INFORMED GOVERNANCE

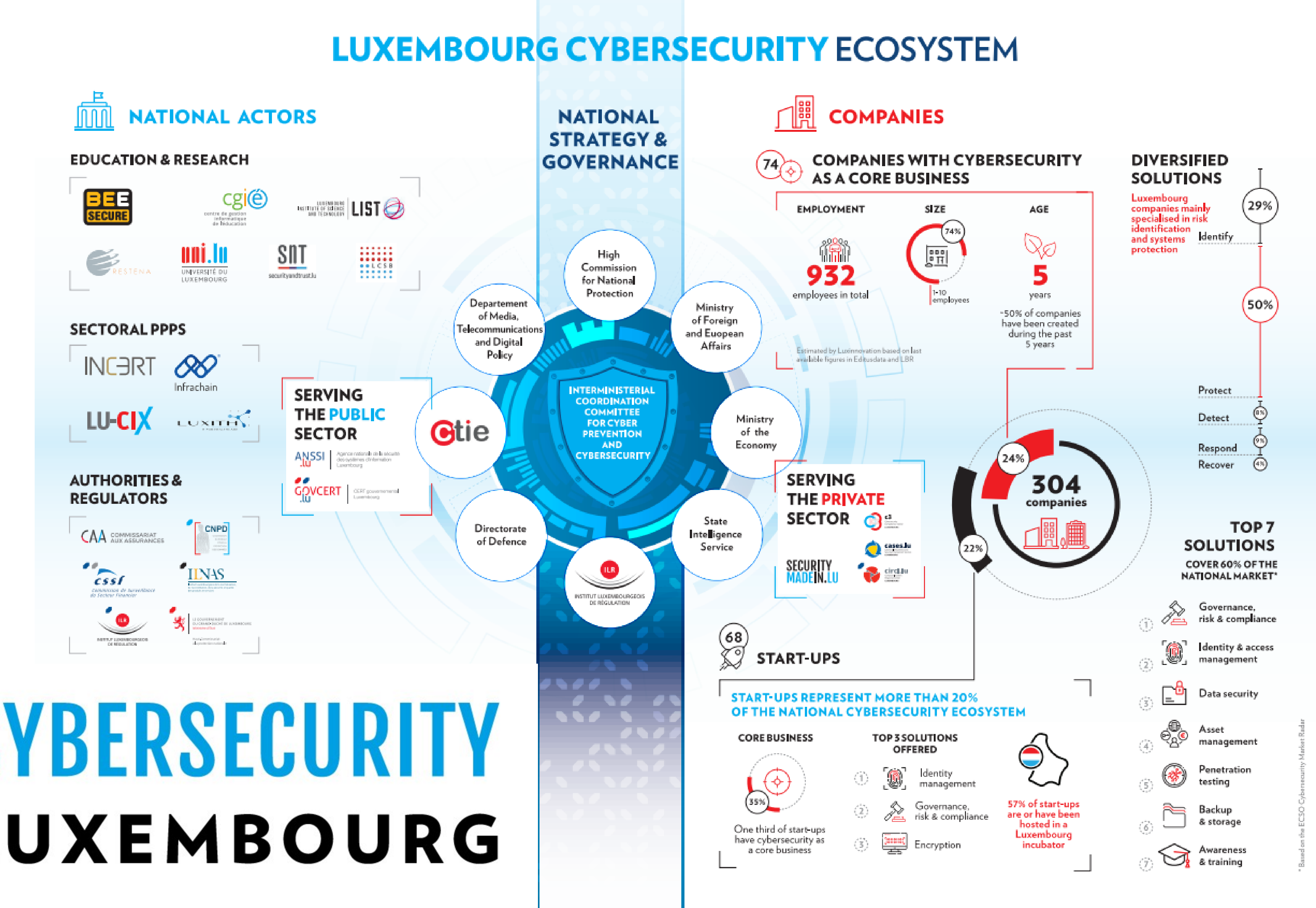
through

Information Sharing and Analysis Centers

Steve Muller

LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de l'Économie

https://securitymadein.lu
https://cybersecurity.lu



LUXEMBOURG CYBERSECURITY ECOSYSTEM

NATIONAL ACTORS

EDUCATION & RESEARCH

BEE SECURE
cgié centre de gestion informatique de l'éducation
LUXEMBOURG INSTITUTE OF SCIENCE AND TECHNOLOGY LIST
RESTENA
uni.lu UNIVERSITÉ DU LUXEMBOURG
SnT securityandtrust.lu
LCSB

SECTORAL PPPS

INCERT
Infrachain
LU-CIX
LUXTRUST

AUTHORITIES & REGULATORS

CAA COMMISSARIAT AUX ASSURANCES
CNPD
cssf Commission de Surveillance du Secteur Financier
ILNAS
ILR INSTITUT LUXEMBOURGEOIS DE RÉGULATION
LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG

