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ATM Forum Document Number: ATM Forum/96-1268

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Title: MIMO Frame Latency Metric - Revised Definition

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Abstract:

MIMO latency is extended to cover the case of discontinguous input
frames.

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Source:

Raj Jain, Gojko Babic
The Ohio State University

Raj Jain is now at Washington University in Saint Louis, jain@cse.wustl.edu http://www.cse.wustl.edu/~jain/

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The MIMO latency as currently defined in the baseline document is:

MIMO = Min{LILO, FILO - NFOT}

Where:
LILO = Last-bit in to last-bit out time for the frame
FILO = First-bit in to the last-bit out time
NFOT = Normalized frame output time = Frame size/output link rate

This definition assumes that the input to the network is contiguous.

In the last ATM Forum meeting, the issue of discontiguous input
frames was brought up. To handle this case, NFOT needs to be defined
as follows:

NFOT = Normalized Frame Output Time = FILI*Input Link Rate/Output
Link Rate

Where,
FILI = First-bit in to last-bit in time (includes all gaps)

This modified definition works for contiguous and discontigous inputs. In particular, note that if the input frame is contiguous, FILI*Input Link Rate is equal to frame size and so the previous definition is a special case of this more general definition.

A list of all possible cases and how this modified definition handles them will be presented at the forum.