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EUROPEAN UNION AGENCY
FOR CYBERSECURITY

ENISA'S THREAT LANDSCAPE 2024

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Cyber Security Expert

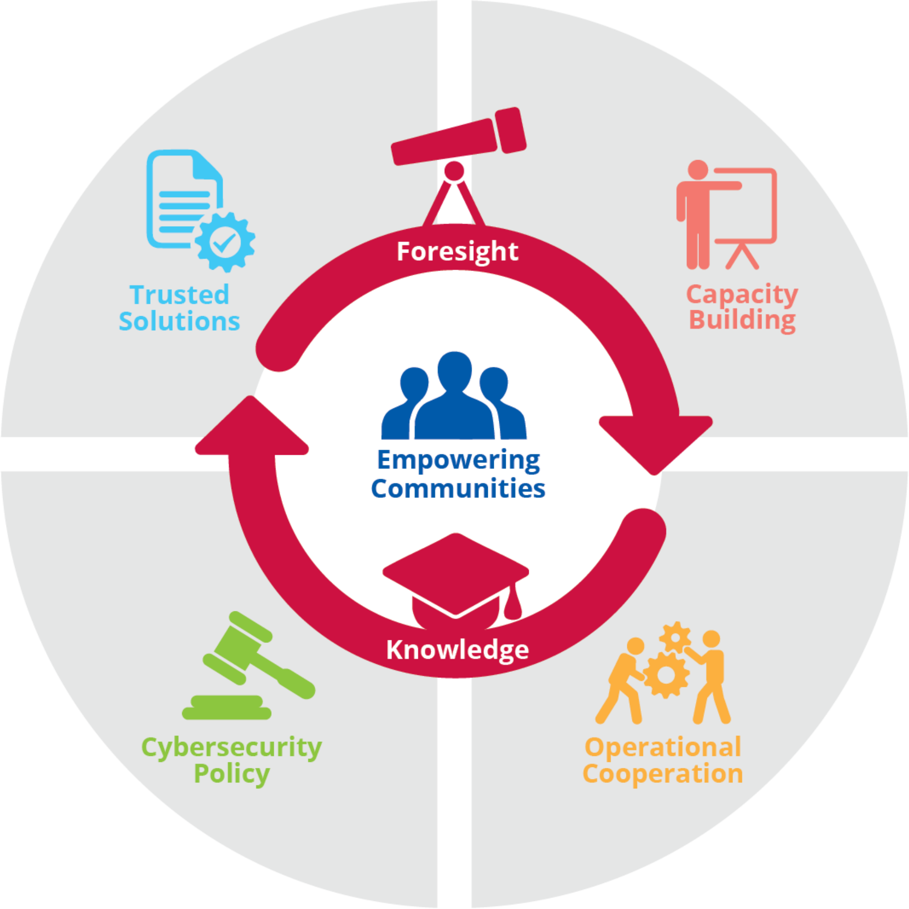
03 12 2024

ROLE OF ENISA – WHO WE ARE

EUROPEAN UNION AGENCY
FOR CYBERSECURITY

A TRUSTED AND CYBER SECURE EUROPE

Our mission is to achieve **a high common level of cybersecurity** across the Union in cooperation with the wider community



AGENDA

- ENISA Threat Landscape activity & methodology
- Threat actors
- Prime threats

ENISA THREAT LANDSCAPE TRADITION

enisa 20 years!

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ENISA THREAT LANDSCAPE 2024

July 2023 to June 2024

SEPTEMBER 2024

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2023

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It’s reflecting on the PAST to prepare for the FUTURE

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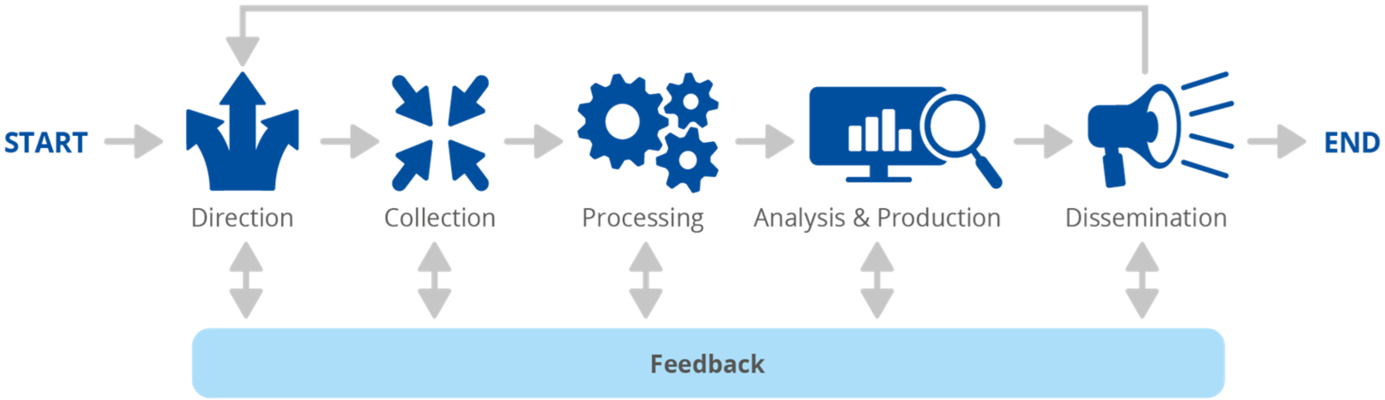
ENISA THREAT LANDSCAPE: TRANSPORT SECTOR

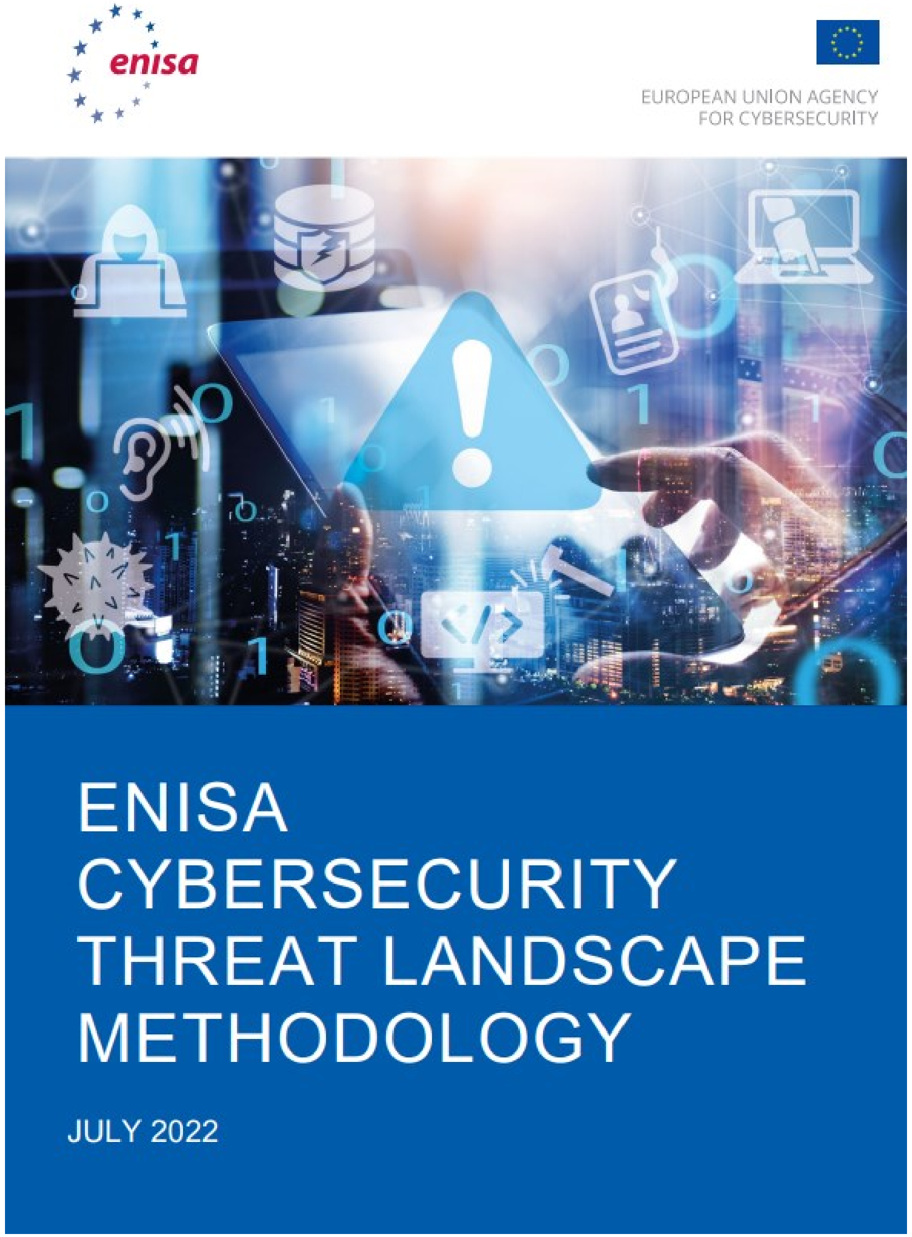
(January 2021 to October 2022)

