



Constituency building via essential services

Eric ROMANG

2021-10-14

TLP:WHITE

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

By Grand-Ducal decree of 9 May 2018.

For state administrations and services:

- ▶ **Single point of contact** for significant incidents;
- ▶ Provide **watch, detection, alert** and **reaction** services;
- ▶ Operate an **intervention team** taking charge of **prevention** and to **response** to incidents;
- ▶ Ensure the function of **National** and of **Military CERT**;

By Grand-Ducal decree of 9 May 2018.

- ▶ **National official point of contact** for national CSIRTs and foreign governments;
- ▶ **National official point of contact** for the collection and distribution of information relating to security incidents;
- ▶ **Relay of information** to sectoral CSIRTs or directly to the victim;

By Grand-Ducal decree of 9 May 2018.

The Governmental CERT is authorized, **subject to their agreement**, to extend its field of activity to other public institutions and authorities, **public entities** and **critical infrastructures**.

The bill **7670** will repeal the GDD, with no significant changes.

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

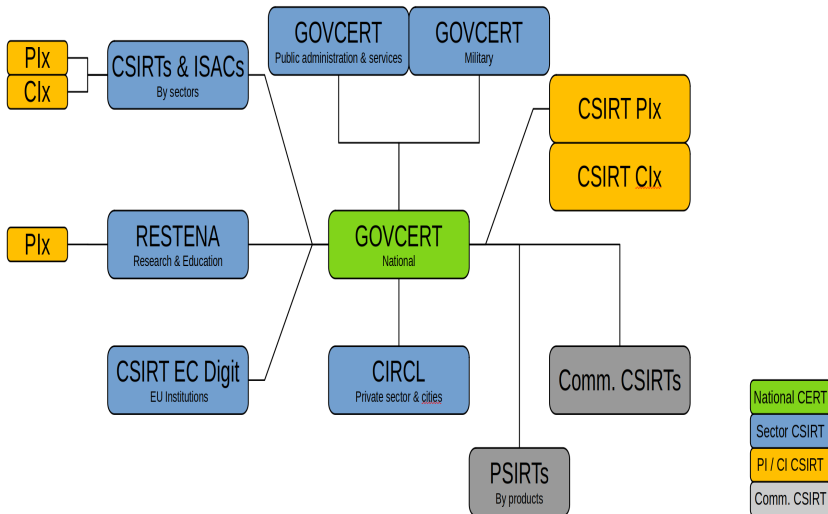
Vulnerability detection

Security Alerts

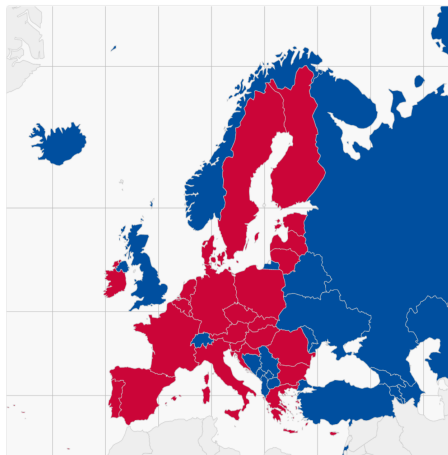
Support request

Conclusion

National CSIRT Network



European & International network



- **GOVCERT member of**
 - **EU CSIRT Network**
 - **Trusted Introducer (Accredited)**
- **EU CSIRT Network**
 - **Introduced by NIS Directive**
 - **39 members**
- **FIRST member (international)**

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

The foreseen Grand-Ducal decree expansion of constituency is formalized through collaboration agreements.

These collaboration agreements resume:

- ▶ Subscribed services;
- ▶ Service level agreements;
- ▶ Roles and responsibilities;
- ▶ Information exchange modalities;

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

GOVCERT currently offers various services to its constituents based on the “Security Incident Management Maturity Model” named **SIM3**.

GOVCERT is regularly audited and is certified.

SIM3 defines three precise processes:

- ▶ Incident prevention process;
- ▶ Incident detection process;
- ▶ Incident resolution process;

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

March 2021 Hafnium incident:

- ▶ Multiples constituents had severe impacts;
- ▶ Intervention team deployed in parallel at multiple constituents;

Lessons learned, for certain cases

- ▶ Risks not visible to constituents;
- ▶ Inappropriate cyber hygiene and resource allocation;
- ▶ Inaccurate contact details;

GOVCERT response

- ▶ Align constituency cyber posture with essential services;
- ▶ Collect and maintain accurate constituency contact details;

GOVCERT direct constituency is composed of:

- ▶ Luxembourg State civil service: 31.000 agents
- ▶ 64 public entities: 27.000 employees
 - ▶ 29 small (10 to 49 employees)
 - ▶ 17 medium (50 to 249 employees)
 - ▶ 18 large (> 250 employees)
- ▶ And critical infrastructures operators

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

Essential services are composed of:

- ▶ Vulnerability detection;
- ▶ Security alerts;
- ▶ Support request;

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

Vulnerability notification:

- ▶ Surveillance of defined product vulnerabilities;
- ▶ For defined vulnerability levels;

Vulnerability analysis:

- ▶ Vulnerability scan at defined frequency;
- ▶ On constituent internet facing services;

Results, constituents discover exposed on Internet

- ▶ unknown products;
- ▶ unknown critical vulnerabilities;

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

- ▶ Security alert **for relevant critical vulnerability exploited in the wild;**
- ▶ Security alert **for constituent detected as compromised;**
- ▶ Security alert **for leaked information detection;**
- ▶ Security alert **for event of interest to the entire constituency;**

Results, constituents discover

- ▶ Compromised computers in their network, compromised employees personal and providers computers;
- ▶ Unknown credentials data leaks

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

GOVCERT can support its constituency, in its capacities and means, when doubt or analysis is necessary on specific events (example: suspicious e-mail or document, suspicion of intrusion).

Table of Contents

Functions and missions

National, european and international networks

Collaboration model

SIM3 service model

Why Essential Services

Essential Services

Vulnerability detection

Security Alerts

Support request

Conclusion

Thank you
Thank you for your participation to Cyberday



CERT gouvernemental
Luxembourg

Comments or questions ?