



Future-Net  
New York  
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**IPsphere FORUM**  
THE BUSINESS OF IP

**Monique Morrow, Vice-Chair**

[www.ipsphereforum.org](http://www.ipsphereforum.org)

## Agenda

- **Macroeconomic Dynamics**
- IPSF Focus
- Example
- Road to 2010 and Beyond
- IPsphere Records and Plans



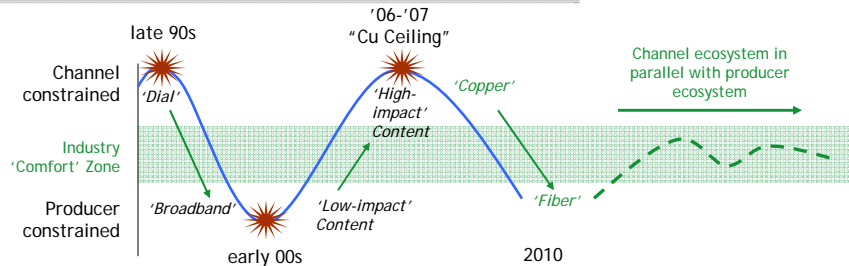
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## Cooperating to reduce risks & accelerate rewards

At peaks & troughs the entire supply side (i.e. both channels & producers) are at risk; one stakeholder's opportunity is constrained by capital need of the other



IPsphere aim is a mechanism which relieves extremes and mitigates risks to the overall industry



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## Connecting business with technology

- Internet has historically encouraged application flexibility but is "access-exploiting" not "access-investment-creating"
- IPsphere architecting framework to enable **commercial relationships** with similar flexibility
  - A mechanism so that every stakeholder can obtain a share of money flow to encourage active investment
- Inducing **broader** & more **market-stimulating** sets of business relationships



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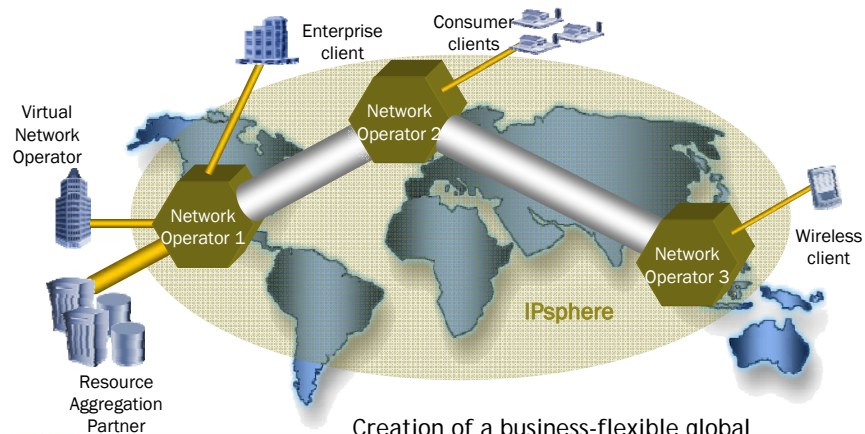


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# Here's the Starting Point



Creation of a business-flexible global partnership for new-generation network services



