

Modern communication dispatching site for today's (and tomorrow's) transportation company

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TTC TELEKOMUNIKACE



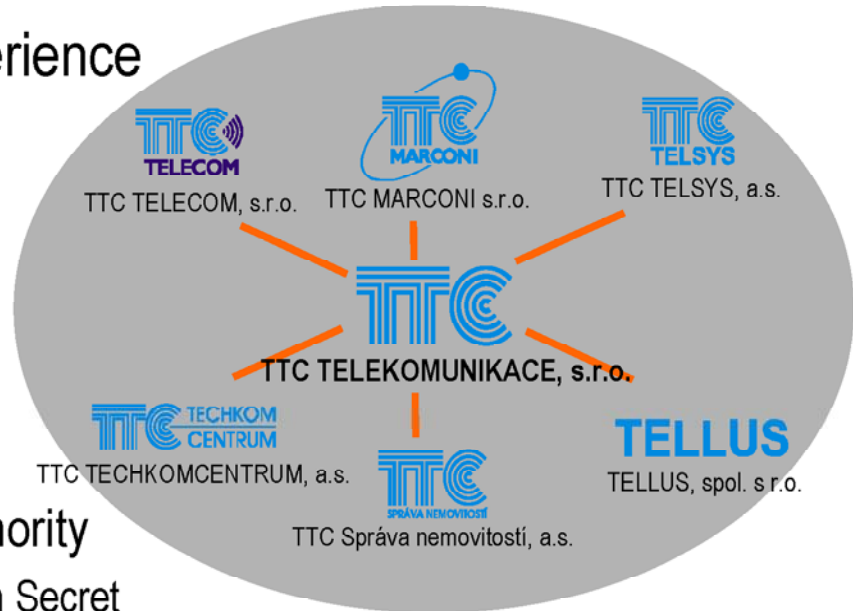
IP TOUCHCall

Content

- Few words about the company
- Ground for dispatching site employment
- Dispatching developed by TTC
- Examples of use

TTC TELEKOMUNIKACE

- Original Czech private company
- Holding structure
- Over 50 years of experience in telecommunication
- Certificates
 - ISO 9001:2001
 - ISO14001
 - AQAP 2110
 - National Security Authority
 - a level of classification Secret



TTC TELEKOMUNIKACE (cont.)

- Strategic focus
 - From ISDN to IP/VoIP
 - R&D in telecommunications
 - Specialized functions
 - Competencies in dispatching sites
 - Partnership & Integration
 - Company & Product

Partnership

Partners and cooperating companies

IP Telephony and IP infrastructure



*TTC is Application,
Registered and SMB select Cisco partner*

Security & Fire systems
SIEMENS

Fleet management



Security & Fire
systems interface

Automated voice scenarios



Event and voice recording



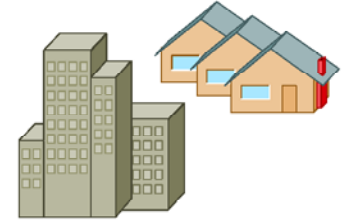
Radio system integration



Dispatching site usage



Manufacturing companies



Apartment complexes and office buildings



Transportation and logistics



Hospitals, parking lots, printing companies, campuses, ...

Military



Utilities



Ground for communication dispatching site

- Necessity for voice communication
- Managing people and processes
- Not every occasions predictable (automated)
- Allowance for both - automated and condition based decision
- Elimination (minimization) of attendance mistakes
 - Decision support functions

