COMARCH

E-PLUS GRUPPE

TRANSFORMATION OF NETWORK PLANNING & DESIGN PROCESSES
E-PLUS, GERMANY

Increasing efficiency of business processes and managing NGN rollout costs are key issues to any mobile operator. E-Plus Germany selected the Comarch Next Generation Network Planning (NGNP) solution, together with the support in process reengineering, in order to achieve these goals.

THE BUSINESS NEED

E-Plus' main goal in this project was to transform the processes and the organization. Existing network planning and rollout processes were very complex, with hundreds of workarounds for simple operations, not supported by the tools already in use. In order to start thinking about lean, smooth and efficient processes, Comarch and E-Plus had to stop thinking about applications and focus on business activities in the area of planning and network integration. To secure ROI for the project E-Plus defined a list of business KPIs. These included two high-level business goals: increase of efficiency in planning and rollout by 50% and reducing time-tomarket for new technologies to 3-6 months.

CLIENT:

E-PLUS

INDUSTRY:

TELECOMMUNICATIONS

With 22,7 million customers, the E-Plus Group is Germany's third largest mobile telecommunications network operator and since 2000 belongs to the Dutch telecommunication group KPN.

E-Plus Group generates annual revenue of over €3 billion (2011) and employs more than 4,500 people in Germany.

IMPLEMENTED SOLUTION:

- Comarch NGNP
  (Next Generation Network Planning)

THE CONCEPT

The project assumed the implementation of the Comarch Next Generation Network Planning (NGNP) platform as a core of the transformation. But the main focus was on redesigning and simplifying processes, an essential step to maximize efficiency. Based on the redesigned processes all other project streams were aligned, like the new architecture of IT systems and interfaces or the way to prioritize and scope migration requirements.

Comarch's approach was to take one stream and make it a leading one, called Business Transition, with two main tasks: redesign all processes independently of the platform requirements (using eTOM/ITIL as a reference and BPMN/EPC notation for Business Process Modeling), and then create a new platform architecture using standardized E-Plus modules and the Comarch NGNP package. In fact, those two areas coexisted throughout the whole project, supporting each other. To secure ROI, a Managed Services model extended with a bonus-malus payment option was applied.

THE PROJECT – BPR & ARCHITECTURE TRANSFORMATION

The OSS transformation project started with assessing business processes in the RAN, transport and core networks, like creation of a new site, a system swap, a new transport network element or an integration process. All processes in all domains were documented, as they should work, without any applications in the background. Such an approach allowed for focusing on the important steps, without all legacy ones, introduced to overcome the lack of functionalities in tools. It was crucial that the remodeling of processes also entails certain changes in the organization.

The crucial achievement of the project was process reengineering. The work spent on defining new processes allowed E-Plus to achieve the requested project KPIs related to network planning and rollout. What is even more important, the redesigned processes provide better control over network planning and rollout processes, thus also increasing network quality. All this ultimately translates to improving EPlus' business offer.

WHY COMARCH?

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Throughout the whole NGNP project Comarch has developed and proved its own concepts and ideas for managing and helping with big transformation projects. Comarch skills and OSS strategy helped us in smooth transition from complex legacy architecture and processes into new lean approach for network planning, delivery and integration.

Department Manager Processes & Support
E-Plus

THE RESULTS

RESULT 1: Decreasing the complexity of network planning and design processes.

Once high-level processes were defined during the "blueprint" phase, the real optimization process started. The business analysis resulted in replacing 110 existing business processes with 65 newly introduced processes for RAN, transport and core planning. The new processes automated data handling between different systems and provided clear boarders between various planning phases. This brought an additional benefit for E-Plus by providing flexibility in introducing various outsourcing scenarios and ease of adaptation to partners via inventory and BPM interfaces, e.g. for network rollout.

RESULT 2: Simplifying and standardizing of the NGOSS architecture.

