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Software package



Technical Information System



**Enables handling and management
of the street and road network
across administrations**



In co-operation with

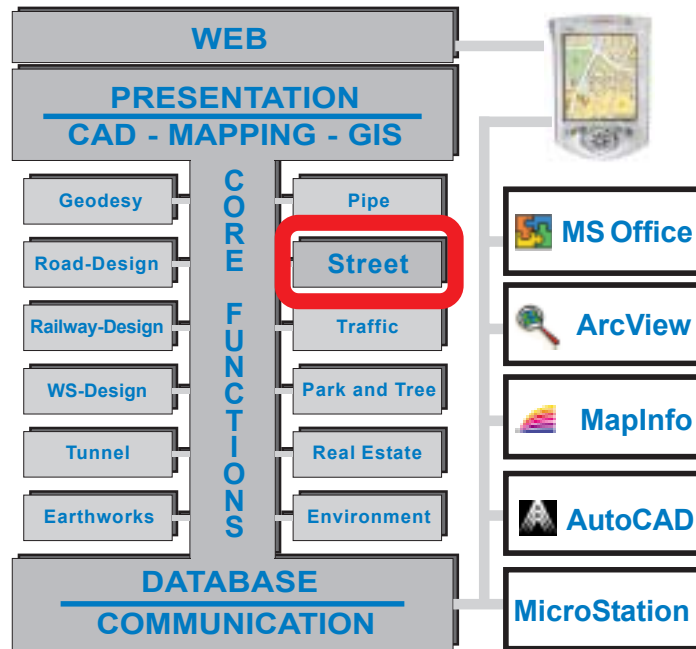


GEOSECMA – Ideology and functionality

GEOSECMA is a broad based technical information system, designed to manage geographically linked attribute data in an organisations infrastructure.

GEOSECMA is a highly flexible system with the ability to connect to many popular GIS and CAD systems.

The user can manage the design, construction documentation and report production for roads, streets, railways, pipes and other infrastructure elements.



The Core Functions holds the functionality and the GEOSECMA database, which is accessible from all modules, removing duplication across departments within the organisation, whilst utilising the data more efficiently.

Centralising the core functions reduces cost by reducing the number of server installations. Allowing for easier updates, upgrades, maintenance and education of systems operatives. Systems using a combination of software solutions from a number of providers have to ensure data compatibility and connection before updating or upgrading any software, which can be time consuming and expensive.

For the users, GEOSECMA offers the ability to use one system across all disciplines within the organisation. GEOSECMA ensures complete data compatibility, reduces data input and optimizes data use.

Decision making on all levels, within an organisation is made easier, from the detailed decisions of small departments to top management decisions that require an holistic view of the whole organisation for the strategic deployment of scarce resources.

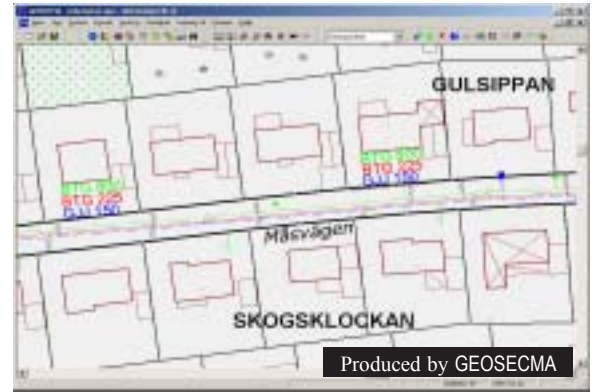
The Core Functions include a web application for presentation of data over the Internet including the facility to input and modify the data via hand held devices. Presentation tools within the web application and Core Functions allow for the production of CAD drawings, mapping tools, thematic GIS products, and printed data.



Automated routines enable the linkage of user-selected datasets to be graphically displayed in a variety of GIS programs.

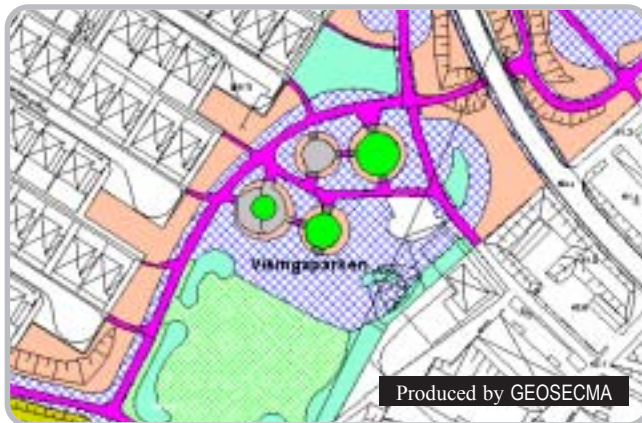
Multiple users can access data and any changes made in the data field are seen by all users simultaneously.

