EXTENDING REACH OF MOBILE NETWORK SECURITY TO IOT

Bringing authentication & data integrity
to billions of devices in the Internet of Things

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ERICSSON

THE CHALLENGE FOR AUTHENTICATION AND DATA INTEGRITY

› Authentication of devices ?

Provisioning?

Scaling?

› Data Integrity with end to end encryption

Maintenance?

Enterprise

Life Cycle?

A TECHNOLOGY FOR END TO END SECURITY
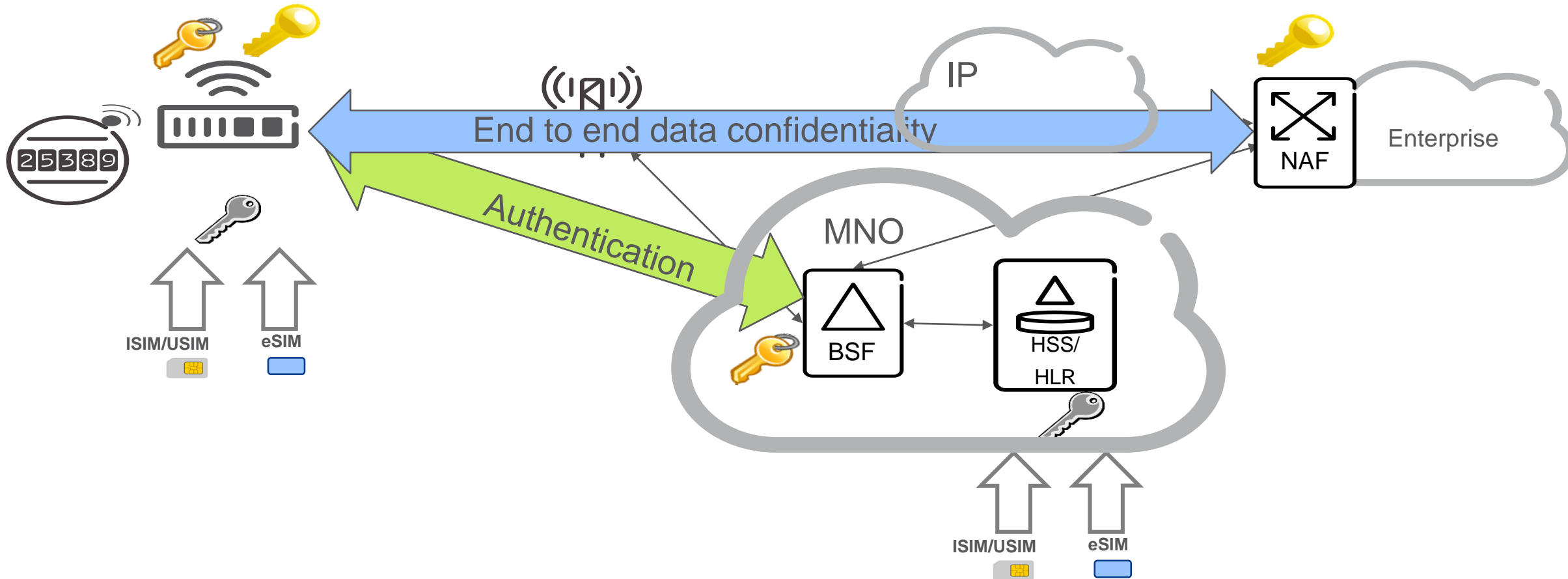
Authentication | **GBA** | Data Confidentiality

› Network Authentication based on SIMs can be extended using Generic Bootstrapping Authentication (GBA)

› High levels of AUTHENTICATION & DATA CONFIDENTIALITY

GBA IN A NUTSHELL

3GPP GW & SENSORS

End to end data confidentiality

Authentication

IP

NAF

Enterprise

MNO

BSF

HSS/ HLR

ISIM/USIM   eSIM

ISIM/USIM   eSIM

THE WAY FORWARD

The Importance of secure authentication and secure channels for data integrity.

IoT Security Guidelines, CLP 14, section 3.

GBA's strong authentication and Data Integrity based on timed limited session keys for symmetric encryption.

CONCLUSION

› Leveraging on the already existing identity and authentication infrastructure deployed by the mobile operators

› Scales effortless to billions of IoT devices

› Provides mutual authentication

› End to End encryption

Secure take off for IoT

Thank You!