

# **Siemens CMT**

## **Communications, Media and Technology**

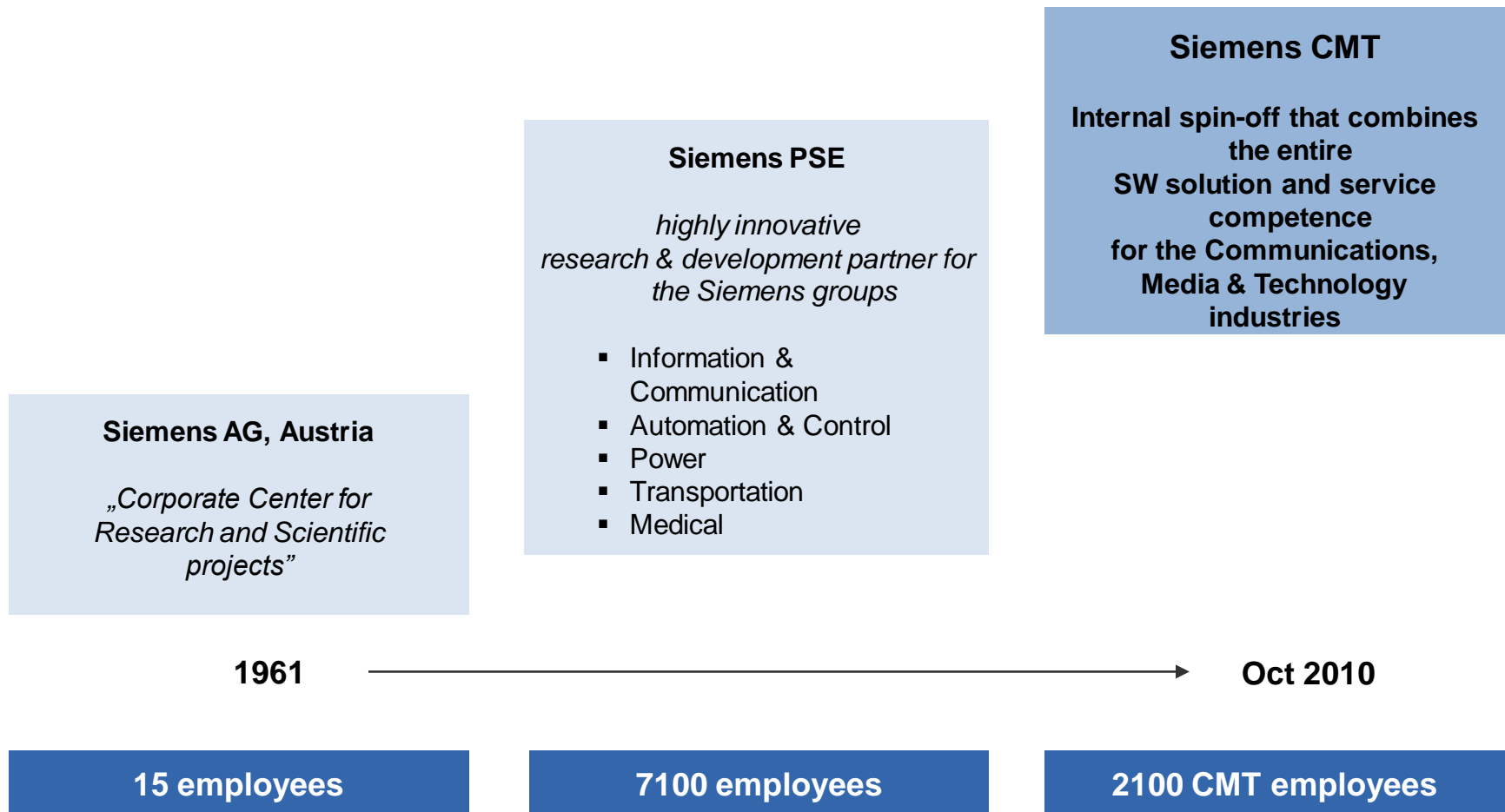
Meet the company

February 2011

**Siemens CMT - Driving Competitive Advantage**  
**.Committed competence .Going the extra mile .Creating sustainable value**

# Intro Siemens Communications, Media and Technology (CMT)

Siemens CMT has a long and successful history, providing innovative SW and HW R&D services since almost 50 years



