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LIAISON STATEMENT
Ref. TD 268 (WP 4/13) – Annex I

Source: ITU-T Working Party 4/13 (Geneva, 22 May 2008)

Title: Y.2174 (Y.RACF-DistribMPLS), Distributed RACF architecture for MPLS core networks

LIAISON STATEMENT

To: **IETF MPLS Working Group**

Approval: **WP 4/13 meeting**

For: **Information/Comment**

Deadline: **31 July 2008**

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ITU-T SG 13 has received your response to our initial liaison that specified a policy-based resource and admission control framework (aka RACF) for next generation networks in a distributed manner – Y.RACF-DistribMPLS. We have considered your questions and our responses are as follows:

1. Describe the process by which the SBC gateway determines QoS and priority requirements by the so called "Policy Decision and Functional Entity" [PD-FE]?

The process by which the PD-FE determines QoS and priority requirements is fully described in ITU-T Recommendation Y.2111. The PD-FE determines the QoS and priority requirements from the Service Control Layer via the Rs Reference Point. From an implementation perspective, the Policy Decision Function could be located in any physical element such as the Session Border Controller (SBC) or the Proxy-Call Session Control Function (P-CSCF). Potential candidate elements for implementing the PD-FE are for further study.

2. Once the PD-FE QoS and priority requirements have been established by the PD-FE, what is the process by which they are then communicated to the MPLS LER?

As stated in the document, the Session Border Controller CAC function maps the specified requirements into a DiffServ Code Point which is then communicated to the LER via an RSVP PATH message as specified in RFC 3175 and RFC 4804. In particular, Appendix B of RFC 4804 provides a detailed description of how resource requests are communicated to the LER's from the Gateways (which are equivalent to the SBC's in our document) with further processing by the LER's. Both RFC's are normative references in our document.

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3. Describe the expected behavior by the MPLS LER, e.g. the actual mechanism for tunneling.

The establishment of TE-tunnels is expected to be carried out via RSVP-TE again as specified by RFC 3175. The tunnels are assumed to be pre-provisioned between pairs of LER's.

4. What is meant by a PE-FE function as pointed out on page 4 of this document, eg. that an Ingress LER will also possess SBC gateway capabilities?

The generic Policy Enforcement Functional Entity is fully described in ITU-T Recommendation Y.2111. Policy enforcement functionality is currently expected to reside in Media Path functions identified in the Session Border Controller as described in ITU-T Recommendation Y.2012 Supplement 1. These functions are not expected to be duplicated in the LERs. As such, the PE-FE is not part of any LER.

5. What extensions of DS-TE do you expect to have if any to support the PE-FE capability?

DS-TE capabilities are expected to be prevalent only in the LER's in the MPLS core. As referenced in RFC 4804, DS-TE Bandwidth Constraint algorithms come into play when the allocated bandwidth in tunnels of higher priority Class Types need to be increased at the expense of allocated bandwidth in tunnels of lower priority Class Types. These capabilities are not intended for extension into the SBC's and hence, no DS-TE capability is expected in the PE-FE functions in the SBC's.

Please note that Y.2174 (Y.RACF-DistribMPLS) has been consented at the WP 4/13 meeting in May. The consented text is attached.

Attachment: Consented text of Y.2174 (Y.RACF-DistribMPLS) (TD 265 (WP 4/13)).