



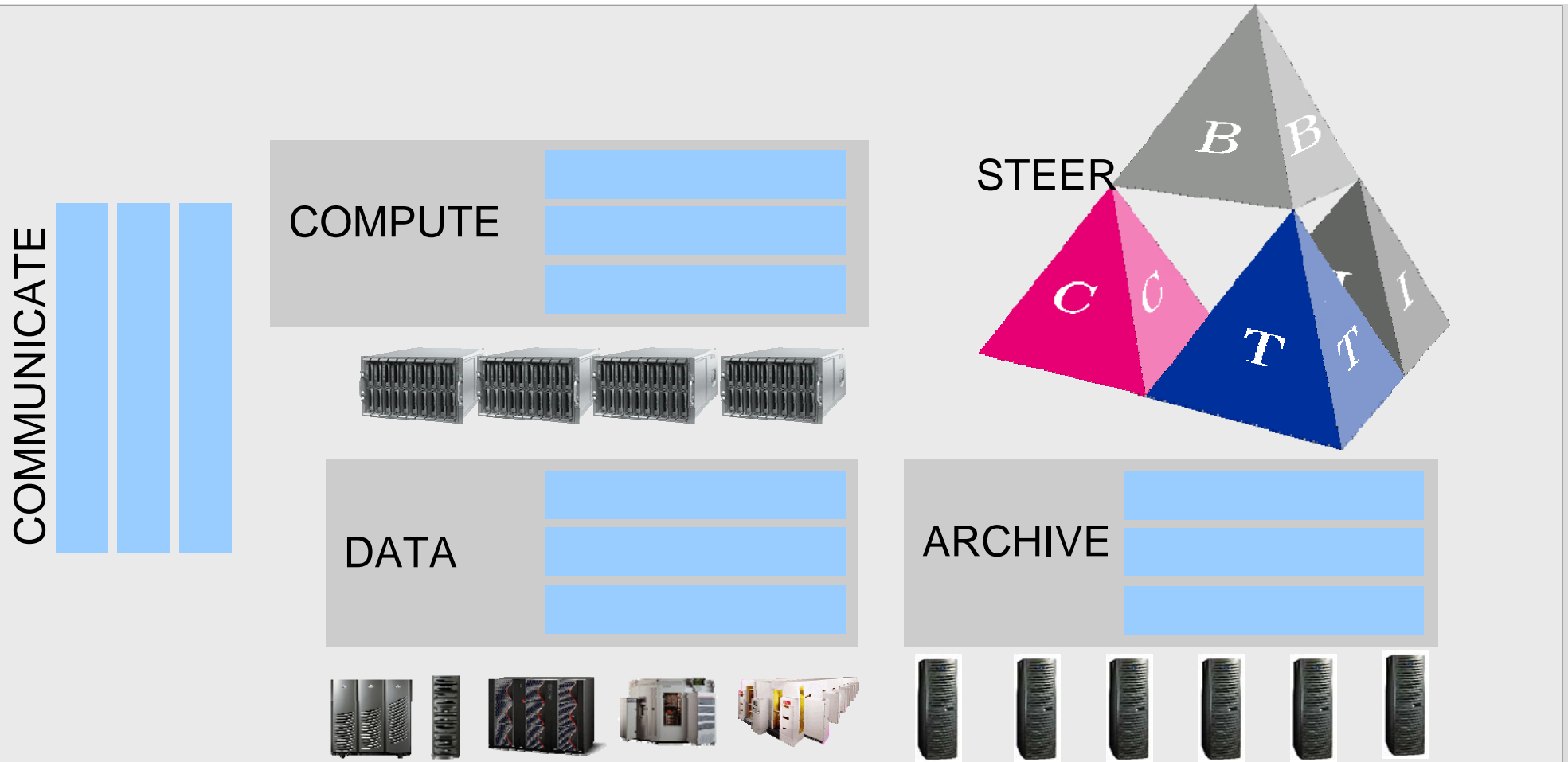
ITU-T/OGF Workshop on NGN and Grids Steering via SLA

Michael Fehse
Chief Scientist ITO
23 Oct 2006 Geneva

The Vision for IT and NGN.

Global Disperse Service Infrastructure.
Modelled on Principles of Manufacturing Industries.

... **T** ... Systems



... **T** ... Systems • Business flexibility

T-Systems M. Fehse
October 2006
Slide 1

The Vision for IT and NGN.

