

## Dialogic® ControlSwitch™ System Helps Turkcell Superonline Transform Its IP Multimedia Subsystem and Core Switching Networks

### CASE SUMMARY

#### Challenge

Turkcell Superonline, a fast growing innovative telecom operator in Eastern Europe, needed a replacement for its end-of-life Cisco Systems, Inc. (Cisco) PGW 2200 softswitch deployments to support its any-to-any connectivity requirements.

#### Solution

Turkcell Superonline replaced its legacy softswitches with the Dialogic® ControlSwitch™ System, an IP Multimedia Subsystem (IMS) ready Media Gateway Control Function (MGCF) solution, which provided it a cost effective and operationally efficient way to leverage its existing base of Cisco AS 5300 Series Universal Gateways and seamlessly interconnect to its Ericsson IMS core network.

**TURKCELL**  
SUPERONLINE

### Challenge

Turkcell Superonline is part of the Turkcell Group, a leading information and communications technology provider with approximately 61.7 million subscribers across nine countries. Turkcell Superonline provides comprehensive voice and data telecommunications solutions for wholesale, corporate and residential customers, including long distance telephone and triple play services. Its switching infrastructure, which included two Cisco PGW 2200 softswitches, was critical to its delivery of services to its customers. In 2011, Cisco announced the “end-of-life” of its PGW 2200 softswitch, and for Turkcell Superonline this news posed a significant challenge that it needed to address immediately.

Turkcell Superonline used one of the two Cisco PGW 2200 softswitches it had deployed to interface its TDM network through an extensive deployment of Cisco AS5000 series Universal Gateways distributed across its operating area. The other PGW 2200 platform was used to connect its SIP-based VoIP customers to its IMS network, broadband residential and business customers, and its IP peering partners.

Turkcell Superonline was motivated to find a long-term replacement for this core part of its infrastructure. It needed to find a vendor that could not only replace the Cisco gear that was end-of-life, but also transform its network in an economical fashion with a scalable solution that offered a technology roadmap to support its needs now and into the future. It wanted a solution to provide both the IP and TDM connectivity with its Next Generation, IMS and legacy networks and that could help it realize the long term goal of implementing an IMS-centric service delivery environment.

### Solution

Dialogic was able to provide Turkcell Superonline with a solution that was cost effective, easy to implement, and that could replace the Cisco PGW 2200 softswitches while at the same time interwork with the operators embedded infrastructure of Cisco AS5000 series Universal Gateways. In assessing its requirements for a replacement of its existing softswitch implementation, Turkcell Superonline saw the Dialogic ControlSwitch System as providing a carrier class, IP-based solution that was uniquely suited to meet its immediate PGW 2200 replacement needs and also provide an IMS ready MGCF platform. The Dialogic solution, compared to alternatives proposed from competing vendors, allowed Turkcell Superonline to not only replace both of its legacy PGW 2200 platforms with a single ControlSwitch

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**- Barbaros Özdemir,**  
**Director of**  
**Corporate Business**  
**Management,**  
**Turkcell Superonline**

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System softswitch, but also enable it to still utilize the existing embedded base of Cisco AS5000 series Universal Gateways which helped them save considerable CAPEX, time and OPEX on the overall project. A Dialogic® I-Gate® 4000 EDGE Media Gateway was used to provide the legacy SS7 connectivity, and the interoperability and flexibility of the ControlSwitch System allowed Turkcell Superonline to seamlessly interconnect to other IP-based networks through its existing third party session border controllers (SBCs) and interwork with its current application servers and growing IMS network.

