

Lawful Interception in practise in the Netherlands

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SvSnet

NBIP

- SvSnet founded in 2005 for supporting the NBIP
 - NBIP is the Dutch service organisation for Internet Providers
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- Is it possible to do lawful interception with a group of providers?
 - Does this make it cheaper?
 - Is it safe to let a third party do lawful interception?

Content

1. law and supervision

- Telecommunications Law
- Law enforcement agencies
- Telecommunications Agency (AT)
- BBGT – Security Framework
- specifications

2. Interception Infrastructure

- infrastructure
- interceptable services (IP, E-Mail, VoIP)
- management interface
-

3. NBIP – foundation for lawful interception

- organisation
- growth
- services
- procedures
- costs

Obligations for Law Enforcement

- Obligations on telecommunication providers for law enforcement
 - Handover subscriber data
CIOT – Centraal Informatiepunt Opsporing Telecom
 - Interception
 - Historical data, retained data
Dataretention directive

Telecommunications Law (1)

Artikel 13.1

1. “Aanbieders van openbare telecommunicatienetwerken en openbare telecommunicatiediensten stellen hun telecommunicatienetwerken en telecommunicatiediensten uitsluitend beschikbaar aan gebruikers indien deze aftapbaar zijn.”

Public telecommunication services and networks must be interceptable.

2. “Bij of krachtens algemene maatregel van bestuur kunnen regels worden gesteld met betrekking tot de technische aftapbaarheid van openbare telecommunicatienetwerken en openbare telecommunicatiediensten.”

Rules on intercepts can be defined

-> FuncSpec en TIIT (functional and technical specifications)

Telecommunications Law (2)

Article 13.2: cooperation on exceptional orders

Article 13.3: disputes -> Telecom Agency

Article 13.4: cooperation on handover of information

Article 13.5: security measures for secrecy of information
-> BBGT

Article 13.6: costs

- interceptable: provider
- administrative en personnel costs: government

Article 13.7: non public networks and services

Article 13.8: release of obligations

Telecommunications Law (3)

- Changes in the Telecommunications law for Data retention
 - Law since July 6th 2009. Active since Sept. 1st 2009
 - art. 11.13: Retained data may not be used for other purposes
 - 13.2: Data Retention
 - directions for warrants based upon criminal law
 - 13.5: Change of BBGAT to BBGT
 - 13.9: evaluation every 5 jaar
Evaluation will be in September 2010!
 - 13.10: Mentioning the attachment with data to retain

Law enforcement agencies

- Lawful interception by Justice
 - identifiable user or entity
 - serious crime
 - punishment 4 years
- Lawful interception by intelligence agencies (AIVD/MIVD)
 - investigation borders
 - can be anything

Telecommunications Agency

- “Agentschap Telecom”
supervisor Telecommunications law art. 13
 - information
 - “last onder dwangsom”
 - test taps to check
 - fine
- dispute LEA vs provider
- BBGT

BBGT – security measures

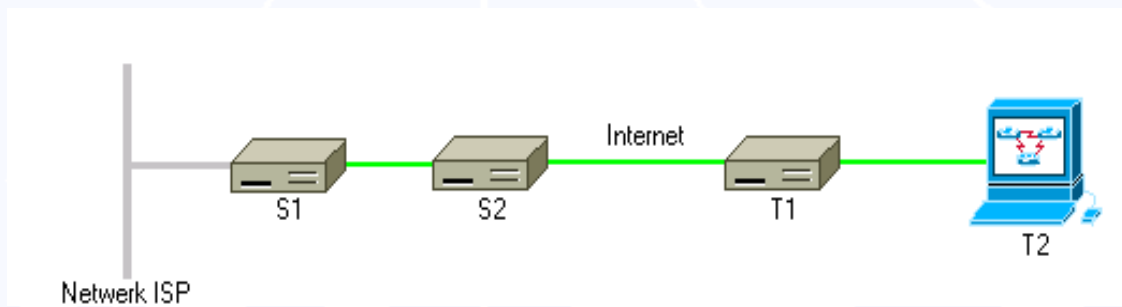
- “Besluit Beveiliging Gegevens Telecommunicatie”
Directive on Security of Telecommunication Data
 - Security of Intercepted data and information
 - Security of retained data
 - security plan
 - security measures
- since juni 2005
- supervision by Agentschap Telecom

