

SLA HANDBOOK AND
INTRODUCTION TO JOINT INITIATIVE
Malcolm Sinton

AGENDA

- T MF SLA Handbook –GB 917;
- T MF SLA Handbook W G and OG QoS Forum Liaison Initiative;
- Best Practices Assuring QoS via SLAs.

SLA HANDBOOK

Background Documents

- GB 917 – SLA Management Handbook;
- TMF 701 – Performance Measures and Concepts;
- NMF 503 – Service Provider to Customer Performance Reporting Business Agreement;
- NMF 506 – Service Quality Management Business Agreement.



Currently work is to convert GB 917 into a 3 Volume structure aimed at Telcos, Service Providers(SP), Third Party SPs, Suppliers (equipment/system vendors) and Customers

Volume 1 – Executive Business View

- An Executive Summary for busy Corporate Executives highlighting:
 - Industry Requirements and primary drivers for SLAs;
 - Motivation for SLA management;
 - Current SLA Assessment;
 - Service Categories;
 - What Executives do next.

Volume 2 – Architectural Principles

- For CTO, ITO type manager readership to give:
 - More in-depth view of what SLAs are about (parameters, metrics thresholds)
 - How to create and manage SLAs
 - Interconnecting systems between Operators and technologies
 - What managers do next
 - Interdependency on TOM/eTOM

Volume 3 – Applications and Examples

- Provide examples of parameters, measurements and threshold Management;
- Interface to associated systems(sub) based on TOM/eTOM;
- Application examples taken from GB 917;
- Relate to technology and service specific and independent parameters.

Current Status

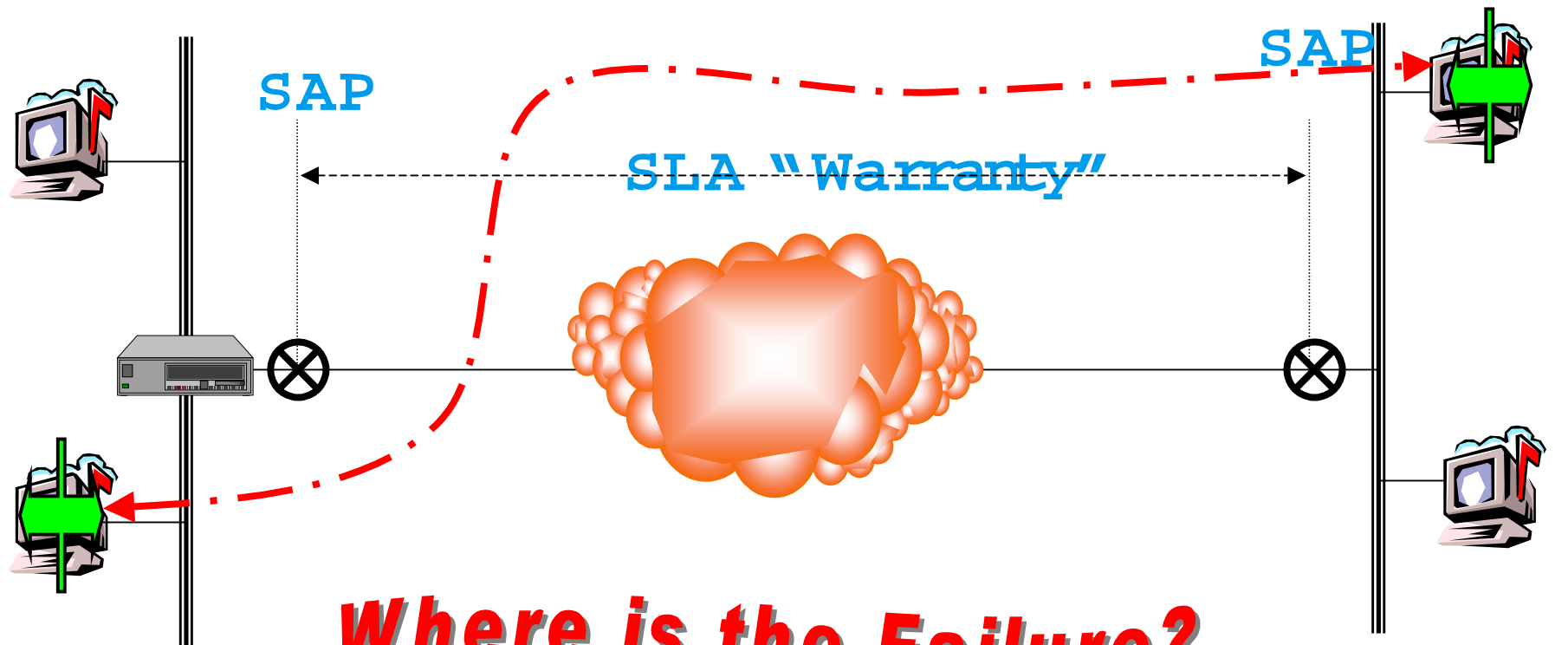
- Volume 1:
 - PowerPoint presentation prepared
 - Structure agreed
 - Much text incorporated
- Volume 2:
 - Structure agreed
 - Some text available
- Volume 3:
 - Structure agreed
 - Some text available

Basic Concepts

- End-to-End Business Requirement;
- Domains of Responsibility;
- Performance Requirements "Flow Thru";
- Life Cycle of Service;
- Parameter Framework;
- Interface to TOM/eTOM;
- Management of Measurements.

End-to-End Business Requirements

Application Performance



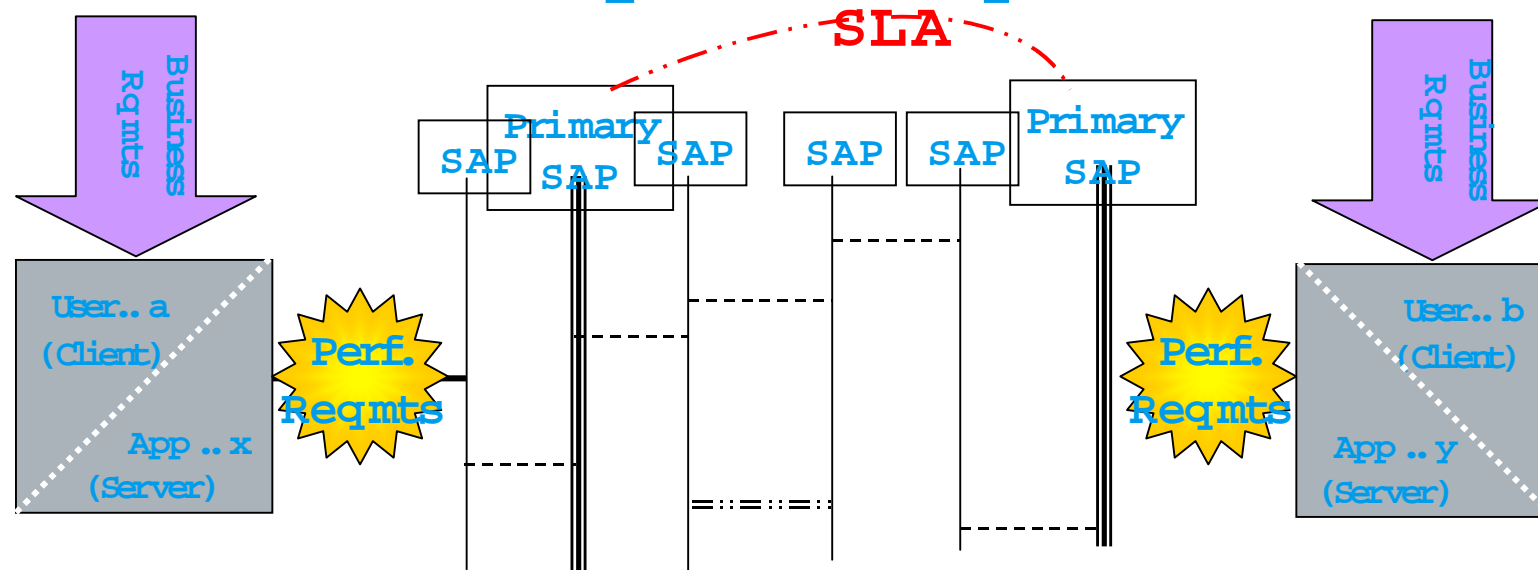
Where is the Failure?