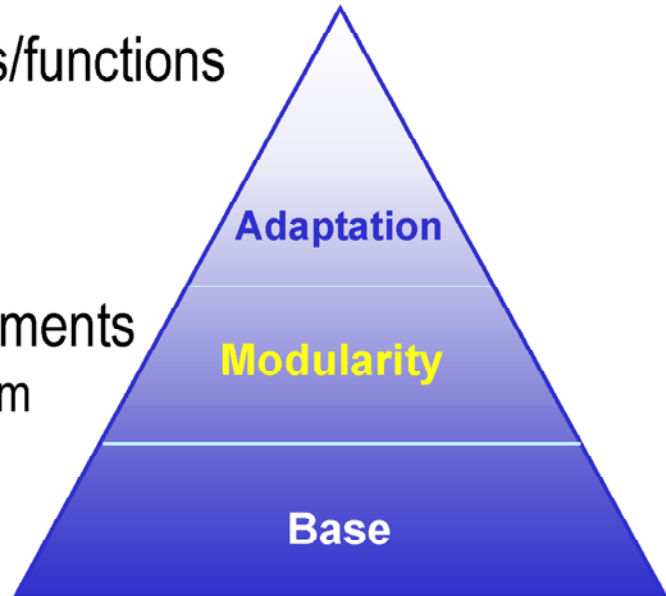
Dispatching site demands

- Regular operations
 - Price (purchase, operation, further development)
 - Interoperability with current and new systems
 - Simple and comfortable handling
 - Easy staff adaptation (low acquisition barrier)
 - Growth and scalability
- Emergency situations
 - Reaction speed
 - Mistake free
 - Accessibility
 - Preset prioritization of incoming requirements
 - Intuitive handling
 - Support for reverse analysis of situation



Building blocks

- Base – set of common features/functions
 - Team communication
 - Queue of requirements
 - Prioritization of actions
- Modular concept – optional elements
 - Integration Security & Fire system
 - Voice modules
 - SIP, H.323, ISDN
 - Interconnection to GIS
- Individual adaptation – specific user interface, functions, handling
 - Branch specificity – radio systems, recording
 - End user requirements – screen appearance, button types, IT integration



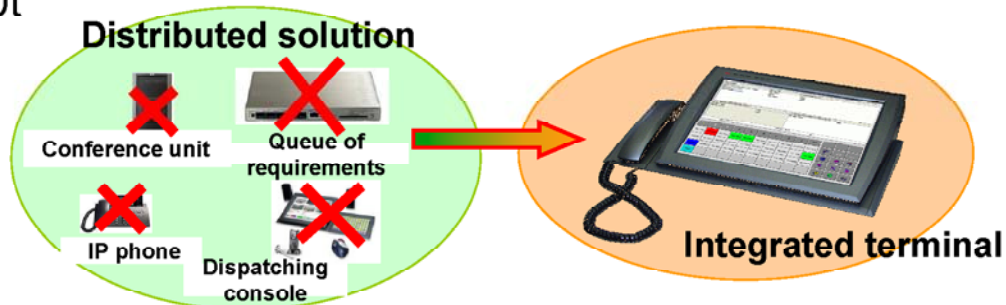
IP TouchCall

Dispatching site made by TTC



What is IP TouchCall

- Product / Application / Solution – IP TouchCall (IPTC)
- Functions
 - Device for managed team voice communication and call handling
 - Radio systems integration and interconnection with recording systems
 - CCTV output and Security&Fire system integration
- Concept



- Technology standards
 - VoIP IETF SIP / ITU-T H.323, Dialogic (Intel), MS Windows
- Regular SNMP management within IP network

Functions and their business impact

- Modern platform employment
 - → VoIP - standards IETF, ITU-T
 - Investment protection, interoperability

- Data network and business application integration
 - → IP – VoIP
 - → OSS, CRM, GIS
 - Operational costs, business support

- Terminal integration and umbrella system approach
 - → Compact terminal
 - → Voice/Security & Fire systems/CCTV/Radio
 - Accident mitigation, operational costs
 - *Intuitive handling, ergonomics, accuracy and speed of reaction*

- Event prioritization
 - Accident mitigation
 - *Mistake-free and fast reaction*

- Substitutability and backup
 - → Shared queue of requirements
 - Availability and reliability

- Events / calls / action recording
 - Accident mitigation
 - Past situation analysis

- Scalability
 - Investment protection

- Ergonomics of workplace
 - Operational costs
 - *Low entry barrier for staff*

- Regular HW employment
 - Upfront investment and operational costs
 - *Backup solution*

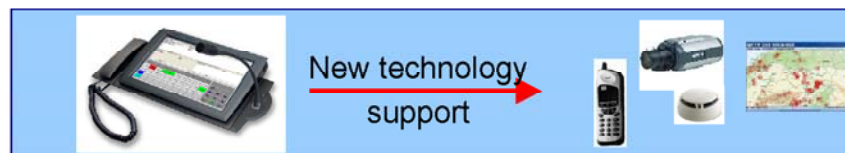
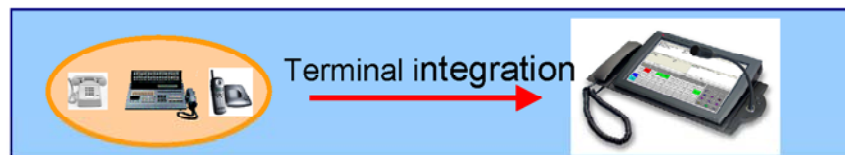
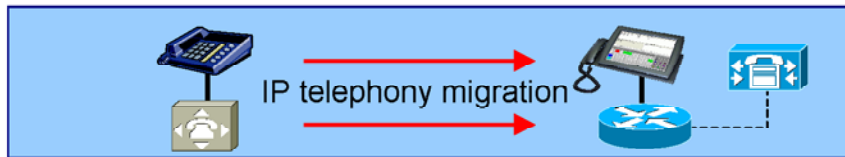
Integration as a natural part

