

DataBridge⁷

A Lawful Intercept solution



Digital
Intelligence

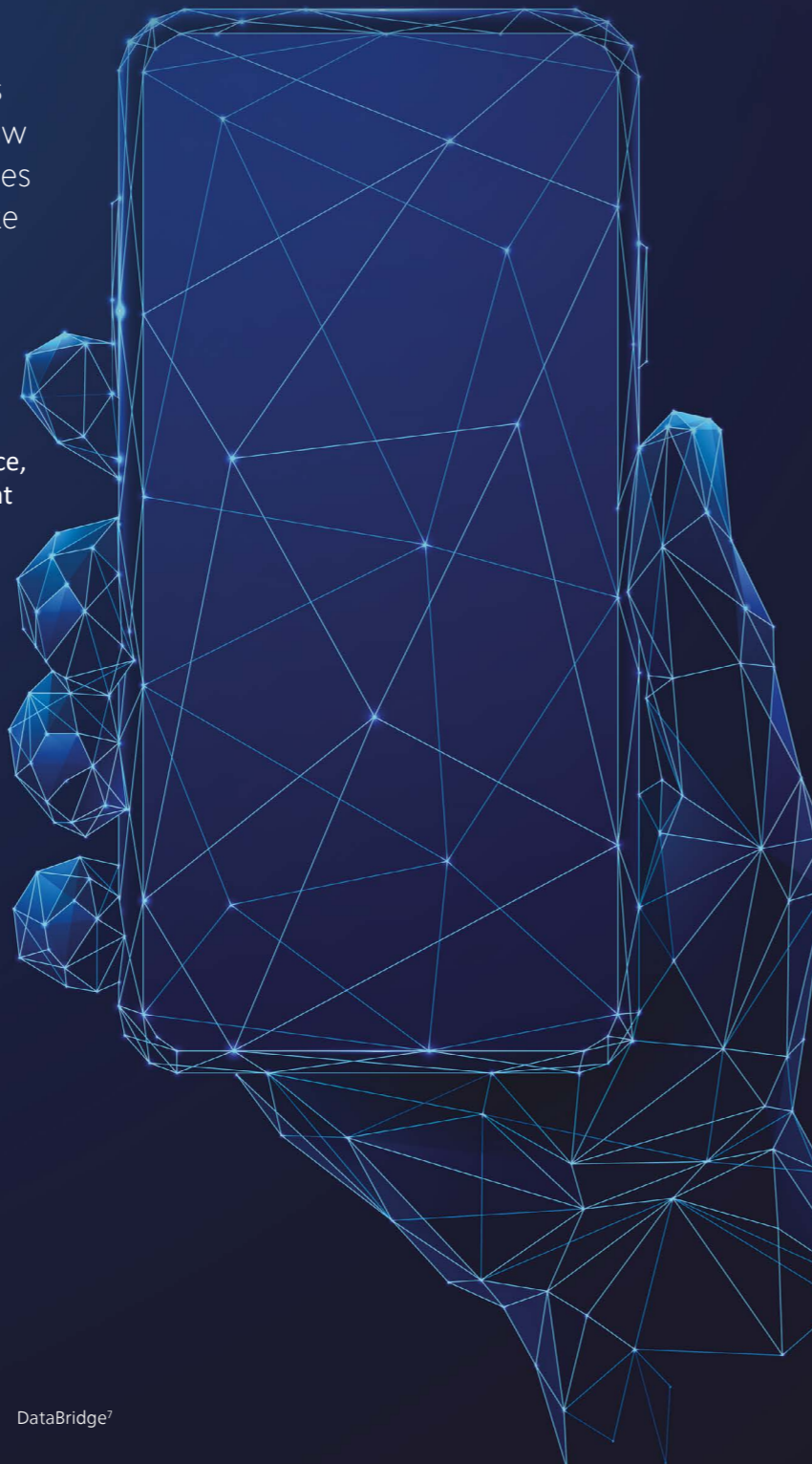
BAE SYSTEMS

A proven Lawful Intercept solution in the fight against crime and terrorism

Criminals and terrorists rely on the internet, social media and smartphones every day to plan, communicate and execute their activities. This puts Communications Service Providers (CSPs) under increasing scrutiny. The data generated by these Subjects of Interest (Sols) as they interact online flows through CSP networks – and is critical to Law Enforcement and National Security Agencies in their mission to detect threats, investigate crimes and protect society.

To support these efforts, CSPs must comply with Lawful Intercept (LI) regulations in their respective jurisdictions. When presented with a legally authorised request, CSPs are required to intercept and securely deliver real-time communications - voice, messaging, email and more - to the Law Enforcement Monitoring Facility (LEMF) in a precise, auditable format. This process demands strict data protection, ensuring only authorised information is provided and no unauthorised access occurs.

LI is a vital tool in the fight against crime and terrorism. However, as CSP networks grow and adopt complex technologies, meeting compliance requirements becomes increasingly challenging. For CSPs, LI is a necessary cost of doing business - but it doesn't have to be a burden. Partnering with an experienced LI specialist ensures seamless compliance, protects resources and allows CSPs to focus on their core operations.



Your compliance partner

For over 40 years, BAE Systems has supported CSPs in meeting their Lawful Intercept obligations with precision and reliability. Our DataBridge⁷ solution is an established industry standard, delivering high-performance LI capabilities across Fixed, Mobile and Satellite networks. Upon receipt of an authorised warrant, DataBridge⁷ provides operators with an intuitive, web-based interface to configure CSP infrastructure quickly and accurately. The system manages the collection of real-time content and metadata from targeted Sols, formats the data to meet Law Enforcement Agency (LEA) specifications, and securely forwards it to the designated Law Enforcement Monitoring Facility (LEMF).

