

# Cybersecurity for Critical Infrastructure

Kaspersky Industrial CyberSecurity



kaspersky



# Why do we need Industrial Cybersecurity solutions?



## Digitalization

is a focus for the majority of mature industrial enterprises because OT is the fuel for:

- Quality control
- Process automation
- Revenue growth
- Safety



## Consequences

Disruption of production processes due to cyber attacks or staff mistakes

- Attack surface increases
- No & cost of incidents
- Strick legislation & policies
- Risks for supply chain



## OT challenges

There are barriers to implement and maintain OT cybersecurity tolls

- Compliance with legislation
- IT-OT conflict
- Skills gap, staff shortage
- Deployment, integration and management inefficiencies



Bring on the future

## OT security technology provider must:

Be transparent and a long-term **enterprise** grade supplier

Have the **right mix** of IT, OT, and IoT expertise and ecosystem offering

Provide a **platform** solving multiple challenges

Offer extended detection, **prevention** and secure by design products

Ensure **compliance** with standards, regulations and compatibility with ICS

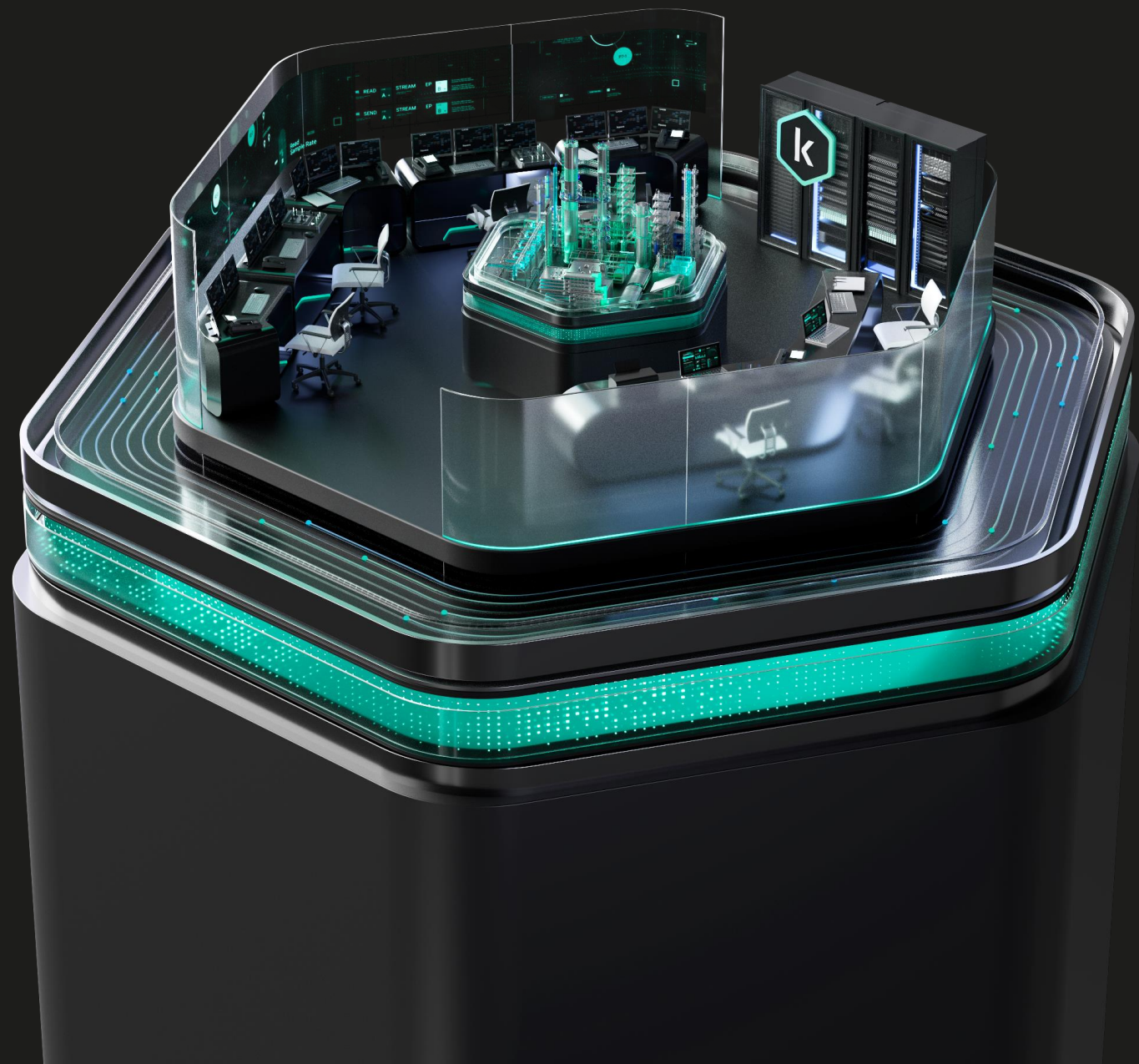
**TEST**

**IEC** 62443-4-1

Prove the **efficacy** and **safety** of its technologies



Kaspersky expertise





# Kaspersky at a glance

## IT



**28Y**

On cybersecurity market



**5000+**

Highly-qualified specialists



**200+**

Countries and territories where we operate



**450K+**

Amount of new malware samples daily

## OT



**15Y**

OT cybersecurity experience



**300+**

OT cybersecurity cybersecurity experts



**1000+**

Industrial customers in track record



**IEC/ISO**

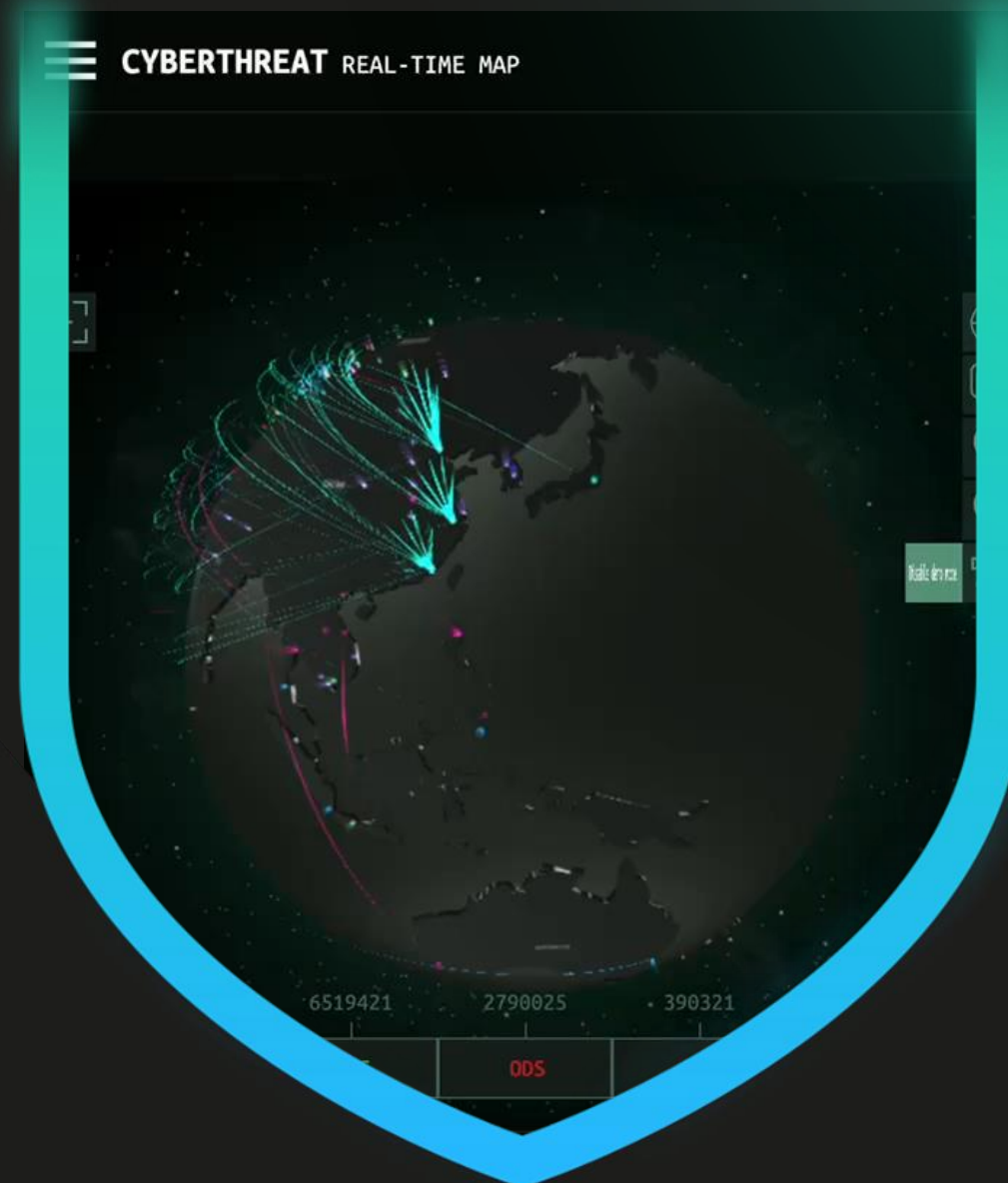
Industry-leading audits





# Today, Russia faces the most cyber attacks of any country

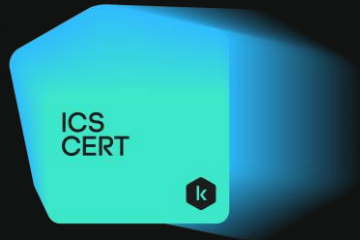
This unique position provides us with unparalleled awareness of global cyber trends, combining expertise from both East and West.





# ICS CERT expertise

7



World-top experts in ICS threat and vulnerability.

Real-life experience.

Authorized to assign CVE identifiers to vulnerabilities and publish CVE records.



## TRAINING

Empower your workforce with cybersecurity knowledge

Industrial Cybersecurity Awareness

Fuzzing-Based Vulnerability Research

Digital Forensics

