Overview of differences and gaps of
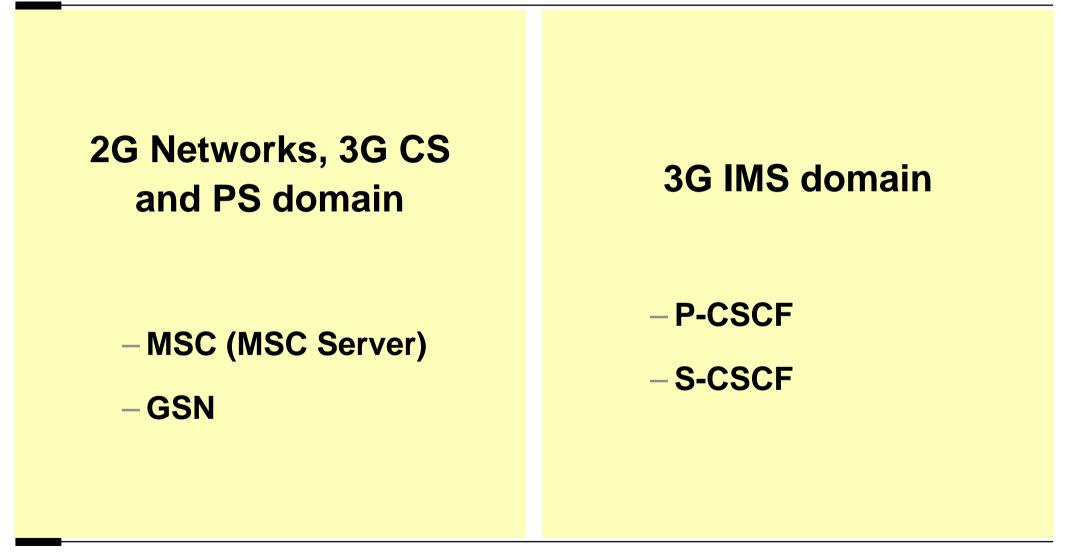# Lawful Interception
between legacy telecommunication and
multimedia call scenarios

Identifiers

Identifiers used to select a target to be intercepted

- **PSTN: Directory Number**

- **2G Networks (CS and PS): MSISDN, IMSI, IMEI**

- **3G CS and PS domain: MSISDN, IMSI, IMEI**

- **3G IMS domain: SIP URL**

Intercepting network elements

2G Networks, 3G CS and PS domain

- MSC (MSC Server)

- GSN

3G IMS domain

- P-CSCF

- S-CSCF

Result of Interception

– **PSTN, 2G networks and 3G CS/3G PS domain:**

  » **Intercept related information (IRI) describing the event and the parties involved is delivered on interface port X0_2.**

  » **Content of communication (CC) is delivered on interface port X0_3.**

– **3G IMS domain:**

  » **Only intercept related information describing the event and the parties involved can be delivered on interface port X0_2, content of communication is not available at CSCF.**

Correlation issues

- A subscriber can (and should) be intercepted in both domains: PS and IMS domain.

- A correlation between interception results from PS domain with results from IMS domain is only possible with the "lawful interception identifier" which may be unique for a subscriber, but not for a call. As no interception specific signaling is available, no exchange of interception data between intercepting nodes is possible.

Location Dependent Interception

- **Location Dependent Interception (LDI) is a feature for serving nodes like VMSC, VMSC-Server and SGSN to intercept a subscriber only in a given area the Law Enforcement Agency is authorized for.**

- **In P-CSCF and S-CSCF the location of the subscriber is not known. This means that a subscriber always will be intercepted, independent of his location, as long as an interception task is entered in the CSCF.**

Interception and Call Forwarding

» **Scenario: Not intercepted subscriber A calls intercepted subscriber B which has call forwarding conditional (e.g. busy) to not intercepted subscriber C.**

» **In case of CS the visited MSC (Server) of intercepted subscriber B will intercept the call.**

» **In case of multimedia call in IMS domain the node (S-CSCF) responsible for intercepted subscriber B will return the new directory number for not intercepted subscriber C to not intercepted subscriber A. Not intercepted subscriber A will establish a new call to not intercepted subscriber C. This call will not be intercepted as node for intercepted subscriber B is not involved any longer and no interception specific signaling between the nodes is available.**