## Intro Siemens CMT – Mission

Siemens CMT is starting with a clear focus based on attractive offerings

**SIEMENS**

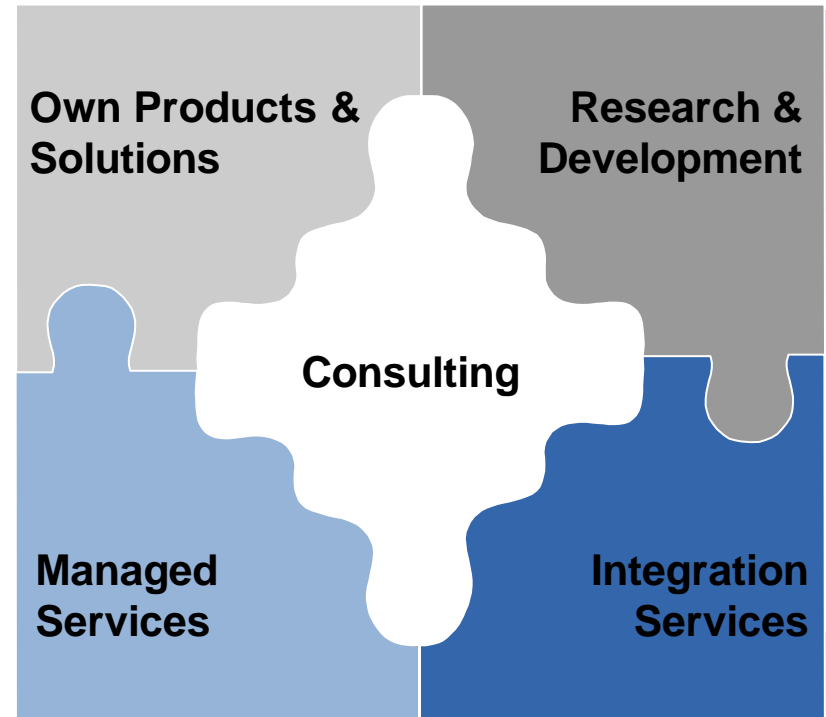
### Mission Statement:

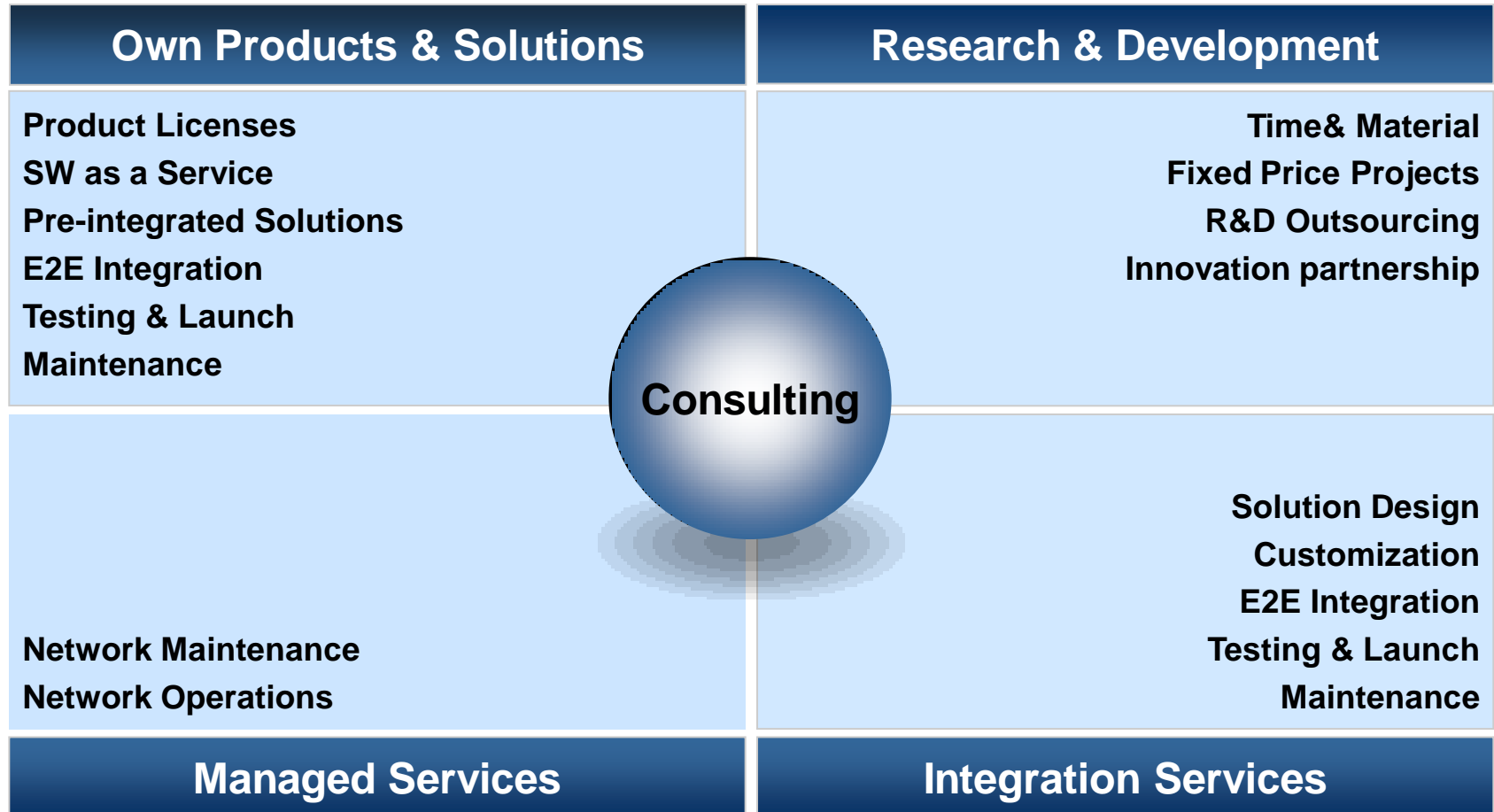
We are a **top Software solution and service provider** in the field of **Communications, Media and Technology**

**Our customers** gain a **competitive advantage** from **the Software and System solutions, R&D and integration services** we provide

**Our people** combine **strong technical expertise** with **deep domain know-how** and go the **extra-mile** for **our customers**

