



kaspersky



Kaspersky Industrial  
Cybersecurity  
Conference 2021

# Can Demirel

Industrial Cyber Security Services Team  
Lead, Cyberwise, Turkey

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#KasperskyICS

Чат конференции: <https://kas.pr/kicscon>



Current Status of Industrial Cyber Security Regulations in Turkey in the light  
of Geopolitics and Strategy

Kaspersky Industrial Cybersecurity Conference'21



# Agenda

- Geopolitics & Strategy & Cybersecurity
- Current Industrial Cyber Security Regulations in Turkey
- Future expectations
- Q&A



# Speaker



**Can Demirel (@secandit)**  
**Team Lead @Cyberwise (Formerly Biznet)**

- Electrical & Electronics Engineer
- 9+ Cyber Security Experience
- 5+ ICS/SCADA Cyber Security
- Volunteer @ BootCamp & EKSKonferans
- CCI Turkey Co-Coordinator
- Project Member @issvs



# Geopolitics?



Source: <https://en.wikipedia.org/>



# Strategy?



**Garry Kasparov**

Becoming energy hub for the region

Becoming transportation hub for the region  
Increasing trade volume

Developing own defense technology

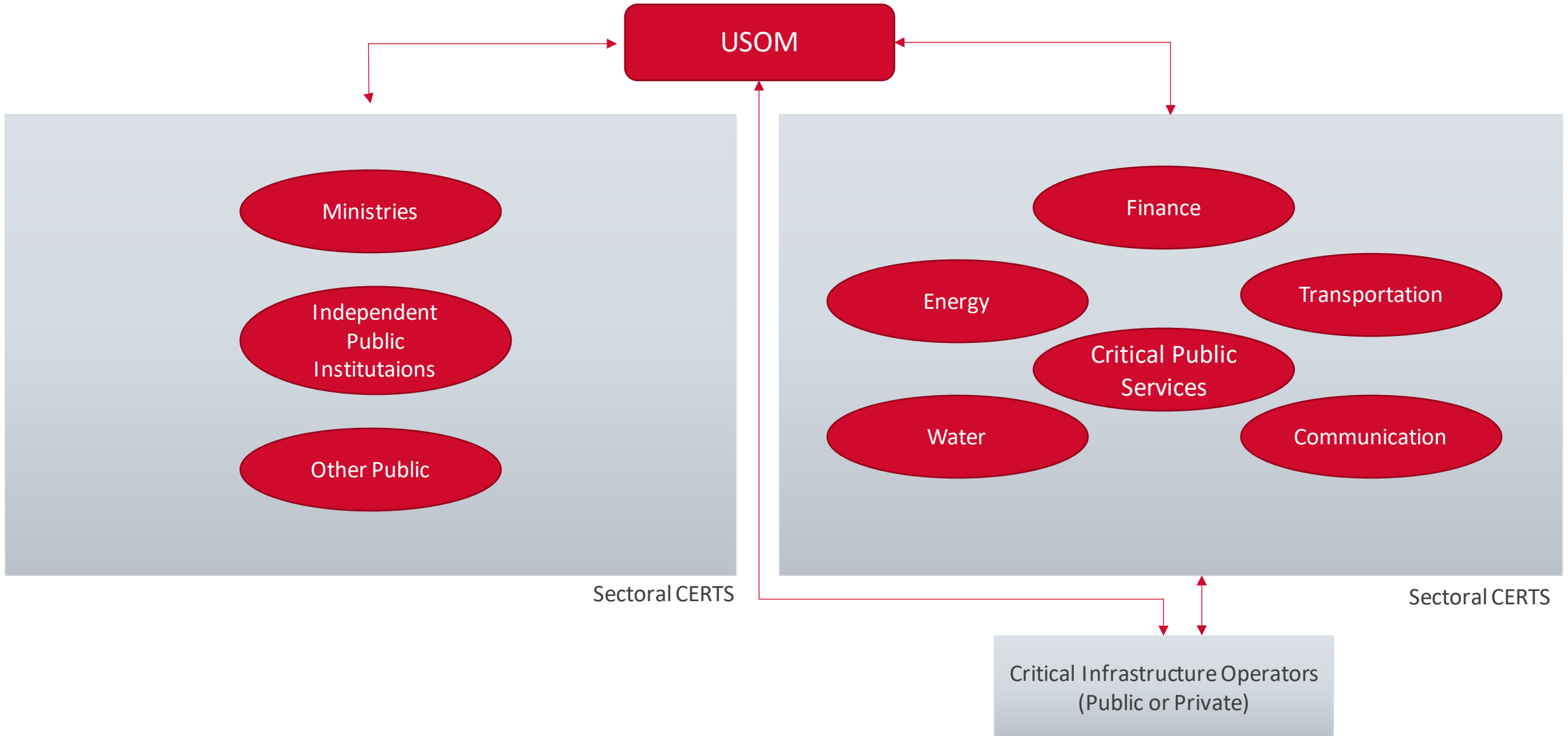


# National Cyber Security Strategy & ICS

| Period    | Focus            | Industries  | Critical Infrastructure Definition   |
|-----------|------------------|---|--|
| 2013-2014 | IT Security      | Governmental Agencies, Energy, water, health, transportation, communication, finance, etc | Governmental Agencies, Energy, water, transportation, communication, finance |
| 2016-2019 | IT & OT Security | Increased scope regarding industries  | Governmental Agencies, Energy, water, transportation, communication, finance |
| 2020-2023 | IT & OT Security | Increased scope regarding industries  | Governmental Agencies, Energy, water, transportation, communication, finance |



