

ISPA Conference
“The New Belgian Telecom Law - Will it meet industry Needs?”

VoIP in Belgium

Situation and Perspectives under the New Legal and Regulatory Framework for Electronic Communications

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2. What is VoIP? (for the purposes of telecom regulation)
3. ERG Statement and ECC Recommendation 2005
4. PATS vs. (P)ECS: concepts and definitions
5. Rights and obligations (EU & Belgium)
6. Details of Belgian situation
 - market access, numbering, number portability, access to emergency services, economic regulation, etc.
 - Conclusions
 - Q&A and discussion

What is VoIP? (1)

What is being discussed and why?

- ❑ The EU Directives and the new Belgian Law of 13 June 2005 focus on 'electronic communications' *networks and services (+terminal equipment)*
- ❑ Technological neutrality is enshrined as a major cornerstone of regulation (Art. 5 of the Law of 13 June 2005)
- ❑ VoIP is a technology, it is not a service, it is not a network
- ❑ So why does VoIP need to be discussed, categorised, (maybe) regulated, (maybe) treated differently?
 - ❖ Good question... maybe because regulators are there to categorise and regulate?
 - ❖ Objective differences in technical capability (+ and -) compared to traditional telephony
- ❑ What happens while regulators discuss, consider how to categorise, how to regulate?
 - **Uncertainty**
 - **Limited development in Belgium; most VoIP positioned as traditional telephony**
 - **Limited innovative services (e.g. little nomadic VoIP, no hi-fi VoIP, ...)**

What is VoIP? (2)

What is being discussed and why?

□ Elementary VoIP categorisation

- ❖ **Self provisioned VoIP** (e.g. IP-PBX) → No service provision, no remuneration
(regulatory framework clearly does not apply)
- ❖ **Corporate/internal multi-site VoIP** → No service provision, no remuneration
(some questions in Belgium → BIPT notification? → Secondary regulations being developed to create clear exemption? Let us assume no regulation for purposes of this presentation)
- ❖ **Publicly available VoIP service** → Service, provided against remuneration
(regulatory framework applies)
(regulatory conditions/rights/obligations depend on the type of offer)

→ **Further categorisation, discussion (and regulation) should concern types of service offered against remuneration**

- The NRAs are committed to address barriers to market entry if they arise in accordance with the European regulatory framework
- Number portability should be seen as one tool for lowering barriers to market entry instead of being a restriction to it
- Numbering → ECC [...] *geographic numbers offer the best support for competition, especially combined with number portability*; [...] mobile numbers are seen as less attractive because of the perceived high retail tariff for calling [...]
- Numbering plans should be technology neutral; the same number ranges should in principle be available for both traditional voice and VoIP services
- The number range used by the caller does not affect the ability of the emergency service to locate the caller because the emergency service is normally dependent on a database for obtaining street address. The problems of whether or not such a database is available and whether or not the call is made from home or away cannot be solved by the choice of number range

- From a public policy point of view it is desirable that access to emergency services is available from as wide a range of electronic communications services as possible
- When calling the emergency number, caller location should be provided *to the extent technically feasible*
- In those cases where the caller location cannot be determined by the VoIP provider (most likely in the case of nomadic use of VoIP services), the *end-user should be clearly and unambiguously informed* by the VoIP provider about any restrictions in routing emergency calls and providing caller location information and the potential consequences
- Further requirements for nomadic VoIP services related to call routing and caller location information should be discussed after technology and standards have matured

- Considering: [...]
 - 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
 - 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

- Recommends: [...]
 - 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 number plan by adding a new number range for services with nomadic features
 - 3. that national regulatory authorities should consider implementing both options

- ❑ **(P)ECS** (Electronic Communications Service)
 - ❖ *Service normally provided for remuneration (EU)*
 - ❖ Consisting wholly or mainly of conveyance of signals on electronic communication networks
 - ❖ Available to the public (PECS) or not (ECS)
 - ❖ (has right to numbers – under EU Directive 2002/21/EC; no restriction in Law of 13 June 2005; Royal Decree on numbering not yet updated)