### Scope of work:

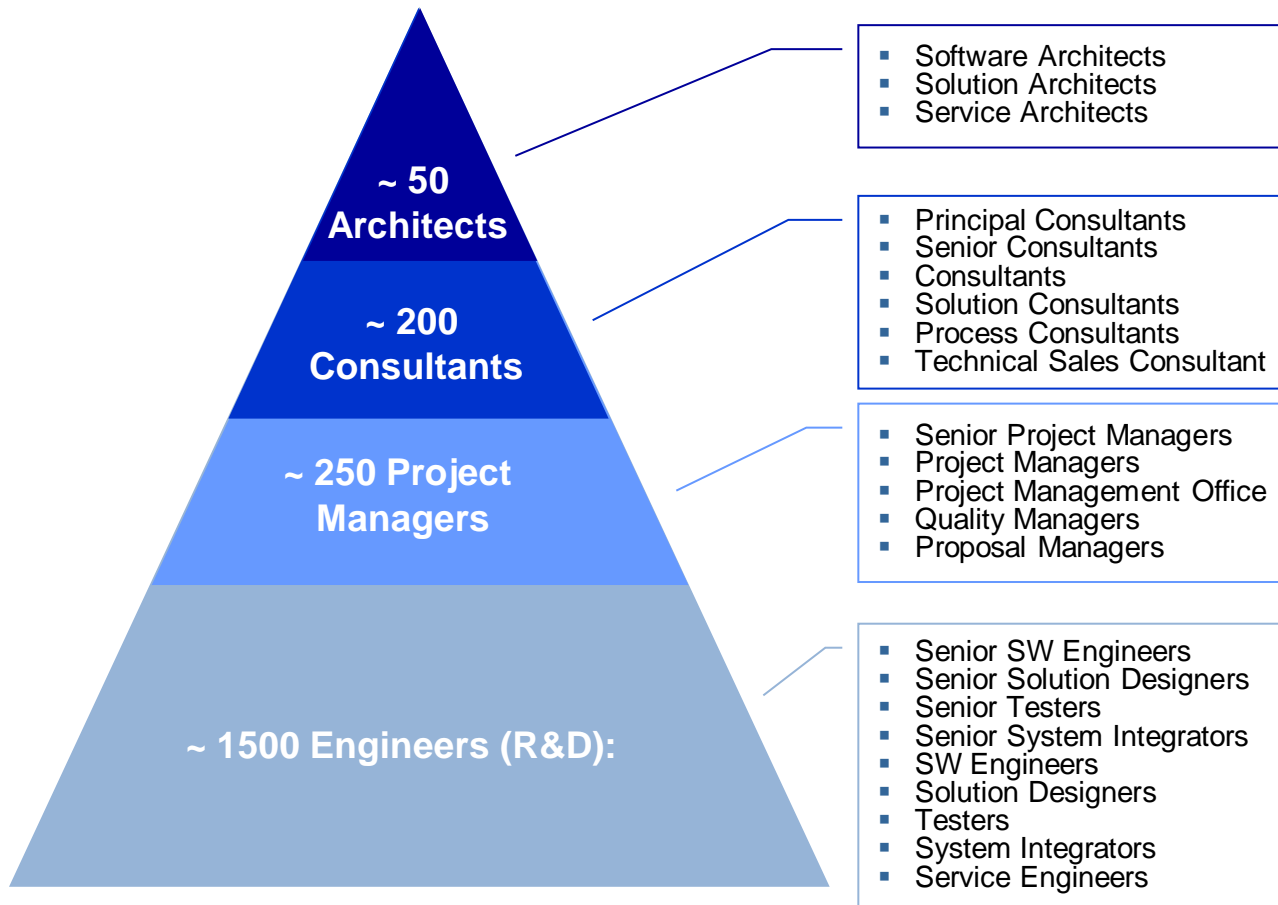




# Intro Siemens CMT – Global Skills

More than 1500 engineers with deep communication domain know how (average 15 years), build the basis of our organization