- Dispatching communication terminal
 - Advanced voice functions
 - Cooperation with other systems
- IP infrastructure, IP Telephony, Unified Communication
 - Cisco Systems, Inc.
- Security&Fire systems/CCTV/Access building blocks
 - Siemens, s.r.o. BT
- Graphical interface for Security&Fire systems/CCTV
 - A2D s.r.o.
- Fleet management
 - Radium s.r.o.
- Automated voice functions
 - Optimsys, s.r.o.
- Recording of vice and events
 - Retia, a.s.
- Radio systems
 - DCom, spol. s r.o.
- ... and the other future potentials



Examples of use

- Running applications (segments)
 - Transportation
 - Army
 - Utilities
- IP TouchCall roles



IP TouchCall in Czech Railways

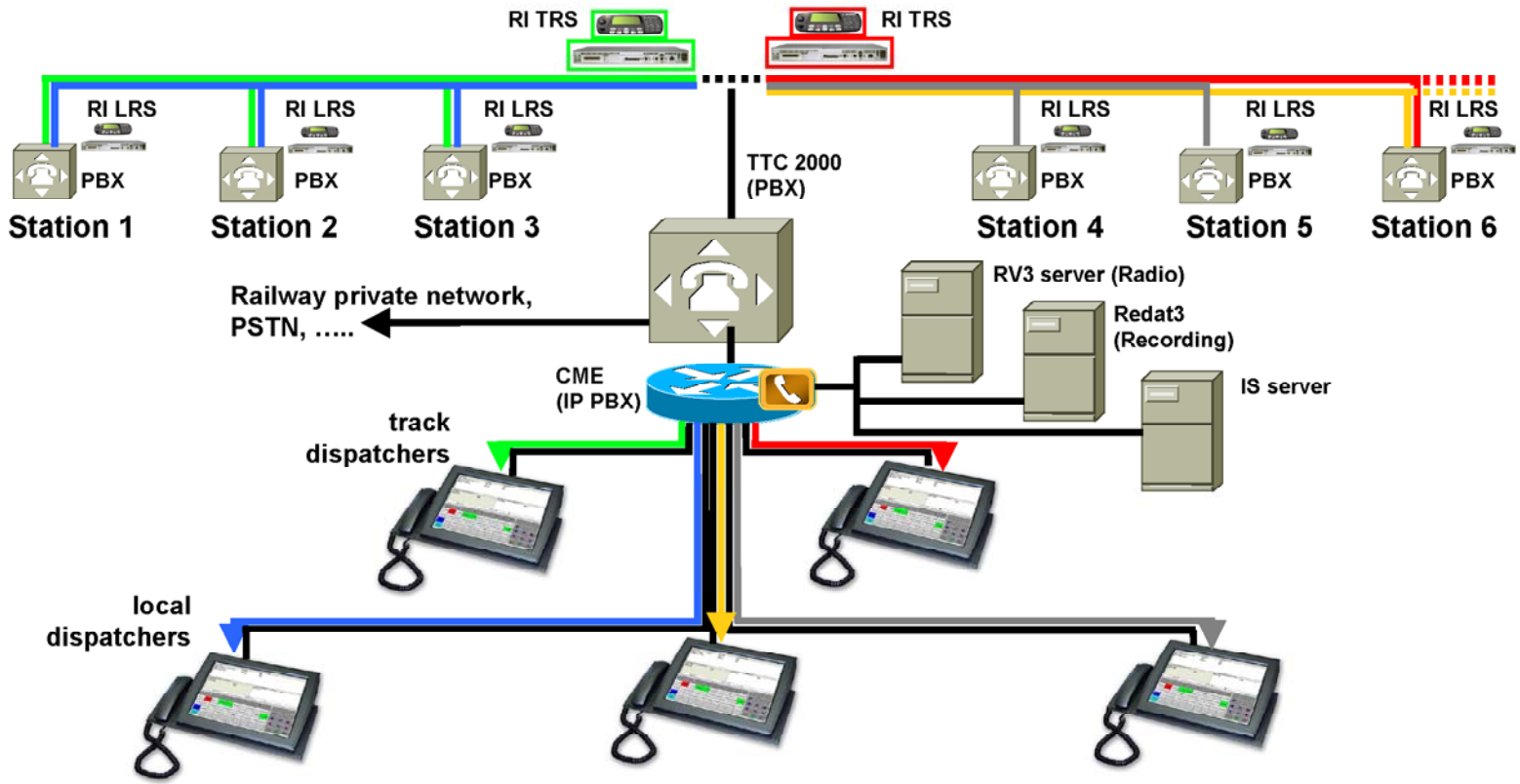


- II. Czech Railway corridor
- Contributions
 - Connection of dispatchers with managed stations
