ETSI

World Class Standards

**ETSI TC LI
STANDARDIZATION
ACTIVITIES**

ETSI Presentation to ISO SC27, April 26th 2013

Why LI implementation in the EU

**17th January 1995: EU Council of Ministers
adopted resolution COM 96/C329/01 on Lawful Interception**

The providers of public telecommunications networks and services are legally required to make available to the authorities the information necessary to enable them to investigate telecommunications
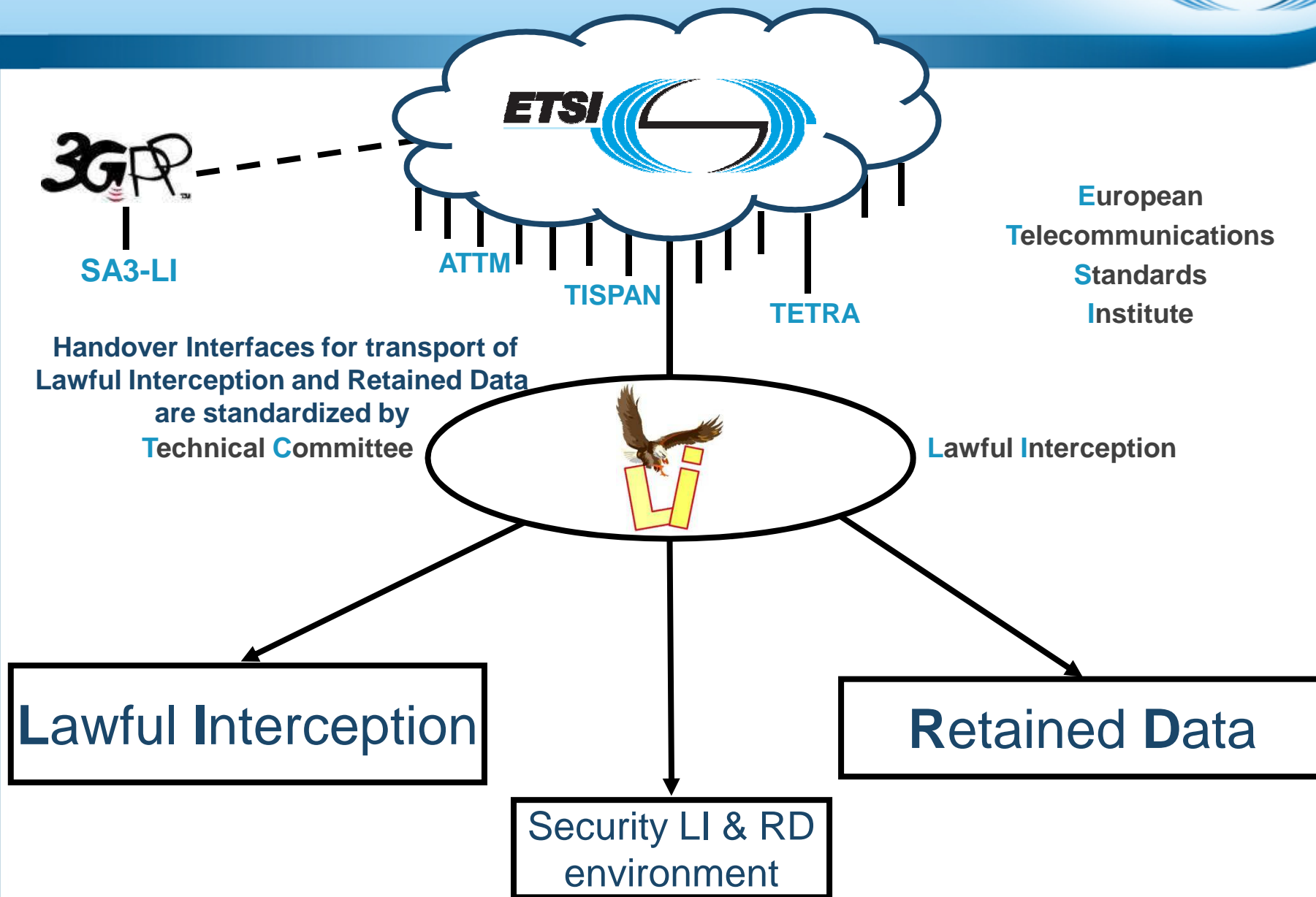
Why DR implementation in the EU

