INTERNATIONAL TELECOMMUNICATION UNION

ITU-T Q.82.4

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

GENERAL RECOMMENDATIONS ON TELEPHONE SWITCHING AND SIGNALLING

FUNCTIONS AND INFORMATION FLOWS FOR SERVICES IN THE ISDN

STAGE 2 DESCRIPTION FOR CALL OFFERING SUPPLEMENTARY SERVICES – LINE HUNTING

ITU-T Recommendation Q.82.4

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Q.82 was published in Fascicle VI.1 of the *Blue Book*. This file, which is an extract from the *Blue Book*, contains *only* the part of the Recommendation still in force. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Recommendation Q.82.4

STAGE 2 DESCRIPTION FOR CALL OFFERING SUPPLEMENTARY SERVICES – LINE HUNTING

4 Line hunting

4.1 *Introduction*

4.1.1 *Definition*

Line hunting is a supplementary service which enables incoming calls to a specific ISDN number to be distributed over a group of interfaces.

Note - Expansion of the line hunting service to cover the case of hunting on available ISDN numbers or addresses, rather than on interfaces is a possible extension of the service.

4.1.2 *Description*

This description covers the form of line hunting which applies to interfaces within one node. It is an anticipated further extension to enable the group of interfaces available for selection to be distributed over more than one node.

The selection of an interface within a node is performed on the basis of the hunting algorithm used. (Where hunting is extended over more than one node the network routing techniques used to extend the selection to the next node may be similar to that used for the call forwarding supplementary service, though applied by the Administration. The precise description of multi-node line hunting is for further study.)

An access belonging to a line hunting group may also be addressed using an individual ISDN number. Facilities associated with the individual number are not affected by line hunting.

4.2 *Definition of the functional model*

The additional functionality required for line hunting, over that of the basic service, is confined to a single node, as seen in Figure 4-1/Q.82.

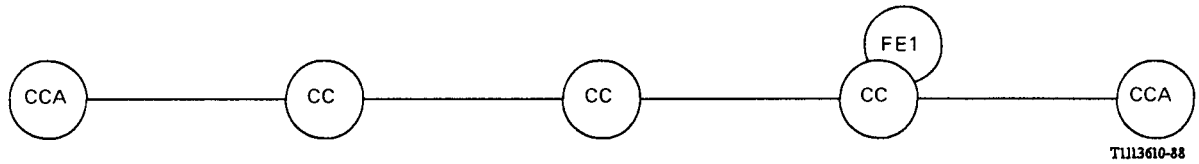


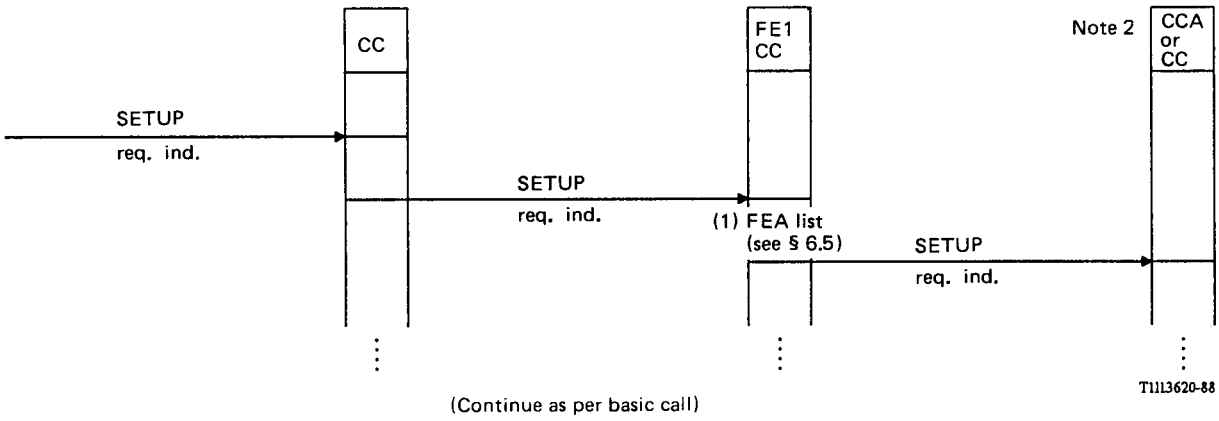
FIGURE 4-1/Q.82

Relationship of line hunting to basic service

4.3 *Information flow*

4.3.1 *Flow for single node hunting*

For the single node case, the information flows are those defined for the basic call as shown in Figure 4-2/Q.82. No information flows arise as a result of the hunting action.



Note 1 – Only those entities directly involved in line hunting are shown.
Note 2 – The selected access may be to a CC or a CCA.