Incident Response in ICS

IoT Vulnerability Research



## CONSULTING

Ensure best practices and customer experience

Assessment of Product Security Maturity

Product Vulnerability Assessment

Methodology and Frameworks Assessment

Product Design Assessment

Policies and Procedures Development

Regulation and Standards





# Kaspersky AI Technology Research Center

## For more than 20 years

Kaspersky has been empowering its solutions with ML / AI technologies, enabling us — and our customers — to stay ahead of whatever cyberattackers unleash.

## Key focus areas



Incorporating AI and machine learning into our cybersecurity products and services



Developing guidelines for the secure use of AI and participation in the AI Alliance



Tracking AI-driven threats to uncover emerging attack vectors



Researching generative AI technologies with the help of our in-house LLM infrastructure



Conducting research on AI algorithm security and developing principles for responsible AI use



Applying AI approaches to detect anomalies and ensure continuity of manufacturing processes



# IEC 62443 Coverage



## Level 3 to IEC 62443 4-1

KICS was the first in the world in its category to reach the ML-3 maturity level



## 88% requirements of IEC-62443 3-3

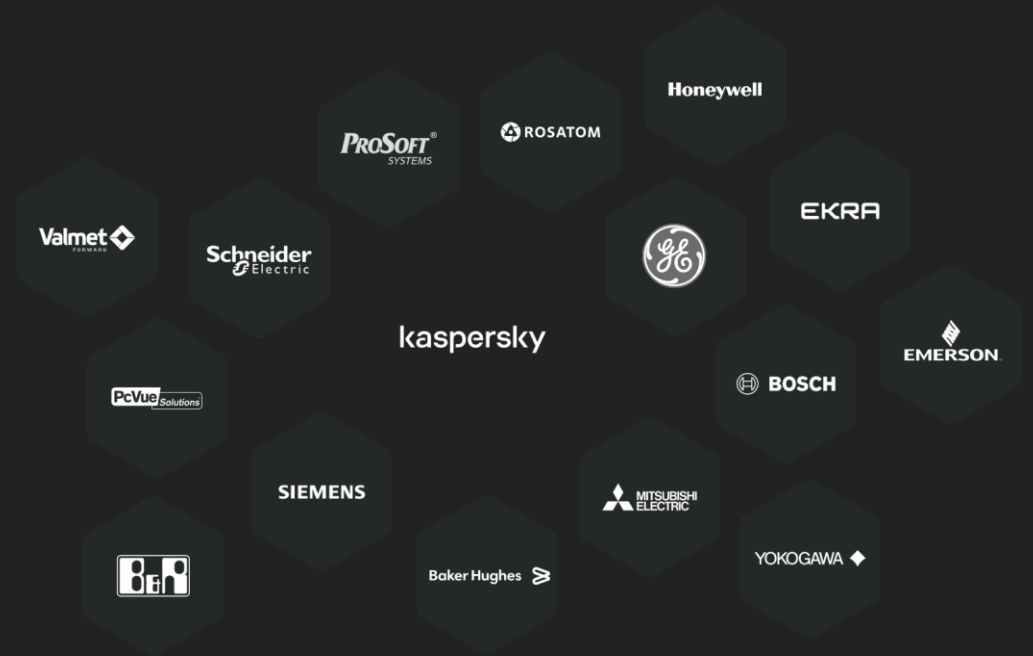
covered by KICS and organizational measures (all requirements and all security levels)



Extensive program of  
testing the solution with  
leading automation  
system vendors

## Compatible

240+ tested systems from 70+ vendors





Serving the largest  
industrial enterprises  
worldwide from all  
major verticals

## Trusted

Results to date

270k+

Licenses shipped

1000+

Industrial customers

420+

Networks protected

230

Deployment partners



kaspersky

# Kaspersky solutions for OT



[kaspersky.com/enterprise-security/industrial-solution](https://kaspersky.com/enterprise-security/industrial-solution)



# Kaspersky Industrial Cybersecurity Platform (KICS)

KICS for Networks

A proprietary protocol-level solution for **Network Traffic Analysis (NTA)**, detection and response

KICS for Nodes

Industrial-grade, tested and certified **Endpoint Protection, Detection and Response** software

Portable Scanner

Non-intrusive secure **scanning & auditing** for **isolated or legacy machines** and devices







