Reactive Congestion Management: Capturing constraints

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Constraints discussed during interim

General agreement to limit the scope

- **Add constraints & scope into 5 criteria**

    Broad market potential

    Distinct identity

    Compatibility

    Technical feasibility

    Economic feasibility

- **Hugh's interpretation of discussions…**

Broad Market Potential

"short reach networks"

- b/w delay product < 64kbit (best number for this?)
  - Defined in typical packet lengths?

- Single administrative domain

Distinct Identity

- **Encapsulation of traffic across CM network not in scope**

- **No requirement for or restriction of admission control**

- **Reactive (not prescriptive), end-to-end (not link level) mechanism**

Compatibility

- **CM cloud definition**

    CM cloud consists of only CM compliant bridges

    and attached CM compliant end stations.

- **Cloud operates at 1 or more priority level**

    Allows non-CM traffic flow through at different priority

- **No change to 802.1Q queue structure in bridge**

- **No change to transmission selection algorithm in bridge**

Technical Feasibility

- **Fractional line rate response**

  Congestion point generating BCNs

  Reaction point adjusting rate limiter

- **Implementable in hardware**

  (assumed new hardware standard)

Economic Feasibility

- **No per flow queuing or state in bridge**

- **Minimal flow state in end station**

    Allowance for complexity / optimization tradeoffs