Example: The DATA Object.
Self-managing split-path design.

... T ... Systems

Entry Point



Deep Inspection



Function Block

Mgmt Block

virtual LUN

Virtualizer

normalized LUN

Normalizer

proprietary location independent LUN

Localizer



proprietary location dependent LUN

Disk



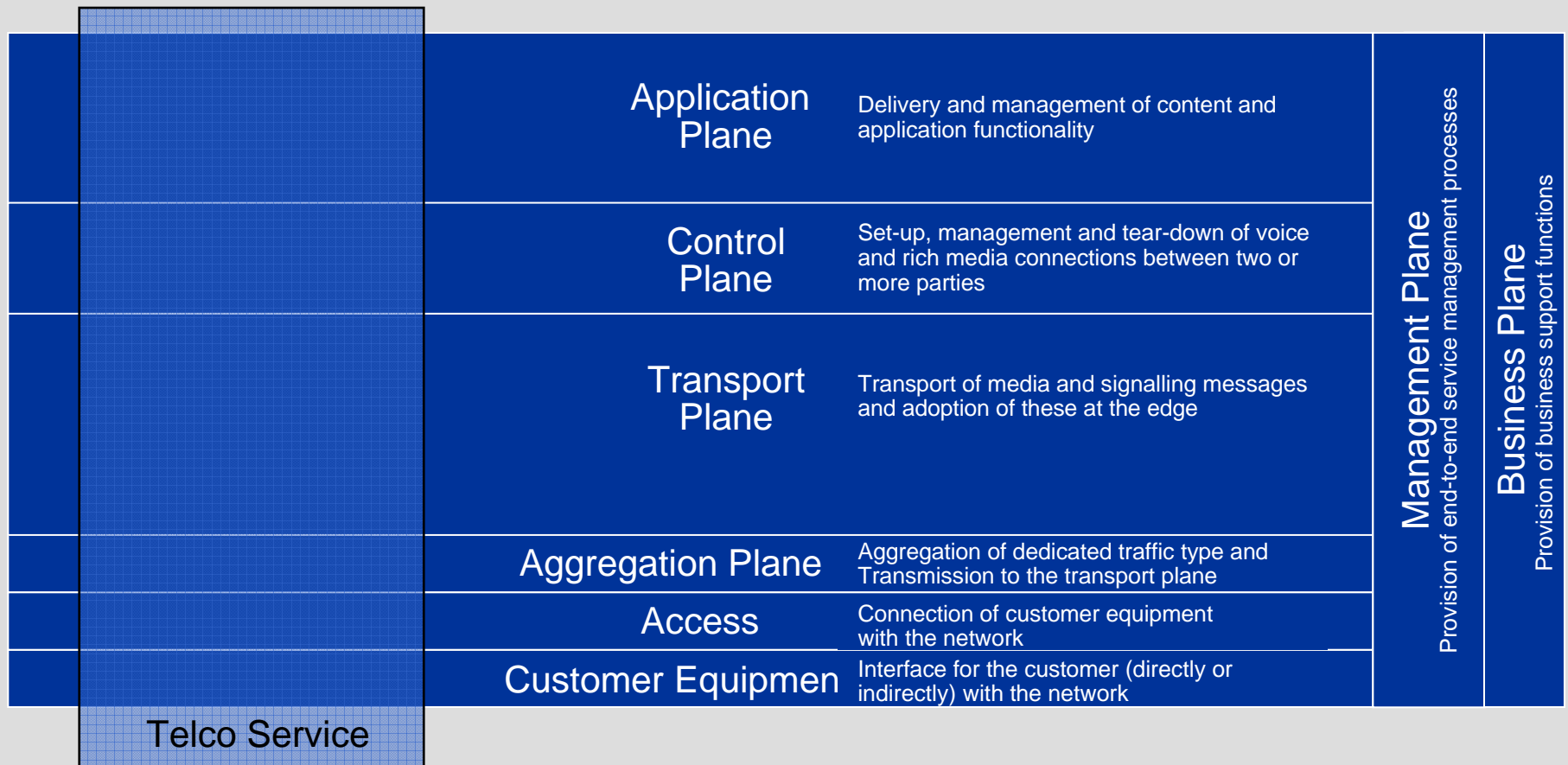
Tape



LUN = Logical Unit Number

NGN Architecture.

Vision for Networks.