FIGURE 4-2/Q.82

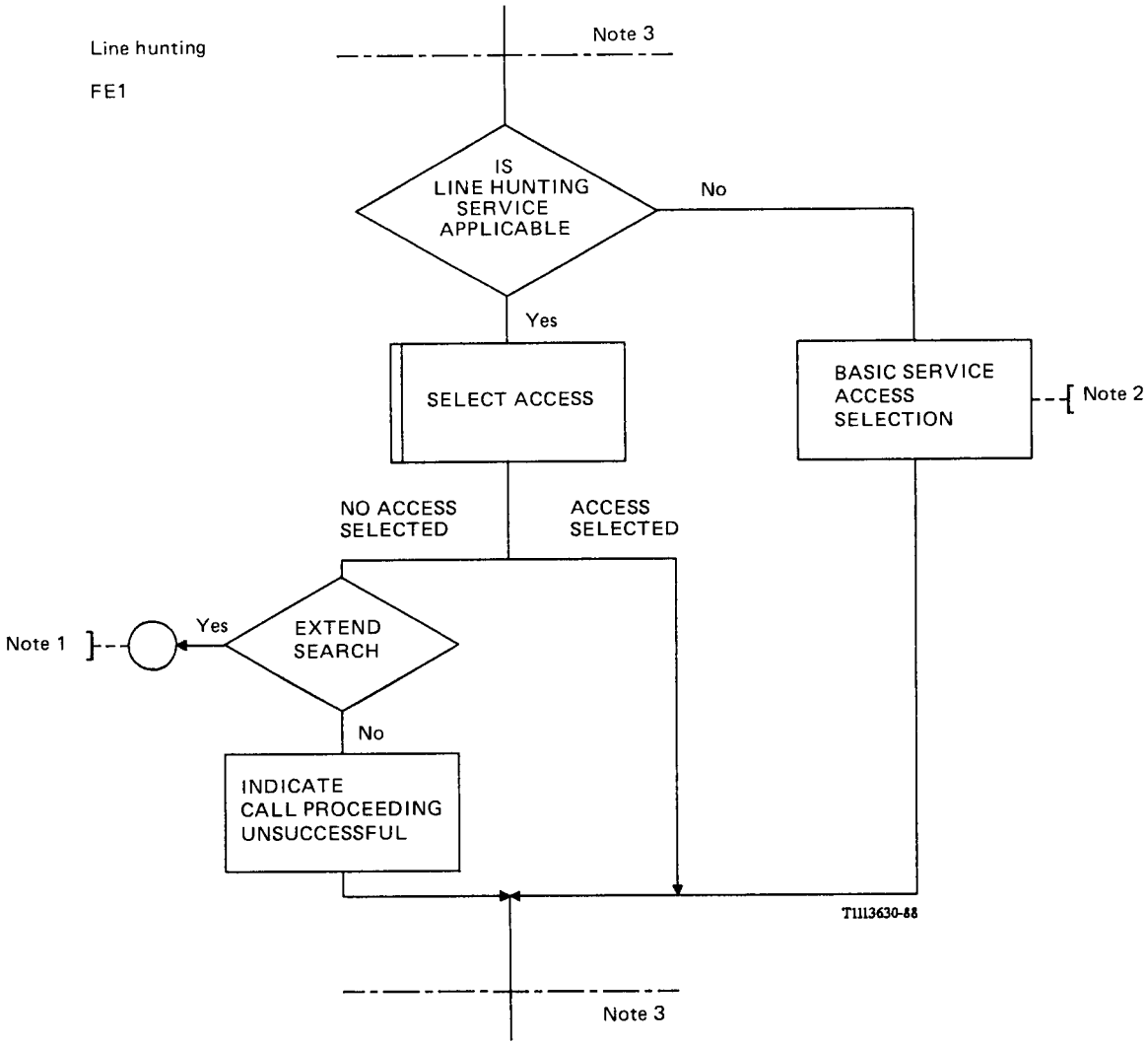
Information flows for line hunting

4.3.2 *Flow for multi-node hunting*

This is for further study.

4.4 *SDL diagrams*

The SDL diagrams for the entity FE1 are shown in Figure 4-3/Q.82 and Figure 4-4/Q.82.



Note 1 – For further study.

Note 2 – This process is described within the basic service description.

Note 3 – This SDL is executed within the "Term. Screen. Process Attempt" process boxes at reference points 241, 241A in the basic call SDL.