Measurement Access Point

QinetiQ

Domains of Responsibility

Domains of Responsibility

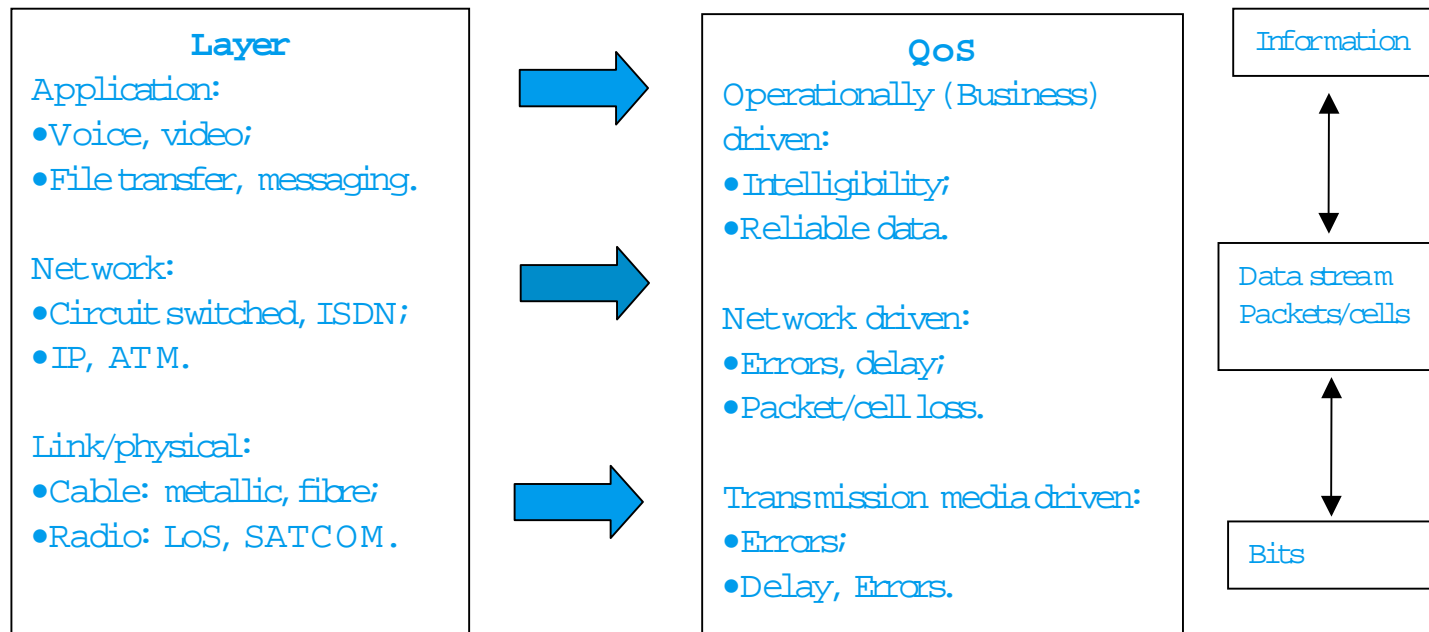


- A SAP exists at each change in Administrative responsibility. The Primary function of the SAP is to define the contractual responsibilities between two parties through a SLA.
- Administrative boundaries typically exist between SPs, NOs, internal IT dept which may or may not require mapping or allocating performance for each parameter across the boundary.
- Performance requirements must be consistently supported across each boundary.

Performance Requirements Flow Through

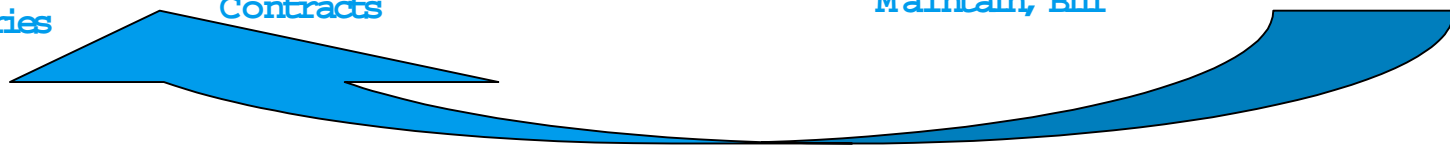
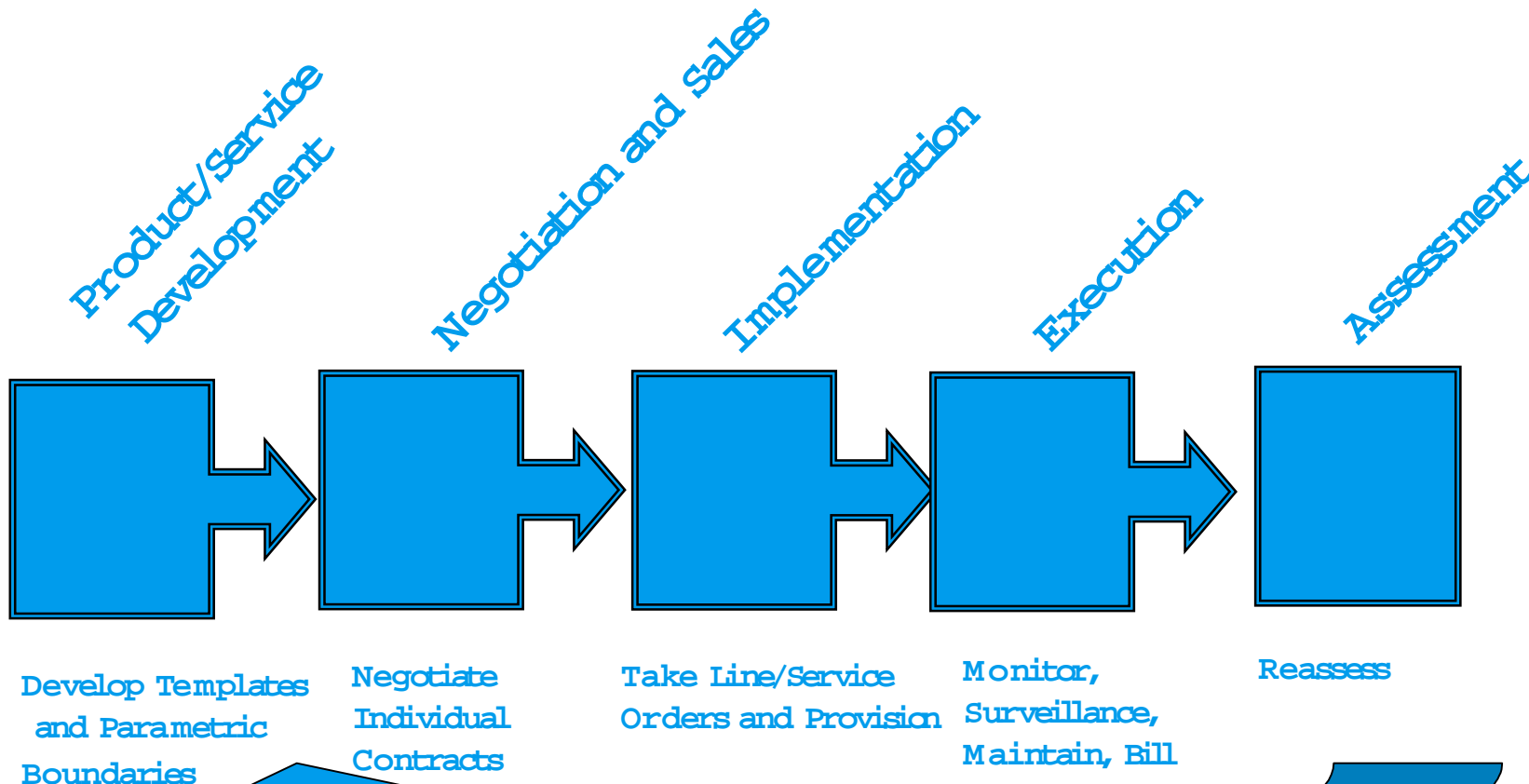
QoS relating to ISO stack

