

INTUG

Everything over IP an IP interface on everything but is access to be universal?

Ewan Sutherland

Executive Director

**International Telecommunications
Users Group**

ewan at intug.net

Keidanren, Tokyo 18 May 2005

www.INTUG.net

INTUG contents

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- Internet Protocol on every device
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- conclusions and issues

INTUG what is INTUG?

- members:
 - national associations
 - corporations
 - individuals
- activities:
 - ITU and WTO
 - OECD
 - APEC TEL, CITEL and EU

INTUG our aims

- real and effective competition
- genuine choice for users
- lower prices
- higher quality
- more innovative services
- constructive co-operation with:
 - international bodies
 - governments
 - regulators

INTUG priorities

1. open access to global mobile networks
2. regulatory best practice
3. liberalization
4. leased lines
5. IP telephony
6. digital divide
7. universal access
8. numbering

INTUG IP telephony

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- many:
 - devices
 - applications
 - services
- rapid development of:
 - markets
 - technologies
- slow evolution of policy and regulation

INTUG IP-VPNs

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- being rapidly deployed by multi-national corporations
- softphones on lap-tops to reduce roaming charges
- IP is seldom mentioned in regulations
- regulatory uncertainty in:
 - break-out to PSTN?
 - break-in from PSTN?
 - use of security hardware and software
- difficulties in obtaining:
 - Service Level Agreements
 - integration with mobile networks
 - MPLS inter-operability

INTUG VoIP as an application

- can be a simple download
- instant messaging (ICQ, Yahoo, etc.)
- Skype:
 - is not a service
 - already reached 2,500,000 concurrent users
 - shows on-line status of “buddies”
 - can be embedded in a PDA
 - SkypeOut and SkypeIn gateways to the PSTN
- games consoles with voice (and Wi-Fi):
 - Nintendo DS and Sony PSP
- Oakley and Motorola bluetooth sunglasses

INTUG United States of America

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- supposedly light regulation, but:
 - must contribute to universal service fund
 - must be engineered to allow wire-tapping
 - obliged to provide access to emergency services
- however, call rates are not regulated
- federal government has almost excluded the states from regulation and taxation of VoIP
- some states have begun litigation on access to emergency services
- FCC has ruled against blocking VoIP
- uncertainty on payment of access charges
- many legal challenges still to be heard

INTUG European Union

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- technology neutrality is a principle, so market definitions are unaffected by VoIP
- definitions in directives have created problems:
 - number portability
 - access to emergency services
 - entries in national directories
- is the service:
 - voice telephony?
 - nomadic?
 - origination and termination without access?
- European Regulators Group (ERG) favourable to VoIP
- study by Analysys and public consultation by EC
- risks of legal complexity tied up in courts for years
- EC Treaty forbids barriers to cross-border services

INTUG challenges for 3GSM operators

- Arun Sarin (CEO, Vodafone) thinks VoIP is 3-5 years away from mobile operators
- VoIP “prices” make fixed-to-mobile calls look yet more expensive:
 - for many, the only itemised call charges
- can MNOs move to a “flat fee” model?
 - for subscription customers?
 - for pre-paid customers?
- VoIP over EDGE or UMTS?
 - too expensive with per Megabyte charges
 - unnecessary with flat rate voice fees

INTUG security challenges

- emergency services:
 - access to
 - provision of location information
- personal/corporate security:
 - denial of service attacks
 - viruses, worms, trojans and other malware
 - SPIT - SPam over Internet Telephony
- law enforcement authorities:
 - provision for wire tapping
 - data preservation
 - data retention

INTUG challenges for policy makers

- declining cost of basic telephony
- increasing range and richness of services and applications
- blurring of traditional distinctions
 - how is VoIP different from CPS?
- change undermines:
 - mechanisms to fund universal service
 - the regulatory regime
 - the established operators
 - fixed opinions

INTUG challenges for regulators

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- definition:
 - one service or many?
 - how to distinguish types?
- assignment of telephone numbers:
 - geographic and/or non-geographic
 - “nomadic”
 - secondary numbers (other cities, ex-patriates)
- quality of service:
 - defining
 - measuring
 - publishing and enforcing
- anti-competitive effects of bundling services

INTUG universal service

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- original meaning in USA was only interconnection of all networks
- policies have never delivered true universality of voice telephony
- frequently used to protect the incumbent operator
- sometimes large transfer of money to incumbent operator from competitors
- the scope is now being challenged
- some funding mechanisms cannot last

INTUG competition policy

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- need to ensure universal service policy increases competition and not the reverse
- disaggregate universal service:
 - different elements
 - geography
- invite in more players
- European Union has rules for:
 - state aid for service
 - obligatory tendering process for transparency
 - open access to infrastructure

INTUG United States of America

- enormous schemes:
 - rural subsidies
 - e-rate for schools and colleges
- funded from federal taxes:
 - on long distance and international calls
 - but rapidly declining tax base
 - so rising tax rates
- not sustainable in the medium term

Some additional state taxes on mobiles.

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- 2002 legislation:
 - obligation on countries to assign an operator
 - operators may request a universal service fund
 - however, the “burden” is often unfunded
 - many intangible benefits
 - minor change in the scope
- review due in 2005:
 - will it add broadband access?
(but what speed? what price?)
 - is there new money from general taxation?
 - will mobile operators be eligible to receive payments?

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- major geographic challenges
- politicised by the (constantly) impending sale of Telstra
- focus on technical performance
- an expectation of “broadband” in the bush
- rural markets are severely curtailed by long history of anti-competitive behaviour of Telstra
- satellite is likely to require enduring subsidies

INTUG ubiquitous network society

- next stage in the information society
- search for new economic growth
- device technologies look promising
- unclear where the competition will be
 - service portability between networks?
 - access to services of user's choice?

Some lessons to learn from the problems in foreign countries in the adoption of i-mode.

INTUG conclusions

- IP is ubiquitous:
 - carries all services and applications
 - appliances will all have IP interface
- voice telephony is no longer a distinct service, it is part of a suite of communications
- universal service:
 - scope challenged
 - funding mechanisms challenged

INTUG issues

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- how to maximise the contribution of the market?
- how to minimise politico-regulatory game playing?
- ensuring we keep options open for:
 - policy-makers
 - regulators

INTUG thank you

Ewan Sutherland
International Telecommunications Users Group
Reyerslaan 80
B-1030 Brussels
Belgium

+32.2.706.8255

ewan at intug.net

<http://www.intug.net/ewan.html>

[callto://sutherla](mailto://sutherla)