



QUALITY OF EMERGING SERVICES

Focus Area Editor:	Kelly Krick
Focus Area Champion:	Bill Hoberg
Focus Area Session Chair	Masyuki Murata
<u>Participants</u>	

- [Definition](#)
- [Metrics](#)
- **World Class Performance**
- **Best Practices**
- **Best-in-Class Recognition**

I. DEFINITION

Quality of Emerging Services is based on the platforms and capabilities to deliver those services. As such a definition of the emerging services are required. Emerging services are those introduced within the last 5 years or significantly launched throughout the telecommunications networks within the last 5 years. (Internet qualifies as an emerging service.)

Internet & Multimedia

- Dial-up Access
- Dedicated Access
- IP Voice
 - IP Radio
 - IP Telephony
- Video
 - Broadcast
 - 2 way/Conferencing
- Multicasting Multimedia
- Multimedia on demand
- Information "Browsing"
- Virtual Private Network
- Email+
- Chat

- Electronic Bulletin Board
- Entertainment & Games
 - Multi-party games
- Web Publishing
- Web/Email Advertising
- Broker/Stocks
- Medical Services
- Virtual Reality
- Electronic Commerce
 - Electronic Cash (Banking)
 - Trusted 3rd Parties
 - Key Management
 - Digital Signature
 - Secure Sockets

Mobile Remote Communications/Wireless

- Satellite
 - Broadcast Video Distribution
 - Internet Access (Downlink)
 - Imarsat
 - LEO
 - Iridium
 - Global Star
- Cellular
 - Analog
 - Digital
 - TDMA
 - GSM
 - CDMA
- Global Positioning System (Location)
 - Intelligent Transportation System
- Paging w/ text or voice
- Internet Access
- Remote Sensing
- Wireless LANs
- Packet Data Transport
- Email
- Point to Multipoint Video
- FAX
- Global Network

Broadband

- Cell Relay
- Permanent Virtual Circuits
- Switched Virtual Circuits

Multi-media Access Asymmetric
Asymmetric
 ADSL
 Cable TV
 Internet Access
 Telephony
 Video Broadcast
 Digital Satellite
Symmetric
 Frame Relay
 Switched Mega Data Service
 ATM

Quality of Emerging Services is not based on plain old telephone service (POTS)

II. METRICS

Quality of Emerging Services can best be measured by establishing attributes of quality and refining those attributes into metric definitions. Below are listed the attributes from this workshop. Subsequent workshops need to focus on the definitions for these attributes. Once accomplished, the metrics could be collected and weighted and would be valuable to base decisions.

Attributes

Product/Service related attributes

Performance

- Error Free
- Latency/Throughput
- Availability
- Speed
- Response Time
- Access Time
- Good Quality
- Accuracy

Reliability

- Availability
- Mean time to repair
- Delivery – Status/Confirmation
- Robustness
- Two Phase Commit (Transactions)
- Dependability
- Session Stability
- Scope of Measurement (Global vs. Local)

Friendly / Usability

- Congestion Friendly
- User Friendly
- Easy Service Portability
- Adaptability
- Expandability
- Flexibility
- Maintainability

Security

- Availability
- Privacy
- Confidentiality
- Integrity
- Accountability

Business related attributes

Effective Customer Support
 Technical Support
 Billing
 Provisioning
 Cessation

Customer Business Fit
 Cost Effective
 Provides Value
 Features & Functionality
 Satisfies Customer Needs – On budget, Timely, and Fit for purpose
 Effectiveness

Differential Guarantee Service
 Priority
 Best Effort vs. Guarantee
 Service Level Agreements (Variety and Measurements)

III. PARTICIPANTS

The working group participants consisted of the following industry professionals.

Name	Affiliation
Chen, Chi-Ming	AT&T
Doran, Marvin	Nortel
Ekholdt, Roald	Norwegian Post & Tele. Auth.
Friedmann, John	AT&T
Fujita, Yasuyuki	Osaka University
Harrison, John	British Telecom
Hasegawa, Go	Osaka University
Hoberg, William	Lucent Technologies
Krick, Kelly	Nortel
Luckenbaugh, Gary	Lockheed Martin
Mase, Kenichi	NTT
Murata, Masayuki	Osaka University
Pennington, William	DSC
Zamanali, Jalal	University of Maryland