ECC Recommendation (12)04

Numbering for Nomadic Voice Services

Approved 22 November 2012

INTRODUCTION

Innovative types of voice services are being developed that use the internet either via fixed and/or mobile connections rather than the traditional circuit switched networks. These services are commonly referred to as nomadic voice applications (e.g. Voice over IP [VoIP]) by service providers without control of the underlying network, i.e. the access to nomadic voice service is location independent.

For many of these new services the interoperability with traditional voice services (i.e. telephone voice services supported by Public Switched Telephone Network (PSTN), ISDN, or mobile networks like GSM/UMTS) is a critical success factor and this means that these services need adequate access to numbers for their subscribers. Although many of these new services started by offering outgoing calls only, some nomadic voice service providers are now asking for numbers to support incoming calls and so the issue is now high on the agendas of many regulators.

Existing numbering ranges facilitate easy and quick implementation which is needed to ensure interoperability. Today end-users are using different kinds of applications and underlying networks. From market and competition point of view the end-users should be able to port their numbers between different service providers and applications, noting that there are national limitations within number portability, e.g. fixed-mobile portability may not be allowed. Where technically feasible, national limitations should be technologically neutral and avoid creating unnecessary hurdles.

Today nomadic voice services are still mostly delivered over fixed broadband internet access, though they are increasingly based on a mobile broadband data access.

The assignment of numbers is an administrative act of the NRA that subsequently entitles the service provider to assign these numbers to their own subscribers according to the specific conditions applied to the range of numbers. The subscriber might request to use the assigned number outside the original service. To allow the use of numbers by subscribers outside of the specific conditions represents a flexibility given to subscribers that may be offered by service providers and accepted by the NRA. In other words this could mean that a subscriber can use a number for a service for which the number was originally not assigned, provided this conforms with current numbering policy.

In this Recommendation "nomadicity" is understood as a feature of a service which is not linked to a particular physical location. The service can be provided from potentially any fixed and/or mobile network access point in the world for incoming and outgoing communication. Within nomadicity call handover is not possible.

Mobility has the same characteristics as nomadicity but with additional call handover function.

In this Recommendation numbering plans for operators which offer services based on IP technology on their own network (e.g. broadband telephony) are not considered.

ECC RECOMMENDATION OF (12)04 ON NUMBERING FOR NOMADIC VOICE SERVICES

"The European Conference of Postal and Telecommunications Administrations,

considering

a) that this Recommendation only addresses nomadic voice services from service providers without control of the underlying physical network;

b) that many providers of these new services, usually based on VoIP technology aim for these services to be a substitute for traditional voice services;

c) that such services continue to grow and have significant potential to increase competition;

d) that such services are not linked to a particular physical location and that the services can be provided potentially from any fixed and/or mobile network termination point (nomadicity);

e) that numbering rules and conditions attached to the assignments should be

- user-friendly,
- transparent, objective and non-discriminatory between service providers,
- informative to the user, especially with regard to tariff transparency,
- facilitating portability;

f) that the existing approach in countries having a specific numbering range for nomadic voice services appears to have had a limited commercial success;

recommends

1. that the NRAs should ensure that nomadic voice services can be provided using the existing numbering ranges of the national numbering plans;

2. that the NRAs should assign or allow the usage of either fixed or mobile numbers depending on the specific features of the service in question in accordance with the existing national numbering plan.