SERVING THE PUBLIC SECTOR

ANSSI .lu Agence nationale de la sécurité des systèmes d'information Luxembourg
GOVCERT .lu CERT gouvernemental Luxembourg
CTIE

NATIONAL STRATEGY & GOVERNANCE

INTERMINISTERIAL COORDINATION COMMITTEE FOR CYBER PREVENTION AND CYBERSECURITY

High Commission for National Protection

Ministry of Foreign and European Affairs

Ministry of the Economy

State Intelligence Service

INSTITUT LUXEMBOURGEOIS DE RÉGULATION

Directorate of Defence

Departement of Media, Telecommunications and Digital Policy

COMPANIES

74 COMPANIES WITH CYBERSECURITY AS A CORE BUSINESS

EMPLOYMENT

932 employees in total

SIZE

74% 1-10 employees

AGE

5 years

~50% of companies have been created during the past 5 years

Estimated by Luxinnovation based on last available figures in Editusdata and LBR

DIVERSIFIED SOLUTIONS

Luxembourg companies mainly specialised in risk identification and systems protection

SERVING THE PRIVATE SECTOR

68 START-UPS

START-UPS REPRESENT MORE THAN 20% OF THE NATIONAL CYBERSECURITY ECOSYSTEM

CORE BUSINESS

35%

One third of start-ups have cybersecurity as a core business

TOP 3 SOLUTIONS OFFERED

1. Identity management
2. Governance, risk & compliance
3. Encryption

57% of start-ups are or have been hosted in a Luxembourg incubator

TOP 7 SOLUTIONS

COVER 60% OF THE NATIONAL MARKET*

1. Governance, risk & compliance
2. Identity & access management
3. Data security
4. Asset management
5. Penetration testing
6. Backup & storage
7. Awareness & training

* Based on the ECSO Cybersecurity Market Radar

CYBERSECURITY
LUXEMBOURG

Cybersecurity ecosystem is mature; **many other sectors are not**

data leaks

cyber attacks

awareness

supply chain

privacy

ransomware

More resilience – but how?

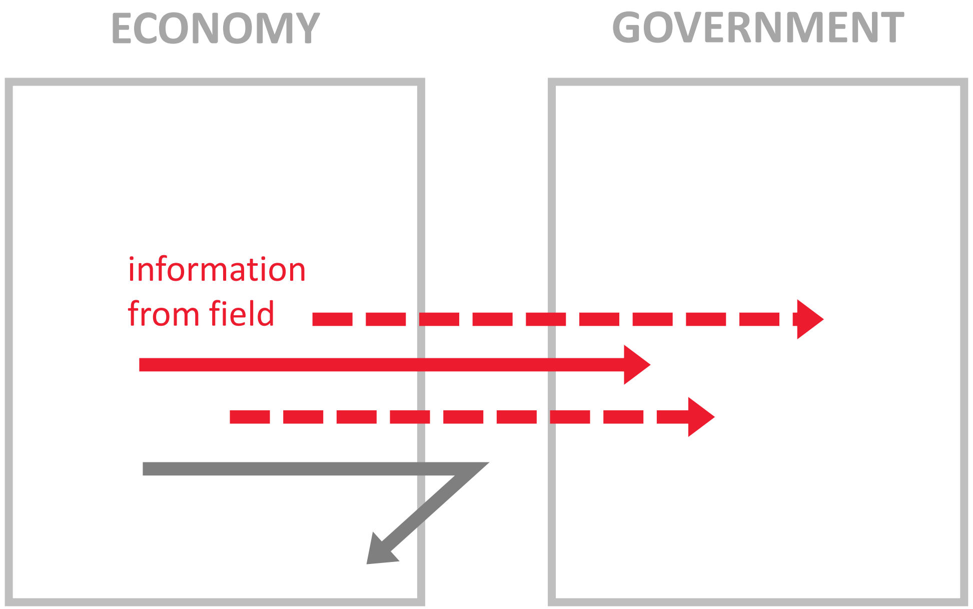
Option 1 – Regulation

one-way information flow
→ no advantage for economy

obligation
→ half-hearted, “checklist security”

