

Strategic and operational threat analysis at Europol's EC3

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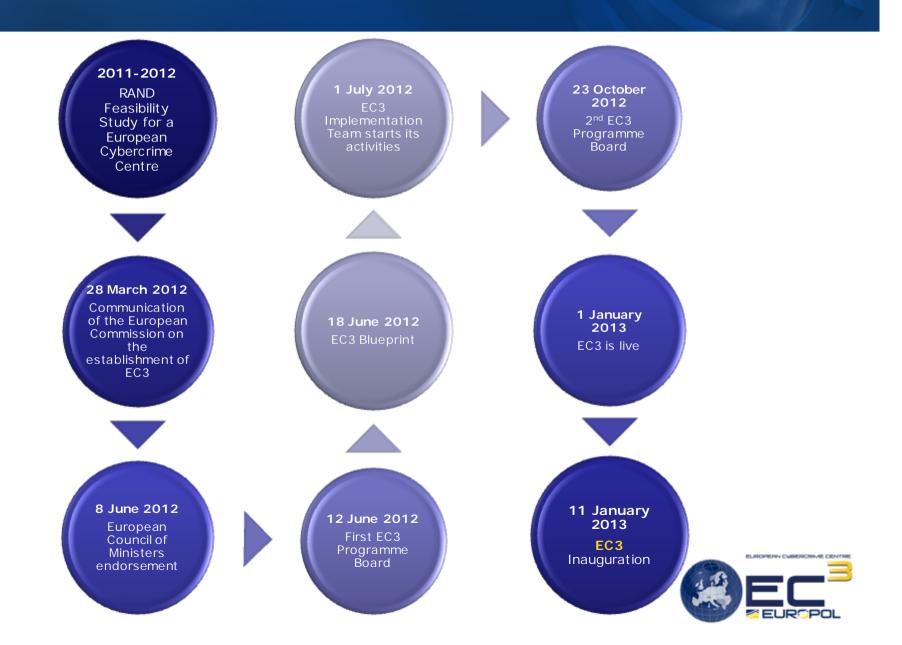
Europol Unclassified - Basic Protection level / Europol Public Information

EC3 - Who We Are and What We Do





EC3's History

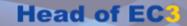


Europol Organisational Structure





EC3 Organisational Structure



MANAGEMENT SUPPORT TEAM

Head of Operations

CYBER INTELLIGENCE

CYBORG

TERMINAL

TWINS

Head of Strategy

OUTREACH & SUPPORT

STRATEGY & DEVELOPMENT

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FORENSIC EXPERTISE (incl. Forensic Lab)



EC3 Governance Model

Assisted by 2 Advisory Groups









Multi-Stakeholder Approach



Europol's network of Liaison Bureaus



EC3 Core Services

European cybercrime info/intel focal point Support to Member States' cybercrime investigations Platform to pool skills and expertise & tool support for MS

Collective voice of European cybercrime investigators









OPERATIONAL

- Coordination of High Profile Operations
- On-the-Spot Operational Support
- Operational, Technical and Forensic Analysis
- Digital IT Forensics Support

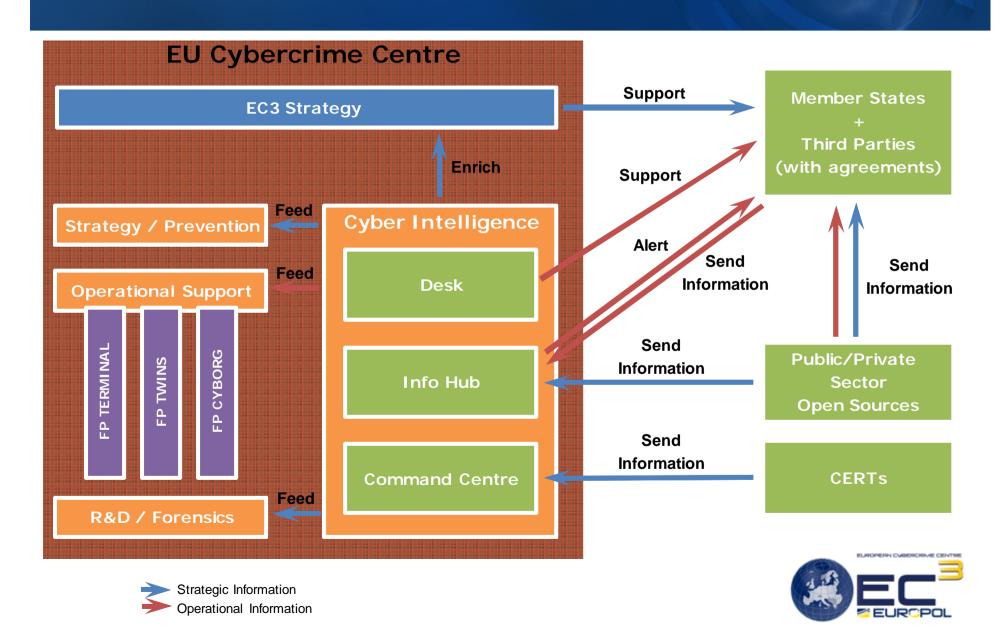
STRATEGIC

- Outreach to Public/Private Partners
- Strategy and Forward Looking Assessments
- Training and capacity building
- Digital IT Forensics R&D



EC3 Products & Solutions LFE Digital Lab **Decryption Platform** SPACE **EURSPOL** Mobile Office MDCCI **EMAS**

EC3 Information/Intelligence Flow



Cyber Intelligence Team

Information collection on cybercrime from the widest array of public, private and open sources.

