squire technologies

Sigla

Unified Signalling Platform

Signalling Specialists to the Telecoms Industry

From Squire Technologies comes Sigla, Icelandic for ‘Navigate’

Sigla is a smart centralised signalling platform that unifies all mediation, routing and interworking, security and measurement between multi-generation networks, reducing network complexity and operating costs.

Operators Challenges

With technology adoption at varying stages across the global telecoms landscape, operators are faced with meeting the demands of managing signalling across a complex mix of hybrid networks and a mature multi-vendor ecosystem. With this comes the challenge of ensuring compatibility between legacy and next-generation protocol technologies.

As 5G opens the way to a myriad of Industrial IOT and Private 5G opportunities it is crucial that operators find smarter ways to manage signalling and ensure forward and backward compatibility.

Operators Challenges

Multi-Generation Networks

2G 3G

VoLTE 4G VoIP

5G 6G+

Multi-Vendor Networks

Multi-Segment Networks

MVNO MVNA MVNE

Industrial IOT, Private 5G, NB-IOT

Network Handicaps

The demand to navigate data between multi-protocol networks and support legacy technologies has led to increasingly complex interop and networks being managed in isolation, leading to:

- Unnecessary network complexity
- Leads to vendor lock-in
- End-of-life scenarios
- Introduces security and revenue assurance vulnerabilities
- Increased operational costs for operators
- No single point of monitoring, analysis and reporting for multi-generation networks

Sigla - Central Signalling Platform

Sigla brings a homogenous layer to the management and operation of multi-generation networks, freeing operators from the burden of managing multiple core networks, and reducing network complexity and operating costs.

A Central Hub

Sigla is a central hub for all control plane signalling between multi-generation networks, managing and executing all mediation, routing and interworking, monitoring and network security.

A Common Operating Interface

Sigla provides a common operating interface from where operators can configure, control and maintain signalling across multi-protocol networks.

A Single Point of Integration

Sigla provides operators with a single point of integration between multi-protocol networks and OCS/OSS/BSS and BI resources.

Sigla - Unified Signalling Platform

Mediation

Sigla reduces interop and provisioning of OCS/OSS/BSS and BI resources by providing a single point of integration. With a highly flexible protocol conversion engine, customisable logic and open interfaces Sigla conducts mediation across all multi-generation networks.

Routing and Interworking

Sigla manages all control routing, switching and interworking between multi-generation networks, providing complex routing options and fallback to legacy 2G/3G infrastructure from 4G/LTE and 5G networks.

Monitoring

Sigla enables operators to aggregate and collate data from across multi-generation networks on a single platform. From here they can configure and manage monitoring, analysis and archiving of data for all networks independently.

