Update from San Diego meeting on IP VPN work in ITU-T SG13

Marco CARUGI
France Télécom R&D
marco.carugi@francetelecom.fr
Minneapolis - March 2001





Work on IP VPNs in ITU-T Study Group 13

- Study Group 13
 - « Multi-protocol and IP-based networks and their internetworking »
- Question 11 of SG13 (end) 2000/(end) 2003 study period
 - « Mechanisms to allow IP-based services using MPLS to operate in public networks »
 - It's the successor of Question 20 which initialized the work on IP VPNs in the previous study period
 - two Draft versions of Recommendations on IP VPNs have been produced up to now
 - Y.1311 "Network based IP VPN Service Generic framework and service requirements"
 - Y.1311.1 "Network based IP VPN over MPLS Architecture"
 - more advanced status than the previous one
 - up to now it also includes requirements (plan to move them into the more generic Y.1311 in a later version)



Most recent steps of this activity

- Official SG13 meeting (Geneva, Nov 00)
 - requirement enhancements to Y.1311.1
 - new structure of Y.1311 document
 - discussion on service model (service/transport decomposition)
- Q11Rapporteur's meeting (Boston, Feb 01): focus on Y.1311.1
 - general editorial revision, addition of references, standard ITU template
 - refinement of requirements' section (QoS & SLSs, security, interworking)
 - some minor additions on technical approaches' section (introductory text on inter-AS(SP) VPN, ...)
 - consensus of participants on launching the process for consent call at the end of next official SG13 meeting (May 01)
 - Y.1311.1 updated version has been sent as "white contribution" for May
 - comments on Q11 mailing list and some (agreed) contributions for May are expected to finalize the Draft Recommendation
 - Y.1311.1 will live, further version(s) expected after first consent



Some details on Y.1311.1 "Network based IP VPN over MPLS Architecture"

- It currently does not cover all spectrum included in IETF PPVPN
 - IP VPNs just over MPLS
 - no CPE-based approaches
 - no Network-based Layer 2 VPN approaches
- Scope
- Abbreviations and references
- Service definitions and reference model
- Service requirements (no distinction among generic, Customer and SP ones)
- Framework architecture
 - learning customer-site reachability information
 - distributing reachability information
 - constrained distribution of routing info
 - LSP tunnel establishment and usage

- Technical approaches for NBVPN
 - 2 identified (based on deployment):
 - BGP/MPLS (2547)
 - Virtual Router
- QoS approaches
 - Point-to-Cloud SLS, Point-to-Point SLS, Cos Transparency
- Inter-AS (SP) VPN (to be developed)
- Interworking between different solutions (to be developed)
- Service Interworking with other VPN architectures (to be developed)



ITU-T Q11/13 - IETF PPVPN synergy

- The synergy is clearly stated in :
 - the PPVPN WG charter
 - the Y.1311.1 (Y.1311) introductory text
- According to that :
 - the PPVPN WG context was presented by myself during the Boston Feb 01 Q11 meeting
 - most of the service requirements produced inside ITU (with implication of several SPs) have been used as input for draft-ietf-ppvpn-requirements-00.txt
- To continue this mutual exchange and cooperation effort
 - Plan to submit, as information for all Q11/13 people, the last versions of framework and requirements IDs and this PPVPN WG meeting's minutes as Temporary Documents for the SG13 May meeting
 - obviously mentioning that it's an ON-GOING work inside IETF





Last versions of Y.1311 and Y.1311.1 Draft Recommendations available on the informal PPVPN server:

http://nbvpn.francetelecom.com/ituRelated.html



