



THE PARLAY GROUP

BRIDGING TELECOMS AND IT



Growing Business Opportunities with OSA/Parlay

Celio Rosa

Director

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Member of the Parlay Marketing Executive Committee



Growing Business Opportunities with OSA/Parlay

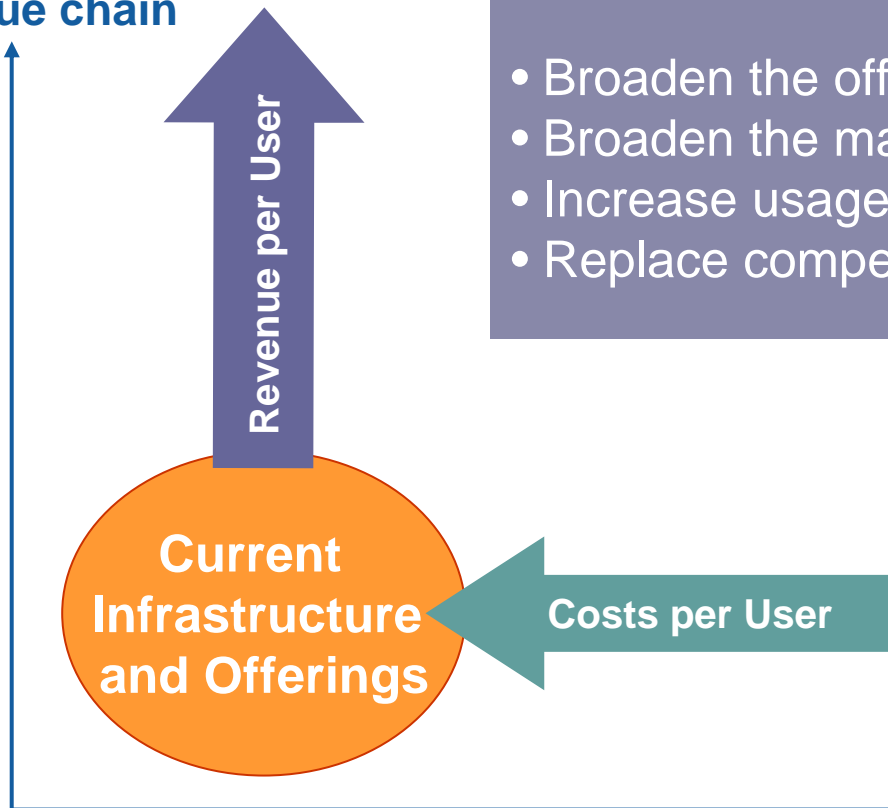
- **The need for a new business model !**
- **What's OSA/Parlay ? Who's OSA/Parlay ?**
- **What type of services are most likely to generate Revenues ?**
- **What is the next step ? How does OSA/Parlay fit IMS ?**
- **Conclusion**





Increasing Operator Business: Two Paths...

Revenues/Margins
value chain



Revenue Generators

- Broaden the offering: New Services and applications
- Broaden the market: Reach new subscriber segments
- Increase usage by leveraging installed base
- Replace competitors' offerings

OPEX Reducers

- Reduced operating costs
- Common platforms, pre-integrated products, integration services
- Subscriber self-provisioning
- Automation of tasks





What the operators are saying loud ?

"We live in an ever-changing converging Telecoms and IT environment, with pressures to get new products and services to market quickly, with minimal OPEX and CAPEX. It is critical for us to invest in a next generation service architecture platform."

European Operator

Source: Operator Guidebook to IMS and
New Generation Networks and Services
SECOND EDITION
FEBRUARY 2006

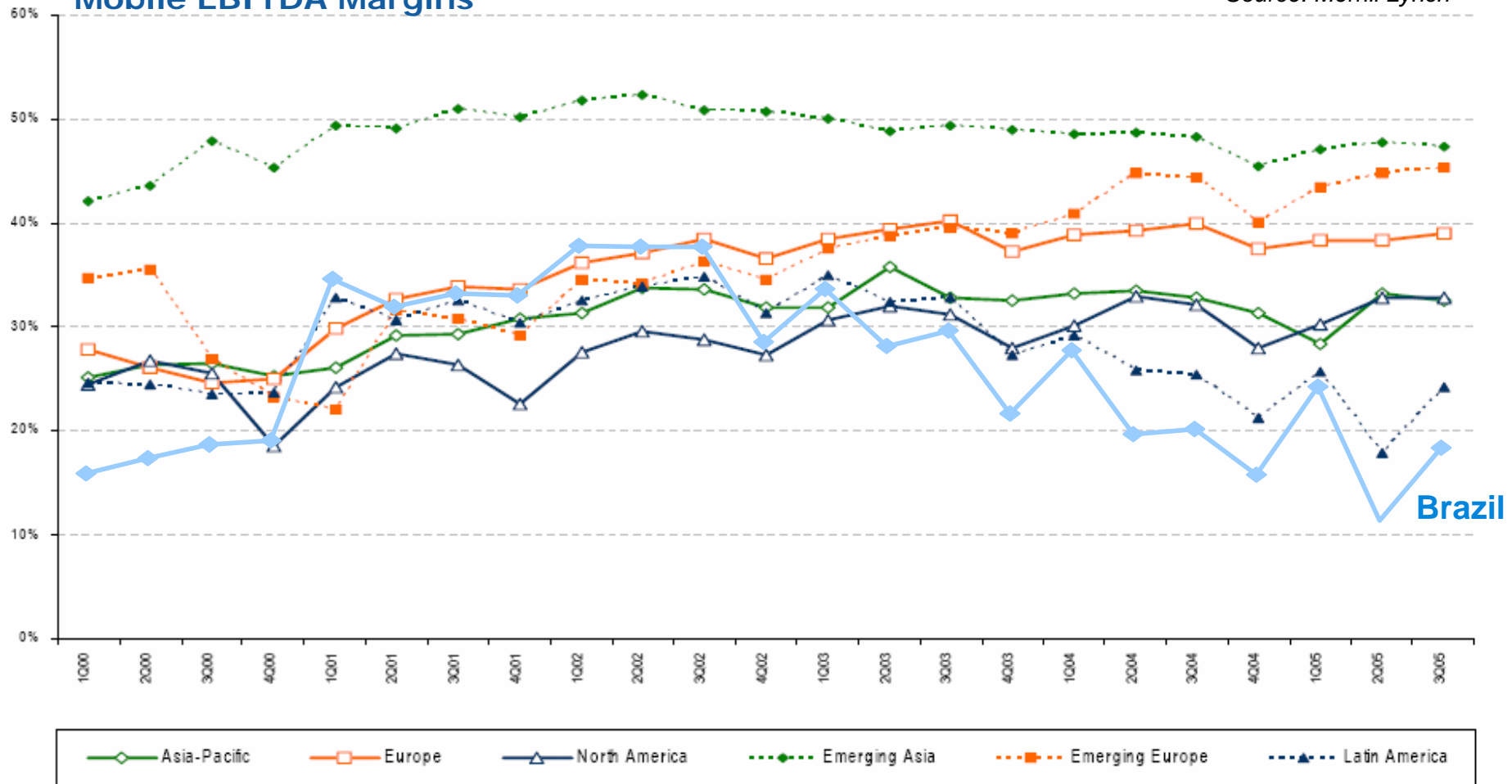




How is Brazil doing ?

Mobile EBITDA Margins

Source: Merrill Lynch



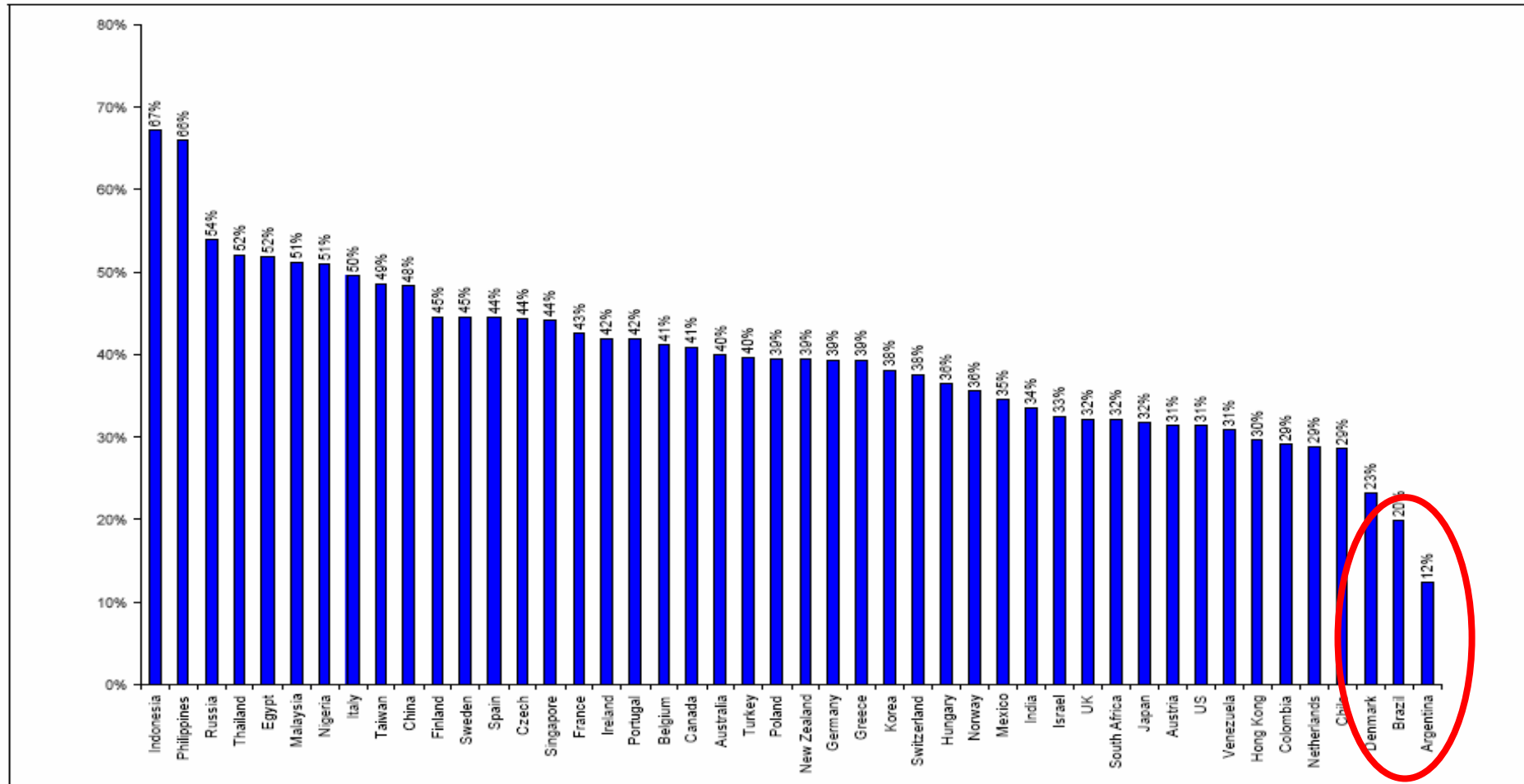
The growth with large terminal subsidize, infrastructure investments and strong competition has lead to decrease EBITDA margins





How is Brazil doing ?

Chart 17: EBITDA Margins By Country As Of 3Q04



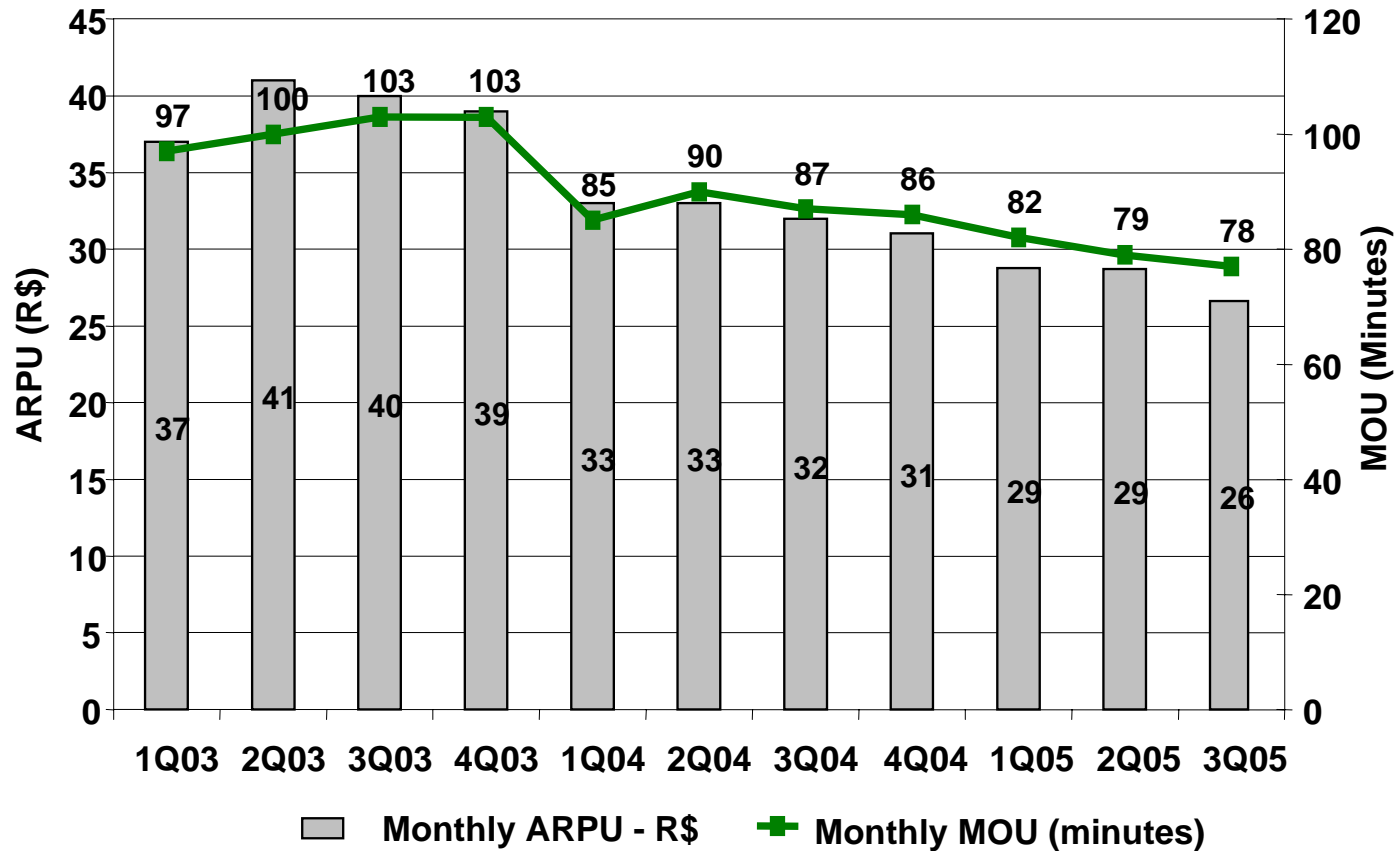
Source: Merrill Lynch Telecom Research Estimates. * Weighted by subscribers due to incomplete historical revenue figures for certain countries.