**15th of March 2006: the European Parliament
and the Council of the European Union adopted
Directive 2006/24/EC on Data Retention**

**Data generated or processed in connection with the provision of
publicly available electronic communications services
or of
public communications networks
need to be retained**

Standards activities for LI and DR

- Delivery of intercepted communication in transit
  - LI happens in real time
  - No data is retained in the network
- Delivery of records relating to communications activity (i.e. signalling)
- TC LI defines the Handover Interface from Operator to Authorised Organisation (typically a LEA)
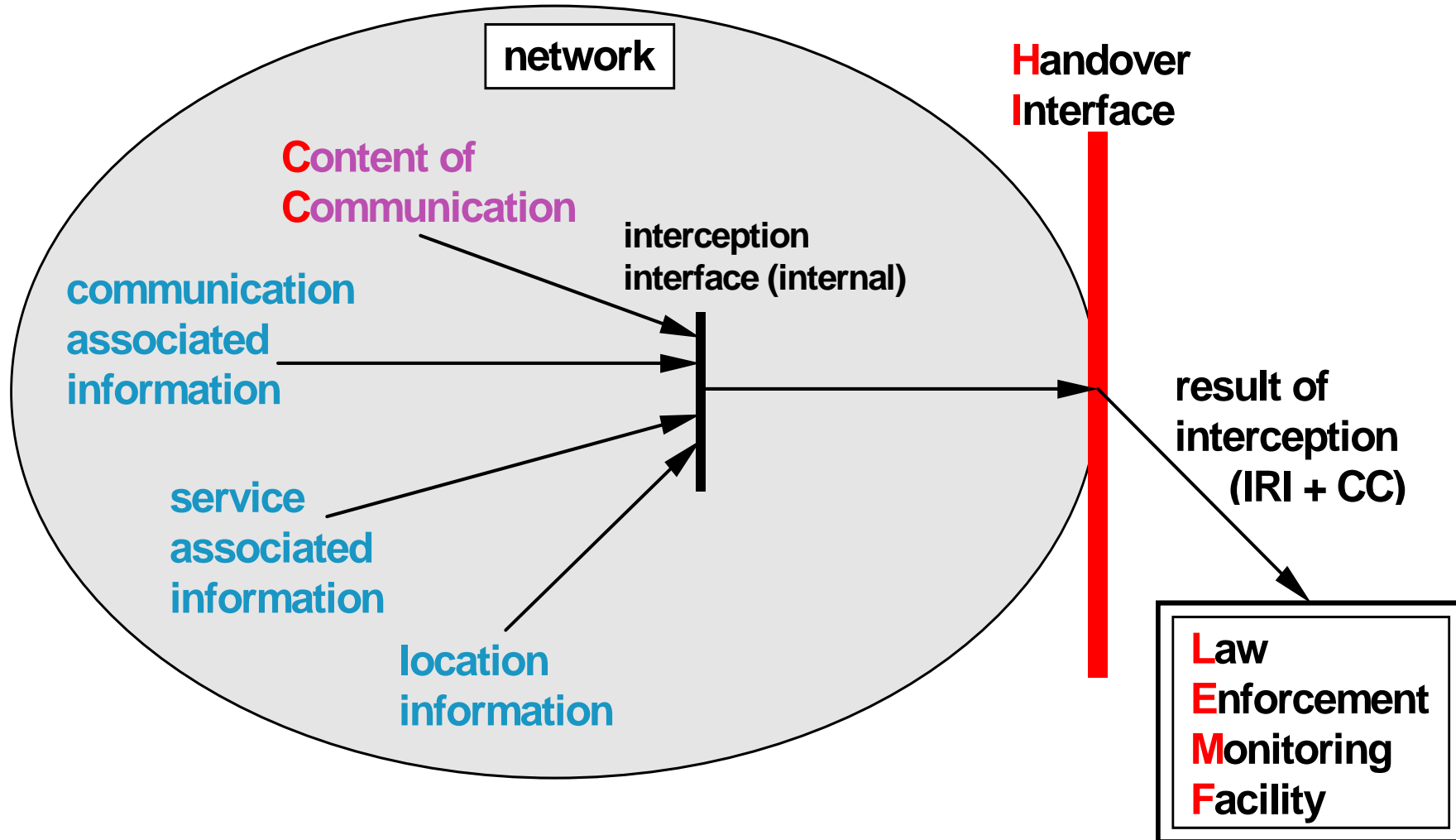 - Data formats
  - Data protocol