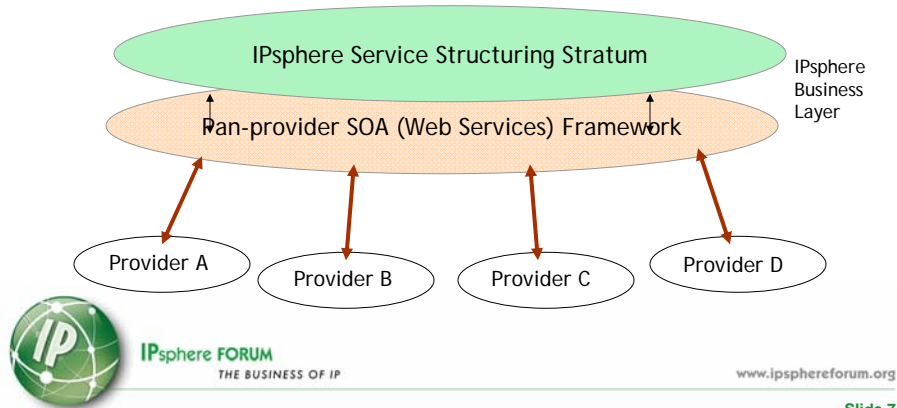
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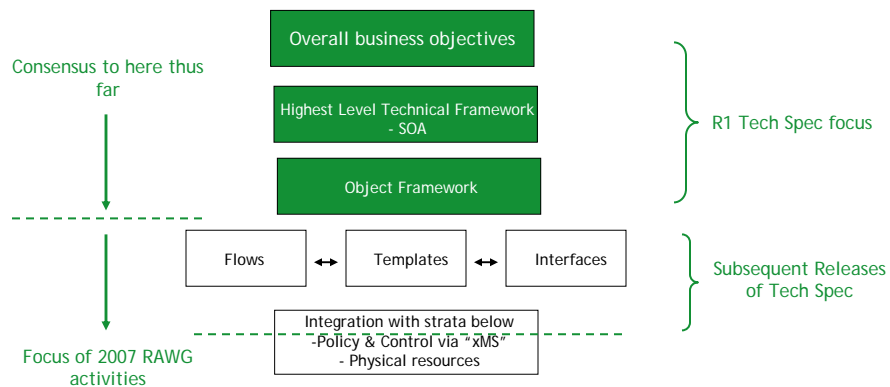
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# Register, discover, select, & use

- 1) Individual providers **register** service "element" offers
- 2) Retail providers **discovers** service "elements" required of others
- 3) **Negotiate** commercial terms for participation in the overall services
- 4) Individual providers **execute** per their 'offers' selected by retailer

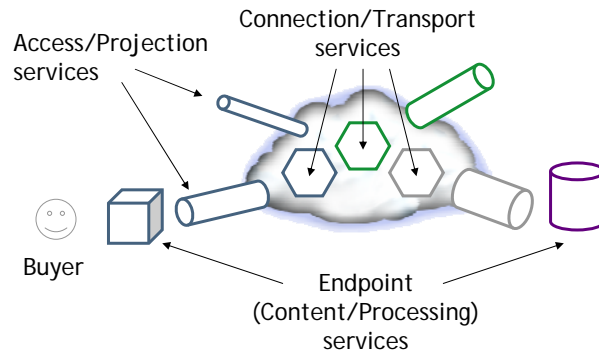


# Current focus



# Service Elements

## Physical View

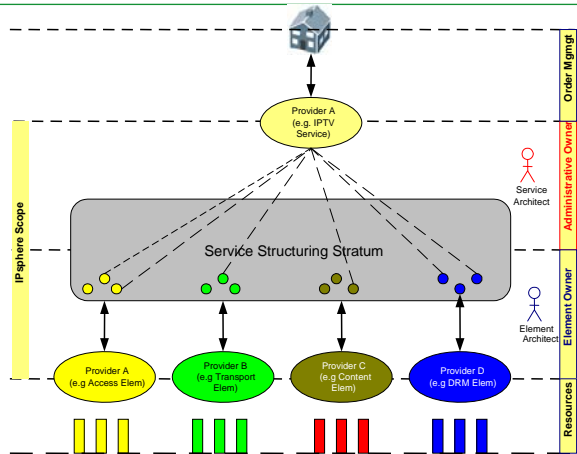


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# Provider Roles in IPsphere



- Services are offered to the customer underpinned by a description of how to optimally fulfill these terms through internal and external resource commitments.

- Resource owners can build "widgets" that can be composed into services by their own retail arm or by others, and can focus on fulfilling and managing their resource commitments.

