MARKET IMPACT EVALUATION

ERRAC was set up in 2001 and is the single European body with the competence and capability to help revitalise the European rail sector :

- **To make it more competitive**
- **To foster increased innovation**
- **To guide research efforts at the European level**

ERRAC Project Evaluation Working Group (EWG)

Objectives:

- **Determine the market impact of previous rail research to improve use of research funding**
- **Ensure a strategic approach to the prioritisation of rail research**

Project Evaluation

- **Individual projects are evaluated after they have been completed to ensure successful dissemination of project results**
- **To ensure that the results of previous rail research can be taken into account for future projects**
- **To avoid weak market uptake of results by learning the lessons of previous research**
- **The EWG will provide intelligence based on the project evaluations for input into future European Framework Programmes**

ERRAC Project Evaluation Group

RAVEL

EVALUATION FROM SEPTEMBER 2007

Project acronym: RAVEL
FP: 4
Programme acronym: BRITE/EURAM 3
Project Reference: 94/571/EC
Call identifier: FP04 The greening of surface transport
Total Cost: € 5,160,000
EU Contribution: € 900,000
Timescale: November 1998 - August 2001
Project Coordinator: Michael Schmmer

Web references: http://cordis.europa.eu/search/index.cfm?fuseaction=
acro.document&AC_LANG=EN&AC_RCN=3884814&pid=
0&q=E7E18CA30237E62D22DD10952C64E7FF&type=sim

❑ Presented by: V. Andriès
❑ Date evaluation: 11.12.07
❑ Market uptake: Strong
❑ Follow up projects: None
❑ Other related Projects: PROSPER and REPID

ERRAC Project Evaluation Group

PROSPER

EVALUATION FROM SEPTEMBER 2007

Project acronym: **PROSPER**
FP: **5**
Programme acronym: GROWTH
Project Reference: **1999/169/EC**
Call identifier: **FP05 The greening of surface transport**
Total Cost: **€ 850,000**
EU Contribution: **€ 0**
Timescale: **December 2002 – December 2005**
Project Coordinator: **Thomas Melham**
University of Glasgow (UK)

❑ **Presented by: V. Andriès**
❑ **Date evaluation: 11.12.07**
❑ **Market uptake: Strong**
❑ **Follow up projects: None**
❑ **Other related Projects: RAVEL and REPID**

Web references: **http://www.railway-procurement.org/prosper.htm**

ERRAC Project Evaluation Group

REPID

EVALUATION FROM SEPTEMBER 2007

Project acronym: REPID
FP: 5
Programme acronym: GROWTH
Project Reference: 1999/169/EC
Call identifier: FP05 The greening of surface transport
Total Cost: € 3,300,000
EU Contribution: € 1,650,000
Timescale: 1998 - November 2001
Project Coordinator: Mads Bergendorff
UIC

❑ **Presented by: V. Andriès**
❑ **Date evaluation: 11.12.07**
❑ **Market uptake: Strong**
❑ **Follow up projects: None**
❑ **Other related Projects: RAVEL and PROSPER**

Web references: http://www.railway-procurement.org/repid.htm

European Rail Research Advisory Council

EU Funded Project Evaluations for the RAVEL, PROSPER and REPID cluster of Environmental Impact projects

December 11th 2007 Meeting

User Briefing by V. Andriès ALSTOM Transport

5. REPID - Rail sector framework & tools for standardizing & improving the use of Environmental Performance Indicators & Data formats - Summary

- **The REPID project was a continuation of the successful RAVEL project and started in early 2002.** The objective of the REPID project was to provide, based on the results of the RAVEL project:
  - A framework with a legal body for dealing with standardization of Environmental Performance Indicators EPI and data formats within the railway industry A tool for improving usability of Environmental Performance Indicators EPI and data formats.

- The project was divided into four work packages (WP):
  - WP1 concerned project coordination, WP2 concerned the establishment of a network, WP3 concerned technical maintenance and WP4 covered the software solution.

