

# Signaling for International Roaming.

International Carrier Sales & Solutions (ICSS)

Life is for sharing.



Mobile  
World

## Offer your customers worldwide mobile services.

Using their mobile phones while abroad has become one of the basic requirements of your customers. In addition, the need for international connectivity still rises, becoming an increasingly substantial share of your revenues. Providing these international mobile services to your end users can only be achieved via sound, reliable international signaling capacities. That's where we come together.

Add international mobile services to your portfolio without dealing with the hassle of running your international signaling network! Are you seeking options to outsource your signaling services due to cost reasons? Or you don't have international signaling capacities yet, but want to offer worldwide voice and data services? ICSS offers you a high-quality, low-cost solution to cater to all your signaling for international roaming needs.

## ICSS's Signaling for International Roaming solution.

Signaling for International Roaming is a robust, reliable, state-of-the-art solution of ICSS that lets mobile network operators (MNOs) and carriers benefit from the international signaling network of Deutsche Telekom. This solution is optimum for mobile network operators that want to outsource their signaling activity or any carrier that needs signaling network capabilities. ICSS's service allows the real-time transport and delivery of signaling messages through the Deutsche Telekom network. This service lets you connect to other mobile operators or the facilities of value-added service providers. Using Deutsche Telekom's entire SS7 network, traffic is carried over clear channels, hence avoiding any loss or deterioration in quality. Deutsche Telekom's SS7 network provides you with access to over 680 mobile network operators (MNO) in more than 200 countries.

## ITU-ANSI Converter: a one-stop-shopping solution for your international roaming needs.

Rely on ICSS for your international signaling needs, no matter which network you use! Thanks to ITU-ANSI Converter, a signaling transmission service for international roaming between Europe and North America, ICSS becomes your one-stop-shopping provider of seamless roaming services on five continents.

## ICSS helps you to improve your end customers' satisfaction and experience and manage processes efficiently.

### Spam Protection.

Benefit from ICSS's Spam Protection solution, which guards Signaling for International Roaming customers from any kind of SMS spam (i.e. spamming, flooding, spoofing, and faking). In case of SMS fraud, ICSS has thus set up the following process: the user can report the problem to ICSS. ICSS identifies the suspicious messages

(one or multiple SMS), presents a blocking scenario, and applies it after customer approval. If traffic rises abruptly, ICSS will proactively inform the customer. Benefits to your end customer:

- Protect the customer from further spam SMS
- Avoid misuse of the costumers MSISDN

### KPI Monitoring.

ICSS's KPI Monitoring (key performance indicators) Tool is a web-based monitoring service to obtain an overview of the status of your signaling relations with other mobile operators. It provides you with key information regarding your SS7 signaling interconnections with third parties via ICSS. You can choose from a variety of output options, data formats, and display settings to gain an overview of the current data that has been adapted to your needs. The main technical indicators, such as to whom you are connected, outages, and country information, are shown in spreadsheets and can be displayed as charts or exported as MS Excel files.

### SIGTRAN.

Use ICSS's SIGTRAN offer to migrate your Signaling for International Roaming traffic from a TDM to an IP base. Whether you would like to increase your service security by combining TDM and IP technologies or you would like to step into the future of the all-IP world by migrating all your traffic from TDM to IP, Deutsche Telekom ICSS is your international partner for all your SIGTRAN requirements.

### Access to the service.

Regular TDM-based interconnection with Deutsche Telekom's network is established through:

- Traditional bilateral network
- International private leased line
- Local access to the PoPs of the Deutsche Telekom ICSS network

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## Choose what best fits your needs: MTP or SPR services

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Deutsche Telekom ICSS offers you two signaling solutions: a basic signaling service, called Message Transfer Part (MTP), and a comprehensive solution, called Signaling Point Relay (SPR). Features of these services are:

