

# Urban Transport Benchmarking Initiative



## Annex A1.2

### Review of Previous Initiatives

July 2004



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Prepared for

European Commission  
Directorate General for  
Energy and Transport

by



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Project Number	L/03/111
Version	1.1
Date	July 2004
File location	\\Ttr01\company\TTR PROJECTS\CURRENT PROJECTS\EC Benchmarking\Technical\ Project Reports - End Yr1\ 
Last edited	02-08-2004
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## 1. INTRODUCTION

The Urban Transport Benchmarking Initiative has built upon the experience of the two previous Citizen's Network Benchmarking Initiatives which together ran from 1998 until 2002. In addition, there have been many other transport benchmarking projects and this document provides details of 17 previous benchmarking initiatives.

## 2. REVIEW OF PREVIOUS BENCHMARKING INITIATIVES

### 2.1 Benchmarking European Sustainable Transport (BEST)<sup>1</sup>

BEST is a Thematic Network which has been reviewing benchmarking practices in a number of transport sectors. The six BEST conferences have been aimed at raising the profile of benchmarking for the transport sector via the use of presentations and reports from various contributors who have experience of the benchmarking process. Until its commencement in October 2000 there had been little research into how benchmarking could work for the transport sector. In particular the BEST project aimed to explore the potential for benchmarking techniques to be adapted to assist in the future implementation of sustainable transport policies across the EU. The three main objectives of the initiative are:

- To produce specific recommendations on the development of benchmarking as a practical tool to assist the European Commission, Member States and Accession Countries in effectively implementing sustainable transport policies in Europe.
- To create an innovative dynamic of exchange of experience between the different transport sectors and sub-sectors.
- To build consensus, at a European level, on the key requirements for a successful benchmarking process, and the benefits of applying benchmarking in the transport sector

The indicators reviewed by BEST represent the recommendations which emanated from the BEST conferences, most notably conference 3, which aimed to highlight the most effective and practicable criteria for successful transport benchmarking. The findings of the BEST project were very useful in establishing the indicators and processes for the Urban Transport Benchmarking Initiative.

### 2.2 Benchmarking Public Transport Emissions and Energy Use (BESTRANS)<sup>2</sup>

The aim of the BESTRANS project is the creation of an internal and external benchmarking methodology for energy and emission performance in the urban public transport sector and it follows up the RUBENS project. This methodology is then to be tested by a benchmarking exercise with European public transport operators. This project is also an exercise in awareness raising, because despite a large number of energy saving and emissions related good practices, the lack of a systematic approach to management and benchmarking in the sector means that the best practices are rarely shared.

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<sup>1</sup> BEST web reference: <http://www.besttransport.org>

<sup>2</sup> BESTRANS website: <http://www.tis.pt/proj/bestrans/index.htm>

The indicators used in the BESTRANS project focus particularly upon the efficiency, energy costs, average travel speeds and extent of route prioritisation for buses. The findings of the BESTRANS study were particularly relevant to the Urban Transport Benchmarking Initiative, because of the close links with the project's aim to develop more sustainable urban transport systems and promote alternative transport modes.

### **2.3 Commission for Integrated Transport (CFIT) – EU Best Practice in Integrated Transport Delivery<sup>3</sup>**

The Commission for Integrated Transport's study aimed to compare the UK's integrated transport delivery with that of other EU countries. The project aimed mainly to establish the progress achieved in:

- Reducing congestion without impinging upon economic competitiveness.
- Improving road safety, especially for children, pedestrian and cyclists.
- Reducing the environmental fallout of transport.
- Creating a more inclusive society.

The analyses all took place at the national scale and were largely a means of comparing the performance of the transport systems of EU cities. The datasets themselves were therefore incomparable with those collected by the Urban Transport Benchmarking Initiative, although may in future provide useful comparisons at a national level should this be required.

