



anam

The Signalling  
Security Experts



# Do you know what is happening in your SS7 and Diameter signalling networks today?

*How can you be sure that your customers and corporate brand are safe?*

Serious security flaws in Mobile Operator Signalling networks (SS7 and DIAMETER) are being exploited today by fraudsters, criminals and foreign security services to intercept subscriber communications, track location and to carry out credit fraud.

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## CONSEQUENCES OF A MOBILE NETWORK SIGNALLING ATTACK

### VOICE

Illegal and undetected monitoring of voice calls

### TEXT

Visibility of texts, Spoofing of SMS & USSD, SMS related fraud and interception of authentication messages

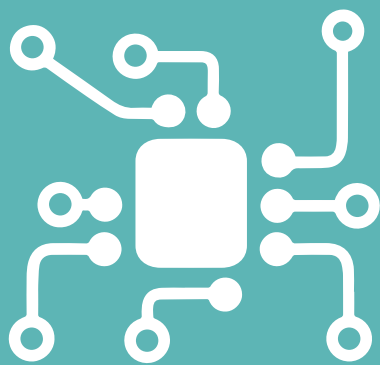
### LOCATION

Target can be tracked down to street level

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# Protect your reputation and subscribers.

Our SS7 and Diameter specialists work with MNOs to identify if the network is currently being attacked, monitor on-going threats and secure the network. We typically begin with a signalling network audit in which we apply Anam's analytics technology and expertise to identify any existing attacks, and then move to ongoing monitoring and if required evolve to a full Signalling Firewall implementation coupled with a fully managed Signalling Security service.



**CUTTING  
EDGE  
TECHNOLOGY**



**SPECIALIST  
EXPERTISE &  
SERVICES**

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*The technology*

## Cutting edge technology to analyse and protect against signalling attacks.

### **Signalling Security Analytics**

Enables you to pinpoint where you are most vulnerable & where to focus to achieve early and real wins against hackers and fraudsters

Anam uses Big Data techniques and tools to analyse signalling security. We monitor for all known threats for these and offer a threat information sharing service designed to allow operators to alert other networks to new threats as they occur. Anam's highly flexible analytics tools analyse signalling traffic and generate graphical overviews of the current status which can be 'drilled into' to deliver more detailed reports. Data is fed in near real-time allowing the graphical displays to be updated constantly

### **Signalling Firewall**

Anam's Signalling Firewall is the most featured and easy to use Firewall available on the market today. The Anam Firewall protects your network against SS7 and Diameter attacks, and is extensible to other protocols. From talking to operators we realise that configuration and management is expensive in terms of operations time, to address this issue we offer the easiest to manage Firewall. The Firewall system can automatically synchronise with your existing IR.21 agreements and populate its own rules and has an intuitive user experience. The system can be deployed in 'proxy' or 'loop' configurations on local servers, private cloud or NFV.

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*The expertise*

## Specialist expertise to audit, plan, implement & optimise.

Operators face an issue with how to identify Signalling Threats and exploits and to configure their Firewall. Anam has a solution to this problem which we refer to as Anam's 'Real Time Global Threat Information Service'. Anam gathers realtime threat information from a number of sources. These include the GSM Security information exchanges and threats

identified by our own deployed Firewalls. In addition, we work with a number of well known Partners who operate global signalling networks and we have agreements to access their threat Information to manage our firewalls. All of this information can be provided in real time to Anam's customers in a Threat Assessment Queue for operator approval.

# How can we help you now?

- Ongoing threat monitoring
- Identify where your network is most vulnerable
- Fully managed signalling network security implementation

## Identify Where Your Network Is Most Vulnerable

Realtime filtering of Signalling traffic is widely accepted as the optimal approach to seal the network against attack, and we know what is involved for an MNO to deploy a firewall in the network. Many Operators need to look at interim solutions until alignment of budget, resource and timing of other network projects will allow for the installation of a Signalling Firewall. This is where Anam's Analytics approach can help – by leveraging existing data to reveal where protective measures are most urgently required and provide a comprehensive audit on the safety of your signalling network. During the Signalling Network Audit, we look at the level of actual attacks and illegal signalling in the network.

## Ongoing Threat Monitoring

Anam can put in place an analytics solution to give immediate visibility of signalling security threats. Our experts analyse signalling data on an ongoing basis to ensure that signalling attacks are identified, and eliminated.

## Fully Managed Network Security Implementation

Anam designs and delivers a signalling security solution comprising analytics technology, managed services focused on threat detection and if necessary full signalling firewall implementation

## The rewards of securing your signalling network

MNOs that secure their signalling networks have the potential to benefit in many ways including the avoidance of network outages, brand enhancement and by being trusted by customers and roaming partners. From a financial perspective, revenue loss is avoided as revenue fraud is eliminated, and there is an opportunity to launch new revenue generating services such as SIM swap notification. In addition MNOs are able to ensure that subscriber privacy is maintained and national security regulations adhered to.

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*Why Anam?*

The technology, people, independence and passion to safeguard your network.

## **100% Independent**

We focus on MNO needs. We approach signalling security from the MNO's perspective. Open, direct, honest, uncompromised advice.

## **Growing & Progressing**

We are now working with over 60 MNOs worldwide and the recent Rocco report named us as one of the top 3 Firewall providers in the world.

## **Powerful, Proven Technology**

Our specialist services are powered by cutting edge, patented technology. We are one of the first to apply the power of big data technology to signalling security.

## **Advanced, Specialist Expertise**

Our technology is great but it's our people who make all the difference. We have a diverse, well rounded mix, combining experience with expertise, from a myriad of backgrounds including telco, banking, business consultancy and technology.

## **Always Tailored To Your Precise Needs**

We begin where you need us to begin; whether that's with a quick audit or a complete solution. We'll then stay with you to ensure your network remains secure.



*About Anam*

## Experts in Signalling Security

Anam's team of industry-leading consultants leverage technology and expertise to enable Mobile Operators to secure their networks and generate revenues. Anam is a world leader in SS7 and Diameter Signalling Threat detection and blocking. We have the expertise and technology to examine what is happening in your Signalling networks. Working with you and your signalling teams we can help gather the relevant Signalling data and analysis the data in a secure environment.

Anam owns the worldwide patent for Home Routing (EP 1683375 B1), a technique invented in 2006 and fundamental to mobile firewall operation. Anam is ISO27001 certified. Headquartered in Dublin, Anam has an Asia hub in Kuala Lumpur, and also a presence in London, Hong Kong and Hanoi.



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# anam

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