- The Service/Element Template process that represents these two sets of activities "meet in the middle" at the SSS

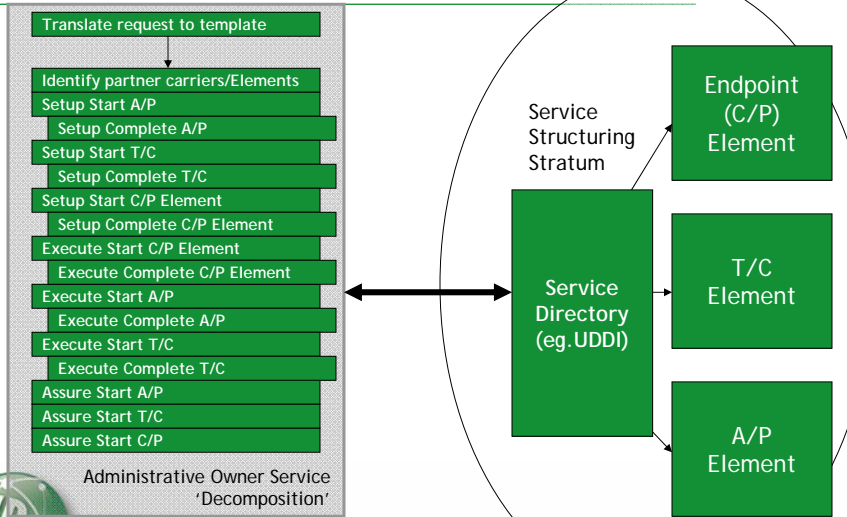


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## SOA framework that coordinates access, transport, and users



Administrative Owner Service  
'Decomposition'

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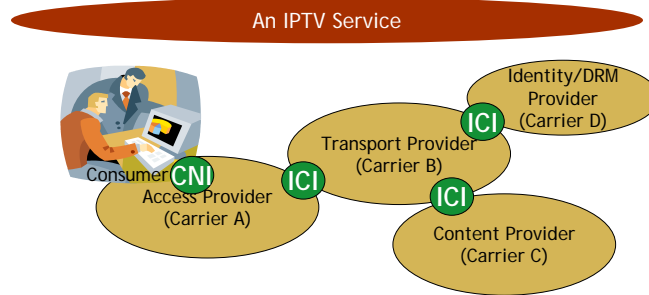


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# Our Example as a Picture

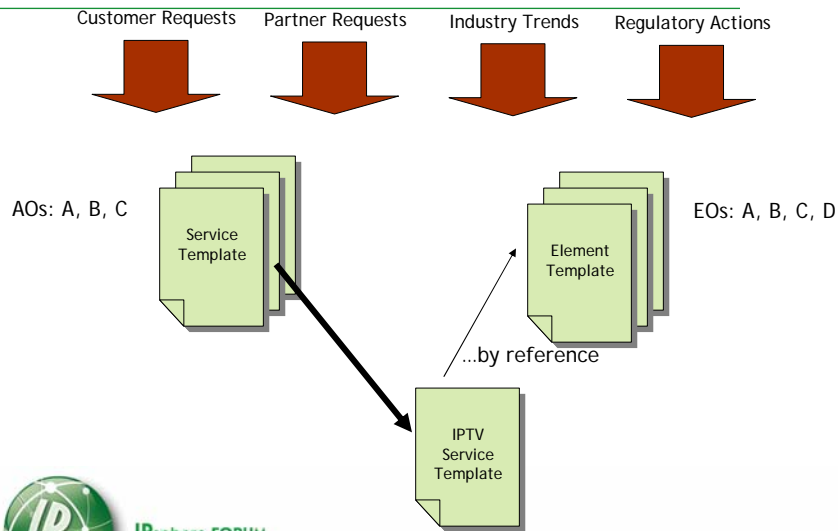


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# Opportunity Drives the Process

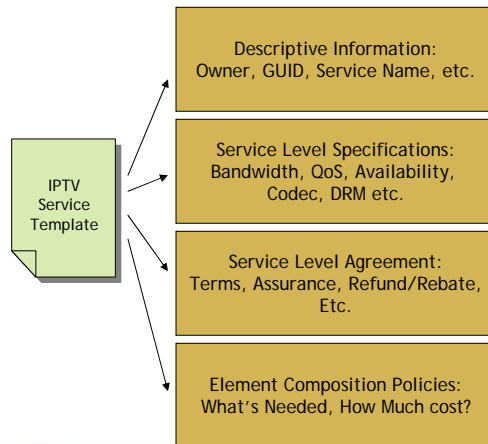


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# Building the Service Template