MARCH 2023

THREAT LANDSCAPE METHODOLOGY

The ENISA Cybersecurity Threat Landscape (CTL) Methodology describes a systematic process for relevant data collection and analysis, to be used for the formation of CTLs

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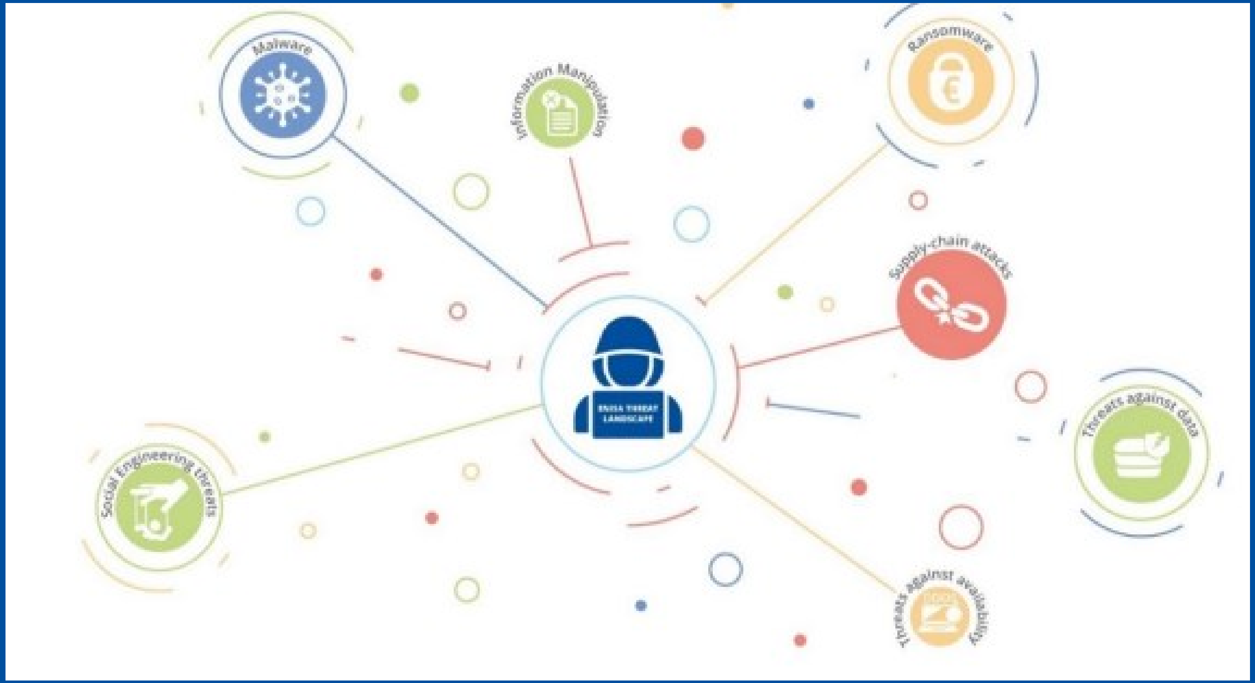
ENISA CYBERSECURITY THREAT LANDSCAPE METHODOLOGY

