Kapsch, your ICT service partner.

Partnership with Global Solutions for OMV Petrom’s network infrastructure

22.03.2012
Agenda

- Introducing ourselves
  - Kapsch Group, an introduction,
  - Kapsch BusinessCom a member of Kapsch Group,
  - OMV Petrom Global Solutions, an introduction,

- Network Infrastructure for datacenter and campus of OMV Petrom, PetromCity
  - Business requirements for the network infrastructure,
  - Technical solutions to meet business requirements,
  - Kapsch BusinessCom contribution.
1892
Company founding in Vienna.

1930
First demonstration of a television with complete transmission and reception system in Austria at the Kapsch pavilion of the Vienna Trade Fair.

1946
Important role in reconstruction of the telephone network.

1950
Founding of branch offices in Austria.

1955
Leading in the production of black and white TV sets.

1966
Production of desk telephones with low-noise dial plates.

1978
Crucial role in the introduction of digital telephony in Austria.

1984
Entry into the mobile telephone business.

As of 1989
Founding of foreign subsidiaries and representation offices in Hungary, the Czech Republic, Poland, Slovakia, Ukraine, Russia, Slovenia and Croatia.

1994
A number of European railways are equipped with train communications from Kapsch.

1994
Repositioning of the Kapsch Group with three strategic business fields and three independent companies: Kapsch TrafficCom AG, Kapsch CarrierCom AG and Kapsch BusinessCom AG.

2002
Erection of the world's largest comprehensive, fully electronic toll system in Austria.

2006
Erection of the electronic truck toll system for the Czech Republic in record time and assumption of system operation duties.

2007
Successful flotation of Kapsch TrafficCom AG in Vienna; Founding of branch offices in Serbia and Belarus.

2009
Listing of the Kapsch TrafficCom AG stock in the VÖNIX sustainability index;
Expansion of the leading position of Kapsch BusinessCom as a Cisco Gold Partner;
Strengthening of the strategic position of Kapsch CarrierCom through additional acquisitions in Central and Eastern Europe.

2010
In addition to the GSM technology for EMEA and Taiwan, Kapsch CarrierCom acquires Nortel's entire GSM-R technology, becoming a world market leader in this product segment.
For us, the future has always been a family matter.
The **Kapsch Group in numbers**

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<tbody>
<tr>
<td><strong>Revenues</strong> 1)</td>
<td>829,9</td>
<td>388,6</td>
<td>243,6</td>
<td>231,9</td>
</tr>
<tr>
<td><strong>EBIT</strong> 1)</td>
<td>66,6</td>
<td>48,9</td>
<td>11,3</td>
<td>5,5</td>
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<tr>
<td><strong>Employees</strong></td>
<td>4,096</td>
<td>2,167</td>
<td>743</td>
<td>1,112</td>
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1) Calculated according to the International Accounting Standards (IAS)
fiscal year April 2010 – March 2011
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The Kapsch BusinessCom Portfolio Building
Continuous and long-term expansion of sales and employees.

<table>
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<tr>
<th>Turnover(^1)</th>
<th>Actuals 2006 /07</th>
<th>Actuals 2007 /08</th>
<th>Actuals 2008 /09</th>
<th>Actuals 2009 /10</th>
<th>Actuals 2010 /11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover(^1)</td>
<td>136</td>
<td>160</td>
<td>181</td>
<td>167</td>
<td>196</td>
</tr>
<tr>
<td>Employees</td>
<td>636</td>
<td>828</td>
<td>894</td>
<td>841</td>
<td>871</td>
</tr>
</tbody>
</table>

Turnover development over the past 5 years

Calculated according to the International Accounting Standards (IAS)
fiscal year April 2010 – March 2011
International presence of Kapsch BusinessCom

Kapsch BusinessCom is located in these countries:

- Austria
- Hungary
- Poland
- Slovakia
- Czech Republic
- Romania

Kapsch BusinessCom References:

- Croatia
- Slovenia
- Bulgaria
- Turkey

“Follow the customer” – With global account management, we support our customers as they expand around the world.
Kapsch BusinessCom România

- **Kapsch Romania** started as an extension of the BusinessCom delivery organization in Austria, applying “Follow the customer” philosophy, to support the local offices of the regional customers,

- **Kapsch Romania** extended its operations in 2011 and is contiguously growing,

- In Feb 2012 **Kapsch Romania** acquired Squario IT Solutions, an Oracle partner specialized in ERP and CRM solutions.
Kapsch BusinessCom Service Network in Romania

Kapsch Service Centre
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OMV Petrom Global Solutions

- **Global Solutions** is the integrated Competence Center of the OMV Group and optimally services the business of the individual group companies,

- **Global Solutions** has three business units, IT, Finance and Business Support,

- **Network, Telecomm & Security department** is part of Global Solutions IT Infrastructure service line and provides design, maintenance and support for all network, telecomm and security infrastructure needed for group communications.
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Business requirements for network infrastructure

- High availability >99.99%,
- Future proof technology,
- Hi speed and QoS enabled,
- Scalability and flexibility.
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Technical solutions to meet business requirements

- VSS unifies two Cisco 6500 switches into one logical switch with one active control plane and two active forwarding planes

- vPC (Virtual Port-Channel) makes two Cisco Nexus switches look like a single entity for another switch, server or Nexus 2000 fabric extender that connects to them.

- Nexus 2000 top of rack architecture and vPC provide a modular, highly flexible, virtualization ready alternative for server connectivity
Technical solutions to meet business requirements, continued

- VSS unifies two Cisco 6500 switches into one logical switch with one active control plane and two active forwarding planes.

- vPC (Virtual Port-Channel) makes two Cisco Nexus switches look like a single entity for another switch, server or Nexus 2K fabric extender that connects to them.

- Combining the two technologies results in a redundant, high bandwidth, scalable and spanning-tree free topology for aggregation to core connectivity.
Technical solutions to meet business requirements, continued

- Nexus1000v is a software switch that brings all the great features of NX-OS to the virtualization world

- Nexus1000v was chosen because:
  - Physical and virtual servers network connections needed to have the same configurations across the DataCenter
  - The distributed linecard model with centralized control plane of Nexus1000v made the centralized network management of all virtual servers in a domain a reality
  - Complex QoS policies can now be applied also to virtual servers ports and move together with vMotion
  - The high availability architecture with Active/Standby Supervisors makes the virtual servers environment as safe as the physical one.
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Kapsch BusinessCom contribution

- Low level design and implementation services for Data Center Network using Cisco Nexus 5000, Nexus 2000, Nexus 1000V and Cisco 6500 switches,

- Low level design and implementation services for the Campus Network using Cisco 6500 and 3560 switches for a total of around 3000 users,

- Functionality and Performance testing of the Data Center and Campus Network before going into production,

- Data Center migration planning and execution with minimum downtime,

- Data Center and Campus Network maintenance and changes implementation

- Documentation of the network infrastructure
Kapsch BusinessCom and Global Solutions; one team

- In complicated projects within complex organizations service providers try to define **clear responsibilities and deliverables**, this way setting a clear delimitation between supplier and client.

- Global Solutions needed a partner who is willing to **share the responsibility** of the project in front of the end client, OMV Petrom business units,

- Kapsch team was and is a **trusted partner** that was embedded in the Global Solutions team and had the responsibility of delivering the project as well as **sharing the responsibility** for operations,

- We, at Kapsch, consider that proper definition of deliverables is important, but **attitude** towards our client needs is **more important**,

- Understanding our **client needs and constraints** and establishing **proper communication** enabled us to be up to the challenge and deliver as expected.
Kapsch
your ICT service partner.
22.03.2012
Thank you for your attention!