MissisSIPpi by Kapsch

kapsch >>>

Kapsch CarrierCom – Carrier VoIP Services

Kapsch Group

Kapsch TeleCom(s)
International Branchoffices

kapsch

Kapsch Components
Production and Logistics

Kapsch BusinessCom AG

Solutions for Enterprises:
> Telephons, Telephony Systems
> PABX
> Local Networks
> Call Center

Kapsch CarrierCom AG

Solutions for Carriers & Providers:
> Fixed Networks
> Mobile Networks
> Data Networks
> Services & Applications

Kapsch TrafficCom AG

Solutions for Rail & Road:
> Traffic Control Systems
> Toll Collection Systems
> Railway Communication Systems

Kapsch CarrierCom Facts

> Profile

We are the leading System-Innovator for Carriers and Service Providers

> Kapsch CarrierCom AG

- Employees: ~550
- Turnover: EUR 120 Mio
- Market Focus: Europe
- Headquarter: Vienna/Austria
- Sites: Czech Rep. Slovak Rep. Hungary, Slovenia, Croatia, Bulgaria

> Kapsch Group

- Employees: ~2.000
- Turnover: EUR 476 Mio.
- Market Focus: World Global Presence

Carrier VoIP Services

Market Trends

Trends and Challenges in IP communication networks

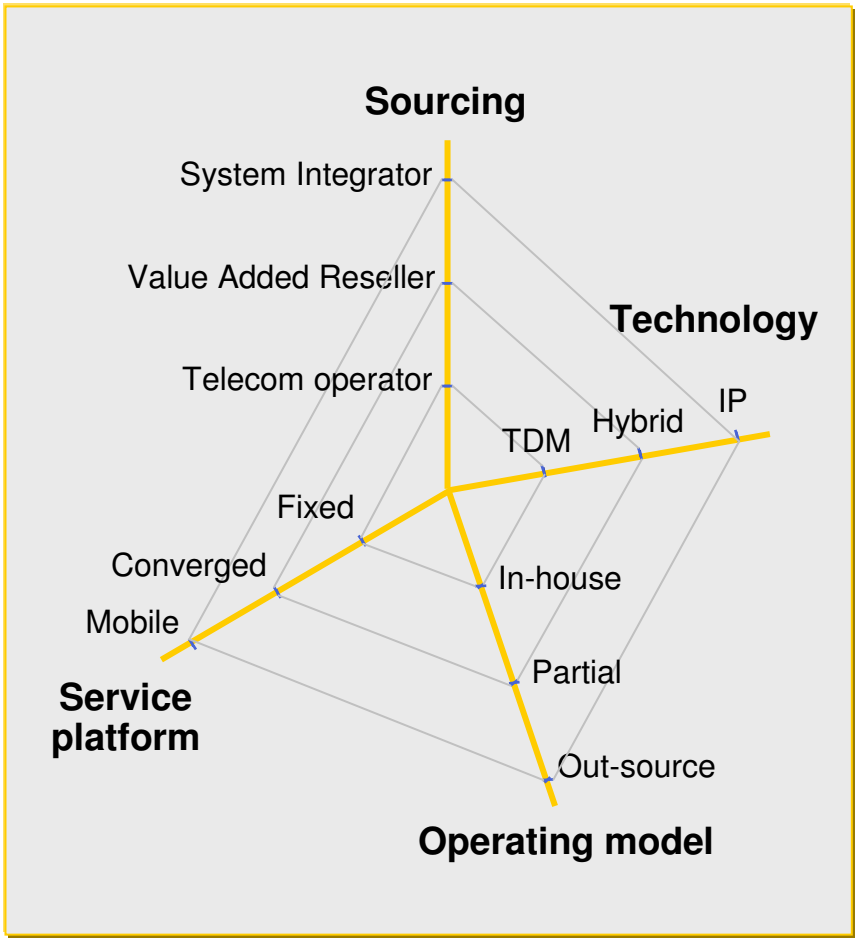
Trends in network architecture

- A **migration to VoIP networks** and general trends to **converged networks** can be observed
- Companies increasingly integrate **new services** into their networks thus exploiting unused potential
- A trend for the **unification of services** ignoring underlying transport technologies can be noted

Challenges in TDM to IP migration

- **Costs** of IP solutions is the major challenge when migrating from TDM to IP solutions
- Already deployed TDM solution have to be **amortized** otherwise representing considerable **sunk costs**
- **Legal restrictions** in using IP-based voice communication is an issue for some countries (especially in the middle east)