- ❑ **PATS** (Publicly Available Telephone Service)*
 - ❖ Service available to the public
 - ❖ For originating and receiving national and international calls
 - ❖ **Providing access to emergency services ****
 - ❖ Using E.164 numbers

* PATS is always a super-set of PECS: the conditions and obligations are cumulative

** **If no access to emergency services is offered, the service cannot be PATS**

□ Types of offer (service provision) – ***categorisation in Belgian law***

- ❖ Electronic communications service (ECS) – Art. 2, 5°
- ❖ Telephone service accessible by the public (PATS) – Art. 2, 22°
- ❖ *(resellers are required to register with BIPT under Art. 9 of the Belgian law triggers operator status for resellers according to Art. 9)*

□ Types of offer (service provision) – ***categorisation by BIPT***

- ❖ Telephone service accessible by the public (PATS)
- ❖ Nomadic VoIP electronic communications service (Nomadic Voice ECS)

- ❖ *Other non-PATS voice ECS*
 - *Many are still registered with BIPT from the previous law*
 - *Other non-PATS voice ECS clearly do exist but have not been discussed*
 - *Other non-PATS voice ECS will emerge, concerns about legal certainty and delays*
- ❖ *Resellers of PATS, Nomadic Voice ECS, other ECS*
 - *Hardly any registered with BIPT, because it was not required by the previous law*

→ **The remainder of this presentation focuses on PATS and on Nomadic Voice ECS**

□ Types of regulation

❖ General telecom/technical regulation

- Authorisation = market access, market control
- Numbering = ability to distinguish services/retail calling prices, location

❖ Promotion of competition, consumer protection, societal regulation

- Number portability = promote competition, consumer protection, but...
- Access to emergency services and routing of emergency calls
- Lawful interception and data retention
- Universal service
- ...

❖ Telecom-economic regulation

- Inclusion in, or exclusion from, relevant markets susceptible to ex-ante regulation; consequences resulting from relevant market analysis
- Ex-ante control on dominant operators (to prevent anticompetitive exercise of market power – if any...)

□ Market access

- ❖ Both PATS and Nomadic Voice ECS (as well as resale thereof) are subject to prior notification to BIPT
 - This notification is very simple
 - Leads to registration by BIPT (= +/- *authorisation*)
 - Fees to be paid to BIPT vary considerably (but this is likely to change)
 - Opens basic rights and obligations, including right and obligation to negotiate interconnection and access

□ Numbering resources

- ❖ Both PATS and Nomadic Voice ECS (as well as resellers thereof) have rights to apply to BIPT for reservation (and subsequent allocation) of numbering resources, including geographic number blocks
 - The application for numbers can be done in a 5-10 page document
 - Requires justification, details on technical infrastructure and call routing details etc.
 - Fees to be paid to BIPT are modest for geographic numbers

→ So far so good...

- BUT... Nomadic Voice ECS geographic numbers are subject to special conditions...

❑ Geographic numbers for Nomadic Voice ECS

❖ Belgian situation is very peculiar

- Ministerial Decree for each provider, instituting exception (Art. 19§2 of the (old) Royal Decree on the management of the numbering plan)

❖ Belgium is one of a limited number of EU countries to allow nomadic use of geo numbers outside geo telephone zones, but subject to substantial restrictive conditions

- Geo numbers allocation to provider as a precarious exemption, subject to potential undoing of the exemption if the Royal Decree is modified (with 1 year transition if the exemption would be withdrawn)
- Geo numbers must be allocated initially in the correct telephone zone where the users (individuals or businesses) have their main Internet connection
- Prohibition on providing access to emergency services (but foreshadowing possible change, converting the prohibition into an obligation)
- Each subscriber must be informed individually, 3 times per year, of the differences between PATS and Nomadic VoIP ECS, specifically regarding access to emergency services

→ Real question as to whether this is a viable regime for providers...