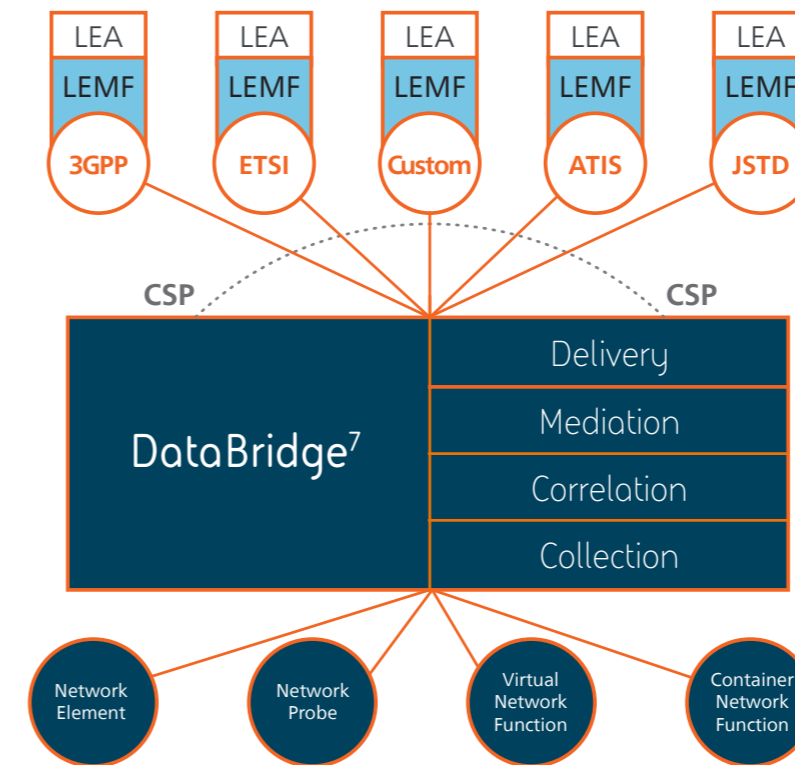
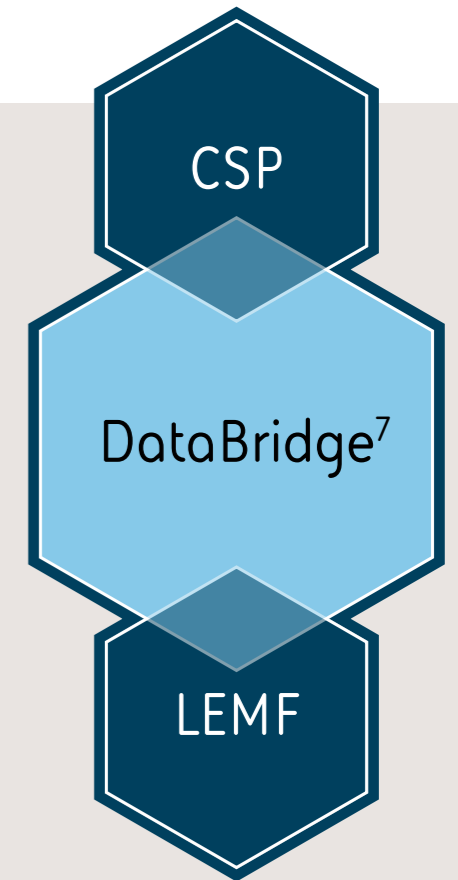


Figure 1 The DataBridge⁷ Lawful Intercept solution

Key features

- **Cost efficiency:** Our standards-based, cloud-native architecture supports lawful interception for all CSP types and regulatory models - from new and emerging providers to national scale deployments.
- **Secure by Design:** Built with security at its core, DataBridge⁷ meets CIS and OWASP security standards and undergoes independent penetration testing.
- **Standards Focused:** We actively collaborate with 3GPP, ETSI and ATIS standards bodies to ensure ongoing compliance with the latest revisions.
- **Latest 5G Technologies:** Get full support for LI on 5G Standalone (5GSA) and 5G Non-Standalone (NSA) networks, including advanced features such as 5G Identity de-concealment and Lawful Access to Location Services.
- **Flexible Deployment:** A cloud-first, container-based architecture supports private and public cloud deployment models.

Introducing DataBridge⁷

DataBridge⁷ is the seventh major release of the DataBridge⁷ product, built on a highly scalable, container-first architecture aligned with 3GPP and ETSI Lawful Intercept models. This standards-based foundation, combined with our cloud-native approach and proven support for 5G Standalone networks, ensures seamless integration and simplifies deployment across a variety of environments.

Designed from the ground up for cloud-native flexibility, DataBridge⁷ supports CNF and VNF models across public clouds (AWS), private clouds (ESXi), or dedicated COTS x86 hardware.

Platform-agnostic design enables deployment in air-gapped environments, ensuring security and adaptability for diverse CSP requirements.