Specifications

- Functional specifications
 - real-time
 - secrecy, unnoticeable
 - reliable
 - identifiable user (name, address, account, IP-address, e-mail address, phone number)
 - all traffic
 - IP or E-mail

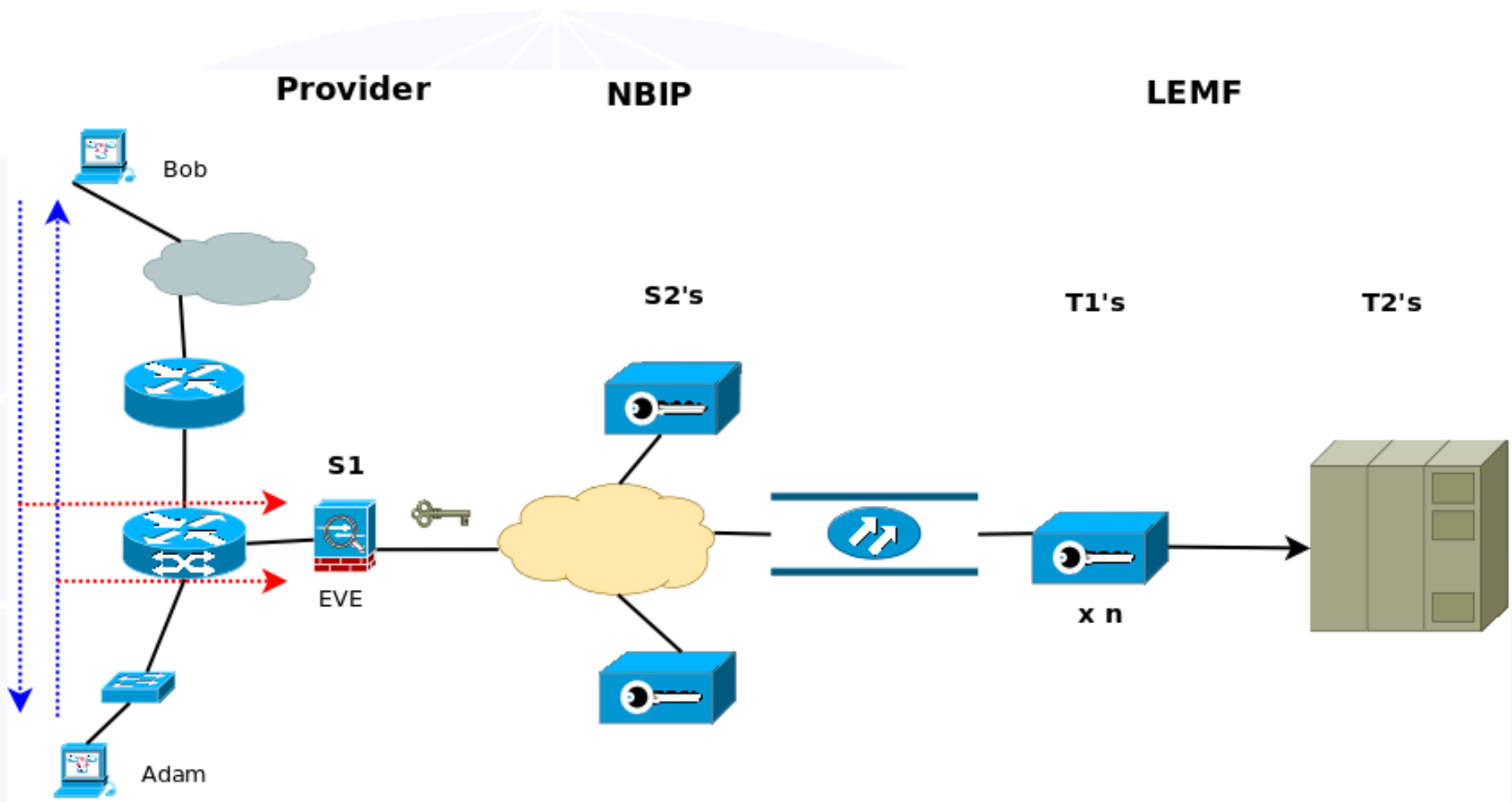
Specifications

- Technical Specifications
 - based on TIIT
 - moving to ETSI 102 323



- S1: filtering and coding
- S2: transport to LEMF (tunnels)
- T1: receiving data and split-up
- T2: store and investigation