Transformation of the IT architecture was planned as the next step. Based on due diligence method, subset of existing modules was assessed and merged into a new architecture, with Comarch Network Inventory (Resources) and Comarch OSS Process Management (Processes) modules at its core. Redundant functions were standardized and finally migrated to Comarch NGNP.
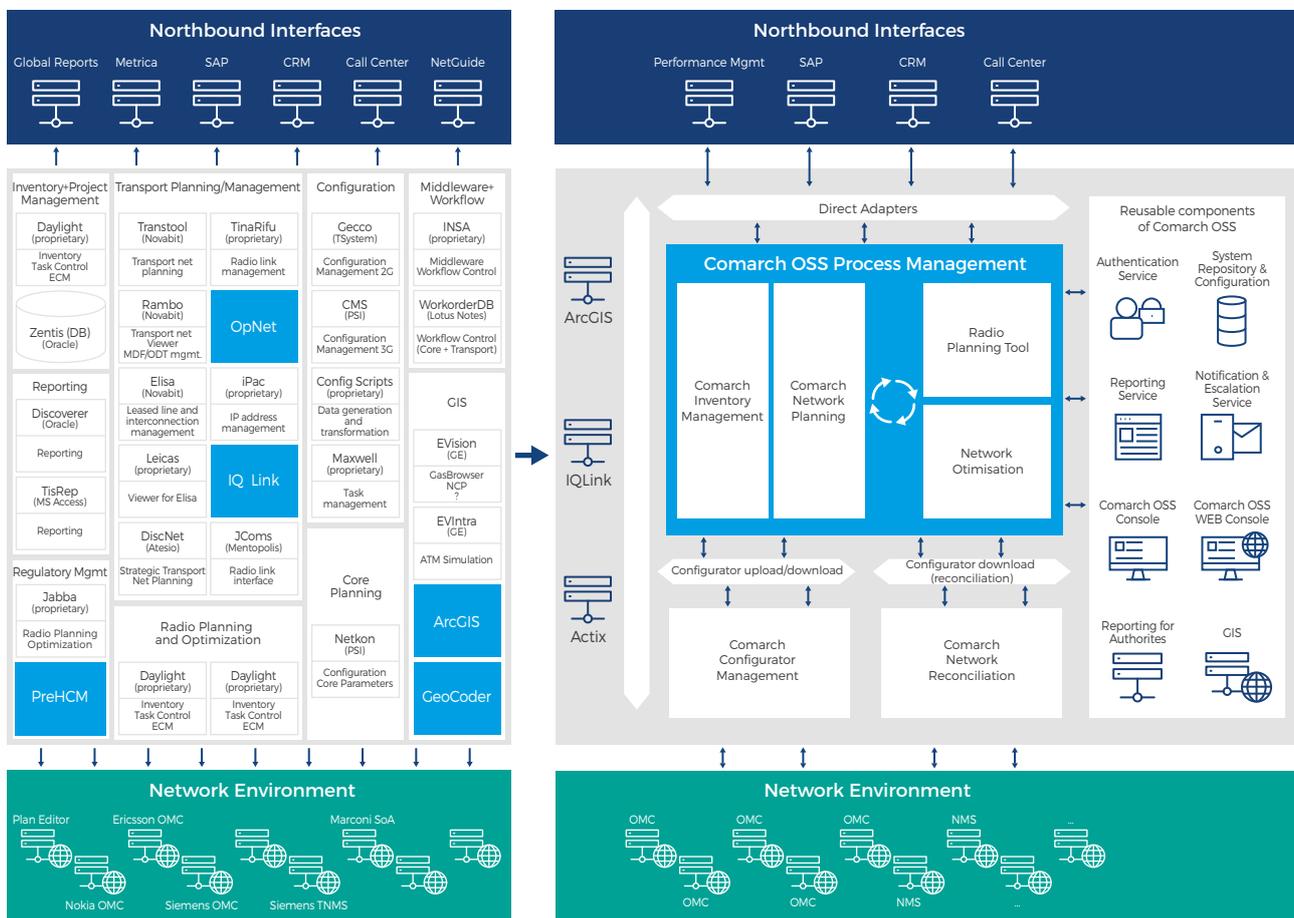
Simplifying and standardizing of the NGOSS architecture.

RESULT 3: Time-to-market improvement. Optimization of the network integration process.

Network integration is a crucial process for a mobile operator. To orchestrate the configuration changes, most service providers still use theso called 'Turn On Cycle' (TOC) process, which defines a number of changes to be executed in a defined period of time. Radio planners providethe network configuration at the end of the TOC process, which means that it is necessary to manually update the configuration for each day and each integration in the configuration management systems. This increases the risk of errors in the configuration and requires multiple

planners to verify if the requested configuration is in place. Some errors can be identified only by drive tests or customer complaints. The solution proposed for E-Plus is based on a simplified process for network integration and tools with capabilities to support this process. The process identifies all integration happening in a period of time and divides the operation to physical integration and optimization.

Within the first part of the process all deletion commands are prepared and integration is executed based on default parameters. After the necessary tests, the site becomes active, but locked for commercial traffic. A basket of other sites in the same state is created for a given network cluster. In the second part of the process this basket is optimized with a final configuration and integration for all sites. Within this process the sites are marked as commercially available. The process itself is executed very closely to the data, which is automatically updated based on the network reconciliation process. This is vital to bring the planners close to the real network configuration, so the plan they prepare can be executed without creating problems in the network. It is just one of the process redefinition examples.

RESULT 4: Overall business process efficiency improvement by 50%. Reduced number of network configuration errors.

The launch of the first two project phases proved that the target of 50% increase of efficiency is a realistic objective and will be reached. In order to reach that goal a lot of user know-how is being put into the Comarch OSS Process Management system, increasing the level of automation. Additionally, through architecture centralization, a lot of manual retyping and data transferring was no longer necessary. Automation of processes and centralization of the data reduced the number of network configuration errors, additionally increasing operational efficiency. This was achieved mainly by reducing the number of applications and internal interfaces and introducing standardized, modern ones.

RESULT 5: Seamless integration of Network Infrastructure Outsourcing and E-Plus Network Planning & Design Policy

The Comarch NGNP platform provides end-to-end processes for network rollout. Particular process phases are standardized based on NGMN (Next Generation Mobile Networks Alliance) recommendations and the TMF eTOM standard. Each phase is delivered either with a standard integration interface or with access to E-Plus applications, where new rollout partners can be easily introduced. The process provides well defined project roles and responsibilities, allowing E-Plus planners to fully manage and track realization of the rollout projects.

ABOUT COMARCH

Comarch is a provider of complete IT solutions for telecoms. Since 1993 the company has helped CSPs on 4 continents optimize costs, increase business efficiency and transform BSS/OSS operations. Comarch solutions combine rich out-of-thebox functionalities with high configurability and are complemented with a wide range of services. The company's flexible approach to projects and a variety of deployment models help telecoms make networks smarter, improve customer experience and quickly launch digital services, such as cloud and M2M. This strategy has earned Comarch the trust and loyalty of its clients, including the world's leading CSPs: Vodafone, T-Mobile, Telefónica, E-Plus, KPN and MTS.

telco-enquiries@comarch.com | telecoms.comarch.com

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