LI in ETSI

3GPP

SA3-LI

Handover Interfaces for transport of Lawful Interception and Retained Data are standardized by Technical Committee

ATTM

TISPAN

TETRA

European Telecommunications Standards Institute

Lawful Interception

Lawful Interception

Security LI & RD environment

Retained Data

Deliverables of ETSI TC LI

- ETSI/Technical Committee Lawful Interception (TC LI)
  - **on Lawful Interception:**

TR 101 943	*TR 102 503*	*TR 102 053*
TS 101 331	*ES 201 158*	
TS 101 671	*ES 201 671*	
TR 102 528	*TR 102 519*	*TR 103 690*
TS 102 232-1	*TS 102 232-2*	*TS 102 232-3*
TS 102 232-4	*TS 102 232-5*	*TS 102 232-6*
TS 102 232-7		

  - **on Data Retention:**   *TS 102 656*   *TS 102 657*
                             TR 103 657
  - *Security Report on LI and DR:*   *TR 102 661*

Types of LI data

- **Intercept Related Information (IRI)**
  - collection of information or data associated with telecommunication services involving the target identity:
    - **communication associated information** or data (including unsuccessful communication attempts)
    - **service associated information** or data (e.g. service profile management by subscriber)
    - **location information**

- **Content of Communication (CC)**
  - information exchanged between two or more users of a telecommunications service

General Network Arrangement

network

Handover Interface

Content of Communication

interception interface (internal)

communication associated information

service associated information

location information

result of interception (IRI + CC)

Law Enforcement Monitoring Facility

LI Handover Interface specification

ETSI TS 101 671   *(= old ETSI ES 201 671)*

Handover Interface for the Lawful Interception of Telecommunications Traffic

- **generic flow of information and procedures and information elements, applicable to any future telecommunication network or service**

- **circuit switched and packet data**

- **covered technologies**
  - PSTN, ISDN, GSM, UMTS (CS), GPRS, TETRA
  - wire line NGN (including PSTN/ISDN emulation)
  - wire line IMS PSTN simulation

DR specifications in TC LI

- ***ETSI TS 102 656***
  Requirements of LEAs for handling Retained Data
  - guidance and requirements for the delivery and associated issues of retained data of telecommunications and subscribers
  - set of requirements relating to handover interfaces for retained traffic and subscriber data
  - requirements to support the implementation of Directive 2006/24/EC
  - freedom for national regulations, procedures and processes
- ***ETSI TS 102 657***
  Handover interface for the request and delivery of Retained Data
  - handover requirements and handover specification for the data that is identified in EU Directive 2006/24/EC on Retained Data and in national legislations as defined in TS 102 656
  - considers both the requesting of retained data and the delivery of the results
  - defines an electronic interface (for the Request and for the Delivery)

Modular approach for DR spec.

Framework for Retained Data Handover Interface			
Telephony services	Network Access services	Asynchronous message services	Synchronous Multi-media services

e.g.

PSTN/ISDN GSM/UMTS-cs SMS/MMS	Internet GPRS UMTS-ps	E-mail webmail	chat

TC LI latest and future technical work

- Maintenance of LI and DR suites
  - LI and DR Handover Interface specifications
    - Handover from provider to authority
  - 7 parts: service-specific details for IP delivery

- Ongoing new work
  - Specification (TS) on Dynamic Triggering of LI function
  - Two reports (TRs) on LI/DR for Cloud Computing