Security

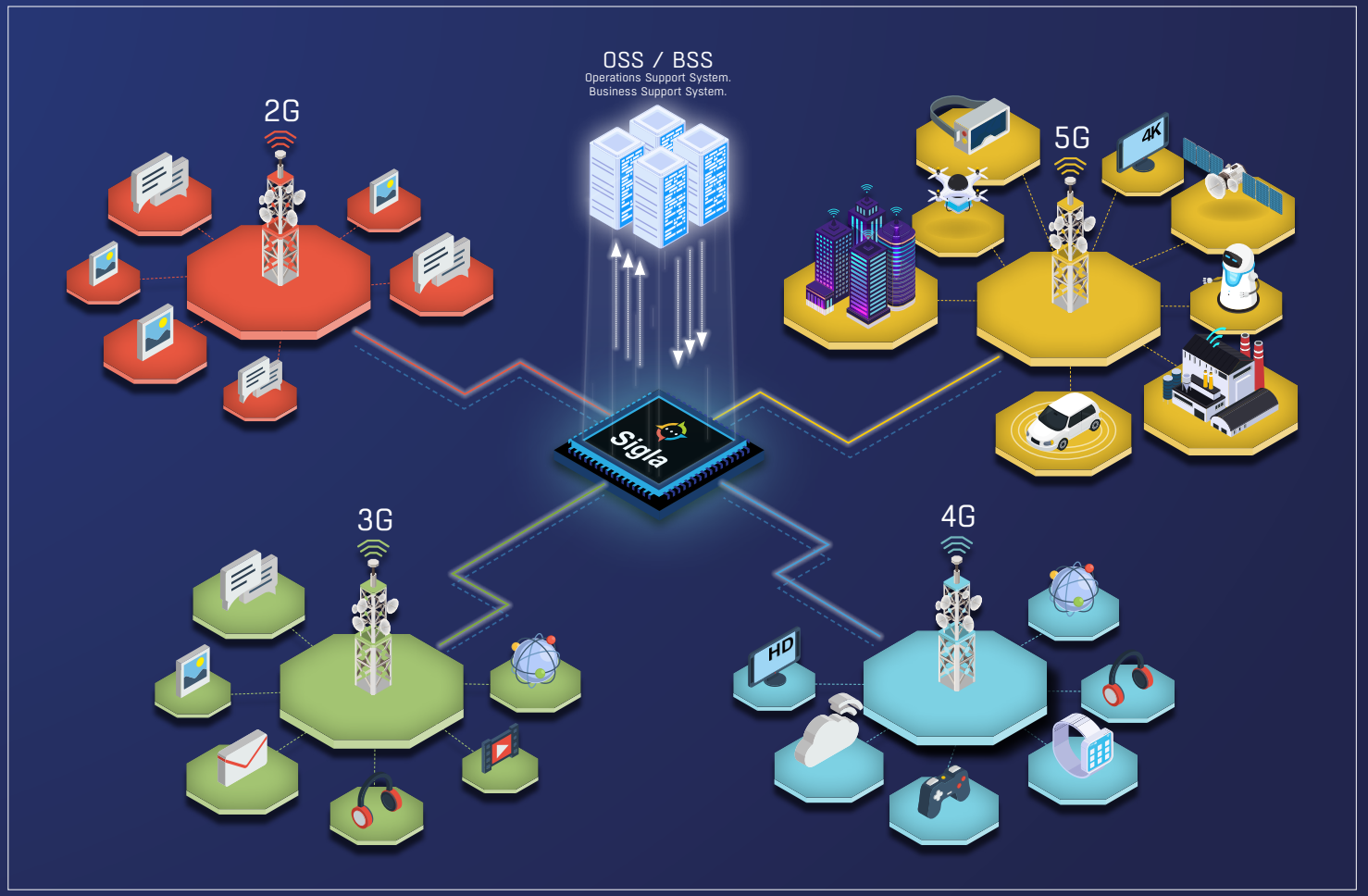
Sigla provides operators with a solution where network security, fraud prevention and revenue assurance efforts can be deployed and coordinated from a signal interface to insure the security and integrity of all multi-generation networks.

Multi Generation Signalling Platform

For operators to drive digital transformation in their customers they must first undergo network transformation.

Sigla provides a solid foundation from where operators can consolidate network infrastructure, reduce complexity and simplify the orchestration of signalling across multi-protocol networks.

As 5G presents growth opportunities for operators Sigla prepares operators networks so they can more effectively deploy new revenue generating services and interop between 5G and legacy networks.