Example QoS at various layers



Service Life Cycle

Service Life Cycle



Typical SLA Life Cycle



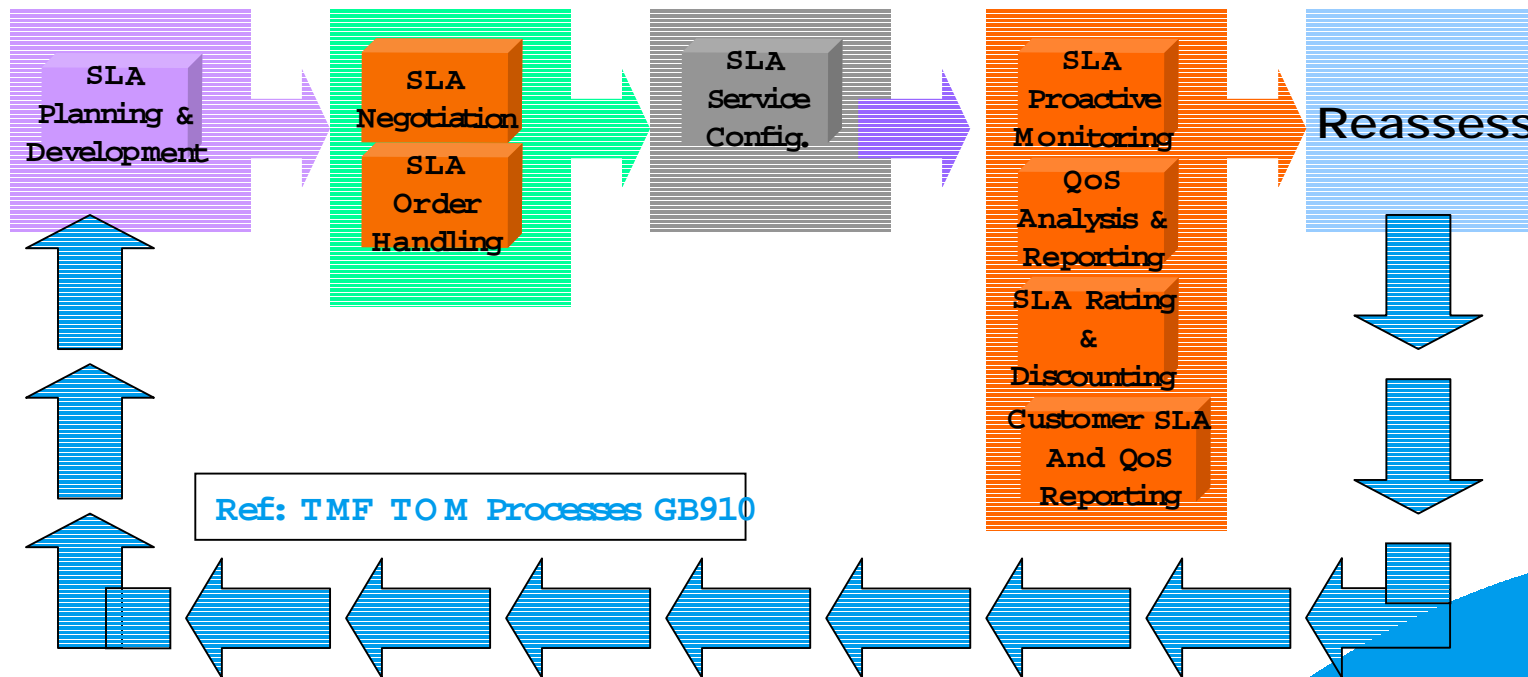
Product/Service Development

Negotiation & Sales

Implementation

Execution

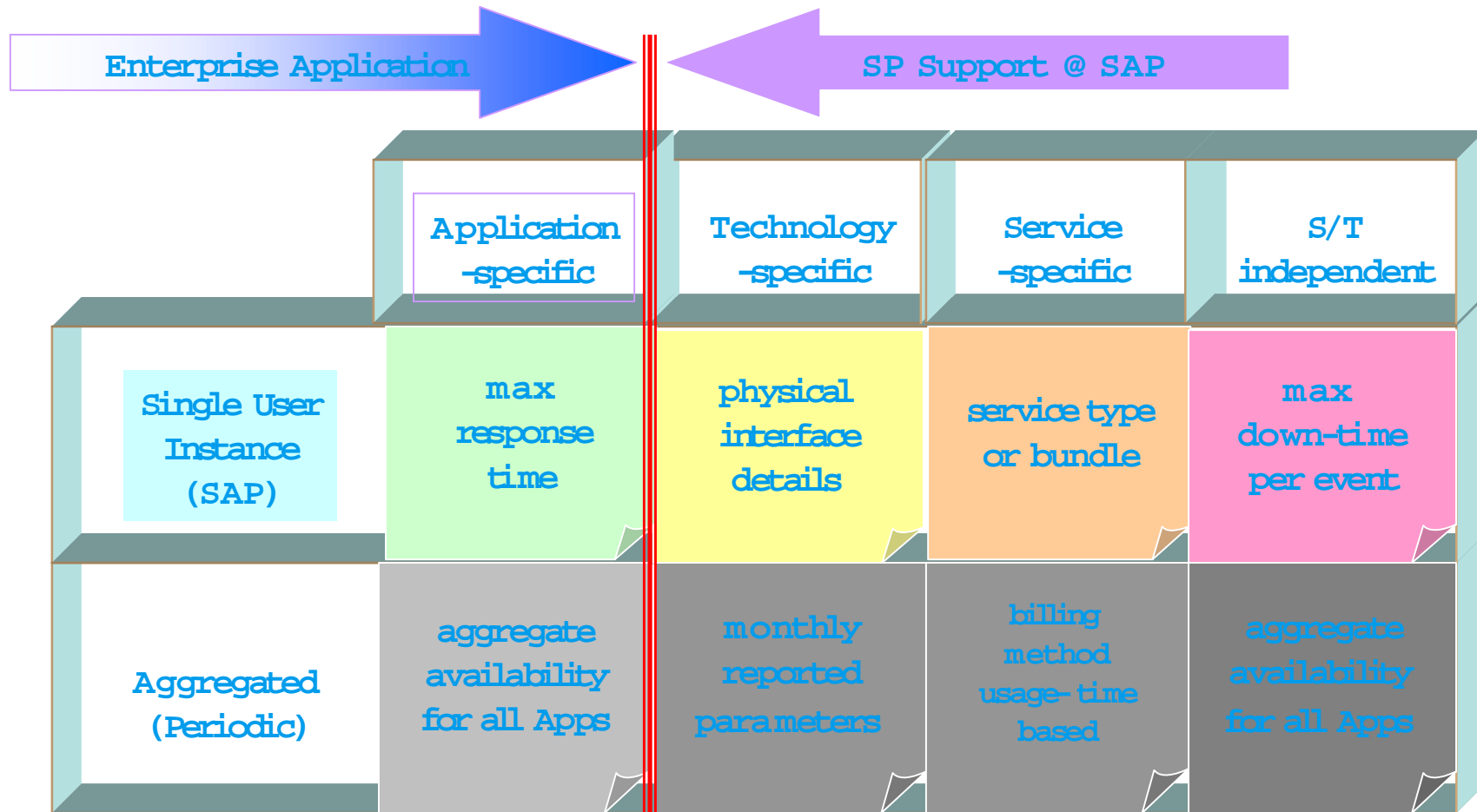
Assessment



Ref: TMF TOM Processes GB910

Parameter Framework

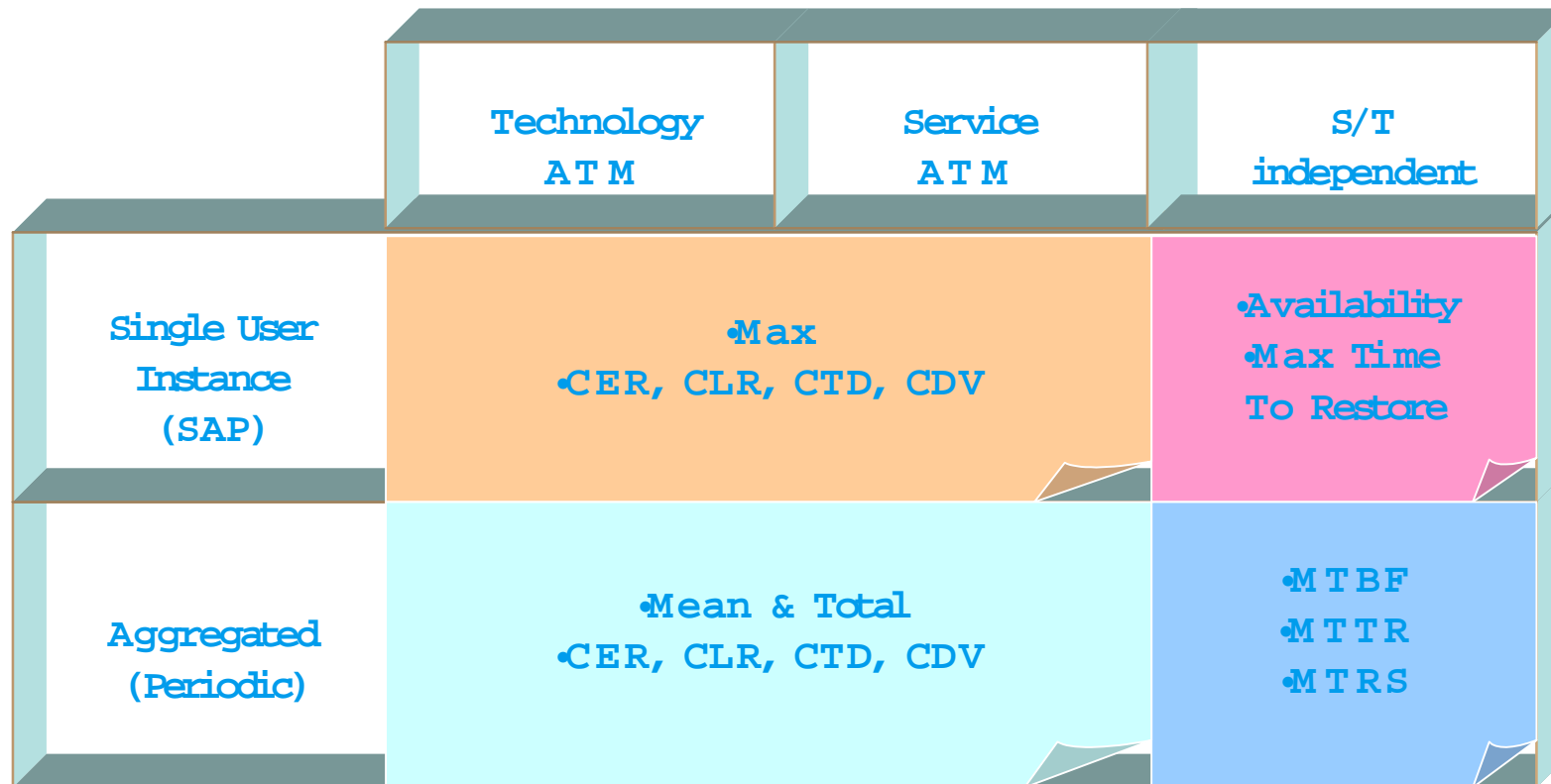
SLA Parameter Framework End-to-End