- A "Service Architect" builds an IPTV template that describes the technical and commercial parameters of the service, and the way in which Elements must be selected to create it.
- This template is generally conformant to the TMF SID and TEQUILA Project structures, augmented for IPsphere's mission.
- IT resources (content servers), application resources (DRM, Codecs) and network resources are treated equally

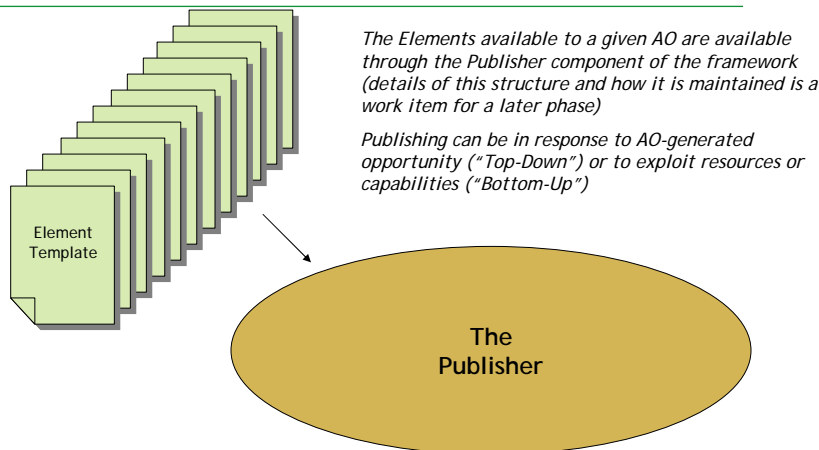


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# The Publishing Function



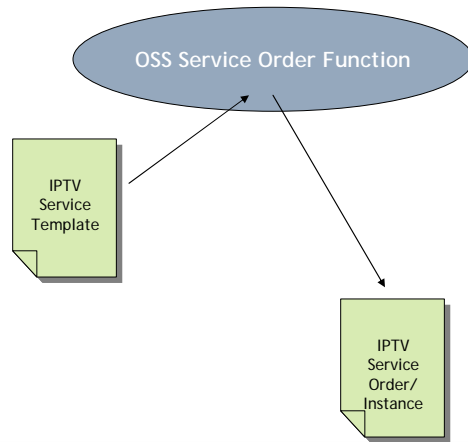
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## An Order is Placed through the OSS

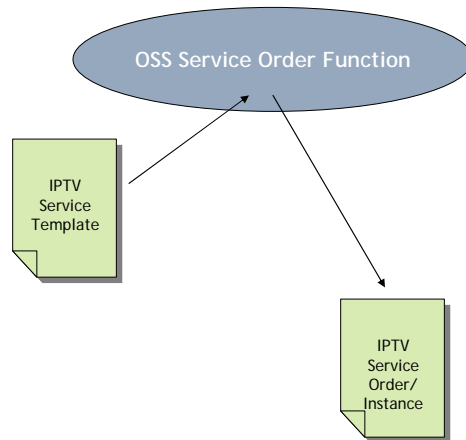


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## An Order is Placed through the OSS



*Authored templates can be used to drive the order management process of an OSS, which returns the data to populate the IPsphere Service Order Instance*