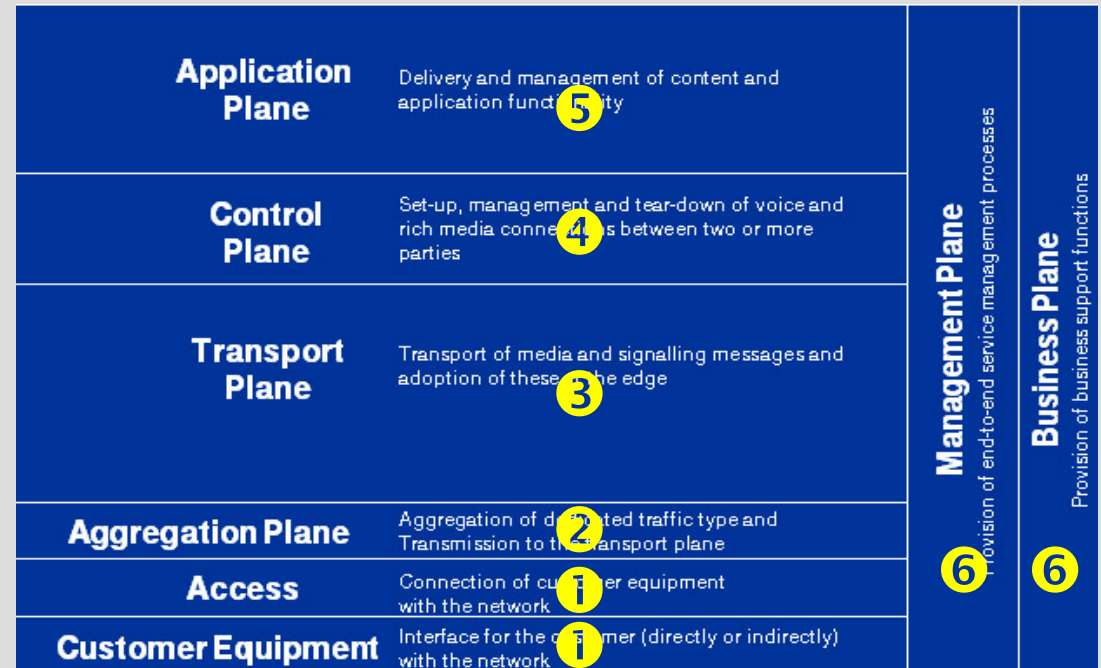
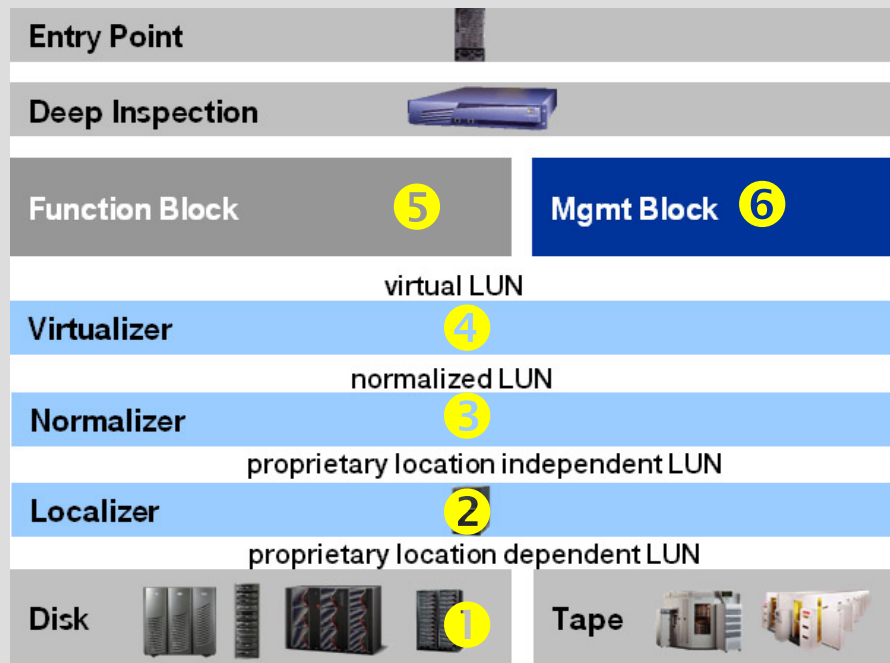


Network and IT Visions.

Similarities ?

Good enough to treat them equally!