**SIEMENS**



## Certifications (exemplary only)

**ORACLE®**



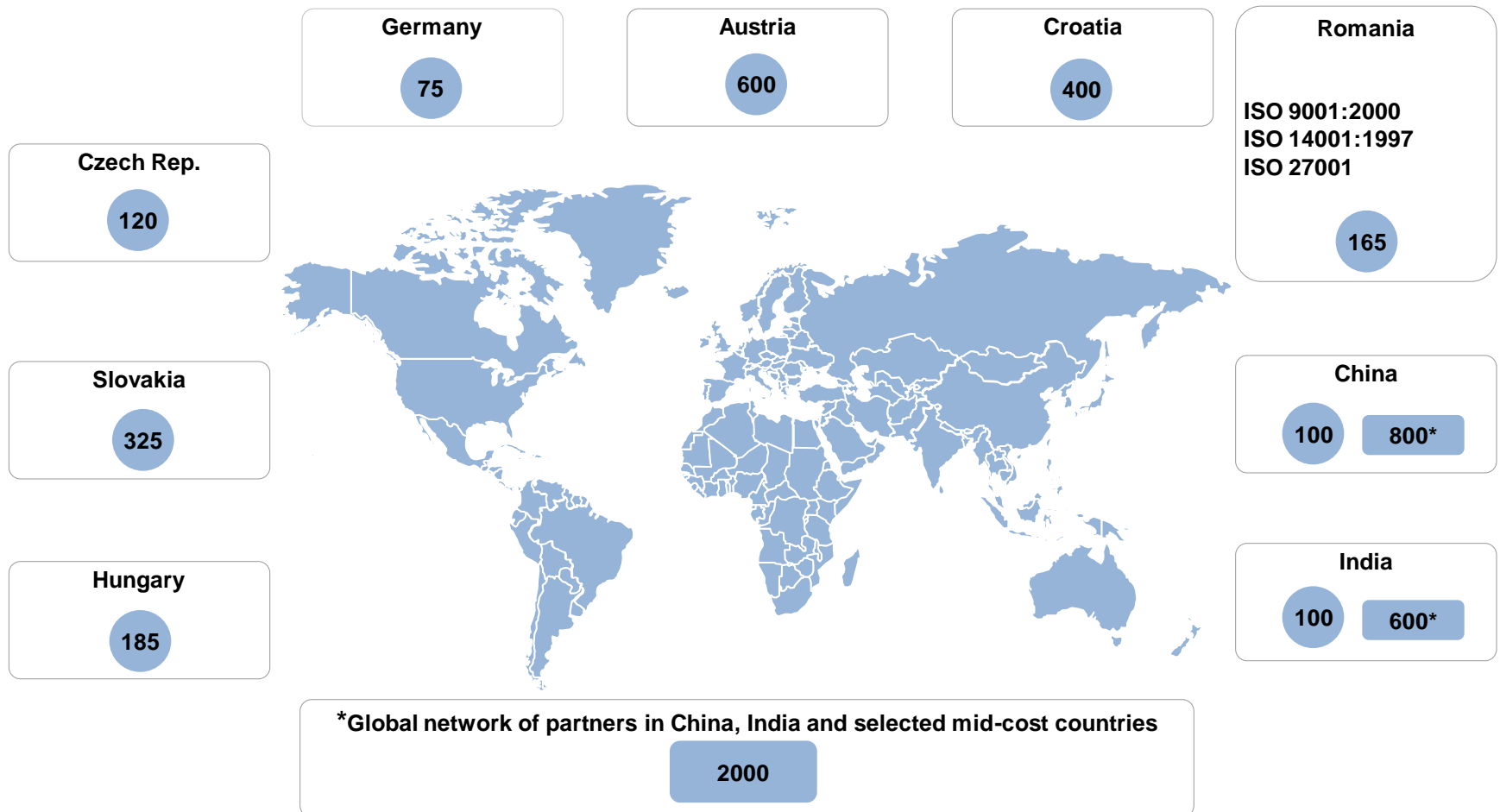
**Microsoft®**

**SIEMENS**

## Intro Siemens CMT – Global presence

Based on our presence in high-, mid- and low cost markets paired with our partner network, we delivered project work in 70 countries worldwide

**SIEMENS**



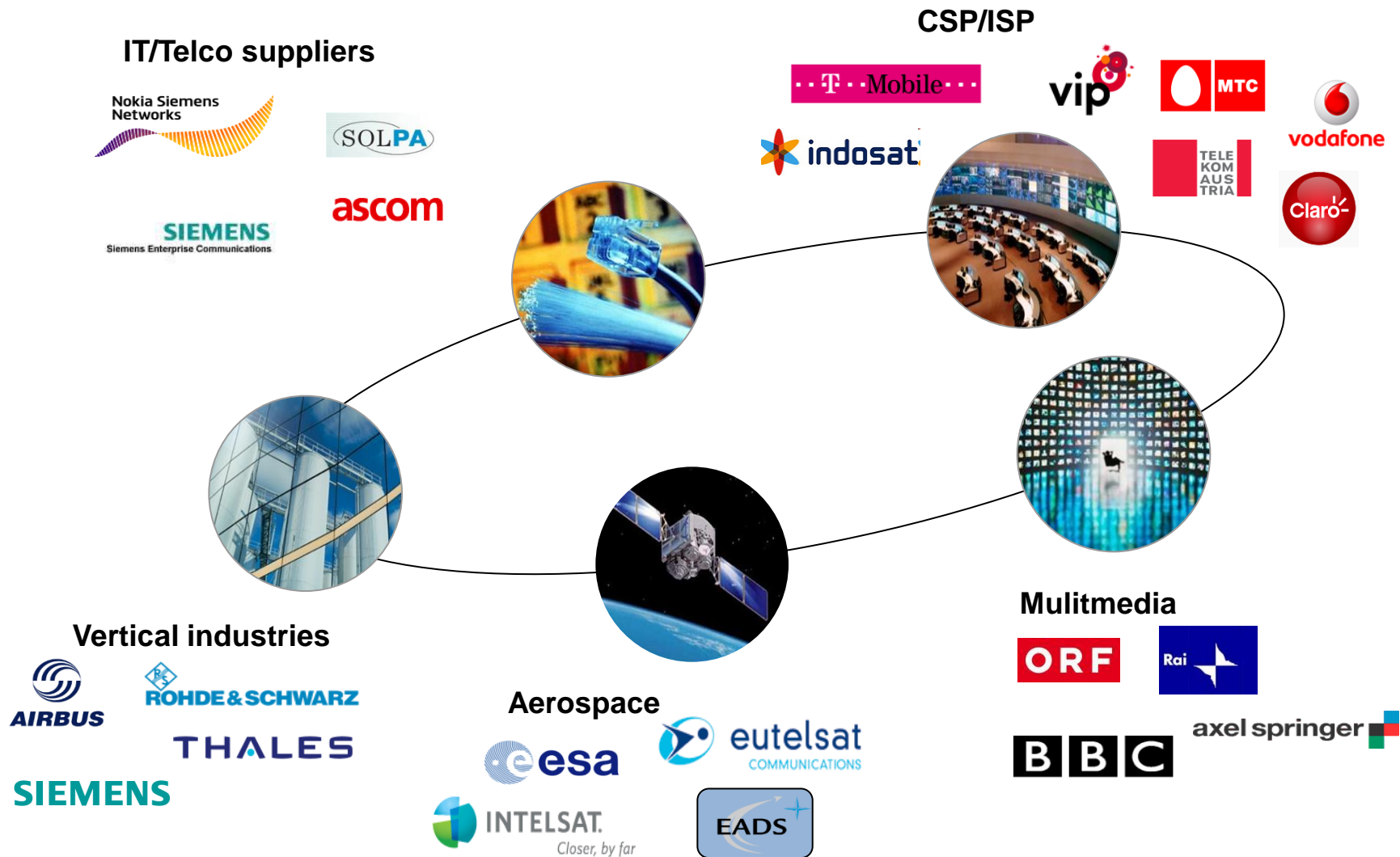
■ **+70 countries with substantial project work in last 5 years**