JULY 2022

ENISA
THREAT
LANDSCAPE
2024

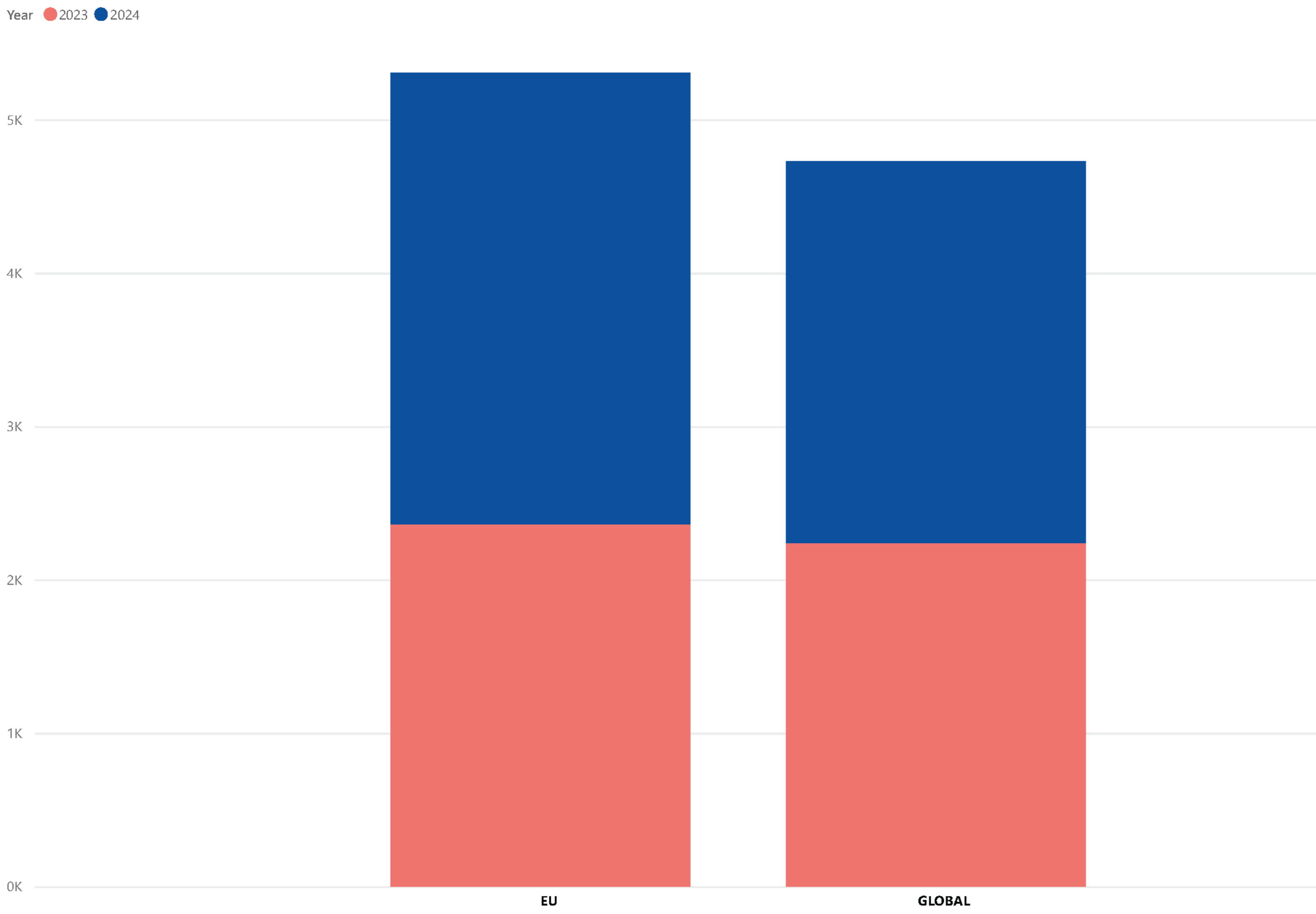


INCIDENTS
JULY 2023 TO JUNE 2024

Total

2023 – Global 2239, EU 2360

2024 – Global 2491, EU 2945



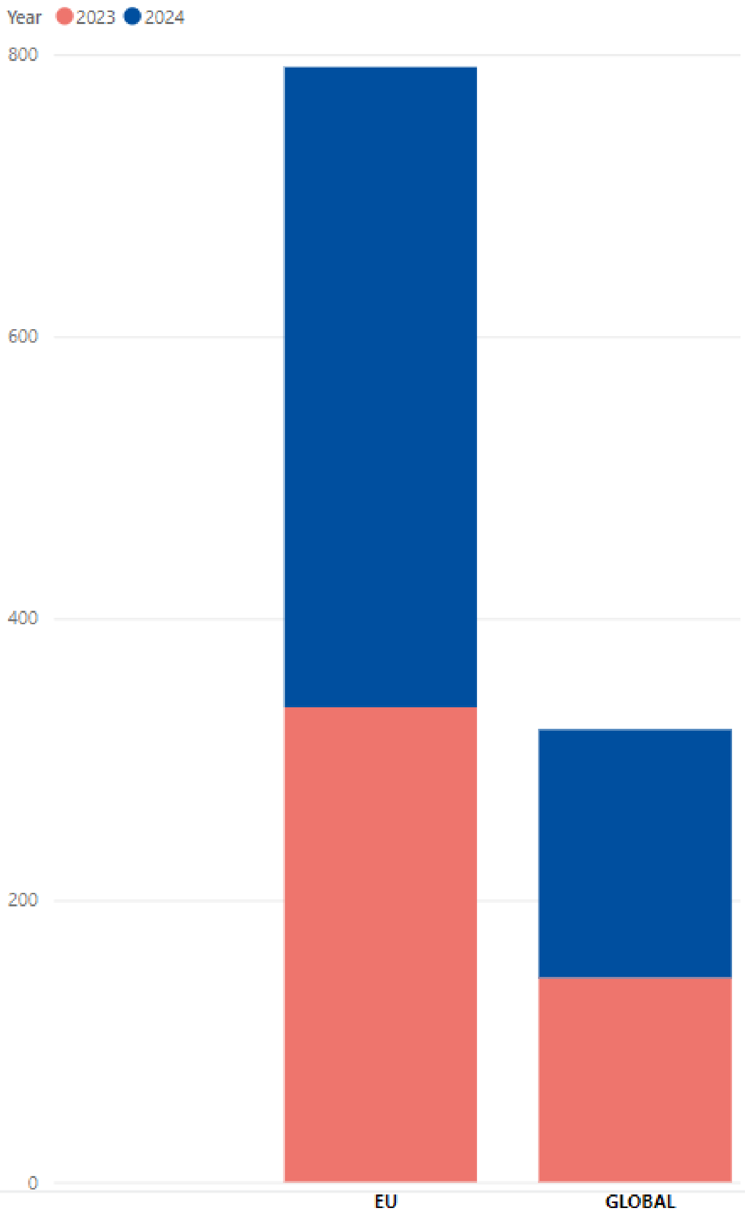
INCIDENTS (TRANSPORT)

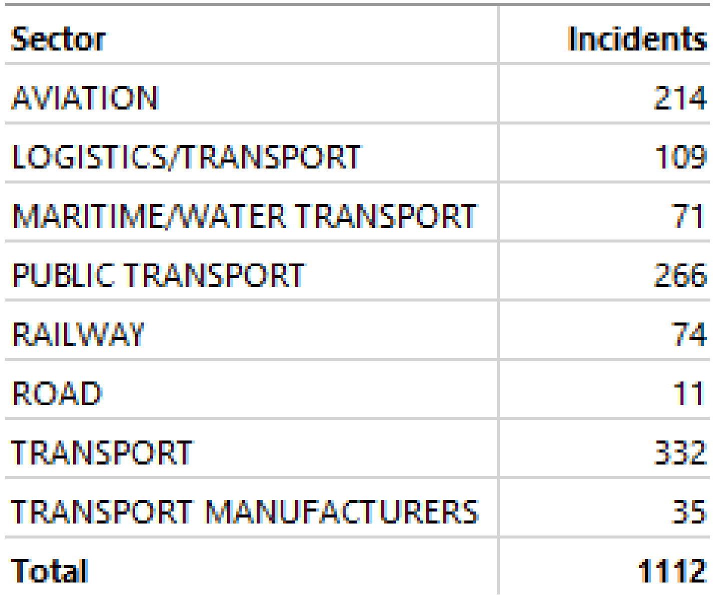
Total (July 2023 to June 2024)