Working from a well-structured database, GEOSECMA allows customised reporting, object linkage to pictures & video, CAD, COGO functions, and easy data transfer and linkage to external software.



Data security and quality

GEOSECMA provides a secure data storage solution with a relational database enabling high-speed data queries, as well as data storage routines to ensure the quality of data input.



Graphics Environment Data Exchange

GEOSECMA includes all necessary GIS/CAD facilities as Core Functions.

It is also possible to link external programs such as ArcView, MapInfo, AutoCAD and MicroStation, increasing the flexibility of the system.

Why choose the GEOSECMA system?

- * Easier maintenance as there is one common system
- * Reduce the number of licences
- * Saves money
- * Increase accessibility to data
- * Increase ability access and transfer between departments
- * Same USER interface across all modules and functionality making the system easier to learn

Language support

The system is available in four languages, additional languages can be added.





The Street module

The Street module is one of 12 core modules linked to GEOSECMA Core Functions

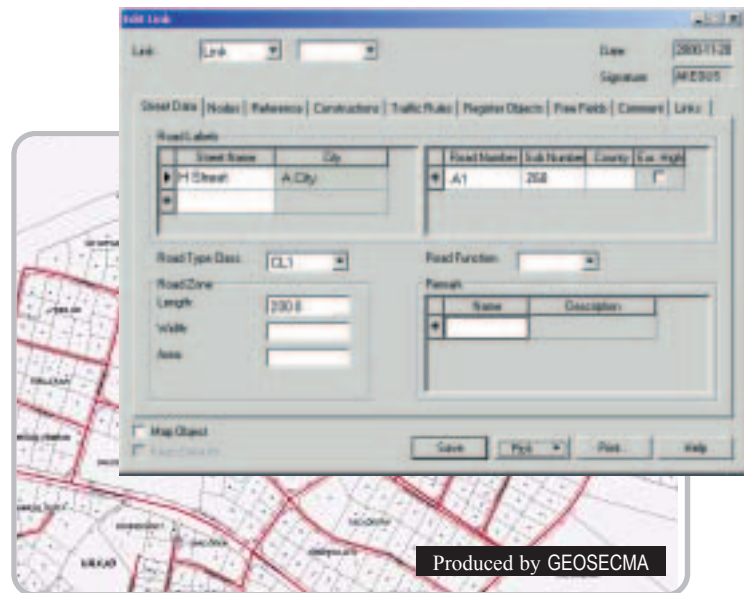
The Street module is made up of two main applications:

- Pavement Management System (PMS) application.
- A powerful inventory application

The Inventory Application

The authority must keep details of the number, type and condition of inventory items contained within its network to enable it to monitor and maintain the items effectively. The inventory system can contain information on any item; signs, lighting, kerbs and pavements for example.

User definable objects can be easily attached and stored for each item on, such as location, condition, manufacturer, costs, history of repairs and pictures. The information can be used to keep track of information on the asset such as: age, reliability, quality, condition, manufacturer and cost.



The PMS application

Pavements deteriorate over time with traffic and need to be maintained to ensure functionality. The pavement network is a major asset, which needs to be managed taking into consideration the needs of the entire network in a systematic and objective way to ensure that maintenance budgets are spent optimally and efficiently.

Society is placing more emphasis on the optimal allocation of scarce resources. For the pavement sector, with increasing emphasis on preservation and less on new construction, it is vital to have a tool that objectively maximises the return on maintenance investments



The Dynatest PMS utilises not only the visual condition data, but also utilises bearing capacity and pavement structure data in mechanistic-empirical models to predict the future structural condition of the pavement network and to determine the performance of various maintenance and rehabilitation strategies for each road link.

The PMS helps the engineer to determine the optimum time and the type of rehabilitation option and allows the senior managers' to quickly evaluate various budget strategies, determining the optimum budget and the affects of under and over funding for the user and the authority.