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**I.N.C.D. ECOIND BUCURESTI- ROMANIA**

*in cooperation with*

**UNITED NATIONS INDUSTRIAL DEVELOPMENT  
ORGANISATION**

*Final report on "TEST Project Dissemination"  
(Output 5)  
developed within the project*

**TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY  
(TEST) in the DANUBE RIVER BASIN**

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- Bucharest, November 2003 -

## Introduction

TEST dissemination addressed the basic contractual provisions and aimed two activities:

- ◆ The local counterpart will prepare a brochure/publication outlining the results achieved during the implementation of the TEST project in the selected enterprises.
- ◆ The local counterpart will organize a final local workshop within the country to present the results of the TEST project.
- ◆ Other Romanian enterprises will be offered ad-hoc in plant seminars on TEST approach

Besides these basic activities, other dissemination actions took place before the TEST National Seminar, or are in view for further dissemination.

### 1. National TEST Brochure and TEST National Publication

The **TEST Summary Brochure** (Annex 1) was prepared (in 700 pieces) by the counter-part before the National Seminar and it targeted more awareness about TEST strategy and achievements in participating local enterprises. This was distributed by either the local pilot units and participating consultants to different interested parties/partners or during more national and international events.

A more detailed presentation of TEST project results was developed as a **National Publication** (Annex 2), a 32-page technical material, structured as follows:

- ❖ TEST strategy and TEST main achievements;
- ❖ overall achievements of TEST technical modules;
- ❖ main results and achievements of participating pilots (four case-studies);
- ❖ local challenges and barriers in meeting TEST requirements.

### 2. TEST National Seminar

This event, the last activity within the 2003-contract frame, was organized as a half-day session, on October 29, 2003, taking benefits of the INCD EcoInd Symposium, at the Romanian Academy premises. For preparation of the presented materials both the unit teams and external consultants contributed.

The **Seminar Agenda** is presented in Annex 3.

Next to the units' representatives and the participating TEST consultants, the members of Advisory Board, other interested parties and potentially interested units were invited. The **List of TEST Seminar Invitees** is attached in Annex 4 and the **Invitation** (model) previously sent, in Annex 5.

The presentations were delivered by TEST Project Manager, TEST National Coordinator and the unit representatives. Most of the presented (unit specific) results can also be found in the TEST National Publication.

UNIDO awarded a **Diploma** to each participating unit and these were also signed by the State Secretary for Environment of the Romanian Government.

A **Questionnaire** (Annex 6) was developed and distributed to other units/industries and their answers/completion are still expected.

This action aimed:

- more dissemination of TEST approach/results (at unit level);

- to check the interest on TEST and the units' potential to carry a TEST project.

### 3. Other Dissemination of TEST

The dissemination activities started after the completion of first TEST modules and continued while the TEST project progressed. Different forms and opportunities were used and they are grouped as follows:

- 3.1 Participation at national and international Symposia/Conferences;
- 3.2 Additional work contracted for TEST activities.

#### 3.1 National and international Symposia/Conferences

**3.1.1 "Water - A Miracle", 2nd Edition "Less Water for Industry" - International Symposium, Bucharest 25 - 26 June, 2002**

Paper: "Application of CP methodology to ASTRA ROMANA – Ploiesti. A Case Study". **Authors:** R.de Palma, V. Dobes, Gh. Marin, J. Gheorghita, Maria Theodorescu, A. Constantinescu, **C. Theodorescu**

**3.1.2 "Chemistry in the New Millennium - an Endless Frontier", International Conference of the Chemical Societies of the South-Eastern European, 3rd Edition - Bucharest, September, 2002**

Paper: "Integrated Pollution Prevention and Control. The Challenge of a New Approach - The ASTRA Case Study"

**Authors:** R.de Palma, V. Dobes, Gh. Marin, J. Gheorghita, Maria Theodorescu, A. Constantinescu, **C. Theodorescu**

**3.1.3 Annual Symposium of Romanian Chemical Society – Calimanesti, October 2002; international participation**

Paper: "Modelling of a Hydrotreating Unit by Adding the Environmental Dimension" **Authors:** R.de Palma, V. Dobes, Gh. Marin, J. Gheorghita, Maria Theodorescu, A. Constantinescu, **C. Theodorescu**

**3.1.4 Annual Symposium of Romanian Chemical Society – Calimanesti, October 2002; international participation**

Paper: "The Hydrotreating Reactor. Advanced Mathematical Model and Parametric Study"  
**Authors:** **C. Theodorescu**, Gh. Marin, A. Constantinescu.

