## Scientific purposes and methods of Navigocorpus subsystem

Navigocorpus aims at computerising without bias and at storing to a same and unique database in such a way as to make them easily retrievable for scientific uses:

a) Data referred to sea journeys and to the history of the ships themselves, from any kind of sources whatever.

b) Data referred to cargoes or passengers and their history, during their transport as well as before and after.

c) Data referred to actors directly or indirectly implicated in sea journeys, or in producing goods transported by ship, or providers of resources needed for their transport.

d) Data referred to taxes paid due to sea transport.

Navigocorpus database computerising criteria are:

a) To atomise all relevant data into univocal information pieces, the nature, characters and limits of which will be determined by their function within the studied source so as to preserve them from any possible bias due to their fragmentation.

b) To build a common computerised structure able to store those information pieces in such a way as to make possible retrieving any item with the same cost as any other, independently of the class they belong to, so as to eliminate biases introduced by differential costs of retrieval.

c) To make the architecture of this computerised structure independent of the package in which it has been presently implemented (v.g. FileMaker), so as to make it portable to any other database package.

Accumulating data for data's sake is not a scientific goal and creating a database only makes sense if processing data is made easier by it. Helping historians to take advantage of the system in spite of their low competence in computing, consequently ranks high among Navigocorpus' priorities. This goal can be attained by combining five approaches:

a) Making data directly available for any kind of problematics through a correct atomisation of the same, and equipping the system with tools which should allow any user to code and retrieve exactly the data set he needs and to structure it by means of the relevant relationships before exporting it to any other statistical, analytical or cartographical processing package.

b) Making the data base itself easier to manage by means of careful ergonomics: coherent use of colours, scripts and triggers for the most usual operations, clear and numerous layouts, a possibility for experienced users to create new routines and layouts without making the system unserviceable.

c) Providing, along with the database and inside the same, dictionaries, repertories and catalogues of definitions, measurement units, products etc. So as to give the user the necessary information to control his movements among an unusually complex and vast amount of data.

d) Providing, along with the database and outside the same, concepts and routines which should make possible intellectually to process greater amounts of data than those the historian is used to. Classical techniques, such as cartography, for instance, although necessary, quickly reach their limits, and must be substituted by more abstract network and topological analysis. It is the duty of the database administrators to provide an introduction to the same.

e) Making the database generally accessible, integrally to selected researchers, partially and in a simplified form to the public in general. This means that once the system reaches its maturity, the database might be implemented to a portal and a simplified version prepared for general publication.