

EAGLE® 5 Integrated Signalling System (ISS)

Industry's global market-share leading signalling platform providing end-to-end signaling across fixed, mobile, and next-generation networks.

Benefits at a glance

- » Exceptional capacity and transaction speed
- » 99.999% field proven reliability
- » Integrated platform supports signalling, NP, monitoring, screening, etc.
- » Enables cost-efficient growth and network evolution



TEKELEC

Katherine House
85 The High Street
Egham, Surrey
TW 20 9HF, United Kingdom
TEL +44.1784.437000

OTHER REGIONAL OFFICES in EMEA:
France (Paris, Lyon & Mulhouse),
Germany (Griesheim), Italy (Rome),
Russia (St Petersburg), Spain (Madrid),
United Arab Emirates (Dubai), South
Africa (Johannesburg), The Netherlands
(Rijswijk)

www.tekelec.com

Product Overview

The EAGLE 5 ISS is the world's leading signalling platform and a future-proof solution for operators migrating to next-generation IP connectivity. From a single platform, the EAGLE 5 ISS performs key functions such as signal transfer point (STP), signalling gateway, intelligent routing, screening services, number portability (NP) and integrated performance and service management. Service providers can optimise the use of network resources, manage subscribers and migrate them to new technologies, control fraud, and interoperate between networks with disparate technologies. The EAGLE 5 ISS delivers dramatic database size, signalling capacity and transaction speed. These advanced features, coupled with high-performance IP connectivity, optimise today's core telecommunications network with scalability, reliability, security, and flexibility, while providing investment protection.

Applications

- » **SS7 Signalling.** The EAGLE 5 ISS delivers ANSI/ITU International Gateway functionality, centralised signalling routing, and bridges the existing circuit switched and packet networks. It provides seamless interworking between time division multiplex (TDM) resources like service control points (SCPs) and IP-enabled elements such as softswitches and next-generation databases, in addition to delivering full STP capabilities and a host of core network applications.
- » **SIGTRAN Signalling.** Tekelec offers proven and robust IP signalling solutions, based on the industry standard SIGTRAN (SS7 over IP) protocol suite, to fit a variety of networking needs. Tekelec has been a leader in defining industry IP signalling standards and a pioneer in implementing successful IP-based networks, with some of the earliest and largest deployments in all regions of the world. Standards-based for connectivity and interoperability, the EAGLE 5 ISS supports a wide range of IP-based signalling protocols, including SCTP, M3UA, M2PA, and SUA.
- » **Number Portability.** Tekelec has a broad portfolio of number portability solutions covering GSM, CDMA and fixed networks, as well as intra-carrier number retention. Tekelec has been providing number portability solutions to global operators for many years - with more than 70 NP customers in over 25 countries. Tekelec's number portability solutions integrate advanced database management and signalling functions directly onto the EAGLE 5 platform, providing several advantages over solutions that rely on external SCPs. Tekelec solves the number portability problem for voice, short message service (SMS), multimedia message service (MMS) and prepaid calls with triggered and triggerless solutions that benefit operators and subscribers on a variety of networks.
- » **HLR and Voicemail Routing.** Tekelec's G-Flex Home Location Register (HLR) routing solution provides a cost-effective, turnkey solution to more efficiently distribute subscribers and services across multiple HLRs in the network. G-Flex allows each HLR to be filled to 100 percent of its capacity and alleviates the need to maintain subscriber number routing tables in every mobile switching centre (MSC) in the network. The flexible voicemail router solution allows operators to route individual premium subscribers to specific advanced Voicemail Service Centre (VMSC) platforms, while directing basic voicemail subscribers to standard platforms.
- » **Equipment Identity Register.** The EAGLE 5 Equipment Identity Register (EIR) effectively renders a stolen handset useless and helps deter mobile handset theft. This feature enables network operators to enter the IMEI of stolen handsets into a "blacklist" and prevents them from being registered on the network.