**3.1.5 "Novelties in Pulp & Paper Fabrication" - International P&P Symposium – May 29 - 30, (Dej - Romania); over 200 participants**

Paper: "TEST Project implemented at SOMES Dej"

**Autori:** Gheorghe Benea , Hajnal Baban, Rodica Laslo, **Maria Bacaran**, Olaru Adela, Timar Adrian, Itu Alexandru, Monica Malutan, Carmen Galea

**3.1.6 "The 6th International Symposium and Exhibition on Environmental Contamination in Central and Eastern Europe"- Prague2003, September 2 – 4, 2003**

Paper: "From Cleaner Production Assessment to Sustainable Enterprise - a Romanian Case-study within UNIDO – TEST Project"

**Autors:** Roberta de Palma, **Maria Teodorescu**, Lucian Constantin, Maria Bacaran, Adela Olaru, Adrian Timar

**3.1.7 EPPIC Thematic Network 3<sup>rd</sup> Workshop – Sustainability in the Pulp and Paper Industry - Iasi, Romania, September 3-5, 2003**

Paper: "Environmental Management Accounting at Somes SA Dej"

**Authors:** **A. Timar**, H.Baban, M. Bacaran, M.Svasta

**3.1.8 „The Environment and Industry” – 25 EcoInd Jubilee**, Bucharest, 29-31 October, 2003; international symposium

Paper: „Environmental Management Accounting – a Usefull Tool for EMS”

**Authors:** Roberta de Palma, Oana Tortolea, Mihai Svasta, Adrian Timar, Maria Teodorescu, **Lucian Constantin**

**3.1.9 „Jubilee ICPM (R&D for Institute Mining) – 50 years”**, International Symposium, 6-7 Nov., 2003, , Petrosani, Romania

Paper: „TEST Approach – from Improvement of Environmental Performance to Competitiveness Increase and Compliance with Environmental Laws”

**Authors:** Roberta de Palma, **Maria Teodorescu**, Lucian Constantin

**3.1.10 “Implementation of TEST project in SOMES – Dej” – article to be published in BPP News - Balkanian Pulp and Paper News (international technical magazine), issued in Sremska Mitrovica, Serbia and Montenegro and**

**BIT – Buletin Informativ Tehnic (national magazine), issued in Braila**

**Authors:** M. Bacaran, A. Olaru, **E. Cristian**, M. Teodorescu, C. Constantin, Roberta de Palma

**3.1.11 „TEST Approach – a Certain Way Towards Water Resource Protection and Economic Benefits” – article to be published in „AQVA” – periodical issued by ARA (Romanian Assocoation for Water)**

**Authors:** R. De Palma, **M. Teodorescu**, M. Oprescu, F. Stefanoiu, C. Teodorescu, E. Cristian, L. Constantin

**3.1.12 Application for „FORD Awards for Environment Protection and Conservation – 2003” with: „Transferul Tehnologiilor Sanatoase pentru Mediu (Transfer of Environmentally Sound Technology – TEST) – Method and Results in Four Romanian Pilots”**

### **3.2 Additional work contracted for TEST activities**

**3.2.1 “Designing, Implementing and Certification of EMS at Plant Level”** – Contract issued by Rulmentul and Rom. Government (CALIST Programme) with INCD EcoInd;  
Value: about \$10,000

**3.2.1 “Technical Assistance for Extenssion of QMS and EMS at Mill Level”** – Two contracts issued by SOMES Dej and SOMES + Rom. Government (MENER Programme) with CEPROHART Braila;  
Value: about \$15,000

**3.2.3 “Strategy for Management of Wastes generated at SC KOBER SRL – dye producing unit;** Contract issued by KOBER for RomEnviroServ and paid by the unit;  
Value: approx. \$5,000

**3.2.4 “Improvement of Water and Wastewater Management through Cleaner Production Programme”** – Contract issued by USAID through EcoLinks Program;  
Value: approx. \$50,000

### **Other dissemination, with local capacity building**

- ❖ **Master thesis: “Environmental Management Accounting – development of a case study”**

**Author: Oana Tortolea**

Institution: Polytechnic University – Bucharest; Faculty of Energetic

- ❖ **Graduation thesis (as second specialization): “Environmental Management Accounting – Computation of Environmental Costs for Industrial Plants”**

**Author: Adrian Timar**

Institution: Faculty of Economics Science, Babes Bolyai University

#### 4. Conclusions, follow-ups

Following the National TEST Seminar, some of the participating units showed their interest in implementation of TEST approach:

- ❖ TEXTILA Dacia, textile enterprise, interested on all TEST tools and able to co-finance a TEST project;
- ❖ ROMAERO, plane constructor & maintenance, interested on some TEST tools.

Five important leather and footwear producers in the country were pre-selected and contacted through their specialized R&D Institute and a presentation to their representatives seems the most feasible step for TEST introduction to some of these units.

Dissemination of TEST results has been proving a key action for the real project success. Neither the participants at TEST Seminar nor some of the authorities could really assess the dimensions of TEST approach and all the benefits following the presentations during the seminar. More detailed discussions and clarifications were proposed by some interested participants. TEST seems to be too a complex instrument for both the industrial polluters and the environmental authorities.

Two directions can be followed and make further dissemination more efficient:

- a. Direct contact of interested units and in-plant presentation of TEST structure, tools, their functioning and potential benefits;
- b. Joint action (with Ministry of Environment) to contact and involve some industrial associations and local environmental authorities. TEST presentations might be provided during the meetings of decision makers of the respective associations.

More and efficient dissemination forms will follow as contracted work (by the consultants/companies participating at TEST project) with other industries/companies, more projects that will access different financing resources (e.g. “*Analysing the opportunities for promoting and implementing Cleaner Production in dyestuff industry*” proposed by EcoInd for financing from governmental funds) and more publications that are intended by the participating consultants.