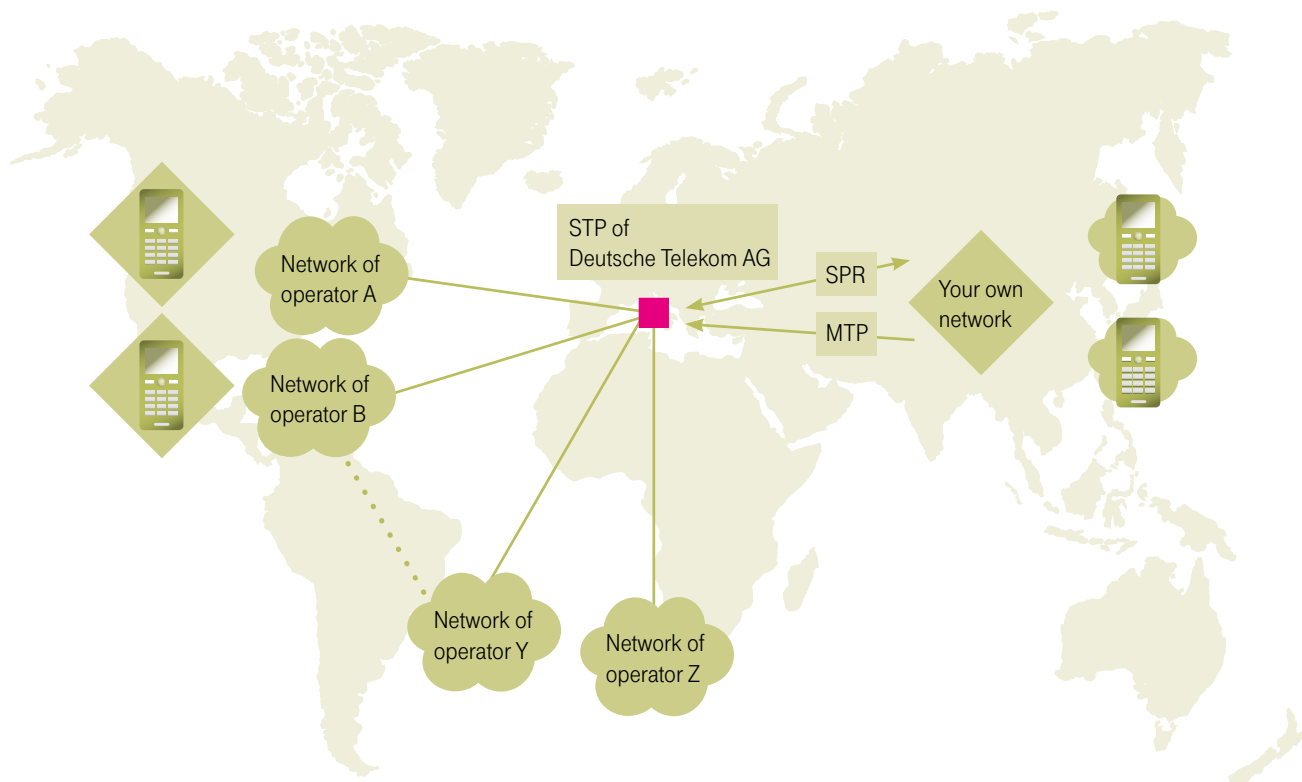
	<b>MTP signaling service (transit service)</b>	<b>SPR signaling service (full service)</b>
Communication protocol	Layer-3-transit via the MTP protocol	Layer-4-transit via the Signaling Connection Control Part (SCCP) protocol
Signaling messages	Outgoing messages always through the Deutsche Telekom network, incoming depending on partner (one-way)	Incoming and outgoing signaling messages always through the Deutsche Telekom network (two-way)
Service / Support	24-hour trouble shooting	24-hour end-to-end trouble shooting
ITU ← → ANSI converter	Optional	Included
Specials included		Global Title Translation (GTT) Full network management (e.g. planning, implementation, and monitoring of routes)

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Both services are compatible with e.g. GSM 900, 1800, and 1900 networks. They support SMS transmission and mobile number portability.

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## The signaling mobile roaming choice with Deutsche Telekom



SIGTRAN interconnection with Deutsche Telekom's network is established through

- Private peers with QoS
- IP over IPX/GRX with QoS
- Ethernet over SDH
- Public peers with best-effort quality
- IPX/GRX over Internet (IPsec)

### Why should you choose ICSS's Signaling for International Roaming solution?

Focus on your high revenue-generating mobile services while we take care of your signaling for international roaming expectations. ICSS's Signaling for International Roaming service is an easy-to-use, hassle-free and reliable solution that helps you focus on what matters to you most: your core mobile business. Benefits of ICSS's solution include:

- **High quality of service through a wealth of experience:** Trust the long track record of ICSS, which has been providing the world leading carriers with signaling services for the last 10 years. Benefit from this experience in combination with Deutsche Telekom wide-spread international network infrastructure, its fully redundant and highly reliable SS7 network, and the fast and easy configuration process of your international roaming service.
- **A one-stop-shopping service** for your signaling and signaling conversion needs, one single point of contact, and one bill via ICSS, with access to a wide range of worldwide operators, including those operating with the ANSI standards.

- **Extended coverage:** make the most of Deutsche Telekom's international footprint and stable relationships with long-lasting partners. ICSS lets you have access to over 680 operators all over the world. Via Signaling for International Roaming every MNO can be reached directly or indirectly.
- **Significant cost savings:** rely on Deutsche Telekom's high-quality international SS7 network and technical know-how, and limit your investment in time, personnel, and financial resources. Using the Signaling for International Roaming solution of ICSS will help you boost your EBITDA per user abroad.
- **Extensive support and maintenance service through one single point of contact:** signaling maintenance and handling, SS7 rerouting and proactive management, and high-level support for SS7-related topics and network matters are all taken care of by Deutsche Telekom's dedicated technical experts.

For further information, see  
[www.telekom-icss.com](http://www.telekom-icss.com)

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