Project no. TIP5-CT-2006-031415

INNOTRACK

Integrated Project (IP)

Thematic Priority 6: Sustainable Development, Global Change and Ecosystems

D1.4.2 – Online database of numerical models and data analysis tools

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Organisation name of lead contractor for this deliverable: University of Birmingham

Revision 1

Project co-funded by the European Commission within the Sixth Framework Programme (2002-2006)		
Dissemination Level		
PU	Public	PU
PP	Restricted to other programme participants (including the Commission Services)	
RE	Restricted to a group specified by the consortium (including the Commission Services)	
CO	Confidential, only for members of the consortium (including the Commission Services)	

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Executive Summary

This report outlines the work that was undertaken in order to produce an online database of models and data analysis tools within SP1 of the Innotrack project.

A database of over 230 models and data analysis tools has been compiled and made available to the Innotrack project via the database website (http://www.innotrackdataentry.co.uk/DefaultQuestions.aspx). For each entry in the database the following fields are populated:

- Tool name
- Description – a description of the tool's purpose
- General inputs – high level description of input data required
- Specific inputs – a more detailed description of input data
- Exact inputs – where available, a description of the specific input data requirement
- General outputs – high level description of output data generated
- Specific outputs – a more detailed description of output data generated
- Exact outputs – where available, a description of the specific output data generated
- Division in railway system – classification of which subsystem the tool applies

The database forms the first phase of a task aimed at identifying methods for linking existing modelling tools and finding gaps in modelling technology. Later in the project, research will focus on understanding the potential benefits of using methods such as the eXtensible Markup Language (XML) for interchange of data and models between modelling tools. It is hoped that this work will lead the way to more efficient data handling and potential allow semi-automatic or automatic interchanges between tools.

Database Description

The database is located at http://www.innotrackdataentry.co.uk/DefaultQuestions.aspx. Upon accessing the website the user should selected the option 'Models and tools' as shown in Figure 1.

