

WIPO



SCIT/WG/2/3

ORIGINAL: English

DATE: November 2, 1999

E

WORLD INTELLECTUAL PROPERTY ORGANIZATION
GENEVA

STANDING COMMITTEE ON INFORMATION TECHNOLOGIES

WORKING GROUPS

Second Session

Geneva, December 6 to 10, 1999

DISASTER RECOVERY PROGRAM

Document prepared by the International Bureau

1. The Information Technology Strategic Implementation Plan includes a number of IT projects which need a highly reliable and robust network infrastructure and systems to provide the data products and services. The loss of an automated system or even a small database can entail damaging consequences for WIPO's operation and implementation of IT projects. Those risks range from accidental loss of data for a few minutes to the catastrophic loss of entire system for days. Accordingly, WIPO must minimize the adverse effects of any occurrence that could disrupt operations. For example, in the development of new IT projects, notably PCT IMPACT, WIPONET and IPDLs, the issues of disaster recovery should be taken into consideration within the system design.
2. WIPO adopted certain measures for disaster recovery of the present systems. WIPO information systems are implemented on a mainframe computer system of the International Computer Center ("ICC," located in Geneva) and on application servers running in the Network Operations System ("NOS," located in WIPO premises) environment.
3. All the major WIPO information systems, namely CASPIA, CASPRO, MAPS and FINAUT, are based on the ICC mainframe, and the ICC already has a disaster recovery facility in place (in Paris). Thus, today's main business systems are not at risk. On the other hand, other small systems (e.g., SPIDI and PAMSCAN sub-systems) and WIPO's internal

computer systems running on the NOS at the WIPO premises, only rely on the present ad-hoc solution, that is, the use of tape backups or the operation using two parallel servers with duplicate optical jukeboxes. Such backup tapes and a server of duplication are placed within WIPO premises, with being separated by fireproof walls from the other office space.

4. As more and more of WIPO's IT projects and applications shift from the mainframe to in-house client/server systems, it will become necessary to implement a new disaster recovery program which will implement or replace the present solution in order to further minimize the risk of disruptions.

5. The International Bureau has started a preliminary study of the matter which will be completed in the summer of 2000. However, at this stage it may be worth mentioning preliminary assessment of various options as follows:

(a) It is the minimum level solution to safeguard WIPO data using data archival, off-site data storage, and other techniques to migrate data from one storage medium to another, noting that this incomplete solution involves long recovery times and unacceptable interruption of the services and systems.

(b) Consideration should be then given to the emergence of new solutions, which make it possible to mirror continuously data updates at a distance, since to effectively duplicate crucial data at a remote location can minimize risk exposure to disasters.

(c) An option to set up a shared site for disaster recovery with other organization(s) may have difficulties, if one considers the need to resolve problems arising out of the difference in the security requirements and resources available, and the lack of WIPO's direct control over the operation and maintenance of the site.

6. In order to minimize uncertainties and dependence on external circumstances, viable solutions would be either the use of a third party disaster recovery services or the establishment of a WIPO-operated disaster recovery site. The location of a disaster recovery site should be determined, taking into account the overall cost, availability of a suitably equipped site, adequate telecommunications, connectivity facilities, the need for confidentiality of data, prompt delivery and installation of replacement equipment.

7. The International Bureau proposes to procure specialized IT consultancy services to assist the International Bureau in establishing a thorough analysis and in preparing a draft disaster recovery program for the WIPO IT projects and network infrastructure.

8. The Information Security Working Group is invited to take note of the intention of the International Bureau to prepare a draft disaster recovery program.