# Intro Siemens CMT – Client examples

Our global customers trust in our innovative solutions and value our proven execution skills in complex projects

# SIEMENS

Not exhaustive





# Intro Siemens CMT – Communication portfolio

Siemens CMT has a broad range of communication solutions, supporting today already leading CSP worldwide

**SIEMENS**

## Communications

IT/Telco suppliers



CSP/ISP



### Communication Network Systems

Focused, efficient products for next generation IP multimedia and Intelligent networks.

- High performance and availability server mapping
- VoIP Session Border Controller
- IN services based on resilient and open platforms

### Business Support Systems

Products bridging gaps between business & networks boosting the experience with converged services.

- Telco CRM add-ons to enhance i.e. loyalty and campaign mgmt
- M-payment and voucher less recharging platform
- Customer- & Self-Care solutions

### Operation Support Systems

Flexible and comprehensive product suite, covering full scope of OSS

- High performance service activation mediation solution
- Highly scalable inventory and resource mgmt solution
- Comprehensive charging and billing solutions

### Intelligence Support Systems

Law enforcement products for public and professional networks to master today's security challenges.


- Highly reliable lawful interception systems, addressing all required needs of today's security requirements



# Intro Siemens CMT – Media portfolio



Siemens CMT is an innovative solution provider to the Media industry

<b>Media</b> <b>Multimedia</b> 	<b>Innovative TV applications</b> Innovative TV applications to enable Media companies to drive new revenue sources	Cabel/SAT-, IPTV-, PayTV	<ul style="list-style-type: none"><li>• TV betting application</li><li>• Home control</li><li>• Energy control</li><li>• Health control</li></ul>
	<b>Over The Top TV</b> Enable CSP and Media companies to enhance customer access by entering the living room with innovative solutions	Broadcaster, Content Producer, Telco Operators	<ul style="list-style-type: none"><li>• Innovative solutions to enable broadcaster, content producer and Telco operators to offer interactive applications on multiple devices</li></ul>
	<b>ePublishing</b> New service offerings for small and mid-size publishing companies to also monetize the next big trend	Publishing companies	<ul style="list-style-type: none"><li>• Managed services for publishing companies to monetize its content and publish it on multiple new devices</li></ul>
	<b>Advertising and Recommendation</b> Apply state of the art advertising and recommendation solution to new media channels	Media agencies	<ul style="list-style-type: none"><li>• Interactive digital screen</li><li>• Advertisement Server</li><li>• Recommendation engine combining Web2.0 interfaces</li></ul>

# Siemens CMT

Industry specific portfolio at a glance

**SIEMENS**

## Energy



## Mobility



## Space



## Public safety & security



## Defense



## Services

## Solutions

## Products

# Siemens CMT- Industry specific portfolio at a glance

## Energy

SIEMENS

### Services offered



Consulting, Integration, Maintenance and Security services for networks.

Consulting, Design & Integration of tailored **M2M** (Machine-to-Machine) solutions



### Products and Solutions (Selection)



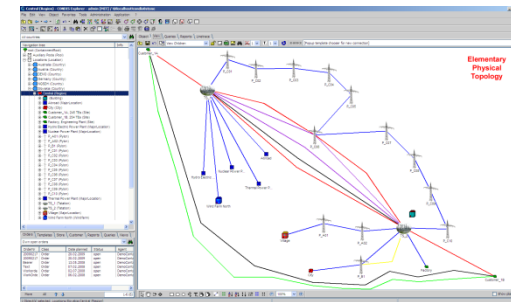
**CONDIS Network Resource Management** (Inventory) Cabling Infrastructure Management, Asset Management, Smart Metering Infrastructure Management, Service Provisioning, Service Availability and Maintenance



**Billing** solution's for small power utilities and **Meter Data Management** solutions based on CMT products.



**Consumer focused** Solution (providing transparency about energy consumption, **self-care**, tailored **advertisement** solutions (e-Mobility)



Selected references:



Energy provider - Austria



Energy provider - Germany

We leverage the broad experience of telecom deregulation for the changing energy market

# Siemens CMT- Industry specific portfolio at a glance

Mobility (1) – Control Center, Dispatching & GSM-R

**SIEMENS**

## Services offered



Consulting, design and building of custom-specific solutions as turnkey provider  
Integration Services for GSM-R & TETRA

## Products and solutions (Selection)



**SiemACCS®** (Advanced Communication and Control System)  
Proven command & control system, comprising video surveillance, passenger information, public address, ...