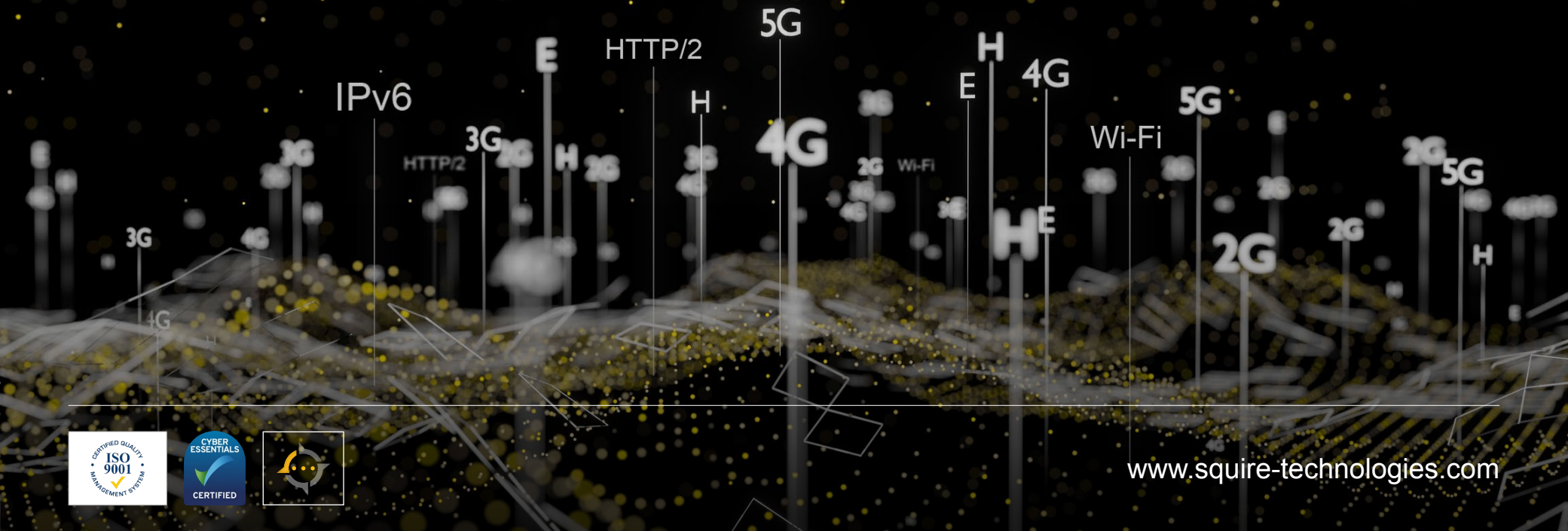
Routing and Interworking

Sigla brings simplicity to the routing of signalling traffic across multi-generation networks.

Sigla's smart signalling platform brings agility via a highly flexible routing and interworking engine that seamlessly traverses legacy and next-generation networks.

The centralised architecture reduces complexity and provides operators with a common operating interface from where they can configure and conduct all routing, switching and interworking, policy enforcement and subscriber database services for all multi-protocol networks.

As operators extend their networks and demands increases for Private 5G and IOT networks operators can better manage signalling as user traffic increases.

