

## COLLECT. OPTIMIZE. ANALYZE. VISUALIZE.

## Evolving communications networks with Functional and Regulatory Assurances for Providers

Secure provisioning, monitoring, mediation, and handover of lawfully intercepted data have long been critical considerations for Communication Service Providers (CSPs) in how they design and buildout networks. Full interoperability with lawful intelligence solutions allows law enforcement agencies (LEAs), government entities, and emergency responders to protect citizens. In a world of increasingly distributed, encrypted networks shaped by cloud and 5G infrastructures, those considerations have become more complex.

To meet these evolving needs, SS8 and NEC, a leader in the integration of network technologies, have now completed interoperability testing. As part of SS8's Acceler8 partner program, the ongoing engagement has demonstrated long-distance compatibility between SS8's Xcipio mediation platform and NEC's Session Management Function (SMF) a 5G control-plane element. Validating this capability provides functional and regulatory assurances to CSPs when they implement next-generation network infrastructure.

### GOING BEYOND THE STANDARDS

International standards establish a baseline for interoperability of 5G network elements from different vendors, but do not guarantee compatibility. Any combination of technologies from different companies must be thoroughly tested to verify performance, security, and usability. Through the Acceler8 program, SS8 and NEC empower CSPs to execute implementations smoothly and avoid unforeseen delays and costs.

### VALUE PROP

**Proof of concept for lawful intelligence in a borderless world of communications**

**Compliant, on-demand network elasticity**

**Leverage AWS cloud scalability to spin up functions during the busiest time of day**

**Develop global services without deploying global staff**

**Protect society while maintaining privacy**

### USE CASES



Cross-border lawful intelligence gathering



Next-gen network implementations



Compliant cloud deployments



Distributed, edge-based network processing



Global Communication Providers



KEY BENEFITS



Futureproof networks with lawful intercept solutions that satisfy 3GPP, ETSI, and 5G standards



Reduce implementation risk and guarantee interoperability of mediation platforms and 5G SMF



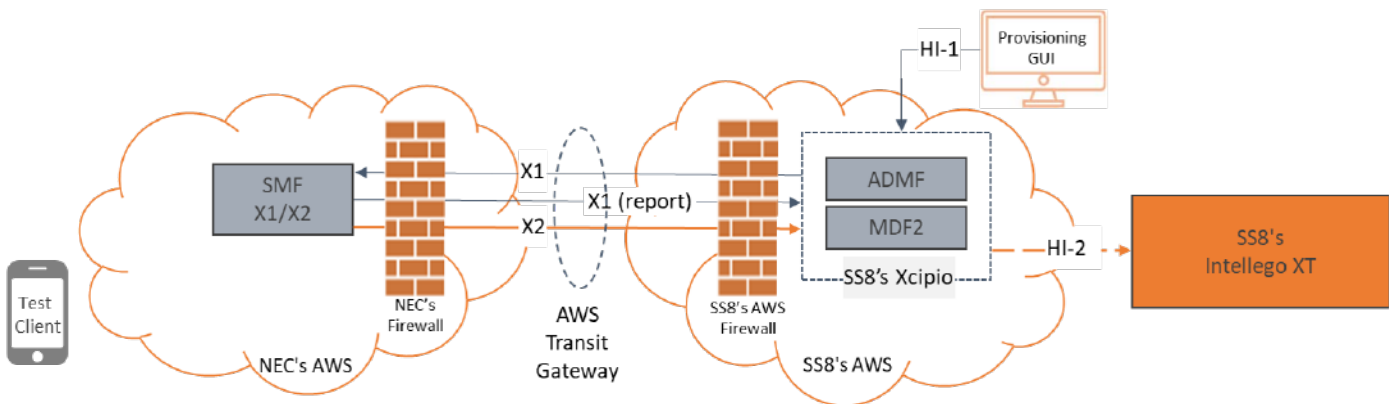
Dynamically provision resources to optimize bandwidth, reduce latency, and capitalize on growing markets like IoT



Reduce costs and drive growth with scalable technology that adapts across large, international geographies

ACRONYMS

ADMF	Administration Function
MDF2	Mediation and Delivery Function 2 (IRI)
AWS	Amazon Web Services
SMF	Session Management Function
GUI	Graphical User Interface
HI-1	Handover Interface 1 (provisioning and report)
HI-2	Handover Interface 2 (IRI)
X1/X2	Standards Based Interception Interfaces



THE SS8 AND NEC USE CASE

For the validation test, NEC's SMF in Japan and the SS8 platform in California were interconnected by Amazon Web Services (AWS), as shown above. The successful operation of the X1 provisioning interface and X2 signaling transmission interface demonstrate intercontinental compatibility between SS8's Xcpio and NEC's 5G Core, eliminating the need for the companies' shared customers to maintain idle system headroom for usage peaks. This demonstrates the opportunity for CSPs to geographically decouple lawful intelligence mechanisms from the network functions they must connect to.

As CSPs seek greater economies of scale, larger, often international service areas are becoming prevalent. To the

extent allowed by legal and other considerations, technology is, therefore, most efficient when it can operate freely across political borders. The distributed nature of 5G networks enables this efficiency by moving network functions to the physical location where they will be used at the appropriate time.

Strategic planning of network infrastructure sets the stage for CSPs to take advantage of emerging opportunities afforded by distributed, international networks. Aligning these network roadmaps with interoperable SS8 and NEC platforms provides CSPs with an efficient, end-to-end, carrier-grade 5G network supported by leading lawful intercept solutions that ensure compliance while capturing the actionable intelligence needed to protect society.

**SS8** | The Trusted Choice for  
Lawful Intelligence Solutions

Learn how we can help you to capture data and  
turn it into actionable intelligence:  
**sales@ss8.com**  
**+1 408 944-0250 | www.SS8.com**