

# Synway's Carrier-Grade SS7/SIGTRTAN VoIP Gateway SMG3064, Optimizes Hi-Capacity VoIP System for Germany leading Operator

CASE STUDY

**E-Plus** is a mobile telecommunications operator in Germany and it headquartered in Düsseldorf is a wholly-owned subsidiary of Telefónica Deutschland Holding AG. It is one of the largest telecommunication providers in Germany with over 47 million customer connections. According to mobile customer numbers, Telefónica Deutschland is the top one operator in the market. The company and its subsidiaries have licenses to operate in all of the Germany regions.



## Challenge:

*E-PLUS wanted to develop a more cost effective VoIP services for some SMB and medium level enterprises. As the first operator in Germany to offer mobile communications services, E-plus was looking for ways of creating demand for its services and finding multiple market sectors that could benefit from all telecommunication has to offer.*

*To make connectivity even easier, E-Plus wanted any-to-any network connectivity and interwork multiple protocols to deliver services to their retail, business and wholesale customers. That would save time and money both for the customers and E-Plus themselves. For improving the performance of customers' telecommunication, E-Plus also wanted to find a device can widely compatible with its own softswitch platform and a third party Broadsoft. Moreover, the device was expected to support high densities call with high stability.*

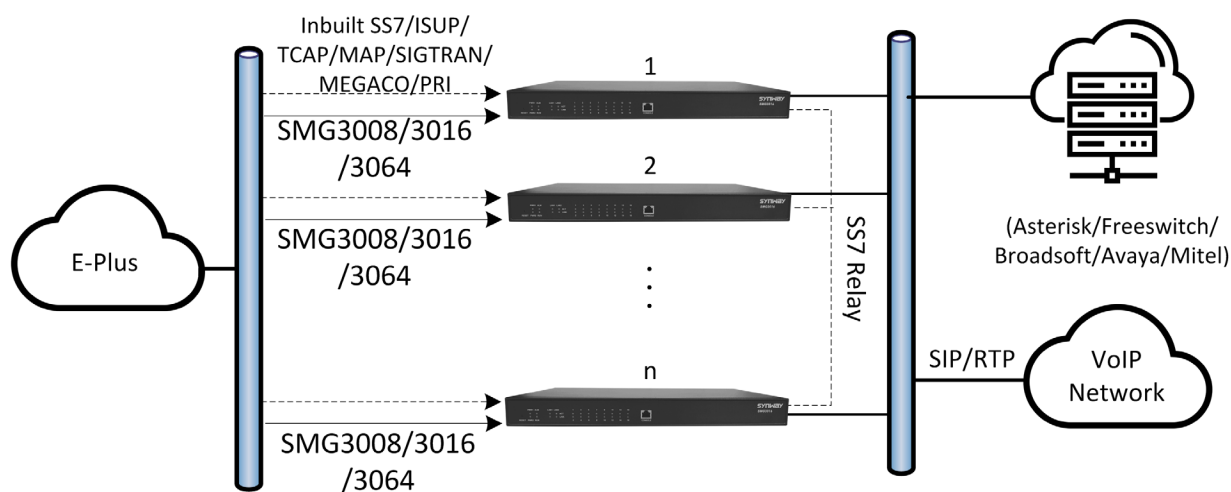
## Solution:

*After evaluating several devices from different vendors of VoIP hardware, E-Plus choice was Synway SMG3064/3016/3008. The SMG3064/3016/3008 connects IP and hybrid networks via telephony and Fiber Optical/Ethernet links in a compact 1U form factor appliance. It also transforms media and signaling to support efficient and reliable voice, fax and multimedia sessions for mobile, fixed*

*and cloud-based applications. The convergence of IP multimedia and TDM gateway functionality in a single chassis in the SMG offers significant reductions in investment and operational cost when compared to less integrated alternatives.*

*SMG3064/3016/3008 adopts telecommunication architecture and use more DSP hardware than similar products, the processing ability is more powerful than most rivals. SMG3064/3016/3008 adopts open platform architecture, which is compatible with a variety of soft switching and a third-party software. It also can upgrade product functionalities promptly, according to user needs, being seamlessly compatible with diverse networks and applications.*

*SMG3064/3016/3008 could help integrators and enterprises to enjoy cost-effective & reliable telecom applications. According to the user's experience and comparison analysis, SMG3064/3016/3008 features faster system response speed, and connects with the IP/TDM network faster and more reliably, with very low latency, and increases numbers of trunking frequency. SMG3064/3016/3008 can implement full load communication effectively in the case of low bandwidth, and convert TDM to high definition VoIP reliably. SMG adopts a variety of brands components, optimizes embedded system continually during using, assuring the products can maintain a better stability under the circumstance of long time and high-density usage.*



## Results:

By adopting SMG3064/3016/3008 VoIP Gateway, E-Plus can receive the following benefits:

- *Minimize SS7/SIGTRAN VoIP Gateway Cost:*  
High voice quality and instant call connection, improving system efficiency and profitability; Synway SS7 VoIP Gateway could reduce hardware cost by 70%;
- *Build-in SS7, SIGTRAN, SIP in A Single Platform*  
Complimentary standardized SS7 Packets (Up to 64 SS7 links, ISUP, MTP1~3, TCAP), SIGTRAN and SIP for any carrier networks worldwide; Field-proven by over 50 largest operators from European, China, USA, India, Brazil, South America;
- *Dedicated DSP-Empowered Capability*  
Telecom-style DSP algorithm has been optimized for over decades, assuring seamless compliance with any network environment. Plentiful DSP resources are allocated for signaling, media processing, bandwidth optimization, Telco redundancy;
- *Robust Telco-Grade Architecture*  
Dual power supply, 1U compact structure, industrial heating

*sink system, dual 1,000M Ethernet interfaces, and Telco' grade hardware architecture ensure 200,000Hr MTBF and 0-defective rate in long lifecycle ;*

- *Highly Adjustable For Diverse SoftSwitch*  
Homegrown core technologies to assure seamless compliance with diverse softswitch platform, including Mitel, Avaya, Broadsoft, Yate, OpenSIP, Asterisk, VECTRA, VSC, SIPPULSE, Tropico, FreeSwitch and more other softswitch;
- *99.9999% Availability in Full Load*  
Support 4/8/16/64E1 (120/240/480/1,920Chs) per unit, with higher system responsiveness capability in extreme network for better operational results; High performance and stability in cases of unstable (low) bandwidth and high capacity;
- *User-friendly WEB Management*  
With complete understanding about SPs and operator's headaches, SMG3000 adopts the simplest and straightforward configuration to achieve SPs and Operators' most sophisticated objectives. Over 1,000 units of SMG3000 can run together;

### About Synway

As a major manufacturer and supplier of communication products and solutions, Synway specializes in providing superior Multimedia Gateway, Integrated Multimedia Switch, Telephony Hardware in use for Telecom communications. [www.synway.net](http://www.synway.net)

Hangzhou Synway Information Engineering Co., Ltd.  
Synway R&D Building, No.3756, Rd. Nanhuan. Binjiang District, Hangzhou, P.R.China 310053  
Tel: (86) 571 88860561; Fax: (86) 571 88850923; Email: info@synway.net  
Copyright © 2014 Synway. All rights reserved.