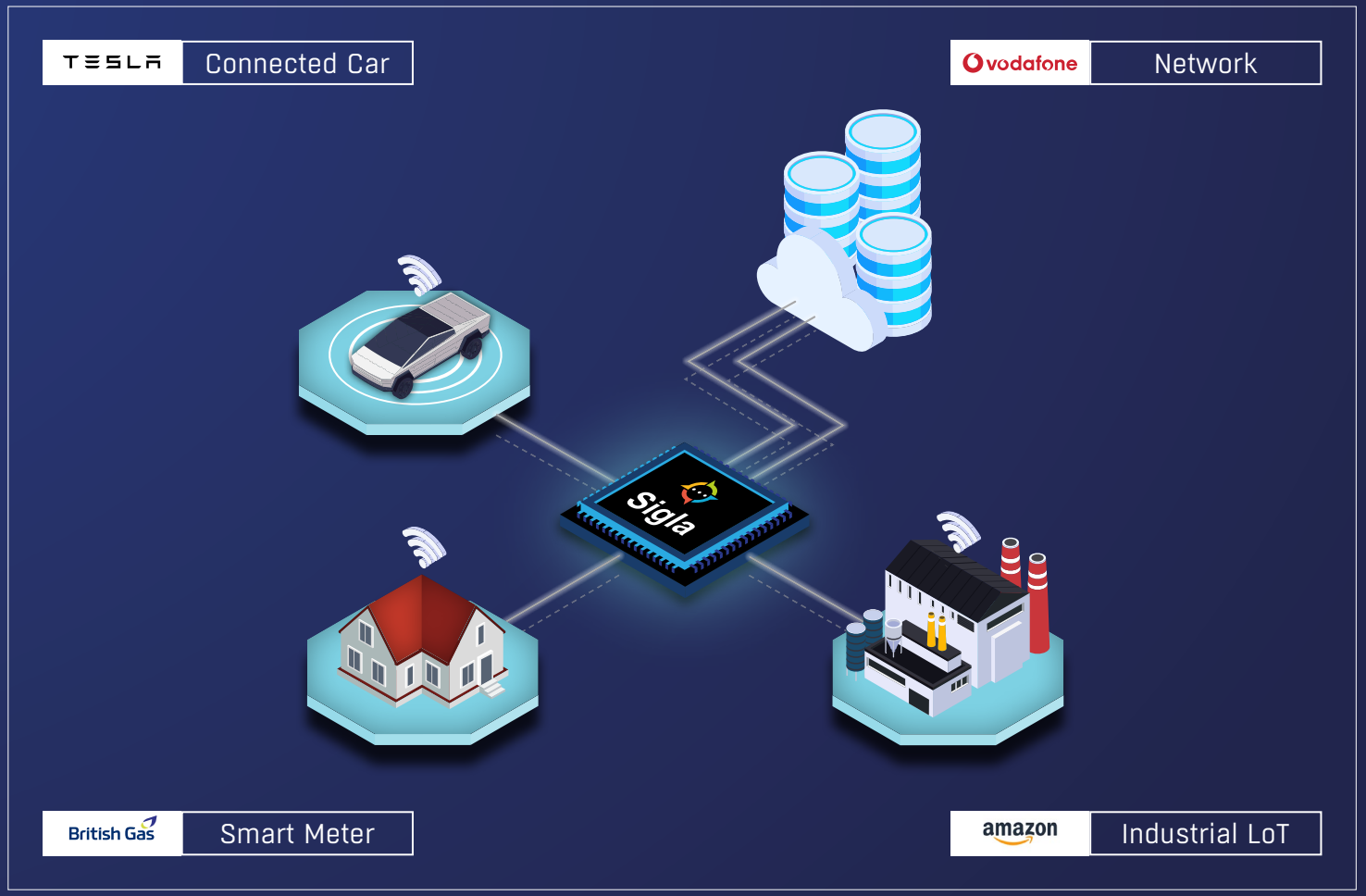


Multi-Segmentation

As 5G creates opportunity for greater expansion of Private IOT networks Sigla provides operators with a solution to manage signalling from new and emerging multi-segment networks.

The unified platform provides a solid foundation from where operators can leverage network slicing to deploy fit-for-purpose virtual networks that feature their own degrees of independence and capabilities to meet customer demands.

Fully NFV compliant, Sigla's modular design enables operators to deploy resources and manage mobile edge processes for IOT devices to meet latency demands.



Routing and Interworking

Flexible routing engine

Highly flexible routing, switching and interworking engine that allows for the configuration and refinement of routing approaches with regular-expression based manipulation across multi-generation networks.

Legacy interconnect

Comprehensive legacy technology support with fallback to 2G/3G networks from 4G/5G. Sigla insures that operators can integrate existing legacy infrastructure with new diameter based components like Online Charging Systems (OCS).

Extended support

Support for IM-SSF and Reverse IM-SSF for legacy network services into IMS networks, and USSD Gateway support for prepaid subscribers on 2G/3G networks.

Roaming

Integrated interworking function provides seamless mobile roaming between 4G/5G and 2G/3G networks.

Multi-vendor interconnect

Routing to all OSS/BSS and network entities from multi-protocol networks is achieved via a single integration point. Advanced protocol conversion engine and open API's provide multi-vendor interop.

Scalability

Sigla provides a scalable cost effective centralised signalling solution featuring flexible routing options, dynamic load balancing and policy enforcement, charging and subscriber database services.

Resiliency

The centralised routing control provides complete oversight of the state of networks, and enables operators to optimise the use of network resources through sophisticated congestion control and throttling.