Brazilian Operators MOU & ARPU

Source: Merrill Lynch

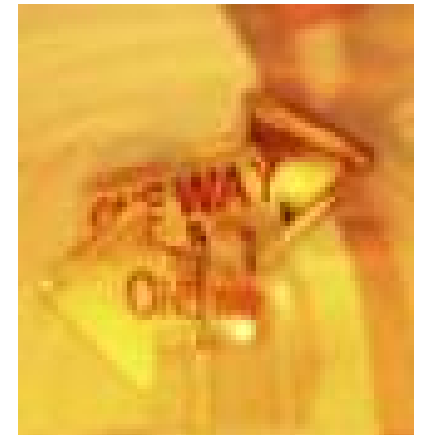




What the operators are saying loud ?

- *“...how to facilitate mass development of services?*
- *...how to ensure reuse of assets in the future?*
- *...how to simplify supply management and mass partnering?*
- *...It costs me millions of dollars to launch services “*

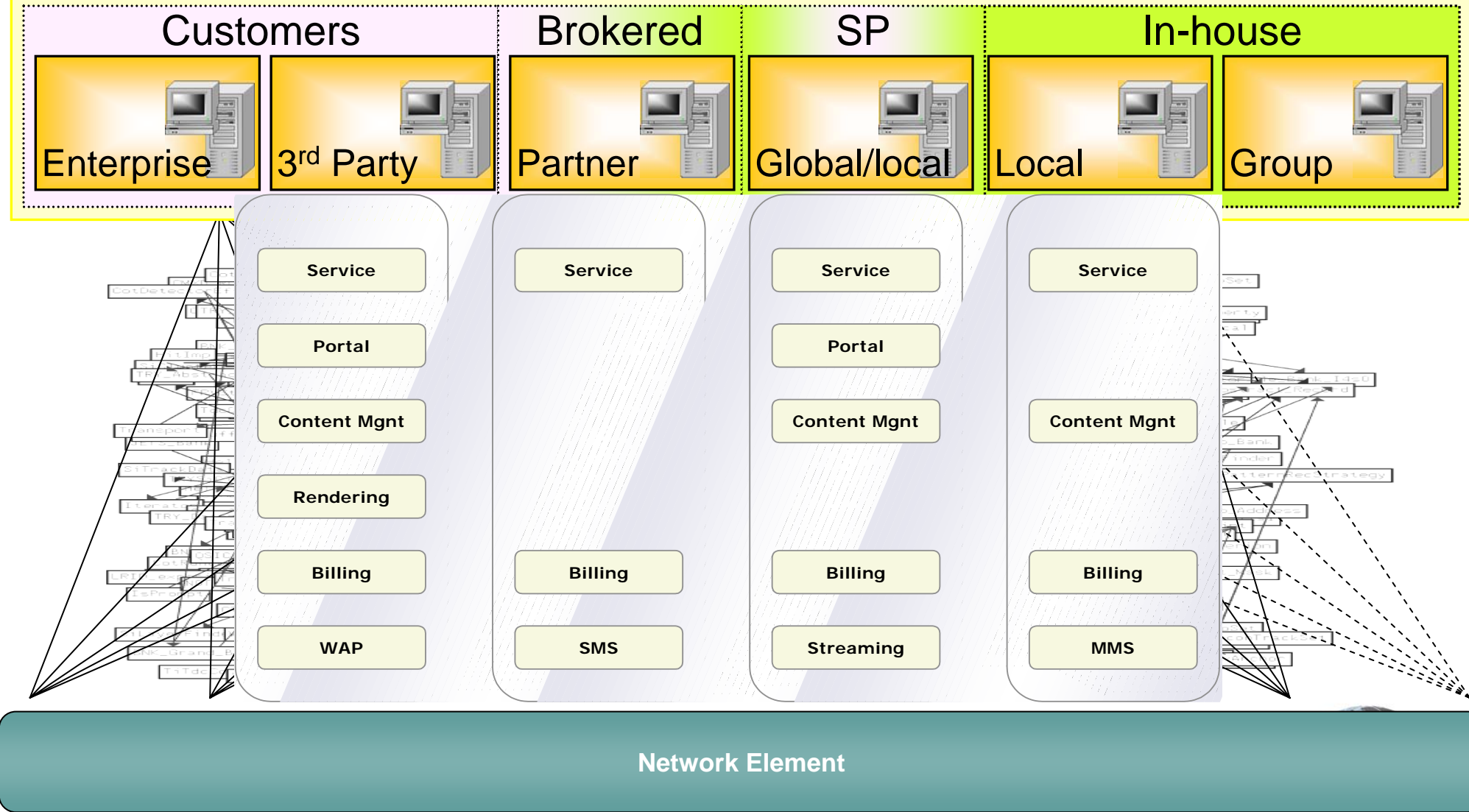
American Operator





Most Common Architecture

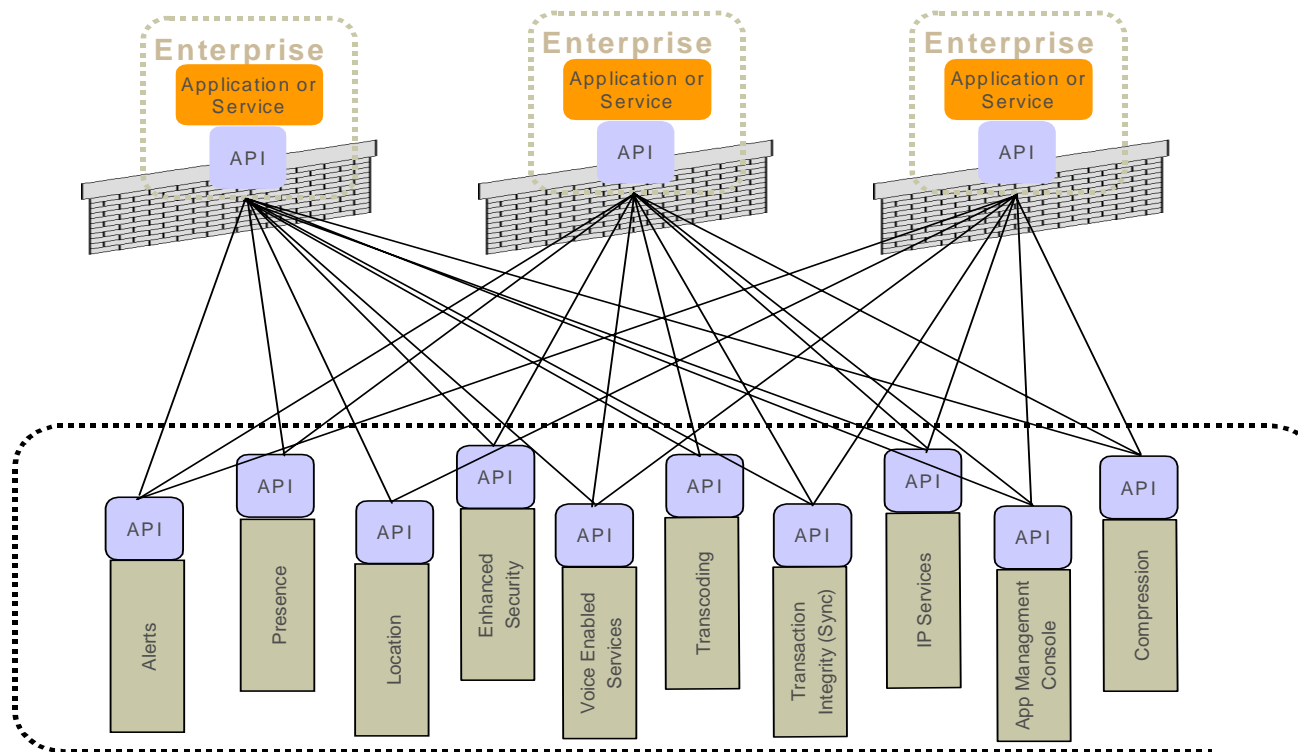
End user services





Sprint USA– Service Layer

Beyond a few capabilities / customers, the common approach for extending and enriching Enterprise Applications **is unworkable**