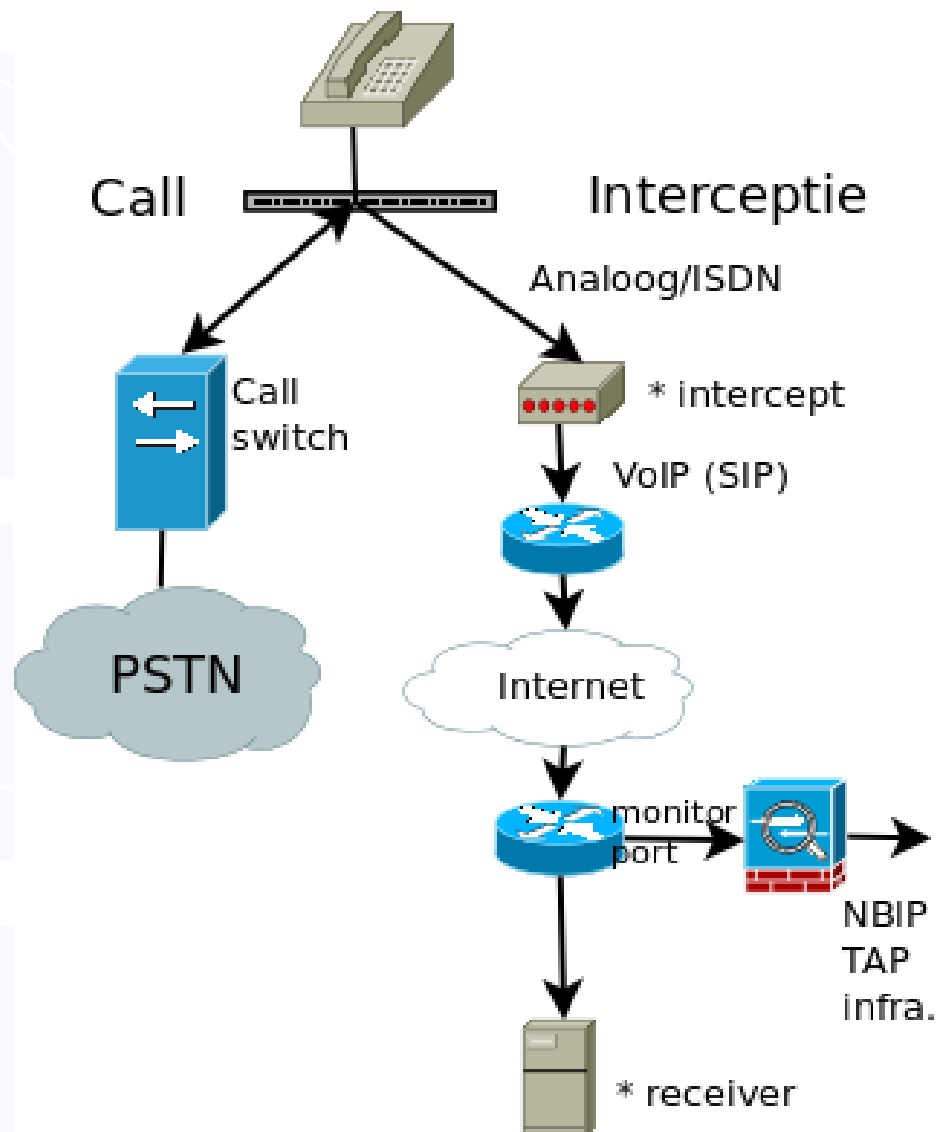
Interception Infrastructure



Interceptable services

- Internet connectivity
 - DSL, Cable, fixed lines, fibre, VPN's
 - Triggering protocols DHCP, Radius
- hosting, shared, dedicated, colocating
- E-mail - SMTP
- VoIP - SIP, H.323
- Fixed lines on small scale
 - analogue, ISDN-30, ISDN-2

Make it VoIP!



EVE Management Interface (1)

EVE – Interception Software (<http://www.lawfulinterception.com/>)

- Pine Digital: from the Internet industry with focus on security
- software solutions with standard server platform with FreeBSD
- all units (S1, S2, S3) use same software bundle
- separate units or EVE-One (combined)
- separate licenses for services (IP, e-mail, voip)
- many triggering protocols

EVE Management Interface (2)

- definition of:
 - S1 units and groups
 - T1 units and groups
 - Services (EVE, EVESMTP, EVESIP, etc)
- taps
 - input manually or from XML file
- logging and auditing

foundation NBIP

National Service Organisatie
for
Internet Providers

- offering services to providers to fulfil obligations from the telecommunications law, article 13;
- acting as an intermediary between government and providers, whereas providers can delegate obligations;
- decrease costs for providers on executing the obligations on technical, economical and organisation level

NBIP organisation

- founded in august 2002 – 9 ISP's
- 1-1-2010: 79 participants
- administration
- board (7 persons)
- Council of Participants
- Office and execution by contractors:
SvSnet

- Growth of the NBIP

year	2003	2004	2005	2006	2007	2008	2009	2010
participants	10	15	27	41	45	50	59	79
warrants	12	13	27	69	147	259	335	
interception days	528	670	1168	2402	5468	7837	8920	
duration (mean)	44	52	43	35	37	30	27	

NBIP Services

- administration of participants
- management of infrastructure
- intake and testing
- executing warrants
 - legal check
 - drive out (S1's)
 - tap's
- monitoring taps and infrastructure
- contacts with government, Agentschap Telecom, working groups
- BBGT support

Interception infrastructure NBIP (2)

- central S3 / S2's – fail-over, redundant
- monitoring system
- mobile S1's for IP en mailtaps