2023 – Global 145, EU 337

2024 – Global 176, EU 454

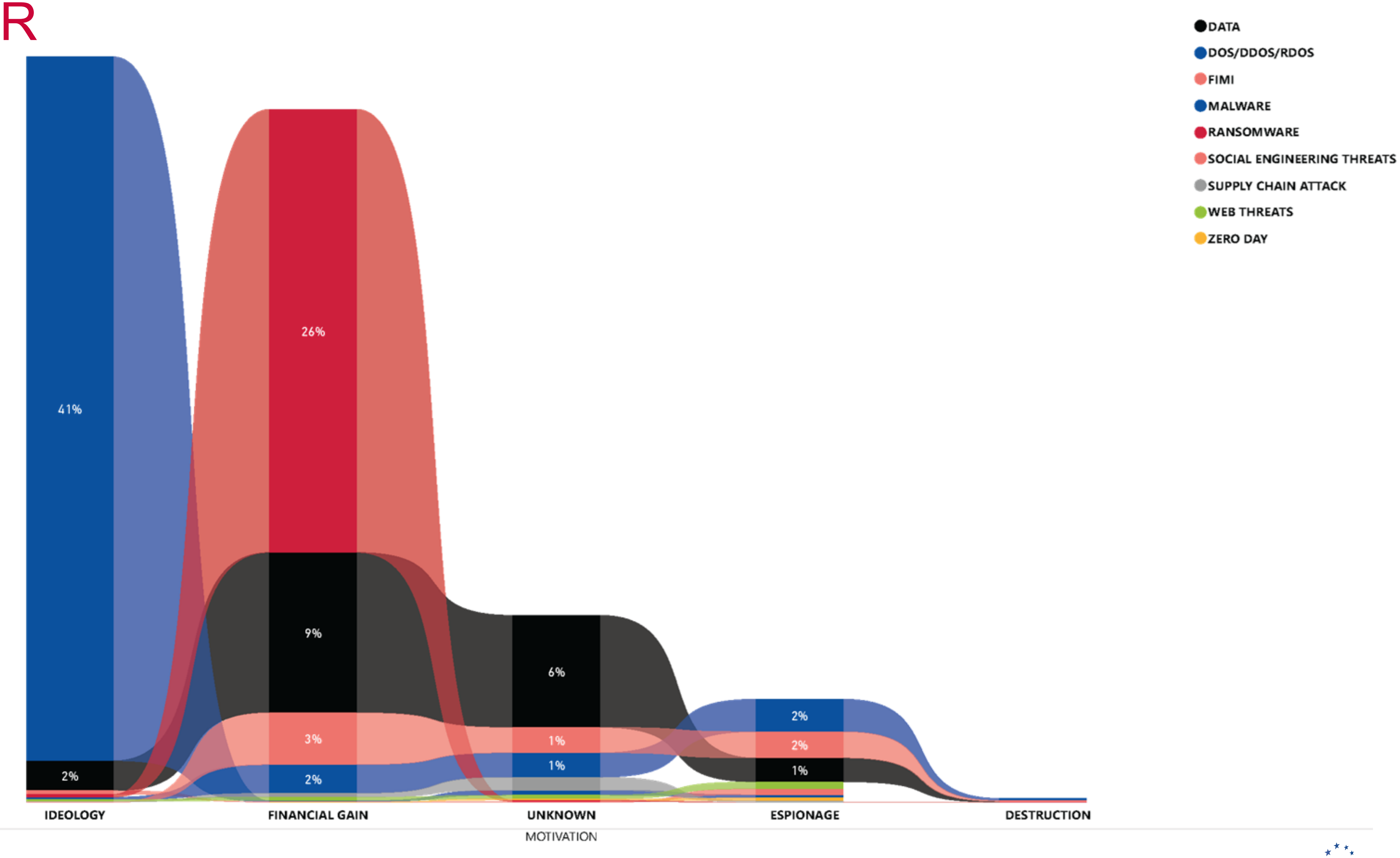
11% of total incidents
2nd most targeted sector



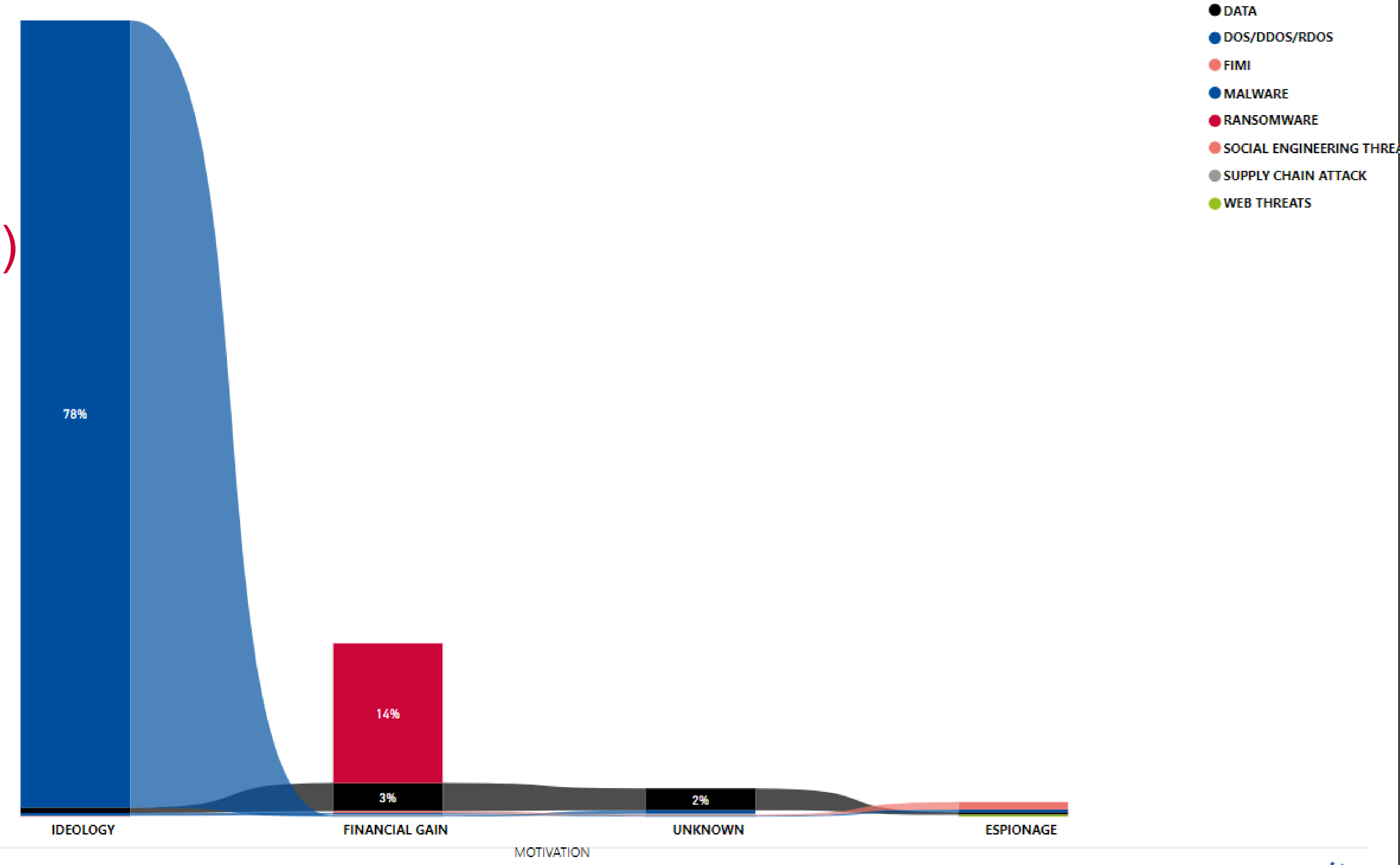


Sector	Incidents
AVIATION	214
LOGISTICS/TRANSPORT	109
MARITIME/WATER TRANSPORT	71
PUBLIC TRANSPORT	266
RAILWAY	74
ROAD	11
TRANSPORT	332
TRANSPORT MANUFACTURERS	35
Total	**1112**

THREAT ACTOR MOTIVATION



THREAT ACTOR MOTIVATION (TRANSPORT)



THREAT ACTORS

State-Nexus Actors:

Increased focus on stealth and long-term espionage operations.

Exploitation of cloud services and public-facing vulnerabilities for covert access.

Cybercrime Actors:

Growth of as-a-service ecosystems, including Ransomware-as-a-Service (RaaS) and Drainer-as-a-Service.

Increased use of AI tools for phishing, scripting, and evasion.

Hacktivists:

Alignment with geopolitical conflicts (e.g., Ukraine, Middle East).