360° situational awareness and risk exposure control for critical infrastructure

Unify workflows and strengthen internal alignment across OT, SecOps, IT and business

Gain the advantages of data sovereignty and transparent ownership costs

Simplify internal, regulatory and industry-specific compliance journey

Benefit from seamless integration with Kaspersky's best-in-class IT cybersecurity portfolio





# Kaspersky OT CyberSecurity

IT – OT Convergence



Kaspersky Next  
XDR Expert



Kaspersky  
Industrial  
CyberSecurity

Native XDR



**for Nodes**  
Endpoint protection,  
detection and  
response



**for Networks**  
Network traffic  
analysis, detection  
and response



Kaspersky  
Machine Learning  
for Anomaly  
Detection



Kaspersky  
Antidrone



Kaspersky  
Automotive  
Secure Gateway



Kaspersky  
SD-WAN

Industry 4.0  
& IIoT

Monitoring  
& Control

IT systems



Kaspersky  
Thin Client

Automation & Protection

Technological process

## Expertise

Discovery



Kaspersky  
ICS Security  
Assessment

Response



Kaspersky  
Incident  
Response

Managed  
Protection



Kaspersky  
Managed  
Detection  
and Response

## Knowledge

Cyber  
Hygiene



Kaspersky  
Security  
Awareness

Threat  
Intelligence



Kaspersky  
ICS Threat  
Intelligence

Training



Kaspersky  
ICS CERT  
Training

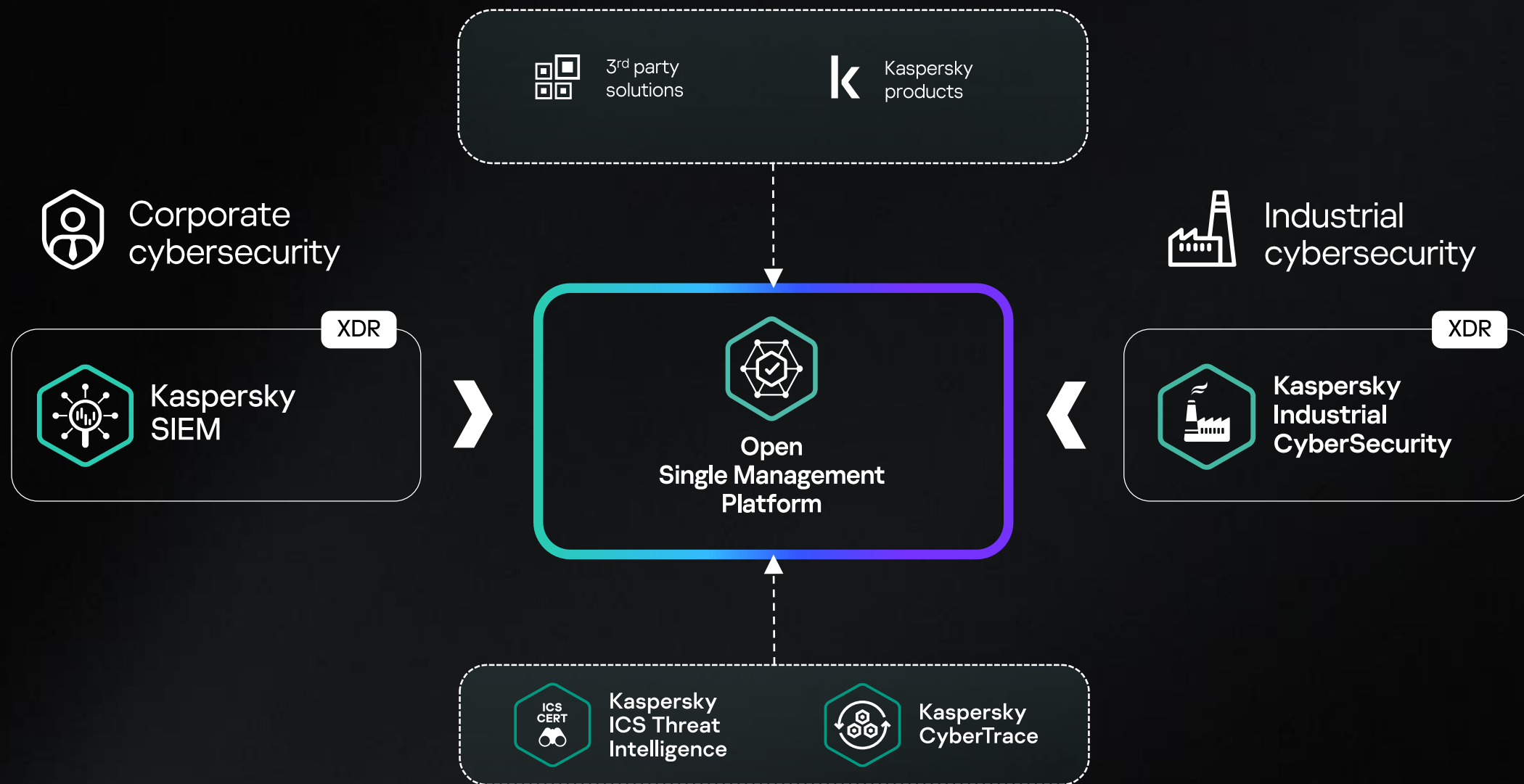
Learn more





# Convergence of IT and OT environments

16





### 3 Business & enterprise

Security  
operations  
center



Kaspersky Next  
XDR Expert

The unparalleled  
expertise powering  
our portfolio

Expertise  
Centers



[Learn more](#)

### 2 Monitoring & control



Kaspersky  
Industrial CyberSecurity  
for Nodes

Site  
supervisory  
control



HMI



SCADA



Historian

agent-based asset inventory



hardware inventory

security audit



Standalone  
equipment



Installation-free KICS for Nodes  
portable scanner for isolated  
systems and bring-in devices

### 1 Automation & protection



Kaspersky  
Industrial CyberSecurity  
for Networks

KICS for Networks passively ingests network traffic from:

- Own network sensors
- SD-WAN collectors
- Endpoint agents
- Portable scanner

passive monitoring (SPAN)