Enterprises considers four basic factors choosing communications solution

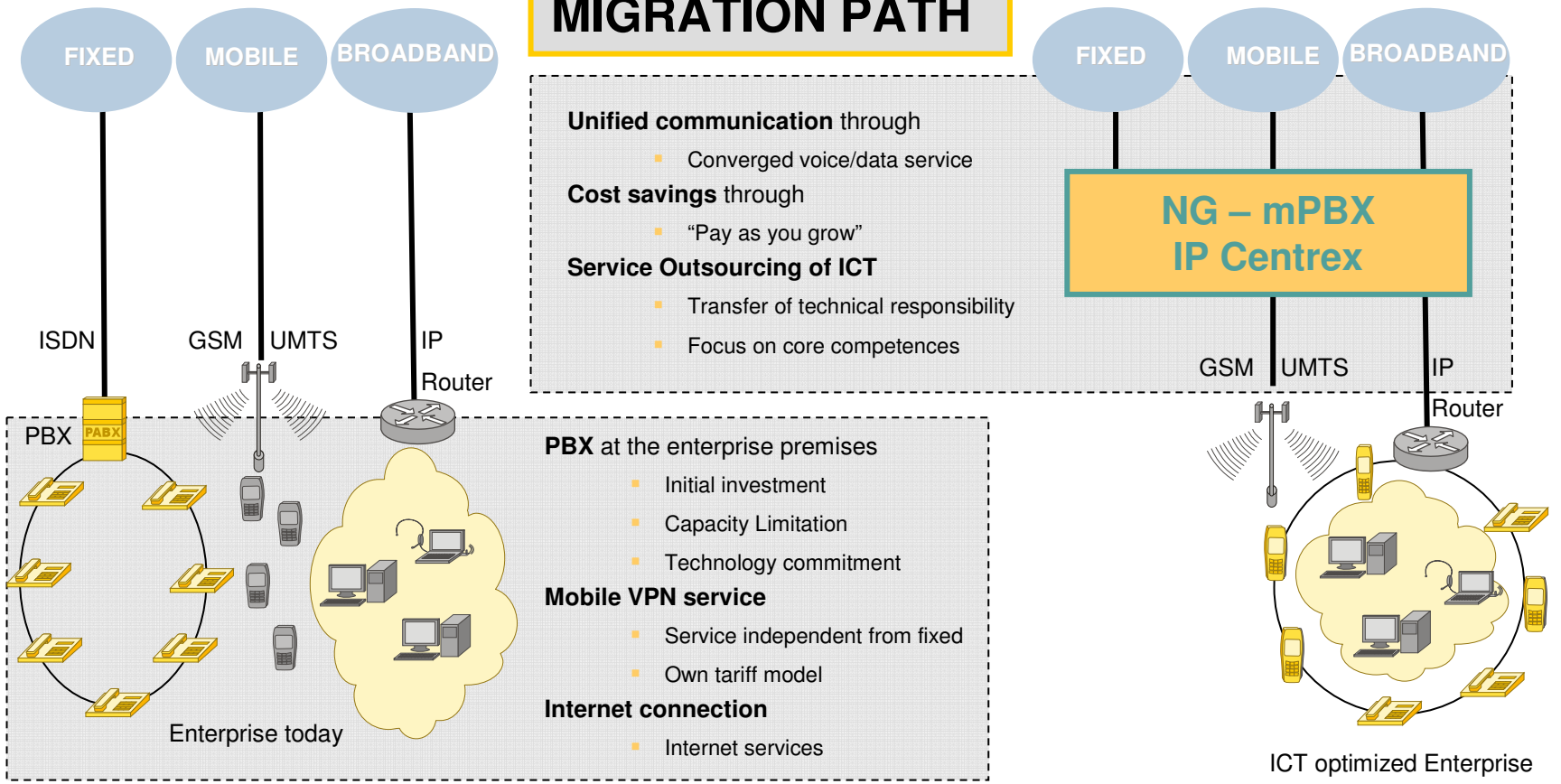


- Decision concerning telecommunication architecture remains complex
- Decision has to be based on four criteria:
  - In **sourcing** the enterprise has to choose between offers from telecom operators, VAR and SI
  - **Technology** decision between TDM, Hybrid or IP solutions
  - The **operating model** will result in an in-house, out-sourced or a partial solution
  - The **service platform** will depend on the mobility needs of the enterprise