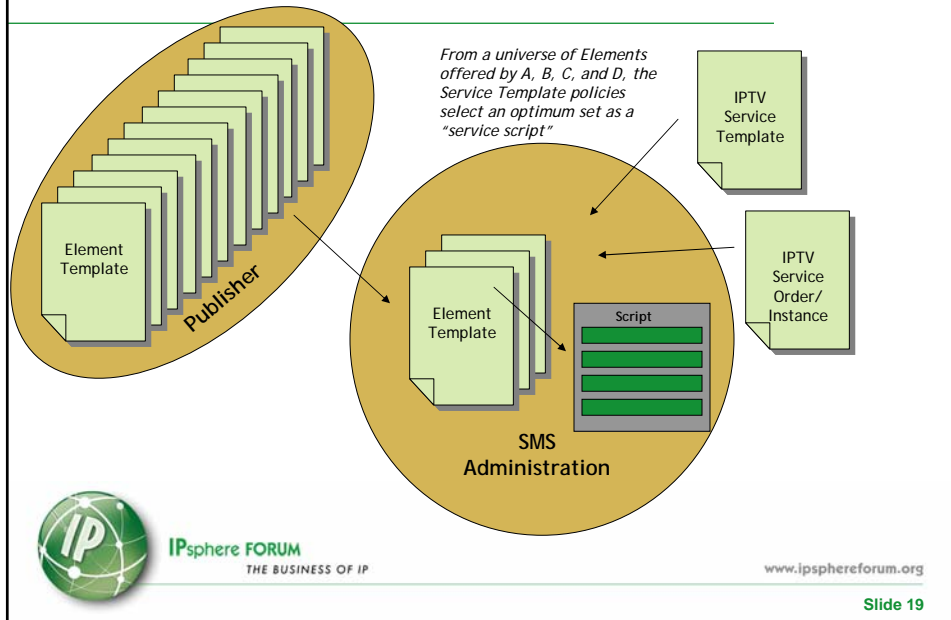


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## SMS Administration Picks Elements



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## Road to 2010 & beyond

- Growth opportunities are pre-dominantly consumer market based
  - **Fad** driven, unpredictable: “anticipate it at your own **risk**”
  - Vast scale has profound operational implications
- Possibility #1
  - Single provider operating **global** set of facilities, with global reach
  - Complete portfolio offering **any-all** services
- Possibility #2
  - Many “local” providers, with varying but limited reach
  - Attempting to offer any-all services - must coordinate resources
  - Looking to extend customer ownership - **natural aversion** to cooperation
- Possibility #3
  - Many “local” providers, with varying but limited reach
  - Attempting to offer services leveraging unique competencies, advantages
  - Willing to **cooperate** to explore & address customer needs & desires



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## Codifying Framework

- **Framework** for business-based structuring of provider services
  - Intra-provider (Type 2 interest)
  - Pan-provider (Type 3 interest)
- IPSF is **codifying** an **automated** framework which
  - Allows portions of a **service** (Elements) to be **published** by providers for assembly by others into complete services
  - Enables **selection** of service Elements based on business **policies**
  - **Assembles** selected Elements **into active services** on the physical resources of their contributing providers
  - **Binds** Elements to create continuous, complete end-end service



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## Choice we've all made

- Idealistic
  - Codify procedures from service layer **all the way** to resources
  - **Mapping** any & **all** possible services to a homogeneous and complete service plane, control plane, resource plane framework
- Pragmatic
  - **Abstract** away from **underlying heterogeneities**, allowing them to flourish as needed to fuel service innovation
  - **Codify** homogeneous **procedures** for structuring services **from any ordering** environment across heterogeneous control, resource planes



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## 2010 growth: Consumer markets

Commercial Dimension

Millions of Buyers

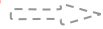


Billions of Buyers

Requires technology which can be **leveraged** to explore & address consumer market **opportunities**