network response

Substation  
automation  
system



BCU

Switch

active polling  
of OT assets



IED

agentless polling of network devices

Main process  
control  
system



MLAD

Switch

endpoint  
response



EWS



DCS  
controller

alerts from hosts  
and network

DCS  
controller

Secondary  
remote  
sites



SD-WAN



RTU

OVAL-based  
configuration control

compliance audit via active  
polling or passive monitoring



IIoT

### 0 Technological process



## Solution architecture and use cases

Advanced assets  
management and with AI  
profiling

Extended detection and  
response

Continuous security  
audit

## Integrations

+ Next XDR Expert for  
complex protection

+ MLAD for anomaly  
detection and predictive  
maintenance

+ SD-WAN for  
distributed infrastructure



Confidential



Multiply support teams

Difficult to prescribe

Multiply cross-solution failure points

Difficult to deploy

Difficult to maintain

Extensive training on each individual product

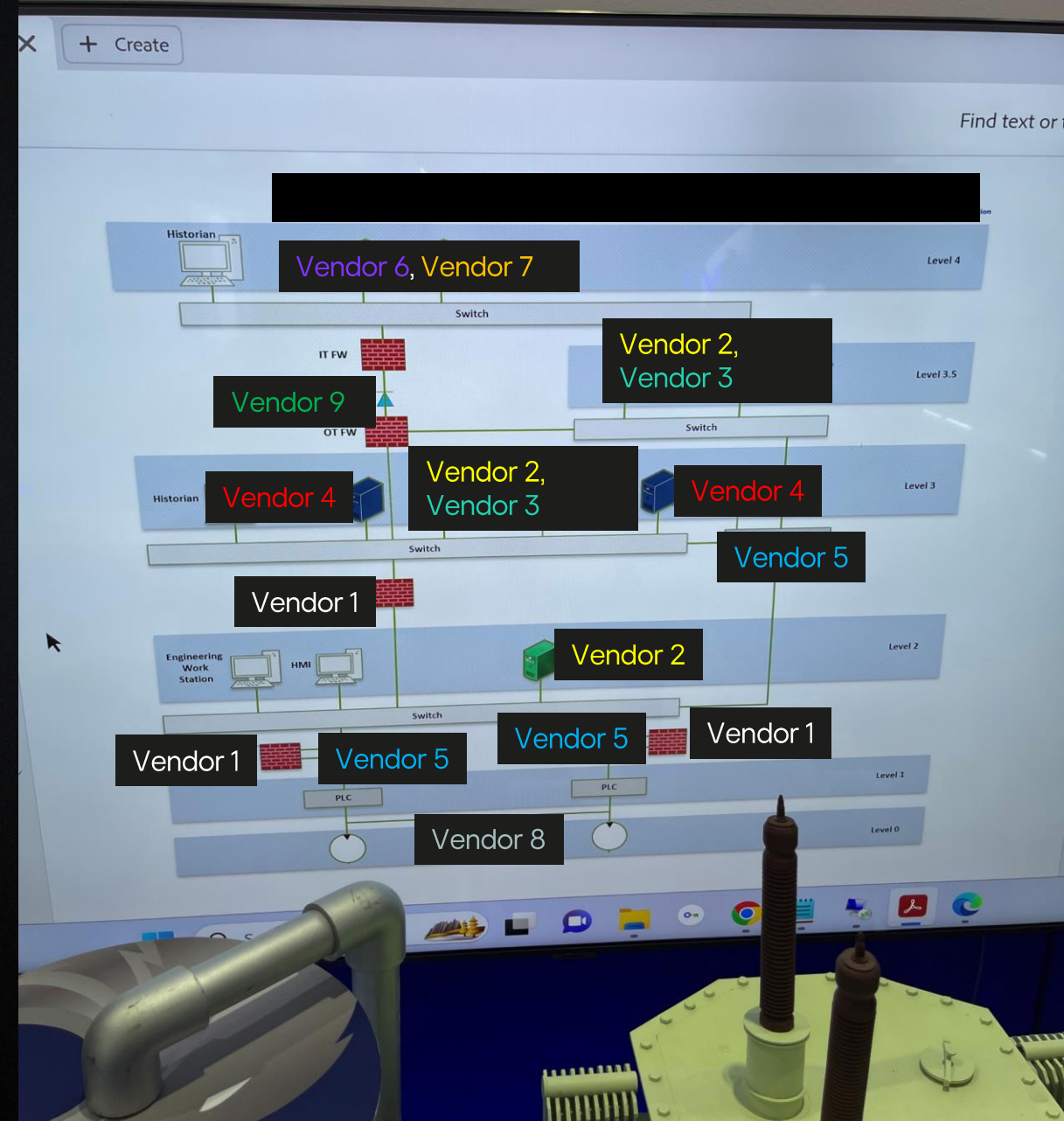
Difficult to troubleshoot

Sophisticated licensing

60%

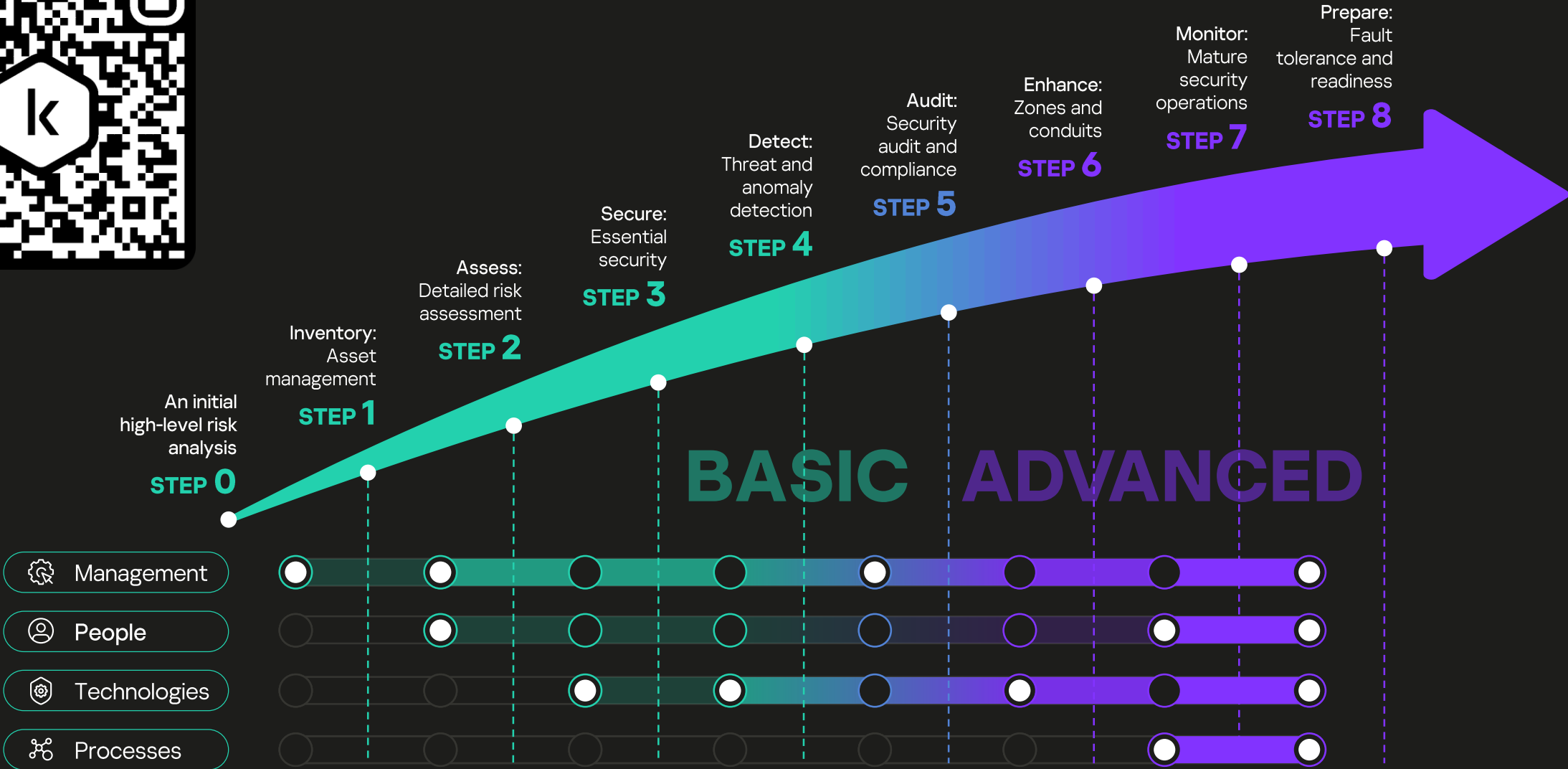
Prefer to obtain  
comprehensive solution  
from a single vendor\*