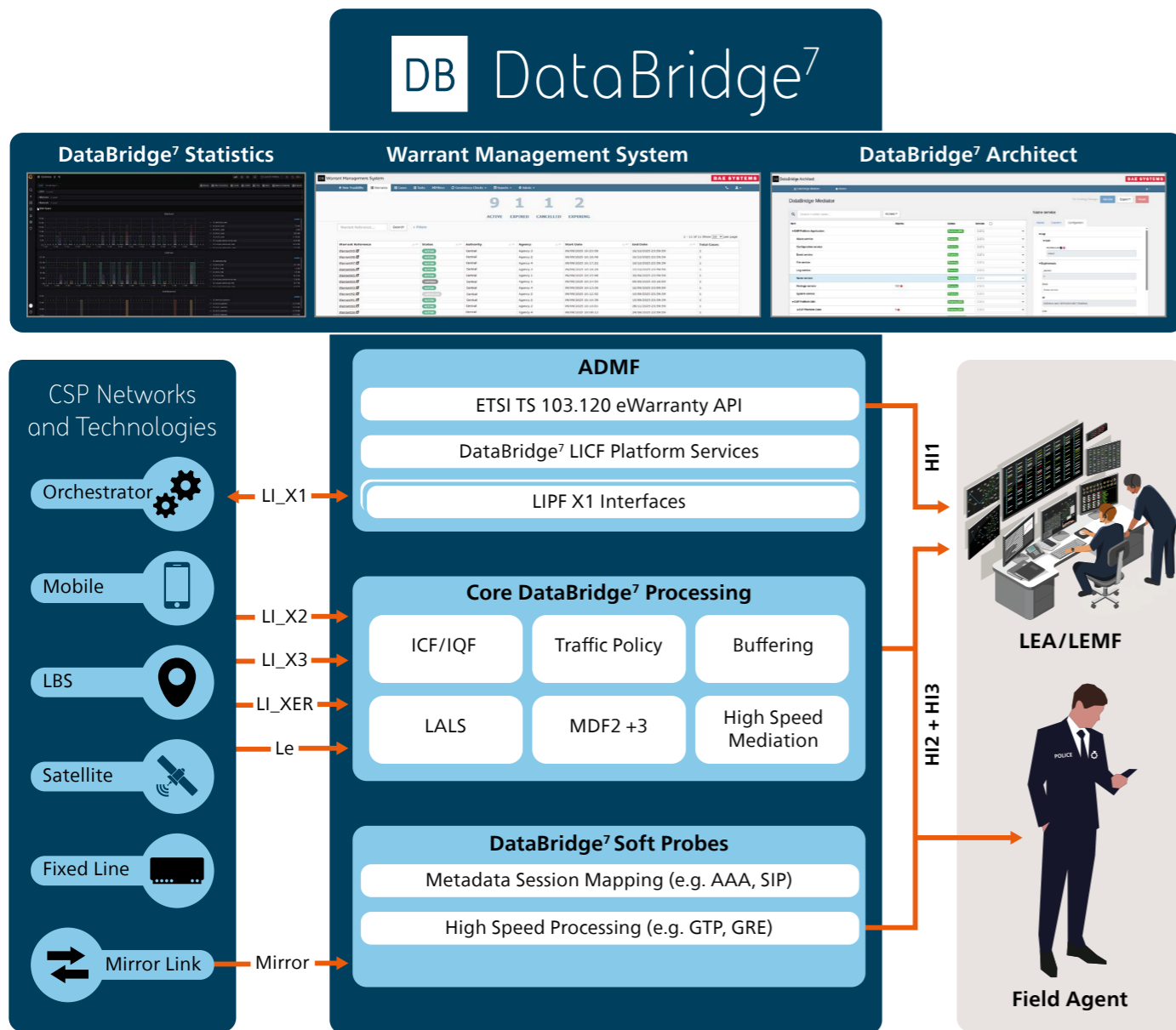


Figure 2 Architecture for BAE Systems DataBridge⁷

Warrant Management System

9 1 1 2
ACTIVE EXPIRED CANCELLED EXPIRING

Warrant Reference... Search + Filters

Warrant Reference	Status	Authority	Agency	Start Date	End Date	Total Cases
Warrant49	ACTIVE	Central	Agency 3	09/09/2025 10:23:58	16/10/2025 23:59:59	1
Warrant48	ACTIVE	Central	Agency 2	09/09/2025 10:18:48	16/10/2025 23:59:59	1
Warrant47	ACTIVE	Central	Agency 4	09/09/2025 10:17:22	16/10/2025 23:59:59	1
Warrant46	ACTIVE	Central	Agency 3	09/09/2025 10:16:26	17/10/2025 23:59:59	1
Warrant45	ACTIVE	Central	Agency 1	09/09/2025 10:15:48	30/09/2025 23:59:59	1
Warrant44	EXPIRED	Central	Agency 1	09/09/2025 10:14:50	09/09/2025 10:16:00	1
Warrant43	ACTIVE	Central	Agency 4	09/09/2025 10:13:36	12/09/2025 23:59:59	1
Warrant42	CANCELLED	Central	Agency 2	09/09/2025 10:12:02	10/09/2025 23:59:59	1
Warrant41	ACTIVE	Central	Agency 2	09/09/2025 10:10:58	15/09/2025 23:59:59	1
Warrant40	ACTIVE	Central	Agency 2	09/09/2025 10:10:01	28/11/2025 23:59:59	1
Warrant39	ACTIVE	Central	Agency 4	09/09/2025 10:09:13	24/09/2025 23:59:59	1

Functionality and Features

Flexible & Automated Warrant Management

DataBridge⁷ Warrant Management System (WMS) streamlines compliance workflows for CSP teams. With an intuitive, web-based interface, WMS supports warrant entry, authorisation, automated network provisioning, auditing, authentication and reporting. WMS supports deployment as part of a complete DataBridge⁷ solution or integrated standalone with an existing LI platform.

ETSI TS 103.120 API

ETSI TS 103 120 defines a standardised, machine-to-machine HI-1 interface and DataBridge⁷ provides a deployment-ready API based on that standard.

DataBridge⁷ ETSI API transforms the standard from a specification into an operational HI-1 capability and removes the burden of designing, building and maintaining a compliant interface, allowing CSPs to adopt a standards-based HI-1 model quickly and with confidence.

Intuitive Configuration Management

DataBridge⁷ Architect provides centralised control of collection, mediation and delivery components through a modern UI. Operators can reconfigure, restart, disable and add modular components in real time. Integrated alarm management ensures quick identification and resolution of issues.

