN643
  - Quality of the grades obtained (moisture, composition, amount of unusable substances a.s.o.)
  - Yields (ratio between the amount of recyclable fractions and the amount of RP sorted, if applicable)

- **Cost (energy, labour, depreciation) per kg of recyclable fractions**

### **3. Identification of recovered paper quality trends and their impact on recyclability:**

- **Trends from paper manufacturing**
  - Change in fibre composition
  - Amount and type of minerals (pigments and fillers)
  - Impact of functional additives (dry strength, wet strength agents a.s.o.)
- **Trends from converting**
  - Impact of functional additives (coatings, compounds, etc)
  - Impact of new printing techniques (inks) as well as adhesives
  - Compounds
- **Modelling (predicting) the impact of above trends on the RP quality**

### **4. Effects of recycling on fibre properties (WG2)**

The discussion on

5. Sustainable use of recovered paper
  - Optimise raw material use  $\Leftrightarrow$  product. Demands for process adjustments.
  - Needs of fibre up-grading and using reinforces fibers
6. Tools (methodologies/sensors/models/...) for monitoring RP quality

which had been part of the suggestions for WG1's work programme mentioned earlier is – due to a lack of time – postponed to the next meeting.

## **4 Results concerning the programme of the next WG1 meeting**

It is agreed that the next meeting should focus on the assessment of collection system (i.e. item 1 of the above list). This should be done on the basis of as many as possible reports from the various countries on examples of collection systems. These reports should address - as comprehensively as possible – the criteria listed above under item 1.

Correspondingly the members present confirm the following reports for the next meeting:

- ♦ Collection systems of recovered paper used in Europe  
Henry Vermeulen confirms that either he or one of his staff would give a report on an ongoing investigation on the characteristics of paper collection systems in Europe which has been issued by CEPI.
- ♦ Experiences with different collection systems for recovered paper in Germany  
Harald Grossmann would invite a speaker (Bernd Bilitewski) or would personally report on a national investigation on the differences between selected collecting systems and their performance characteristics.
- ♦ Comparison of the impact of different collection systems for graphic recovered paper for Deinking  
Andreas Faul volunteers to report on INGEDE's experiences.
- ♦ Furthermore, possibilities to collect reliable information with regard to recovered paper collection systems used in Japan will be checked (Harald Großmann)

Harald Grossmann points out that it is extremely important for the overall success of the Action in this early stage to get experience reports from as many countries as possible.

**He expresses his expectation that the members of the WG will – at the next meeting - present far more than the reports mentioned above. He encourages all participants to prepare corresponding contributions – no matter how comprehensive they are.**

Comparisons of different national collection systems should include information with regard to relevant national labour and energy costs, if possible as specific costs.

**Angeles Blanco will set up the programme for the next WG1 meeting and would therefore need presentation proposals (just working titles) by mid September at the latest.**

## **5 AOB**

As there seems to be some overlapping between the focal points of WG1 and WG3 the participants felt that it could be instrumental to split the next WG1 meeting which should cover a whole day in two parts. One part should be devoted to exchange views with WG3.

## **6 Date and venue of next meeting**

The next WG1 meeting will be held in conjunction with the MC meeting scheduled for late November 2005 in Brussels. Details will be given in due time.

## **7 Closure**

Harald Grossmann closes the meeting and thanks all participants for their cooperation.

## **List of activities**

Preparation of reports on the characteristics and experiences of collection systems to be held on the next meeting of WG1.  
Information of Angeles Blanco

**All**