Comments to Accompany USA Ballot Response on Defect Report 10589/001 (SC6/N7531)

1 Clarification of QoS Handling for Encapsulation

LOCATION: Defect #4.

RATIONALE:

The suggested text to resolve defect number 4 outlines a specific conformant implementation rather than stating the underlying normative requirement. In particular, the solution proposed for defect 4 would result in the following new text for item d) 1) of clause 7.2.10.4 of ISO 10589:

```
Copy the QoS Maintenance field (if present in the encapsulated PDU)
to the encapsulating PDU. Change the field to indicated routeing by
the Default routeing metric if necessary.  if the ISO 8473 PDU doest
not contain a QoS Maintenance field, the IS shall include the QoS Maintenance
field in the encapsulating PDU and indicate routeing by the default
routeing metric.
```

This text appears in a list introduced by the words `"...the IS shall"`, and hence requires an IS to preform three operations: a) copy the QoS field, b) change the QoS metric to default if it is not already equal to the value, and c) add a QoS metric with value default if the encapsulated PDU contained no QoS metric.

Regardless of the presence, absence, of value of the QoS field in the inner (encapsulated) PDU, these steps in all cases lead to a single possible end result: the header of the outer (encapsulating) PDU must indicate routeing according to the default metric. Hence, the current proposed "copy", "check", and "add" steps are in fact only one possible way to achieve the actual normative requirement, which is that the header of the outer (encapsulating) PDU indicate routeing by the default metric. Note that another possible implementation of this requirement would be to include no QoS parameter at all in the outer header. According to ISO 10589 7.4.2.a this will also result in routeing according to the default metric.

PROPOSAL:

Clause 7.2.10.4, item d) 1) should be recast in terms of the normative requirement, rather than outlining one possible method for satisfying that requirement. The USA proposes that the existing text of clause 7.2.10.4, item d) 1) be replaced with the following new text:

```
insure that the header of the encapsulating PDU indicates routeing by
the default metric.  Routeing by the default metric can be indicated
either by including a QoS parameter with its bits set in accordance
with Table 1, or by carrying no QoS parameter at all (see 7.4.2 item
"a").
```

A similar change is also needed in clause 7.4.3.2, changing the next to last sentence (`"Set the QoS Maintenance ..."`) to read:

```
Set the header of the outer PDU to indicate forwarding via the default
routeing metric (see 7.2.10.4, item "d").
```

2 Alternative Multicast addresses for Token Ring LANs

LOCATION: Defect #9

RATIONALE:

Defect #9 points out potential problems with the use of the ISO 8802-5 alternative multi-destination addresses in bridged heterogenous LAN environments. The defect report notes that the regional workshops have been addressing this issue in the context of their functional profile work for MAC Service Bridges ("RD Profiles") and ISO 10589. At the time of its generation, the defect report suggested that no action be taken pending harmonization of regional workshop positions on this issue.

Since this time the workshops have harmonized (see Attachment A) on requiring the use of the general ISO 8802 multi-destination addresses when operating ISO 10589 on token ring LANs and have reflected this agreement in the draft ISP for token ring bridges (RD53).

Given the interoperability problems noted in the defect report and the subsequent general agreement to only use the multi-destination addresses specified in Table 9 when operating on token ring LANs, it is proposed that ISO 10589 be modified to make this behavior mandatory for conformance to the base standard.

PROPOSAL:

Remove the alternative token ring multi-destination addresses from clause 8.4.8 as follows:

1. Delete the phrase "`, other than ISO 8802-5,`" from the first sentence of the second paragraph of clause 8.4.8.
2. Delete the third paragraph and the note and warning that follows it.
3. Delete Table 10.