

PTS - new regulation on security measures



NETNOD SPRING MEETING 2016

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Background

- Recommendations since 2007.
- Society is increasingly dependent on functioning services + number of users is increasing + number of significant interruptions is not decreasing →
need for stricter regulation.

Three main causes of incidents

- Power outages
- Cable cuts
- Faults relating to change management, configurations

Scope

- Provisions concerning the technical and organisational measures that network and service providers shall take.
- Derives from EU regulation.



Provisions

- Three categories of provisions:
 1. General provisions for all providers
 2. Provisions for providers with knowledge of the number of active access points (*i.e.* not dark fiber providers etc.)
 3. Provision for mobile network and service providers

1. General provisions

- Security organisation (3)
- Documentation of assets and connections (4)
- Risk- and impact analysis (5-6)
- Incident management (7)
- Business continuity planning (8)
- Measures related to access and authorisation (13)
- Measures related to surveillance and preparedness (14)



Measures following risk assessment

- Physical and logical intrusion and other external impact (10)
- Weather related threats (11)
- Planned changes (tests and restoration plan) (12)
- + Any additional measure necessary (9)



2. Specific provisions – providers with knowledge of the number of active access points

- Classification of assets (15)

A $\geq 200\ 000$

B $\geq 30\ 000$

C $\geq 8\ 000$

D ≥ 2000

E > 0



Two important definitions

- **Asset;** means a function consisting of a delimited part of a communications network or communications service and which is necessary to provide such a network or service, and which is used to transmit, receive, process or store information
- **Active access point;** means point of access to a communications network or communications service that allows immediate use of communications services

Redundancy – assets (16-18)

- The provider shall, through redundant assets, ensure that assets in classes A and B which cease to function do not cause disturbance or interruption to a communications service.
- Class C → through redundant assets or redundant critical components.
- Class D → critical components in an asset in class D, which cease to function may not cause disturbance or interruption to a communications services that exceeds 12 hours (weekdays) and 18 hours (at other times).

Redundancy – connections (19-20)

- Redundant connections between all assets within and between the classes A, B and C
- Redundant connections between all assets within and between classes A and B must be appropriately separated geographically.
- Connections between an asset in class D and an asset in the classes A, B and C, which ceases to function may not cause disturbance to a service that exceeds 12 hours (weekdays) and 18 hours (at other times).

Backup power (21)

The provider shall with backup power systems ensure:

- 24 hours for assets in classes A and B;
- 8 hours for assets in class C in urban areas (with more than 8000 inhabitants);
- 12 hours for assets in class C in other areas;
- 2 hours for assets in class D in urban areas , and
- 4 hours for assets in class D in other areas.
- Requirements regarding testing and processes

3. Requirement for providers of mobile networks and services (22)

- Mobile base stations in cities (>8000 inhabitants.)
 - 1 h
 - Outdoor coverage
- Other areas
 - 4 h
 - Outdoor coverage
- The number of frequencies can be reduced as long as coverage is maintained

Exemptions (23)

- PTS may grant exemptions from redundancy and backup power requirements, if:
 1. inappropriate in relation to the positive impact
 2. other regulation prevents measure
 3. inappropriate in relation to assets/connections that will be removed
- The provider must take alternative measures to limit the effects of the prescribed measure not taken.

Enters into force on...

- June 10, 2020 for provisions relating to redundancy or backup power, unless there are changes made to the assets or backup power systems.
- January 1, 2016 otherwise.

The actual regulation...

...may be found at pts.se

as well as

our plan for upcoming supervision of the regulation.



Regulation on art4 (e-Privacy)

- Similar regulation on security measures relating to the protection of processed data.

Thank you!

- Any questions?
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