Estonian Cyber Security Strategy

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Director of Cyber Security

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Estonia

660 million digital signatures

95% taxes declared online

43% of votes cast online

1 in 50 medical prescriptions on paper

Estonia
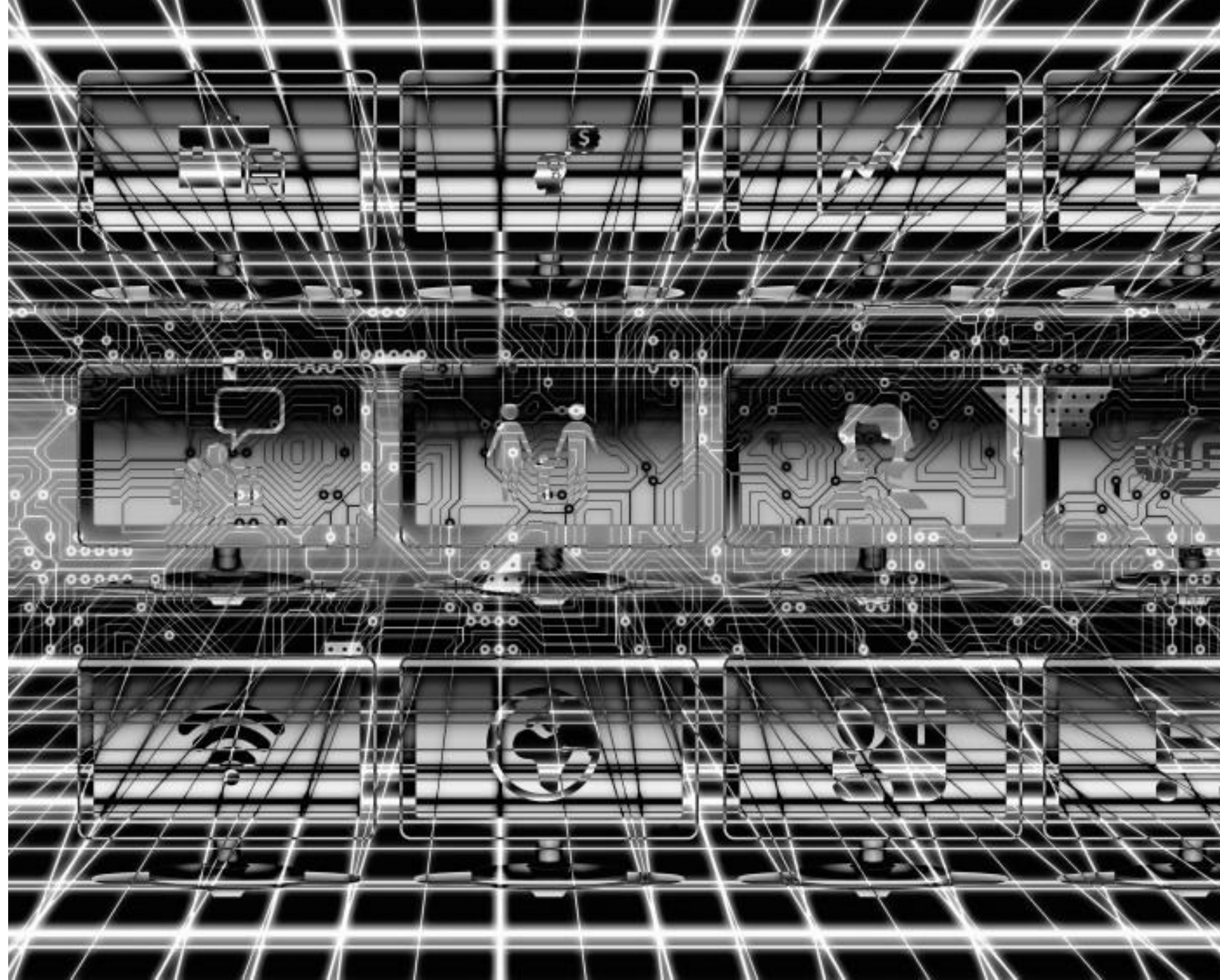
Digital public services

Trust & confidence

Secure architecture
- E-identity
- X-road

Reputation

Community

Changing landscape

1990- 2000 limited impact

2000-2007 growing cyber crime

2007-2013 impact to national security

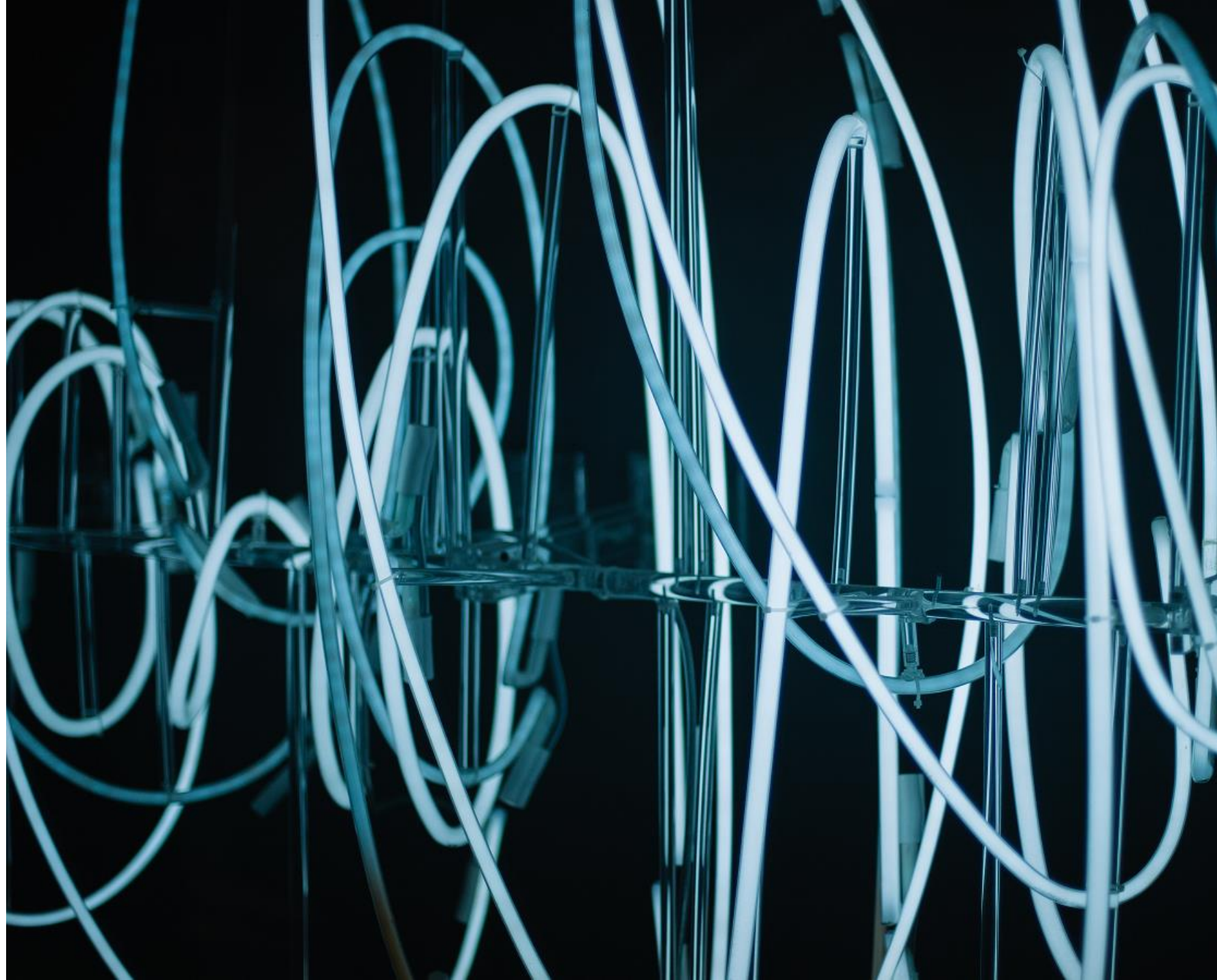2013 - ... direct impact and threat to daily life

NCSS

2019- 2022 focus on prevention

New standard for network and information security

National Cyber Security Centre

Preventional programs

Resilience & continuity

REPUBLIC OF ESTONIA
GOVERNMENT

National Security Council

National Cyber Security Council

REPUBLIC OF ESTONIA
MINISTRY OF THE INTERIOR

REPUBLIC OF ESTONIA
MINISTRY OF ECONOMIC AFFAIRS
AND COMMUNICATIONS

REPUBLIC OF ESTONIA
MINISTRY OF DEFENCE

Politsei- ja Piirivalveamet

KAITSEPOLITSEIAMET

REPUBLIC OF ESTONIA
INFORMATION SYSTEM AUTHORITY

EESTI KAITSEVÄGI
ESTONIAN DEFENCE FORCES

VÄLISLUUREAMET
Estonian Foreign Intelligence Service

Police

Crime Prevention
Criminal Investigation

Internal Security Service

Counterintelligence

Investigation of national security incidents

Information System Authority

Cyber Security Branch

CERT: 24/7 CSOC & Incident Response

CIIP, Risk Control & Advisory

R&D

Defence Forces

Military CIRC →
Cyber Command (2018)

Intelligence Service

Classified networks

How do we protect?

Shared responsibility
every agency counts

Baseline security standards
ISKE,
ISO 27001

Awareness
CERT 24/7, intel,
information sharing

How do we protect?

Community systematic engagement

Collective brain synchronization (exercises, trainings)

Cyber hygiene awareness

RIA

Community

Protection of critical infrastructure
baseline standards

Screening of Estonian internet ecosystem

Large scale cyber incidents
central coordination authority

Preparedness
plans, excercises

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