# General Cyber Security Structure in Turkey







# Current ICS Related Regulations

- EPDK/EMRA - Energy Market Regulatory Authority- Establishment and Management Corporate CERT
- EPDK/EMRA - Energy Market Regulatory Authority- ISO 27001 & 27019 Compliance
- EPDK/EMRA - Energy Market Regulatory Authority- Asset and Risk Management
- EPDK/EMRA - Energy Market Regulatory Authority- Penetration Testing and Security Audits
- Presidency of the Republic of Turkey- Information and Communication Security Act
- Presidency of the Republic of Turkey-Digital Transformation Office- Information and Communication Security Guideline



# EPDK/EMRA – Corporate CERT

- Since 2013
- Defines mostly IT infrastructure
- Setting up a team
- Setting up and Running SOC
- Assessments
- Trainings
- Incident Handling & Response
- Annual Activity Report



# EPDK/EMRA- Standard Compliance

- Since 2013, Updated 2016
- Started with IT, moved to OT
- Includes ISO 27001 compliance, ISO 27019 Guidance



# EPDK/EMRA- Asset and Risk Inventory

- Since 2017
- IT and OT Focus (Mostly OT)
- Annual inventory activity
- Regulation defines a specific form to complete inventory
- Each company stores its own inventory



# EPDK/EMRA- Penetration Testing and Security Audits

- Since 2019
- OT focus security assessments
- Regulation defines;
  - Architecture and configuration analysis
  - Social engineering
  - Vulnerability Detection & Exploitation
  - Wireless Assessment (ICS)
  - Malware and Anomaly Detection
- Company and personnel competence
- 3 year time period or after change tests should be done



# Digital Transformation Office Guideline

- Since July 2020
- 2 years period to be compliant
- IT + OT Security Controls (Mostly IT)
- Critical Public Services and Critical Infrastructure Operators
- Critical Infrastructure: Energy + Communication