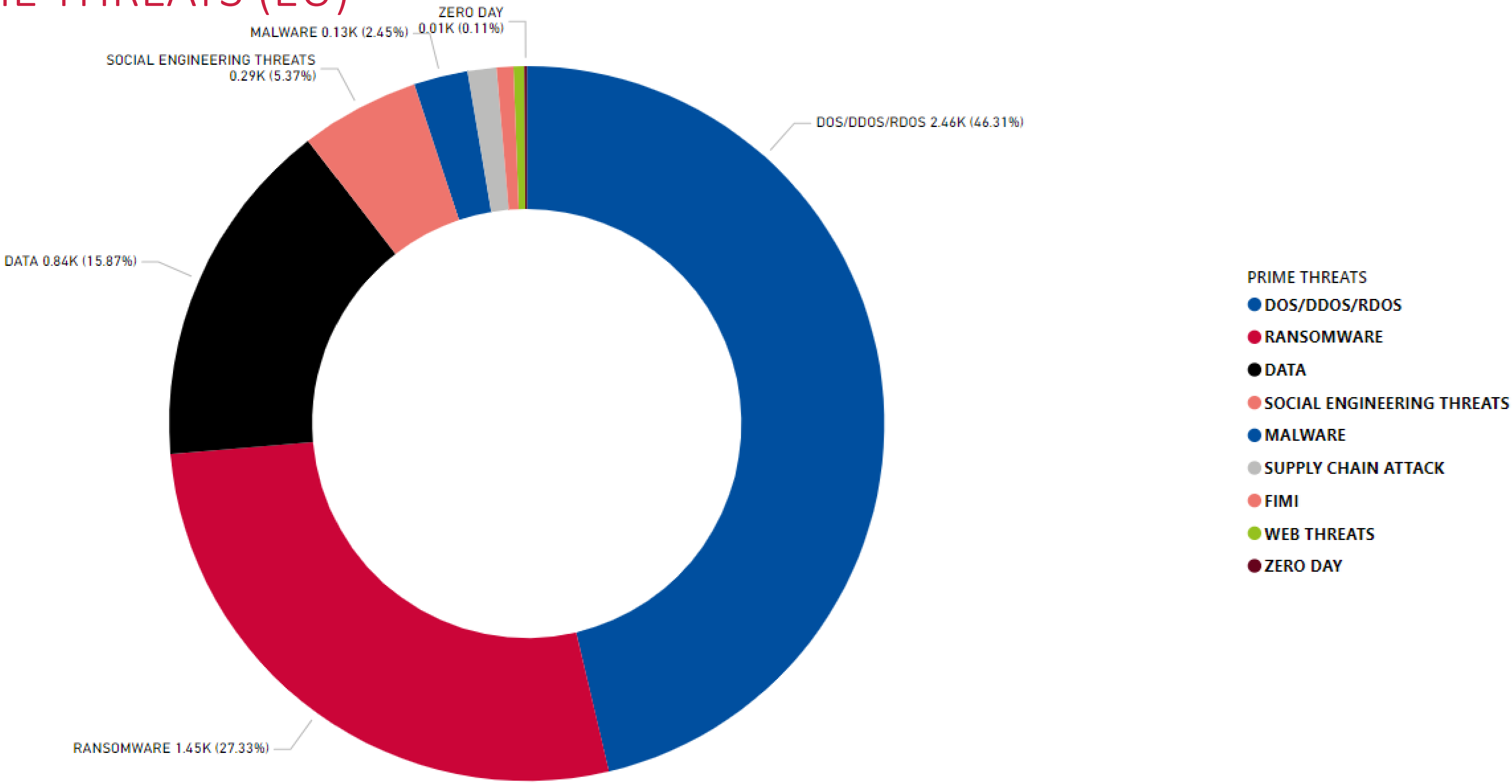
Greater overlap with state-backed operations to obscure direct involvement.

Private Sector Offensive Actors (PSOAs):

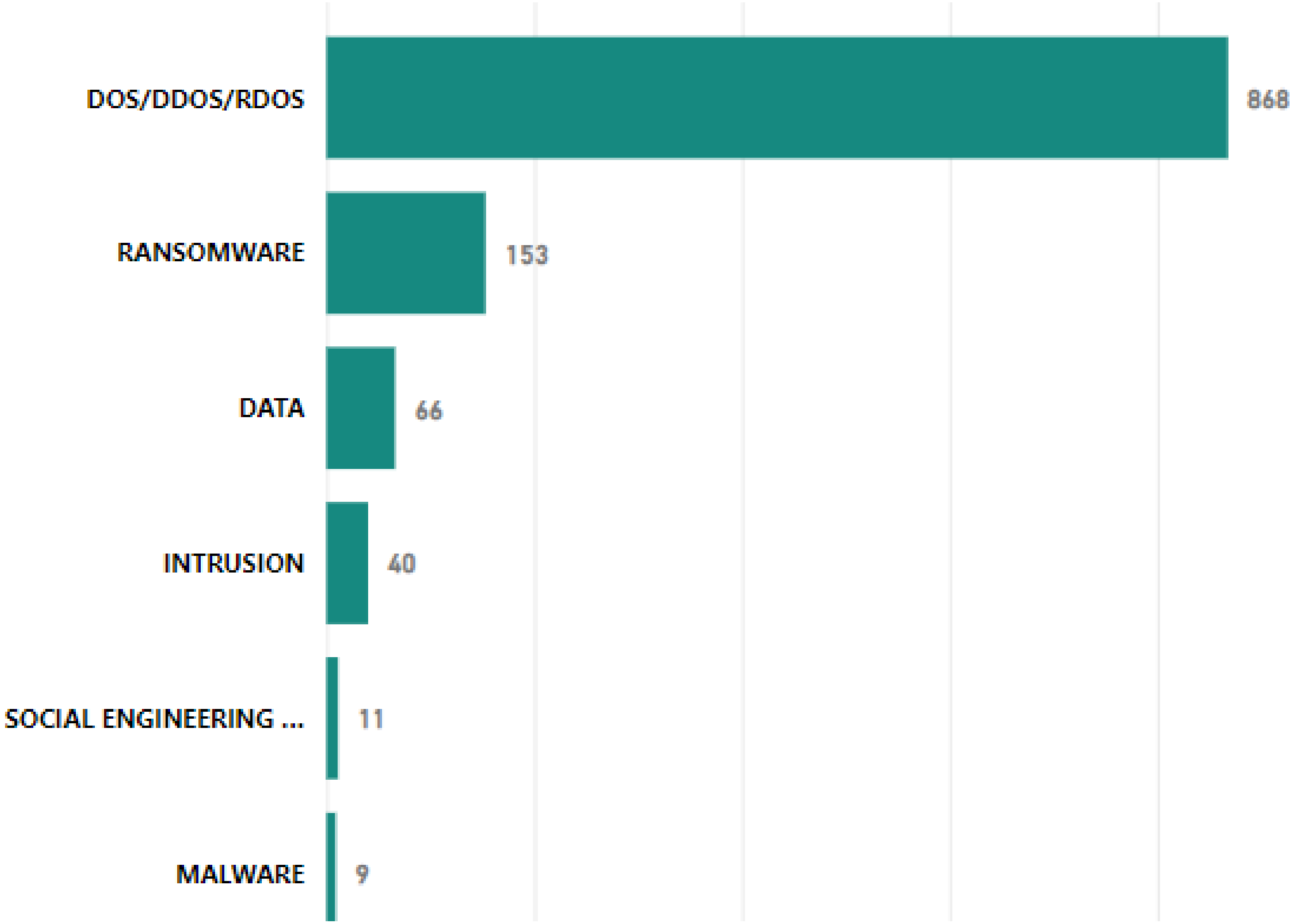
Advanced surveillance tools targeting high-value individuals and organizations.

Persistent ethical and legal concerns about their operations.