\* Sing OT with Purpose-built Solutions, 2025 © VDC Research





# Transition from being a solution supplier to a trusted advisor to unlock greater value





## KICS PLATFORM FEATURES

### KICS FOR NETWORKS

### OT XDR

### KICS FOR NODES

- |                              |                           |                                 |
|------------------------------|---------------------------|---------------------------------|
| Asset Management             | Advanced Asset Management | Endpoint Protection             |
| Threat and Anomaly Detection | Security Audit            | Endpoint Detection and Response |
| Ecosystem and Integrations   | Detection and Response    | Portable Scanner                |

### Technologies



### PILOTING

### Expertise



# Industrial cyber resilience

8 steps to secure your enterprise

## 1 Inventory: asset management

- 1.1 Outline objectives
- 1.2 Prepare for discovery
- 1.3 Use active pooling
- 1.4 Map network
- 1.5 Inventory
- 1.6 Monitor continuously

IEC 62443-3-3 SR 1.1\*; SR 1.2; SR 1.3; SR 7.8^

IEC 62443-3-3 ZCR 1.1; ZCR 2.2

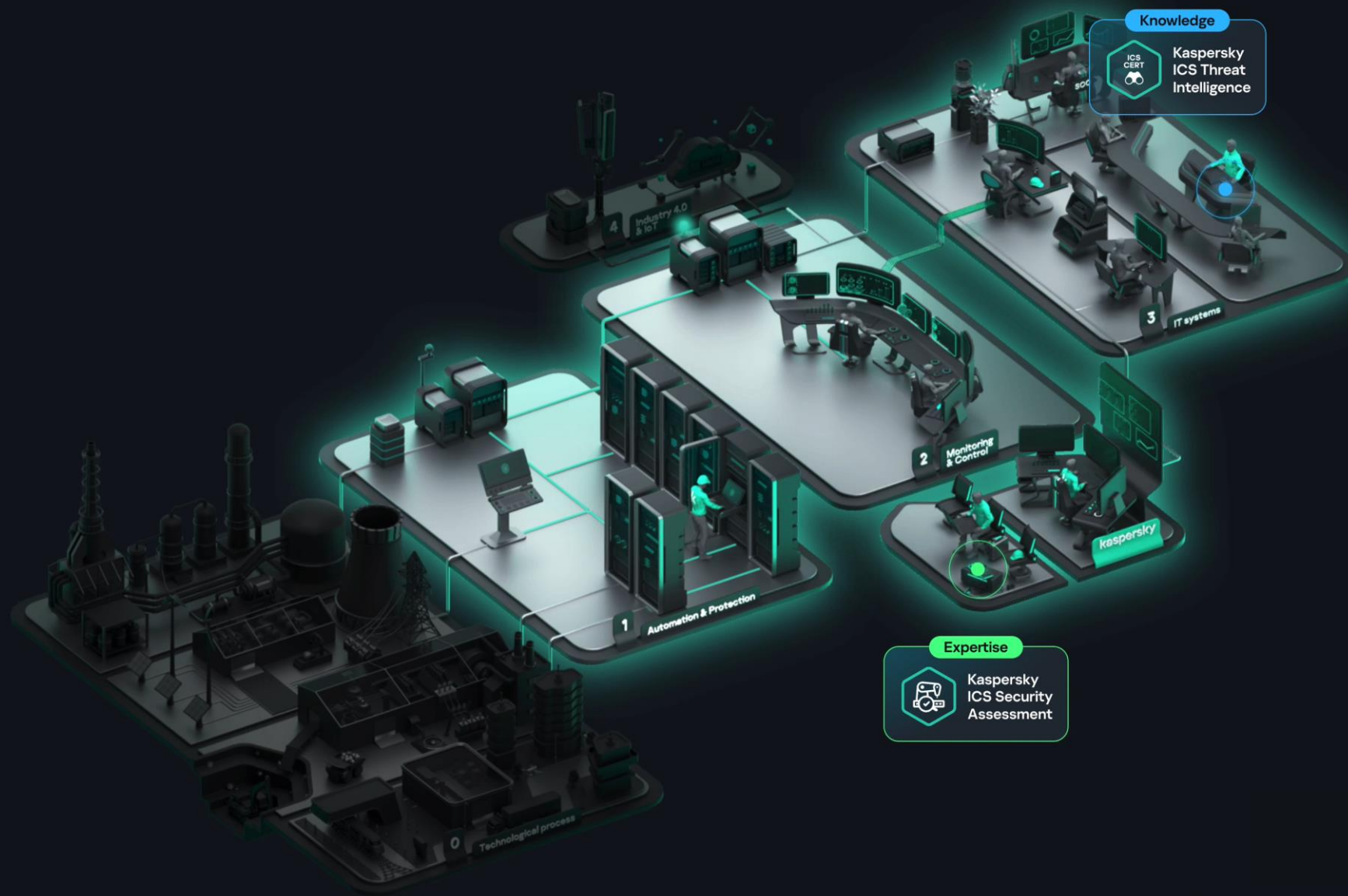
NIS2 Article 21: p. 2 (d, g, l), p. 3

NIST SP 800-82r3 6.1.1: Asset Management



# Industrial cyber resilience

8 steps to secure your enterprise



- 1
- 2 **Assess:** detailed risk evaluations
  - 2.1 Identify vulnerabilities
  - 2.2 Assets threats
  - 2.3 Analyze impacts
  - 2.4 Risk prioritization
  - 2.5 Consider compliance
- 3
- 4
- 5
- 6
- 7
- 8

IEC 62443-3-3 ZCR: 3.\*; 5.1; 5.2; 5.3; 5.4; 5.5; 5.8; 5.10; 5.12^; 5.13^

NIS2 A. 21: p. 2 (a, f); A. 22: p. 1

NIST SP 800-82r3 3.3.6; 6.1.3



## KICS PLATFORM FEATURES

### KICS FOR NETWORKS

### OT XDR

### KICS FOR NODES

 Asset Management	 Advanced Asset Management	 Endpoint Protection
 Threat and Anomaly Detection	 Security Audit	 Endpoint Detection and Response
 Ecosystem and Integrations	 Detection and Response	 Portable Scanner