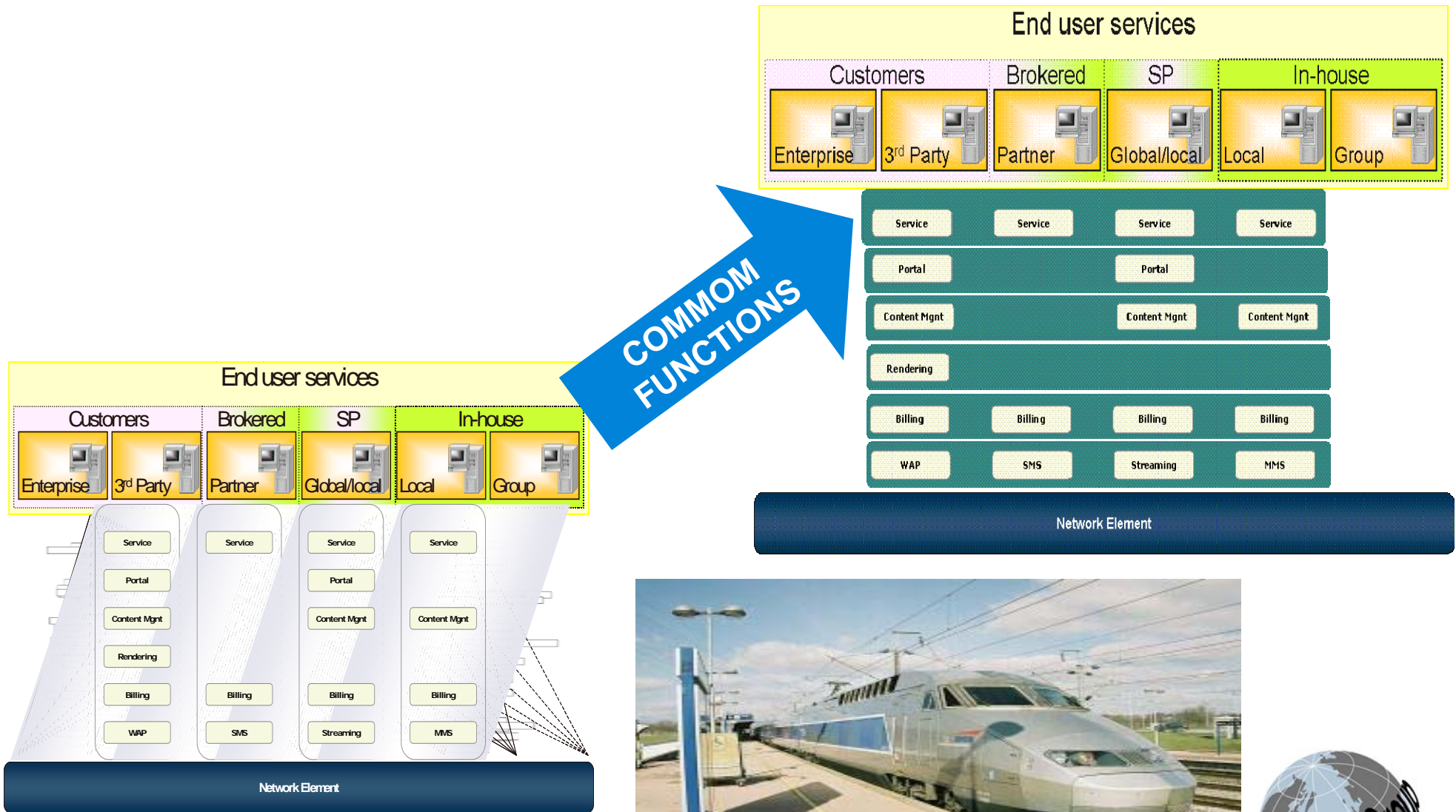


April, 21 2003



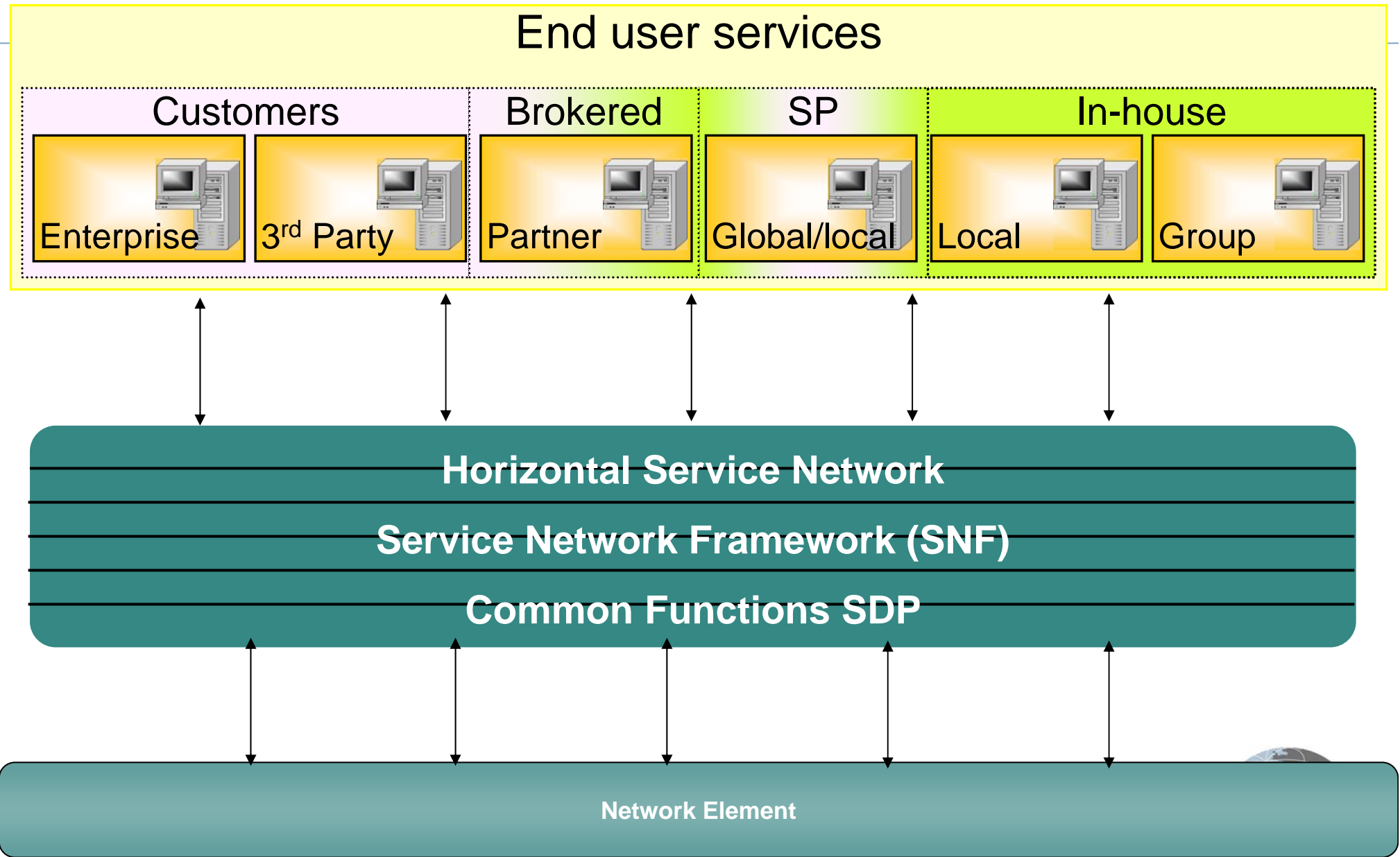


Reducing the complexity





Horizontal architecture





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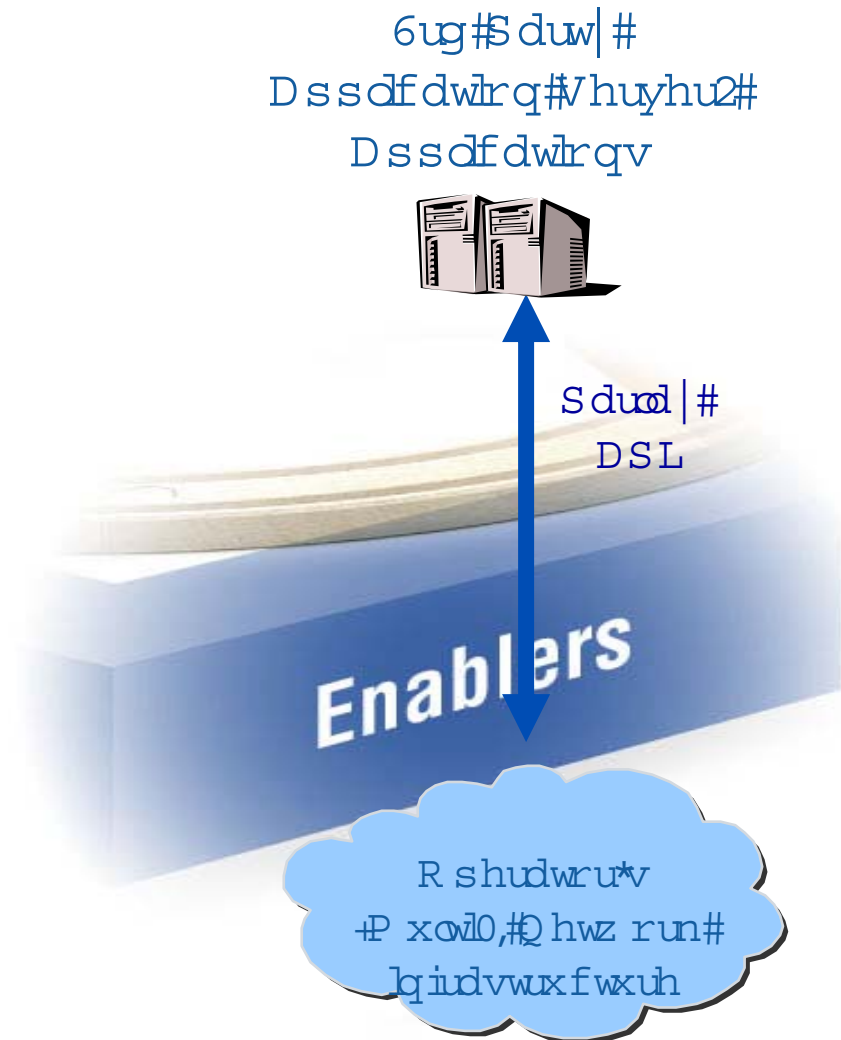


What is Parlay?

Def.: A mediator API between Telecom networks and 3rd Party applications

Open standards (specified by the **Parlay Group and 3GPP, OSA**), allowing operators to extend their business into the internet & enterprise markets

Secure interface between Network Operators and Application Servers. **Parlay integrates services with IT applications** via a secure, measured and billable interface.





Who is Parlay?

- Parlay Group created in March 1998
- In June 2000, became an **open multi vendor forum to standardize and promote open application programming interfaces.**
- Has over 80 members in Feb 2006
 - ▶ Operators
 - ▶ Telco vendors
 - ▶ IP vendors
 - ▶ Developers