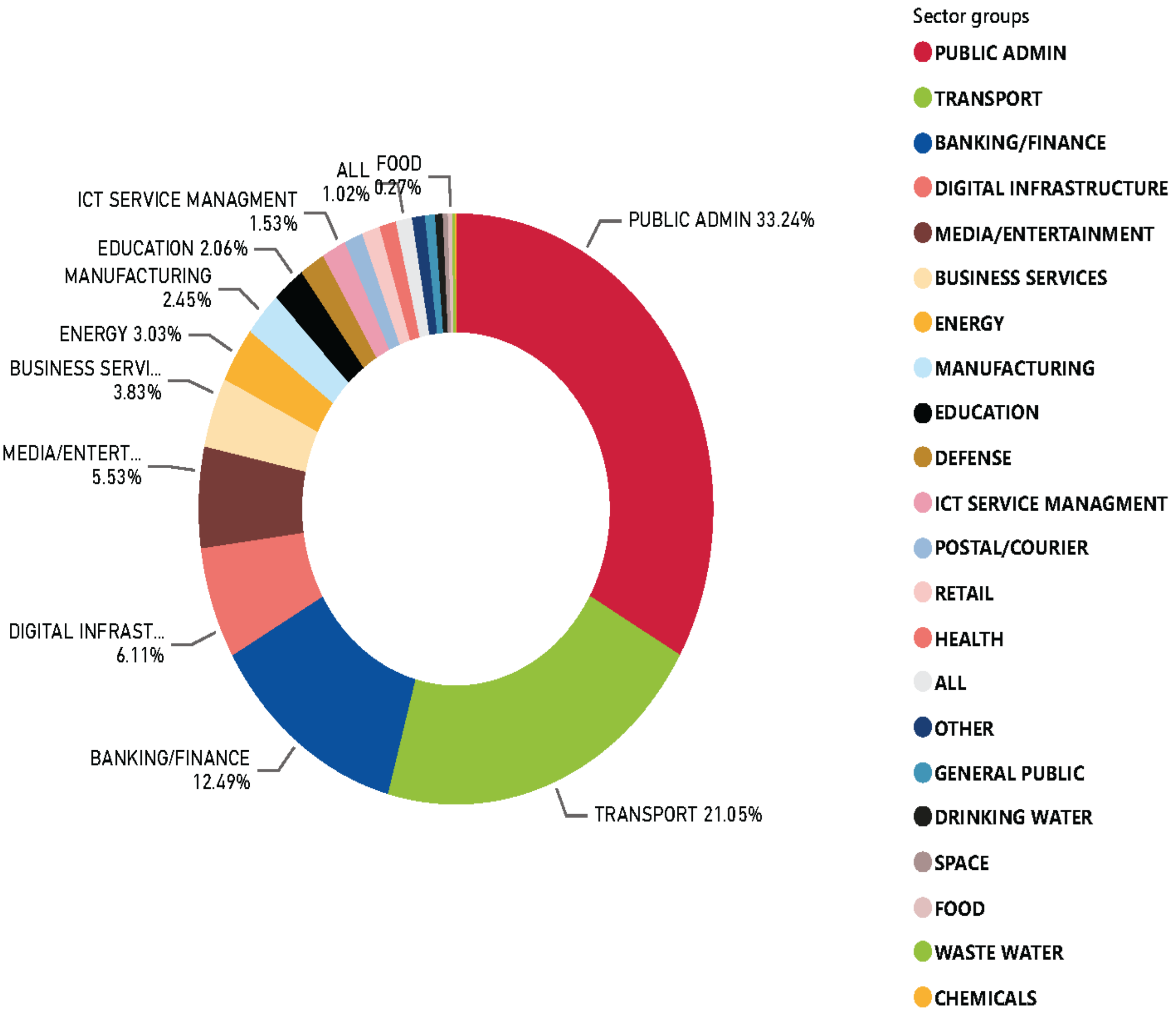
PRIME THREATS (EU)



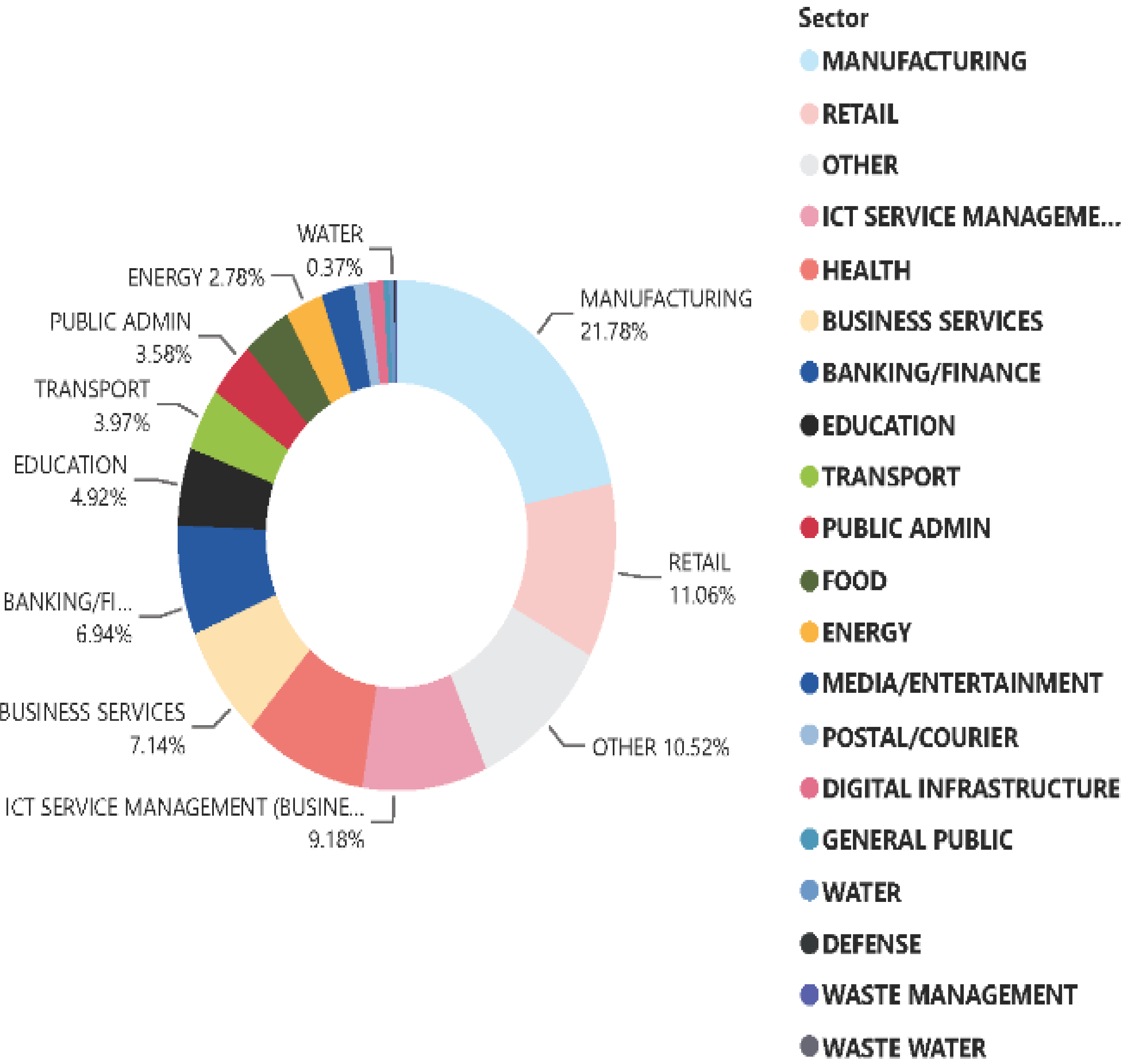
PRIME THREATS (TRANSPORT)