... T ... Systems

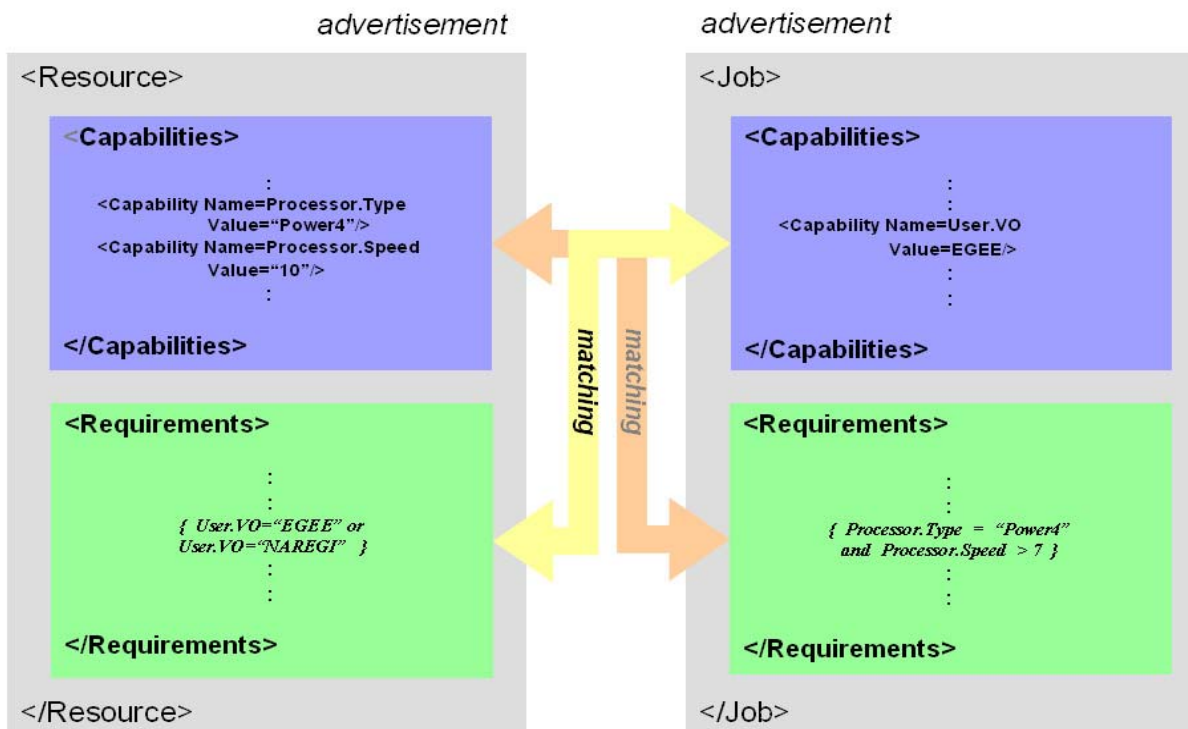


- | | |
|---|--|
| 1 physical "terminal" device | 4 controls mapping/session, virtualizes allocation |
| 2 creates location independence | 5 creates the service |
| 3 abstracts transport, makes all look equal | 6 manages functional/non-functional req. |

Raise abstraction level.
Resource becomes service.
Makes objects self- * able services.

