Executive summary

The Sustainable Mobility Information System (SMIS) is one of the activities supporting the back-up plan for a policy of sustainable development organised by the Prime Minister's scientific, technical and cultural departments (STCD).

The overall aim of the SMIS is to direct "potential users towards information and data on the subject of transport and sustainable mobility in Belgium". Its particular task is to help research workers and others in posts of responsibility to find relevant sources of data necessary for their work. Its function is also to assist those providing data to make known the availability and, indeed, the existence of their results. In addition, the project must also make it possible to identify both gaps in research and the knowledge necessary to establish transport policies in the direction of durable development.

This project also forms part of a more extensive programme for the sustainable development data metabank launched by the STCD, and is should also serve as a pilot experiment in establishing the bank.

The project is under the direction of the CEESE-ULB in conjunction with the GfG-KULeuven.

In connection with these aims, the data metabase must be set up in accordance with two principles, i.e.

- A functional content (what are the concrete data?);
- A study of the optima strategic technological alternative serving to fulfil the aims (how can information on sustainable mobility be sought simply and rapidly?)

Lastly, another of the SMIS's aims consists of demonstrating possible interactions between disciplines and policies and those involved in them.

A standardised information system cutting across the different disciplines (economic, social, institutional and environmental) covered by the concept of sustainable mobility can form the first stage in the construction of the required links between different, normally separate, disciplines and those involved in them.

The SMIS is situated within a clearly defined international context and answers the desire on the part of Belgian political decision-makers to realise mechanisms that will enable them to fulfil their international commitments.

The UN Conference on Development and the Environment took place in Rio in 1992. Agenda 21 was one of the principal texts to emerge. The last part of this document (*Chapter 40: " Information for Decision-Making")* defines practical methods for the implementation of initiatives which could be undertaken with a view to sustainable development. This document sees the optimalisation of the decision-making processes as being essential for sustainable development. Two types of programmes are seen as necessary to ensure that future decisions will be based on sound information, i.e.

- Bridging the data gap
- Improving information availability

Concerning the notion of information availability, the Aarhus Convention (a convention held in Aarhus in June 1988 by the UN Commission for Europe and concerning access to information, public participation in the decision-making processes and legal access in matters relating to the environment) lays down the major guidelines for the general availability of information on the environment. Yhe EEC and 35 other countries signed this convention.

The SMIS's answer to the demands enshrined in the documents resulting form these conferences (sic!) has been to:

- Make available an aid to decision-making by providing information on information (meta-information) concerning sustainable mobility;
- Guarantee free and unlimited access to this meta-information through the use of the internet as a vector for these data

As for the development of the project, this was carried out in two phases so as to fulfil one of the founding principles of the SMIS, which was to make the project operational from the outset;

- The first version, known as the HTLM and relying on hyperlink technology, was set up at the beginning of the project
- In parallel to this, a relational type of data base of (Access) was developed by the GfG team. This relational data base became functional during the second year of the project and replaced the initial HTML version.

The following table compares the two versions

	Initial Version	**Final Version**
Type of support	HTML pages	Relational data base
Max. data load	+/- 100	No limit[1].
Data processing	Manual or semi-automatic[2].	Automatic
Frequency of updating	Max. weekly	Daily & automatic
User friendliness	Good	Very good
Search	Manual, textual	Assisted by a search motor

The first version was both very flexible and very simple in its composition and access. While it enabled us to respond to users' needs very rapidly, it very soon attained its limits. The second version has a much greater potential in terms of performance, functions and capacity.

In the matter of accessibility, our project had to be made compatible with other systems, and particularly with those enabling information to be exchanged on the Internet, the project's chosen vehicle for the dissemination of our metadata. This means that data exchange standards are playing a major role in the setting up of the SIMS data metabase.

The follow-up and definition of the metadata exchange standards are basic paramaters in the effective development of the SMIS project.

In what appears to be its final version,the SMIS is based on the European Topic Centre on Catalogue of Data Sources (ECT/CDS), a model developed by the European Environmental Agency using standards, the principal of which are ISO, Dublin Core and SGML.

In addition, we also participed actively in the 'Information Society Standardisation System' (MMI) work group of the European Noramlisation Centre (CEN), which uses of the Dublin Core standard to analyse the application of data exchange standards on the Internet on a European scale. The CEN-MMI workshop is now in a position to offer a guide to groups and organisation wishing to take DC into consideration in managing their metadata. This guide contains information on the state of DC in Europe, on its use and its fonction.