Enterprises choose among 7 telephony solutions, 3 are future proofen

System	Fixed / Mobile Solution	Enterprise solution	Carrier solution	Description	Future proof
TDM PBX	Fixed	✓		■ Classical analog or digital PBX, where all phones are connected via dedicated lines to the central branch exchange ■ Calls outside are connected via trunks to the PSTN network	○
TDM Centrex	Fixed		✓	■ Classical central office exchange solution in the Voice Switch integrated, where access lines can be integrated and connected in a private voice network with private numbering plan	○
IN VPN	Mobile		✓	■ A centralized solution on the legacy intelligent network layer to offer PSTN services ■ Especially in the mobile area used for VPN	◐
IP enabled PBX	Fixed	✓		■ Enables existing circuit-switched PBX with addition of new hardware interfaces and generic software to upgrade to support IP telephony options	◐
IP PBX	Fixed Mobile	✓		■ IP based PBX solution, where sub-station is connected via IP/SIP to the branch exchange ■ Cross linking and integration of different sites via IP possible	●
Hosted IP PBX	Fixed Mobile		✓	■ IP-PBX located offsite in the carrier's data center and dedicated to a single client ■ Administration can be split between carrier and customer, carrier is responsible for maintenance	●
IP Centrex	Fixed Mobile		✓	■ At operator-side centralized IP-PBX, where customer can order a flexible number of sub-stations and features ■ The customer does not operate and maintain the system and the carrier can service multiple clients – “managed services”	●

Future-proof telephony solutions for enterprises



ICT enabled enterprises concentrate on their core competence

Offering „managed services“ for enterprises

> Enterprises got charged from:

- Purchase / lease PBX from the full service provider / system integrator
- Fixed line call minutes charged from the fixed line / full service provider
- Mobile access (e.g VPN service) charged from the mobile operator
- Broadband access charged from the fixed line / full service provider

> „broadband takes it all“ through:

- Leverage **xDSL** broadband access
- One **fully integrated** enterprise communication network
- Offering a **convergent** Voice/Data service to SMEs
- Extend the customer base
- Additionally **capturing** fixed line call **minutes**
- Ready for **Technology change** and substitution process

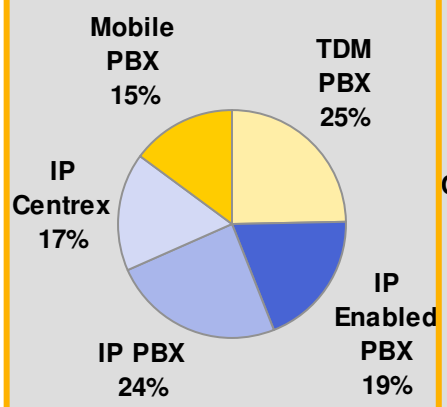
> „mobile takes it all“ through:

- One **fully integrated** enterprise communication network
- Offering a **convergent** mPBX service to SMEs
- Extend the customer base
- Additionally **capturing** fixed line call **minutes**
- Leverage **UMTS** broadband access
- Ready for **Technology change** and substitution process

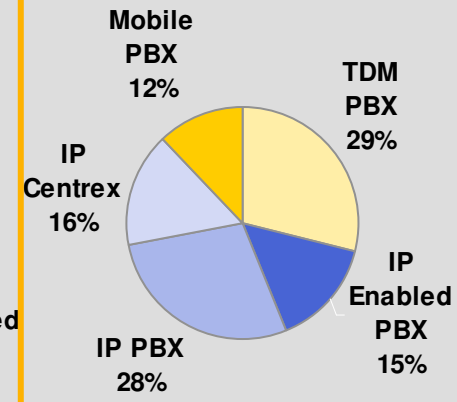
Increase ARPU through managed services portfolio

Enterprise telephony solutions to be expected 2010

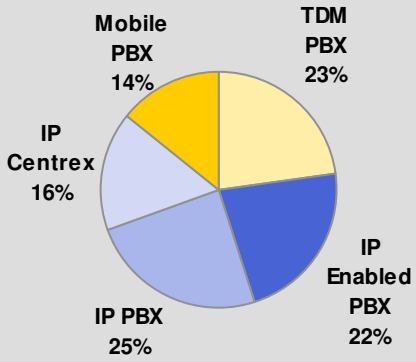
Average
% of lines / IP ports in installed base