 - Integration of local radio system (maintenance, switchmen)
 - Integration of track radio system (connection with drivers)
 - Integration of passenger information system



Solution for pro track dispatching site

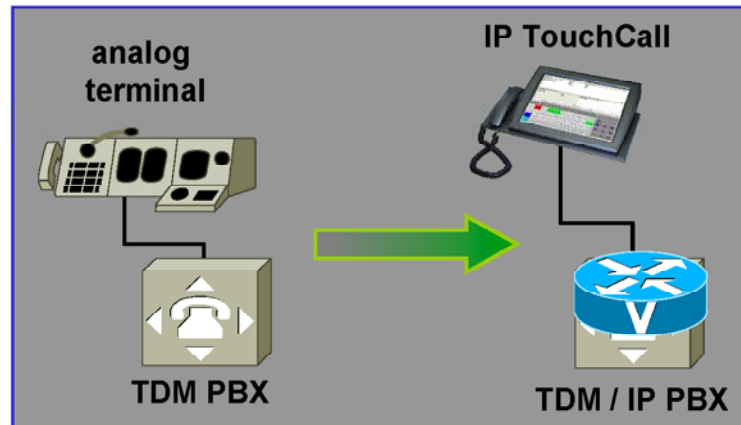
Current situation



IP TouchCall – analog system follower at ATC

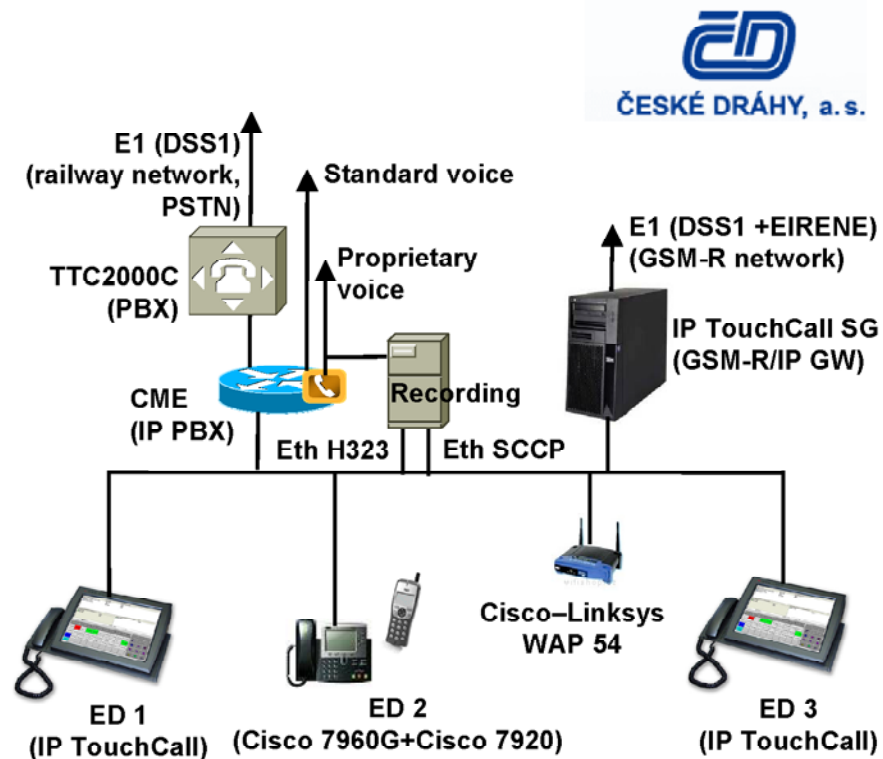


- IP TouchCall as a follower of analog system at Air Traffic Control in Czech Army
- TDM system modernization by keeping all the current functions and bringing the possibility of new ones
- Substitution of analog console by IP TouchCall and its adaptation to the current way of handling
- Integration of VoIP gateway into the PBX allowing interconnection with IP environment
- Bringing IP telephony functionality and modern dispatching site features
- SNMP management