**TCAD** – Train Controller – Dispatcher for trains, metros, trams and bus fleets for GSM-R and TETRA



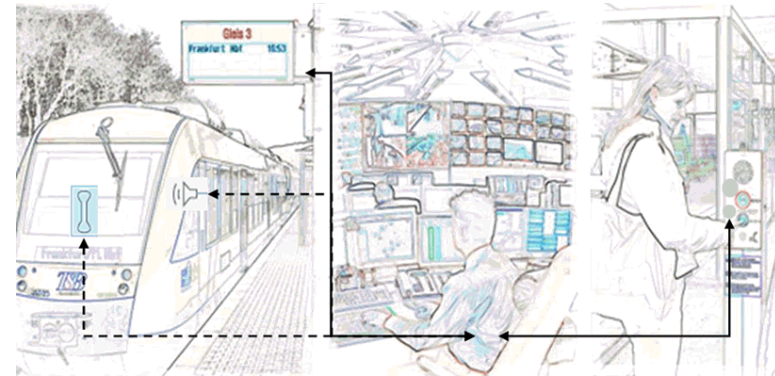
**SiTRS** (Train Radio Subrack) - On-Board device for wireless data & voice communication (TETRA, GSM-R)



**SIEmergency®** - Emergency Call Device for use on train platforms, roadside SOS, tunnels, etc.



**Operations** support products and solutions  
e.g. Inventory (**CONDIS**), Fault management, ....



**GSM-R**



Selected references:



**SIEMENS**

**üstra**

**protec**  
service

**ÖBB**

**ASFINAG**



Products & solutions for railways, trams, buses and roadside communications

# Siemens CMT- Industry specific portfolio at a glance

## Mobility (2) – Aero and Maritime

SIEMENS

### Services offered



Consulting, design and building of custom-specific solutions as turnkey provider

### Products and solutions



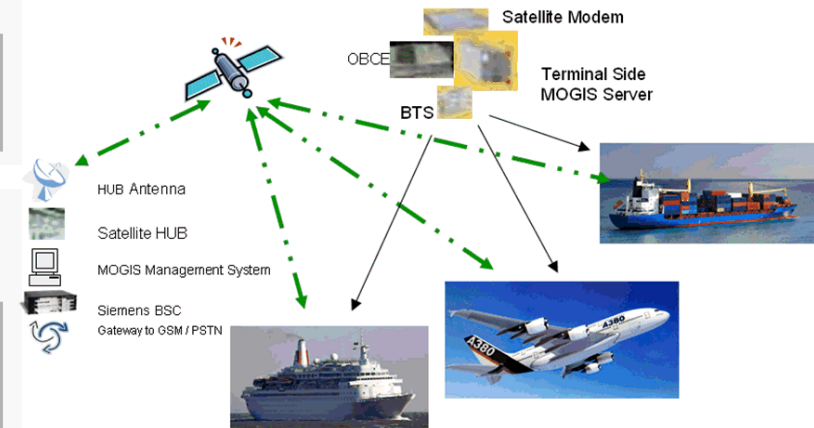
**MOGIS** (Mobile GSM Infrastructure over Satellite)  
MOGIS® provides GSM connectivity in airplanes, on ships and at isolated locations out of the box via satellite communication



**Media4Cruise & TZCC** (Infotainment)  
Provides TV, VoD, Internet,... to ship's crew and passenger. Time Zone Clock Control (TZCC) provides automatic Time Zone synchronisation



**VX-Ship** (Video and Network)  
Camera and Network Equipment for Airplanes, Ships and Rolling Stock



### Selected references:



Communication and infotainment products for airplanes and ships



# Siemens CMT- Industry specific portfolio at a glance

## Space

SIEMENS

### Services offered

➡ Consulting, design and building of custom-specific and standard solutions including hardware and SW

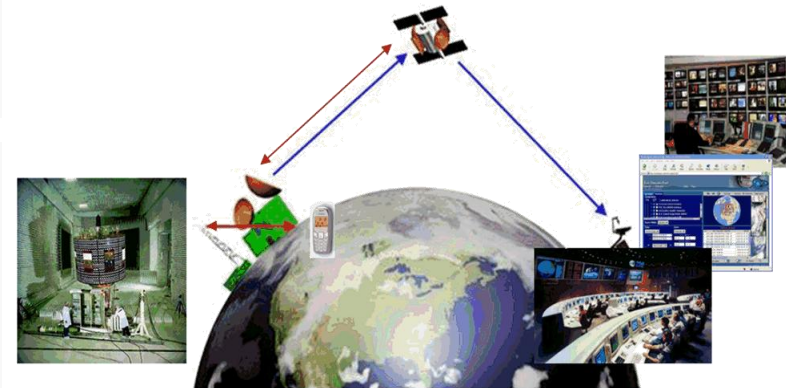
### Products, solutions and R&D services

#### ➡ **SIECAMS® CMS/ILS** \*1

Is a leading product for Satellite Communication Monitoring (more than 30% global market share)

➡ **EGSE** (EGSE ... Electrical Ground Support Equipment)  
Fully automated Tele-command, Telemetry & Control, Power and Payload testing of the satellite's sub-systems during assembly, integration & tests

➡ **EOUS** (Earth Observation User Services)  
User Services and Security Infrastructure provision for the ESA Earth Observation Ground Segment.  
**MCS** (Mission Control System)  
Satellite Mission Control Operational Software



\*1 .. CMS ... Carrier Monitoring System  
ILS... Interference Localization Syst.)