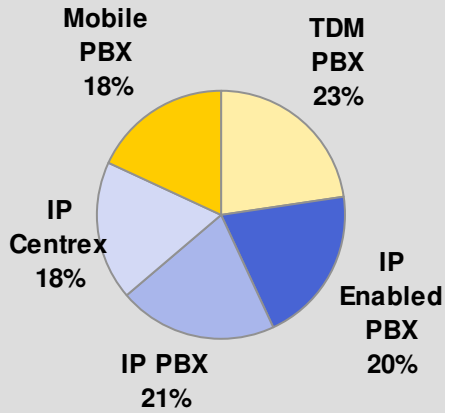
Full Service
% of lines / IP ports in installed base



Fixed Line Service
% of lines / IP ports in installed base



Mobile
% of lines / IP ports in installed base



Source: Arthur D. Little IP PBX and IP Centrex Market Survey 07/2006, Enterprise Voice Market Share 2010

Telecom trend: managed services

High potential for operators to increase business

> Mobile operators

- IP Centrex / NG mPBX offers opportunity to capture business voice segment
- Mobile operators attack fixed voice business market

> Alternative operators

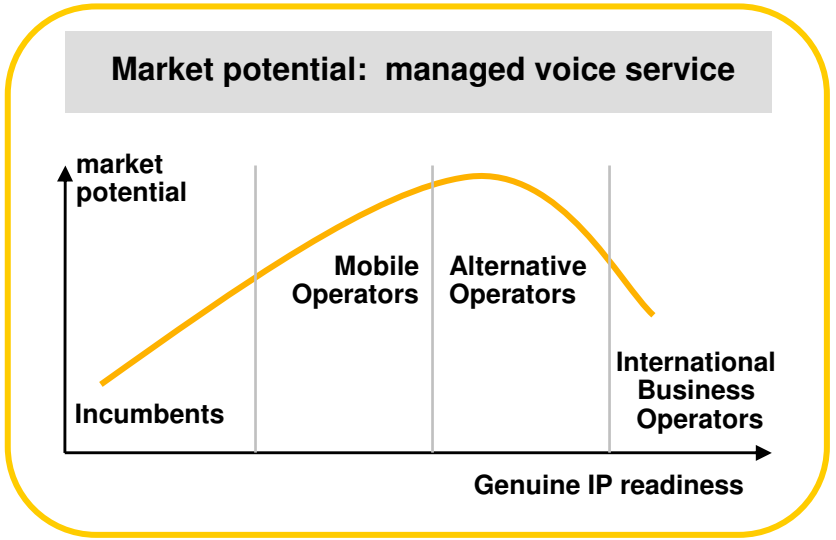
- enlarge their business client base
- attack tariff revenues of incumbents

> Incumbent operators

- slowly migrating as they cannibalize existing TDM business services
- secure their tariff and minute revenues