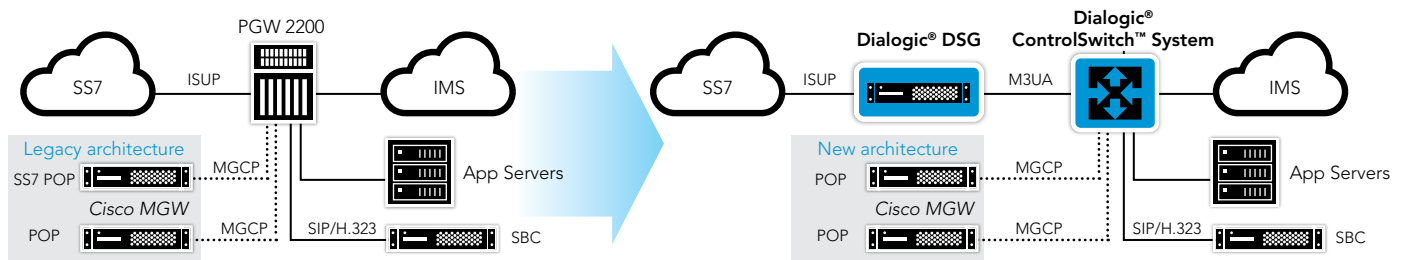


Figure 1 – The ControlSwitch System seamlessly integrates with existing Cisco AS5000 series Universal Gateways, helping make the transition away from a Cisco PGW 2200 deployment easy and cost efficient.

Turkcell Superonline was impressed with Dialogic’s experience in helping other customers successfully and seamlessly transition from not only the PGW 2200 technology, but also other legacy IP and TDM switches from other well-known infrastructure vendors. Turkcell Superonline saw this expertise and implementation support first-hand as Dialogic helped it interconnect its IMS infrastructure as well as its TDM and NGN networks.

Turkcell Superonline felt that Dialogic’s solution brought increased functionality to a service provider’s operating environment, which led Barbaros Özdemir, Director of Corporate Business Management, to comment, “After evaluating a number of vendor options we chose the Dialogic’s ControlSwitch System as our MGCF solution. It provided us with a cost effective and operationally efficient way to leverage our existing base of Cisco gateways and seamlessly interconnect to our Ericsson IMS core network.” Some of the solution features that stood out most to Turkcell Superonline included:

- Support for a wide array of signaling protocols for IP-to-IP and IP-to-TDM interworking including SIP, SIP-I, H.323, SS7, SIGTRAN and PRI
- IMS MGCF support with seamless interworking with Turkcell Superonline’s IMS core from Ericsson and interoperability with existing application servers
- The ability to support an existing base of Cisco AS5000 series Universal Gateways without a forklift upgrade compared to other vendors’ approaches
- Geographical redundancy for high availability and continual processing of mission critical customer traffic
- Extensive routing capabilities, including support for LNP
- Higher bandwidth compression rates (up to 16:1) with the use of Dialogic® I-Gate® 4000 Media Gateways

## Result

With Dialogic’s solution, Turkcell Superonline was able to leverage its existing investment in legacy gateway platforms and third party SBCs. The experience of Dialogic’s professional services in helping customers transition from their end-of-life technology was important from a service continuity and service integrity perspective. Mr. Özdemir further noted, “Dialogic’s commitment to the technology, and its experience with successfully transitioning service providers like us from legacy switching platforms was an added incentive and gave us confidence that our customers would be minimally impacted.”

Finally, Turkcell Superonline saw in Dialogic the commitment to helping it advance its IMS IP transformation initiatives as well as support its near term service delivery needs and cost constraints with a comprehensive any-to-any connectivity solution. In summing it up, Mr. Özdemir added, “Our VoIP business will continue to grow with Dialogic’s solutions and support.”

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**- Barbaros Özdemir,  
Director of  
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Case Study

## About Superonline

Turkcell Superonline is “#1 Alternative Telecommunications operator” and “Fastest Growing ICT Company for the last 3 years” (according to the latest ICT500/Turkey listing published July 2010). Turkcell Superonline is an innovative telecom operator providing communication solutions to telecom operators, corporations and households in the areas of data, voice and video (triple play).

For more information visit [www.superonline.net](http://www.superonline.net)

## About Dialogic

Dialogic inspires the world’s leading service providers and application developers to elevate the performance of media-rich communications across the most advanced networks. We boost the reliability of any-to-any network connections, supercharge the impact of applications and amplify the capacity of congested networks. 48 of the world’s top 50 mobile operators and nearly 3,000 application developers rely on Dialogic to redefine the possible and exceed user expectations.

For more information visit [www.dialogic.com](http://www.dialogic.com)



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Information about Superonline has been provided by Superonline for this case study.

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