### Technologies



Kaspersky  
Industrial CyberSecurity  
for Nodes

### Expertise



Kaspersky  
Professional  
Services

# Industrial cyber resilience

8 steps to secure your enterprise

1

**Secure:** essential protection

2

3.1 Harden and configure your endpoints

3

3.2 Configure baseline of system integrity

4

3.3 Deploy EPP

5

3.4 Implement access control

6

7

8

IEC 62443-3-3

SR 1.1\*; SR 1.2; SR 1.3; SR 7.8^

IEC 62443-3-3

ZCR 1.1; ZCR 2.2

NIS2

Article 21: p. 2 (d, g, l), p. 3

NIST SP 800-82r3

6.1.1: Asset Management

• Technologies

• Expertise

• Knowledge



## KICS PLATFORM FEATURES

### KICS FOR NETWORKS

### OT XDR

### KICS FOR NODES

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### Technologies

Kaspersky Unified Monitoring and Analysis Platform

### Technologies

Kaspersky Machine Learning for Anomaly Detection

### Technologies

Kaspersky Industrial CyberSecurity for Networks

# Industrial cyber resilience

8 steps to secure your enterprise

1

**Detect:** spot threats and anomaly

2

4.1 Implement toolset

3

4.2 Gather data

4

4.3 Establish baseline behavior

5

4.4 Seek anomalies

6

4.5 Remediate

7

4.6 Be futureproof

8

IEC 62443-3-3

SR 1.1\*; SR 1.2; SR 1.3; SR 7.8^

IEC 62443-3-3

ZCR 1.1; ZCR 2.2

NIS2

Article 21: p. 2 (d, g, l), p. 3

NIST SP 800-82r3

6.1.1: Asset Management

• Technologies

• Expertise

• Knowledge



KICS PLATFORM FEATURES

KICS FOR NETWORKS

Asset Management

Threat and Anomaly Detection

Ecosystem and Integrations

OT XDR

Advanced Asset Management

Security Audit

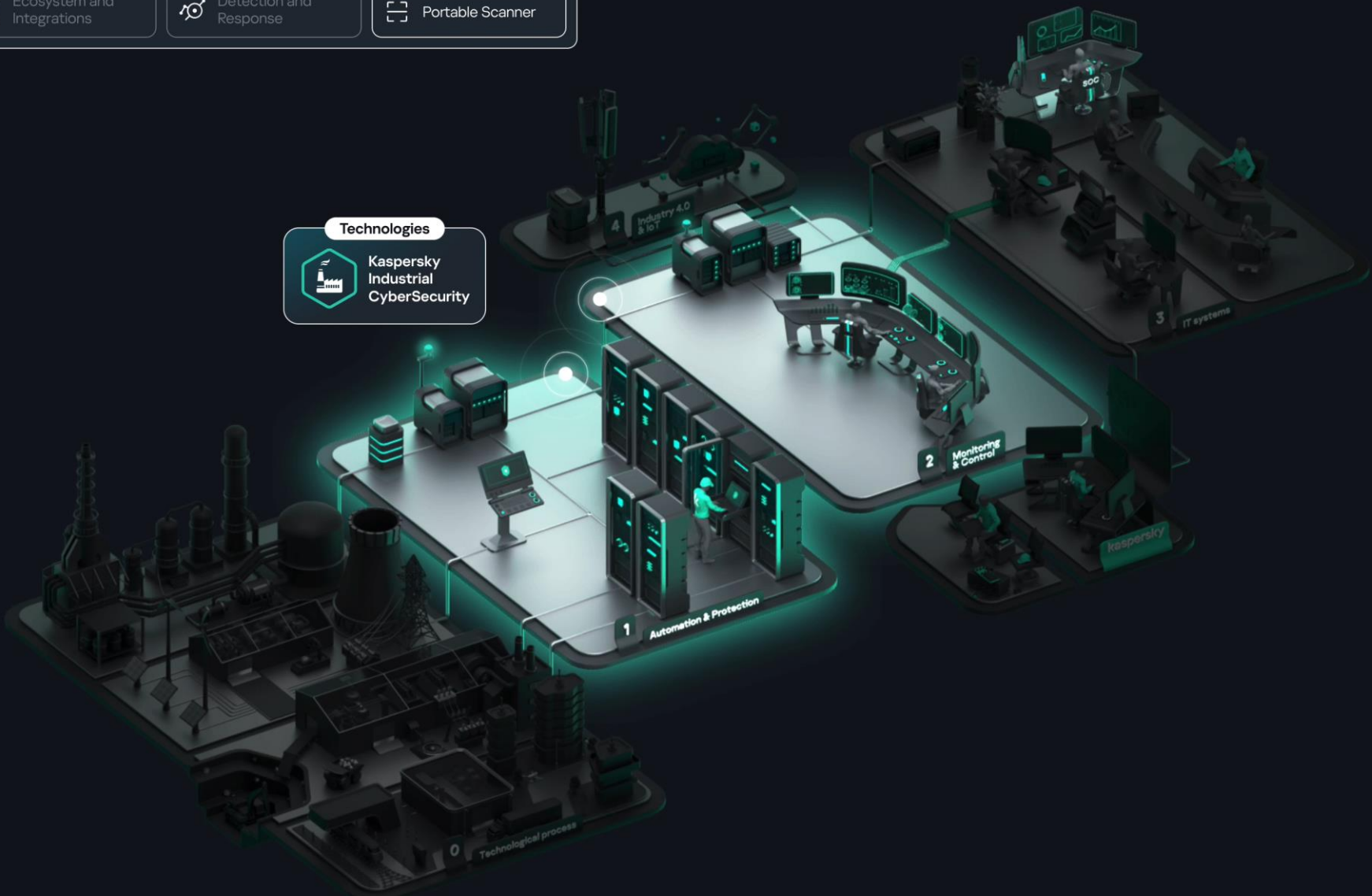
Detection and Response

KICS FOR NODES

Endpoint Protection

Endpoint Detection and Response

Portable Scanner



# Industrial cyber resilience

8 steps to secure your enterprise

- 1

Audit: compliance and vuln.
- 2

5.1 Identify frameworks
- 3

5.2 Implement technical controls
- 4

5.3 Hold risk assessment workshops
- 5

5.4 Conduct security audits
- 6
- 7
- 8

IEC 62443-3-3	SR 1.1*; SR 1.2; SR 1.3; SR 7.8^
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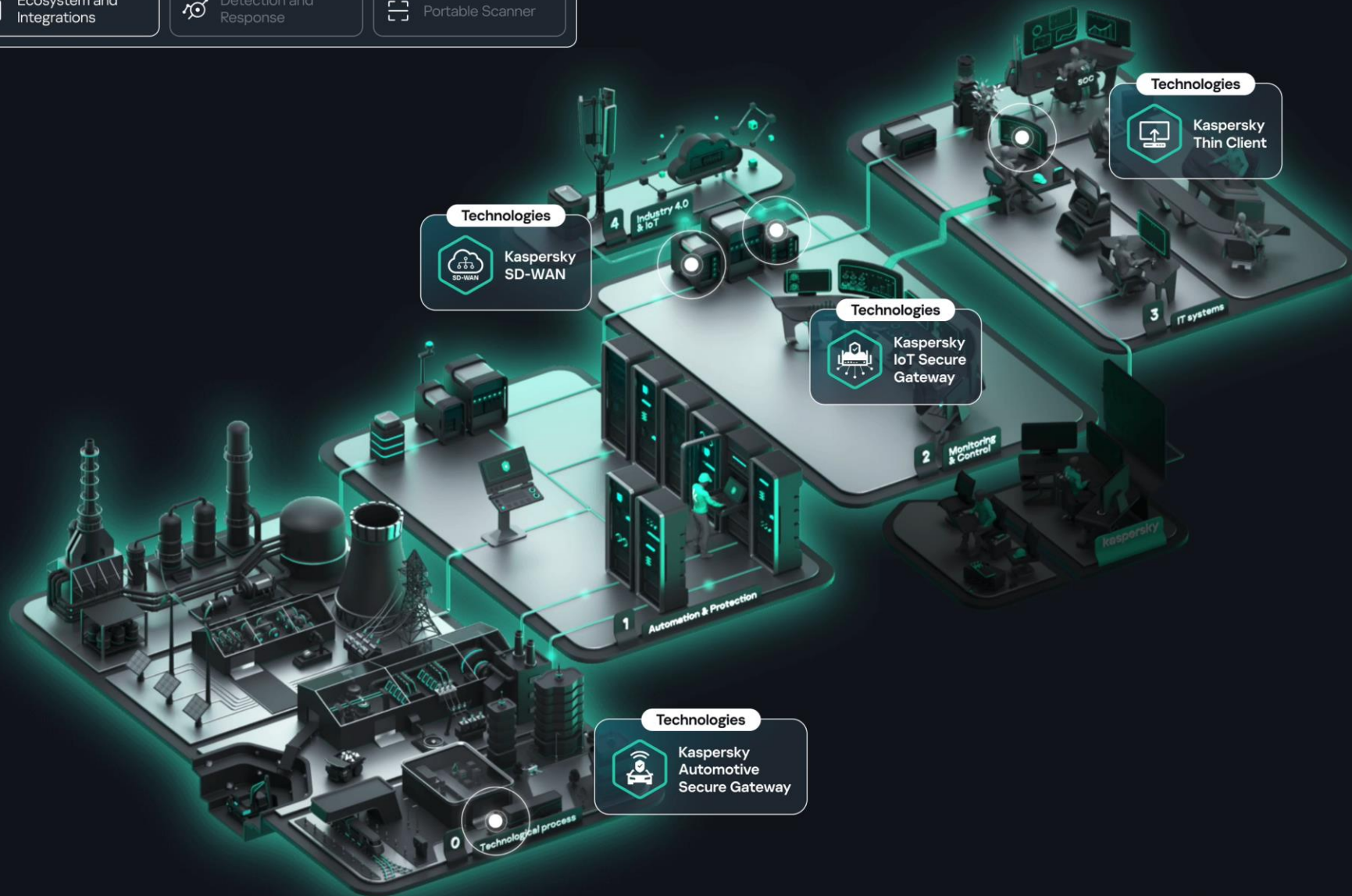
## KICS PLATFORM FEATURES

### KICS FOR NETWORKS

### OT XDR

### KICS FOR NODES

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# Industrial cyber resilience