Since metadata standards are in a state of permanent development, one of the important taks in the project was to keep an eye on these developments. In this respect it is now important to analyse

[1] bearing in mind the physical limitations of the server
[2] depends on the administrator's skill.

SMIS's accountancy in relation to the data exchange standard and structured documents. This standard is now tending to make itself flet on the WWW: XML (eXentsible Mark)up Language).

The notion of Mobility, Sustainable mobility and transport cover an enormous field of study. The amount of information and data involved is very large, and growing exponentially with the advent of the new information technologies. There is therefore a mjor risk of not answering user's real needs. Since we are unable to claim that we can index all the information on these subjects, we decided to work out a typology on the sustainable mobility datas.

We therefore carried out an inquiry involving some 220 persons active in the field of mobility in Belgium in order to sound out their desires and their means of searching out information.

For 218 questionnaires we received 46 answers, which gives a participation rate of 21%. The conclusion from the inquiry are as follows :

- For technical and cultural reasons the Internet is not yet seen as an indispensable tool in the search of information. There is, however, a political will to reverse this tendancy;
- In terms of priority searches the topics involved largely concerned congestion, atmospheric pollution, noise and security;
- Concerning the type of data sought, a very large majority of the respondents placed the emphasis on statistics;
- Finally, as far as information on modes of transports is concerned, virtually everybody came out in favour of the moto-car.

The sustainable mobility data metabase should therefore emphasise the indexation of statistical data on the car. A study such as the one carried out in the Centre for Economic and Social Studies on the Environment (CESSE-ULB) by Miss J. de Villers on the development of sustainable mobility indicator's set therefore constitutes an excellent starting point.

A project like the SMIS must User's oriented. Its first aim is to provide an aid to decision-making for those (politicians, administrators, members of association and academics) who are involved with sustainable mobility in Belgium. We thus constructed our tool so that anybody could use it. In this context, we had to answer the expectations of these two categories (decision-makers and public) by constructing aids that amplified user friendliness, ease of use and the attractiveness of the site :

- An aid function enabling users to seek guidance in their research;
- The 'SMIS News Bulletin', which informs users of conferences, publications, and any new initiatives. Users can also leave their own messages to the SMIS community provided that they are registered within the SMIS;
- The on-line creation of new metadata on the basis of a proforma;
- The on-line editing of metadata in order to rectify and update the metadata already enrolled in the SMIS;
- An automatic maintenance tool;
- Direct and unlimited access to meta-information and a research function help.

The results of the SMIS can be evaluated in mathematical terms as follows :

- More than 4000 records of metadata are now enrolled in the SMIS data metabase;
- More than 450 were updated during the final months of the project;
- The checking of sites (addresses, URL, etc...);
- Translation into French, English and Dutch;
- An analysis of the relevance of the data;
- The user group incorporates 48 experts in the field of sustainable mobility;
- Over the last 18 months, the SMIS has been consulted 2814 times. More than half of the visitors were Belgians, a point which goes to underline the fact that the SMIS was constructed to answer the expectations of Belgian mobility experts.

As a final point, to the question of wheter the SMIS fulfils its initial goal, which was to provide function help in decision-making, the answer is yes, provided that it is seen as a tool and not as a end. Whereas it provides partial answers, facilitates research and points those involved in sustainable mobility in the right direction, in no way does it provide soultions as such.

Now that the new information and communications technologies have reached their zenith, people often seen inn them the solutions to a large number of problems, and particulary to those linked to sustainable development. There has therefore been plethora of data (meta)bank projects. As this report endeavours to demonstrate, it is now essential - with benefit of hindsight and analysis - to recontextualise the project and the approach it as initially conceived, i.e. as a technological aind and not as a solution.

It is still up to the decision-makers, to those working in sustainable mobility and even to the civil society to make the right choice in face of a well-defind set of problems, and to do so by means of mechanisms susch as the SMIS. The SMIS answers certain requirements and, in this respect, fulfils its user's expectetions :

- A requirement for accessibility;
- A requirement for compatibility;
- A requirement for relevance;
- A requirement fir user friendliness and ease of use.

A great deal of work has been carried out in the fields of indexation, updating, increasing the number of function and following up developments in standards. This work must continue so as not lo lose the potential of the SMIS in the medium term.