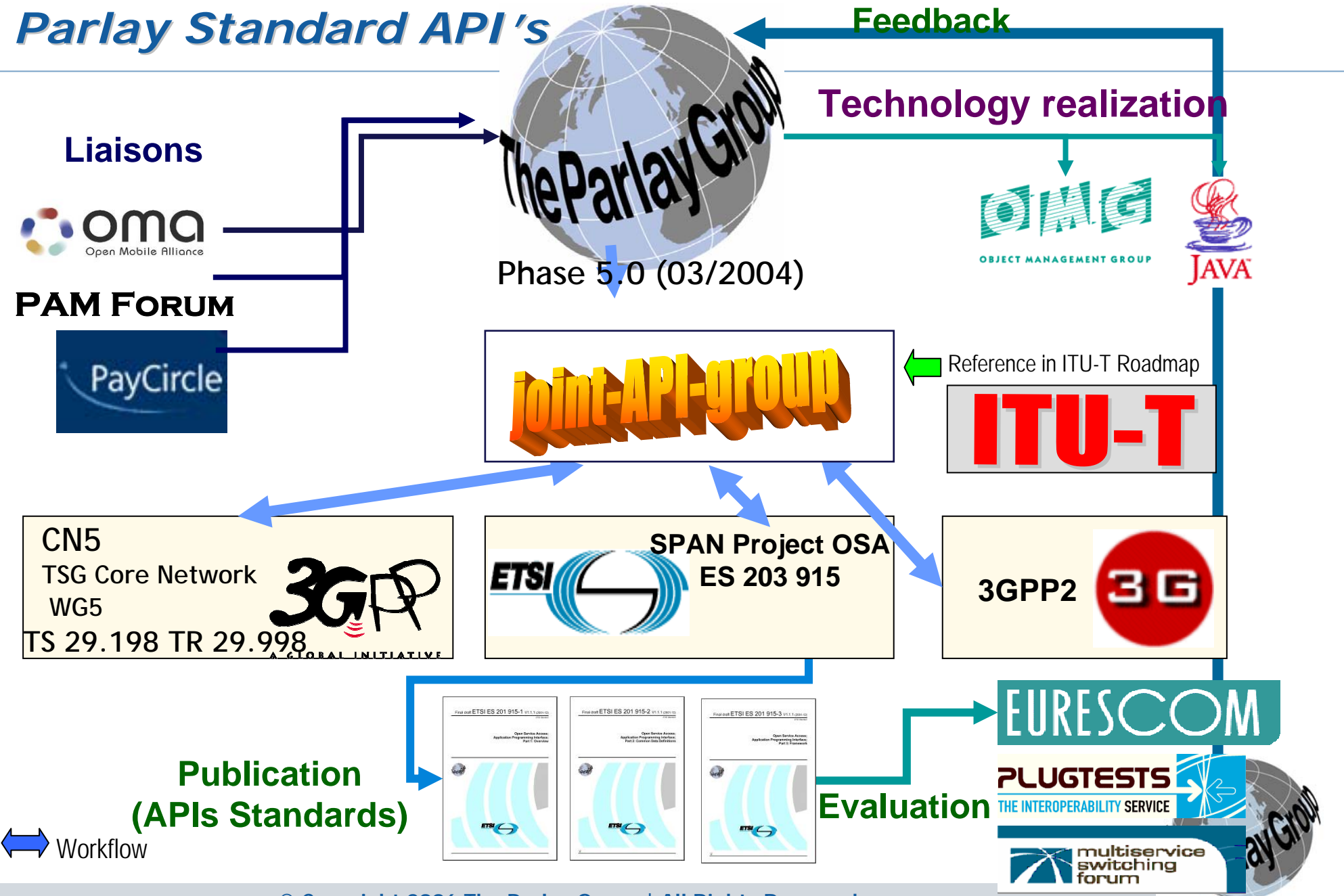
www.parlay.org

Examples

...and more

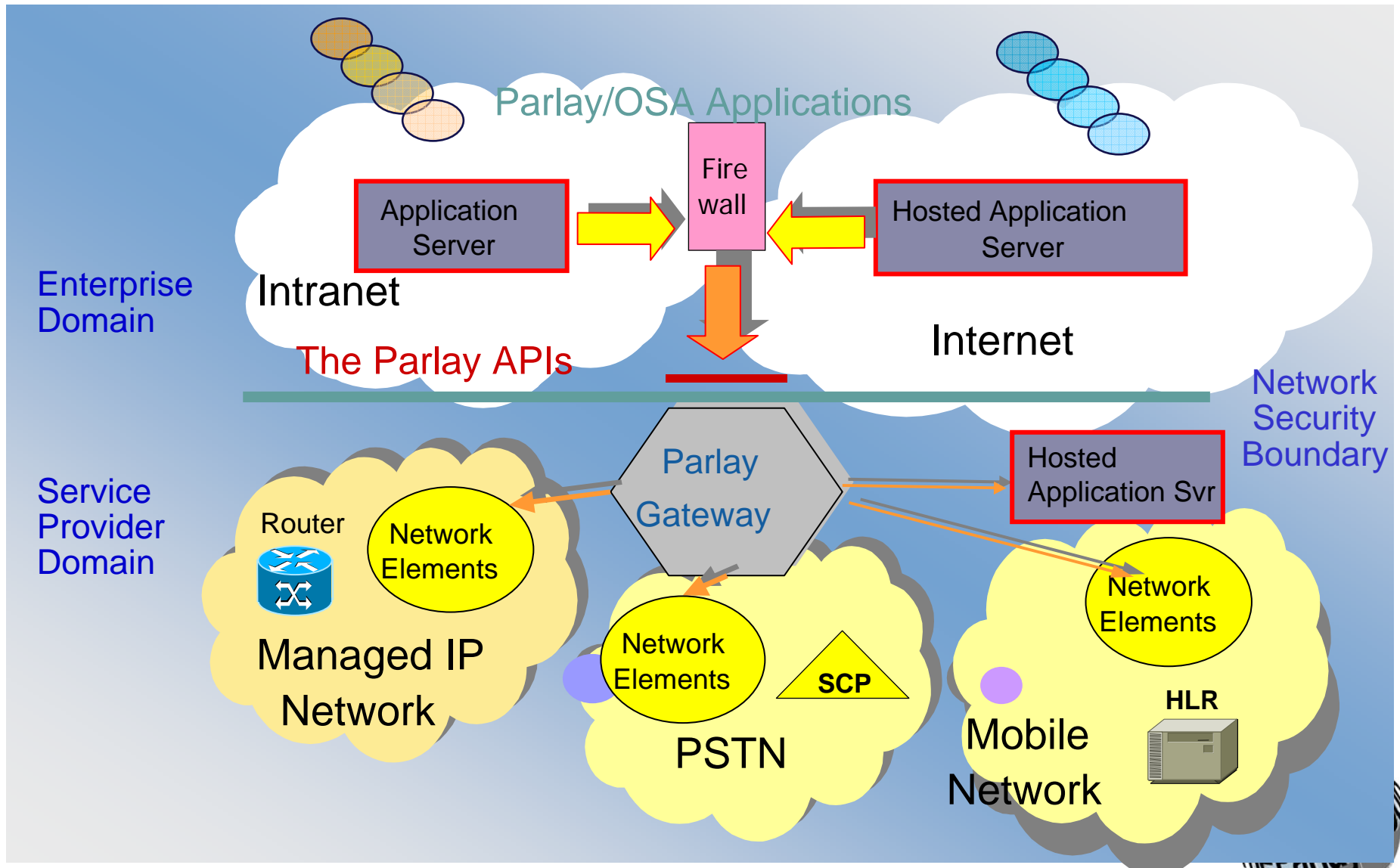


Parlay Standard API's



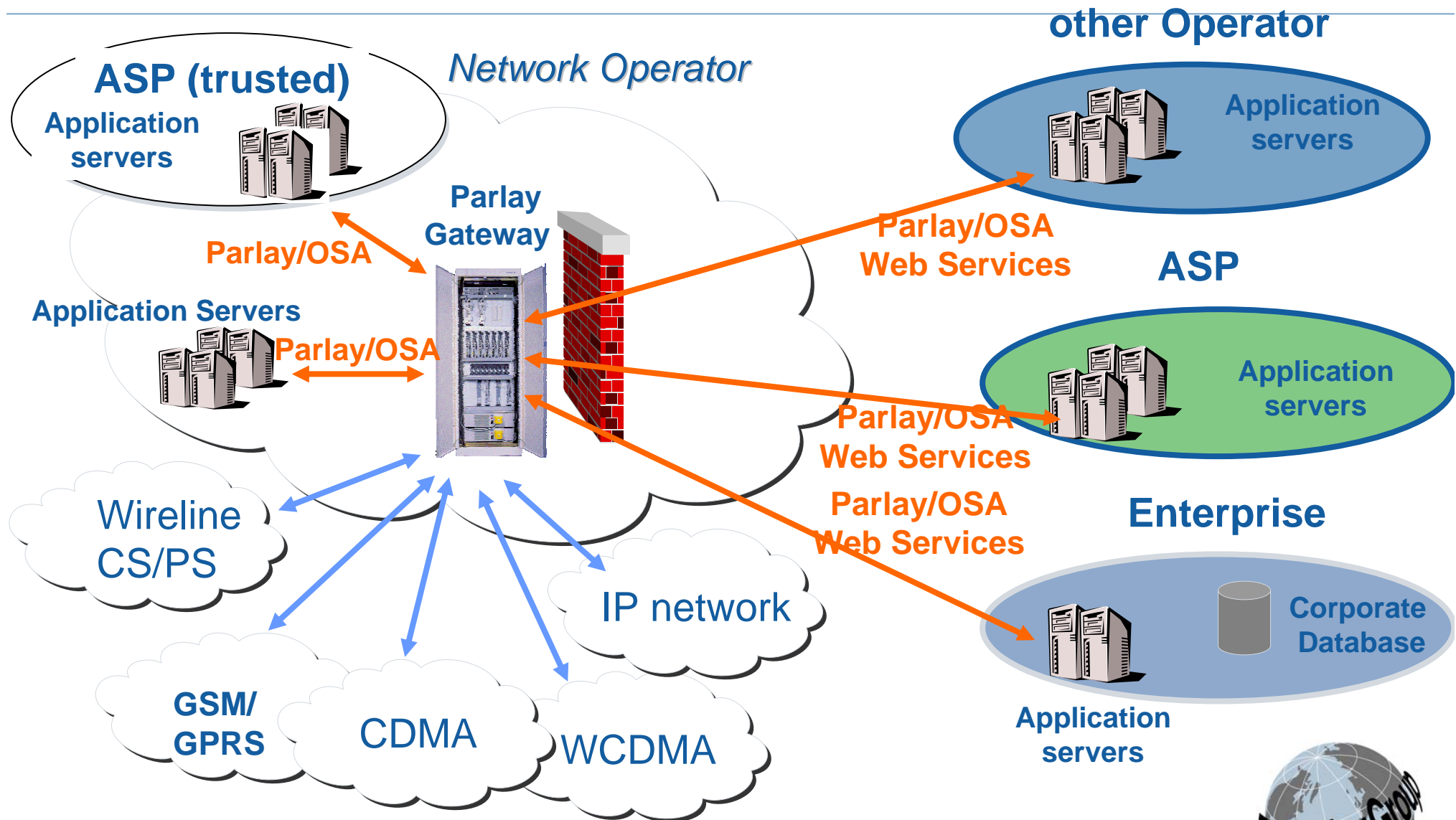


Parlay Reference Architecture





Parlay/OSA Business Scenarios





- ◆ Parlay ran a developer forum at 3GSM in Cannes
 - ~40 developers including
- ◆ “How to build Parlay Applications” from Appium, Ericsson, Infitel, Lucent

<http://www.parlay.org/news/events/Parlay-DevelopersForum-3GSM2004.asp>

Singapore

- The Infocomm Development Authority of Singapore sponsored a seminar in June 2003 for the industry in Singapore and local developers to learn about Parlay.
 - “Ultimately enable a vibrant mobile ecosystem rich in mobile applications and services”



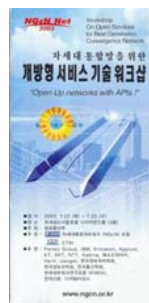
Korea

차세대 통합망을 위한 개방형 서비스 기술 워크샵

(Workshop on Open Services for Next Generation Networks)



Korea Telecom



- 2 day workshop in July 2003 looking at the use of open APIs, organised by ETRI
 - Over 180 registrations
- Exhibition of Parlay/OSA technology
 - IBM, Kabira, NTT
- There were also Parlay products on display which were developed in Korea
 - Herit, Korea Telecom, uAngel
- www.ngcn.or.kr



Herit Corporation stand



uAngel Poster



IMS GLOBAL CONGRESS 2005

Evaluate the business case for deploying IMS and learn how to achieve cost-effective implementation, migration and application development to optimise your ROI

3rd - 6th October 2005 ■ Marriott Hotel, Budapest

- Determining which application server to use in your IMS network
 - Camel
 - OSA/Parlay Gateway
 - SIP
- Günther Pospischil, IMS Lead Architect, MOBILKOM AUSTRIA





Parlay Momentum – 2004 → 2005 Marketing & Tradeshows



**9th International
Conference on Intelligence
in service delivery Networks**

**FutureCom
2004**
October, 25th to 28th
Florianopolis - Brazil

CommunicAsia2004



SERVICE CREATION USING TELECOM CONVERGENT NETWORK PLATFORMS

Enabling Compelling Services for Fixed and Mobile Service Providers

15th - 17th September 2004
Central London

**JOIN, WEB SERVICES,
PARLAY, SIP AND SIP**

Key benefit of attending this conference

- Learn about the latest developments in service creation and network convergence
- Meet the leading industry experts and service providers
- Discover the latest in service creation and network convergence
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www.parlay.com

Business Branding Partner: **telent**
Preferred Partner: **telent**
Media Partner: **SIP**
Sponsored by: **FOCO**, **APONA**

marcus & milner conferences

FROM THE ORGANISERS OF THE 3GSM WORLD CONGRESS

**8 OPERATOR
CASE STUDIES**

mobile Service Delivery Platforms

Developing a cost-effective and flexible solution for the storage, management and delivery of value-added services

5-6 July 2005 // Crowne Plaza Hotel // Brussels

The Register



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Ericsson Mobility World Developers Day in Bogota, April, 2004



SLLA - Celio Rosa – March 04



www.parlay.org

Berlin

Attractive Market-driven Mobile Applications
Enabled by Next Generation Service Delivery
Platforms 3GPP OSA/Parlay & IMS

March 26, 2004, Berlin
9:30 a.m. to 5:30 p.m.

Bundesministerium,
für Bildung
und Forschung

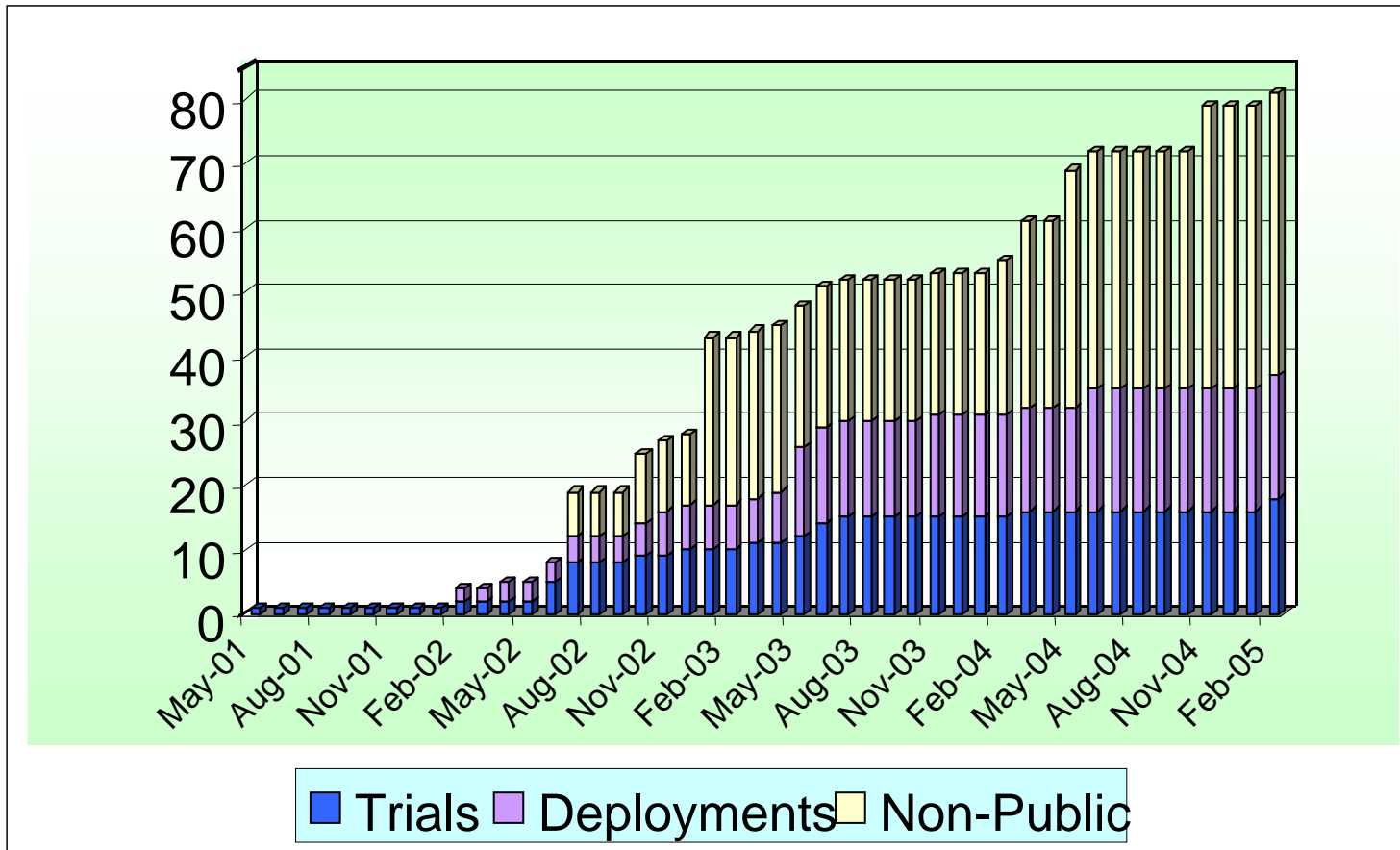
DFN
Deutsches
Forschungsnetz

http://www.fokus.fraunhofer.de/mobile_applications/

Parlay Member Report: ZA Lozinski 11 May 2004, Miami
© 2004 The Parlay Group, Inc. All Rights Reserved.



Parlay/OSA Deployments (October 2005)



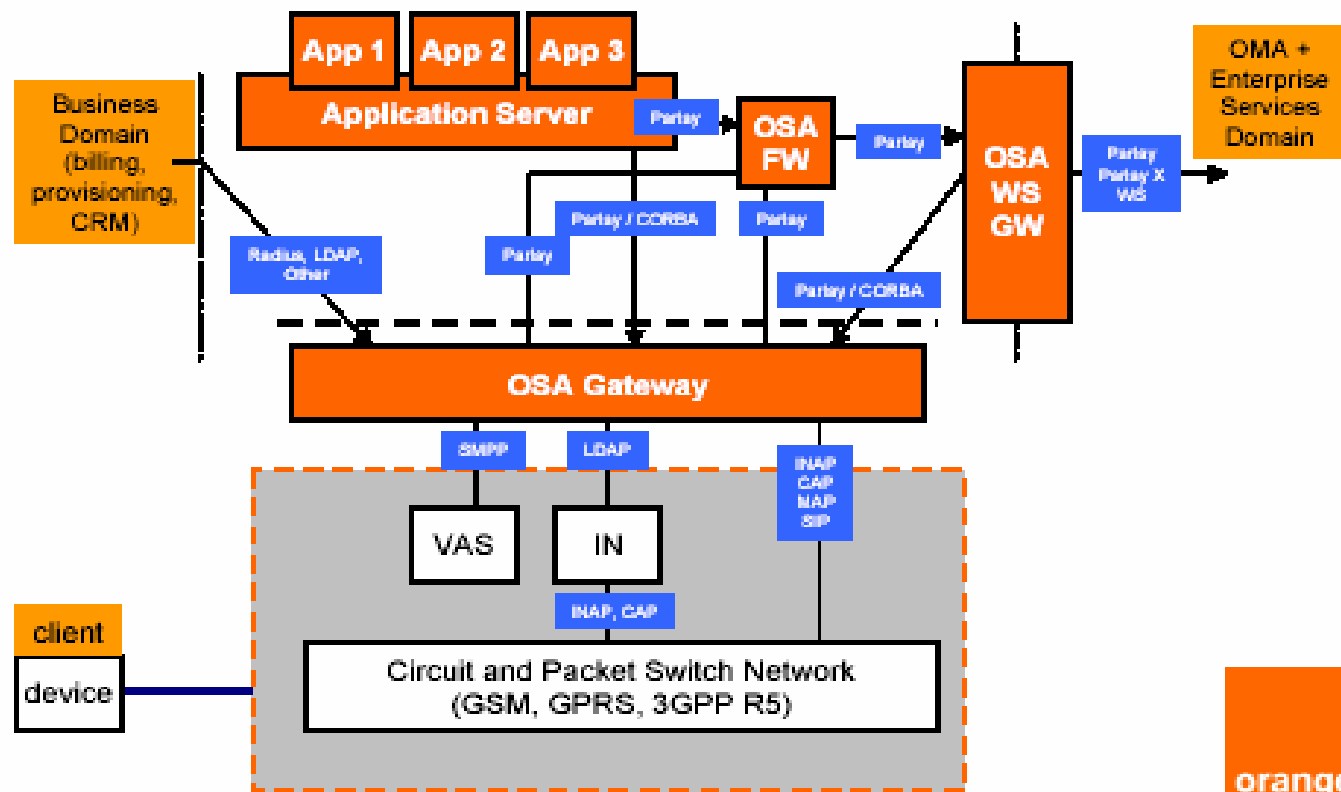
The number of trial and deployments is increasing. More are remaining confidential.