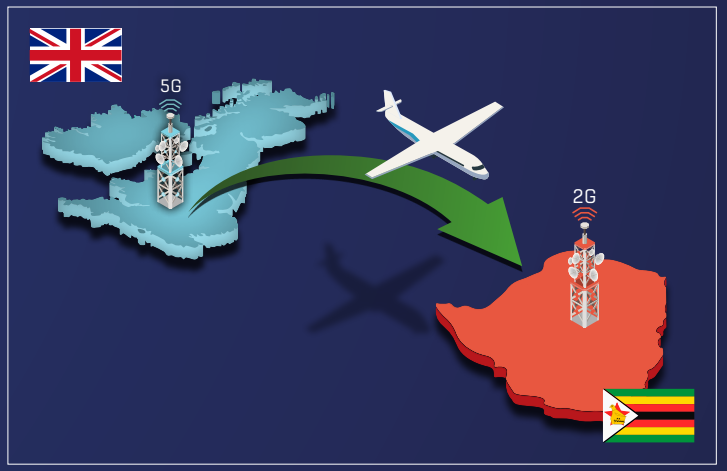
2G / 3G to 4G / 5G Roaming

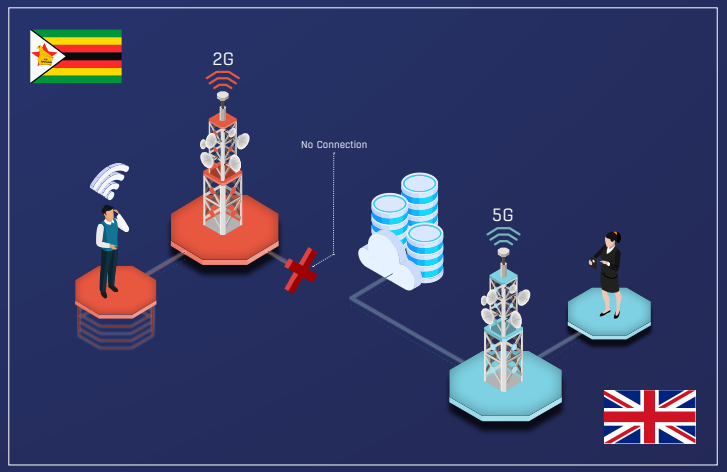
UK based customer is subscribed to a new 5G network.

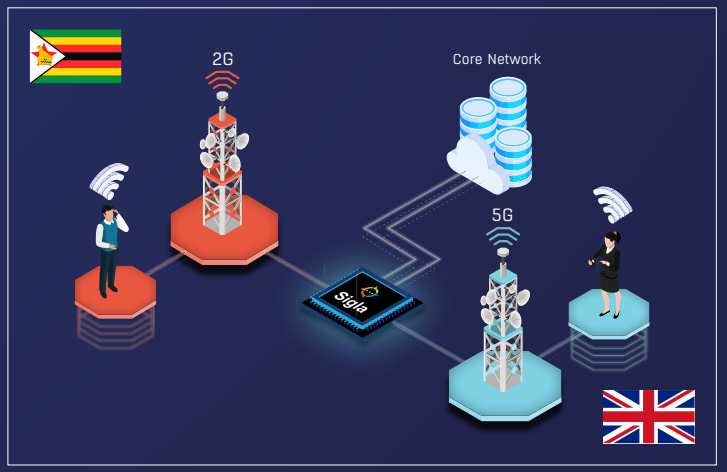
He travels from the UK to Zimbabwe for business where a 2G/3G network is only available service.

The subscriber is unable to make calls from Zimbabwe back to the UK as roaming between the legacy 2G network and his home 5G network is not possible.

With Sigla deployed it provides all protocol conversion regardless of what network generations are involved and whether networks have been provisioned separately to conduct mobile roaming.







Mediation

Sigla's highly flexible GUI driven mediation interface features an integrated interworking function for protocol conversion between multi-vendor and multi-protocol network environments.

The centralised operating platform manages all mediation processes between OCS, OSS/BSS and BI resources across multi generation networks. This reduces the dependency on provisioning, testing and maintaining mediation across multiple network generations, and enables operators to rapidly adapt to network requirements and emerging technologies.