DataBridge Architect

DataBridge Mediator

Item	Alarms	Status	Version
ESP Platform Application		Running (DB)	2.17.1
Alarm service		Running	2.17.1
Configuration service		Running	2.17.1
Event service		Running	2.17.1
File service		Running	2.17.1
Log service		Running	2.17.1
Name service		Running	2.17.1
Package service	352	Running	2.17.1
System service		Running	2.17.1
ESP Platform Site		Running (22)	2.17.1
ESP Platform Zone	9	Running (22)	2.17.1
Mediator Server	1277	Running (6086)	15.6.50

Name service configuration panel showing various fields like Architecture, Name service, Id, Link, MapTo, and Namespace.

Advanced Monitoring

A key part of any LI solution is the provision of a monitoring function that demonstrates clearly to regulators and Law Enforcement agencies that regulatory obligations are being met.

This monitoring functionality should provide a highly-granular historic and real-time view of all the intercepted traffic that is requested, received and delivered to law enforcement by the CSP's LI solution.

Our DataBridge⁷ Statistics Platform supports CSPs in this requirement by providing a holistic view of system performance across the entire LI platform, covering every byte of data that is received, processed and delivered.

High Speed Mediation

DataBridge⁷ is deployed at the world's largest Tier 1 Fixed Line and Mobile operators, supporting ultra-high-speed services such as nationwide wholesale open access infrastructure, Fibre-to-the-Premises and multi-gigabit per second 5G mobile data services.

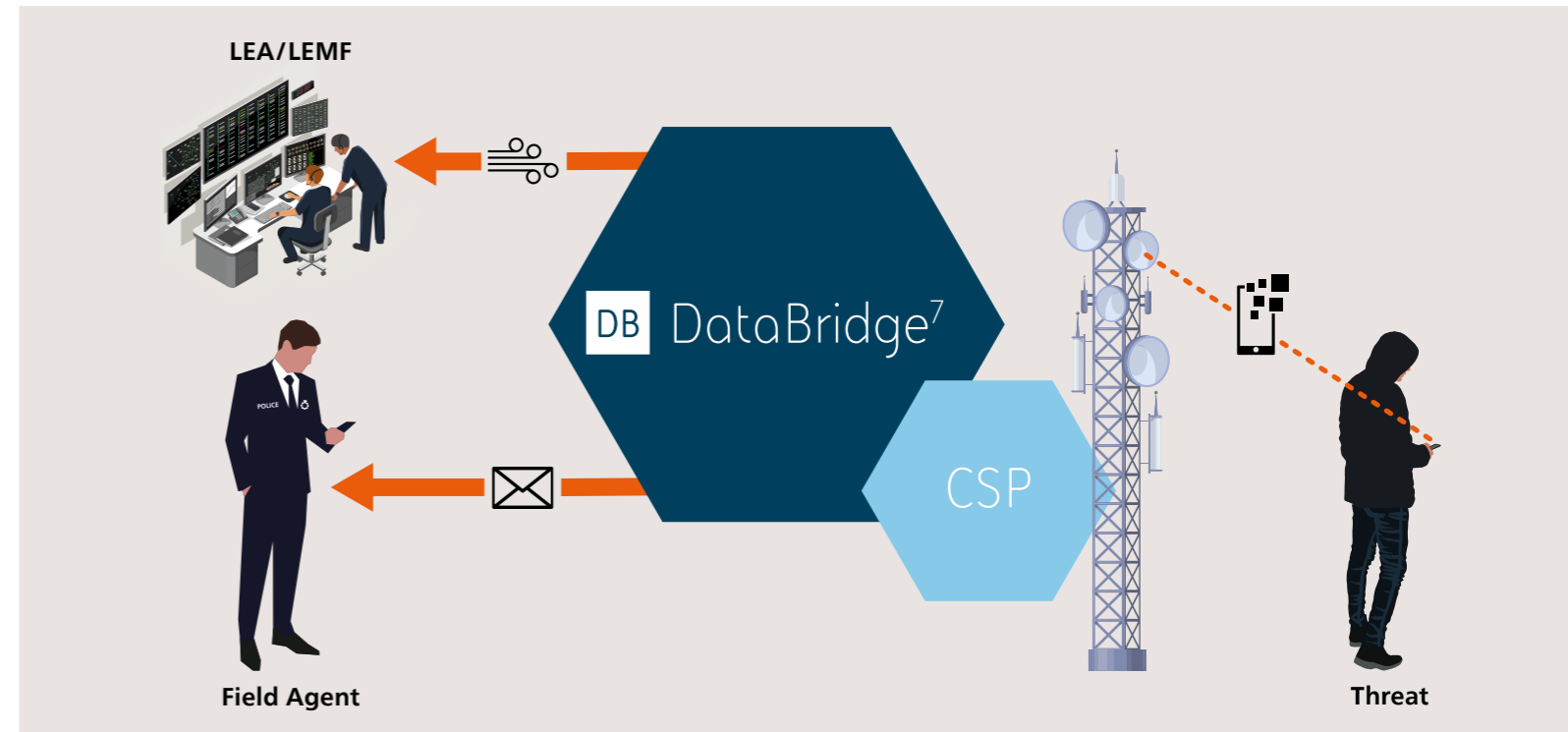
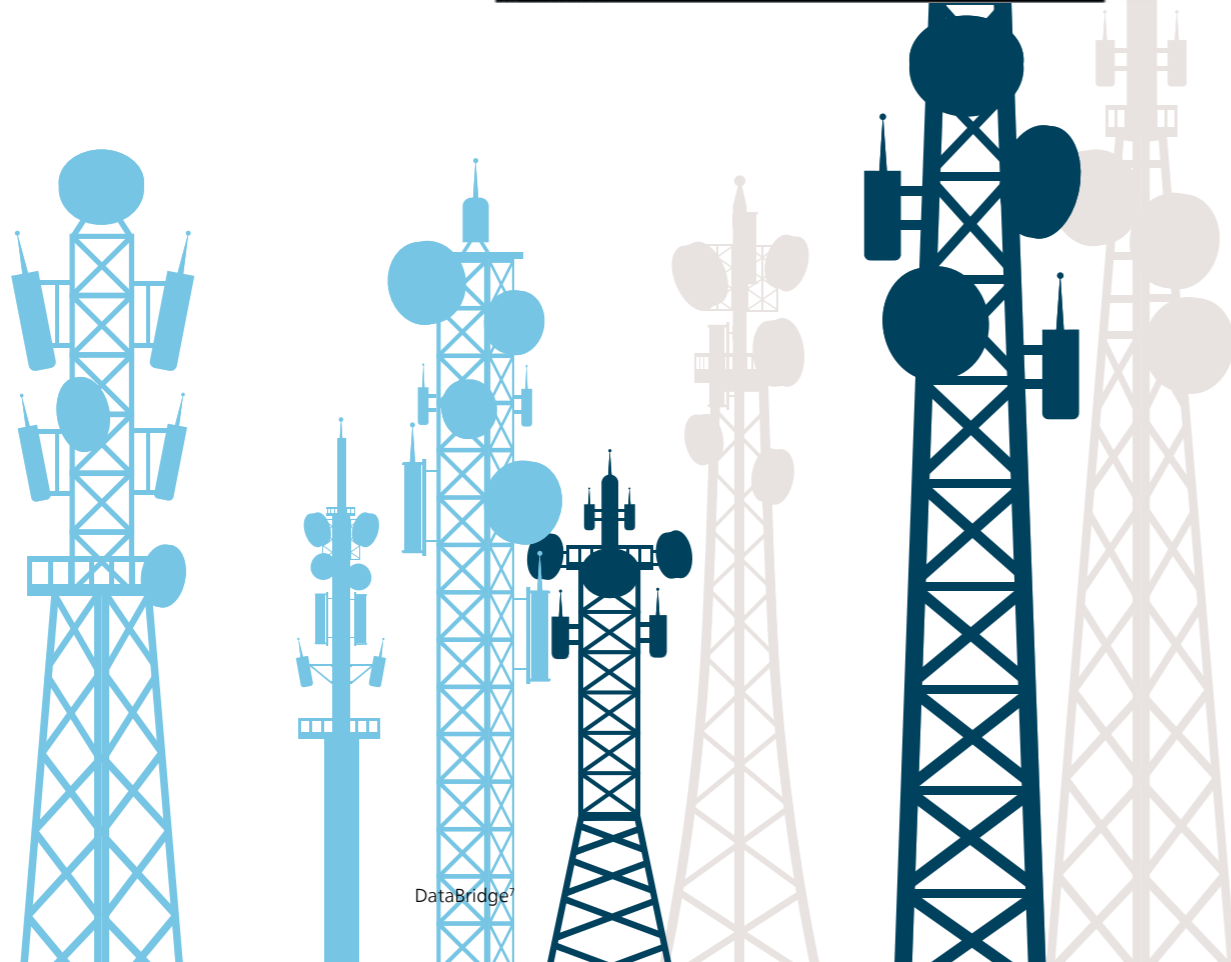
In support of these high-speed services, DataBridge⁷ supports 10Gbps of data mediation for a single intercept, with the total mediation capacity scalable on demand. This ensures mediation resource always exceeds the inbound intercepted traffic rates.

