

INTERNATIONAL TELECOMMUNICATION UNION



1.252.6

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

INTEGRATED SERVICES DIGITAL NETWORK (ISDN)

SERVICE CAPABILITIES

CALL OFFERING SUPPLEMENTARY SERVICES - LINE HUNTING (LH)

ITU-T Recommendation I.252.6

(Extract from the Blue Book)

NOTES

1 ITU-T Recommendation I.252.6 was published in Fascicle III.7 of the *Blue Book*. This file is an extract from the *Blue Book*. 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.

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CALL OFFERING SUPPLEMENTARY SERVICES - LINE HUNTING (LH)

(Melbourne, 1988)

6 Line Hunting

6.1 *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 - Development of Line Hunting to cover the case of hunting on available ISDN numbers, or addresses, rather than on interfaces is a possible extension of the service.

6.2 *Description*

6.2.1 *General description*

The interfaces selected for Line Hunting may be contained within one node, or may encompass more than one node.

It is the responsibility of the user to provide terminals to his interfaces for effective operation of the service. The problem of terminal compatibility in the Line Hunting supplementary service is also the responsibility of the user of the service.

6.2.2 Specific terminology

The following specific terminology is used to describe the possible selection method:

Sequential hunting	A sequential search is conducted over the members of the group in a fixed pre- specified order
Uniform distribution	An equal distribution of calls is provided to idle members of the group

The actual algorithm for each hunting method is a network provider option.

Note - The status of an individual channel may be included in the selection criteria above.

The selection of an interface is based on the availability of information channels rather than on the NDUB status. As part of each applicable bearer service or teleservice, there is already an option specifying the maximum number of information channels which can be used on the interface for each ISDN number, all ISDN numbers or subsets of ISDN numbers.

6.2.3 *Qualifications on the applicability to telecommunication services*

This supplementary service is considered meaningful when applied to the speech and 3.1 kHz audio bearer services and to the Telephony teleservice. Furthermore, it may also be meaningful when applied to other services.

6.3 *Procedures*

6.3.1 Provision/withdrawal

Line Hunting is offered, with possible subscription options, as a service to the called party and applied to an ISDN number. For each subscription the following are specified:

Subscription options	Values
Selected Method	– Sequential – Uniform
Members	– List of 2 or more interfaces

6.3.2 Normal procedures

6.3.2.1 Activation/deactivation/registration

Line Hunting is activated on provision and deactivated on withdrawal.

6.3.2.2 Invocation and operation

An incoming call to an ISDN number on which Line Hunting is in operation will be offered to a specific available interface in a pre-defined manner. The selection of the specified interface may provide for a uniform distribution of calls or sequential distribution of calls.

The method of selecting the interface may be either Sequential Hunting or Uniform Distribution. The selection algorithm may include reference to the channel status.

Once an interface has been selected, normal call set-up procedures apply and Line Hunting procedures are considered complete.

Outgoing calls from a Line Hunting Group are unaffected by this service.

- 6.3.3 *Exceptional procedures*
- 6.3.3.1 Activation/deactivation/registration

None identified.

6.3.3.2 Invocation and operation

If no interface is available, the Line Hunting service is unsuccessful and a busy indication is returned to the calling subscriber.

If no compatible terminal on a selected interface responds, no further line hunting action is provided and the call is released in the normal manner.

If the offered call is rejected at an interface, the call is released with normal procedures. No further hunting is provided.

- 6.3.4 *Alternative procedures*
- 6.3.4.1 Activation/deactivation/registration

None identified.

6.3.4.2 Invocation and operation

None identified.

6.4 *Network capabilities for charging*

This Recommendation does not cover charging principles. Future Recommendations in the D-Series are expected to contain that information.

It shall be possible to charge the subscriber accurately for the service.

6.5 Interworking requirements

The possibility of a line hunting group including both ISDN and non-ISDN interfaces for a particular Line Hunting service should be considered. This is for further study.

- 6.6 Interaction with other supplementary services
- 6.6.1 *Call Waiting*

The Call Waiting service should not be provided to a line in a hunt group.

6.6.2 *Call Transfer*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.3 Connected Line Identification Presentation

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.4 Connected Line Identification Restriction

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.5 Calling Line Identification Presentation

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.6 Calling Line Identification Restriction

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.7 *Closed User Group*

When a free line of a Line Hunting Group has been found, any CUG restrictions must be met before the connection will be established.

6.6.8 *Conference Calling*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.9 *Direct-Dialling-In*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

- 6.6.10 Call Diversion (i.e. Call Forwarding) services
- 6.6.10.1 Call Forwarding Busy (CFB)

If the outcome of the Line Hunting supplementary service is unsuccessful (see § 6.3.3.2 above), CFB may be invoked.

6.6.10.2 Call Forwarding No Reply

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.10.3 Call Forwarding Unconditional

When the CUF and Line Hunting supplementary services are both subscribed to on the same ISDN number, the CFU supplementary service takes priority. Further information is contained in the CUF definition in § 4.

- 6.6.11 *Line Hunting* Not relevant.
- 6.6.12 Three-Party Service

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.13 User-to-User Signalling

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

- 6.6.14 *Multiple Subscriber Number* For further study.
- 6.6.15 *Call Hold*

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.6.16 Advice of Charge

No impact, i.e. neither supplementary service affects the operation of the other supplementary service.

6.7 Dynamic description

The dynamic description of this service is contained in Figure 6/I.252.

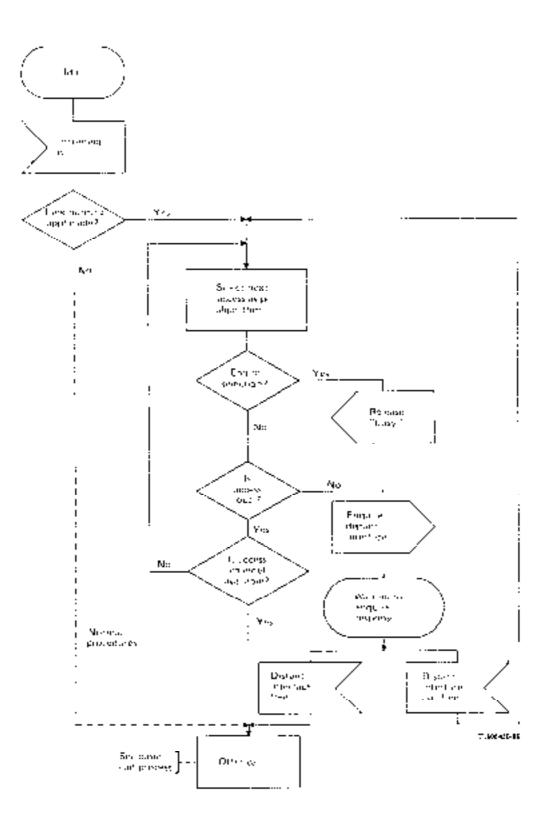


FIGURE 6/I.252 Line hunting overall SDL