### **2.4 Citizen's Network Benchmarking Initiative<sup>4</sup>**

This project forms the basis for the current European Commission benchmarking exercise and it is therefore important to avoid repeating what has already been achieved by the Citizen's Network. The Citizen's Network initiative was actually two projects; an initial pilot project which ran from 1998 to 1999, the success of which prompted the European Commission to fund an expanded initiative in 2001. The three main questions which the indicators were seeking to answer are:

- How do people travel? What transport services do people prefer and how well is the system meeting these requirements?
- How accessible is the transport system? How congested are the roads? What information is available to motorist and transport users?
- What are the costs of transport? What is the impact of transport on the environment? How safe is it to travel?

The majority of the indicators collected by the Urban Transport Benchmarking Initiative have been based upon those collected by the Citizen's Network Benchmarking Initiative in order to allow comparisons to be drawn between the two schemes.

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<sup>3</sup> Commission for Integrated Transport web reference: <http://www.cfit.gov.uk/>

<sup>4</sup> Citizen's Network Web reference: <http://www.eltis.org/benchmarking/>

## 2.5 CoMET & NOVA – Benchmarking of global Metro Systems<sup>5</sup>

CoMET and NOVA are two different, but related, projects which aim to compare the urban transport systems of various cities from around the world. This involved using insight taken from other metro systems in order to attempt to improve internal working cultures and more specifically to improve on service levels. The initial step of these studies began in 1982 as a trilateral study between Paris, Hamburg and London. The CoMET benchmarking group began in earnest in 1994 and while the NOVA group has spun-off from the CoMET benchmarking group and is currently comparing medium sized metro systems. The CoMET and NOVA schemes have attracted cities from all over the world, not just in Europe and include the three global cities of London, New York and Tokyo.

The CoMET/NOVA projects are based around a set of core Key Performance Indicators (KPI's) from which best practices are established and then transferred among the group in the form of case studies. The indicators used in the CoMET/NOVA projects are focused mainly upon issues central to collective passenger transport. In addition the recommendations made in Adeney and Self's (2001) presentation for the 2<sup>nd</sup> BEST conference for the successful exchange of best practices have also been very useful.

## 2.6 Danish Ministry for Environment: US Study Tour<sup>6</sup>

This study tour to the US and Canada by the Danish Research Institute aimed to learn about performance planning and performance indicators used in the areas of transportation and the environment. The report is focused mainly upon the practices which have been adopted by the USA and Canada in order to integrate environmental and sustainability issues into the sphere of transportation. The indicators which the study was based upon are to be found in appendix B and appear to be focused upon very specific issues. The indicators relating to emissions and energy were of specific interest to the relevant working group involved in this benchmarking project. Beyond that there is little more the report had to offer the current benchmarking initiative owing to its focus upon the USA and Canada.

## 2.7 ECMT Urban Travel Survey<sup>7</sup>

As part of the European Council of Ministers for Transport (ECMT) and the Organisation for Economic Co-operation and Development's (OECD) 3 year project on "Implementing Sustainable Urban Travel Policies" an urban travel survey was undertaken involving 168 cities from 32 different countries. This took place between 1999 and 2000 with the collaboration of the French transport institute CERTU. The survey took the form of a questionnaire which used two common indicator questions (population and employment) before asking questions about the traffic network in general. These questions focused upon several aspects of public transport provision, network capacities, trip patterns, the environment and travel safety. Finally, several questions were geared

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<sup>5</sup> CoMET/NOVA web reference: <http://155.198.91.3/rtsc/html/projectsCurrent/pts.htm> NB: This site under construction. See also the BEST website, particularly the section on conference 2, for William Adeney and John Self's presentation notes at: <http://www.besttransport.org/conference02/Adeney2.pdf>

<sup>6</sup> Document web reference: [http://www.dmu.dk/1\\_viden/2\\_Publikationer/3\\_arbrapporter/rapporter/AR148.pdf](http://www.dmu.dk/1_viden/2_Publikationer/3_arbrapporter/rapporter/AR148.pdf)

<sup>7</sup> ECMT Urban Travel Survey web reference: <http://www1.oecd.org/cem/UrbTrav/overview.htm>

towards the policies which have already been implemented and those planned to be introduced to improve transport systems in the city.

The data which has been collected by the surveys is reviewed in the final report which is available at the Urban Travel Survey website. The approach of the ECMT travel survey was very influential in the process of defining indicators for the Urban Transport Benchmarking Initiative.