Enhanced location

DataBridge⁷ supports access to high accuracy and frequency location data through both active and passive mechanisms.

DataBridge⁷ provides an active solution that includes support for standards-based models for Lawful Access Location Services (LALS). This includes the provision or integration with network functions such as the GMLC or direct interworking with mobility and access management functions (e.g. MME or AMF).

Furthermore, DataBridge⁷ supports passive solution implementations for providing high accuracy location information for all subscribers all the time, including building level and x & y axis coordinate information, as well as z axis for 5G - for all subscribers whether in active or idle mode.



5G Identifier De-concealment

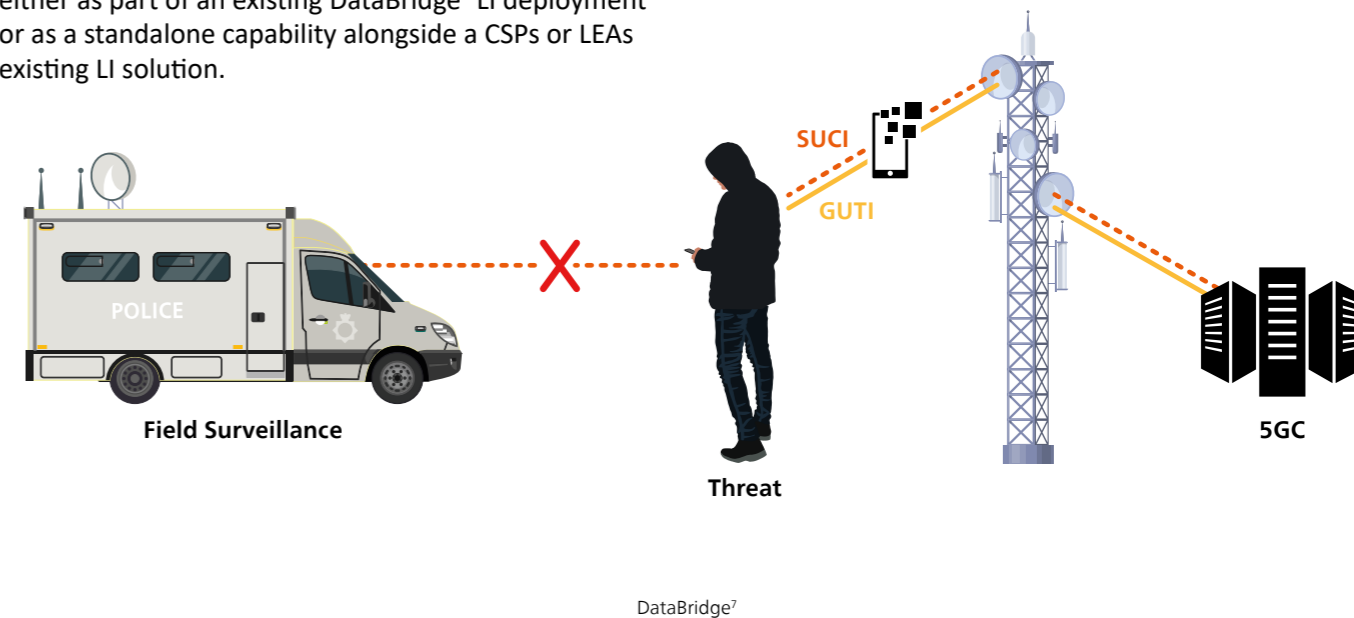
5G Mobile architectures provide significant enhancements to privacy and security. This has been achieved through the introduction of Concealed and Temporary session-based identifiers, which replace attributable and trackable identifiers on the 2G, 3G and 4G radio interfaces.