Advertisement/Requirement Matching

document syntax is exemplary and not rigorous on these concept charts



17 July 2006

OGSA Information Modeling

5

© by OGSA Information Modeling Group

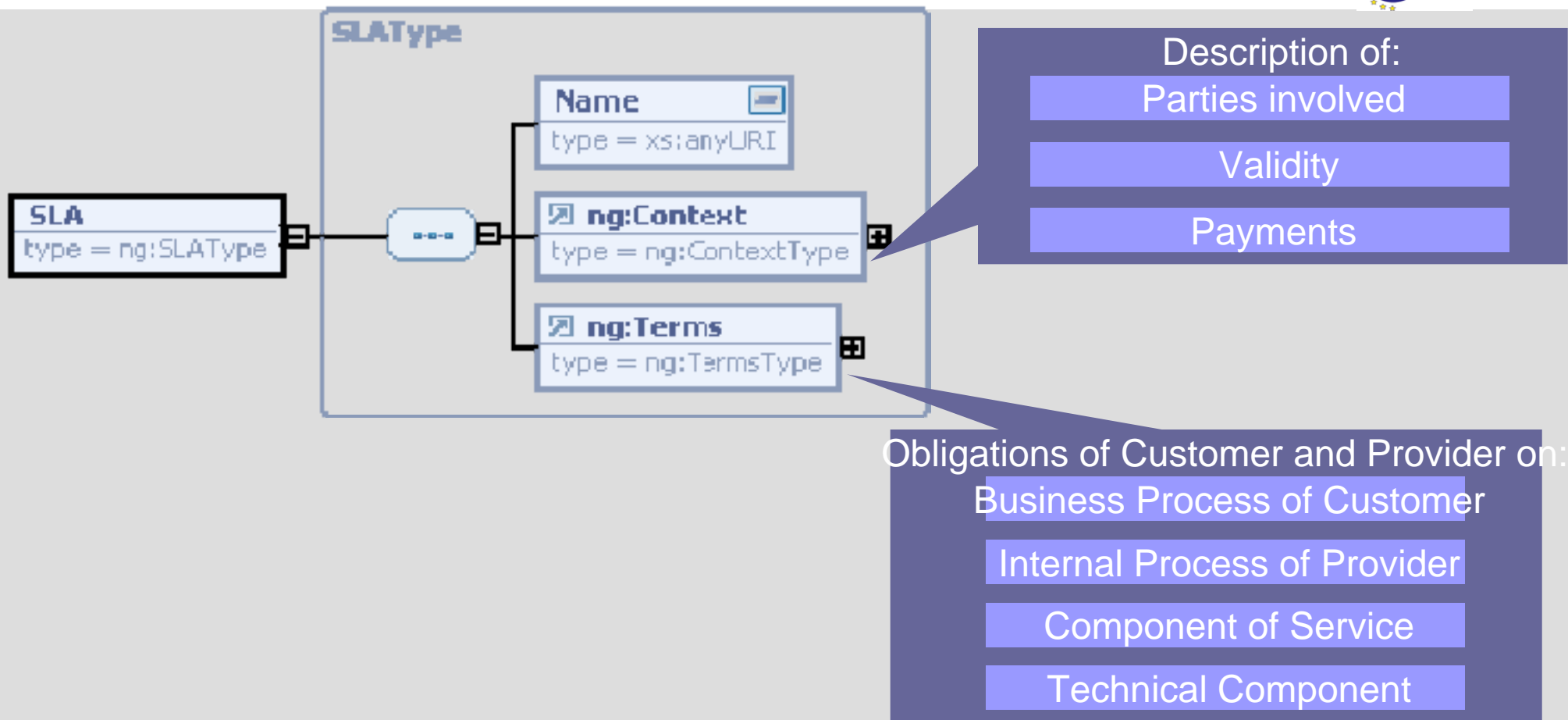
“Discovery” matches Requirements and Capabilities of Resource and Job , treats them both as services.

Introduces the Concept of Obligations on both sides.

Steering of self-* able services via SLA.

WS-Agreement as a base.