Orange UK/France

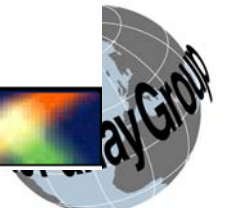
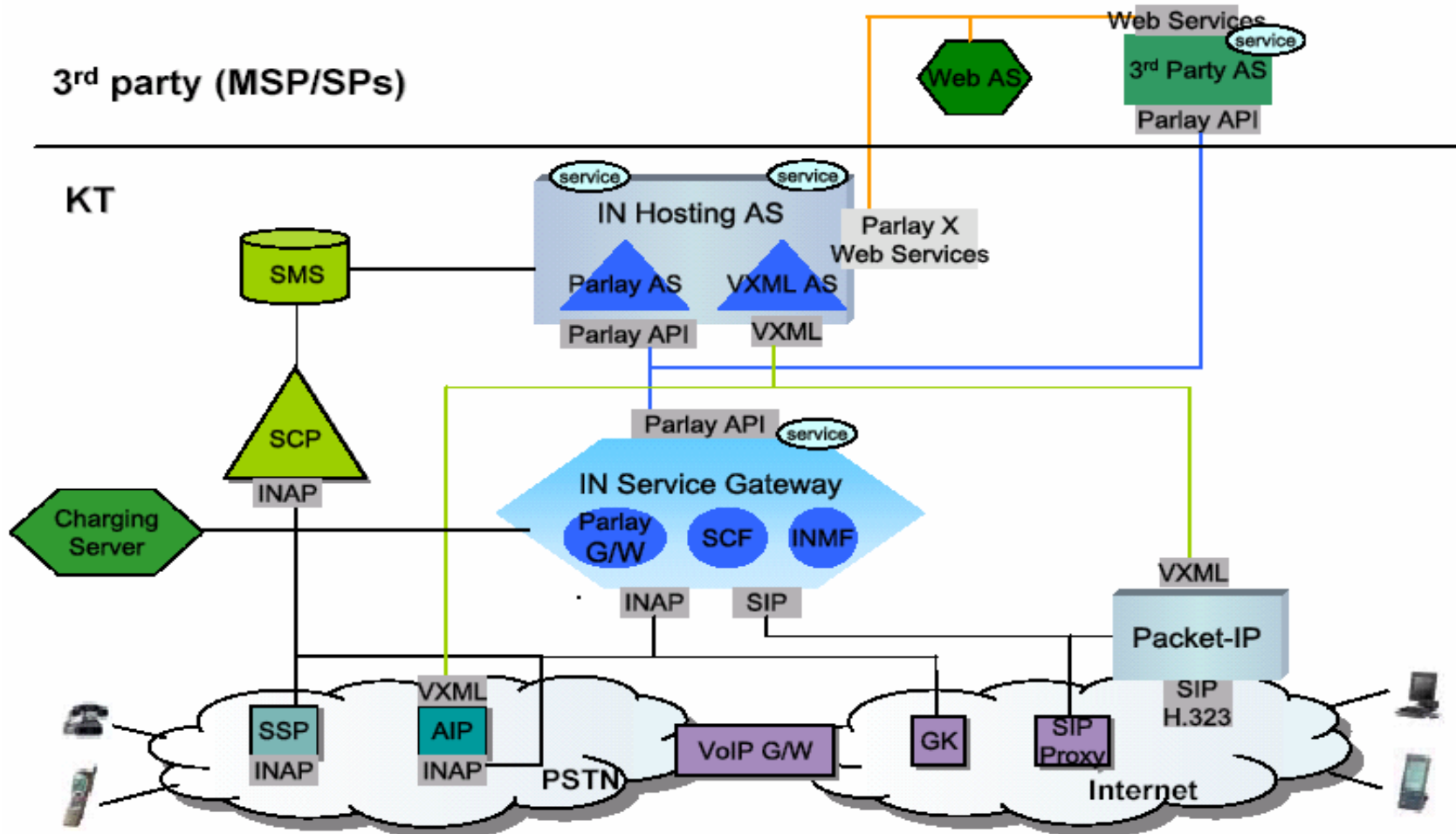
Orange Parlay deployment





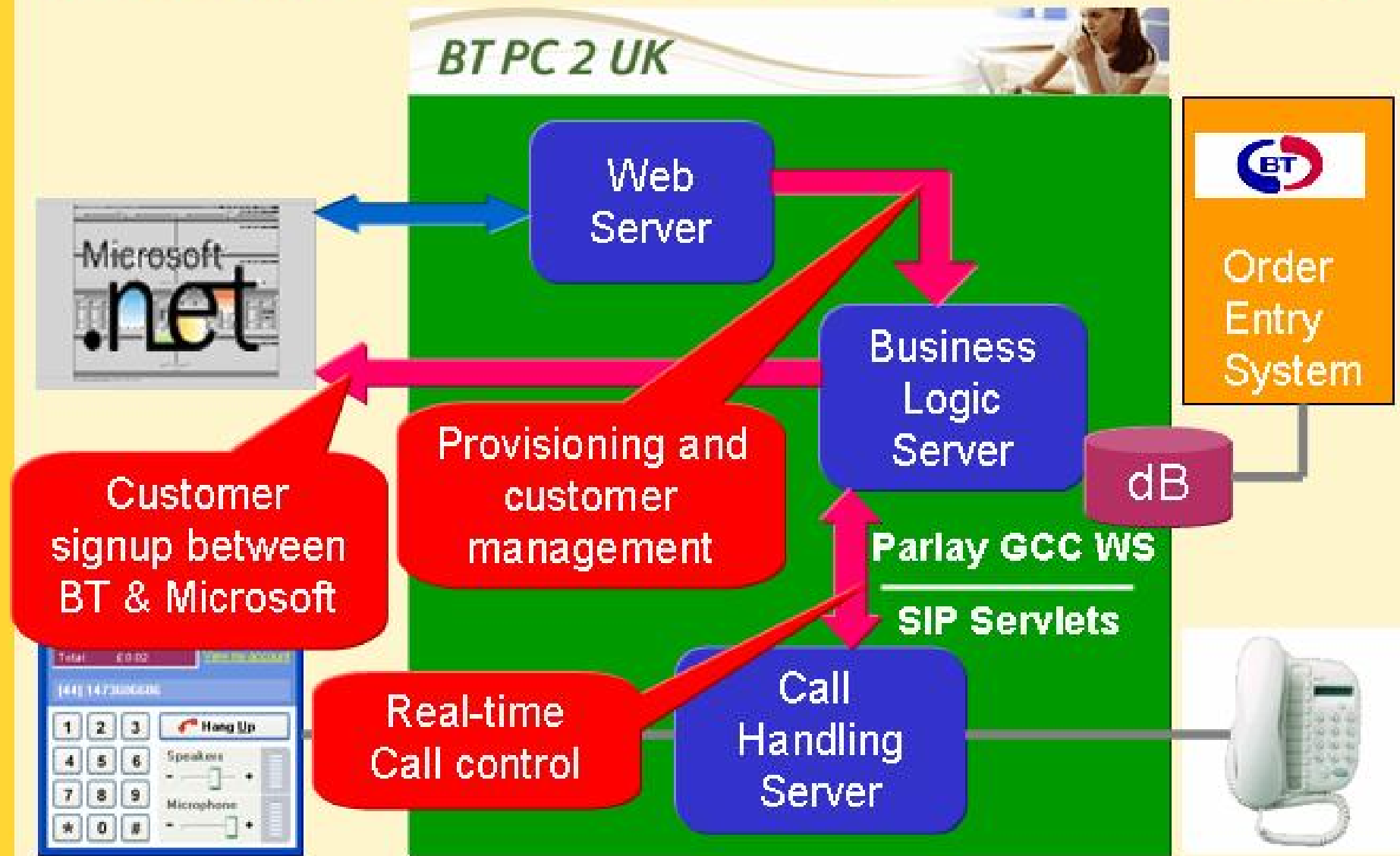
Korea Telecom – Service Layer

KT Open Service Architecture



PC2UK Web Services

web services

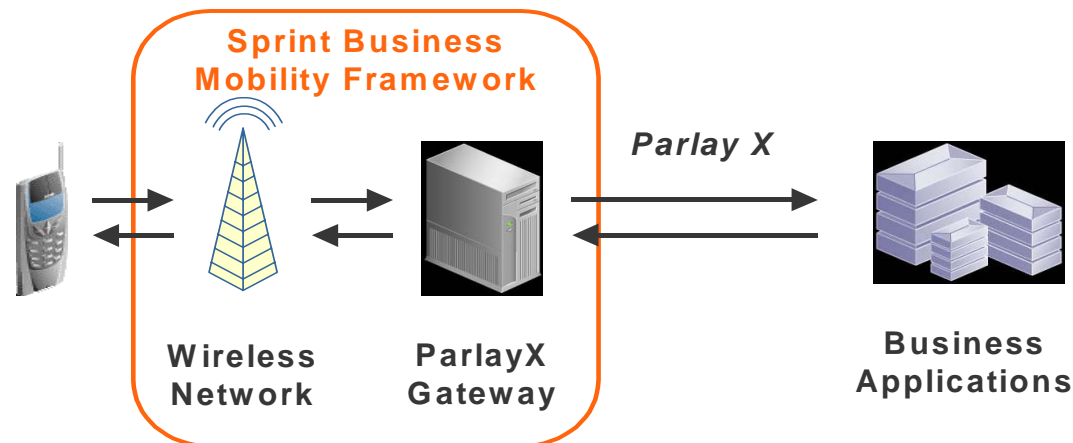




View from the Market

Open standards approach – Parlay X

- Provides a broad set of API's for multiple network services
- Simplifies development by using web services technology
- Reduces business risk
- Enables new business models
- Supports IP/MPLS, CDMA Wireless networks with the same APIs, providing a future-proof evolution path for network services



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Benefits of open API

For Operator and Service Provider

- Reduced Time to Market
- Address New Market Segments
- Higher revenues
- Reduced cost & churn
- Open J2EE applications

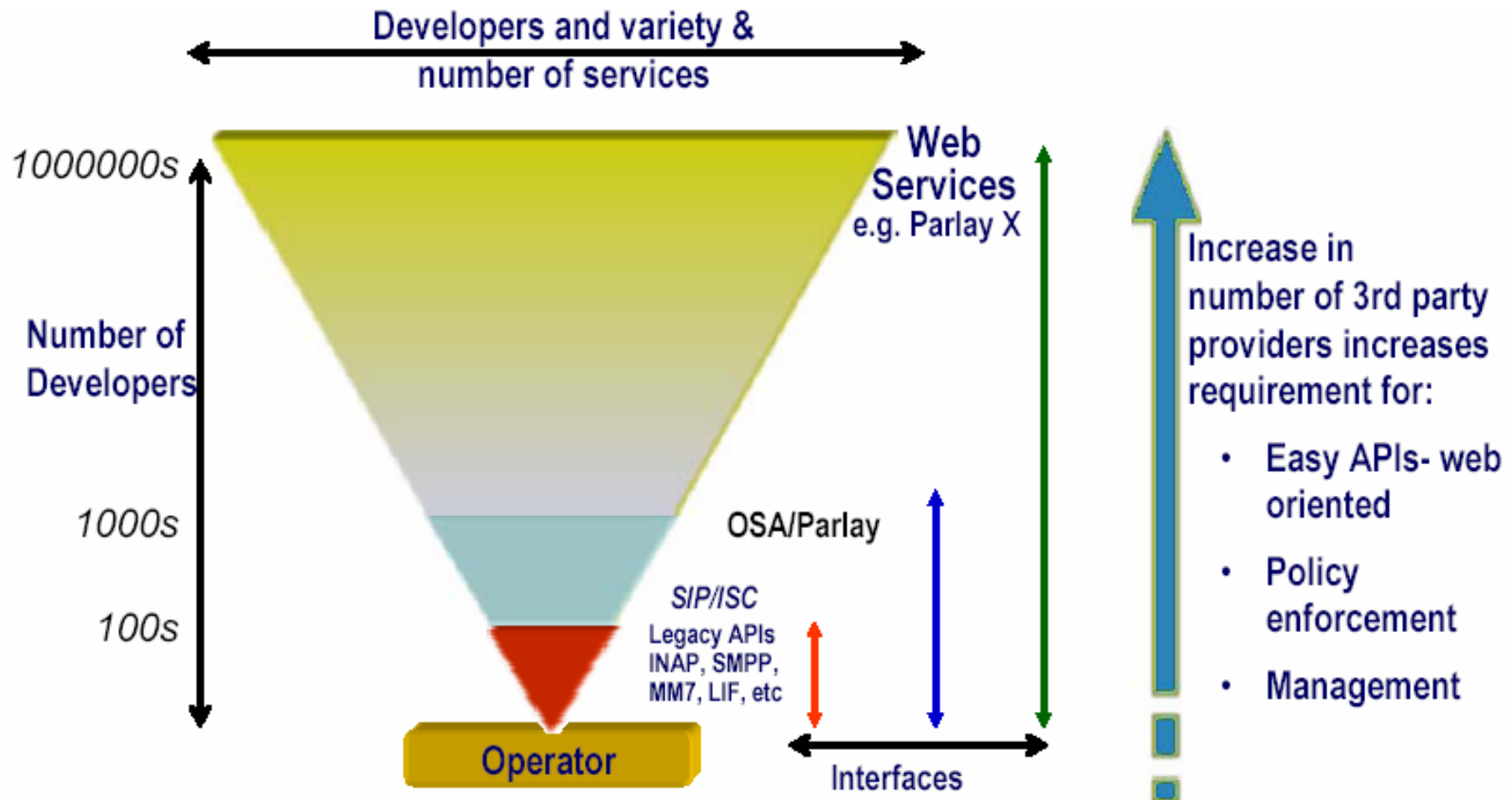
For the Developers

- Faster development
- Lower costs
- Reduced complexity
- Reduced risk
- Higher revenues