□ Number portability for geographic numbers

- ❖ Nomadic Voice ECS are currently prevented from participating fully in number portability
 - The Law of 13 June 2005 creates rights to portability only for users of PATS *(it is silent on ECS – but ...‘everything that is not prohibited is allowed’...)*
(it is clear that there is no legally confirmed right to portability between Nomadic Voice ECS)
(the law can be interpreted as creating right for PATS users to request porting of their number to ECS)
 - BIPT and CRDC database contain flags indicating ‘no right and obligation of number portability’
(legal basis unclear)
 - Traditional operators refuse to port-out geographic numbers to third party Nomadic Voice ECS
(discussion has occurred on transferring numbers from their own PATS to their own Nomadic Voice ECS)

→ **Real question as to whether Belgian (nomadic) Voice ECS can attract customers...**

□ Number portability for geographic numbers

❖ The BIPT consultation document of 24 March 2006 – consultation duration is 6 weeks) states that:

- The Ministerial Decrees prevent PATS operators from using the numbers allocated to them under PATS status for Nomadic VoIP ECS (they must apply for new geographic number ranges)
- Subscribers of PATS have the right to port their number to Nomadic VoIP ECS, but are not entitled to use these numbers for Nomadic VoIP
- The emergency response organisations refuse to accept calls from nomadic users (irrespective of the providers' regulatory qualification)
- The overall conclusion is that the only way for a provider to have access to number portability is to adopt PATS status, but PATS status is linked with the provision of access to emergency services... and Nomadic Voice ECS are not entitled to offer this... (by Min. Decree)

→ In Belgium, nomadic voice service can apparently not be PATS

→ Conundrum subject to BIPT proposals and consultation

□ Number portability

❖ The BIPT consultation document of 24 March 2006 – consultation duration is 6 weeks) also proposes:

- Promotion of participation of as many providers as possible in the CRDC for number portability, including by a *'more equitable cost-sharing for small providers'*

→ **Signals that Belgian situation (portability, emergency access) might evolve in the future?**

- ❑ Access to emergency services and routing of emergency calls
 - ❖ Nomadic Voice ECS are currently prohibited (by Ministerial Decrees) from providing access to emergency services; PATS are obliged to provide it
 - ❖ The BIPT consultation document of 24 March 2006 – consultation duration is 6 weeks) proposes:
 - Creation of a **working group** to further clarify the situation of emergency access and routing for Nomadic VoIP ECS
 - Permitting Nomadic VoIP operators to accede to PATS status as a **transitional regime**, whereby their **issue with emergency services is recognised as not resulting from their own choices, but from the refusal of the emergency response organisations to accept calls without location information**
- ➔ **Will operators have to meet all PATS obligations except correct emergency call routing? Or no emergency calls at all? Will the working cover also routing solutions? → When??**
(see ERG Statement, see also USA developments)

- ❑ Lawful interception and data retention
 - ❖ Is applicable to all providers of electronic communications services, regardless of their telecommunications-regulatory categorisation
 - ❖ Not an appropriate topic to discuss in a public presentation
 - ❑ Universal service (financing, social tariffs, etc.)
 - ❖ Is applicable to all 'operators' under the Law of 13 June 2005, i.e. ECS, PATS (which is a super-set of ECS) and to resellers (which are considered 'operators')
 - ❖ Secondary regulations not yet adopted
- Severe concerns about compatibility with EU directives**