- **REPID Project Partners**
  - **Name /Organization**
  - Mads Bergendorff - UIC
  - Raul Carlsson IMI
  - Sylvain Huleux Alstom
  - Jessica Marklund SEMCON
  - Suzanne L'Ami UNIFE
  - Henning Schwarz Deutsche Bahn
  - Sara Paulsson Bombardier

6. REPID - Rail sector framework & tools for standardizing & improving the use of Environmental Performance Indicators & Data formats; deliverables

- REPID defined a legal body for dealing with the standardization of Environmental Performance Indicators EPI and data formats within the railway industry. In addition, REPID delivered a tool for improving the usability of the Environmental Performance Indicators.
  - **Environmental Performance Indicators (EPIs)** - The RAVEL indicator methodology was further developed within REPID and agreed between the involved partners. A set of EPIs was selected as well as an agreement of how to define these selected EPIs. This would be the base for a common language for communication of environmental performance within the Rail Industry.
  - **Data Model** - The assessment tool which was made created within RAVEL as a prototype was further developed into a more commercialized product within REPID by SEMCON. However the tool as such has not really a success within the various companies. However most partners have however used the methodology and created their own software within the companies, like Bombardier have done with CE-Mat. This is due to the fact that many companies have very strict IT regulations and external suppliers were not able to enter data directly into a database those IT regulations are applied.
  - **Material Lists** - To agree upon a common list of prohibited & restricted materials and substances has NOT been easy and is still an ongoing task within both UIC and UNIFE. However I'm sure that both RAVEL and REPID has made is possible for all involved partners to really discuss these issues on a very detailed level and made is possible to at least agree on a common base including definitions.

7. PROSPER - Procedures for Rolling Stock Procurement with Environmental Requirements - Summary

- The first part of PROSPER was an initiative undertaken by UIC in 2002 and only the train operators participated in this part of this project, outcome was a UIC guideline on environmental performance for the procurement of new rolling stock
- The second Phase of the project started 2004. Bombardier Transportation and other manufacturers as well as UNIFE were involved in the project as members of the reference Group.
- What PROSPER did was to define environmental specifications to be used in invitations to tender for new rolling stock. Then REPID indicators translated these specifications into environmental to be used in the manufacturing process. Both projects cooperated very closely. It was also point point out the necessity to further develop the REPID agreed environmental performance indicators as well as defining minimum values for these indicators.
- The final outcome was UIC Leaflet 345 - Environmental specifications for new rolling stock.
- Today few UIC Customer of ALSTOM refer to this Leaflet even if they specify more and more environmental matters.
- The aim of PROSPER and the UIC Leaflet was to contribute to the harmonization of the environmental procurement framework within the rail sector in Europe, and long-term at a global level.
- This will hopefully ensure that the procurement process is more efficient as well as enabling new rolling stock with a sound environmental performance to be procured more cost effectively.

8. Ravel/Repid/Prosper Evaluation Criteria

1. Were the results implemented in the design of the new products and services? Were these new products/services put into commercial operation – **Yes**

2. Is new legislation and standardization based on findings from this research project – **It responded to EU Framework Environmental Legislation & led to UIC Leaflet 345**

3. Are the results of the project implemented across Europe or only in a small number of Member States – **Only small number**

4. Are the results of the project implemented outside Europe before being accepted in Europe – **No**

5. Did the projects increase competitiveness of the European railway sector abroad with regard to products, services, standards and system design – **Possibly**

6. Did the project increase competitiveness of the railway transportation compared to other transport modes – **Yes by lobbying to integrate environmental criteria even if differs from UIC lealet or REPID EPIs**

7. Are the results of the project taken into consideration when preparing public tenders – **Indirectly**

8. Does the implementation of the project results help facilitate cross-border operations by problem-solving in the domain of interoperability – **Yes, Essential requirements**

9. Does the implementation of the project results help facilitate inter-modal operations by problem-solving in the domain of inter-modality – **No**

10. Can benefits be assessed in financial terms – **Yes**

11. Applicability of results to future scenarios – **Yes**

12. Usefulness of research procedures for future projects (incl. modelling) – **Yes**