creates additional burden
→ difficult for SME

fear of sanctions
→ reluctant to share
→ limited view for government



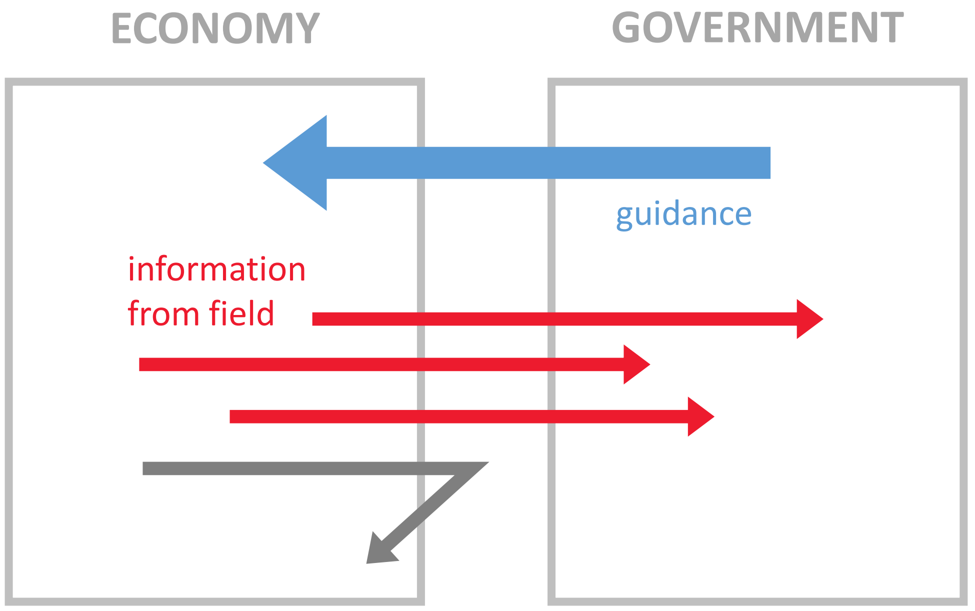
More resilience – but how?

Option 2 – Informed governance

bidirectional flow
→ get something in return

added-value
→ the more you share, the better the results

comparable benchmarks
due to homogenous information

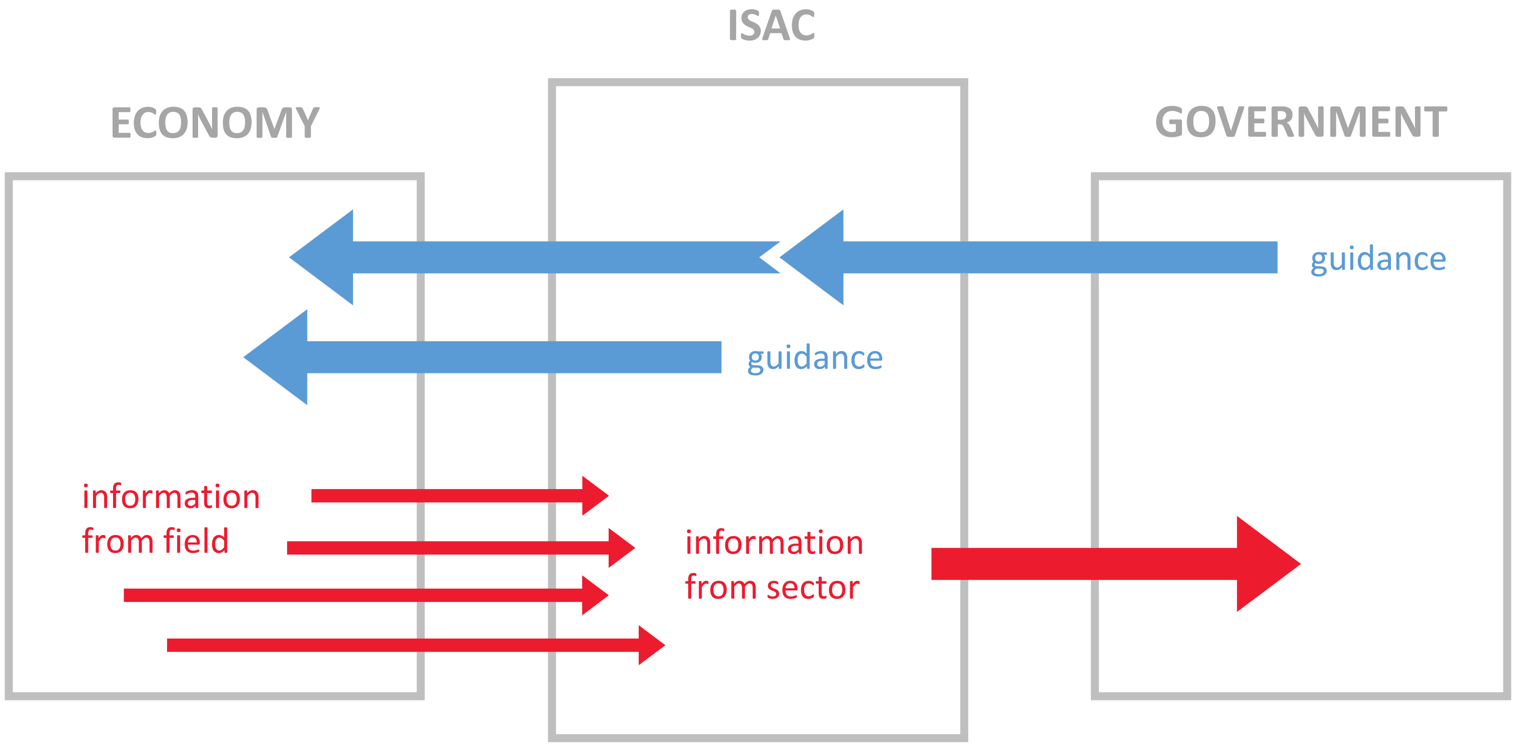


More resilience – but how?