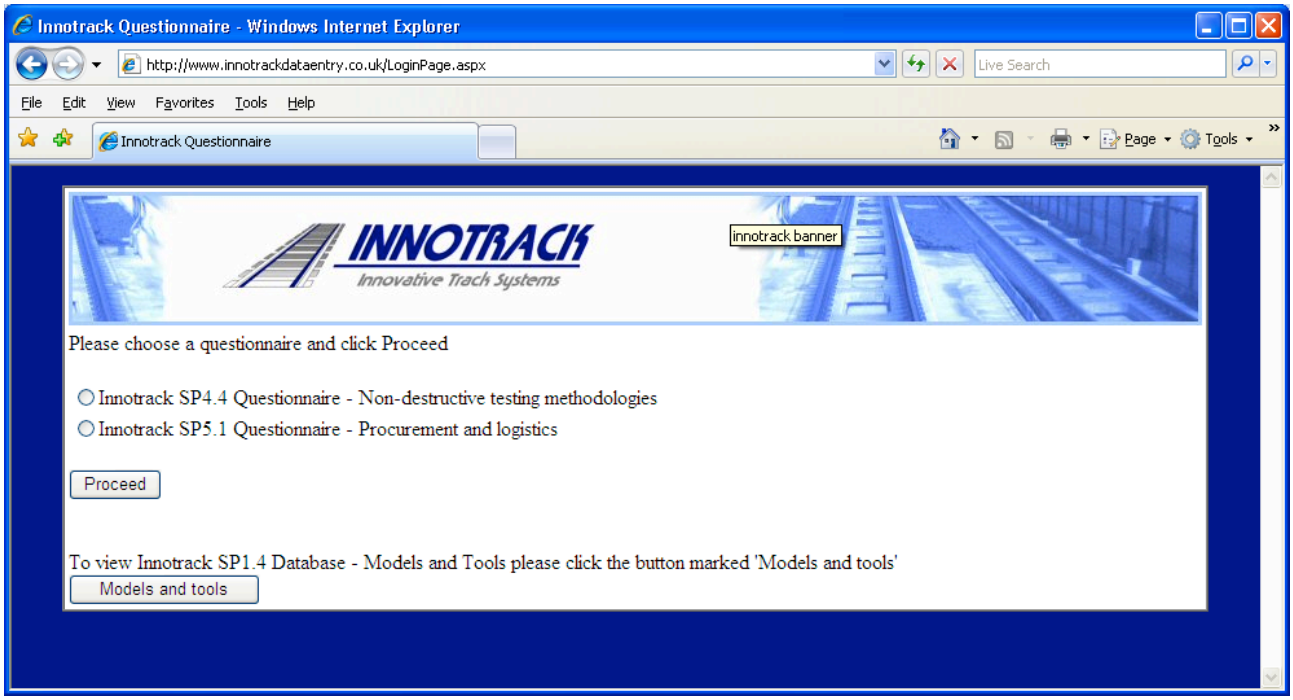

Figure 1 – Welcome screen for tools database

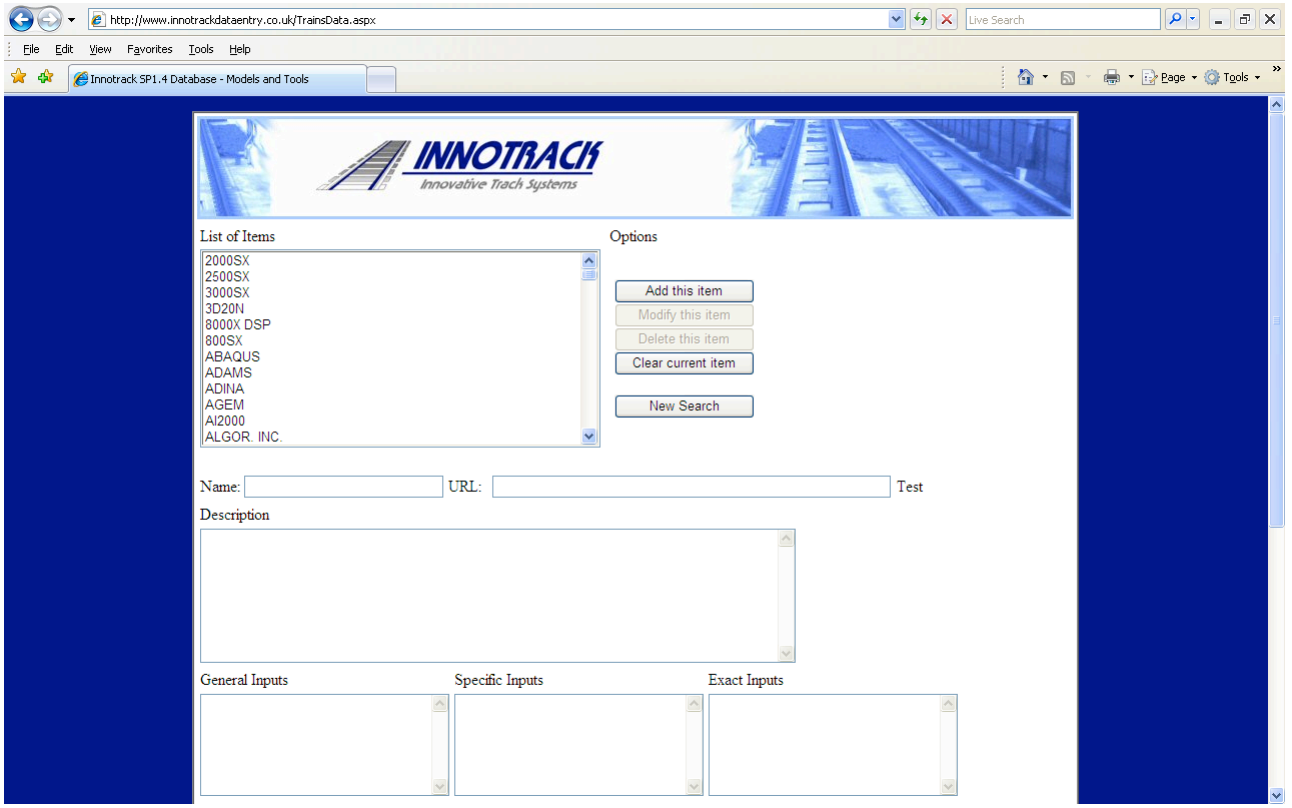

Figure 2 – Tools data base

Once the database has been accessed, the user is provided with an opportunity to search for specific terms in the database; alternatively, the user can search each field individually as shown in Figure 2. In addition the user has the opportunity to view the data held of each tool individually.

The complete set of tools and data collected is listed in Appendix A.

Conclusions and Further Work

To date the database has been populated by the University of Birmingham and Manchester Metropolitan. It has been used primarily by members of the SP1 modelling subgroup to ensure that they have an awareness of all modelling tools available.

The database currently holds details of an extensive set of tools. However, in the next phase of the project there are a number of tasks which need to be focussed upon, namely:

- Investigating the tools further to identify whether they can be considered to be high level, medium level or low level resolution models;
- Identify which SPs should use which models;
- Identify a more rigorous process for identifying to look at common interfaces (inputs and outputs) between models and search for model gaps.

Appendix A – Database details