Multi-Vendor Ecosystem

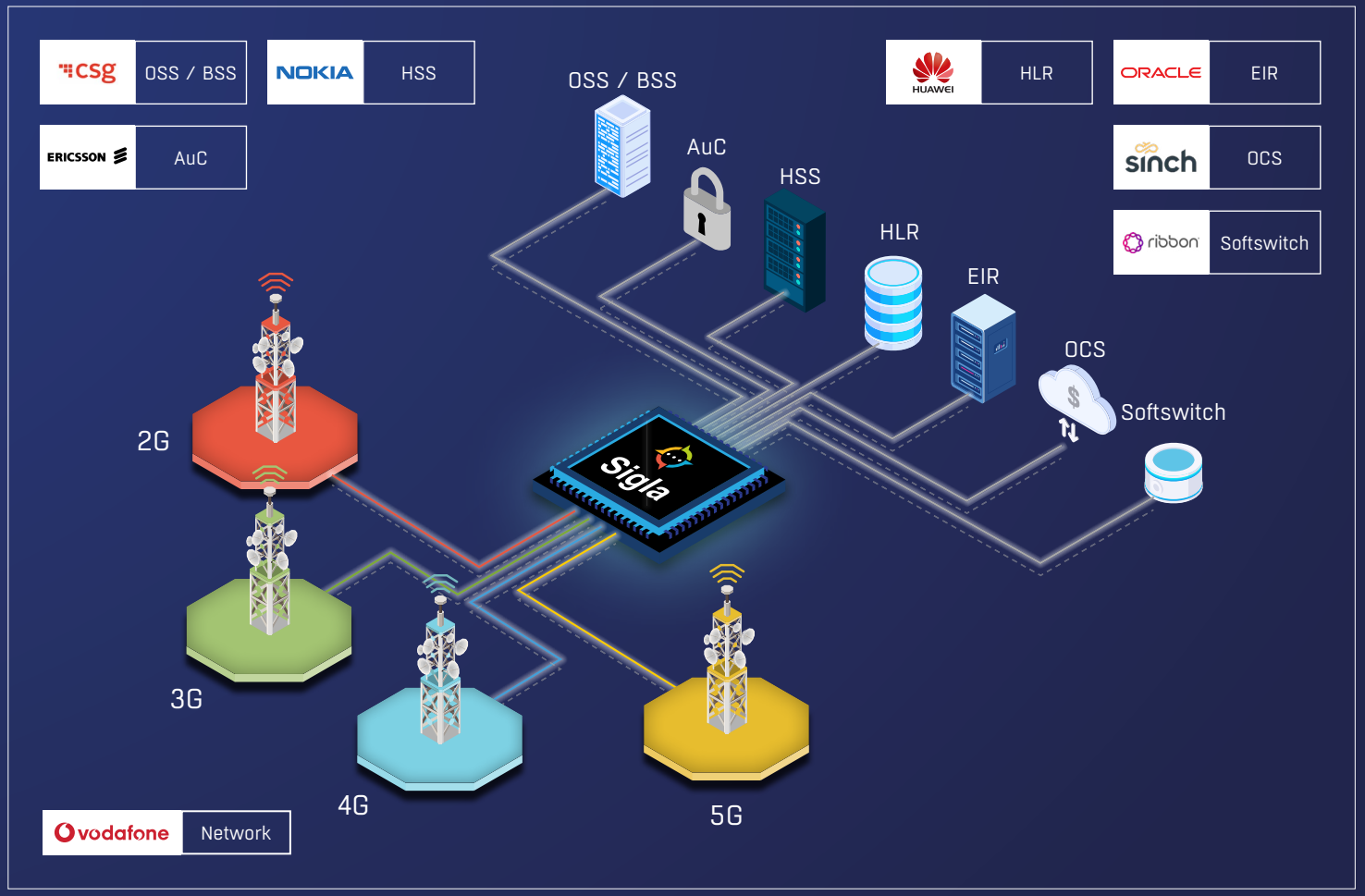
As a central signalling hub Sigla interfaces with any number or type of network entities or nodes.

It features onboard support for MNP, EIR, AuC and support for 5G SCP and SEPP.

All database dips and lookups are configured and managed by Sigla.

A single point of integration for multi-vendor network entities such as OCS, OSS/ BSS resources significantly reduces interop complexity.

Sigla's NFV ready architecture provides agility and scalability to an operators network from where they can extend their operational and business layer services and uncover new revenue generating opportunities.



Mediation

Multi-vendor support

Sigla provides a single point of integration for all multi-vendor network entities. Managing all mediation and protocol conversion between multi generation networks it features onboard support for MNP, EIR, AuC and support for 5G SCP and SEPP.

Extended support

Sigla enables operators to develop their own business logic and applications across a common set of API's, allowing them to extend and advance their operational and business layer services.

Database dips and look-ups

Sigla performs any type or number of lookups to internal network elements such as HLR, HSS and VLR databases, and connects to black lists, white lists and grey lists.

Lawful Interception

Sigla enables operators to deliver active and passive lawful interception over SIP, H.323, SS7, SIGTRAN, ISDN networks

One global expansion that's defying any recession, competition or global pandemic is telecoms network fraud and attacks from opportunistic hackers and organised crime.

All networks and mobile subscribers are at risk of attacks and becoming victims of fraud, with the impacts of security breaches being both financial and the loss of a brands reputation.

The Sigla platform provides a solution where cyber security and fraud prevention measures can be coordinated and deployed to secure and insure the integrity of multi-generation, multi-protocol networks.

Secure by Design

Network monitoring

Sigla provides passive and active network monitoring and routine penetration testing across all multi-protocol networks. Sigla can integrate with third party tools to support operators cyber security, revenue assurance and anti-fraud efforts.

Real-time fraud prevention

Sigla's MavenShield module provides advanced real-time fraud prevention from where operators can configure proactive measures to combat emerging cyber security and network fraud threats. MavenShield is used most commonly to prevent SIM box fraud, IRSF and Bypass fraud, CLI Spoofing, SIM Swap and Wangiri fraud.