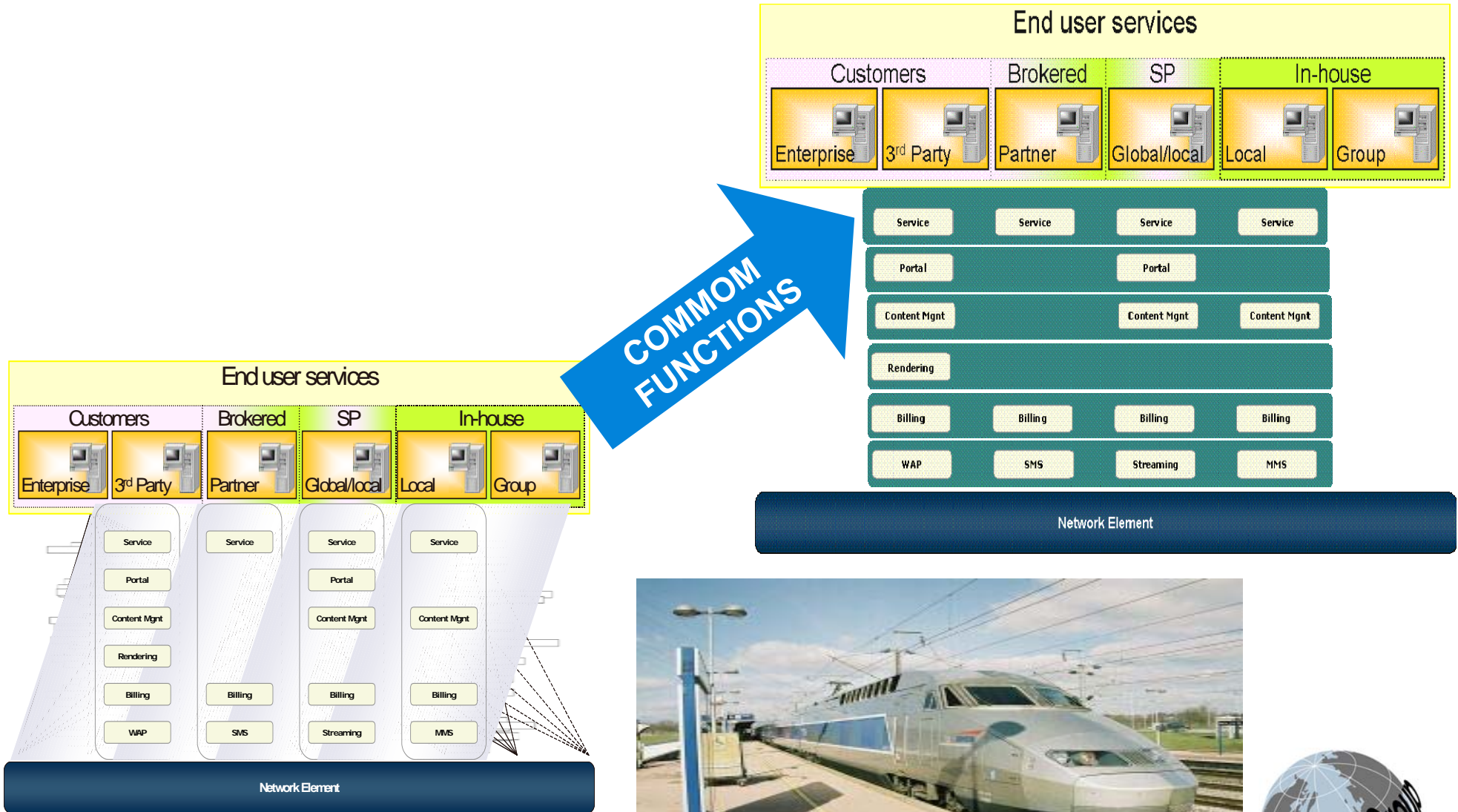


Benefits of open API





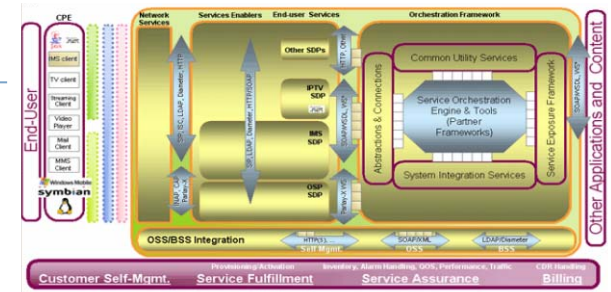
Reducing the complexity



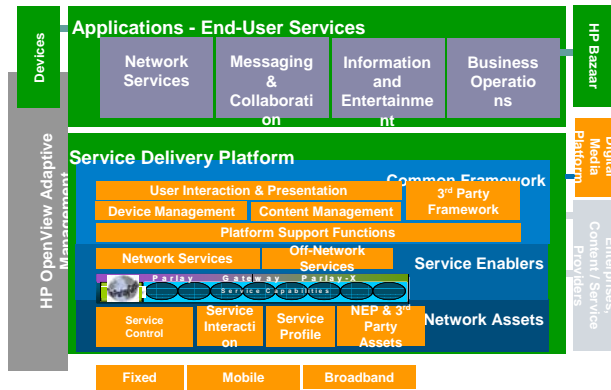


Service Delivery Platform

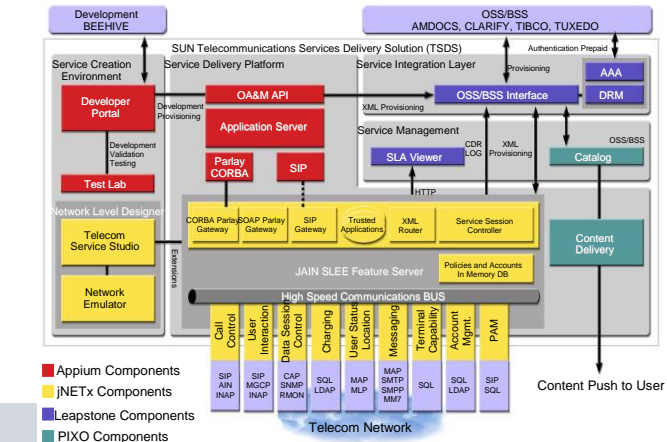
Alcatel



HP

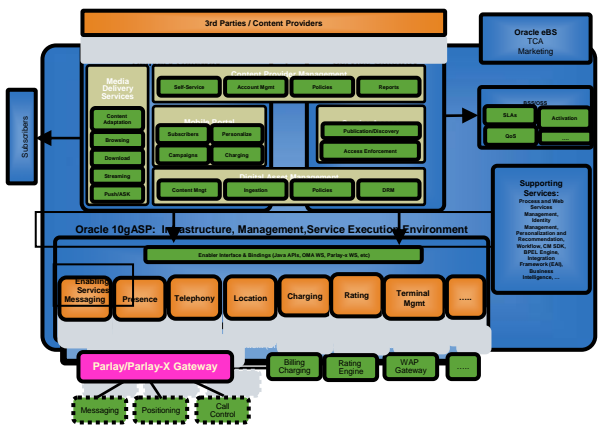


SUN

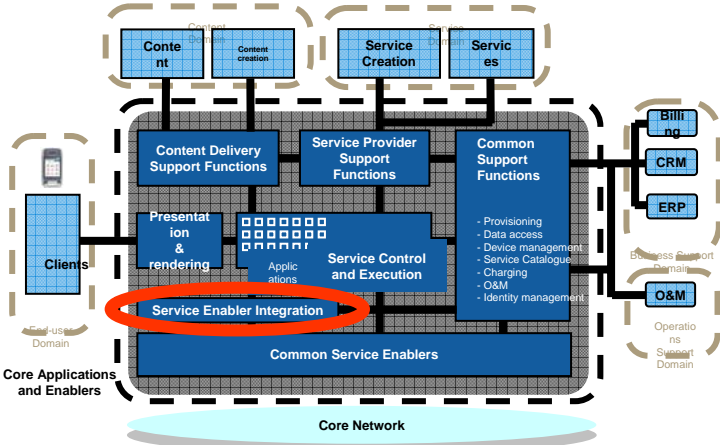


Parlay key role in SDP Architecture:

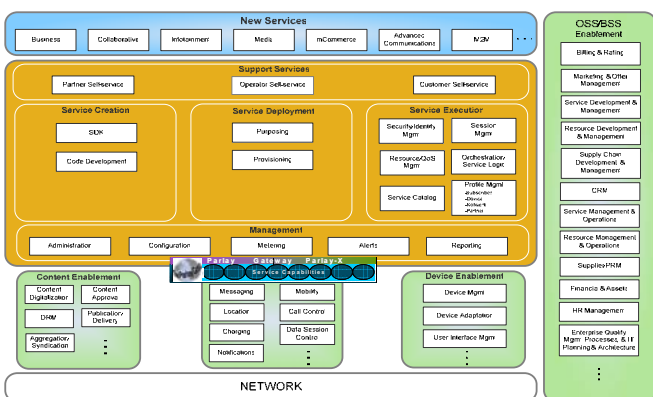
Oracle



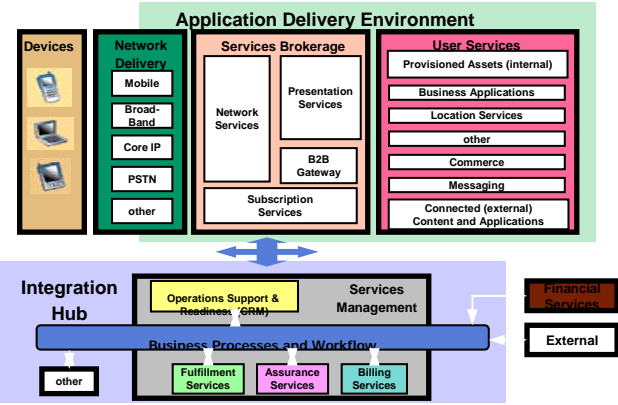
Ericsson



Microsoft



IBM





How to measure the change to gain results?

Operator X Service Delivery Platform	2005	Dec 2006
1. Number of active service providers	18	50 by Dec 2006
2. Number of active services	130	200 Dec 2006
3. Number of active content providers	22	70 Dec 2006
4. Number of active content areas	26	40 Dec 2006
5. Content revenue per month (US Dollars)	3.9 MUSD/Month	6.5 MUSD/Month
6. Service revenue per Month (US Dollars)	10.1 MUSD/Month	16.4 MUSD/Month
7. Service Time-to-Market	90 days	30 Days Dec 2006
8. Content Time-to-Market	60 days	20 Days Dec 2006
9. Service provider contract flow	56 days	20 Days Dec 2006
10. Content Provider contract flow	55 days	15 Days Dec 2006
11. Number of registered subscriber	8 Million sub 1.400 000 actively using services	8.7 Million sub 1 900 000 actively using services with increase in end user service usage.

Reaching real improvements (\$\$\$) !!!





Growing Business Opportunities with OSA/Parlay

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What kind of applications do the operators want ?

- **Positioning information**
 - Apps knows where you are
 - Traffic information delivered timely and where needed.
- **Voice Recognition**
 - Control call flow with your voice, enhanced VPN
 - Non known user leave voicemail before delivery
- **Access Corporate information**
 - Exchange servers..., enhancements to e-mail
 - Call server checks with Outlook database before call setup
- **Machine-to-machine communication**
 - Vendor machines, elevator repair, cargo location...
 - Elevator reports faulty automatically, call setup elevator-repairman
- **Entertainment**
 - Personal preferences
 - Dating service using personal preferences
- **Web Services**
 - Parlay-X Telecom Web Services. Suitable for use by web developers.
 - Suitable for a 'call-me' button on a web page.
- **WEB & WAP control of Applications**
 - End-user controlled services, click-to-talk (0800), web phone Call routing towards many terminals, call setup to first answer

Cool

Apps!





Ideas for OSA/Parlay applications

- Missed Call Message*
- Mobile Scotland Yard*
- Who is it?*
- Call Dad*
- Voice SMS*
- Emergency-Call Closest Mobile*
- Televoting*
- Multi Party Meeting 123*
- Bonus Miles = Prepaid = Minutes*
- Walkie-talkie*
- Digi or Mobile Pet*
- Share the moment*
- Call Barring*
- I am here*
- All together now*
- Where am*
- Spoken tourist information*
- Calendar Reminders*
- The Matchmaker*
- Role Play on mobile*
- Free to Call*
- Call Closest Service Engineer*
- Call a stolen GSM*
- Bar code with GSM*
- City trip guide*
- Buy a daily soap in TV*
- Travel assistant*
- Breaking news alert*
- Reachable during Internetting*
- Last Incoming Call Barring*
- Find a number plate*
- Call Chiffre*
- Top of the queue information*
- Call Completion for congestions*
- The Matchmaker*
- Start Application on Call*
- Catch the moment*
- Chat-and-talk*
- Personalized music at ringtone/busy*
- Take you medicine reminder*
- Phone Pages*
- Direct Call-Back From Voice Mailbox*
- International Multiple Subscription Offer*
- Call from hyperlink*
- Funny Voice Filter*
- Kid/Animal tracker*
- Bonus on Receiving Calls*
- ASAP – Advanced Stock Broker Alert*
- Remote machine management*
- Distribution lists for SMS/MMS/announcements*
- Do not Disturb - Call Filter (White list)*
- Quick dial*
- Calling minutes present*
- Mobile Personal Number*





View from the Market

Sprint Business Mobility Framework: *Services Delivered Today*

- **Presence** – provides a status indicating whether the device is on or off
- **Cell Sector Location** – provides the latitude & longitude of a device's cell sector center, along with accuracy estimate
- **Precision Location** – provides the latitude & longitude of a device along with accuracy estimate; depending on conditions accuracy can be within 5 – 300 meters
- **SMS Alerts (Text Messages)** – enables application server to easily send a text message to a device
- **Voice Alerts** – enables application server to call a phone and play a message using Sprint text to speech technology or via an audio file
- **Presence Notifications** – allows application to be alerted when a device is turned on or off
- **Location Notifications** – allows application to be alerted when a device crosses a specified geo-fence boundary.