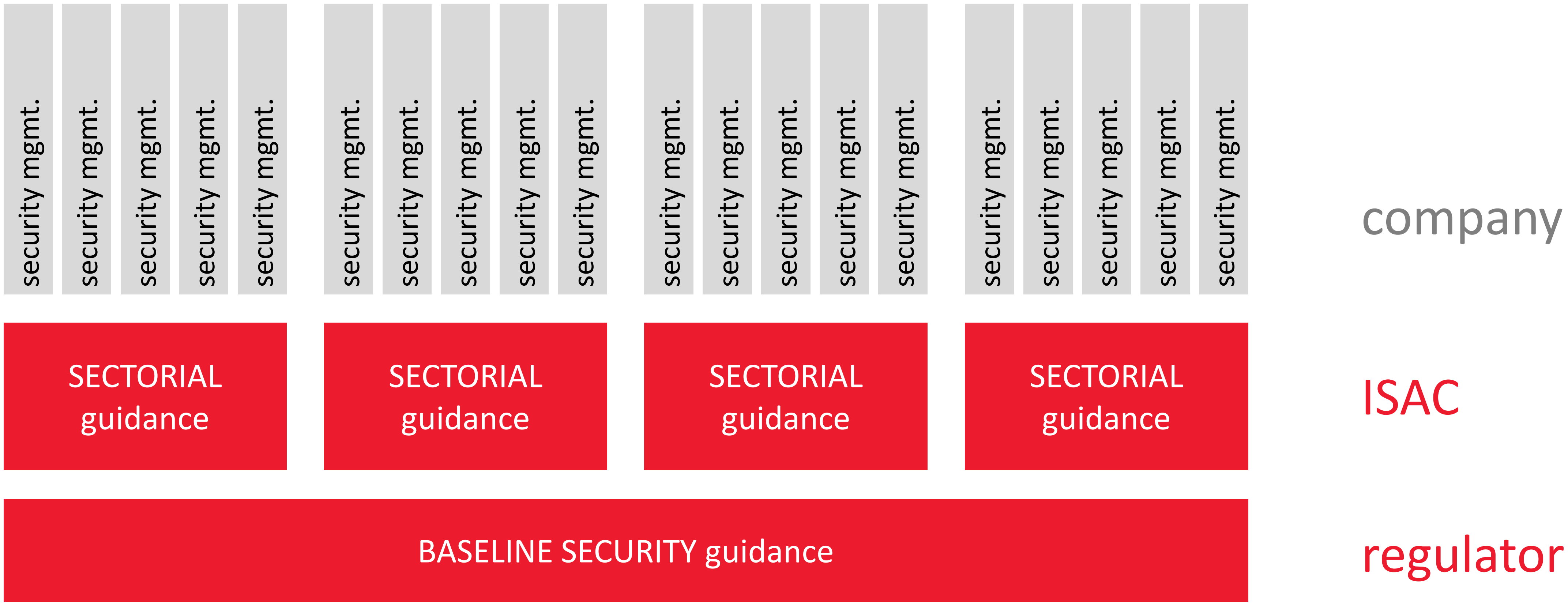
Option 3 – Informed governance through ISAC

trusted environment
→ useful information is often
sensitive/confidential
→ no fear of sanctions

sector-specific
→ more tailored,
more detailed



Informed gouvernance:
Cybersecurity on 3 layers



security mgmt.

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company

SECTORIAL guidance

SECTORIAL guidance

SECTORIAL guidance

SECTORIAL guidance

ISAC

BASELINE SECURITY guidance

regulator

What makes an ISAC **trustworthy**?

nominative
membership

code of
conduct

secure
communication

free
speech

Types of participants

Members

- cybersecurity representatives of the sector
- government
  (for support)

Invitees

- cybersecurity experts
- law enforcement
- intelligence
- academia

Excluded

- ~~marketers~~
- ~~regulators~~

Missions of an ISAC:
Information Sharing and Analysis Center

SHARE

between peers

- current threats
- knowledge (how to)
- risk estimation
- tips & tricks

ANALYSE

for the sector + regulator

- sector-specific risks
- risk estimation
- security guidance

↓

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