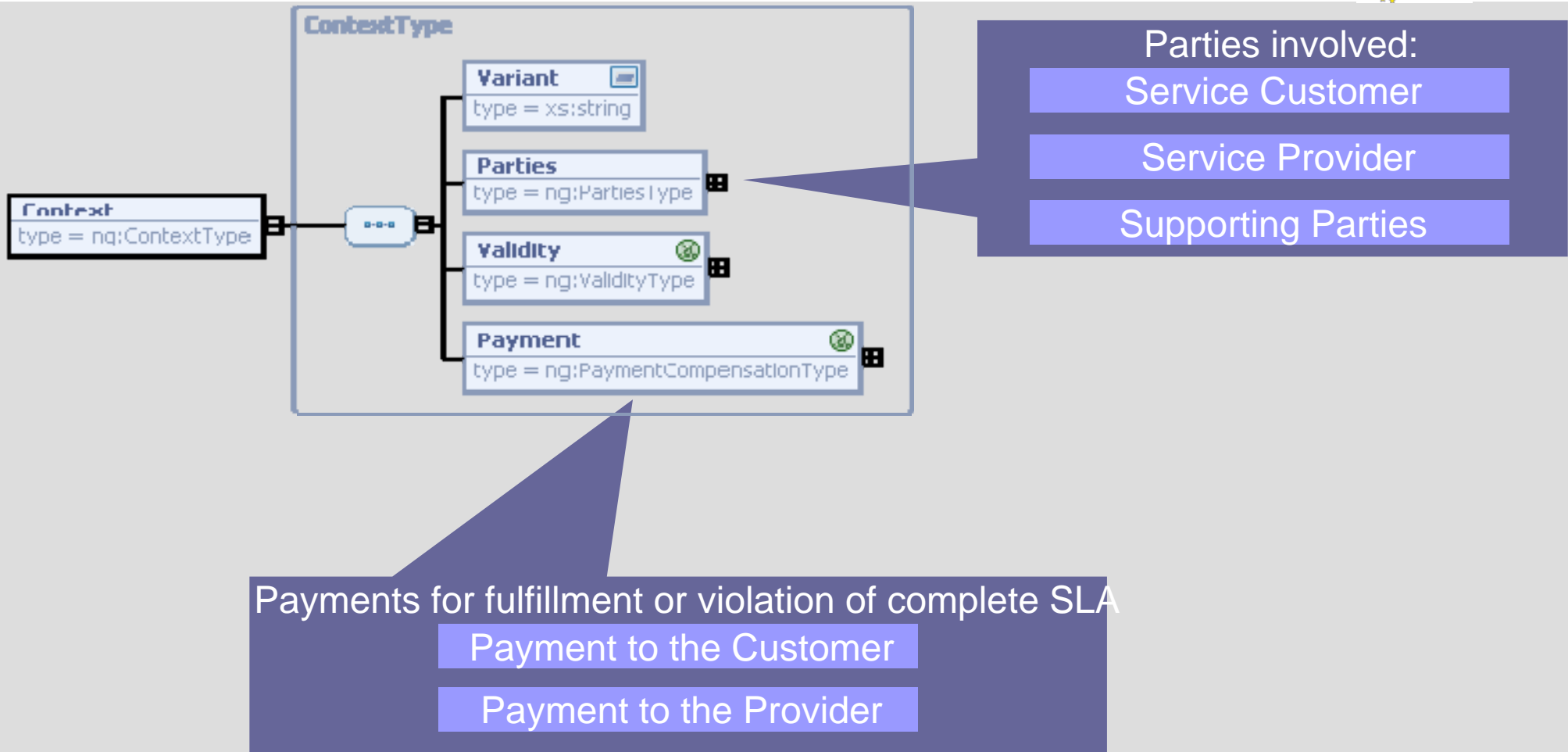
Enhancements by UBL, WSDM etc...



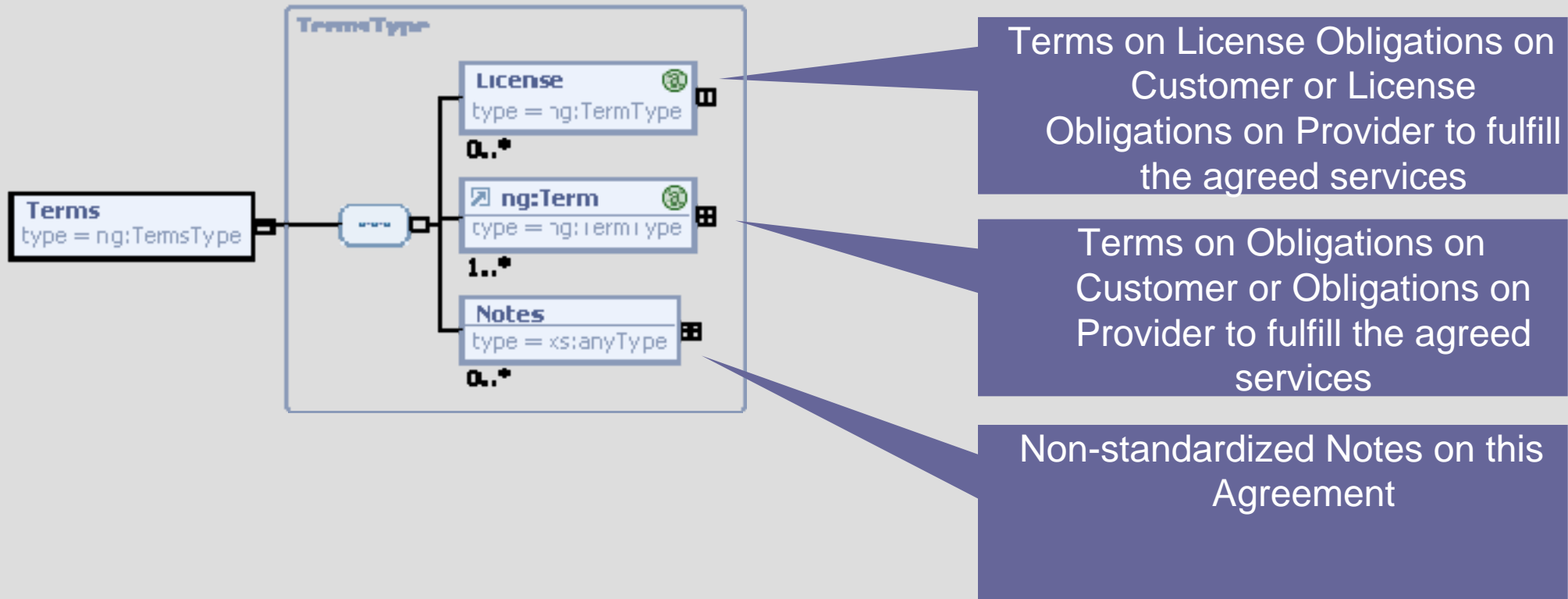
Steering of self- * able services via SLA.