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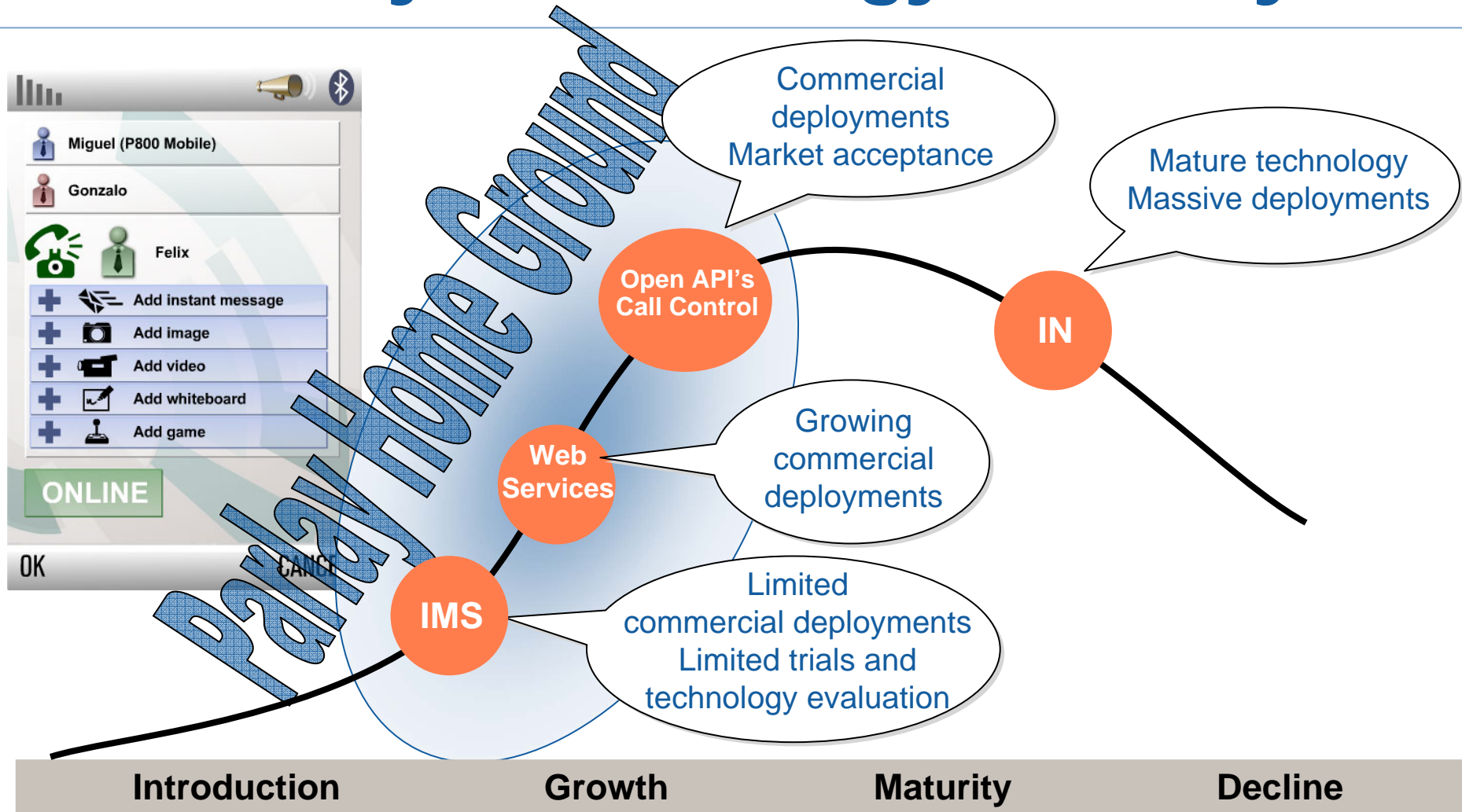
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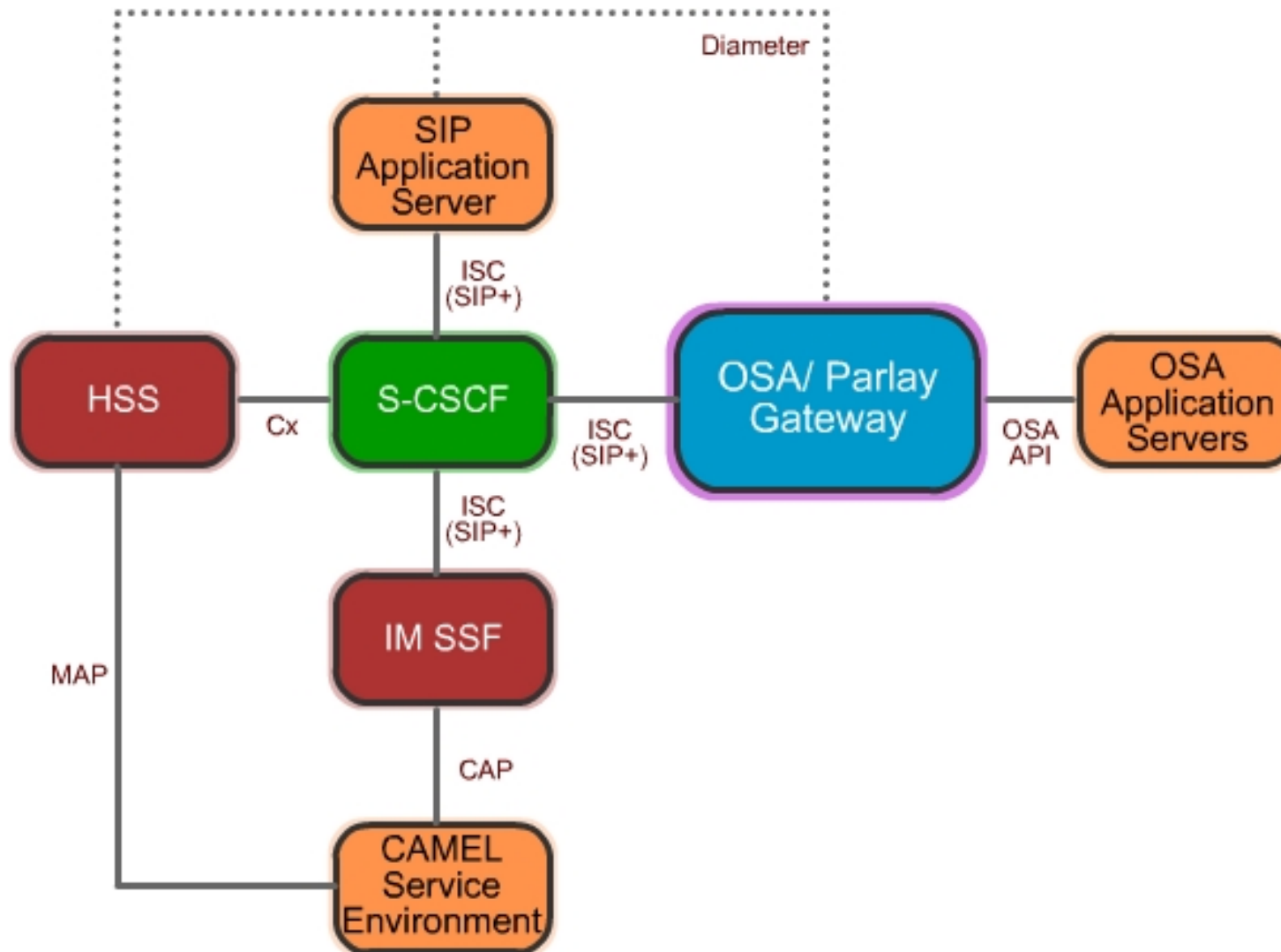
Service Layer technology maturity





Parlay and IMS

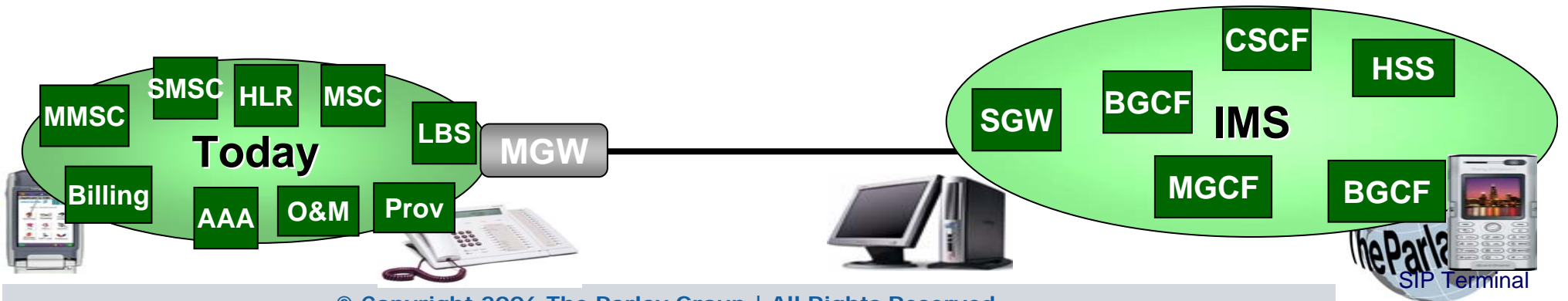
Parlay is one of the service environments defined in 3GPP/3GPP2 IMS





How to Evolve?

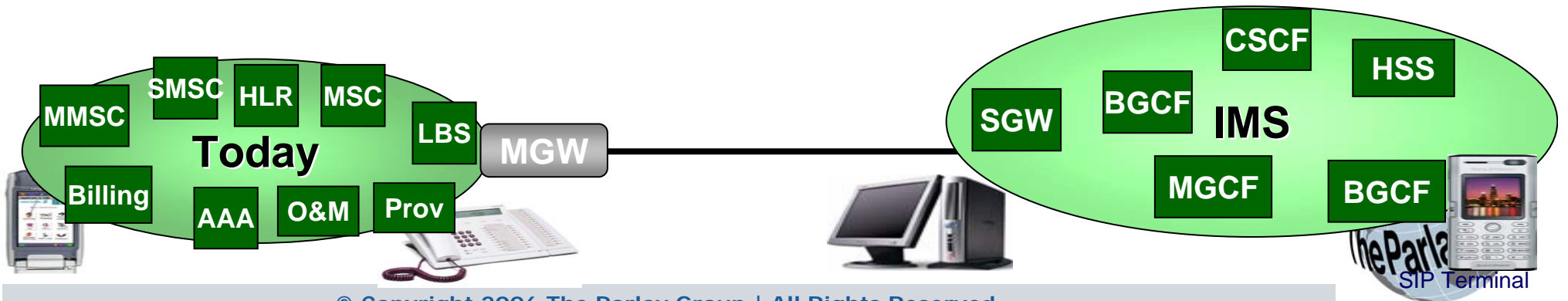
Where are your subscribers today.?

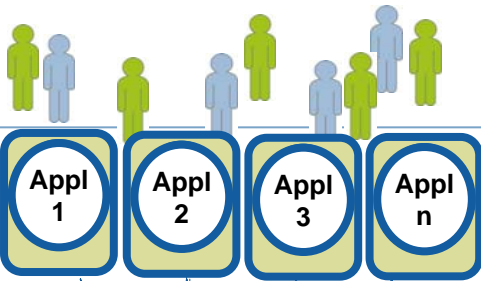




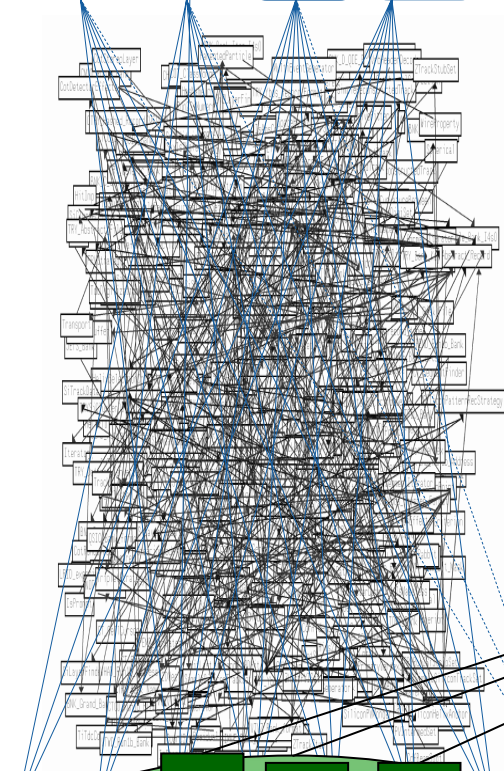
How to Evolve?

