



**Technical Group on Number Portability**

**Advisory Notes on Number Portability**  
**Extension to Location Number**

**Version 1.01**

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## 2. Scope

This advisory note has been prepared by and is the property of the Telecommunication Industries Association in Denmark, and may be updated if there is a need for a common understanding to solve network problems in respect to Number Portability.

This Advisory Note refers to the specification Rules and Procedures on Number Portability Version 1.0 October 1997. This Advisory Note may be changed or cancelled if a revised version of the specification Rules and Procedures on Number Portability is approved.

In the specification Rules and Procedures on Number Portability the requirements to the content of the Location Number parameter for calls from ported numbers is described. According to this specification the Local Significant Part (geographical information) of the address field in the Location Number is a 3 digits code identifying a district ("Kommune") according to the numbering of districts ("Kommuner") in Denmark. This Advisory Note describes the requirements to an extension to the Location Number to be able to handle a more fine-meshed geographical structure than the 'Kommune' based districts. The extension is based on postal districts.

## 3. References

1. Rules and Procedures on Number Portability Version 1.0 October 1997

## 4. Definitions

In general all definitions used in this document are described in ref. 1.

## 5. Extended format for Location Number

For the extension to the Location Number the format and coding of the Location Number described in the specification Rules and Procedures on Number Portability [1] are not changed as far as the information fields Odd/even indicator, Nature of Address Indicator, Internal Network number indicator, Numbering plan indicator, Address presentation restricted indicator, Screening indicator and the Address fields Country Code, National Destination Code and Filler are concerned.

The Locally Significant Part is as follows:

Locally Significant Part: Defines the geographical area where the call is originating. This field has the following structure:  
As a mandatory part the first 3 digits identifies a district ("Kommune") according to the numbering of districts ("Kommuner") in Denmark: Indenrigsministeriet, CPR kontoret, Myndighedskodetabel. Kodenummer orden. April 1994. Kommune /personregisterførere.  
A district ("Kommune") is numbered 0xxx where xxx is the code for the "Kommune", e.g. 0101 where 101 identifies København.

This mandatory part of the LSP is neither changed according to the specification on NP [1].

As an addition to the specification on NP and as an optional part of the LSP the 3 digits code for the 'Kommune' based district may be followed by the public known 4 digits code for the postal district.

If a postal district is spread to more than one 'Kommune', then an LSP consisting of both a code for a 'Kommune' and a code for a postal district shall be understood: the part of the postal district belonging to the concerned 'Kommune'.

As mentioned above the code for the postal district is optional. This means that a network operator may choose never to include this code for calls originated in its own network and to discard this code (either by the network or by the concerned services) for calls received from other network operators. A network operator which make use of the code for the postal district may choose to set this code for all calls or only for some calls. As an example a network operator may choose only to include the code for the postal district for calls from a densely populated 'Kommune' for which a more fine-meshed structure is needed.

Distinction between location numbers including a code for the postal district and location numbers not including this code is done in the following way:

A location number including a postal codes consists of a 2 octets header + 2 digits Contry Code (1/2 octet pr. digit) + 5 digits Carrier Code + 3 digits 'Kommune' Code + 4 digits Postal Code, which means that the length indicator is set to 9. The Postal Code shall be a non-zero value.

A location number not including a postal codes consists of a 2 octets header + 2 digits Contry Code (1/2 octet pr. digit) + 5 digits Carrier Code + 3 digits 'Kommune' Code, which means that the length indicator is set to 2. *As an alternative the location number may include four additional (less significant) digits all set to zero. In this case the length indicator would be 9.*

When a network operator implements Location Number depending services, e.g. routing of calls to destinations based on the origin of the call, then the code for the postal district may be used to make a more fine-meshed distribution of calls. However if such a service shall be open for calls from other network operators, then the postal district must not be a mandatory element in the service.