Appendix 6 NetMap

Background

This note explains the sample NetMap displays that have been presented in 2001-2002 edition of this volume but appear only on the CD-ROM accompanying this volume

The NetMap system is a unique software package distributed by Network Analytics (http://www.netmap.com.au/) for analyzing and visualizing very large amounts of relationship data from one or more data sources, and discovering the answers to complex problems that would have been difficult or impossible to find in any other way.

NetMap enables the user to visually "line" the data to discover natural trends in the data, as well as otherwise hidden relationships which can quickly help solve strategic problems and reveal new opportunities.

Unlike other "data mining" software used to extract information from databases, NetMap does not require any set of rules or questions. Once the data has been entered, it highlights the relationships that stand out. These become obvious, but could not have been found ahead of time by asking questions or writing rules because of the impossibility of knowing what to ask or specify – especially when combinations and certain coincidences of events and statuses occur.

NetMap enables the user to see and understand what the data are trying to "say" – such as patterns of association between the data items, spotting of coincidences or special relationships, paths of particular significance and natural trends in the data which are accumulating in databases as more data are added.

According to the producers of the software, NetMap is a relational data visualisation tool, providing visual analysis of multi-related data from both a strategic and tactical view, providing the analyst or user with full train of thought analysis on large data sets to identify areas of interest within the data. NetMap can be used in

conjunction with data repositories or as a stand alone analysis tool importing flat ASCII files for analysis. The flexibility of NetMap's design enables many other tools such as algorithms and neural networks to be included as an integrated tool.

Application to UIA data

In 1995, the UIA had provided an extensive dataset to NetMap (UK) for a demonstration of the software on an expensive platform beyond the UIA budget. The demonstration was a success and various visualisations of the data were published by the UIA. Of great interest is the possibility of providing a single overview of hundreds of thousands of links and drilling down to subsets or details. It is this feature that makes it a powerful tool for tracing fraudulent financial transactions (a major market for the software).

Contacts with the inventor of NetMap, John Galloway, in the period 1999-2000 resulted in a further test (using an extensive UIA dataset of organizations, problems and strategies) resulted in a new set of images. The possibility of delivery of NetMap services for UIA data over the web was explored as part of the EU Info2000 project within which the UIA had been a lead contractor. NetMap was considering an Application Service Provider (ASP) formula. It was agreed that it would be possible for users of the UIA website to be passed through to the ASP to have NetMap analyses performed on the UIA data (and then passed back to the UIA website).

Items on accompanying CD-ROM:

- A QuickTime promotional video explaining various uses of NetMap.
- A brief PowerPoint presentation of an exploration of UIA data using NetMap.

Appendix 6