# 64th IETF Meeting - November 2005
## IPPM Working Group

## dratf-ippm-stephan-multimetrics-02.txt

## Spatial and Multicast Metrics

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# Presentation Overview

o Draft overview

o One new metric

  • Type-P-subpath-One-way-Delay-Stream

o Benefits of this metric

  • Pure passive measurement

  • Composition of metric

# draft Overview

o **Version 1**
- one-to-group metrics
  - Mean: Overall QoS for a group of users;
  - Variation: Qos difference between users;

- Spatial metrics
  - End to End performance decomposition
  - Segment performance

o **Current version changes**
- One new metric
  - Type-P-subpath-One-way-Delay-Stream

# Version 2 : One new metric
## Type-P-subpath-One-way-Delay-Stream

"A sequence of one-way delays between 2 hops"

o   Like RFC2679 One-way-Delay-Stream

o   Between 2 hops instead of Src and Dst

o   Based on spatial one-way Delay definition

# Type-P-subpath-One-way-Delay-Stream & pure massive measurement

o  Delay between 2 points of a path
  - Packet may be end-user packet
    - See PSAMP WG packet selection effort

o  Methodology :
  - Spatial: e2e measure & passive observation
  - Pure Passive: Observation only

o  Common definition for both methodologies

o  Next step:
  - Defines passive-One-way-Delay-Stream
  - Based on subpath-One-way-Delay-Stream
  - Benefits:
    - Clearly details passive methodology aspects
    - Usage for composition (See AI Draft)

# Connection with composition metric draft draft-morton-ippm-composition-01.txt

o      Implicit decomposition for
-    Type-P-One-way-Delay-Poisson-stream [RFC2679]
-    Type-P-One-way-Delay-Periodic-Stream [RFC3432]

o      Contribute to a clear composition framework

-    one-way Delay streams
  -    Segment performance
    - o    Composition
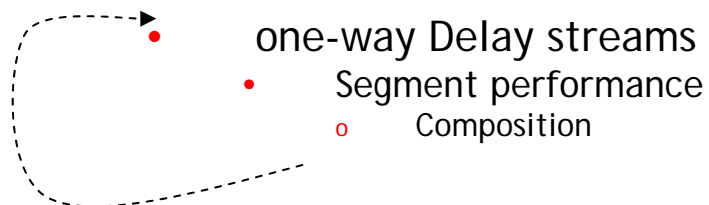
o      one-way Delay streams
-    Type-P-One-way-Delay-Poisson-Stream [RFC2679];
-    Type-P-One-way-Delay-Periodic-Stream [RFC3432];
-    Type-P-One-way-Composition-Stream [composition draft]
-    Type-P-subpath-One-way-Delay-Stream [multimetric draft]

# Discussion

o   Items to discuss

- Pure passive metric

- Composition framework

- Area Director feed back