> Global players

- Servicing business clients on global scale



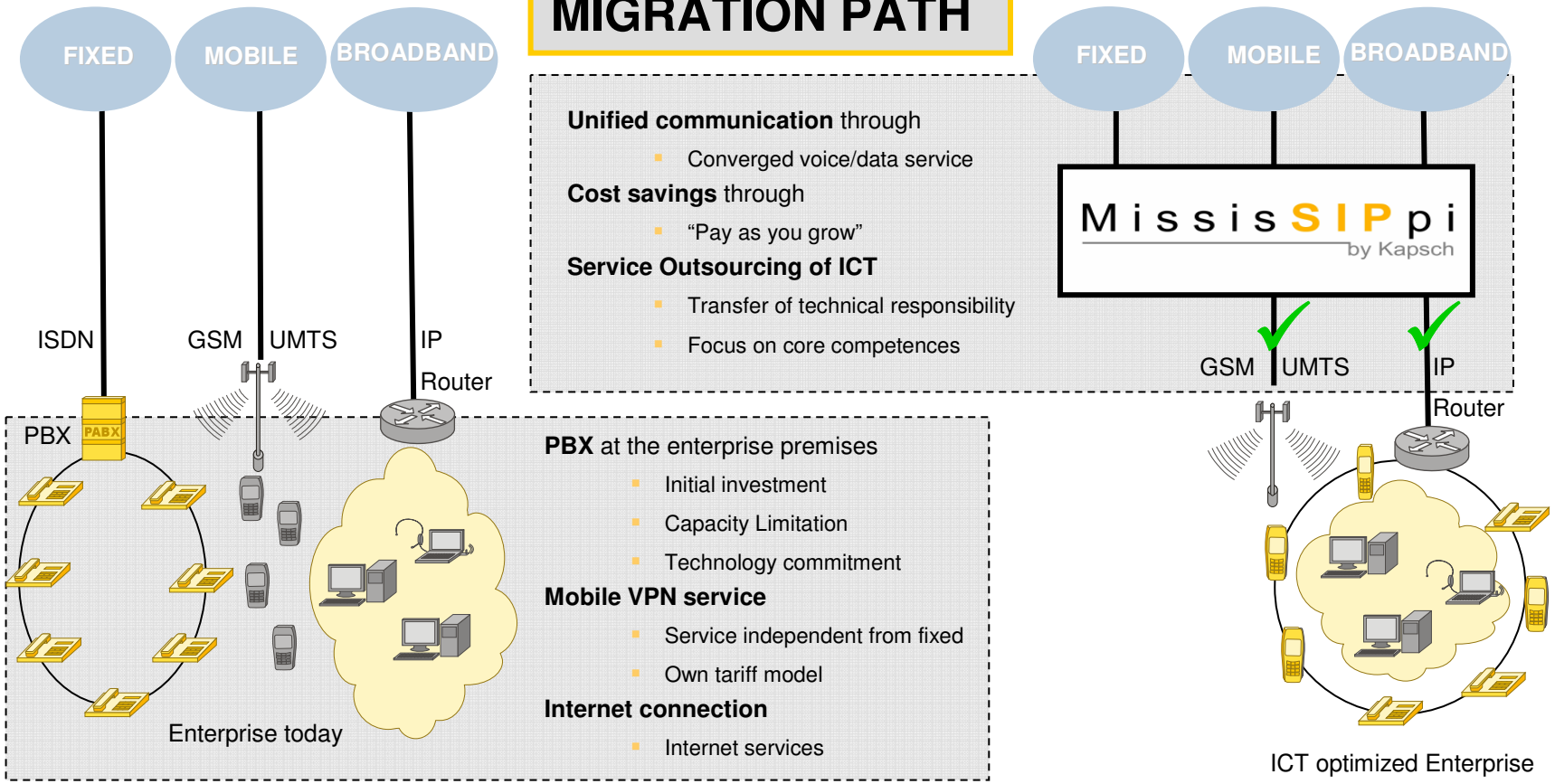
Enlarge footprint through portfolio extension for enterprises