8 Categories

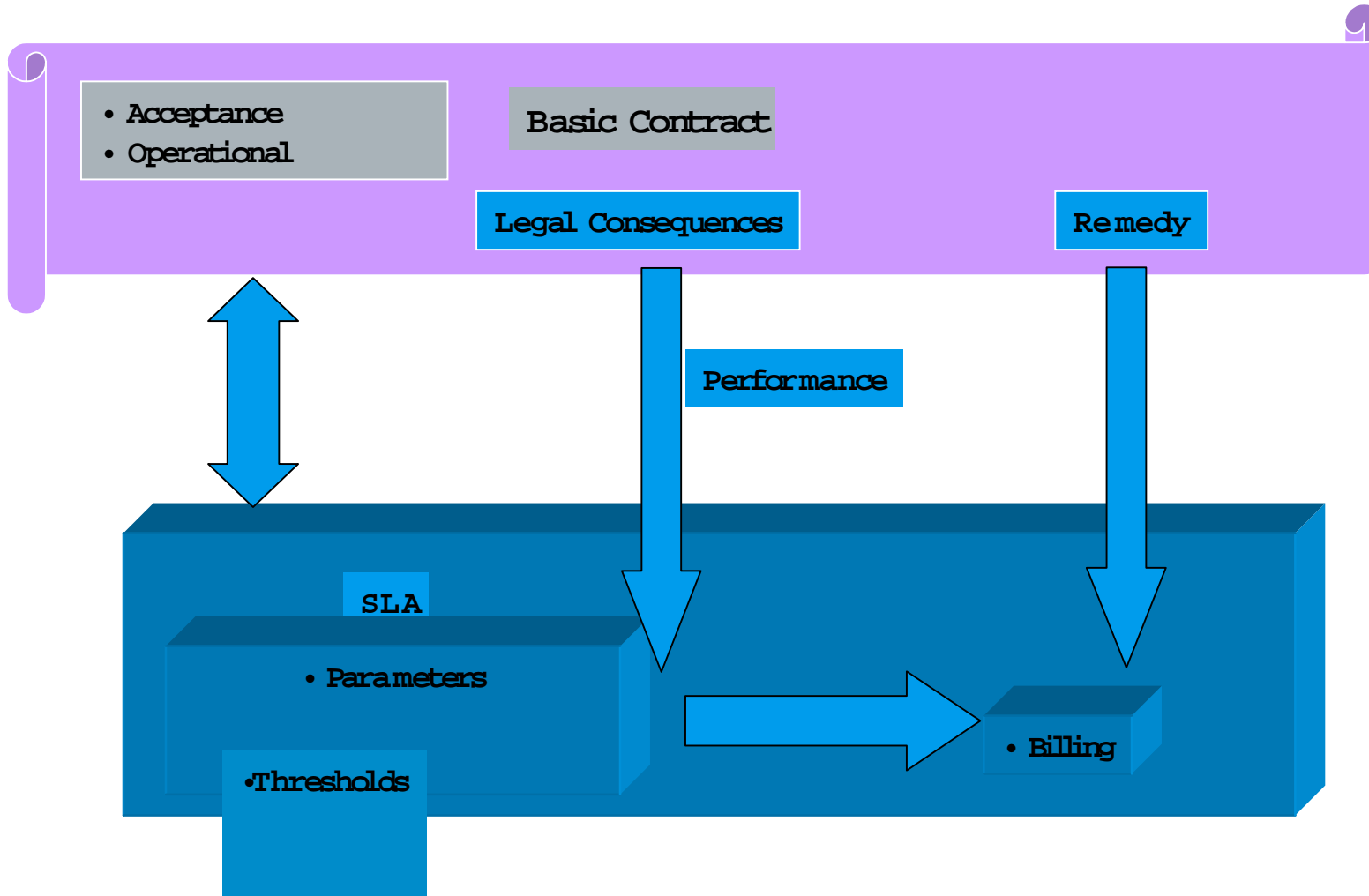
ATM Cell Delivery

(Between the SAPs)



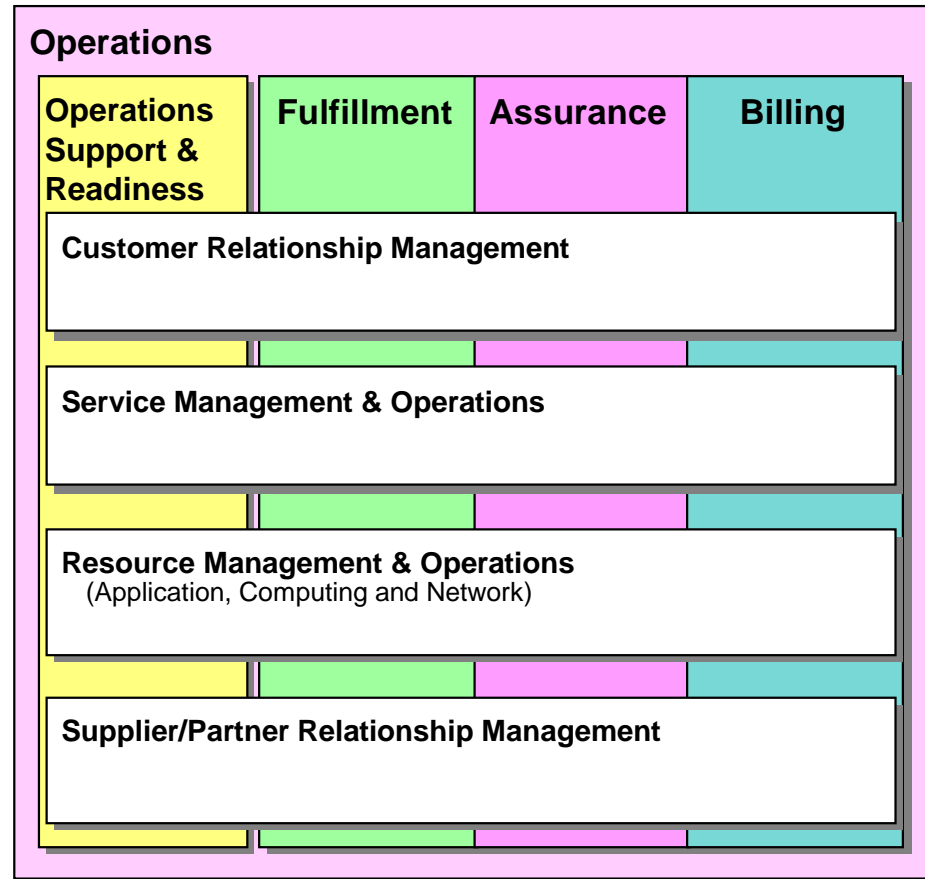
Interface to TOM/eTOM

SLA Process



The Operations area

- “FAB” is still the core of the Operations area ;
- Operations Support & Readiness is separated from FAB;
- “OPS” also supports functional process groupings shown as horizontal layers.

