

#### ECC RECOMMENDATION (05)03

## NUMBERING FOR NOMADIC "VOICE OVER IP" SERVICES

Recommendation adopted by the Working Group Numbering Naming and Addressing (WG NNA)

#### INTRODUCTION

New types of voice services are being developed that use the internet rather than the public telephone network to deliver calls and providers are starting to offer a range of these services and capture a share of the voice services market. These services are commonly referred to as "Voice over IP" (VoIP) services, even though services should be described in technological neutral terms. For many of these new services the interoperability with traditional voice services (i.e. telephone voice services supported by PSTN, ISDN, or mobile networks like GSM) 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 are now asking for numbers to support incoming calls and so the issue is now high on the agendas of many regulators.

"The European conference of Postal and Telecommunications Administrations,

## considering

- a) that many providers of new services based on VoIP technology aim these services to be a substitute for traditional voice services (PSTN, ISDN, GSM);
- b) that such services have significant potential to increase competition;
- that such services are in most cases not linked to a particular physical location and that the services can
  be provided from potentially any fixed network endpoint in the world for incoming and outgoing
  communication ("nomadicity");
- d) that numbering allocations should be
  - technology neutral,
  - user-friendly,
  - non-discriminatory between providers,
  - informative to the user, especially with regard to tariff transparency,
  - compatible with service provider portability;
- e) that although a certain degree of harmonisation in Europe is desirable, numbering arrangements cannot be standardised as the national numbering plans (E.164) have to take into account legacy aspects and differences in market conditions of the country;
- f) that national numbering plans were not designed to take into account the nomadicity aspect;
- g) that national regulatory authorities should design their numbering plans in such a way that competition of these nomadic services with traditional voice services is supported;
- h) that the following two options for allocation numbers for the new services are most likely to meet in a balanced way the interests of subscribers, calling end-users, service providers, and national authorities:
  - (1) allocate geographic numbers
  - (2) allocate numbers from a new number range;
- i) that the first option (the geographic number range) supports competition better, but the impact on number exhaustion needs consideration;

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## recommends

- 1. that national regulatory authorities decide in the short term on whether and how to adapt their national E.164 numbering plan to support these new services in their countries in order to promote competition and not to block innovative services from entering the market;
- 2. that national regulatory authorities should consider as the two main options for accommodating such services:
  - allocating numbers in the geographic range, in many countries requiring a modification of the allocation criteria for the geographic range,
  - modifying the numbering plan by adding a new number range for services with nomadic features;
- 3. that national regulatory authorities should consider implementing both options;
- 4. that national regulatory authorities consider all advantages and disadvantages of the various options as listed in ECC Report no 59 "Numbering for VoIP Services", 16 December 2004."

## Note:

Please check the ERO web site (http://www.ero.dk) for the up to date position on the implementation of this and other ERC / ECC decisions and recommendations.