There is a new revenue generator in the world: MissisSIPpi by Kapsch

Carrier VoIP Services

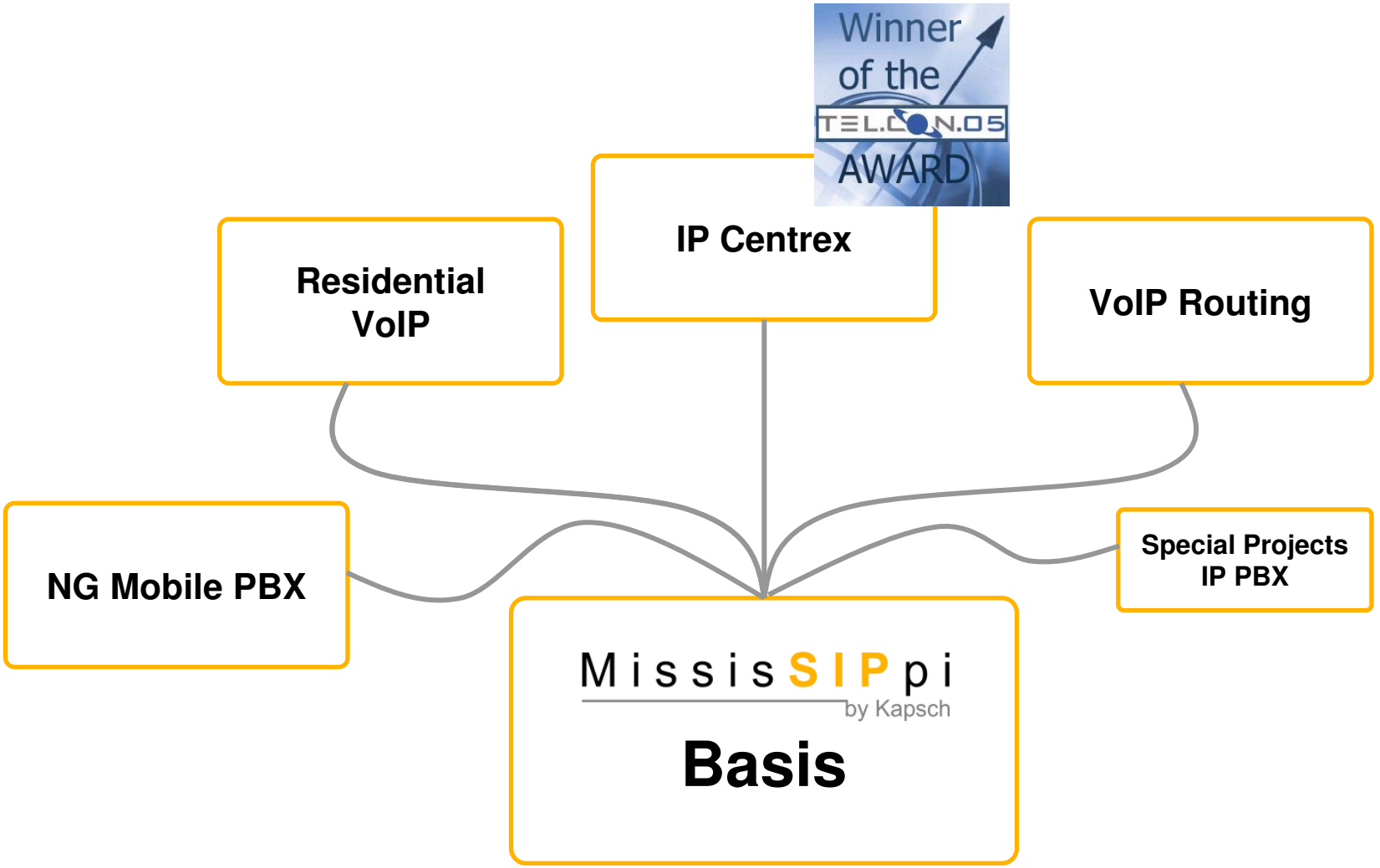
Solution Portfolio

Future-proof telephony solutions for enterprises

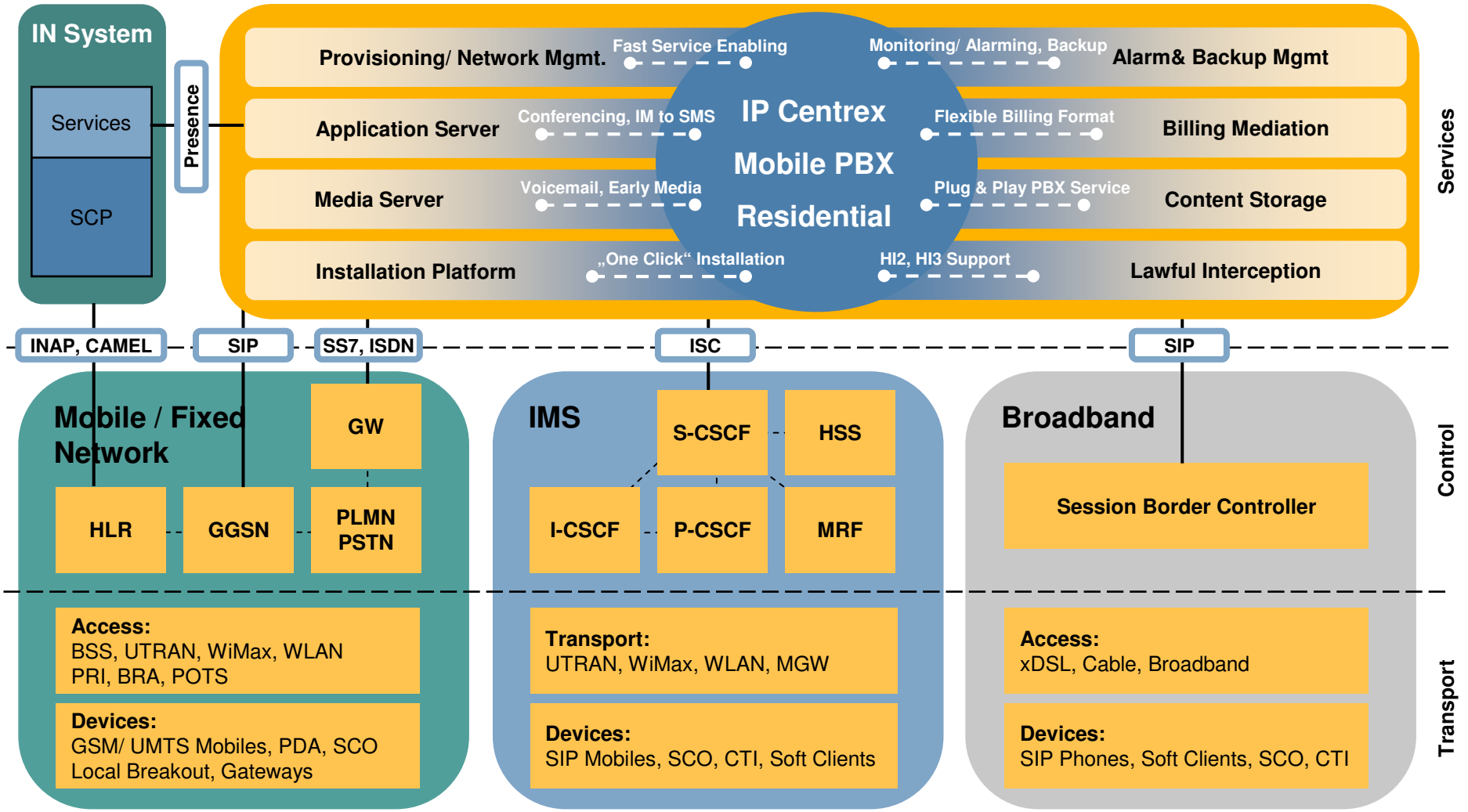


ICT enabled enterprises concentrate on their core competence

Next Generation ICT Services with MissisSIPpi

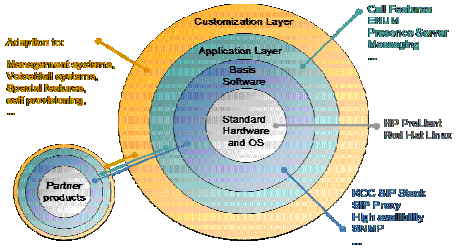


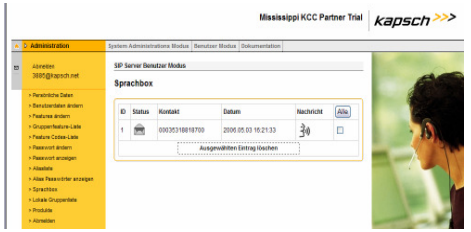
Mississippi – Architecture Overview

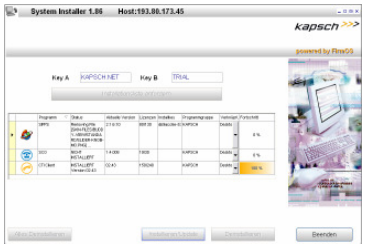


Software Components

- IP Centrex
  - Centralized Routing
  - User Registrar & Presence
  - Centralized Feature control
- Feature Server
  - Powerful J2EE SIP Application server for fast and easy service development
- Content Server - Plug & Play
  - Centralized storage for voicemail, announcements and client configurations
- Provisioning
  - Easy to use, Web based, centralized management of all relevant components
  - Multi Client capability and role based security concept, Customer Self Service
  - Easy integration through standardized XML interfaces
