



# **3GPP SA3**

## Bengt Sahlin

3GPP TSG SA WG3 Chairman Ericsson Research NomadicLab

#### **Outline**



↑ Introduction to 3GPP security
↑ 3GPP Rel-12 security work







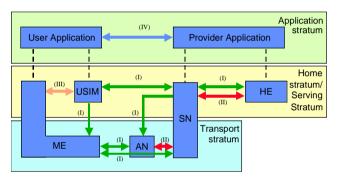
# The WG has the overall responsibility for security and privacy in 3GPP systems

- performs analysis of potential threats to these systems
- determines the security and privacy requirements for 3GPP systems
- specifies the security architectures and protocols
- ensures the availability of cryptographic algorithms which need to be part of the specifications

## **3GPP Security Work**



- **N** Access Security
  - GERAN (GSM, GPRS), UTRAN (UMTS), E-UTRAN (LTE)
- **n** Core Network Security
  - Evolved Packet Core (EPC, SAE)
  - Network Domain Security
- **N** IMS security
  - Signalling and media Plane Security
- **Authentication and Key Establishment for applications** 
  - GBA, MBMS, etc
- → 3GPP security specifications available at:
  - http://www.3gpp.org/ftp/Specs/html-info/TSG-WG--S3.htm

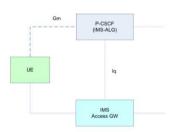






#### → Close to completion

- Security enhancements for usage of GBA from the browser
- Extended IMS Media Plane Security
  - IMS Messaging, and in particular MSRP/TCP based media
  - IMS Conferencing
  - Communications diversion



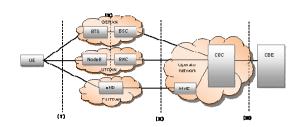
Tunnelling of UE Services over Restrictive Access Networks

## Rel-12 Topics (II)



#### →Ongoing

- Public Warning System (PWS) Security
  - Objective to provide security for PWS
    - Availability, integrity and authentication of the warning messages
- Machine Type Communication Security
  - Device Trigger Filtering specified in Rel-11
  - Small data security
  - UE Power Consumption Optimizations
  - Secure Connection
  - Restriction of USIM to particular ME/MTC Devices
  - Privacy



## Rel-12 Topics (III)



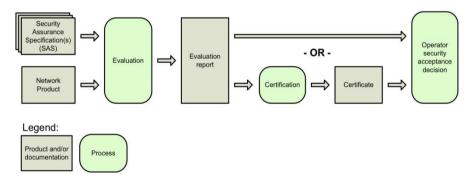
#### ♠ Recently started

- Security Aspects of WLAN Network Selection for 3GPP Terminals
- Security Aspects of Proximity-based Services

## **Rel-12 (IV)**



- ♠ Study on Security Assurance Methodology for 3GPP Network Elements
  - Consensus that 3GPP needs to look into the area of security assurance
  - SA3 tasked to lead the work
  - Study ongoing for choosing a methodology to progress the work
    - Started in November 2012



- ↑ Study on Security aspects of Integration of Single Sign-On (SSO) frameworks
  with 3GPP networks
- Security Study on Spoofed Call Detection and Prevention

### 3GPP / ETSI security work



#### 3GPP Security work in the ETSI Security White Paper

- www.etsi.org/securitywhitepaper
- All ETSI/3GPP standardization security achievements and current work
- 5<sup>th</sup> Edition published January 2013
- List of all ETSI/3GPP standardization security, freely available

#### 3GPP Security work in the yearly ETSI Security Workshop

- www.etsi.org/securityworkshop
- Agenda, Report, all Presentations of previous ETSI Security Workshops
- 9th ETSI Security Workshop on 15-16 January 2014
- Call for Papers in July 2013

# Thank You!





More Information about 3GPP:

www.3gpp.org

contact@3gpp.org