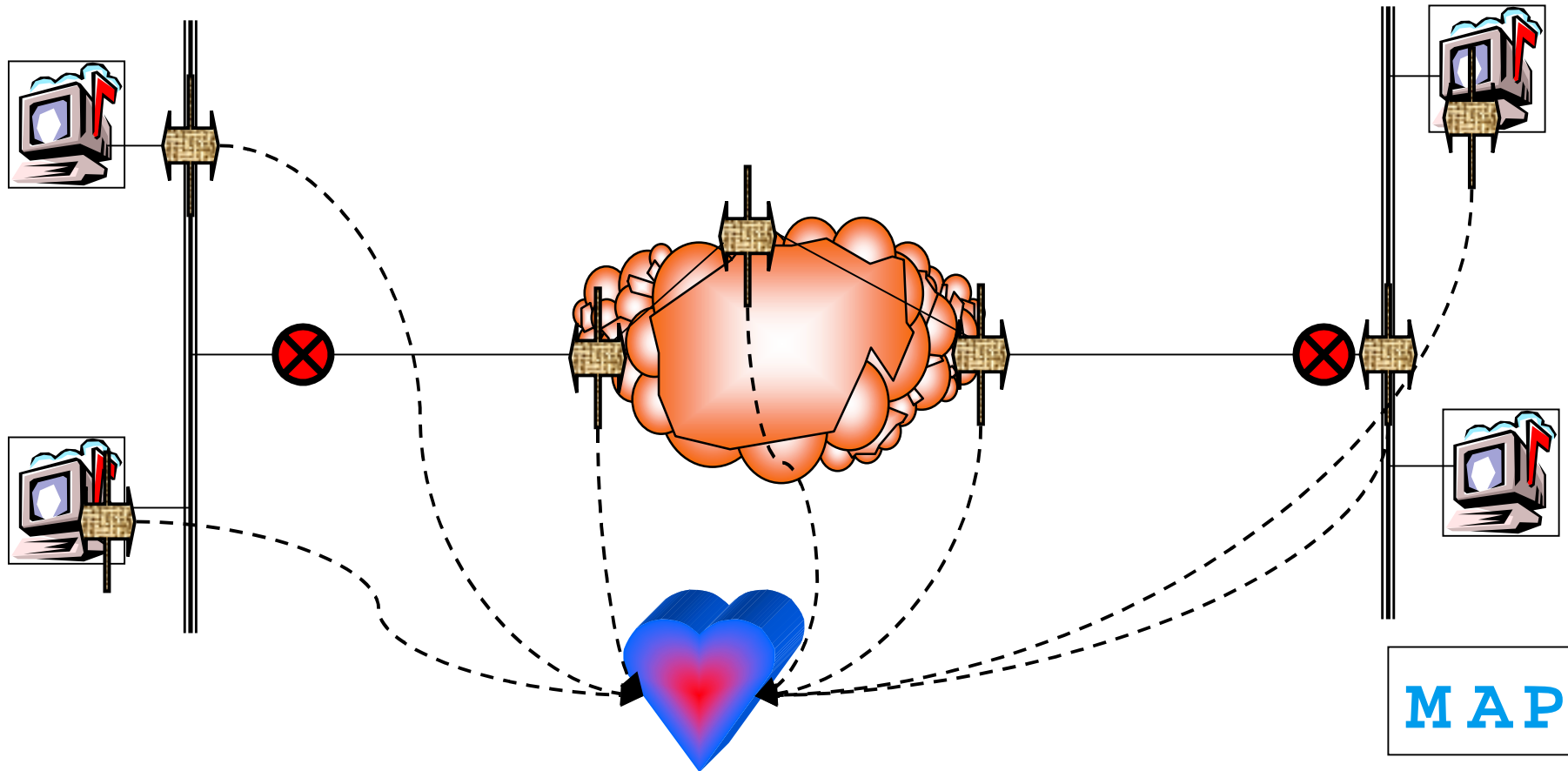


Measurement Strategy

- Location of Measurement Access Points;
- Acquisition of Data from MAPs;
- Timeliness of Data Measure/Acquisition;
- Bandwidth of Management Network;
- Time Correlation Issues;
- Storage.

Data Acquisition

Quantity, Timeliness, Reliability

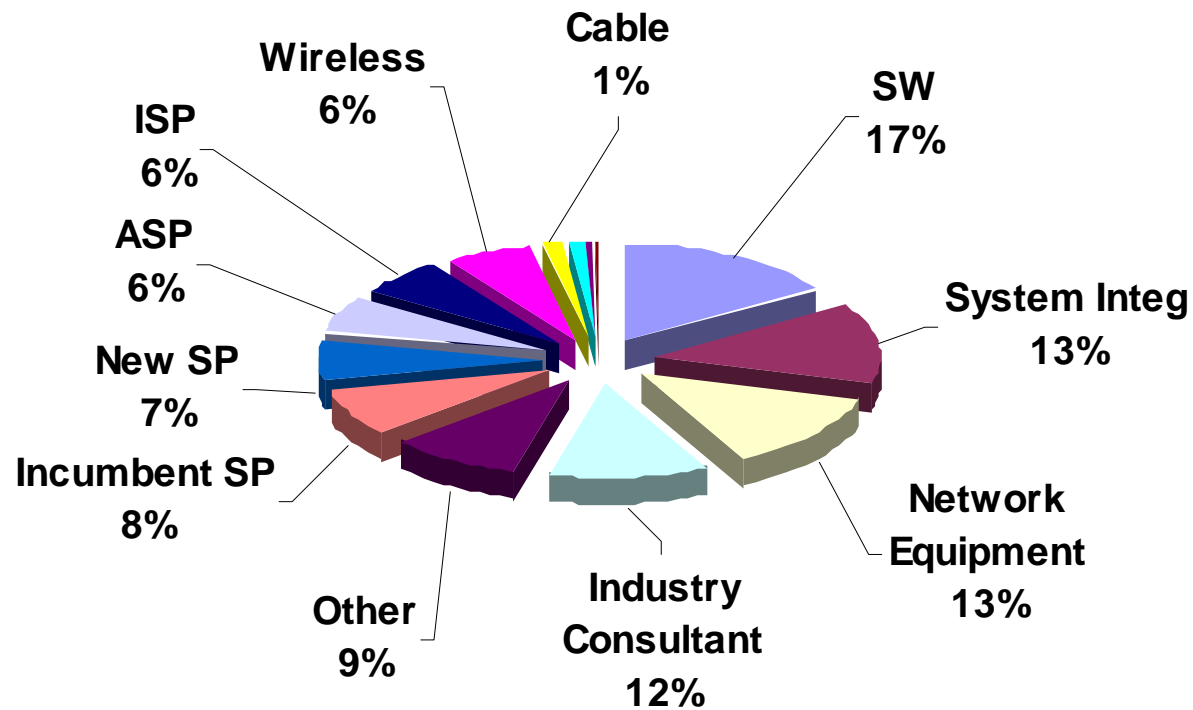


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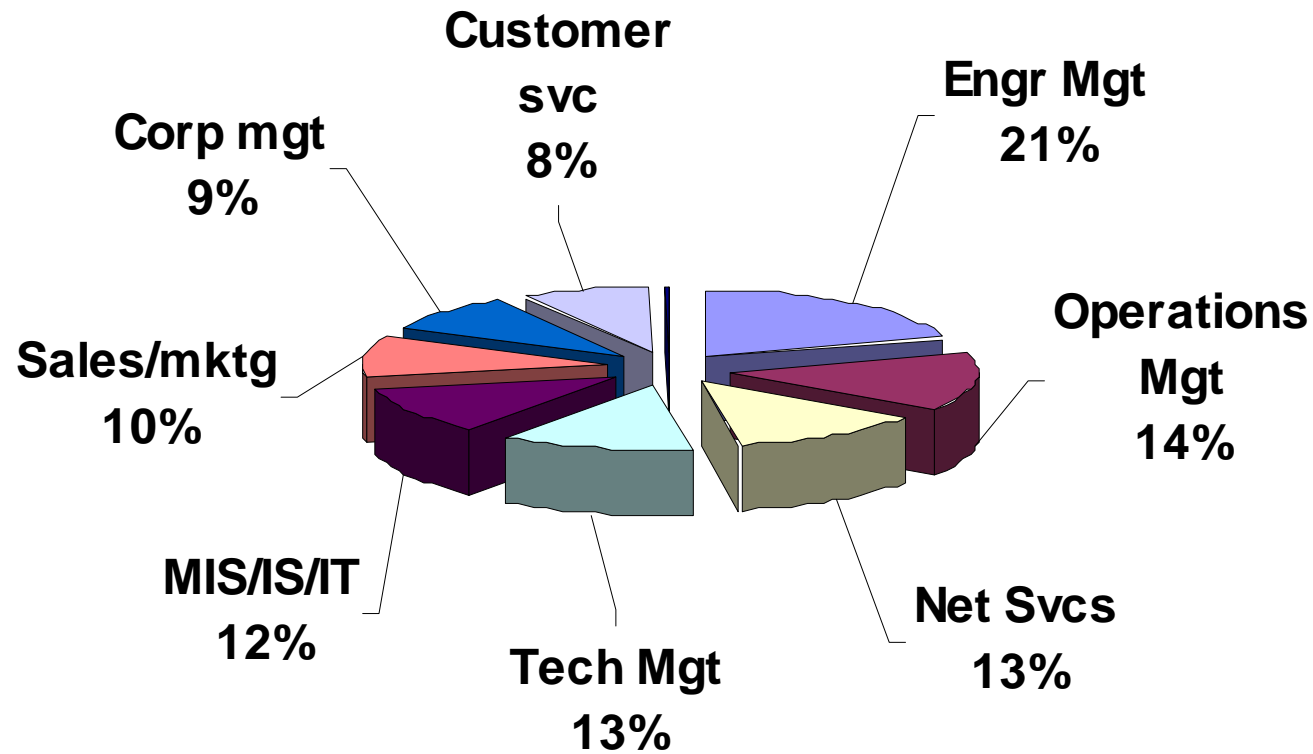
Proposal – 4 Volume Structure

- Volume 4 – Open Group QoS work related to:
 - QoS performance to meet business needs;
 - Business Application User to Business Application User;
 - Business Application User to SAP.