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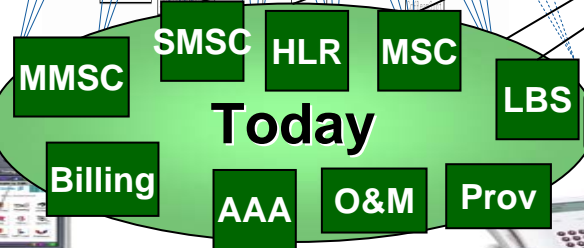




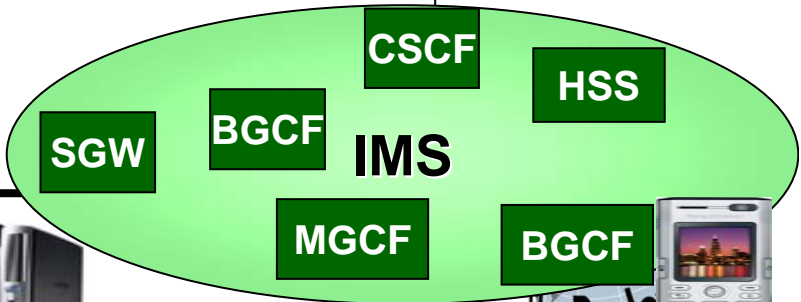
OSA Parlay API's



Parlay Gateway



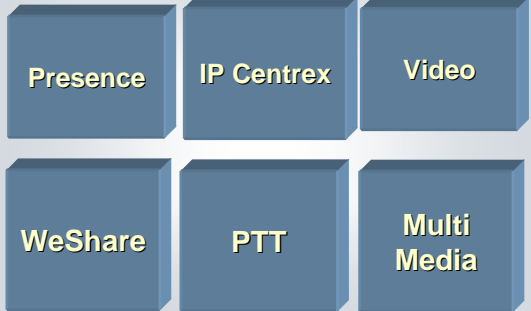
MGW



Service Creation

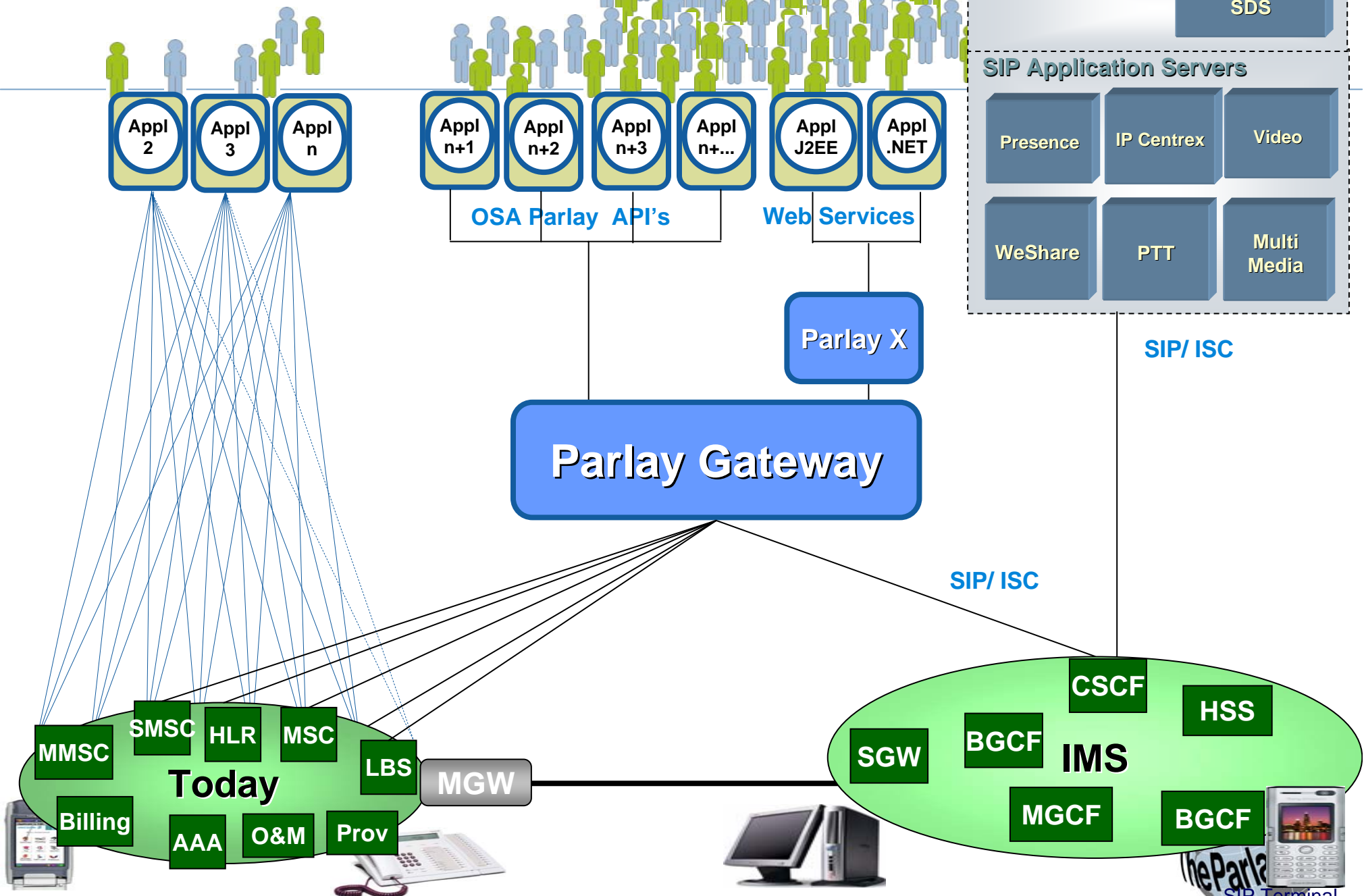
SDS

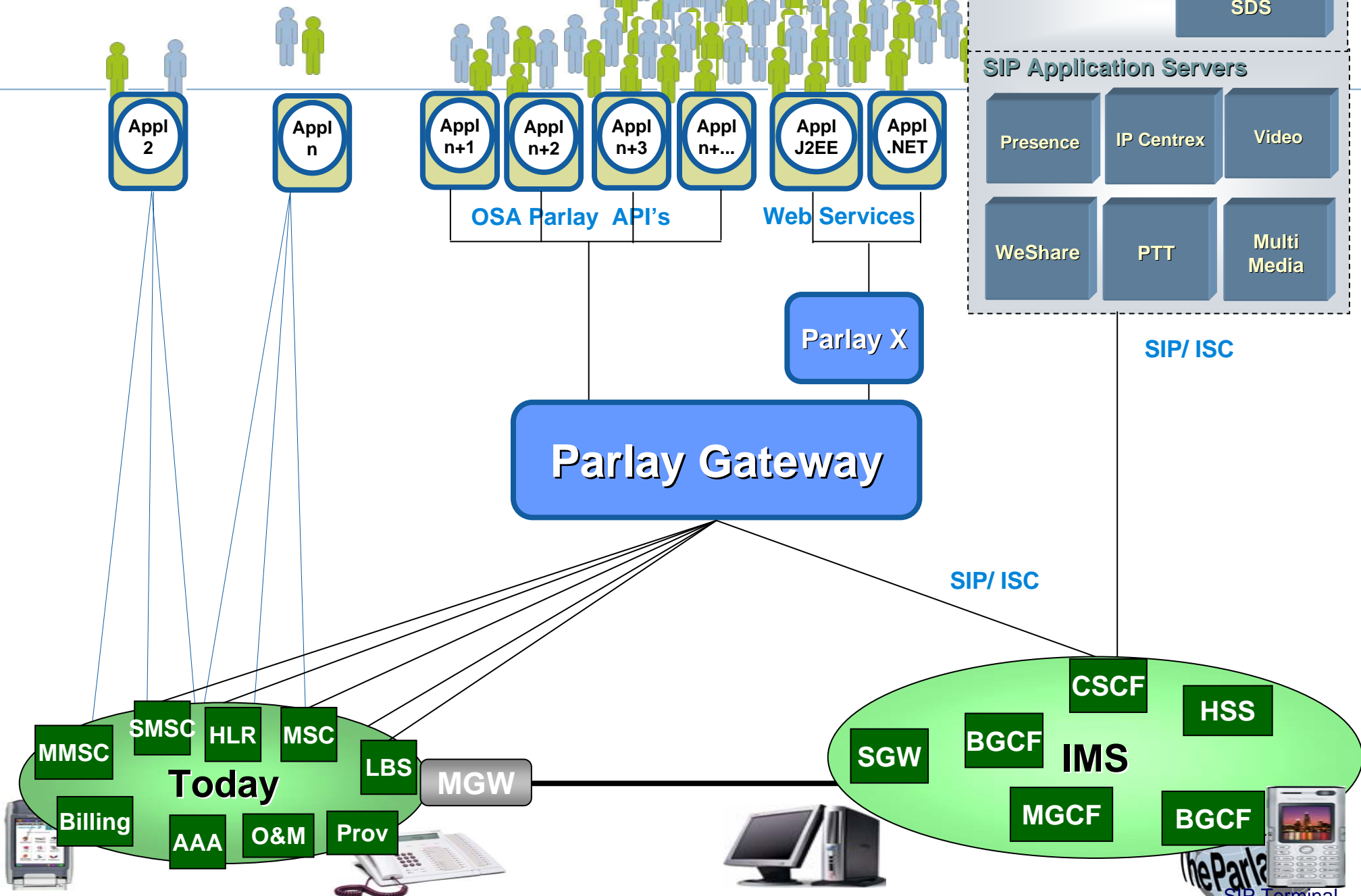
SIP Application Servers



SIP/ISC









MORIANA
g r o u p . c o m

Operator Guidebook to IMS and New Generation Networks and Services

First Edition August 2005

" Whilst the basic SIP protocol is relatively straightforward, its extension for IMS (ISC) is far more complex. (As an evolving signaling protocol for the next generation networks it has been referred to as 'SS8'). For some value added applications SIP is inappropriate and a higher-level abstraction is needed.

In the IT industry, Service-Oriented Architecture (SOA) is often implemented using the key web-services technologies (SOAP, WSDL and XML). The Parlay Group has created a similar set of web service interfaces to general telecom capabilities known as Parlay X. Parlay-X Web Services define a set of telecommunications oriented web-services, which are part of 3GPP Release 6.

Parlay-X in effect creates a bridge for the operator from the Service-Oriented Architecture used by developers and large enterprise customers, to the IMS. " Page 23





View from the Market



Parlay's Opportunity

- Parlay is part of IMS specs through ETSI and 3GPP
- Parlay provides the ideal way to migrate existing applications to IMS
- SS7 and IN will be around for at least next 5 - 7 years before full phase out
- So Parlay gives operators an excellent migration tool





View from the Market

Future Considerations

- Wireless/Wireline Integration and Advanced Voice Services
 - Call Management
 - Call Centers
 - Virtual PBX
- IMS
 - Parlay as the Network Abstraction Layer
 - SIP Services exposed to third parties in a secure, controlled manner
 - Services bridging circuit switched and SIP networks
- Mobile Virtual Network Operators (MVNO)
 - Service Delivery Platforms provide a mechanism for MVNO to offer differentiated services



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Creating value



OSA/Parlay challenge is to **integrate** this **critical link** between users and services in a multi-vendor environment





Summary

- There is a growing business opportunity !!!
- It brings a secure, standard & open environment
- It's agnostic, device & network independent
- Unlimited Service Possibilities & combinations
- New Business Models & Opportunities
- A Global Marketplace for Services and Content



Parlay is building the new age in revenue value for business and personal communications...





16th Parlay Group Conference

Prague, Czech Republic
Theme: **Parlay and IMS**
April 25-28, 2006



FEATURED KEYNOTE SPEAKER



Sean Baker, Chief
Corporate Scientist and a
Co-Founder of IONA will
present "Applying SOA to
IT and Network
Convergence"

Education Track
Vendors Showcases
Business Summit

Register NOW: <http://www.parlay.org/en/news/events.asp#parlayosaconference>





Finding out more about OSA/Parlay

- <http://www.parlay.org> (and become a member!)
- Tutorial in Portuguese:
<http://www.teleco.com.br/tutoriais/tutorialparlay/default.asp>

ERICSSON 

Celio Rosa

Director
Service Layer Sales Account



Ericsson do Brasil

Maria Prestes Maia 300
02047-901- S.Paulo - Brazil
Tel: +55 11 62241367 Mobile: +55 11 8259 7532
e-mail: celio.rosa@ericsson.com

Thank You!





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BACK UPS





New Business Model

Operator as Retailer of Services

- **What Operators have:**
 - ▶ Networks rich in Functionality
 - ▶ A large customer base
 - ▶ Efficient billing and customer management
 - ▶ The ability to mass-market services
- **What Operators need:**
 - ▶ To expand their value chain into new markets
 - ▶ New services that expand their business offerings
- **What Third Party Developers have:**
 - ▶ Ideas and creativity
 - ▶ Huge numbers
 - ▶ Vast knowledge of specialised IT and IP products and markets
- **What Third Party Developers need:**
 - ▶ Help in marketing their services
 - ▶ A business infrastructure to create a cash flow





Where to use Web Services?

- **Use Web Services**

- ▶ New applications across multiple organizational domains, where requirements for availability are low and there is little customization of the provider service enablers.

- **Use Traditional distributed programming**

- ▶ Where high levels of integration are required for high availability, multi-step transactions, ongoing shared state, or real-time performance.

- **Hybrid Applications**

- ▶ Core telecom services may be exposed to external entities as web services. Web services can make available network information such as customer configuration or presence and location. They may provide service interfaces for internal applications like charging and messaging services to external application developers.
- ▶ Web services may be used by core telcom applications to alter call processing (forward to voicemail when calendar shows callee is in a meeting) in so far as their limitations can be bounded by time-outs and default actions.

- **Service Evolution**

- ▶ IMAP, Corba, EDI, LDAP and the like will all have web-services alternatives, usually to enable application blending across domains.
- ▶ Applications requiring more complex authentication, transaction or session state, or complex data models are likely to remain with purpose-built protocols.