8 steps to secure your enterprise

1

**Enhance:** zones and conduits

2

6.1 Continuously improve network segmentation

3

6.2 Map zones

4

6.3 Model conduits

5

6.4 Implement and configure

6

6.5 Test your setup

7

8

IEC 62443-3-3

SR 1.1\*; SR 1.2; SR 1.3; SR 7.8^

IEC 62443-3-3

ZCR 1.1; ZCR 2.2

NIS2

Article 21: p. 2 (d, g, l), p. 3

NIST SP 800-82r3

6.1.1: Asset Management

• Technologies

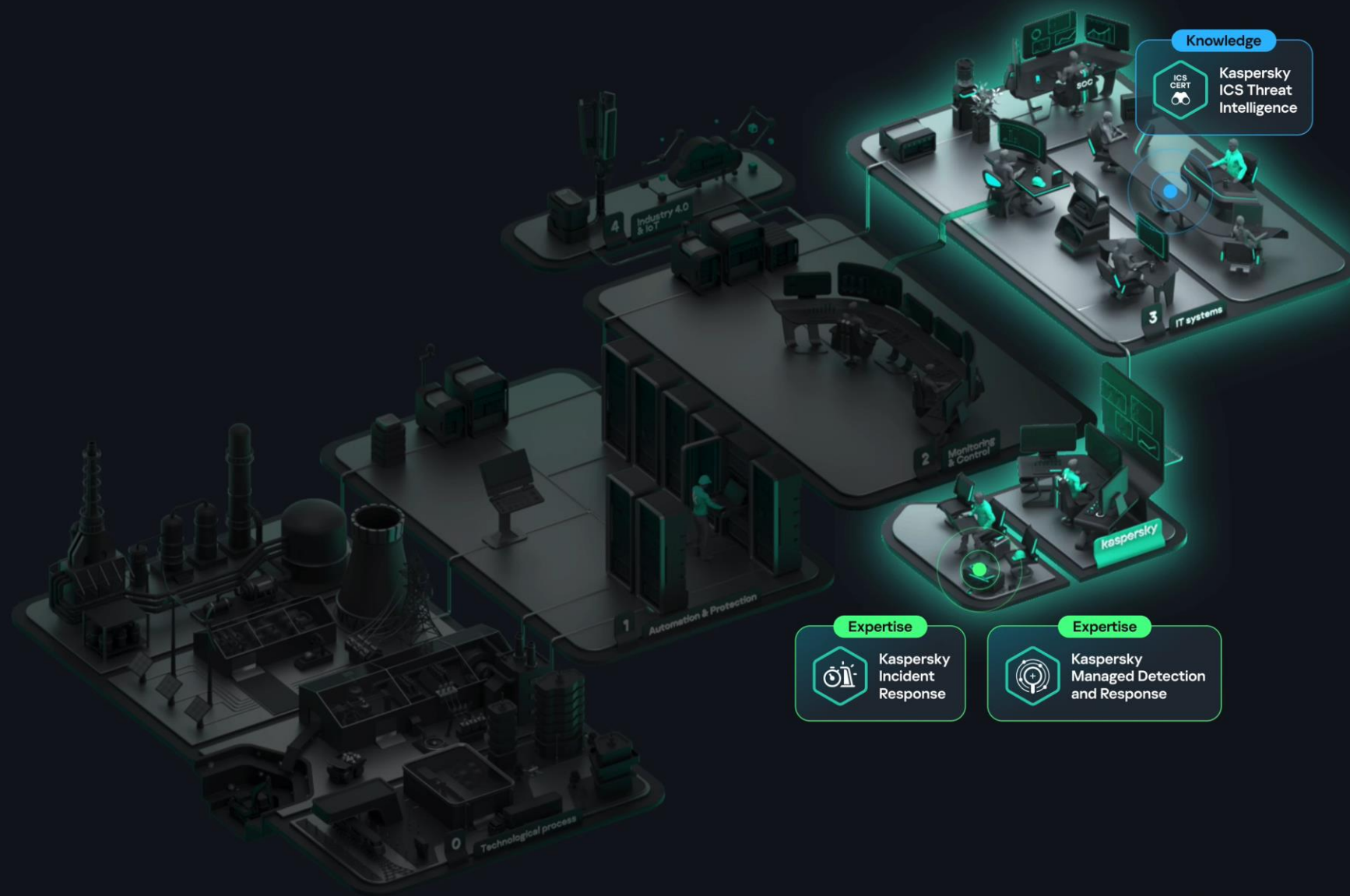
• Expertise

• Knowledge



# Industrial cyber resilience

8 steps to secure your enterprise



1 **Monitor:** mature sec. operations

2 7.1 Set SOC goals

3 7.2 Develop SOC

4 7.3 Grow human skills

5 7.4 Form IR team

6 7.5 Refine IR plan

7

8

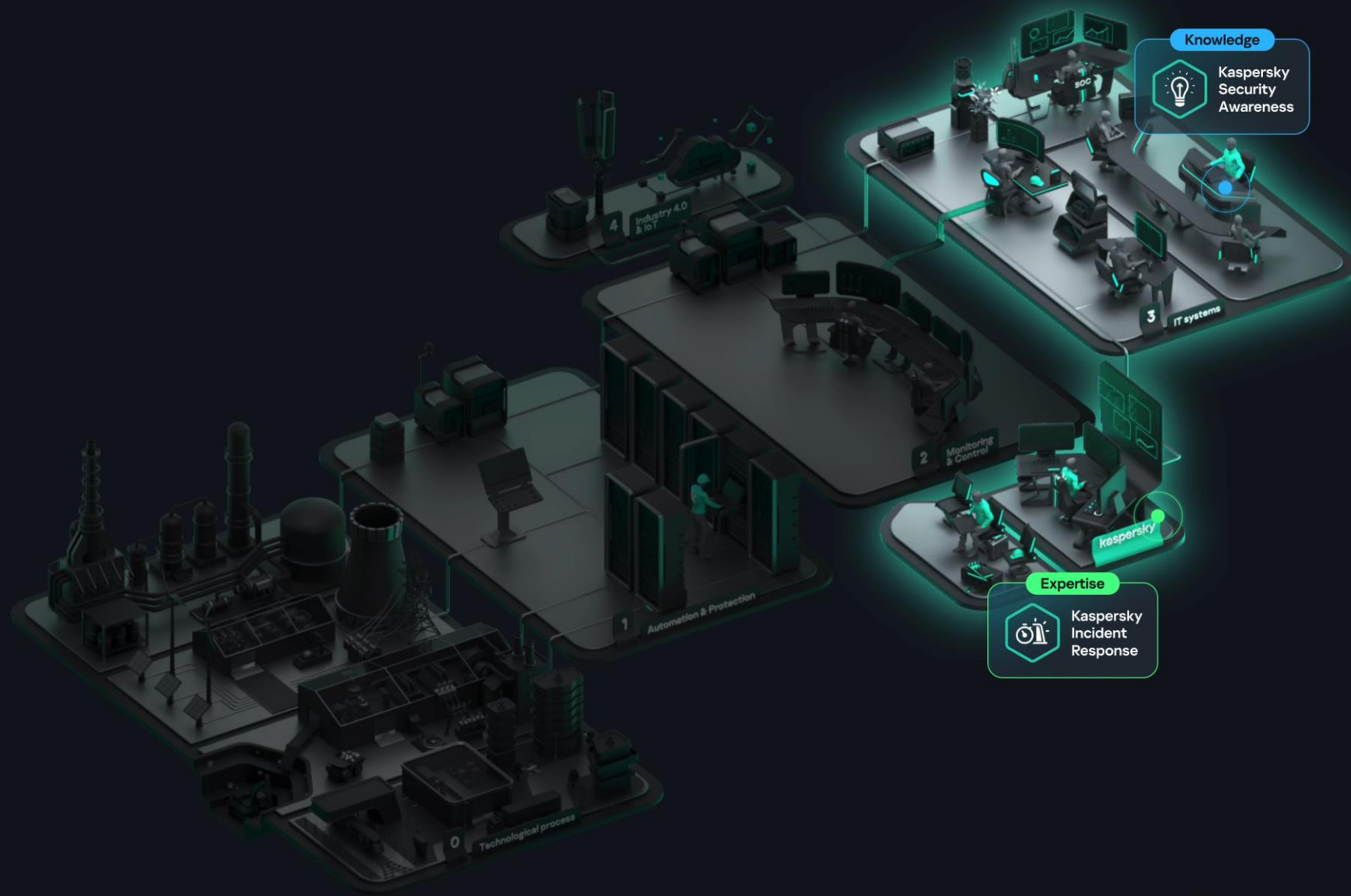
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IEC 62443-3-3 ZCR 1.1; ZCR 2.2

NIS2 Article 21: p. 2 (d, g, l), p. 3

NIST SP 800-82r3 6.1.1: Asset Management





# Industrial cyber resilience

8 steps to secure your enterprise

- 1 **Prepare:** ensure resilience
- 2 8.1 Train your team
- 3 8.2 Establish cross-team collaboration
- 4 8.3 Practice
- 5 8.4 Hold IR retrospective
- 6
- 7
- 8

IEC 62443-3-3	SR 1.1*; SR 1.2; SR 1.3; SR 7.8^
IEC 62443-3-3	ZCR 1.1; ZCR 2.2
NIS2	Article 21: p. 2 (d, g, l), p. 3
NIST SP 800-82r3	6.1.1: Asset Management



# Vertical Solutions: speaking your customer's language.

LAUNCHED IN 2025



EXPECTED IN 2026



Logistics (Airports, Marinas)



Stadiums & Smart Buildings



Chemicals



MMM



OT SOC



# Customer engagement path

## FREE ASSESSMENT BY KICS PILOTING\*

(Asset inventory & Risk Assessment)

- Assets discovery
- Applications, & users identification
- Network topology map