Technical Dimension

Legacy Assets



Leveragable Assets

Reinvestment in un-leveragable, legacy assets = **stranded capital**

As an industry, this is where we must be by 2010

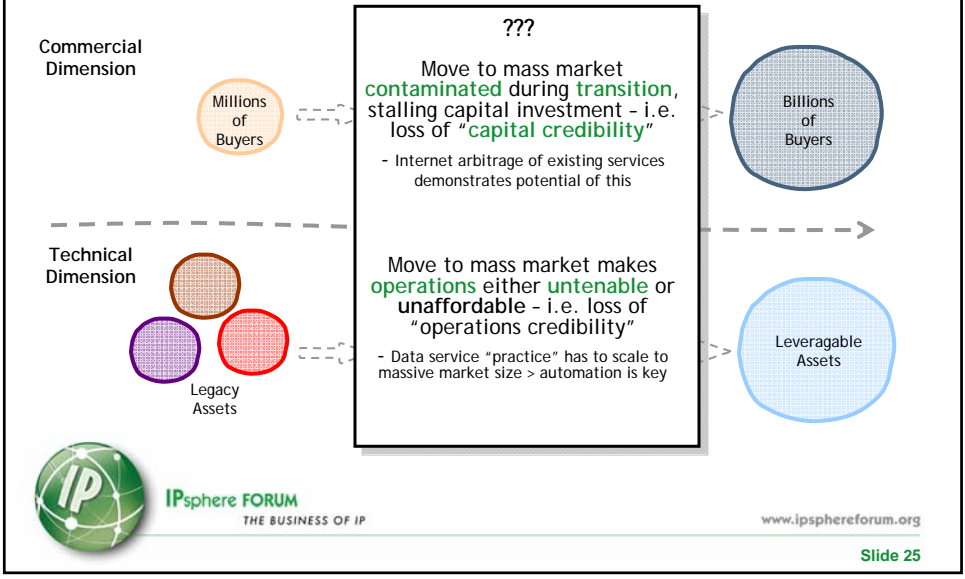


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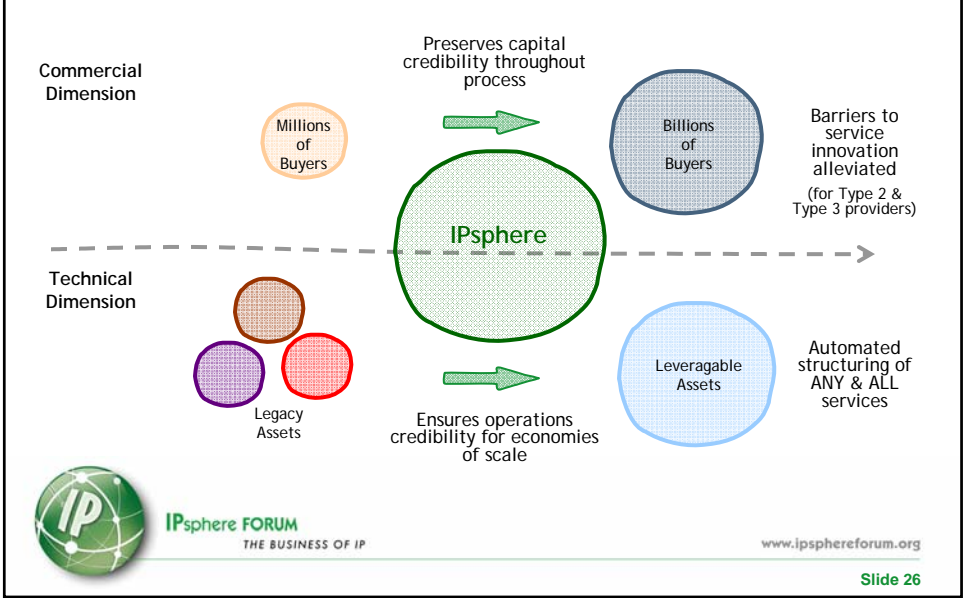
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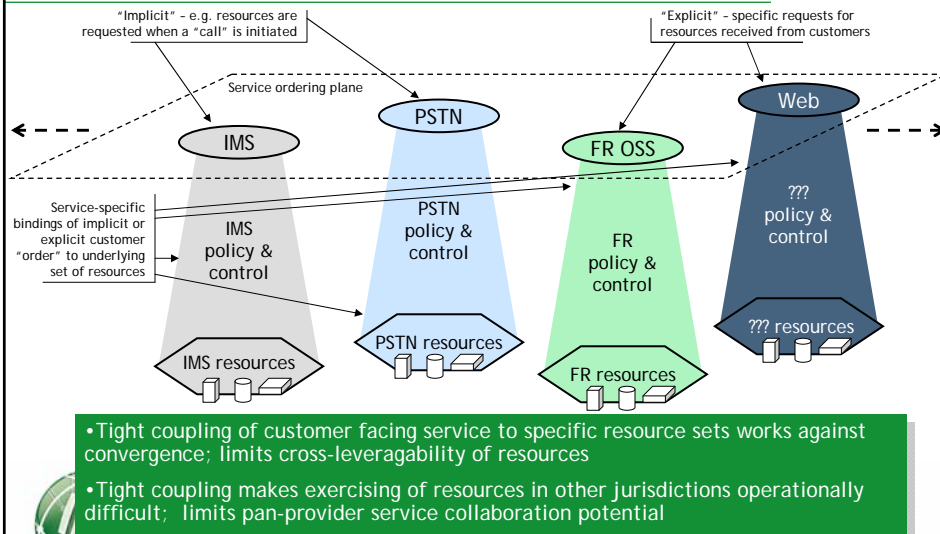
# Risks