### Selected references:



**OHB** TECHNOLOGY



<http://www.siemens.at/space>

Products, solutions and services for SAT-Launcher, SAT Manufacturers, SAT operator, Telcos and other SAT users

# Siemens CMT- Industry specific portfolio at a glance

## Public safety & security

SIEMENS

### Services offered



Consulting, Integration, Maintenance and Security services for networks (TETRA networks), Command & Control (CCC)

### Products and solutions (Selection)



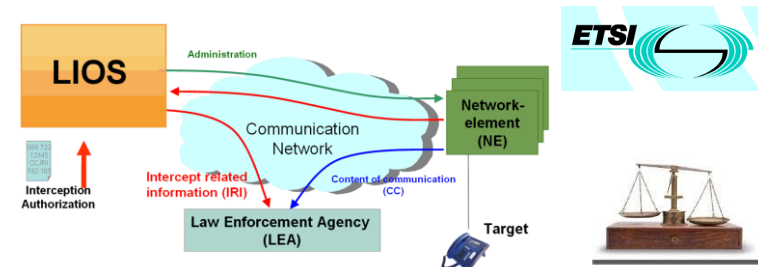
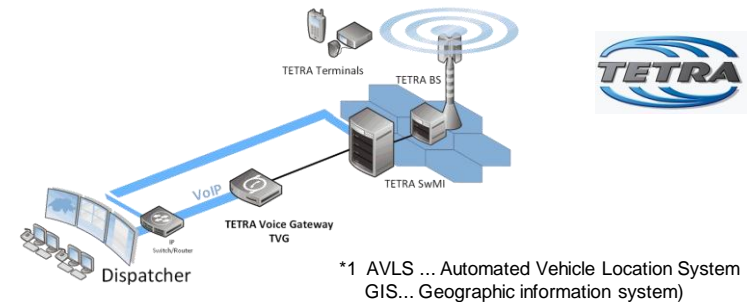
**TCAD** (TETRA Computer Aided **Dispatcher**) with integrated AVLS \*1 and GIS \*1 features.  
**TVG** (TETRA Voice **Gateway**) for **VoIP** connectivity.  
**TVR** (TETRA **Voice/Data Recorder**) for logging of voice and data calls within a TETRA network



**INKA** - **encryption** management framework. End to End encryption to provide **broadband** services over public **wireless** networks in TETRA environment



**LIOS** management system for lawful interception  
**LDROS** (Lawful Data Retention Operation System)  
Both are law enforcement products for public and professional networks (according ETSI & EU directives)



### Selected references:





# Siemens CMT- Industry specific portfolio at a glance

## Defense

SIEMENS

### Services offered



Design and delivery of customer-specific products and solutions.  
Consulting services (e.g. Consulting for **NATO** since 2006)

### Communications solutions



**Geolocation** - for **localization** of hidden **interferers** that disturbs **satellite** communication.

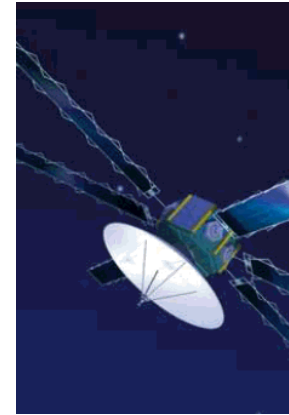


**Fremitus** - **Protection** of convoys and single vehicles against Improvised **Explosive** Devices (IED) that utilizes mobile phone communication (CDMA, GSM, UMTS)

### Operations support products (Selection)



**CONDIS** - Network Resource Management (**Inventory**), Cabling Infrastructure Management, Asset Management



Selected references:



Products, solutions and services for the defense sector

**We design, install, operate and optimize your network**

- **Secured Network Implementation**

Design, plan and implement cutting-edge secure communication systems

- **Network Audit**

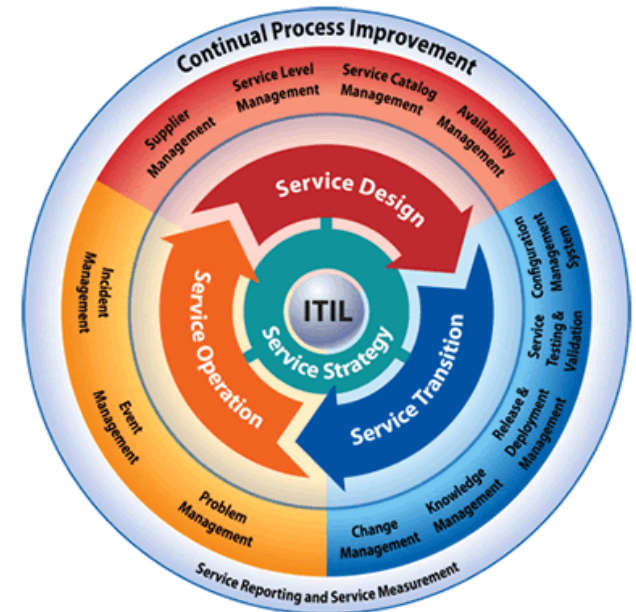
Determine vulnerabilities of IT networks and implement the measures to mitigate all the risks

