Cybersecurity in the oil sector
An administration’s perspective

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Oil Forum
Belgrade
8/10/2019

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Introduction

- Perspective of Belgian administration responsible for Energy
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Oil market in Belgium

- Hub: Port of Antwerp
  - 4 refineries
  - Petrochemical sector
  - Pipeline connections with neighbouring countries
    - Supply to Antwerp
    - Output abroad

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Oil market in Belgium

- Storage facilities
  - Very diverse in size, location, connectivity, service, products
  - Some are important for security of supply of neighbouring countries
  - Storage of strategic stocks

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Oil market in Belgium

- Pipelines
  - Connectivity with neighbouring countries
  - Connectivity in Belgium
    - Between refinery and storage
    - Between refinery and clients
    - Between storage and clients

- Network of service stations

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Oil market in Belgium

- Central European Pipeline System
  - NATO
  - Civil use in peace time (especially airports)
  - International connections

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Oil market in Belgium

- APETRA
  - Stockholding entity
  - Management of strategic stocks
  - Important role in crisis management

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Cybersecurity in Belgium

- Centre for Cybersecurity Belgium
  - General cybersecurity policy
  - Coordination
  - Legislation NIS
  - National CSIRT

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Cybersecurity in Belgium

- National Crisis Centre
  - Close partner of CCB
  - Legislation EPCIP
  - Security authority

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Cybersecurity in Belgium

- Legislation:
  - Implementation of EU NIS Directive
  - Implementation of EU EPCIP Directive
  - Belgian law on classification of documents and security clearance

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- Implementation NIS directive adapted to oil sector:
  - Sectoral authority: Minister of Energy
  - Identifies and designates Operators of Essential Services
  - Inspections: FPS Economy, S.M.E.s, Self-Employed and Energy

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- Implementation NIS directive adapted to oil sector:
  1. Identification of ‘Operators of Essential Services’ (OSE)
     - Which services in oil sector could be essential?
     - Close cooperation with the oil sector

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- Implementation NIS directive adapted to oil sector:
  2. Identified OSE: obligations on short term
     - Appointment of SPOC
     - Prepare inventory of network and information systems on which the essential service(s) depend

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- Implementation NIS directive adapted to oil sector:
  3. Identified OSE: obligations on longer term
     - establish security policy for the network and information systems

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- Implementation NIS directive adapted to oil sector:
  3. Identified OSE: security policy:
     - Conform ISO/IEC/27001 (or equivalent)
     - Take measures in order to prevent or minimalize incidents that might have negative influences on the provided essential service

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- Implementation NIS directive adapted to oil sector:
  3. Identified OSE: obligations on longer term
     – Notification of incidents

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- Implementation NIS directive adapted to oil sector:
  4. Identified OSE: inspections
     - Internal audit every year
     - External audit by accredited body
     - Inspections by FPS

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- Hollistic approach:
  - Uniformity between all relevant legislation
  - Cascading effects
  - Restraints (budget, personnel)
  - ISO/IEC/27001 or equivalent

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- CSIRT:
  - So far only national CSIRT
  - Analysis on-going on establishment of sectoral CSIRT and the format

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- Conclusions of first round of informal discussions with oil sector:
  - Oil is backbone
  - Cybersecurity is at high level in oil sector
  - Several systems in place, due to international nature
  - Avoid administrative burden

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Thank you for your attention!

Additional questions:
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