

Drainage Services Department Technical Circular No. 3/90

Security Considerations for Users of Micro-computers

(Note : This circular is to be read in conjunction with DSD TC No. 2/90)

Recently much publicity has been given to software faults that are deliberately introduced into computer systems, generally known as "viruses". There are indications that some of our micro-computers might have contracted certain forms of virus through the use of software from dubious origins. Damage caused by viruses, so far, is not significant. This circular is to inform micro-computer users about the effects of virus infection, how viruses may be introduced and ways of preventing them.

2. Viruses are subversive computer programs/codes that corrupt/erase data files. Viruses can replicate themselves on other systems and spread as the subversive programs/codes are used on other systems. Micro-computer systems are most vulnerable to viruses because their operating systems are not as sophisticated as those of minis and mainframes.

3. Viruses can be imported into computer systems by one of the following two methods :-

- (a) Individuals who have on-line access to the system may deliberately introduce viruses by amending an existing piece of software in the system.
- (b) Users may acquire a new piece of software, possibly from a dubious origin, which contains a virus.

4. To prevent viruses being imported by method (a), users are advised to exercise strict access control by means of user-id's and passwords and to restrict software amendments to authorised staff.

5. To prevent viruses being imported via method(b), users are reminded NOT to use illegal copies of software. These are the programs most likely to contain viruses. Users should obtain software officially from authorized agents in order to minimize the risks of contracting viruses and to avoid infringing copyright.

6. Apart from the above preventive measures users should continue to regularly back-up their systems in order to facilitate system recovery in case viruses are introduced.

7. Officers in charge of micro-computers should report any inexplicable software or hardware failure to the Senior Engineer/Computer Services for damage control and investigation into the cause of the failure.

K. T. KUO

( K. T. KUO )

Director of Drainage Services