EU and BE regulation	PECS (EU)	Nomadic VoIP (BE)	PATS (EU & BE)
Right to obtain numbering resources including geographic numbers	√	√ (conditions)	√
(Right to provide) number portability (it is an explicit user right for PATS; no statement ECS)	(√) / (X)	X (? BIPT consult)	√
Right and obligation to negotiate interconnection (ensuring service interoperability)	√	√	√
Providing access to emergency services + location information (when technically feasible)	X	√? (Law) X (Min Decree) (? BIPT consult)	√
Obligation of ensuring the integrity of networks/securing against unauthorised access	X	√	√
Obligation to apply end-user protection rules (contractual, tariffs and billing, QoS)	X/ √	X/ √ (QoS)	√
Obligation to provide info to directory and enquiry services	√ (if they have numbers)	X (Law)	√
Obligation to provide directories and enquiry services	X	X	√

- Draft BIPT Market Analyses contain proposed principles on VoIP
 - ❖ Retail markets (M3-6): retail telephone calls
 - **Voice over Broadband (PATS) with QoS**, as offered by Telenet, Belgacom, Coditel, Scarlet, Versatel, COLT, etc... is considered substitutable with traditional retail telephone service, and therefore included in the relevant markets
 - **Network-independent VoIP without QoS, Nomadic Voice ECS (PECS)**, as offered by RealROOT/Packetnet, 3 Stars Net, WeePee, etc. (Telenet and Belgacom soon to follow?). Conclusions from substitutability analysis not very explicit; apparently not proposed to be included in the relevant markets → subject for clarification?
 - **Network-independent VoIP without allocation of numbers**, as offered by SkypeOUT, Yahoo, MSN, Parlino, etc. is considered non-substitutable, and therefore not included in the relevant markets
- **VoIP unlikely to cause a swing effect changing market situation and extent of regulation (on Belgacom)**

- ❑ Draft BIPT Market Analyses contain proposed principles on VoIP
 - ❖ Wholesale market (M9): fixed call termination
 - No distinction between PSTN/ISDN and VoB/VoIP for the purposes of call termination
 - Special obligations for Belgacom (essentially the same as exist today, including non-discrimination, publication of reference offer, cost-orientation, etc.)
 - Alternative operators to become subject to transparency (publication of their wholesale call termination charges) and price control (maximum wholesale call termination charges determined by BIPT)
- **Change for altnets... → “corrected collectivist” approach**
- **VoIP becomes part of traditional interconnection regulation**
- **Considerations for on-net call pricing strategies**

- ❑ BIPT Council Decision of 30 March 2006: Provisional Measures (duration 1 month from 7 April 2006)
 - ❖ Wholesale call termination to Nomadic VoIP ECS is part of interconnection regime
 - ❖ BIPT intervention to require number implementation by Belgacom and ensure end-to-end connectivity to enable termination (and transit) of calls to Telenet Nomadic VoIP ECS geo numbers
 - ❖ Belgacom and Telenet must negotiate in good faith on applicable interconnect charges; in the meantime Telenet's traditional (higher) charges apply, unless the parties agree otherwise
- **Highlights serious issues for number block implementation and call routing, notably existing also between alternative operators in the context of Nomadic Voice ECS**

- All is not well in Belgian VoIP-environment
 - ❖ Serious questions on categorisation remain; focus has been on Nomadic Voice ECS; BIPT has legally established mandate to promote competition; this covers also other innovative services
 - LACK OF LEGAL CERTAINTY; RISK OF DELAYS, AGAIN...
 - ❖ Peculiar role of emergency organisations
 - REAL QUESTIONS ON LEGALITY OF POSITION
 - ❖ Numbering conditions and number portability situation for non-PATS
 - OBSTACLE TO ATTRACTING CUSTOMERS
 - ❖ Concerns remain on customer lock-in and interminable legal/regulatory battles
 - OBSTACLE TO VOIP SERVICE DEVELOPMENTS
 - ❖ Lack of harmonisation in EU prevents launching non-PATS pan-EU VoIP
 - SINGLE EUROPEAN MARKET OPPORTUNITY SQUANDERED
 - GLOBAL COMPETITION; EU COMMISSION / ERG ACTION NEEDED?

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