

Reference No: E168/08/87; **Date:** 22/12/87

Circular 13/1987:- Communications between Computer Systems

A Dhuine Uasail,

1. I am directed by the Minister for Finance to say that he has been considering the question of communications between computer systems within the civil service and between civil service systems and those in external organisations in the light of developments both in relation to technology and to international standards with particular reference to the decisions of the Council of Ministers of the European Community.

2. Communications difficulties arise mainly from incompatibility between computer systems acquired from different manufacturers. Two international developments are directed towards the resolution of these difficulties. First, the International Standards Organisation has been developing a group of standards named the Open Systems Interconnection Model, commonly referred to as OSI. Second, the Decision of the Council of Ministers of the European Community (87/95/EEC) (OJ NO. L36, 7/2/87) makes it mandatory for Member States to take the necessary steps to ensure that, with effect from February, 1988, reference is made (other than in stated circumstances) in public procurement orders relating to information technology to -

- European standards and European prestandards
- International standards, when accepted in the country of the contracting authority.

3. The Minister has also accepted the recommendations of the interdepartmental committee on the telecommunications needs of Departments that

- the electronic exchange of data, text and image between Departments and between dispersed areas of Departments should be based on OSI standards and
- a packet-switched network, based on X.25 protocols, for the transmission of data and textual material, should be developed to link Departments and dispersed areas of Departments in Dublin with, further extension in prospect. This network is at present under development.

4. It is, therefore, necessary to ensure that, from a current date,

- the implementation of new intra-departmental or interdepartmental networks takes account of the developments outlined above and
- computer systems acquired will be able to meet the standards proposed.

5. I am, accordingly, to say that

(i) Departments should not take steps to (a) connect systems in different locations in Dublin or (b) provide new networked services particularly for file message or document transfer on an inter-building or inter-departmental basis, without the prior sanction of this Department.

(ii) Requests for Proposals (RFP) should include the material at Appendices 1 or 2 to this Circular unless the prior agreement of the Department's Computer Control section to its omission is obtained.

In all cases omission of a reference to standards must be justified by reference to the provisions of the Council Decision referred to above.

6. Since it is important that Departments considering information technology procurement should be familiar with the contents of the Council Decision, this Department will arrange to have copies of the Decision together with explanatory information which is being prepared by the European Commission circulated to a liaison officer in each Department/Office. Every Department/Office is, therefore, asked to nominate an officer to whom this documentation will be circulated and who will liaise with this Department on all matters relating to the Decision. Names should be forwarded to Computer Control Section, Department of Finance which will also deal with any enquiries arising from this Circular. It is also intended that further details and instructions on the general topic of communications will be sent to Departments through the liaison officers nominated.

7. This Department is anxious to identify further potential uses for the network referred to in paragraph 3. Departments are asked, therefore, to give this Circular the widest possible distribution with a view to ensuring that it reaches any individual or group within the civil service who may wish to use the network.

Mise le meas,

P Gaffey
Deputy Secretary

Appendix 1 - Communications

It is civil service policy to achieve improved communications through the use of products developed to international standards. Specifically, (the system being acquired) must be able to connect to the civil service X.25 network and to participate in the services available on that network, which will be based on OSI standards. Consequently, proposals should:

- Include text editing software which can convert to and from revisable type DCA documents (as an interim measure pending the availability of ODA encoding),
- Offer a guarantee of future X.25 packet level provision (ISO 8208),
- Offer a guarantee of future Session and Transport layer support as defined in the X.200 series of standards (i.e. 215, X.225, X.214, X.224 or ISO 8326, 8327, 8072, 8073) including a description of the classes within these layers which are implemented (for X.400 systems the Basic Activity Subset of the Session Layer and an implementation of the Class 0 Transport Layer are required),
- Offer a guarantee of future support for X.400 P1 or P3 and P2 protocols and a Reliable Transfer Server (ISO 8505, 9065, 8883),
- Offer a guarantee of future support for ODA encoding within system supplier specific word processing packages,
- Offer a guarantee of future support for FTAM file transfer facilities.

Suppliers should state when the facilities for which guarantees are sought will be available and whether their implementation of the OSI protocols, referred to above, conforms to the profiles issued by the European standards bodies - CEN/CENELEC.

In addition, suppliers should state their policy on the post-delivery updating of products to cope with changes in the relevant standards.

Appendix 2 - Communications

It is civil service policy to achieve improved communication through the use of products developed to international standards. While (the system being acquired) will not connect directly to the civil service X.25 network, it will be required to avail of the services on that network. Consequently, proposals should:

- Include support of a common electronic mail facility between the client and gateway processors which is capable of transferring information transparently i.e either 7 bit ASCII or 8 bit traffic,
- Include a downloading and uploading capability for file transfer of data and documents to and from the OSI gateway processor,
- include text editing software which can convert to and from revisable type DCA documents (as an interim measure pending the availability of ODA encoding),
- Offer a guarantee of future X.25 packet level provision for any wide area interconnection requirements (ISO 8208),
- Offer a guarantee of future support for ODA encoding within system supplier specific word processing packages,
- Offer a guarantee of future support for FTAM file transfer facilities.

Suppliers should state when the facilities for which guarantees are sought will be available and whether their implementation of the OSI protocols, referred to above, conforms to the profiles issued by the European standards bodies - CEN/CENELEC.

In addition, suppliers should state their policy on the post delivery updating of products to cope with changes in the relevant standards.