Latency is Broken – Let's FIX it

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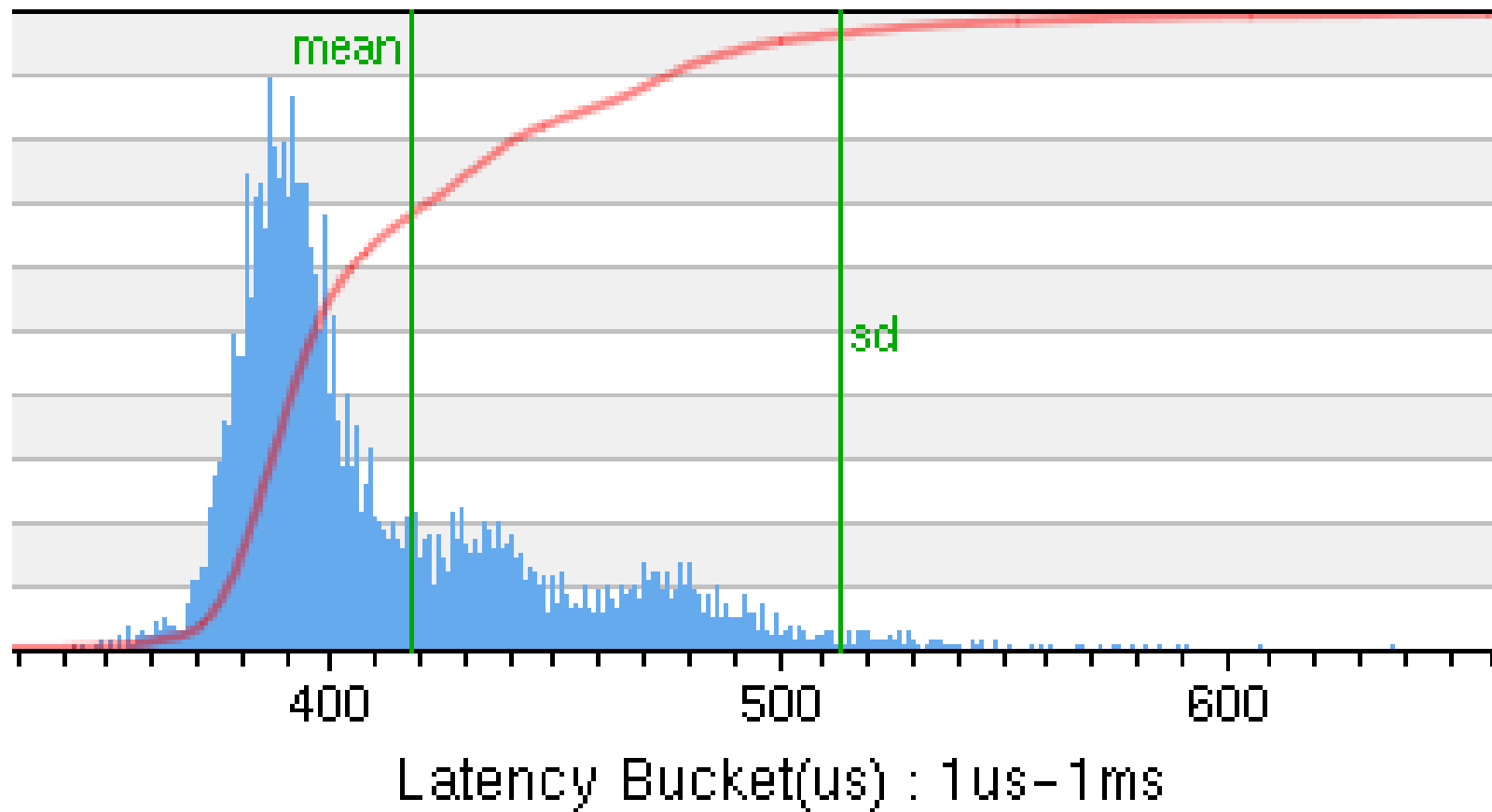Co-Chair FIX Inter-Party Latency Working Group

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Business Drivers for Low Latency

- Algorithmic trading

- High frequency trading (HFT)

- Competition between execution venues

- Competition between prime brokerage service providers

- Competition between traders for arbitrage opportunities

Consequences of "Latency Arms Race"

- Significant investment in low latency technologies

- Customers demanding performance transparency

- Emergence of discipline of Latency Management

- To manage something, you must measure it

- Result = Latency Monitoring

Latency is not a number – it is a "distribution"

"Latency is Broken"

- No standard latency measurement methodology

- Difficult to compare latency data published brokers or exchanges

- No standard for exchange of inter-party latency data

- Results in vendor lock-in and slows adoption

- Standardization needed to:

    - Accelerate the adoption of latency management

    - Lower costs for market participants
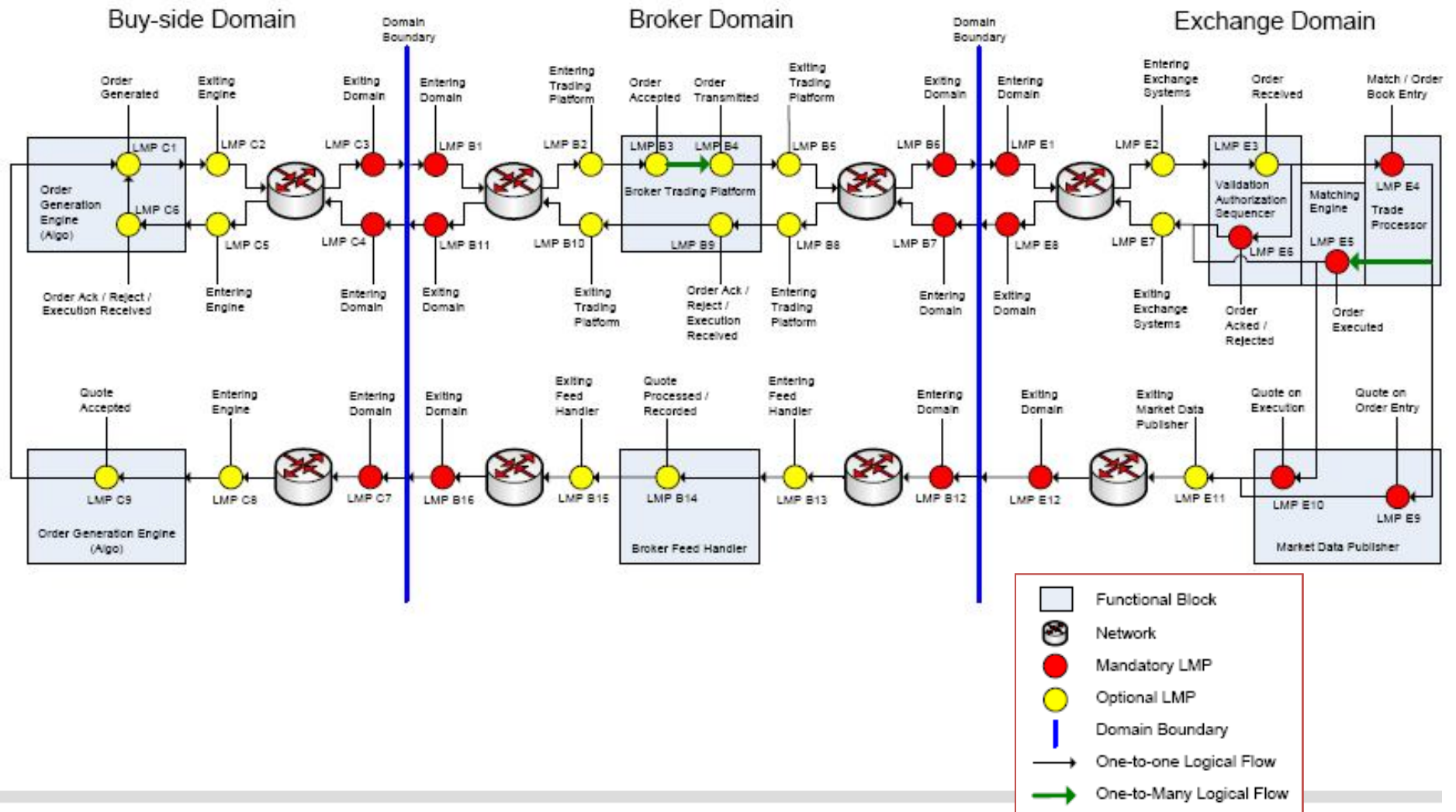
    - Improve transparency

"Let's FIX It"

FPL formed the FIX Inter-Party Latency Working Group in Q1 2010

180+ members representing broad industry participation

FIX IPL standardization goals:

- Define a standard latency measurement methodology

- Define a standard for exchange of inter-party latency data

- Aim to release Version 1 in Q4 2011

- Released with an open source reference implementation

FIX IPL Reference Topology

FIX IPL Interoperability Message Prototype Ver 0.1

IPL Information Message

Field	Field Type	Mandatory/Optional	Field Definition
MsgLength	Unsigned32	Mandatory	Length of the entire message including the MsgLength field.
MsgType	Unsigned16	Mandatory	Reference to Template definition.
MsgVersion	Unsigned16	Mandatory	Reference to Template definition.
ServiceProviderID	Unsigned32	Mandatory	First implementation: can be set to zeros. In future implementations, ServiceProviderID will be allocated by FPL.
AppMsgID	Unsigned32	Mandatory	Up to Service Provider to determine. Recommendation is to create a 32-bit hash of key fields in the message.
MeasurePointID	Unsigned32	Mandatory	As defined in the ServiceProviderID's IPL Document.
Timestamp	Unsigned64	Mandatory	See Open Issue 2