DENIAL OF SERVICE

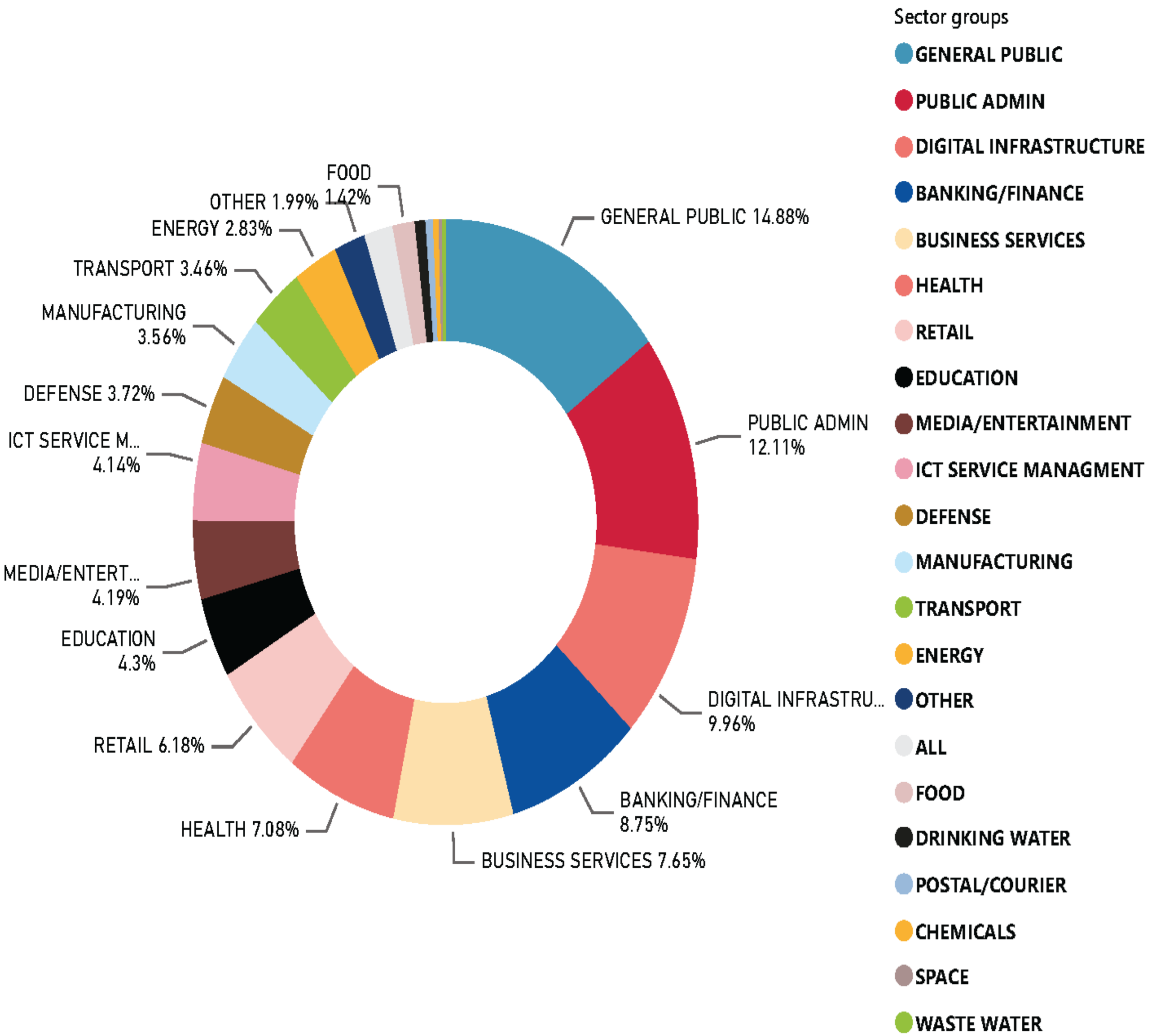


- Surge in **DDoS-for-Hire** services, enabling non-skilled attackers to launch sophisticated campaigns.
- Increased targeting of critical infrastructure sectors such as **transportation** and **energy**.
- **Higher usage of botnets** composed of compromised **residential and mobile devices**.
- EU Member States face rising DDoS incidents **driven by hacktivist and geopolitical motivations**.



RANSOMWARE

- **Stabilization of ransomware incidents** at high volumes (1,000+ claims per quarter).
- Some groups **skip encryption** and move directly to **data theft for extortion.**
- **Increased activity from strains like LockBit, Cl0p, and PLAY,** with LockBit dominating in both EU and global contexts.
- Exploitation of **supply chain vulnerabilities.**
- **Industrial and manufacturing sectors** are the most frequently targeted.
- **Retailers and digital service providers** targeted due to sensitive customer data.
- Use of **zero-day vulnerabilities** for lateral movement in virtualized environments.
- **Weaponization of regulatory requirements** (e.g., GDPR breach disclosure timelines).



DATA THREATS

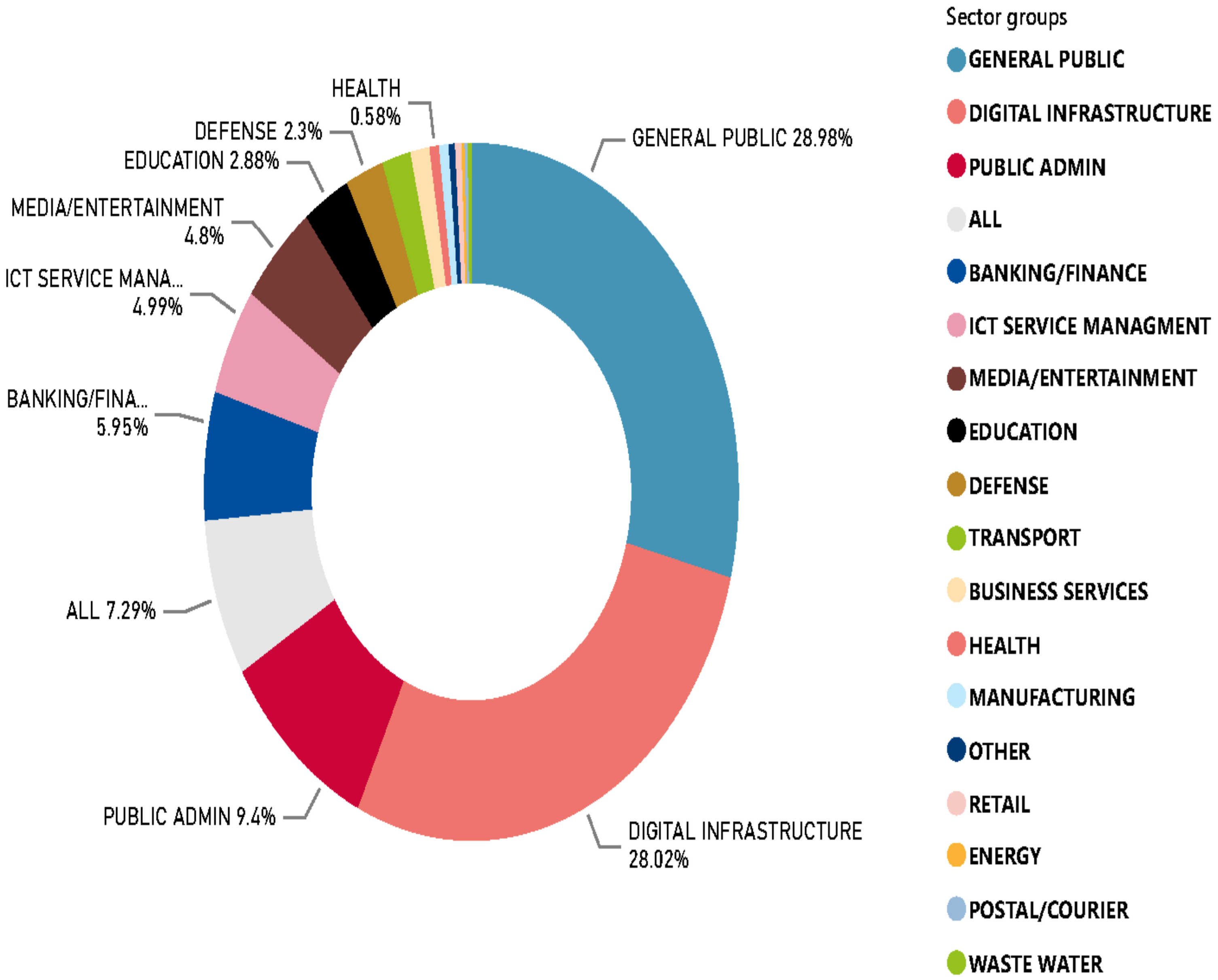
•Data breaches increasingly **paired with ransomware attacks** to amplify pressure on victims.