- Installation platform
  - Fully automated, easy to use, web based rollout and configuration of ALL soft clients
- Billing Mediation
  - Mediation of Call Data Logs into IPDRs
  - Integration in existing billing system
- Backup and Alarming
  - Easy integration in existing umbrella management



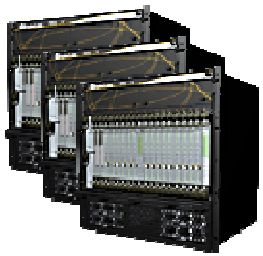




Interworking Platforms

> Gateways to the PSTN network

- Industry leading Audiocodes Mediant with OT SW (for SS7)
  - Mediant 2000 up to Mediant 8000 (up to 16.128 concurrent channels per Mediant 8000)
  - E1 or STM1 interfaces
  - State of the Art codec support (including T.38 for FAX)
  - Carrier Grade



> Media Server – Audiocodes

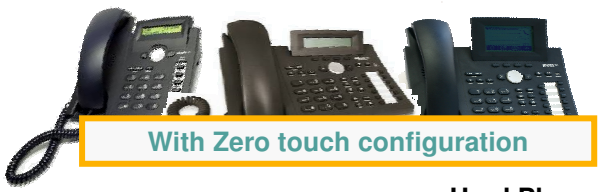
- Voicemail, Announcements, Conference Rooms, Early Media
  - IP Media 2000 up to IP Media 8000
  - Supports all industry standard Voice Codes with transcoding in real time!
  - Carrier Grade

> Session Border Controller – Jasomi/Ditech Communications

- Network boarder, Security, solves NAT/FW problems
  - Carrier Grade
  - Real Media Path Optimization for Voice rtp traffic

