

Legal Aspect of IPv6 and of the IPv4 to IPv6

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Deployment of IPv6

- Further Development of the Internet
- Depletion of IANA's Central Pool of IPv4 addresses
- Technical appeal

Characteristics of IPv6 Addresses

(i)-Located in every packet of information transmitted

(ii)-Unique identifiers

(iii)-Involves privacy and confidence issues.

Acceptance & Deployment of IPv6

- (i) User's confidence- a must
- (i) Technical properties not enough
- (i) Concern for privacy in US & EU

Legal Issues

(i)- Right to Privacy

(ii) Intellectual Property Rights

Legal Foundation of the right to Privacy

(i)Articles 7&8-EU Charter on
Fundamental Rights

(ii)Council of Europe's 1981
Convention for protection of
Individuals -Re Automatic Processing
of Data

Legal Foundation of the right to Privacy

(iii) Directive 95/46/EC-Processing &
Free movement of data

(iv) Directive 97/66/EC-Telecoms Sector

(v) Directive 22/58/EC-Electronic Sector

Legal Definition of Personal Data

Any information relating to an identified or identifiable natural person (data subject); an identifiable person is one who can be identified directly or indirectly, in particular by reference to an **identification number** or to one or more factors specific to his physical, physiological, mental, economi

The concern with IPv6 address

- (i) Different types of addresses
- (i) Allocation of the 128-bit address poses a privacy issue
- (i) Unique identifier-tracking/identification

Implication regarding privacy

(i)-The right to privacy & protection of data - checks and balances

(ii)New Protocols need to be privacy compliant

(iii)Respect for the anonymity of the user

IPv6 and IPR

(I) Two types of contents

(a)-Protected by IPR

(b) in public domain/unprotected

The Protocol IPSec and IPv6

- (i) Intrinsic and mandatory element of IPv6 for enhancing security of transmission
- (ii) Developed by IETF
- (iii) Can identify the sender and receiver of contents(protected or not)
- (iv) Allows encoding which protects against interception of content by

The Transition from IPv4 to IPv6

Similar situation as for

- (i) Passage from Black & White to Colour TV

The Transition

- (I) Involves substantial investments(
 - (a) upgrading networks(Operators)
 - (b)user's equipment
- (ii) Capacity Building
- (iii) Period of “simulcast”
- (iv) “Switch off” date ???

Transition

- (I) Who has authority to decide on “switch off date”
- (II) No decision making body like a government
- (III) When all networks/user equipment IPv6 compliant?
- (IV) Is the IPv4 and IPv6 co-existence here to stay?

Legacy Addresses

(i) Number resources allocated to legal persons before advent of RIRs

(ii) Valuable assets

(iii) Not within jurisdiction of RIRs

Legal Status of holders of legacy addresses

- (I) Ownership v/s Mere detention
- (I) What are their rights on these addresses?
- (I) The rights of RIRs on these assets?

Legal Pronouncement

- (i) Transfer of IP resources to be effected in terms of standing guidelines and “soft law” developed by RIRs
- (ii) Application of RFC 2050
- (iii) The right to use IP addresses not a property right-non transferable between “holders”

Thank you

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