



VoIP Regulation

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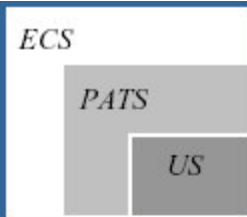
Background

- Number 1 regulatory topic internationally
 - VoIP is coming
 - Traditional regulations are not always applicable
 - Global issue
- Focus on EU
 - Regulations vary from country to country
 - Very little information easily available
 - The author is involved in EU VoIP regulation work
- No separate mobile case
 - Most regulatory questions are same for fixed and mobile VoIP

Regulatory and Policy Objectives

- Promotion of competition
 - maximum benefit in terms of choice, price and quality
 - no distortion or restriction of competition
 - efficient investment in infrastructure and promotion of innovation
- Contribution to the development of the internal market
 - remove obstacles to the provision of services
 - encourage the development and interoperability of pan-European networks and services
 - no discrimination in the treatment of undertakings
 - co-operation of NRAs and the Commission
- Promotion of the interests of the citizens of the EU
 - ensure access to universal service
 - ensure high level consumer protection and protection of personal data and privacy
 - promote provision of clear information on prices and conditions of use
 - needs of special groups, e.g. disabled users
 - ensure integrity and security of networks
- Regulatory principles:
 - objectivity and proportionality
 - technological neutrality
 - transparency and non-discrimination

ECS and PATS Definitions



- **Electronic Communication Service (ECS)**

- Service (normally) provided *for remuneration*
- Consists wholly or mainly in the conveyance of signals on Electronic Communication Networks

- **Public Available Telephone Service (PATS)**

- = Public Available Service
- = Originating & Receiving (inter)national calls
- = Access to Emergency Service (112)
- = E.164 numbering scheme

- **Universal Service (US)**

- Services to be made available to *all end-users* in territory
- Designated by National Regulatory Authority

Source: Alain Van Gaever 1st International CICT Conference

VoIP Classification Criteria

- **Self Provisioned**
 - e.g. PC Software products offering voice
 - **Corporate/Internal Use**
 - e.g. IP PBX
 - **Publicly Available IP Telephony**
- **EU Framework does not apply if no provision of a "service"**
 - **EU Framework applies, but no specific conditions**
 - **EU Framework applies, conditions depend on precise service offered**

Source: Alain Van Gaever 1st International CICT Conference

VoIP Classification Criteria

- Access to other users
 - Ability to make and receive national and international calls
 - Limited access?
- Level of provider control
- Level of nomadicity
 - Affects the ability to route emergency calls
- Other regulatory issues
 - Compliance, e.g. emergency calls
 - POTS look and feel
 - Incumbent vs. new entrant

Requirements

- Telephony service specific requirements
 - Traditional, rather detailed regulation
 - Examples: operator assistance, directory enquiry service and itemised billing
 - A need to revise the requirements
- Common ECS requirements
 - Used in most countries
 - Examples: security, privacy protection and legal interception
 - May become to be the heaviest burden for new entrants
- VoIP specific requirements
 - Restrictions and limitations used in some countries
 - The author suggest removing all VoIP specific requirements

Regulatory Issues

- Level of regulation
 - Consumer protection vs. promote competition
- Extra territorial aspects
 - VoIP is global
- Emergency calls
 - Should not be used as a classification criterion
- Numbering and number portability
 - Geographical numbers, portability right or requirement
- Broadband unbundling
 - Unbundling, separate bitstream service from PSTN subscription

Regulatory Status in EU

- Activities
 - Commission consultation in Autumn 2004
 - ERG VoIP group
- Common Position
 - DL December 2004 ERG meeting
 - Nearly achieved, only one NRA and Commission are still arguing for model 1
- Options
 - 1: Provider can choose if it want to take PATS rights and obligations
 - 2: Clear criteria, which services fall to PATS category -> PATS requirements
- National legislation is slightly different
 - Nearly any harmonised approach requires amendments to national legislation

EU Common Position

1. Introduction
 - 1.1 Scope of work
 - 1.2 Structure of the document
 - 1.3 Co-operation with other regulatory groups for further work
 - 1.4 Limitations in competency
 - 1.5 Current national legislations on the main issues related to VoIP services
2. Market Impact of VoIP
 - 2.1 Evolution of VoIP services
 - 2.2 Technological characteristics, regulatory challenges and market opportunities
3. VoIP Services Under the Current EU Regulatory Framework
 - 3.1 Types of VoIP services
 - 3.2 Explanation of terms
 - 3.3 Regulatory and Policy Objectives
 - 3.4 Regulatory principles of the Framework and the Specific Directives
4. Proposals for a Common Position
 - 4.1 The regulatory approach for VoIP services
 - 4.2 Access to emergency services
 - 4.3 Numbering and number portability

Regulatory Status in US

- Information service vs. telecommunication service
 - Pulver FWD was declared to be a information service
 - Most probably applicable also other Internet telephony services
- Vonage decision 9.11.2004
 - Vonage service is interstate in nature
 - 8th Circuit Court decision is still pending
- Very light Internet regulation
- FCC has recognised a need to ensure social and public safety
 - Universal service & legal interception (CALEA)
 - Emergency calls & access to people with disabilities

Conclusions

- Diverse regulatory landscape internationally
 - Trend is towards more harmonised approach
 - Still it's a very difficult task
- A vision for lighter regulation
 - Traditional approach is not always applicable or controllable
 - Need is decreasing
 - Should apply to all telephony services
 - Some requirements may remain (emergency calls)
 - Some requirements will remain (security, privacy protection)