WS-Agreement as a base.

Enhancements by UBL, WSDM etc...



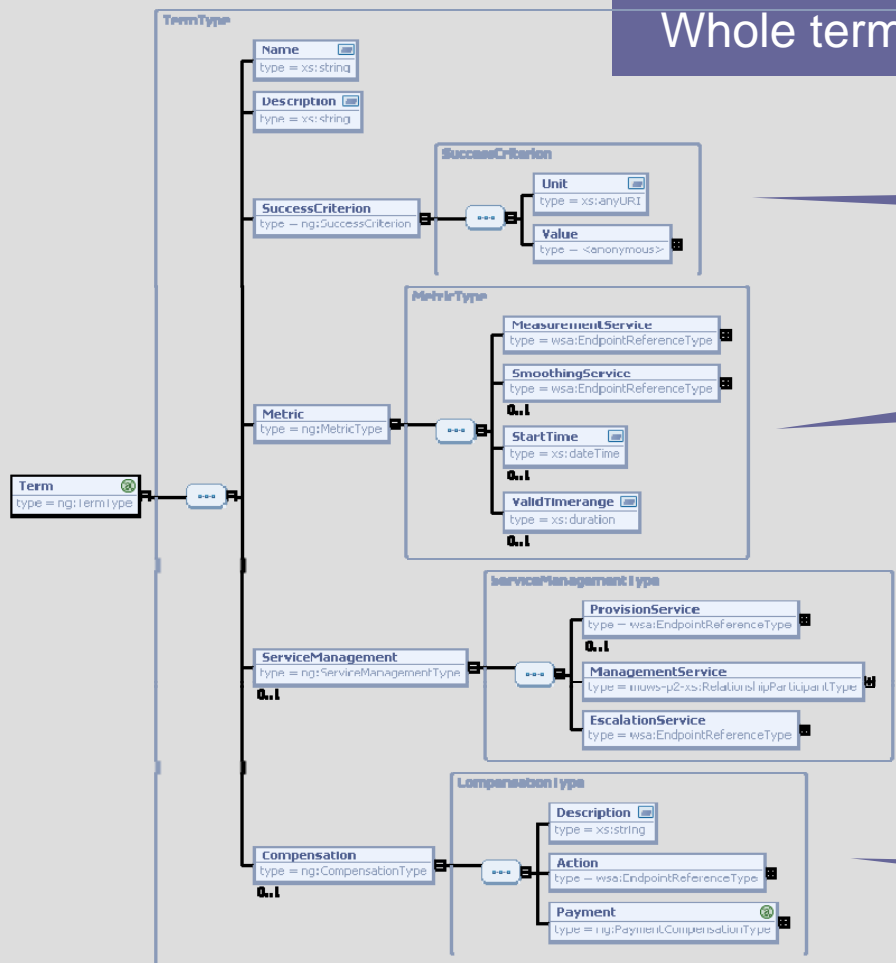
Steering of self- * able services via SLA.
WS-Agreement as a base.
Enhancements by UBL, WSDM etc...



Steering of self- * able services via SLA. WS-Agreement as a base. Enhancements by UBL, WSDM etc...