» **Integrated Applications.** The EAGLE 5 platform supports a variety of network services and value-added applications essential for providing cost efficiencies, revenue generation, service and revenue assurance and network security, including:

- Intelligent routing services such as subscriber management, access screening, GSM equipment identity register, least cost routing, number translation, managed roaming, bridge/migration gateway and more.
- Triggerless services for the deployment of services without expensive intelligent network (IN) switch upgrades, such as number screening for fraud control, NP and number substitution.
- Integrated monitoring supporting network applications for revenue protection, service assurance and market intelligence.

Benefits

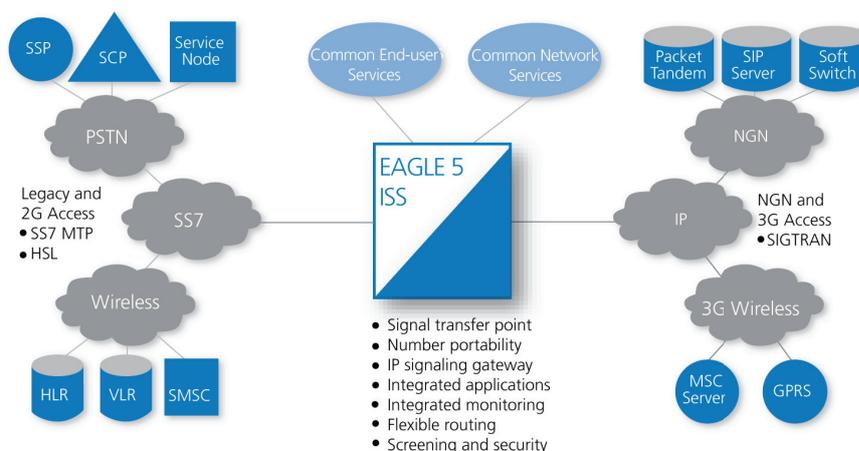
- » Single platform: the EAGLE 5 ISS supports key functions such as integrated monitoring, signal transfer, signalling gateway and number portability.
- » Scalability: Operators can purchase the capacity and connectivity needed to meet existing network needs.
- » Reliability: 99.999%* field-proven reliability in mobile/ fixed networks worldwide.
- » Flexibility: Supports multiple link interface types and industry standards for flexible configuration and connection of network devices – key to cost-efficient growth and network evolution.
- » Network security: Signalling connectivity to other service providers is centralised at the EAGLE 5 ISS, so gateway screening is centralised and not required at multiple switches.

- » Investment protection: The EAGLE 5 ISS protects original investment by providing a migration path to next-gen networks.
- » Operators can cost-effectively increase capacity, deploy enhanced services and migrate to next-generation architecture without forklift upgrades.
- » Reliability calculated using accepted industry methods of measuring STP population availability.

* Reliability calculated using accepted industry methods of measuring STP population availability.

Features

- » Supports one million global title translation (GTT) records, 120 million number portability (ITU markets) and HLR manager subscriber records, and 384 million Local NP (LNP) records for North America.
- » High performance: Performs up to 640,000 MSUs per second.
- » Flexibility to scale from 850 to 150,000 GTT per second, with connectivity from two to 2,000 low speed links (LSLs), two to 180 ATM high speed links (HSLs) or 100 synchronous E1 high speed links.
- » Scales from two to 3,200 M2PA connections, to deliver 200 to 500,000 M2PA messages per second. Two to 3,200 M3UA connections provide 200 to 500,000 M3UA messages per second.
- » Two to 3,200 SUA connections provide 200 to 228,000 messages per second.
- » Supports multiple link interface types, including 100 Base-T, DS0A, V.35, OCU, T1/E1 ATM HSL, channelised E1 and T1 and E1 synchronous HSL.
- » Standards support includes M3UA, M2PA and SUA over SCTP, enabling IP signalling between STPs as well as connectivity to next-generation network elements. Supports large (4096 byte) BICC messages.
- » Third-party audited, NEBS and ITU compliant, CE-marked.



This document is for informational purposes only, and Tekelec reserves the right to change any aspect of the products, features or functionality described in this document without notice. Please contact Tekelec for additional information and updates.

© 2008 Tekelec, Inc. All rights reserved. The Tekelec logo is a registered trademark of Tekelec. All other trademarks are the property of their respective owners. TKLC-PB-005-EMEA-08-2008