In support of LEA requirements for 5G identifier de-concealment, DataBridge⁷ 5G ICF/IQF capability allows authorised Law Enforcement Agencies to attribute, in real time, observed 5G radio identifiers to a subscriber's permanent identifier.

The 5G Identifier Association Function can be deployed either as part of an existing DataBridge⁷ LI deployment or as a standalone capability alongside a CSPs or LEAs existing LI solution.

DataBridge⁷ Identity Caching Function (ICF) provides high speed retention and retrieval for all AMF generated identifier association events within a 5GSA core. With support for over 150 million subscribers and a configurable cache retention period, DataBridge⁷ ICF meets the needs of the world's largest Tier 1 operators within the most demanding regulatory environments.

DataBridge⁷ Identifier Query Function (IQF) provides an interface for LEAs to request temporary and permanent identifiers for a 5G subscriber. This uses the standards-based LI_HIQR interface, enabling both direct LEA access and local requests made through the DataBridge⁷ Warrant Management System (WMS) using the Identifier Association workflow.



Low Earth Orbit Satellites

As large clusters of Low Earth Orbit (LEO) satellites increasingly dominate the night sky, both complementing and competing with traditional mobile operators in the race to deliver globally ubiquitous high-speed internet, lawful access for satellite communications has evolved from a niche requirement to a critical necessity. DataBridge⁷ is at the forefront of this communications revolution, partnering with leading LEO satellite providers to ensure full compliance with country-specific regulatory Lawful Intercept mandates across every region where services are delivered.

Traffic Policies

To support Law Enforcement Agency requests for CSPs to implement ETSI based Traffic Policies, for the purpose of controlling the scope of intercepted content such as discarding high-rate video streaming services (e.g. YouTube), DataBridge⁷ offers a fully integrated Traffic Policy Function which can be invoked on either a global or per warrant basis.

This capability supports Law Enforcement by performing granular traffic reduction at a per warrant, IP, port and protocol level, while continuing to generate metadata (e.g. Packet Data Summary Reports) about the filtered content flows.

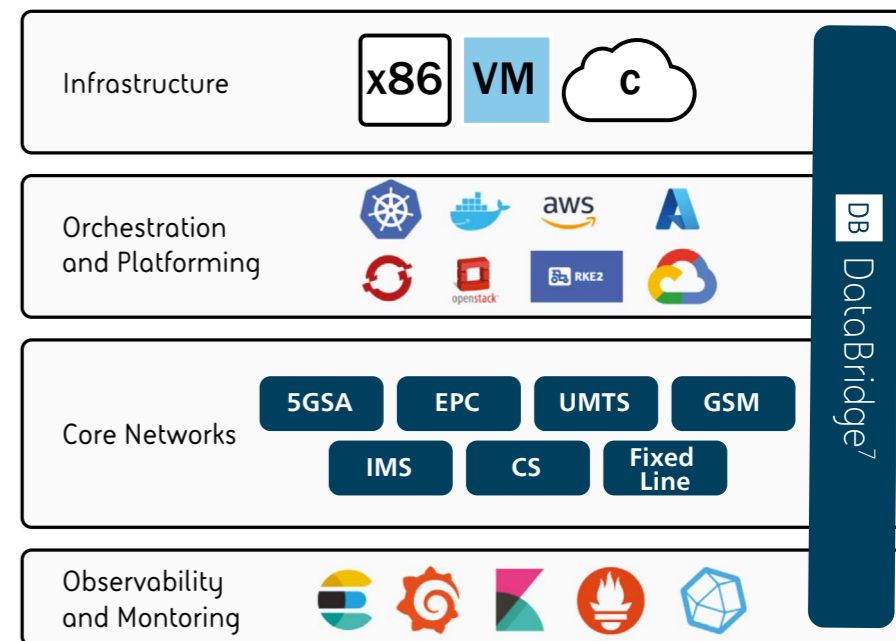
The DataBridge⁷ Traffic Policy Function can be enabled in any DataBridge⁷ deployment and can also be deployed at the boundary between the CSP and the LEAs as a stand-alone function without modification to existing LI capabilities.

Network Probes

While the majority of LI can be performed in partnership with LI interfaces embedded within the network functions, there are some scenarios where intercepting traffic directly from the transport network is more cost effective or appropriate.