Whole term is an Obligation on the Customer or the Provider



Interval of Values and Definition of Unit to describe success

Get current value and eventually perform statistical expressions

Manage the lifecycle; provision support services, manage using WebServices and get help if cannot decide at this

level

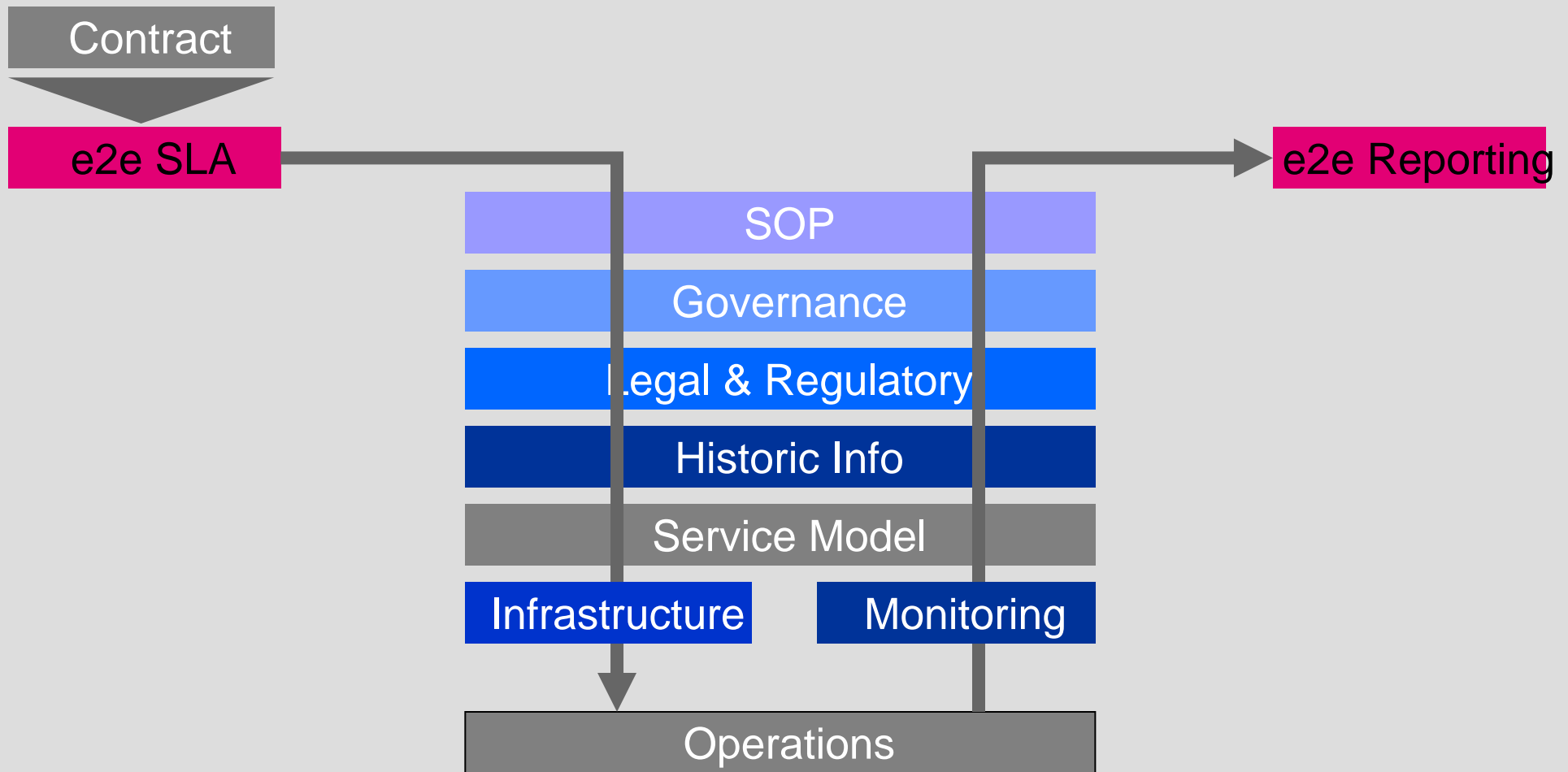
Special actions and payments if this term gets violated

Steering of self- * able services via SLA.

Automated derivation of operations from contract.
(Current Experiment)

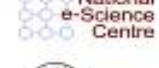
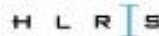
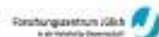


... T ... Systems





michael.fehse@t-systems.com



www.nextgrid.org

Economically
sustainable Grids
for business



...T...Systems...