Clients

> SIP Phones and IADs



With Zero touch configuration

Hard Phones

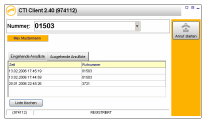
..to be announced

With centralized web based configuration

IADs

> CTI Client

- dial from Outlook and Lotus Notes
- “instant dialing from any application”
- „one click“ installation & upgrade

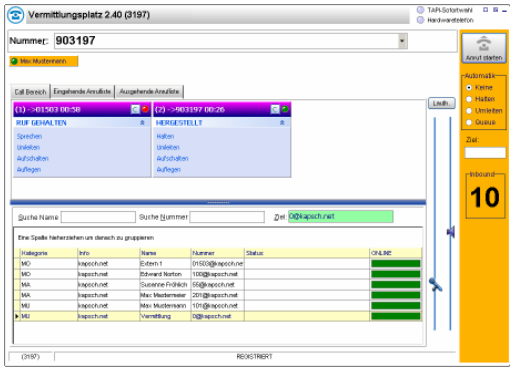


> Business Soft Client

- Feature rich easy to use SIPPS clients
- „one click“ installation & upgrade

> SIP Call Operator

- Company address book
- Presence Information
- Dialog State Info for mobiles & SIP devices
- Support of Call Queues
- Caller list
- IM, SMS, EMAIL
- Log On/Log Off
- Call recording
- Drag&Drop call transfer



Featureset

- Calling Line Identification Restriction (CLIR) ,Calling Line Identification Presentation (CLIP)
- Speed Dial, Redial, Recall
- Direct Dialing Incoming (DDI), Direct Dialing Outgoing (DDO)
- Call Forwarding Unconditional (CFU), Call Forwarding Busy (CFB) Call Forwarding No Reply (CFNR), Call Forwarding Selective (CFSE), Call Forwarding Timeout (CFTO), Call Forwarding UnRegistered (CFUR)
- Voice Messaging / Voice Mail
- Conference Call
- User Groups
- ACD extensions
- Outgoing / Incoming Calling Plan
- Alternate Numbers (alias)
- Client Matter Code (CMC)
- Skip Feature on Loop
- Unattended Transfer, Attended Transfer
- Call Waiting (CW), Call Hold (CH)
- Manager / Secretary Team Feature
- Parallel Ringing (PRNG)
- Call Completion No Reply (CCNR), Call Completion Busy (CCBS), Call Back Number (CBNR)
- Call Park, Call Pickup
- Music on Hold
- Early Media
- Night Mode
- Instant Messaging, SMS, Email
- Presence
- Call Queuing
- Pickup Call Queuing
- Conferencing Bridge
- …

> Others:

- Easy to use Web based Provisioning
- Zero touch client configuration
- „One Click“ web based installation of soft clients

Executive Summary

> Multiple Segments

- Is attractive for **providers** and **ISPs**
- It also addressed to the highly promising **mobile market**

> Features

- **Full set of features** to fulfill customers demands
-

> Future Proof

- future proof product based on IP and **SIP**
- Based on existing Broadband Data Infrastructure
- Kapsch Development Framework

> advantages

- offers an end-to-end SIP-based solution
- ICT optimization via IP Centrex/mobile PBX
- high scalable centralized hosting platform

> Branding & References

- Kapsch has a remarkable reputation in ICT optimization
- Existing customer base

MissisSIPpi by Kapsch

Future proofen platform for managed services

Reference customers (excerpt)

> **TELE2 / UTA**
- Operator profile: Biggest Altnet in Austria, accelerate Broadband penetration through unbundling
- Primary customer profile: residential with legacy telephony service, offering broadband
- Mississippi deployment: “managed business voice service” over broadband

> **UPC / INODE**
- Operator profile: Biggest Altnet/Cable provider in Austria, accelerate Broadband penetration through unbundling
- Primary customer profile: residential offering broadband
- Mississippi deployment: “managed business voice service” over broadband pipe

> **KIELNET**
- Operator profile: Altnet provider in Germany, accelerate Broadband penetration through unbundling
- Primary customer profile: residential legacy telephony service, offering broadband
- Mississippi deployment: substitution of legacy telephony system based on residential voice service over broadband

> **T- MOBILE AUSTRIA**
- Operator profile: largest mobile Altnet provider in Austria
- Primary customer profile: residential legacy telephony service, offering broadband
- Mississippi deployment: substitute legacy PBX telephony system based on NG mobile PBX solution

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