# Why IPsphere Matters: Facilitates transformation to address "consumer" opportunities



# Status Quo



- Tight coupling of customer facing service to specific resource sets works against convergence; limits cross-leveragability of resources
- Tight coupling makes exercising of resources in other jurisdictions operationally difficult; limits pan-provider service collaboration potential

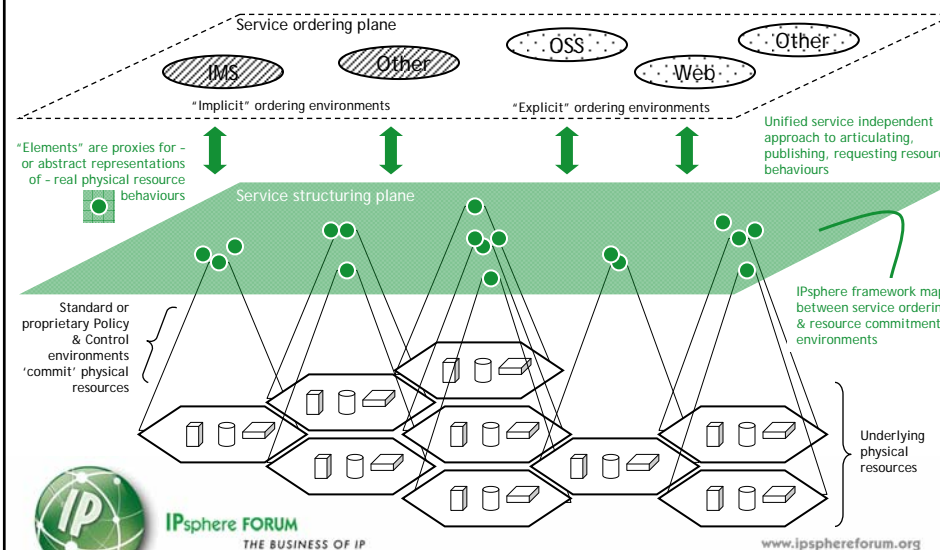


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# Service Structuring



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## Record 2006

	Q1 06	Q2 06	Q3 06	Q4 06
Workshops	IPSF Burbank Feb 13-15	IMS I Paris IPSF Sophia Antipolis May 15-17	Object Model Sunnyvale IMS II Ottawa PP LSP Montreal	IPSF Oslo Sept 12-14 IMS III Whippany Data Model Sunnyvale
Publication		IPsphere commercial framework		
Implementation		Tokyo Showcase		London Validation
Liaisons		ITU-T	OASIS	ETSI



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# Plan 2007

	Q1 07	Q2 07	Q3 07	Q4 07
Workshops	IPSF New York Feb 21-23 SSRM, Interop Whippany	Data Model, Interop Sydney Harmonization London	IPSF Berlin May 8-10 Interim WS TBD	IPSF Dinard Sept 25-27 Interim WS TBD
Publication	IPsphere commercial framework update	Release 1 technical specification	Release 2 technical specification SSRM specification	Release 3 technical specification
Implementation		R&D Platform P1 - Connectivity	R&D Platform P2 - Interoperability	R&D Platform P3 - Pilot Services
Liaisons	MFAF MSF	GSMA OMA	FMCA	Potentials: GGF LAP



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# IPsphere Forum membership

Alcatel-Lucent AVICI SYSTEMS Brighthaul BT CIMI Corporation CISCO  
comware ebay ERICSSON france telecom hp HUAWEI  
Juniper KT meriton NEC Net One Systems nexagent  
Red Zinc SIEMENS T-Com TELARIX Telefonica telkom  
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**Thank You**

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