## **2.8 EMTA Barometer<sup>8</sup>**

The European Metropolitan Transport Authorities (EMTA) Barometer involves 15 of the 26 metropolitan areas which are currently members of the association. The Barometer was designed to provide information on the public transport systems of the participant cities, therefore enabling comparisons to be made. The data refers to the year 2000, although it is stated that future versions of the Barometer study will use updated data and be harmonised in future versions.

The EMTA Barometer is based around three main areas:

- Basic facts of each metropolitan area (population, surface area etc)
- Public transport system data (supply, demand and quality)
- Financial data related to fares, revenues, expenditures, coverage and investments.

The main indicators used in the Barometer study provided useful guidance to the Urban Transport Benchmarking Initiative's selection of both common and thematic indicators.

## **2.9 EQUIP – Extending the Quality of Public Transport<sup>9</sup>**

The EQUIP project had two core objectives:

- To develop a toolbox in the form of a handbook for the self assessment of the internal performance of local public transport operators.
- To ensure that potential users of the handbook are aware of its existence by means of awareness raising and liaison activities.

The project can therefore be seen as a similar sort of initiative as BEST (described above), in that a best practice review was followed by the dissemination of ideas and the promotion of benchmarking via the use of an information network. The initial phase of the EQUIP project involved a literature review of many EU projects and publications and the indicators that were used in the project were useful for the definition of thematic indicators used by the public transport themed working groups.

## **2.10 International Air Transport Association (IATA) – Part of BEST<sup>10</sup>**

This benchmarking project undertaken by the IATA was a case study presented at the second BEST conference. It involved comparing the positions of many airports in relation to strategic goals, regional competitors and industry leaders in order to gain a firmer understanding of overall

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<sup>8</sup> EMTA web reference: <http://www.emta.com/>

<sup>9</sup> EQUIP web reference: <http://www.europrojects.ie/equip/.com>

<sup>10</sup> IATA Web reference: <http://www.besttransport.org/conference02/Morris2.pdf>

performance levels. The study took place in 1999 and involved 57 airports and 60,000 passengers were surveyed. Copenhagen came out on top of the list of world airports and as a result was able to share its best practices with other airports. The main focus of the study was customer satisfaction and therefore was of little relevance to the current EC benchmarking initiative, although the Behavioural and Social Issues in Public Transport Working Group did focus upon customer satisfaction.

### **2.11 International Railway Benchmarking – Part of “Benchmarking of Benchmarking” (BOB)<sup>11</sup>**

The BOB project was set up as part of the Benchmarking of Environmentally Sustainable Transport (BEST) initiative in order to test the recommendations of the BEST network. The railway working group collected data upon punctuality and contractual relationships between authorities and operators and focused particularly upon the conditions for passenger growth and institutional organisation. National railway operators predominantly from Europe were involved in the benchmarking working group, with some taking on observer status. There was also input from the Japanese national railway operator Kyushu as a non-European “best practice” railway.

The accelerated timescale of the BOB working groups meant that only a few indicators were subject to data collection and analyses. These focused primarily upon delays and punctuality and also to a lesser extent upon the rail infrastructure. The indicators were generally useful for the public transport working groups, but because data has been collected at the national or regional level there was limited scope for applying the findings to the current Urban Transport Benchmarking Initiative.

### **2.12 Metis-Conseil Benchmarking – Part of BEST<sup>12</sup>**

This project was a benchmarking exercise undertaken in the Emilia-Romagna region of Italy and was also a BEST case study. The study was conducted by the Metis-Conseil consulting group and focused upon benchmarking the performance of public bus and train transport modes. As a result the study and its findings are likely to interest the collective passenger transport working group.

The indicators used are intensely focused upon the costing and efficiency of the region’s public transport network. The findings of the study were applied with tangible improvements in technical performance and economic results at both company and regional level owing to cost-cutting, increased productivity, revenue development and quality upgrading.

