

# 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

5/21/09