

# Promotion of DNSSEC deployment for governmental organizations in Sweden

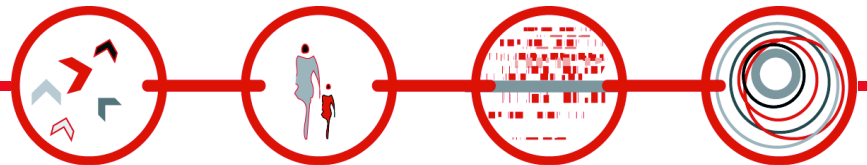
ICANN ccTLD DNS Workshop March 28 2007

Anders Rafting

Network Security Department

National Post and Telecom Agency (PTS)

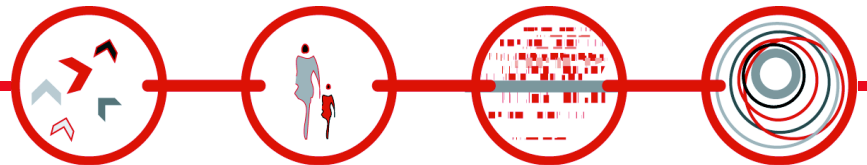
[anders.rafting@pts.se](mailto:anders.rafting@pts.se)



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# National Post and Telecom Agency in brief

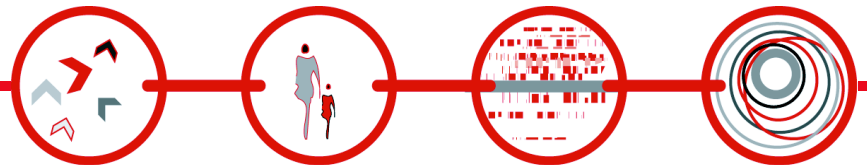
- Monitors the electronic communications
- Approximately 250 employees
- Turnover: € 67 million for 2006
- Financial model:
  - By direct charges, approximately € 25 million/y
  - Appropriations from the national budget for security measures + services for people with disability, approximately € 42 million/y



# Objectives

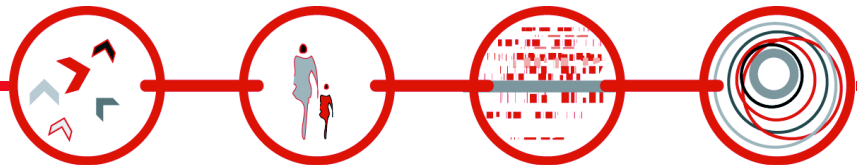
PTS has four overall objectives:

- Consumer interests in focus
- Efficient competition
- Efficient utilisation of resources
- **Secure communications**