SLA Interest by Industry



SLA Interest by Responsibility





Introduction to New Joint TMF SLA Handbook WG and OG QoS Forum Initiative.

e-Business Definition

- "An e-Business is a business where the impact of even a short loss of any telecommunication-related service will cause severe loss of revenue and may even threaten the survival of the business." TeleManagement Forum

Definition:

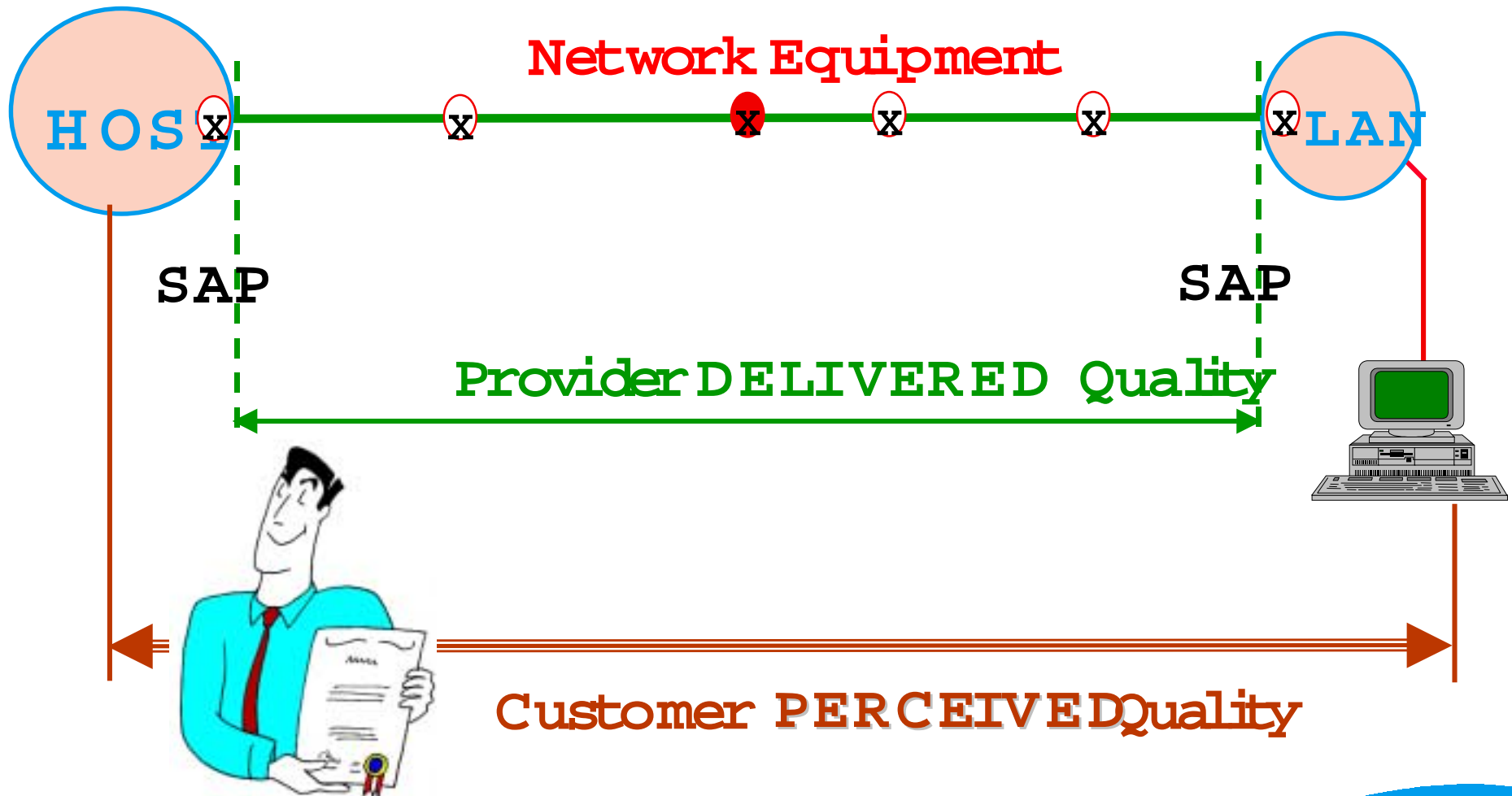
- GB 917 "SLA Management Handbook".

TMF SLA WG has always recognised that business requirements drive the need for a required performance to meet the business need.

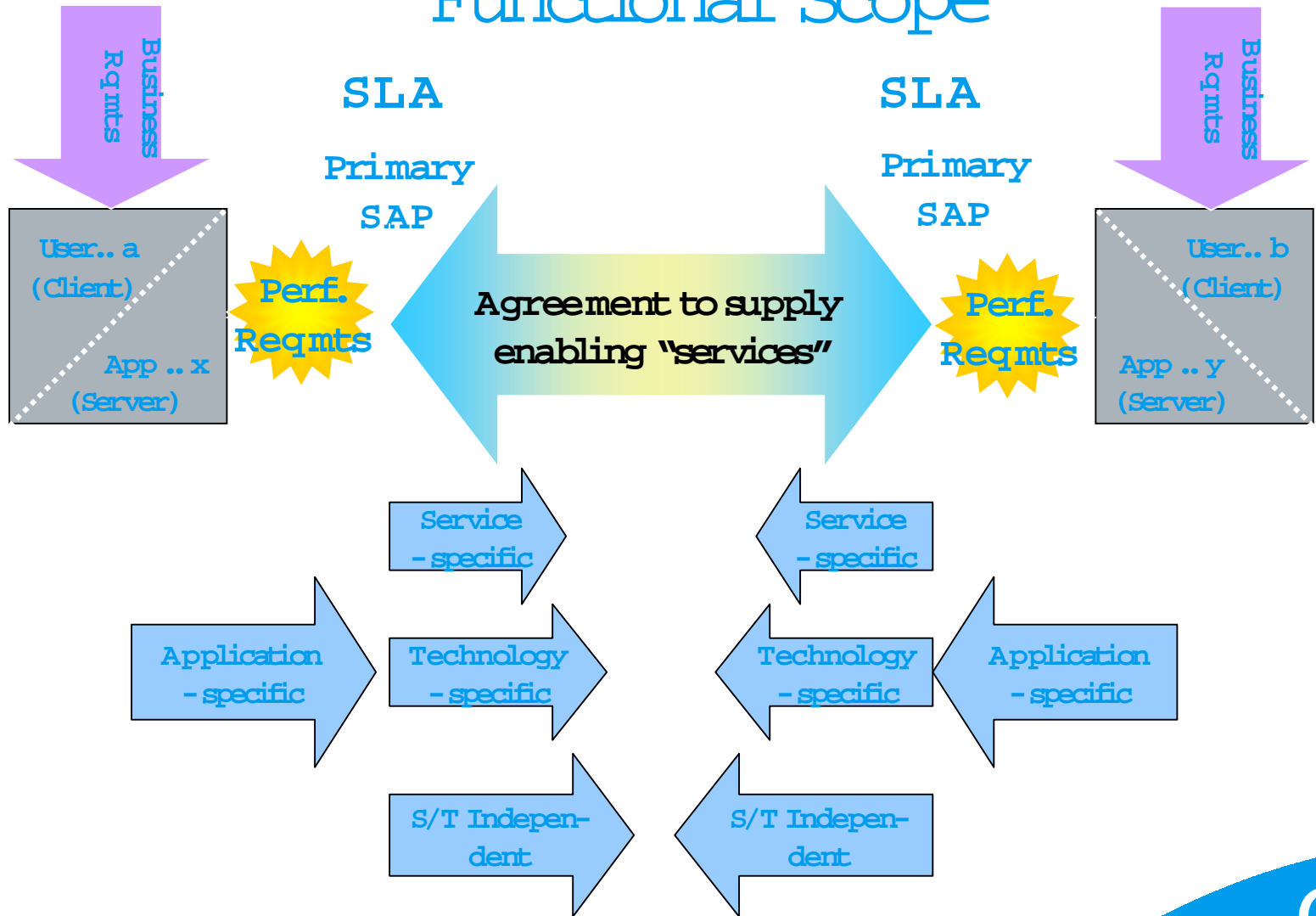
Customer Business View

- Customer Business Requirements;
- Value of Telecommunications;
- Business Dependency on Telecom;
- Outsourcing Strategy;
- Internal IT Accountability.

