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CYBERSECURITY in LAND REGISTRY

- case study SPAIN

CORPME: PUBLIC CORPORATION OF LAND, BUSINESS AND MOVABLE GOODS REGISTRARS OF SPAIN

www.registradores.org

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CYBERSECURITY in LR-SPAIN case study

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I-LR digitalization- Spain state of play

II-Regulatory framework

III-Cybersecurity in LR - Spain

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I-LR DIGITALIZATION - SPAIN STATE OF PLAY

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LAND REGISTRIES

DIGITAL INFO

PUBLIC CORPORATION OF REGISTRARS

SSI

DIGITAL INFORMATION

REM

> 600.000 transactions/ year

INFORMATION SYSTEM SERVICE

Tenure rights´ information digitally available since 2001

Fully digital procedure available since 2006

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II-REGULATORY FRAMEWORK

EU (Parliament and Council) **Directive** 14th Dec 2022:
measures for a high common level of cybersecurity across the Union
https://eur-lex.europa.eu/eli/dir/2022/2555

NATIONAL STRATEGY

-cross sectorial
-cross border
…cooperation

COOPERATION GROUP

-strategic cooperation
-information exchange

MEASURES IN VITAL SECTORS

supervision regimes

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) **Directive** 14th Dec 2022:

NATIONAL STRATEGY →
- -national computer security incident response team _CSIRT_
- -national authority on ciber security
- -national single contact point _SPOC_

COOPERATION GROUP

& CSIRTs network →

Information exchange To

- -prevent + detect + respond to → incidents
- -recover from
- -mitigate their impact
- -enhance level of cybersecurity—raising awareness
- -impede the threats to spread and
- -support defensive capabilities.

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) **Directive** 14th Dec 2022

MEASURES IN VITAL SECTORS

Obliged institutions:
-**esential**
-**important**

ANNEX I

-energy
-transport
-banking
-financial market infrastructures
-health
-drinking water
-waste water
-digital infrastructure
-ICT service management (business-to-business)
-Public administration
-space

ANNEX II

-postal and courier services
-waste management
-manufacture, production and distribution of chemicals
-production, processing and distribution of food
-manufacturing
-digital providers
-research

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) Directive 14th Dec 2022

AIMS

-to solve the shortcomings/deficiencies of the previous regulation
-to adapt it to current needs and
-to prepare it for the future

MEANS

-coordinating security frameworks
-cooperating at union & international level
-cybersecurity risk-management measures & reporting obligations
-jurisdiction criteria based on territory (*exceptions)
-registration of entities in a Register created and managed by ENISA
-information sharing
-supervision and enforcement
-the power to adopt delegated acts is conferred on the Commission

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) Directive 14th Dec 2022

coordinating security frameworks →

-national strategies
-national competent authorities: -national single point of contact (SPOC)
-computer security incident response team/-s (CSIRTs)
-European Union Agency for Cybersecurity (ENISA)
-Coordinated vulnerability disclosure (by ENISA)
-European vulnerability database

cooperating at union & international level →

-Cooperation Group
-CSIRTs network
-international cooperation through international agreements
-European cyber crisis liaison organisation network (EU-CyCLONe)
-building knowledge: -Report on the state of cybersecurity in the Union
-peer reviews

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) **Directive** 14th Dec 2022

cybersecurity risk-management measures & reporting obligations

-ensure **essential & important entities** take **appropriate and proportionate measures**
-Union level coordinated security **risk assessments of critical supply chains**
-reporting obligations
-use of **European cybersecurity certification scheme**
-without imposing or discriminating in favor of the use of a particular type of technology
- encourage use of **European and international standards** & technical specifications

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) **Directive** 14th Dec 2022

To highlight:

key elements to be implemented

-incidents management
-security of supply chains
-management &
-difusion of vulnerabilities
-cryptography
-when appropriate, coding

information flow of significative incident

-initial notification or early warning

-intermediate notification

-final report

list of minimum measures

-warnings
-binding instructions
-order to cease conducts/inform /implement recommendations
-administrative fines

