Cybersecurity for public sector in regions and cities

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Problem statement

- Shift to on-line space in public administration, accelerated in the past two years

- According to [1], the number of cyberattacks in the Czech republic increased in 2020 throughout all sectors, including public administration

- **Many organisations lack experts in cybersecurity** [1]
  - Especially prominent in public administration
  - The reason being unsatisfactory wage according to 77 % out of 63 public administrations

- Often used solution: outsourcing

Current situation – outsourcing of cybersecurity experts

- Typical advantages of outsourcing are, e.g., reducing costs (human resources or technology) and higher level of expertise

- However, hiring a typical company to outsource cybersecurity experts can pose risk like threat to security, instability, or length/type of the contract

- To combat the risks of outsourcing, **establishing regional centres** could be the solution
  - Public sector institutions would be providers as well as customers
  - Co-operation of public sector and academia
  - Potential for PPP and support from SMEs

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Foreign countries

- Many countries have a national cybersecurity strategy

- Almost none mention cybersecurity on a lower than national level; however:
  - Australia's Cyber Security Strategy 2020 mention establishing Joint Cyber Security Centres to engage also territory administrations [2]
  - In the USA, there is the Cybersecurity and Infrastructure Security Agency that provides services on a state levels [3]
  - Ontario, Canada has a Cyber Security Centre of Excellence with extended service catalogue of provided services for public administration [4]
  - Brussels, Belgium has own cybersecurity plan with a goal to be a facilitator for cybersecurity and to create a Regional cybersecurity centre [5]

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Czech Republic

- The central administration for cybersecurity is the National Cyber and Informational Security Agency

- Ministry of Regional Development supported 322 eGovernment projects with 8.3 bil. CZK from 2014 to 2020 [6]

- The leader among regions is Vysočina region
  - Technology centre providing services for public sector in the region [7]
  - Does not appear to provide cybersecurity services

Going forward

- EU has created a new funding programme called Digital Europe [8]
  - Supports digitalisation in businesses and public administrations
  - Focus on supercomputing, artificial intelligence, **cybersecurity**, advanced digital skills, and use of digital technologies through economy and society
  - Furthermore, supports the creation of Digital Innovation Hubs

- Digital Innovation Hubs can serve as a provider of cybersecurity services for public administration

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Resources

[1] Zpráva o stavu kybernetické bezpečnosti České republiky za rok 2020, NÚKIB

[2] https://www.homeaffairs.gov.au/cyber-security-subsite/files/cyber-security-strategy-2020.pdf

[3] https://www.cisa.gov/about-cisa

[4] https://www.ontario.ca/page/cyber-security-centre-excellence

[5] https://bric.brussels/en/news_publications/publications/papers/towards-a-regional-cybersecurity-plan-september-2018

[6] https://www.mmr.cz/getmedia/e26d3a1c-98bb-4e2c-ae9f-85a90dfd4c36/Factsheet-eGov_1.pdf.aspx

[7] https://www.kr-vysocina.cz/technologicke-centrum-kraje-vysocina/d-4061486

[8] https://digital-strategy.ec.europa.eu/en/activities/digital-programme

THANK YOU FOR YOUR ATTENTION.

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