In support of these use cases, DataBridge⁷ 1G, 10G or 100G cloud native software-based probes can be deployed to provide intercept capability for the following use cases:

- IP Voice interception with SIP and RTP protocols
- IP Data interception on Fixed and Mobile networks
- Roaming IP Data on the S8 and N9 interfaces of a mobile network
- Home Routed IP Voice carried over the S8 (S8HR) or N9 (N9HR) interfaces
- RADIUS and DHCP access and session information

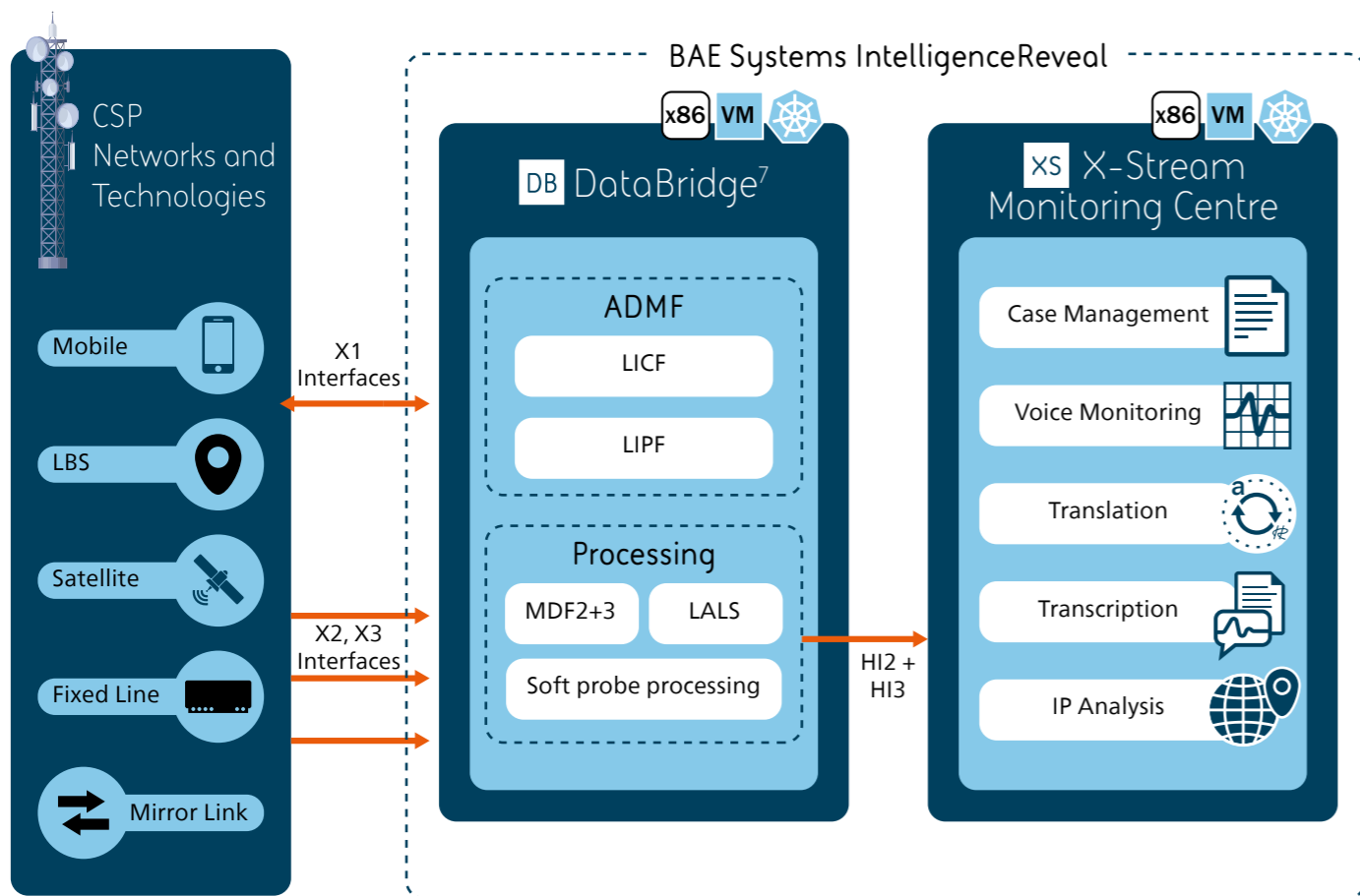


Cloud Native

DataBridge⁷ is designed and built with cloud native platforming in mind, enabling the freedom and flexibility to support the widest possible range of virtualisation technologies, and allowing us to align the solution with our customer's chosen technical direction.

Whether deployed as Container Network Functions (CNFs) within a public cloud like AWS, as virtual network functions deployed on a private cloud such as ESXI, or deployed on dedicated COTS x86 hardware, DataBridge⁷'s cloud native architecture combined with our team's depth of experience will streamline and simplify deployment and integration.