FIGURE 4-3/Q.82

SDL1 for line hunting

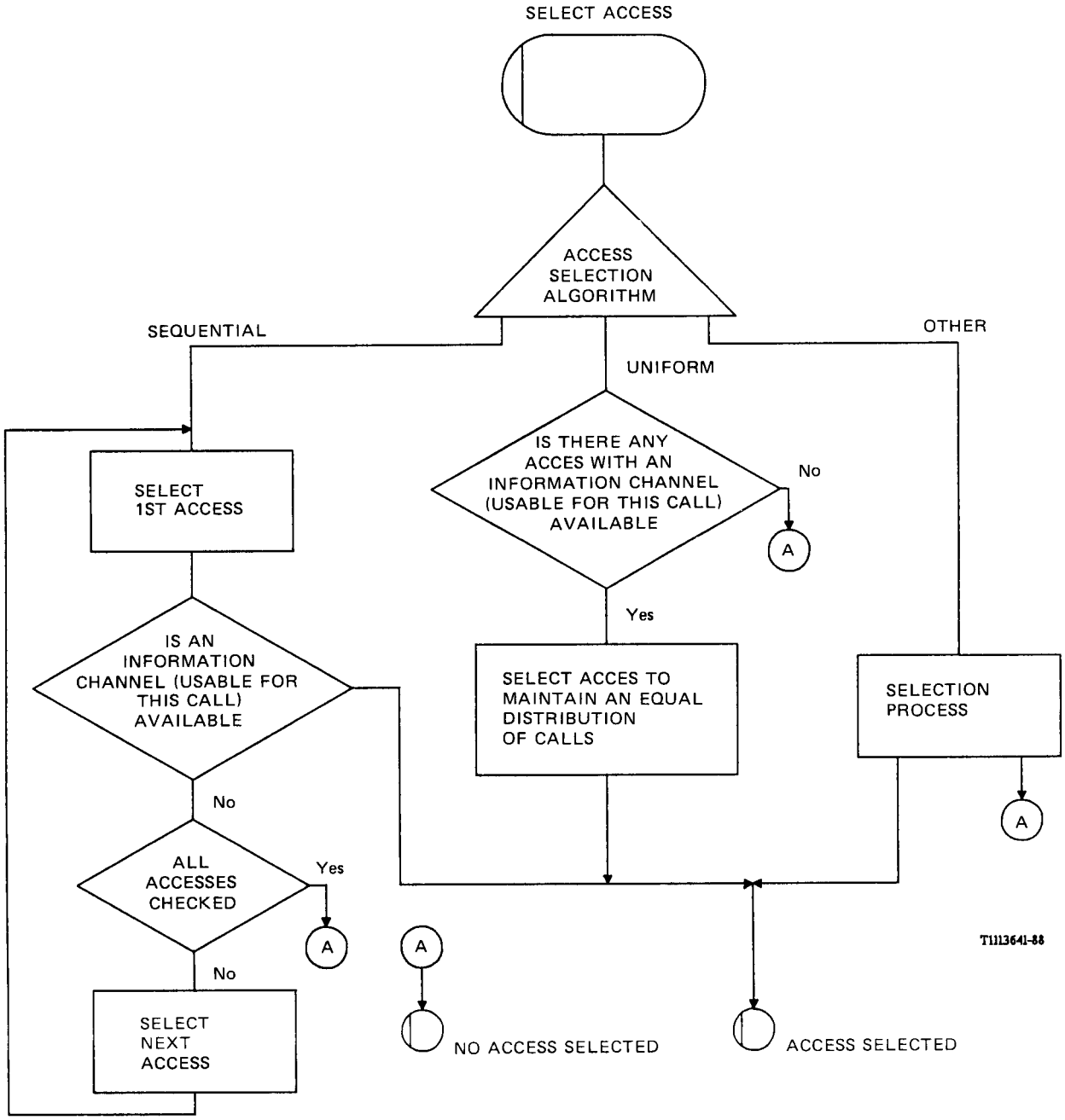


FIGURE 4-4/Q.82

SDL2 for line hunting

4.5 *Functional entity actions*

4.5.1 *Single node hunting*

The FEAs attributed to entity FE1, the line hunting entity, indicated by (1) on the information flow diagram are as follows:

- determine hunting algorithm;
- select free interface.

4.5.2 *Multi-node line hunting*

FEAs, in addition to the single node FEAS, which are required for hunting over more than one node are for further study.

4.6 *Physical locations for functional entities*

The scenarios which apply to line hunting are shown in Table 4-1/Q.82.

TABLE 4-1/Q.82

Possible line hunting scenarios

Functional entities / Scenario	CCA	CC	CC	CC/FE1	CC	CCA
1) Basic rate access	TE	LE	TR	LE	—	TE
2) Basic rate access	TE	LE	TR	NT2	—	TE
3) Primary rate access	TE	LE	TR	LE	NT2	TE