### **2.13 Millennium Cities Database<sup>13</sup>**

The Millennium Cities project involved the compilation of a database of data from 100 cities in order to compare their transport systems. The project was completed by UITP in conjunction with Murdoch University, Australia and focused particularly upon the issues of sustainability and public transport and therefore is highly relevant to the new EC benchmarking initiative. Data was collected for over 200 indicators for the cities and was for the year 1995. The indicators covered a range of the working group themes and are likely to provide useful common indicators as well

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<sup>11</sup> BOB web reference: <http://www.besttransport.org/cadrebobwhat.html>

<sup>12</sup> Access via BEST website at: <http://www.besttransport.org/conference02/Carmeli2.pdf>

<sup>13</sup> UITP web reference available at <http://www.uitp.com/project/index4.htm>

being relevant to collective passenger transport, emissions and energy and demand management. The Millennium Cities database is now being extended by UITP and is being developed into the “Mobility in Cities Database”.

## **2.14 NATCYP – Benchmarking National Cycling Policies<sup>14</sup>**

The NATCYP benchmarking initiative was another of the BEST network’s case studies which involved a national level comparison of cycling policies which involved the Czech Republic, England, Finland, The Netherlands and Scotland. The indicators can be found in appendix B and they focus wholly upon cycling, with some small consideration for the intermodality of cycling.

The project was successful as an awareness raising exercise, because the priority of national cycling policies was previously low. In addition the development and delivery of national cycling policies was given much needed publicity, raising ministerial awareness of cycling’s potential, particularly with regard to sustainable transport policies. This project has greatly influenced the cycling working group’s selection of data indicators.

## **2.15 NPF National Policy Frameworks for Urban Transport**

The National Policy Frameworks for Urban Transport project began in January of 2003. The project is being managed by a consortium of three partners including ISIS (Innovative Transport Solutions) of France, Dorsch Consult of Germany and the Institute for Transport Studies UK at Leeds University. The duration of the project is three years and it is therefore currently in its infancy. The indicators appear to have been decided and data collection is due to begin in September 2003. The statistics are being obtained at national level for all urban areas, although no findings have been published to date.

## **2.16 Scandinavian BEST<sup>15</sup>**

BEST, the Scandinavian Benchmarking Survey has been running since 1999 and was set up by the Stockholm public transport authority “SL”. It initially involved the four Nordic capitals of Oslo, Stockholm, Copenhagen and Helsinki and took the form of a survey of 36 questions based on 10 categories carried out in spring 2000. The idea was that for each of the 10 categories the city which displayed the best results would present a success story at a seminar. The initial problem with this approach was that the only “winning” cities were Helsinki and Copenhagen. All the cities did give presentations though and as a result four Common Interest Groups were chosen and each city is responsible for one of them. They are listed below:

- Integrated Public Transport and City Planning – Copenhagen
- Information at Traffic Disruptions - Helsinki
- Complaint Management - Oslo
- Systematic Branding - Stockholm

The second “round” of Scandinavian BEST included Turin, Munich, Barcelona and Vienna who were found through the UITP network. The project was not overtly quantitative in its approach and

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<sup>14</sup> NATCYP web reference:

<sup>15</sup> Scandinavian BEST web reference: <http://best2005.net/>

sought to provide the involved public transport authorities with a cost effective, usable benchmark forum which was task-oriented. The weaknesses of the project arose from differences in the expectations of stakeholders and varying company attitudes towards secrecy. Some worthwhile recommendations stemming from the project are that an agreement should be made concerning a press policy and that “less is more” when it comes to the number indicators and of participating cities.

## **2.17 ERM – Transport and Environment Reporting Mechanism<sup>16</sup>**

TERM was a European Environment Agency (EEA) project which used indicators to track transport and environment integration in the EU. The project is the first of its kind to specifically consider the forthcoming transport needs of the New Accession States and the environmental impact of an enlarged EU transport network. The TERM indicators provide ready made data sets for national level indicators. The TERM data have also been used to identify trends which are occurring in the New Accession States and the EU15, although the data for accession countries is somewhat limited.

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<sup>16</sup> [http://reports.eea.eu.int/environmental\\_issue\\_report\\_2002\\_24/en](http://reports.eea.eu.int/environmental_issue_report_2002_24/en)