Analytical hub (tactical and operational), processing and analysing information from various sources.

Broaden information picture on cybercrime in Europe over time so as to rapidly identify emerging threats. In close co-operation with Strategy.

Pro-actively scans the environment, identifying new trends and patterns, updating stakeholders accordingly. In close co-operation with Strategy.

What Cyber-Intel can do

- OSINT
- Receive operational information from MS and operational partners
- Search Europol operational information

What Cyber-Intel cannot do

- Surveillance
- Engage with suspects
- Infiltration: provide opinions; create reputation
- "Control the crime" using agent provocateur



Strategy and Development Team

To provide Europol's EC3, EU law enforcement and other relevant partners, including EU policy makers, with an overview of trends, developments, capabilities and intentions to support the fight against cybercrime, inform the formulation of policies and legislative measures, contribute to the development of standardized training, awareness raising and preventive measures, and facilitate regular meetings of stakeholder and governance bodies.



EC3 Intelligence/Knowledge Products

CYBER-INTEL

- Cyber Bits
 - Trends: Modus operandi, tool or technique used by cyber criminals. Emerging patterns and crime series.
 - **Knowledge**: Offer guidance and raise awareness.
 - **Technology**: Technical developments having impact law enforcement work.
 - **Tools:** Presentation of tailored tools to support operational activities.
- OSINT Dashboard
- Quantitative Quarterly Report on Cyber Threats – in cooperation with Strategy

STRATEGY

- iOCTA
- Project 2020: Scenarios for the Future of Cybercrime
- Police Ransomware Threat Assessment
- A Review of Criminal Forums
- Strategic Assessment on CSE Online
- ICANN Guide for Dummies, Assessment of Bitcoin, Top 10 External Cyber Threats, etc.



EC3 Intelligence/Knowledge Products

Dashboard, Cyber Bits, Internet Governance Bits, etc.

> Quantitative Quarterly Reports, Situational Reports, In-depth Assessments, etc.

> > Strategic Products (e.g. iOCTA)

Operational Support and Input



EC3 Threat Analysis - Some Definitions

- Data value, word or event out of context i.e. without meaning.
- Information data put into a meaningful context e.g. by using meta-data to provide context.
- Intelligence 'actionable information' i.e. evaluated information that has strategic/operational/tactical value, particularly in the context of investigations.
- Evidence information or intelligence that can be used in court.



EC3 Threat Analysis - Some Definitions

 Threat analysis – systematic detection, identification, and assessment of actual or potential cyber risks, the probability of these risks occurring and the consequences or impact should they occur.



EC3 Threat Analysis - Challenges

CYBER-INTEL

- Operational data vs. strategic data
- Sharing with non-competent authorities, particularly the private sector
- Sharing with non-operational partners
- Data retention
- Amount of data/information/intelligence
- Human resources, including language skills

STRATEGY

- Operational/tactical intelligence vs.
 Strategic threat intelligence risk of separate intelligence cycles
- Forward-looking, more high-level decisions and planning support vs.
 Operational support
- Management support for Strategic Analysis
- Communication and analysis tasking and prioritisation process (e.g. selection of topics, Ops input)



EC3 Threat Analysis - Challenges

CYBER-INTEL & STRATEGY

- Access to data, information and intelligence (willingness to share, cost factor, lack of standards, overlapping data sets, lack of historical data, etc.)
- Limited OSINT capabilities, particularly in relation to Darknets
- Network of external partners, including industry and academia as well as other EU agencies and the CERT community
- Tool support (storage, retrieval, collation, correlation, analysis, visualisation, etc.)



EC3 Threat Analysis - Initiatives

- Development of a taxonomy and business case for the exchange of information/intelligence between LE and CERTs
- Anonymized cross-matching solution
- Active Stakeholder Management and engagement with EU and non-EU partners, including with private industry and academia
- Engaged in internal and external discussions around OSINT capabilities and data protection



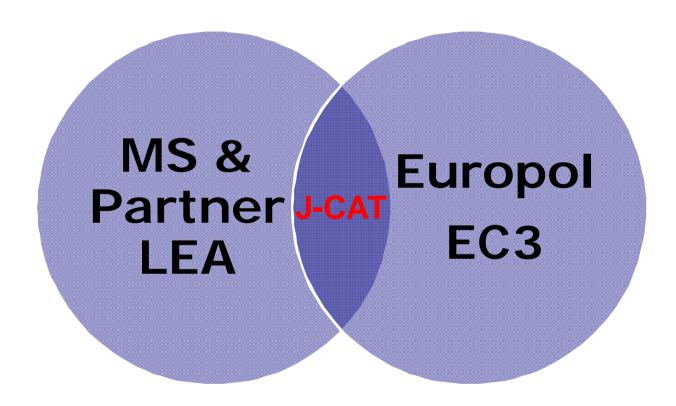
EC3 Threat Analysis - Initiatives

- In-house R&D
- Ongoing evaluation of commercial tools and services
- Training and capacity building

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Joint Cybercrime Action Taskforce





EC3 Threat Analysis – Summary

- Two threat analysis areas—strategic and tactical/operational
- Privacy and data protection, and policies governing OSINT activities
- Exchange of data/information/intelligence with competent authorities vs. other partners
- Tool support and human resources



