

EARN EXECUTIVE

Proposal for OSI Transition Strategy for the coming 18 months

issued by  
D Jennings  
May 21, 1989

-----

## 1 Overall OSI Transition Strategy

The overall OSI Transition Strategy that the EARN Board has already adopted can be summarised as follows:

- 1.1 X.25: Introduce an X.25 sub-network Infrastructure
- 1.2 NJE/OSI: Implement NJE/OSI for continuity of Service
- 1.3 OSI Applications: Introduce OSI Applications and Gateways
- 1.4 Phase out NJE Applications (eventually).

## 2 Current Approach to OSI Transition (Jan-June 1989)

The current approach to the EARN OSI Transition is summarised below, and more details are provided in the current OSI Transition Programme plan.

- 2.1 X.25: Introduce NT-based X.25 sub-network for testing (and at no cost to EARN)
- 2.2 NJE/OSI: Implement and Test NJE/OSI on DEC and IBM systems and test. Test interoperability.
- 2.3 OSI Applications: Start design activity for G-Box X.400 and RFC987 Gateways (Initial design done by OSI Team in 1988)

## 3 Proposed Approach for Next 6 months (July-Dec 1989)

The recent decision of the COSINE Board to initiate the COSINE Project, and, in particular, the decision to negotiate a contract with the Dutch PTT for a european X.25 sub-network (the RARE/COSINE MDNS, also know as the IXI project), introduces new opportunities and perhaps difficulties for EARN. It is expected

that the IXI network pilot phase contract will be agreed by 1 September, 1989, and that the IXI network could be available to EARN by 1 January, 1990. It is expected that some countries will wish to use the IXI network for

EARN traffic during the IXI Pilot phase, and the proposed approach for the next 6 months takes this into account.

### 3.1 X.25:

- Make proposal to COSINE for COSINE support of and funding for the connections of EARN Backbone nodes to the IXI network.
- Continue NT based X.25 infrastructure for testing at no cost to EARN (Digital-Europe funding), pending COSINE contract for the IXI network.
- Plan introduction of IXI X.25 network for EARN, and phase out of NT X.25 network.
- Order additional national lines to IXI backbone using COSINE funds.

### 3.2 NJE/OSI:

- Complete testing of NJE/OSI software and conduct interoperability testing.
- Agree co-operation with RARE on X.25 sub-network
- Introduce "live" EARN traffic on X.25 backbone.
- Resolve NJE routing issues.

### 3.3 OSI Applications:

- Introduce X.400 and RFC987 Gateways on G-Boxes.
- Test interoperation with RARE MHS project
- Test interoperation with other EARN X.400 implementations
- Start design activity for G-Box FTAM and NJE/FTAM Gateways
- Start design activity for G-Box X.500 distributed directories.
- Make Proposal to COSINE for OSI Transition support and funding for additional EARN staff.
- Plan for additional EARN OSI Transition staff (COSINE funded).

## 4 Proposed Approach for 1990

By 1 January the IXI backbone should be available to EARN, and the costs of the IXI backbone after the initial Pilot Phase should be known. (The IXI backbone is expected to cost between 5M ECU and 6M ECU per annum, and is thus significantly more expensive than a similar network operated by the research community. Thus it is not necessarily clear that the IXI backbone is the appropriate solution in the longer term)

### 4.1 X.25:

- Install national lines from EARN backbone sites to IXI backbone
- Phase in use of IXI network
- Phase out use of NT switches (unless some countries decide not to use the IXI backbone)
- Establish charges for use of IXI by EARN after IXI Pilot Phase, and decide on

future strategy

- Hold NT switches pending clarification of future IXI cost and EARN strategies

#### 4.2 NJE/OSI:

- Switch all "live" EARN traffic to NJE/OSI across X.25 backbone.
- Extend introduction of NJE/OSI to additional sites
- Ensure continued NJE/BSC support for non-COSINE countries

#### 4.3 OSI Applications:

- Employ additional EARN OSI Transition Programme staff
- Introduce X.500 Directory Pilot Service
- Extend use of X.400 in EARN
- Design new EARN tools to take advantage of X.400 services (NETSERV, LISTSERV)

#### 5 Proposal

The above outline strategy for the EARN OSI Transition is put forward to the EARN Board for adoption at its meeting in Crete in May, 1989.