•Rise in **targeted attacks on GDPR compliance**, leveraging regulatory requirements for extortion.

•**Exploitation of vulnerabilities** in **cloud** storage and management platforms for data theft.

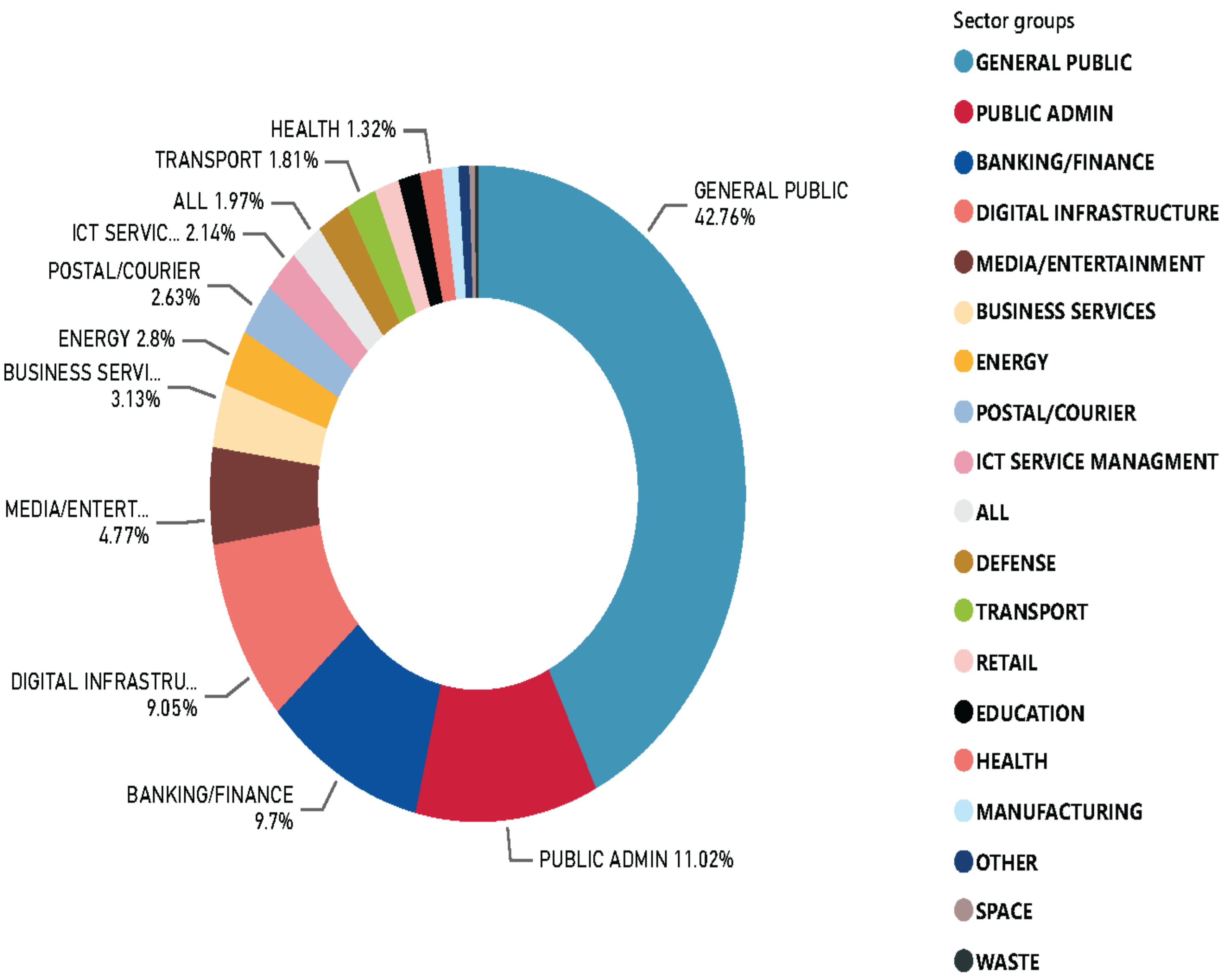
•**Public administration, finance, and digital infrastructure** sectors face the highest volume of attacks.

MALWARE



- Stealing **credentials**, deploying **loaders for other malware**, or **exploiting vulnerabilities** to establish footholds.
- Surge in **Malware-as-a-Service (MaaS)** platforms like BunnyLoader and Stealc.
- **Information stealers** (e.g., RedLine, Raccoon), often deployed via phishing and malvertising.
- **Platform Expansion:** macOS systems increasingly targeted.
- **Innovations in Malware:**
- Use of advanced loaders to bypass traditional detection mechanisms.
- Deployment via trusted platforms such as GitHub, Google Drive, and Slack.

SOCIAL ENGINEERING THREATS



- **Phishing, spear-phishing, QR phishing, smishing, and vishing**.
- Use of **scare tactics** or **impersonation** to gain access to sensitive information.
- Sharp increase in **Business Email Compromise (BEC)** campaigns due to low detection rates.
- **AI-powered phishing campaigns** using tools like FraudGPT to craft convincing lures.
- Rise of **deepfake-based scams**, particularly targeting executives and high-value individuals.
- Growth of **Adversary-in-the-Middle (AitM) phishing tools** like Evilginx, bypassing MFA protections.
- **SEO poisoning** targeting users searching for legitimate resources or software.

SUMMARY-THREATS

Ransomware stabilized at high volumes with increased focus on double and triple extortion techniques.

•Surge in Malware-as-a-Service offerings and targeting of macOS platforms.

•Popularity of information stealers in attack chains.

•AI-driven phishing and deepfake campaigns growing in sophistication.

•Business Email Compromise (BEC) as a persistent threat.

•Expansion of DDoS-for-Hire services targeting critical infrastructure.

•AI-enhanced disinformation campaigns tailored to regional contexts.

THANK YOU FOR YOUR ATTENTION

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