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E-systems:
Informatization of healthcare system
One of the most important Ericsson Nikola Tesla's (ETK's) achievements is surely the entrance into e-systems area and obtaining a position of an expert center and an integrator that offers solutions for informatization of big state systems, especially the healthcare system. Prime advantages of this system are based on specialized integration services that are relevant to all stakeholders in the healthcare processes. This solution provides access to administrative and medical patient data, advanced service management and quality support to medical staff as well as their business communication with insurance and public health organizations. All services are based on globally accepted directives and norms. Among them the most important is the HL7 standard (Health Level 7). It is currently the most advanced norm in the medical ICT sphere. Ericsson is represented in the HL7 International Affiliate Technical Committee by a Technical Co-Chair. We are proud to say that this high position is held by an Ericsson Nikola Tesla employee. HL7 today numbers 30 organizations worldwide. Among them 30 are located in European countries.
Following global trends the Republic of Croatia has already started the process of informatization and integration of big state systems, including the healthcare system. Ericsson Nikola Tesla signed a contract on the introduction of e-systems with the Croatian Ministry of Health as far back as November 2003.
Finally, our intention is to show that all active stakeholders in the healthcare business processes can be interconnected so that the healthcare offered to patients is of the top quality, globally standardized, and that, at the same time, it ensures the safety of patient data and efficient use of resources.

The main benefit is the connection of the Ministry of Health, the Croatian Bureau of Public Health (HZJZ - Hrvatski zavod za javno zdravstvo), the insurance system lead by the Croatian Bureau of Healh Ensurance (HZZO - Hrvatski zavod za zdravstveno osiguranje), the Croatian Medical Chamber, healthcare service providers, surgeries providing basic healthcare, hospitals, specialist medical institutions, medical laboratories, drugstores, etc. It is important to say that all activities aimed at the informatization of the healthcare system are in line with the European and global directives as well as the initiatives and suggestions of the European Commission. Another aspect of this process is related to Croatia's ambition to become a fully-fledged EU member.

It is an important Ericsson Nikola Tesla's reference within the boundaries of the Ericsson Corporation so that in reality the company can expect to be granted additional regional responsibilities in this area, with special focus on the Central and Eastern Europe. As in this way the whole Ericsson Group gains new competencies, a team of the company's experts already operates as an e-systems and e-government competence center within the internal market. The implications of this contract gain increased importance when one bears in mind that Ericsson Nikola Tesla will include in this business chain its Croatian partners, small companies operating within the ICT and applications area. The integration of the solution for the informatization of the basic healthcare into the standard Ericsson's portfolio is currently going on.

Solutions for business users:
MX-ONE^{TM}

Ericsson MX-ONE^{TM} is the latest IP communications platform; a fully equipped IP-PBX system enabling better utilization of IT and communications infrastructure as well as a fast implementation of the converging voice/data network able to serve over 7.000 users. It supports a whole range of business services and advanced possibilities of business cooperation. This includes Instant Messaging, management of corporate directories and current user profile – all of it fully integrated with the standard software for business systems such as Microsoft Office and IBM Lotus Notes.

Analogue, digital, mobile and IP telephones can be used with MX-ONE^{TM}, bringing benefits of the converged wireline and wireless, as well as voice and data systems. Without regard as to which device is used – a smartphone or a desktop computer – the employees will see the same screen and have the same sense of functionalities.

MX-ONE^{TM} messaging application connects voice, fax and e-mail into one common user mailbox. Integrated messaging services and "text to speech" functionality enable users to remotely access their e-mail inbox from a mobile phone, a smartphone device or even a public phone, regardless of the place in which the user is located and the time in which he wishes to access the system.

MX-ONE^{TM} Manager, an active management system based on addresses, centralizes network and users' management and simplifies fault and performance management, reducing the costs related to the converged network.

The organizations that have call centers can combine MX-ONE^{**TM**} with the Ericsson IP-based call center solution - Solidus eCare. It ensures a whole range of voice and multimedia services enabling operation of wireline, wireless and remote agents.

The system is open, modular and future proof, and users of Ericsson's MD110 exchange can integrate MX-ONE Telephony System with their MD110 architecture as the first step towards IP evolution.