- **Network Optimization**

Optimize and increase performance on your communication network

- **Emergency Service**

Troubleshooting and intervention in case of emergencies to minimize loss



## We deliver IT Security Policy

- **Security Design and Implementation**  
Design / redesign environment, implement security solutions and procedures
- **Security Audit**  
Find weak points in systems and procedures
- **Incident Handling**  
Be aware, identify incident, limit damage, resolve root cause, recover, learn lessons
- **Training**  
Basic security guidelines, measures of defense, security incident handling



**We make solutions work for you worldwide**

## ▶ On-site support for Radio and Core Networks

Radio Access 2G / 3G	Core CS R99 (MSC/VLR/HLR/STP) R4 (MSS / MGW)	Core PS GPRS (cSGSN / Flexi ISN) LTE (Flexi NS / Flexi NG)	SDM Subscriber Data Management
<ul style="list-style-type: none"><li>▪ Radio Network Planning</li><li>▪ Radio Network Optimization</li><li>▪ Installation, Commissioning, Upgrade</li><li>▪ Daily Operation and Maintenance support</li><li>▪ Acceptance support</li></ul>	<ul style="list-style-type: none"><li>▪ Installation, Commissioning, Upgrade</li><li>▪ Daily Operation and Maintenance support</li><li>▪ Escalations and Emergency handling</li><li>▪ Acceptance support</li><li>▪ Enabling of local staff</li></ul>	<ul style="list-style-type: none"><li>▪ Support for LTE trial projects</li><li>▪ Installation, Commissioning, Upgrade</li><li>▪ Daily Operation and Maintenance support</li><li>▪ Interoperability testing</li><li>▪ Acceptance support</li><li>▪ Enabling of local staff</li></ul>	<ul style="list-style-type: none"><li>▪ Installation, Commissioning, Upgrade</li><li>▪ Migration support</li><li>▪ Migration tools development</li><li>▪ Daily Operation and Maintenance support</li><li>▪ Acceptance support (NT-HLR, CNTDB)</li></ul>



## We integrate and maintain solutions for customer projects

### Project Integration Technical Assistance CS R99 Customer Projects

- World wide responsible for CS R99 Customer projects
- Integration and testing of CS R99 products according to customer requirements
- Technical Assistance for CS R99 customer projects (software updates, software correction, fault report and technical query handling)

### Upgrade CS R99 Customer Projects

- Developing/testing the upgrade procedures/tools for D900, EWSD STP and HIS700 products (project specific)
- On call support and on site support (FOA) for upgrade projects
- Emergency support

### Technical Product Support SSNC

- Fault Report and Technical Query handling related to SSNC product
- Upgrade and maintenance tests for change request and new hardware release
- Emergency service





## We deliver professional software development

### Technologies

MDA – Model Driven Architecture  
SOA – Service Oriented Architecture  
SaaS – Software as a Service  
BPEL - Business Process Execution Language

### Methodologies

Waterfall  
AGILE

### Core Competences

Java  
Web Services  
SDF – Service Delivery Platform  
Intelligent Networks

### References

STAE – Secure Telecom Asset Exposure  
DWB – Diagnose Workbench  
AAE – Automatic Analysis Engine  
Next Generation Operational Framework



### We deliver professional training programs

- **AGILE methodology**  
Certified Scrum Master and project experience

- **IP Networks Bootcamp**

Highly certified Cisco experts and complete test laboratory

- **IT Security**  
Not focused on specific hardware but general security including cryptography, architecture and design, policies and certifications

- **IP Networks**

General overview of IPv4 and v6, switching and routing





## **CCNA, CCNP**

**CCDP** (Cisco Certified Design Professional)

**CCIP** (Cisco Certified Internetwork Professional),

**CWNA** (Certified Wireless Network Administrator)

**JNCIA – FWV** (Juniper Network Certified Internet Associate – Firewall and VPN)

## **Nokia Security Administrator**

**GCIH** (Global Information Assurance Certification) Certified Security Incident Handler

**CCSP** (Cisco Certified Security Professional)

**CCSA** (Checkpoint Certified Security Associate)

**CISSP** (Certified Information Systems Security Professional)

**OCSE** (Optenet Certified System Engineer)

**LPIC** (Linux Professional Institute Certification)

**SCJP** (SUN Certified Java Programmer)

**SCDJWS** (SUN Certified Developer for Java Web Services)

**IPMA** Certified Project Manager, **PMI**, PM@Siemens

**TM Forum** Business Process Framework (eTOM) Certified, Information Framework (SID) Certified

**ISTQB** (International Software Testing Qualifications Board) Certified Testers



-  Strong regional presence in CEE
-  Proven CMT industry domain expertise
-  Corporate culture driven by customer-orientation
-  Flexible and efficient business models & processes
-  Creative and pro-active in innovating the customers' business
-  Strong credibility across all aspects of communication technology
-  Proven execution skills in complex projects spread across locations