Service Delivery Point

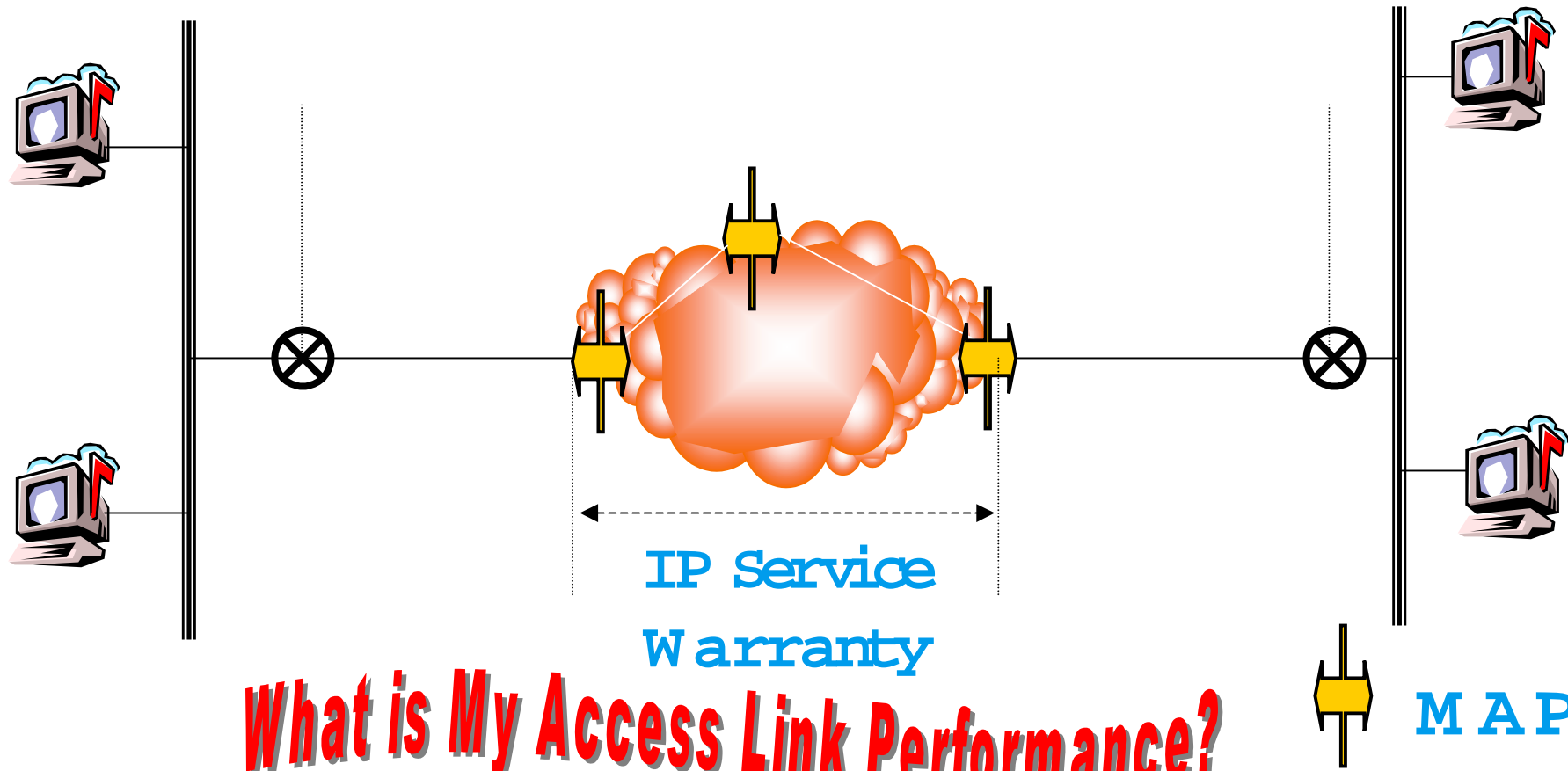


End-to-End SLA Functional Scope



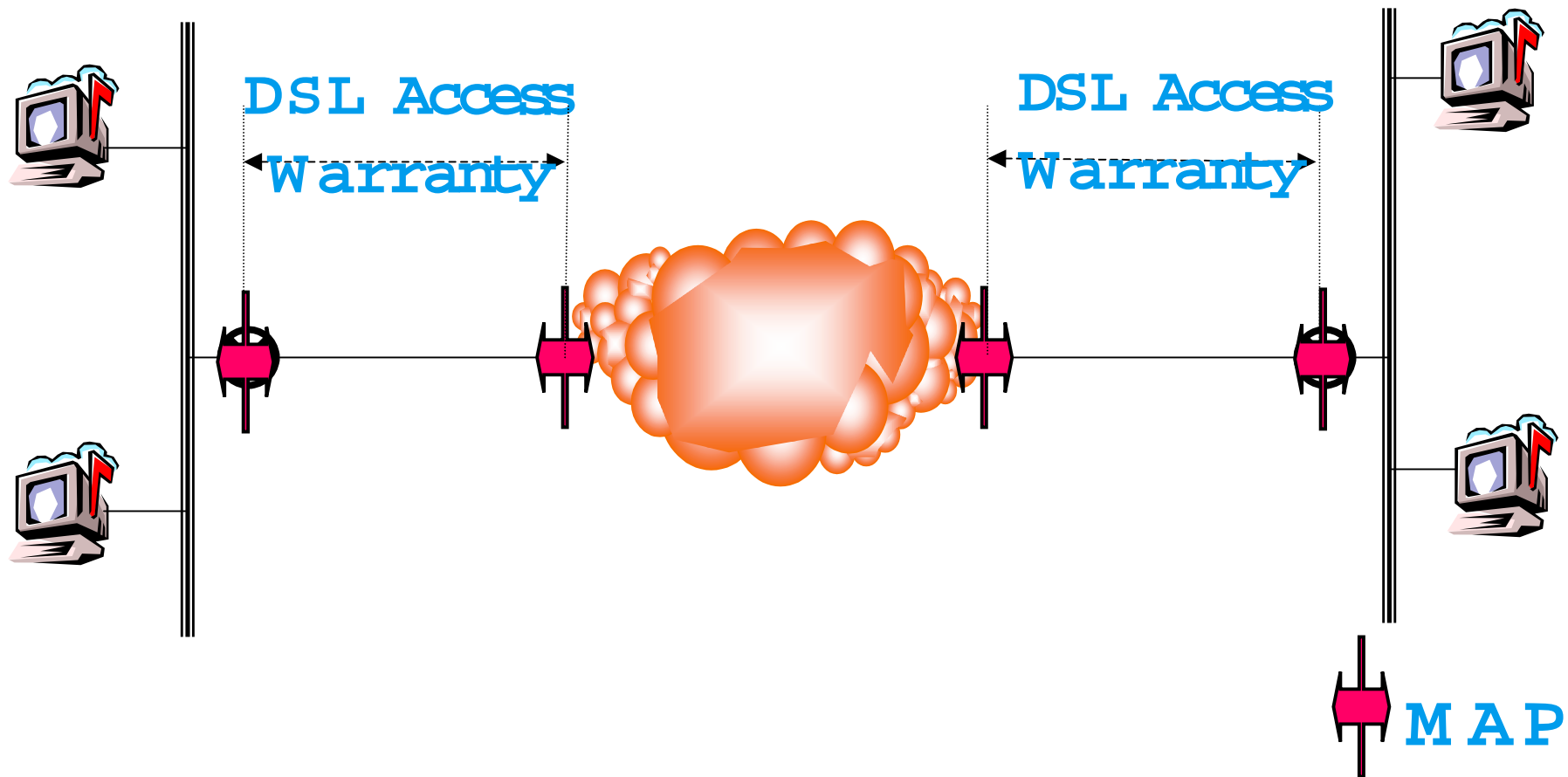
IP Network Performance

(Service-specific)



What is My Access Link Performance?