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II-REGULATORY FRAMEWORK

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EU (Parliament and Council) Directive 14th Dec 2022

NIS2 Directive linked & coordinated with other EU initiatives:

-Regulation (EU) 2022/2554 of the European Parliament and the Council of 14 December 2022 on digital operational resilience for the financial sector

-Directive 2022/2557, 14 December 2022, on the resilience of critical entities

-…

Cyber security as an ongoing project

by 17 October 2027 and every 36 months thereafter…

17 October 2024: Member States shall adopt and publish the measures

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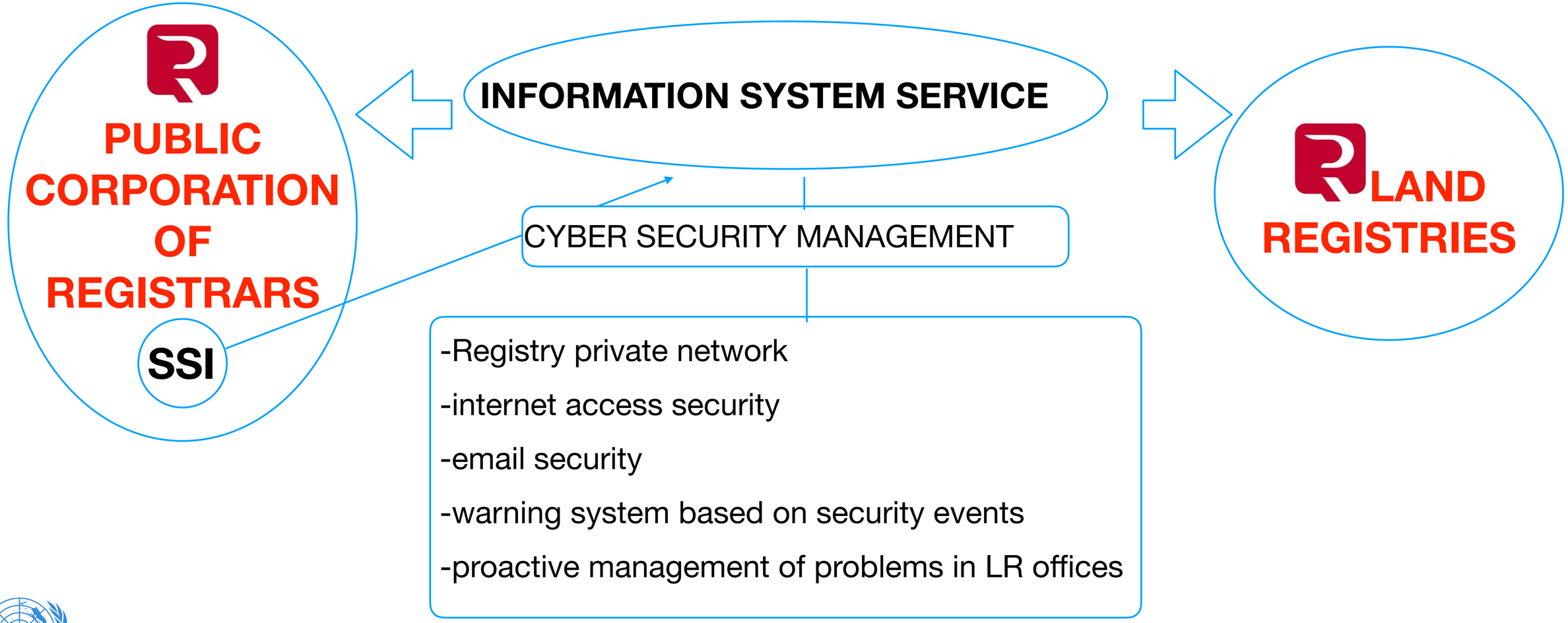
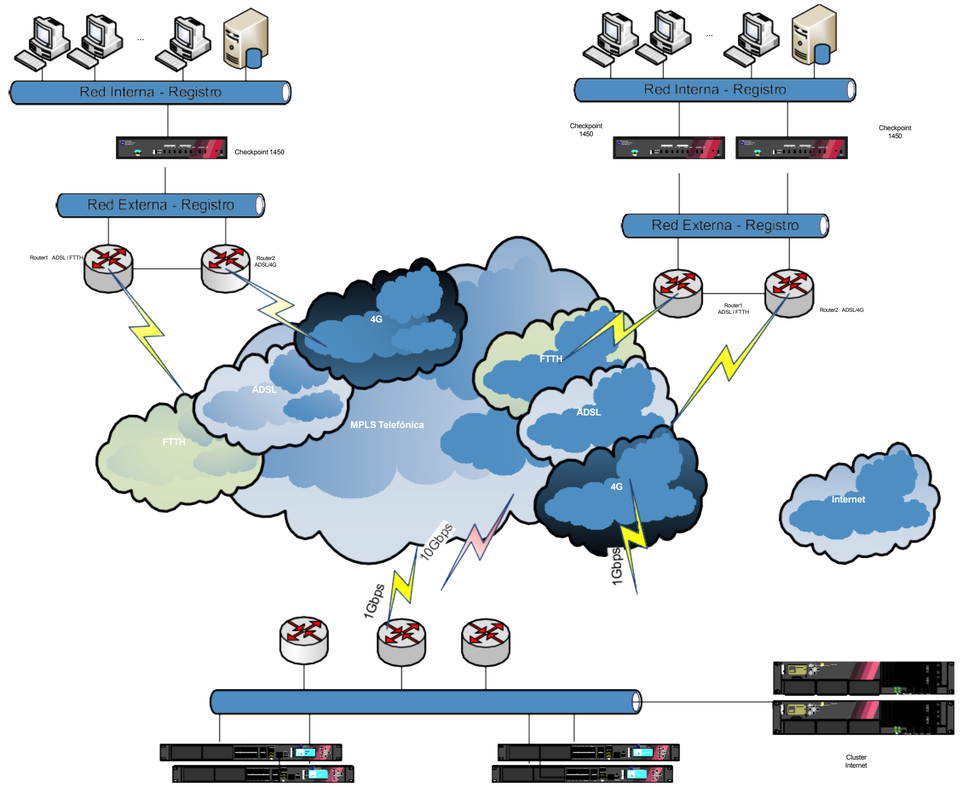
III-CYBERSECURITY in LR- SPAIN