Solidus eCare – new generation contact center

Solidus eCare is Ericsson's solution that offers to business organizations of all sizes the most advanced virtual contact centers supported by Internet protocol and the features of mobility.

The possibilities of integration and management of people working in different locations support a wide user base and lower price of services. In this way the dispersed user support functions as a centralized service. Users are provided with the access to the most adequate agent, regardless of their location and their communications device.

Solidus eCare software applications offer high functionality over a simple and user-friendly interface. Managers can also use WAP Supervisor – from any place – to check a waiting user's number or if the agent is busy or answering web questions.

Solidus eCare operates together with the Ericsson MD110 Convergence system. This solution has a whole range of characteristics of an IP contact center, and it enables support to remote agents with total PBX possibilities.

Operator solutions:
IMS

IMS (IP Multimedia Subsystem) is a standard defining architecture of core and service layers of both wireline and wireless new generation networks. The specification of its main elements, protocols and mechanisms is based on the cooperation of the leading telecommunications standardization organizations, such as 3GPP, ETSI/TISPAN and IETF. The main technological characteristic of IMS is its transparency towards different access networks. Therefore IMS is the main driver of telecom networks and services evolution towards wireline-wireless converged solutions. Thus, users are provided with an integrated user interface and a common access to a wide spectrum of services over different devices

and access technologies (GPRS/EDGE, WCDMA, xDSL, Public Ethernet, WiMAX, WLAN, itd.).

The market research shows that today's users wish to communicate different business and private information, using different communications solutions.

Satisfying practical users' needs, having a possibility to express emotions and having access to entertainment are basic end users' expectations. New IMS based multimedia services have the key role in ensuring personalized communication. Ericsson's IMS services enable communication via different media such as voice and text services, sending images and video clips or their combination. IMS also supports so-called presence services enabling user to select where, how, when and by whom they can be reached.

IP Centrex is a virtual hosted IP PBX solution based on IMS technology that is suitable for small and medium business systems. IP Centrex architecture enables placing of a complete PBX logics within the area of telecom operator. Combining IMS functionalities with IP Centrex application enables hosting a whole range of personal and group services together with a multimedia support such as video communication, conference connection, presence management, Instant Messaging, integration with Personal Information Management (PIM) and teleworking.

The Ericsson IMS solution is a group of components that are required for the realization of IMS services ranging from user devices and functionalities in the radio, backbone and service network to the very IMS platform and applications. The Ericsson IMS enables standardized services such as **IMS Push to Talk** and **IMS weShare** solution as well as **IMS Multimedia Telephony** solution (including IP Telephony and IP Centrex solution), such as a support to development community through development of new IMS services – **IMS Studio**.

Currently, the most attractive application is the Ericsson IMS weShare solution based on 3GPP specification for combination services that enable users to exchange images, video clips and other data content, while talking on the mobile phone. Therefore weShare is one of the first IMS applications fully using the 3G network potential.

Triple play refers to a combination of telephony, Internet and TV content via common infrastructure in wireline networks. The basic element of the realization of this concept is a wideband access network based on WiMAX and xDSL technology. Ericsson EDA (Ethernet DSL Access) product, supported by IP transmission and functionalities such as Bandwidth on Demand, is a relevant solution for complex data services such as HDTV and Video on Demand. On the other hand, Ericsson wireless WiMAX solution enables the realization of Triple Play services in the areas of xDSL infrastructure inaccessibility. The upgrade and integration of IPTV (Internet Protocol Television) system with IMS communications solutions further increases the attractiveness of operators' service packets.

HSDPA

HSDPA (High Speed Downlink Packet Access) is a technological upgrade of the third generation of mobile telephony, offering faster data transfer in comparison to transfer speeds provided by 3G communications.

Introduction to HSDPA technologies is an upgrade of the currently used WCDMA networks. Today HSDPA is already implemented in some networks enabling speeds up to 1,8 Mbps while speeds up to 14.4 Mbps will soon be carried from a test environment into everyday use, creating basic prerequisites for the realization of the mobile Triple Play.

Ericsson Nikola Tesla
Communication