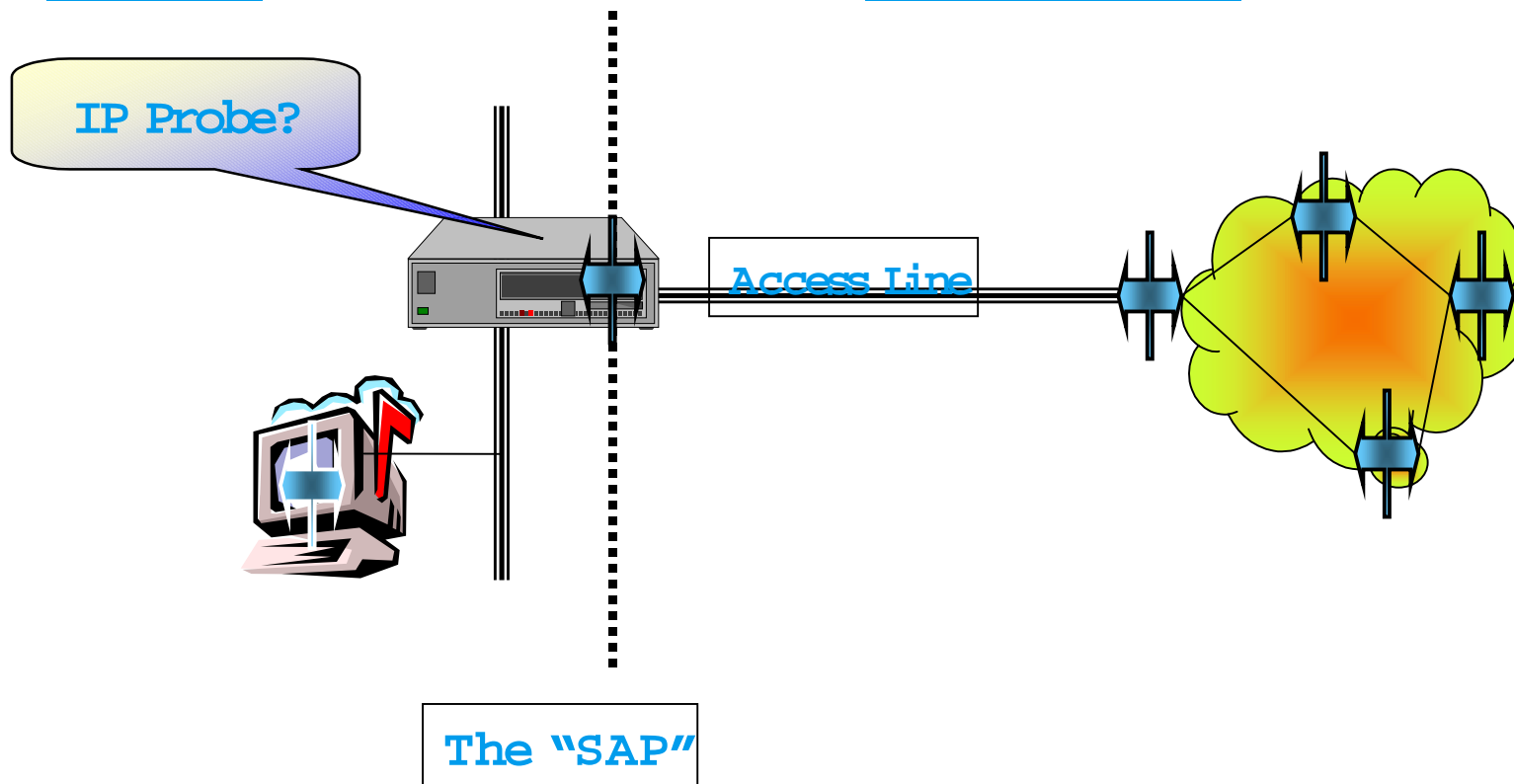
DSL Access Performance (Technology-specific)



Opportunity

Customer

Service Provider



Best Practices Assuring QoS via SLAs

- Quality of Service is

'the collective effect of service performance that determines the degree of user satisfaction of a service' (*ITU-T E.800*)

Top SLA Parameters

- Availability;
- MTTR;
- Throughput;
- Application Uptime;
- Transmission Delay – Latency – Jitter.

Best Practice (1)

- Committed, contractual and bounded;
- Real-time Customer monitoring - self-care;
- SP control to ensure service levels commitments are met;
- Differentiation in standard and revenue;
- Trend and Impact analysis.

Best Practice (2)

- Automation:
 - Pro-active detection of violations;
 - Immediate impact analysis;
 - Real time reports;
 - Pro-active network changes;
- New features (security);
- Guaranteed Availability (not last mile);
- No rewards;
- Share Business risk.

Best Practice (3)

- SP competition increasing;
- Revenue in:
 - Added value;
 - Service differentiation;
- Accurate QoS performance calculation;
- Dispute Avoidance Measures.

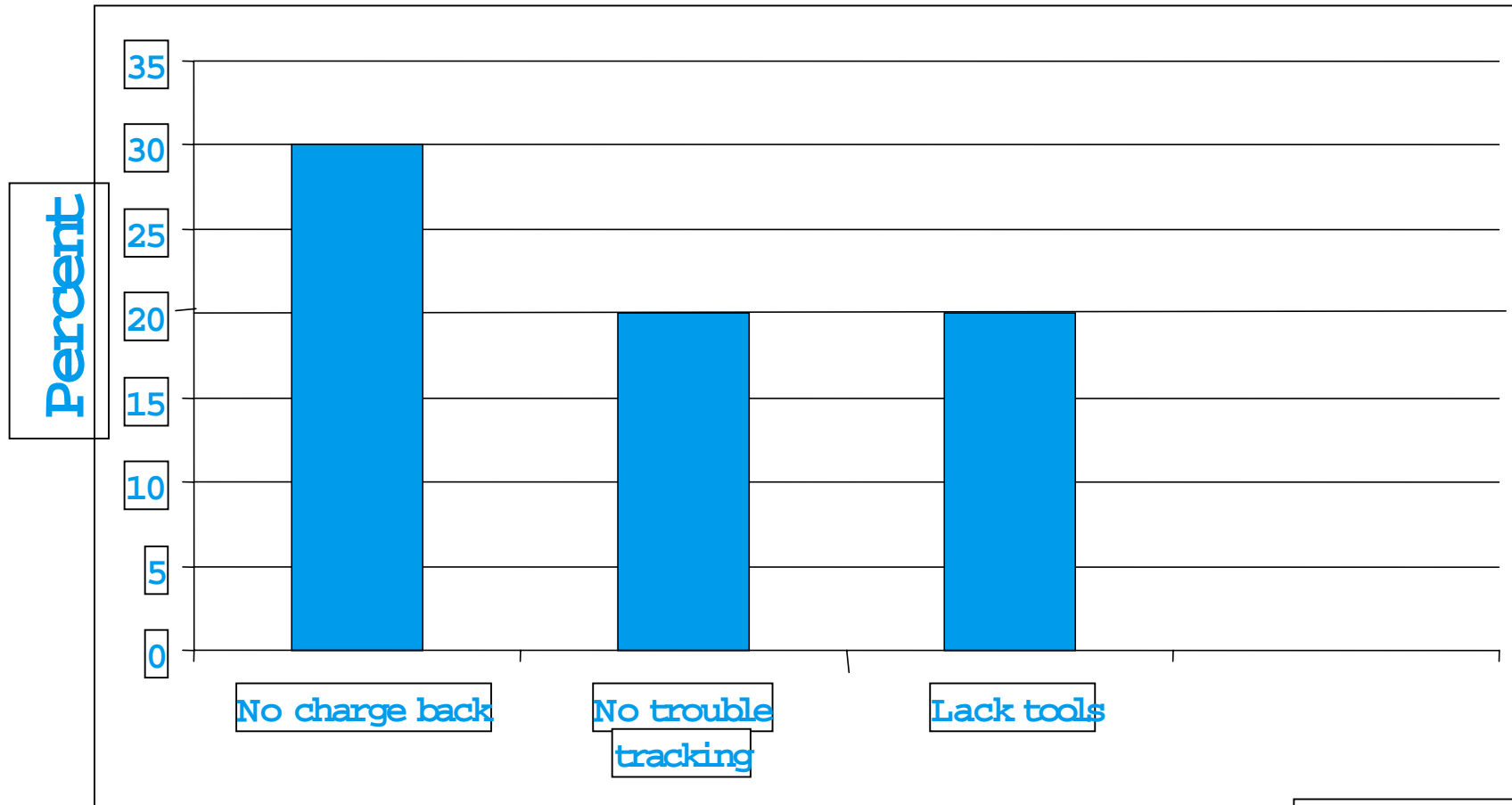
Best Practice (4)

- Have a clearly defined SLA M process;
- Link SLA metrics/thresholds to business goals;
- Select SP based on accessibility, breadth and ease of use;
- Negotiate clear penalties based on transparent measurements.

SLA Pointers

- Many SLA Components exist;
- End-to-end SLA is rarely available;
- Build expectations on what can be measured;
- Select standard parameters;
- Understand what is under contract/warranty/agreed;
- Promote standards (Industry Forums);
- Keep it simple.

Impediments to Service Level Management

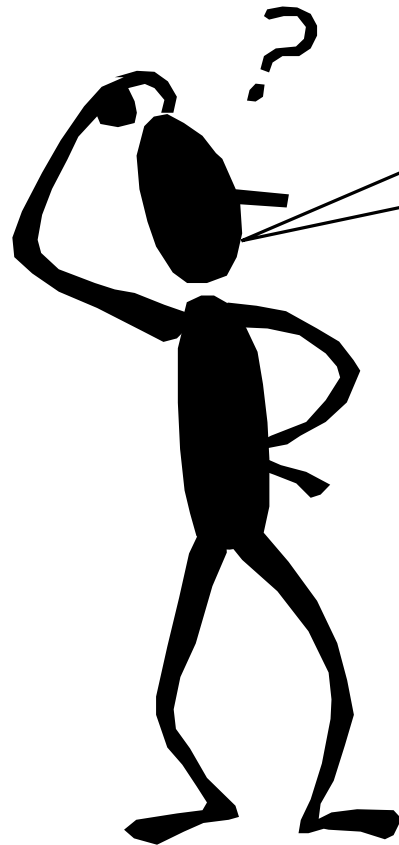


1998 NETPLEX

Mutual Responsibilities (communicate)

- Agreement;
- Expectation Management;
- Relationship Building;
- Partnership.

Questions?



Don't shoot the messenger!