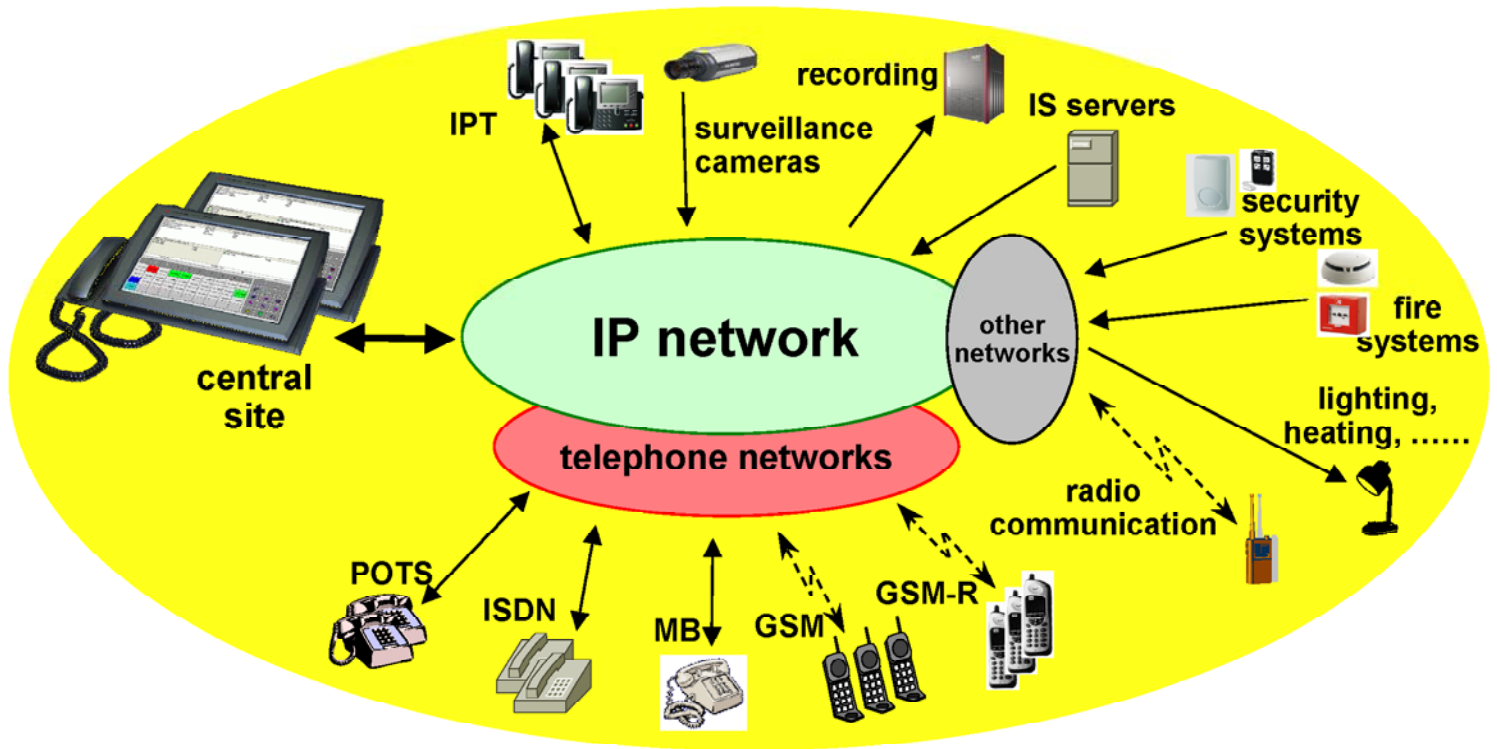


IP TouchCall and modern radio network GSM-R

- Dispatching for electricity distribution in Czech Railways
- System integration
 - Telecommunication networks
 - IP/TDM/Proprietary telephony
 - Voice and event recording
 - Radio network GSM-R
- WLAN employment for voice transmission
- GSM-R ready terminal and GSM-R gateway (developed by TTC TELEKOMUNIKACE)
- Standardized interfaces and protocols in use



Central communication and monitoring site



Thank You for your attention!

Questions?

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