# Other Developments



# Critical Infrastructures National Testbed Center

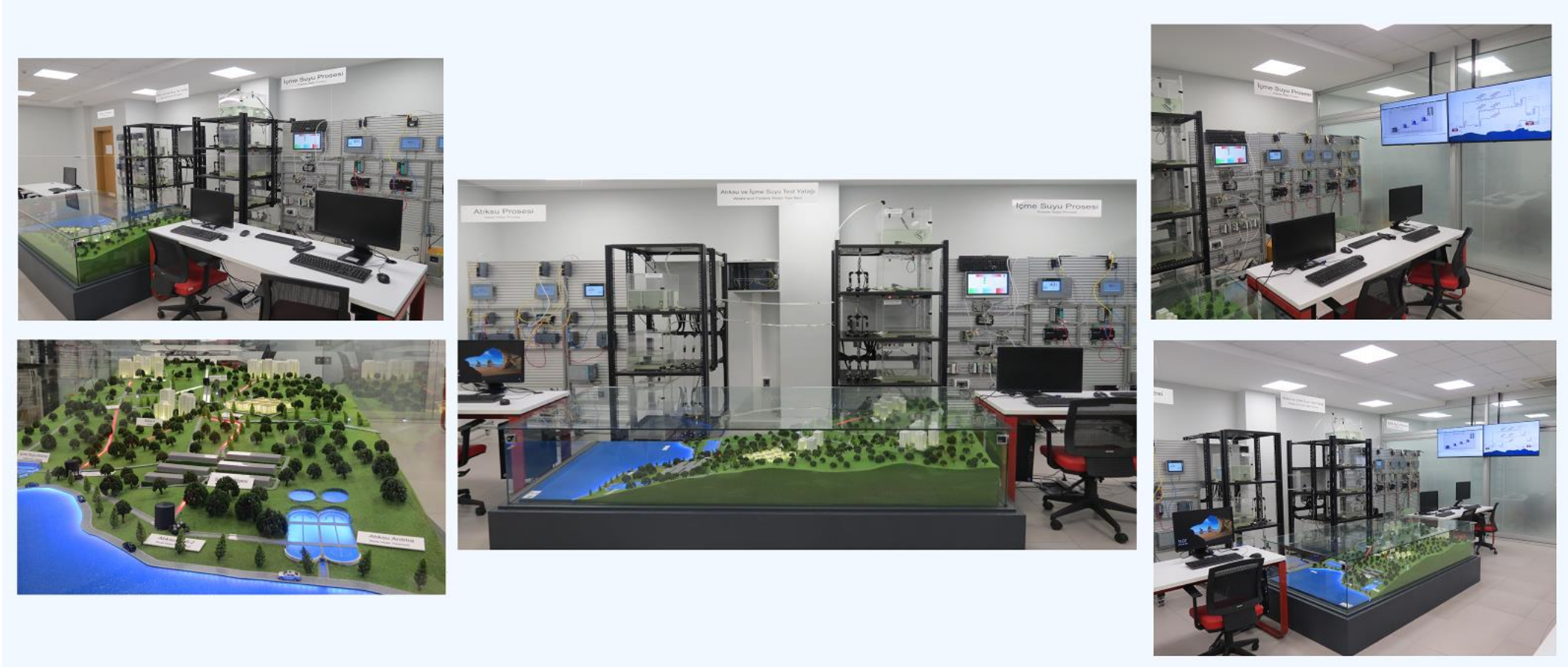


<https://center.sakarya.edu.tr/>





# Critical Infrastructures National Testbed Center



<https://center.sakarya.edu.tr/>



# Turkish Cyber Security Cluster

- Since 2017
- Supported by Presidency of Defense Industries
- Public, private companies and academia
- International ve national events & coordination
- 200+ Member

<https://siberkume.org.tr/>



# Ecosystem and Community Activities

- ICS Cybersecurity Conference
- ICS & IoT Student BootCamp
- CENTER SAU Internship Program
- HackZeugma (ICS CTF)
- Online/Inperson Meetups

**EKS SİBER GÜVENLİK KONFERANSI 2019**  
"SAVUNMANIN GÜCÜ"

**Anton Shipulin**  
Endüstriyel Siber Güvenlik Merkezi (CC) Koordinatörü  
EKS Güvenli İş Geliştirme - Kaspersky  
RUSCADASEC - Kurucu Ortak

Gerçek Hayattaki Saldırı Senaryolarına Karşı  
Endüstriyel Siber Güvenlik Test Deneyimi

13 Kasım 2019  
Wyndham Hotel Ankara

BİZNET BİLİŞİM

Industrial Control Systems  
INTERNET OF THINGS  
Cyber Security Bootcamp'20

27 JUNE 2020

IoT Security Maturity Model

**Ekaterina Rudina**  
System Analysts Team Lead  
Kaspersky ICS CERT

kamp.eksguvenligi.org eks\_kamp

BİZNET SECURENT

SAKARYA istec kaspersky TOGI ICS DEFENSE hardwear.io TÜRKİYE CYBER SECURITY CLUSTER Elder Industrial Cybersecurity RUSCADASEC ISACA



# R&D Activities in ICS Security

- Several programs to support individuals and corporate companies
  - Presidency of Defense Industries
  - The Scientific and Technological Research Council of Turkey
  - And more
- Cybersecurity and ICS Cybersecurity (priority)
- R&D activities encouraged by National Cybersecurity strategy



# Key Takeaways

- Cybersecurity is a major concern for all level of interested parties
- Cybersecurity and industrial cybersecurity regulations increasing in Turkey
- Expected to see;
  - more CIs will be regulated
  - ICS Cybersecurity maturity model
  - ICS focus national exercices

# THANK YOU

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