III-CYBERSECURITY in LR- SPAIN

REGISTRY PRIVATE NETWORK



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III-CYBERSECURITY in LR- SPAIN

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INTERNET ACCESS SECURITY

-network traffic filtering

-categorisation and filtering of URLs

-categorisation and filtering of applications by risk levels

-advanced threat protection

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III-CYBERSECURITY in LR- SPAIN

EMAIL SECURITY

-perimeter firewalls

-Cisco system

-Message delivery control —global IP reputation database

-Own and dedicated Antivirus & AntiSpam

-Suspicious behavior detection module

-Custom filters

-Analysis and rewriting of the links

III-CYBERSECURITY in LR- SPAIN

WARNING SYSTEM BASED ON SECURITY EVENTS

LAND

REGISTRIES

III-CYBERSECURITY in LR- SPAIN

PROACTIVE MANAGEMENT OF PROBLEMS IN LR OFFICES

-incident management console in the registries' hardware
-monitoring availability of necessary services
-management of updates
-local office network, servers & personal equipment measures:

-secure local network & controlled physical access to network devices
-updated operating systems
-updated antivirus/antimalware software
-next-generation security applications to detect and prevent attacks, including "zero-day"
-backups, local and outsourced
-self awareness
-SSI advise

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Thank you very much for your attention!

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