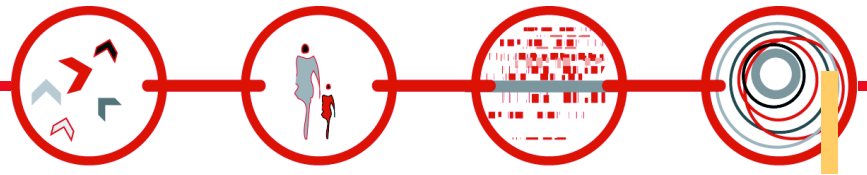
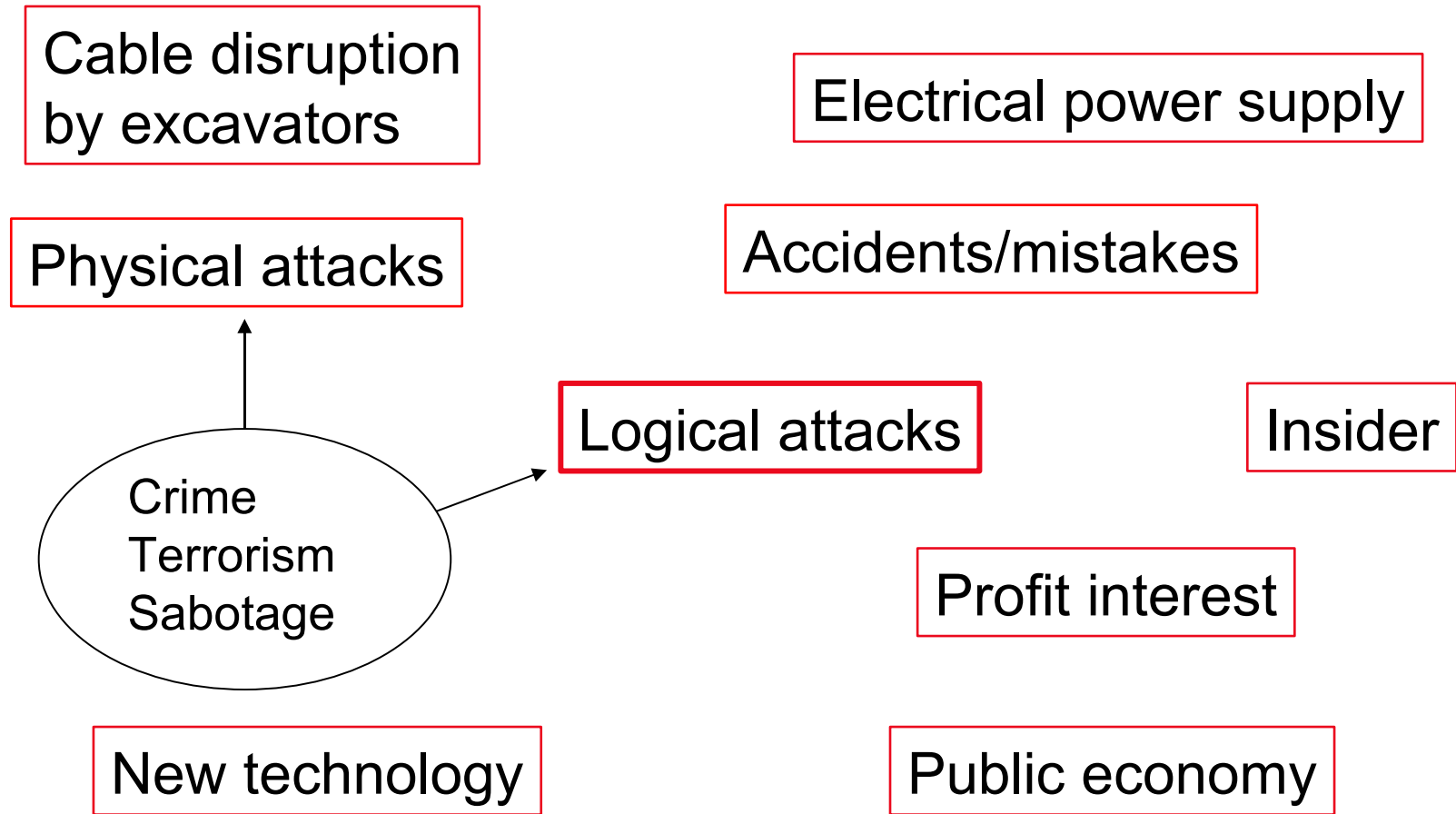


# Secure communications

- Everyone shall have access to secure communications
- Privacy protection shall be high
- Sweden shall have a robust infrastructure for communications services and an attractive exchange of information in IT security issues



# Threatening picture



# Assignment from the Government

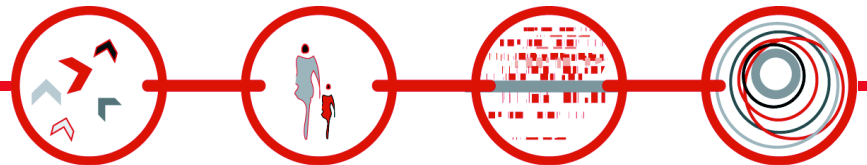
- Strategy to improve Internet security in Sweden,
- Delivery July 30, 2006, approved by Government in Dec -06

The strategy in English may be downloaded from:

[http://www.pts.se/Archive/Documents/EN/Strategy\\_Internet\\_security\\_2006\\_12\\_July\\_2006.pdf](http://www.pts.se/Archive/Documents/EN/Strategy_Internet_security_2006_12_July_2006.pdf)

- An action plan is included:

One of the 23 actions in the plan is: DNSSEC promotion

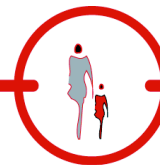


# DNS for organizations in the public sector .....some work to be done

## Observations

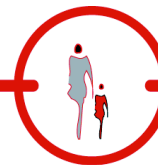
### Inaccuracy:

|                        |     |
|------------------------|-----|
| ▪ Too few nameservers  | 5   |
| ▪ No TCP               | 55  |
| ▪ Wrong glue           | 2   |
| ▪ cname as ns          | 1   |
| ▪ incorrect delegation | 19  |
| ▪ Just one operator    | 120 |
| ▪ No EDNS              | 21  |
| ▪ Recursion activated  | 84  |



## Used software:

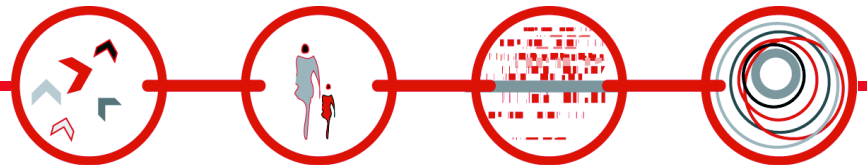
|                    |                                     |
|--------------------|-------------------------------------|
| ▪ NSD              | 4                                   |
| ▪ TinyDNS          | 3                                   |
| ▪ PowerDNS         | 2                                   |
| ▪ MyDNS            | 5                                   |
| ▪ ISC BIND 4       | 2                                   |
| ▪ ISC BIND 8       | 16                                  |
| ▪ ISC BIND 9       | 218 (out of which 50 with 9.2.2-P3) |
| ▪ Windows DNS NT   | 2                                   |
| ▪ Windows DNS 2000 | 19                                  |
| ▪ Windows DNS 2003 | 2                                   |





# So – what have we done so far...

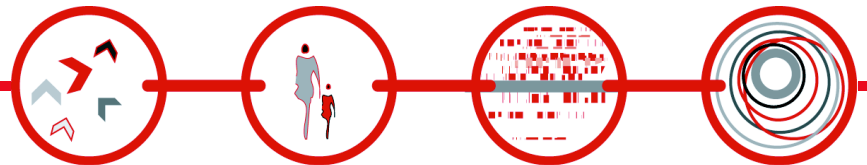
- Test of deployment and use of DNSSEC during 2006 – see documentation [http://www.pts.se/Archive/Documents/SE/sakerhet\\_domannamnssystem\\_2006\\_36\\_okt.pdf](http://www.pts.se/Archive/Documents/SE/sakerhet_domannamnssystem_2006_36_okt.pdf)
- Presentation of the tests at a local big Internet event in Stockholm Oct. -06
- Seminar together with the .se registry on DNSSEC for end-user deployment in Stockholm in Feb. -07
- We have met all the major operators in Sweden to try to convince them to deploy DNSSEC in resolvers



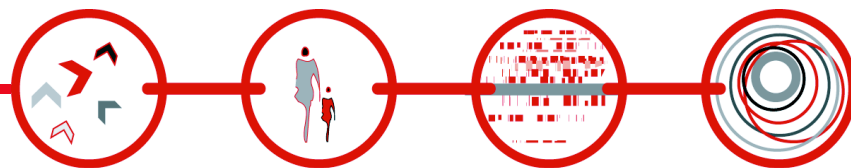
## ..more

- Plan to do stocktaking of the DNS in public sector as a basis for DNSSEC deployment
- To serve as a good example, PTS intends to be the first public organization in Sweden to sign its zone (pts.se)
- As a stimulating step PTS offer 100 h expert support to the first DNS-operator deploying DNSSEC in name servers (authoritative and/or resolvers)

Now, we are waiting for our nameserver operator to sign our zone – they are just working out how to do ...



# Thanks!



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