- Communication paths and conduits
- Threats & Vulnerabilities
- OVAL-based compliance audit

\* IEC 62443 says that an organization must account all of assets and systems as well as conduct risk assessment before implementing everything.

1

Define facility test area, its availability, and success criteria's

2

Run pilot + tests with OT HW/SW are possible at this stage

3

Report on the findings with expert insights

## OUTCOMES

- Full visibility of infrastructure
- Assets inventory
- Assets behavior
- Blind spots identification
- Vulnerabilities detection
- Compliance score
- Risk score

## HELPS TO UNDERSTAND



achieved level of cybersecurity



prioritize further countermeasures and steps



# PoC results - Situational awareness



- Network topology and communication map
- Device identification, inventory and categorization
- Device parameters
- Device security status
- Events and detected malicious actions
- Security risks and abnormal activity
- Vulnerabilities
- Active risks scoring
- Mitigation actions



# Kaspersky Industrial Cybersecurity: results to date

**15+ years**

of experience in multiply segments

**1000+**

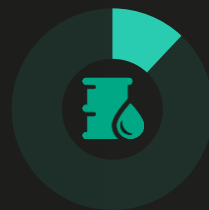
industrial customers

**240+**

tested systems from 70 vendors

**IEC/ISO**

Industry-leading audits:  
IEC 62443-4-1, ICS/IEC  
27001, SOC 2 Type 2



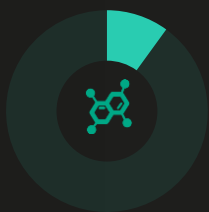
**12%**

Protecting #60 O&G companies with 12% of a total world extraction



**15%**

Protecting 15% of commercial nuclear reactors



**10%**

Protecting 10% of global petrochemical production (varies by products)



[Learn more](#)



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