Multi-layered Protection

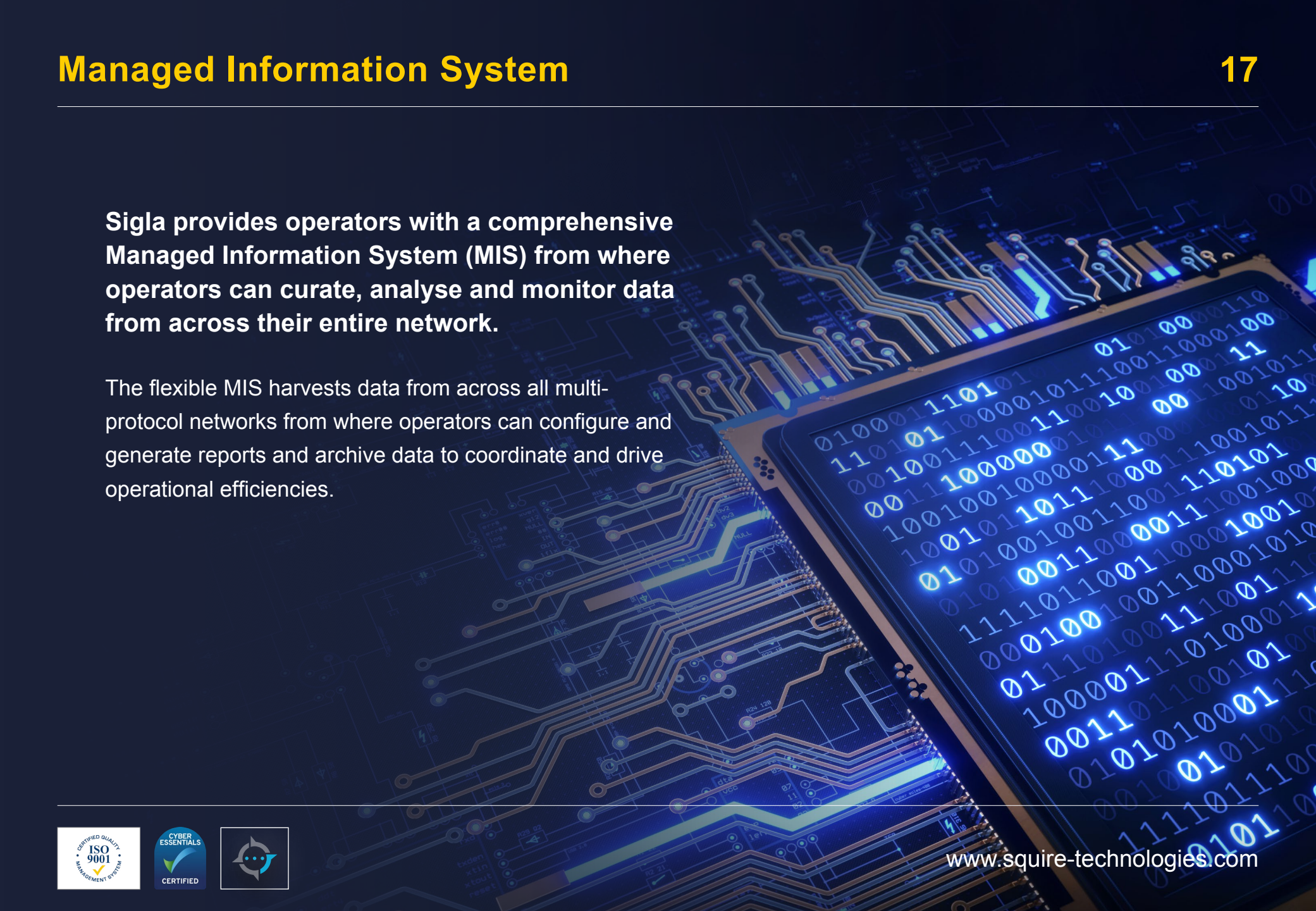
Sigla provides a raft of network security features including:

- Integrated signalling and SMS firewall protection
- Network access control and screening
- Topology hiding
- Real-time fraud prevention
- SMS home routing

Managed Information System

Sigla provides operators with a comprehensive Managed Information System (MIS) from where operators can curate, analyse and monitor data from across their entire network.