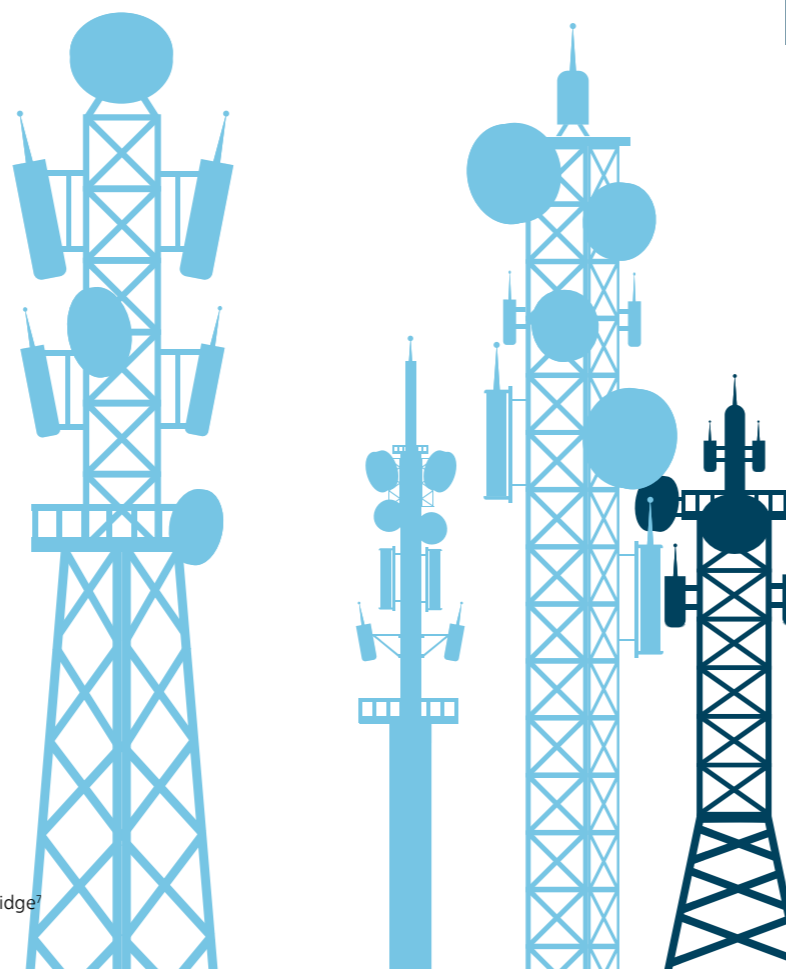
Depending on technology choices and security paradigms, infrastructure requirements have always and will continue to vary between CSPs. In support of these differences DataBridge⁷ has been developed as a platform agnostic solution, equally capable of running on dedicated COTS hardware, as VMs or containers within a cloud environment, with proven integration to a wide variety of cloud platforms and orchestration technologies.



Seamless Integration with IntelligenceReveal for Multi-Source Exploitation

DataBridge⁷ seamlessly integrates with X-Stream Monitoring Centre, enabling a unified, end-to-end lawful interception and Monitoring Centre Solution within the IntelligenceReveal suite. IntelligenceReveal is a comprehensive intelligence exploitation solution that enables analysts to perform complex investigations on data to build a single, unified intelligence picture. More information on IntelligenceReveal can be found here.

As the lawful interception gateway, DataBridge⁷ captures and mediates HI data from across network domains, securely delivering it in real time to X-Stream Monitoring Centre. This seamless integration removes complexity, reduces operational overhead, and ensures that no intelligence value is lost between interception and analysis. Together, DataBridge⁷ and X-Stream Monitoring Centre form a cohesive and highly interoperable solution that streamlines lawful interception workflows. From network capture to actionable intelligence, all within the IntelligenceReveal platform, the result is faster time to insight, simplified operations, and a scalable foundation ready for today's and tomorrow's interception challenges.



DataBridge⁷

DataBridge⁷

Technical Specifications

Supported equipment vendors

- Cisco
- DriveNets
- Ericsson
- HPE
- Huawei
- Juniper
- Mavenir
- Microsoft (Affirmed legacy)
- Nokia
- Oracle
- Samsung
- ZTE
- 3rd party LIG vendors
- Others

Supported Technologies

Fixed Line

- **DSL** - Voice, Data and Email
- **Cable** - Voice, Data and Email
- **FTTP** - Voice Data and Email

Mobile

- **2G** - Voice, SMS, MMS
- **3G** - Internet Access
- **4G/5G NR** - Internet Access, Voice, SMS, MMS, RCS, PTC
- **5G SA** - Internet Access, Voice, SMS, MMS, RCS, PTC, IoT

Standards Compliance

- TIA J-STD-025A
- TIA J-STD-025B
- ATIS 10000678 v2
- ATIS 10000678 v4
- ATIS 1000013.2007
- 3GPP TS 33.106 - 33.108
- 3GPP TS 33.126 - 33.128
- ETSI TS 101/ ES 201.671
- ETSI TS 102 232 parts 1-7
- ETSI TS 103 221-1
- ETSI TS 103 221-2
- ETSI TS 103 120

We are Digital Intelligence

Digital Intelligence is home to over 4,700 digital, cyber and intelligence experts across 16 countries. We operate at the cutting edge of digital innovation and at the heart of organisations that keep vital infrastructure running, national security protected and armed forces prepared.

Our teams provide advanced digital capability, products and solutions that weave together digital threads of data so that customers get the vital insight they need – from the fine detail to the bigger picture, providing the power of perspective to confidently make the critical decisions that keep our societies safe and able to thrive.

Digital Intelligence is part of BAE Systems and has a rich heritage in helping to defend nations and businesses around the world from advanced threats. Whether on land, in the air, at sea, in space or cyberspace, we're your digital mission partner, with you every step of the journey.

BAE Systems Digital Intelligence
Surrey Research Park
Guildford
Surrey GU2 7RQ
United Kingdom
T: +44 (0) 1483 816000

BAE Systems Digital Intelligence
Level 2
14 Childers St
Canberra
ACT 2601
Australia
T: +61 (0) 2 9053 9330


BAE Systems Digital Intelligence
Malta Office Park
ul. Abpa A. Baraniaka 88
Poznan
61-131
Poland
T: +44 (0) 330 158 3627

BAE Systems Digital Intelligence
Level 28, Menara Binjai
2 Jalan Binjai
Kuala Lumpur
50450
Malaysia
T: +60 327 309 390

E: learn@baesystems.com

W: baesystems.com/digital

 [linkedin.com/company/baesystemsdigital](https://www.linkedin.com/company/baesystemsdigital)

 @BAESystemsDigi

Copyright © BAE Systems plc 2026. All rights reserved.

BAE SYSTEMS, the BAE SYSTEMS Logo and the product names referenced herein are trademarks of BAE Systems plc.

BAE Systems Applied Intelligence Limited registered in England & Wales (No.1337451) with its registered office at Surrey Research Park, Guildford, England, GU2 7RQ.

No part of this document may be copied, reproduced, adapted or redistributed in any form or by any means without the express prior written consent of BAE Systems Applied Intelligence.

Digital Intelligence

BAE SYSTEMS