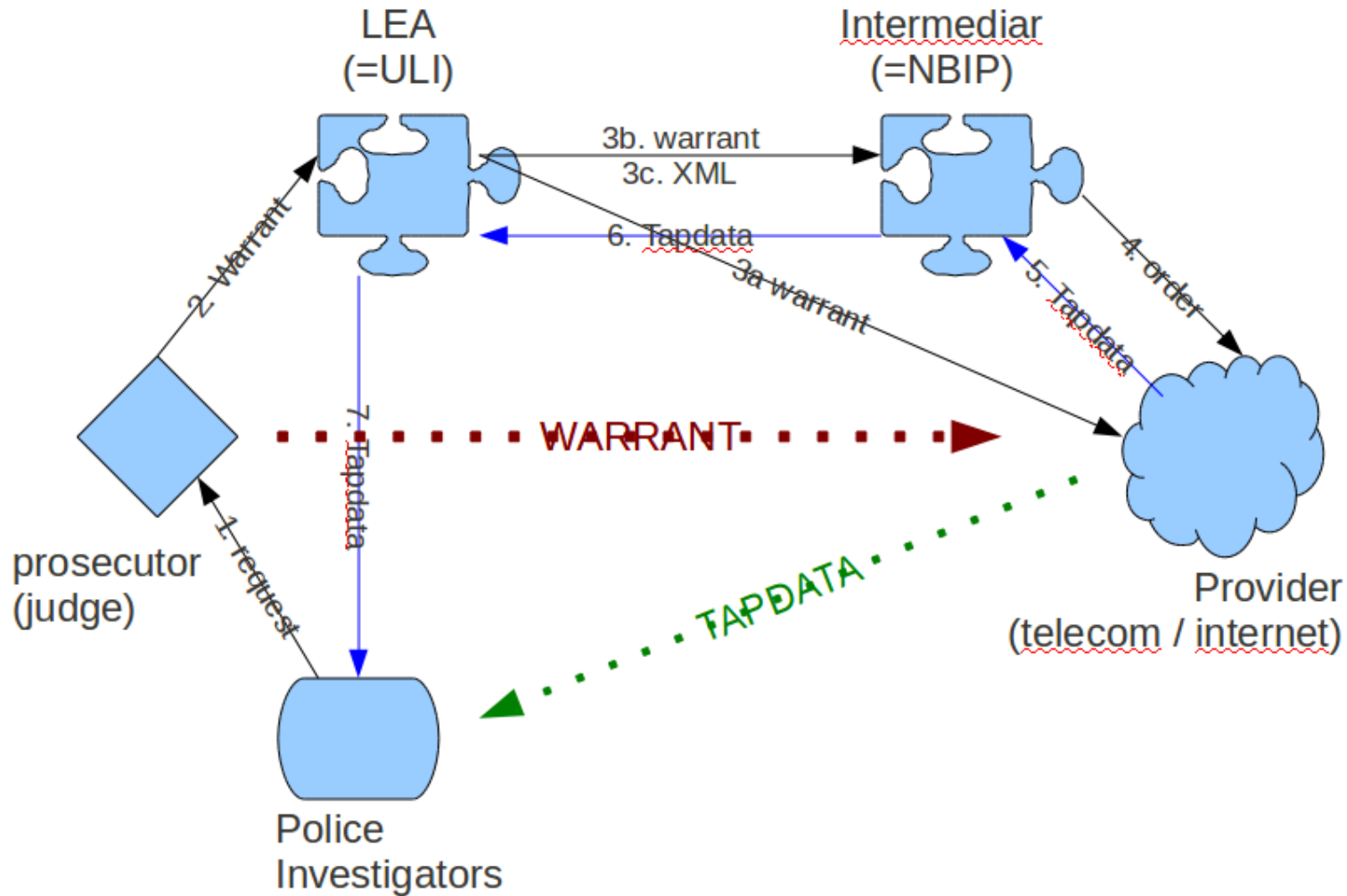
NBIP

NBIP: Procedures: I want to join!

procedure

- take in form with signature
status to “form applied”
- intake – network scan
status to “aspirant member”
- test taps
 - end-to-end test
 - dependant of ISP services
- technical report
status to “member”

NBIP: Procedures - warrant



Costs

- Interceptable: ISP
- Warrant: LEA

In case of NBIP:

- participants fee (yearly) for infrastructure
- bill per tap for execution of warrant

Costs (2)

- De yearly fea for 2010 is:
 - 1 provider business market, max. 3000 subscribers.
Also: max. 7 employees
Yearly fee: Eur 2.000
 - 2 business/residential max 25.000 subscribers
Yearly fee: Eur 3.500
 - 3 business/residential 25K - 250K subscribers
Yearly fee: Eur 15.000
 - 4 business/residential over 250K subscribers
Yearly fee: Eur 30.000

Costs (3)

	Description	Per:	Fee
1	handling tap, administration en legal check	tap	250
2	drive out & pick-up, installation S1 *)	tap	500
3	Monitoring and helpdesk	day	8
	Fee 1 tap for 1 month		990

* In 2007 - 2009 the average fee for taps were about EUR 500,-

* Costs can be declared to the government.



Questions?