The flexible MIS harvests data from across all multi-protocol networks from where operators can configure and generate reports and archive data to coordinate and drive operational efficiencies.



Managed Information System (MIS)

Monitoring and oversight

Sigla's MIS provides operators with comprehensive oversight of their entire network, monitoring and measuring any data that passes through their networks and enabling them to aggregate and collate this data from a familiar interface for all network generations.

Reporting

Templates and Wizards for rapid system configuration are underpinned by XML allowing deep dive configuration. Custom reports can be created to analyse any signalling data that navigates through one or all multi-protocol networks, and configurable dashboards and gadgets allow multiple report sets to be created.

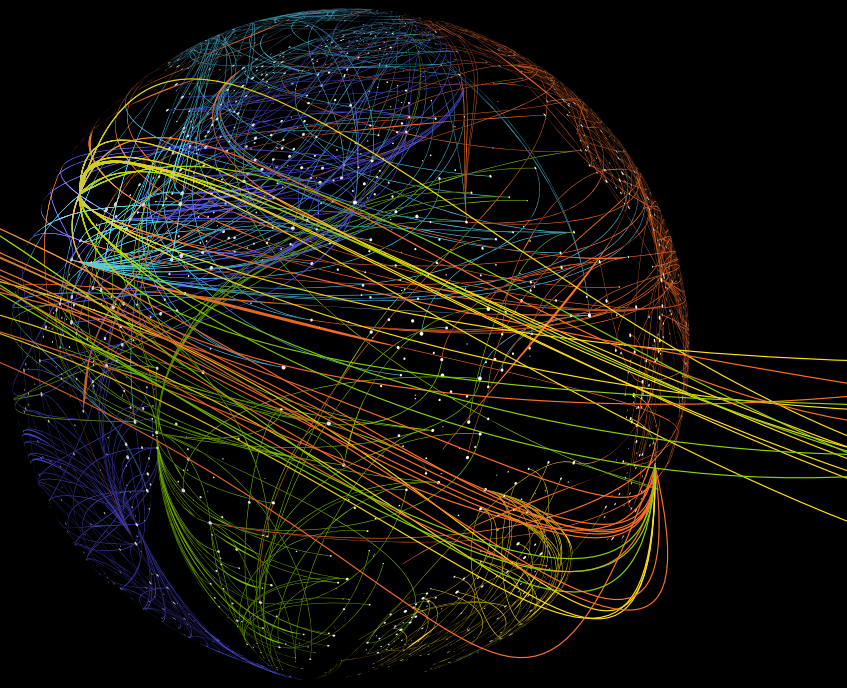
Extended support

The MIS features secure remote access and multi user/multi permissions support, and integrated troubleshooting capabilities with detailed debug and trace and PCAP support enabling Wireshark decode.

Trusted by Customers Worldwide

A state of the art Unified Signalling Platform that enables over 30 billion transactions per second and 11 trillion transactions per year.

With deployments over 6 continents, in 150+ countries and with 400+ customers.



MNO MVNE PRIVATE 5G M2M 5G MVNO
MVNA 4G NB/IoT 2G/3G BROADBAND LTE
INDUSTRIAL IoT IMS IoT WiFi 6 FIXED LINE

Services & Support Packages

Product Services

Choose from our range of Product based services to deliver installation, training, ongoing support and product enhancements to ensure your continued business success.

CLICK TO FIND OUT MORE

Managed Platform as a Service

This allows clients to lease core network products while our dedicated network specialists will install and commission products directly into your network with ongoing support provided.

CLICK TO FIND OUT MORE

Support Packages

Providing a range of post-sales support packages to meet client requirements and budget.

CLICK TO FIND OUT MORE

Let's Talk...

Squire Technologies Limited are a UK based core network product vendor to the Telecoms industry. Talk to us today about your network signalling issues and plans for the future.

International Accreditation ISO9001

Following in-depth evaluation by an independent assessor, Squire Technologies has been successful in achieving ISO 9001 Certification.

This prestigious award is internationally recognised as a benchmark of standardised and quality procedures and systems within the operation of an organisation.

ISO 9001 is a set of requirements against which the quality management system of an organisation is evaluated. This certification assures customers that the production processes in place at Squire Technologies have been measured and achieved a standardised award. This award indicates that Squire Technologies is committed to operating to these requirements and has subscribed to ongoing and regular, internal and external audits of its systems.

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