INFORMACIJSKI POOBLAŠČENEC

REPUBLIKA SLOVENIJA

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Data protection legislation influence on cloud computing from local as well as EU perspective

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Old concepts meet the cloud

- **EU approach to data protection (Directive 95/46)**
- **Data controller**
  - determines that means and resources
- **Data processor**
  - processing on behalf of data controller

- **Private/Pubic /Community/ Hybrid**
- privacy concerns higher where
  - control of data is „outsourced“
  - cross-border transfers (third coutries)

- **Data protection legislation – main cloud issues**
  - Contractual processing of personal data
  - Data/information security
  - Export of personal data to third countries

Some open issues

- Who determines and who may change the terms of use?
- Data controller vs data processor
- The balance is lost – should we strive to maintain it or seek other options?

- **Transparency of cloud providers** – a lot to be done
- Data controllers have no answers to the most basic questions
  - Where will our clients‘ personal data be processed?
  - How will the data be secured?
  - How and when (if ever) will they be deleted?
  - ..

- „We will process personal data in line with our Privacy Policy…“

- Economies of scope and security vs small data controller‘s security

Cloud specific risks

- **Data security is only a part of data protection**
  - function creep effect
  - foreign jurisdictions – law enforcement agencies, civil proceedings etc.
  - are old mechanisms still adequate in the cloud computing era? e.g. Safe Harbor

- Specific risks
  - location transparenecy
  - multitenancy issues
  - vendor lock-in and portability of data
  - data erasure
  - security mechanisms and controls/audits (e.g. logging access to personal data)
  - disclosure during transfer/processing
  - …
- 2011: encreased demand for opinons of data protection authorities (DPAs)

DPA response

- **Datatilsynet** (Denmark) - Google Apps to be used by Odense municipality – data security and contractual relationship concerns
  - similar case in Norway
- **ULD** (DPA of Schleswig-Holstein, Germany)
  - Safe Harbor insufficient, call for independent certification

- **Opinion of the International Working Group for Data Protection in Telecommunications (IWGDPT)**
  - important for its international dimension

- **Opinon of the Article 29 Working Party**
  - contains **recommended content of contracts**
  - **consensus of EU regulators**

IWGDPT opinon

- International Working Group on Data Protection in Telecommunications
- **Sopot Memorandum** – *Working Paper on Cloud Computing - Privacy and data protection issues*, April 2012 - > public cloud, legal persons as users
- **General recommendations**
  - **cloud computing must not lead to a lowering of data protection standards as compared with conventional data processing**
  - **data controllers**: risk analysis (alone or with/by third parties)
  - **cloud providers** : transparency, security, accountability, portability
  - **legislators**: reassess the adequacy of existing legal frameworks allowing cross-border transfer of data and consider additional necessary privacy safeguards;
  - **supervisory authorities**: awareness and supervision;
  - further R&D (e.g „sealed cloud“, homomorphyic encryption);
  - certification and standardization.

IWGDPT opinon

- Recs(27) for data controllers and cloud providers
  - **location transparenecy/auditability**
    - physical location of all processing, including sub-contractors
  - **risk analysis (incl. portability analysis)**
  - actual erasure policies
  - encyription of moving data, data at rest
  - right to audit clauses (third parties allowed)
  - third coutry and own purpose clauses
  - **data subject rights clauses**
  - **independent third pary auditing**
  - less critical data first, additional safeguards for sensitive data
  - **distribution of responsibility**

- IWGDPT opinon – basis for the international conference resolution.

Article 29 Working Party

- A29WP=European DPAs under Directive 95/46/EC + EC + EDPS
- **Opinion 05/2012 on Cloud Computing, 1 July 2012**
- detailed **requests regarding the content of contracts**
- particular chapter devoted to information security
- **imbalance of contractual power is not en excuse for data controllers**
- Safe Harbor self-certification does not cover all transfers within the Cloud; national legislations and DPAs may have additional requirements
- companies exporting data should not merely rely on the statement of the data importer claiming that he has a Safe Harbor certification.
- recommends
  - t.i. standard contractual clauses,
  - BCRs for processors
- third parties to assess adequacy through stadization, certification and auditing schemes

Information Commissioner Guidelines

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- IPRS in co-operation with Cloud Security Alliance Slovenia Chapter, Slovenia ISACA Chapter , Zavod e-Oblak - Eurocloud Slovenia
- **raise awareness**, offer a **control list** for Data Protection Act compliance
- issued 15 June 2012, **English translation available**
  - **concept and specifics of cloud computing**
  - **cloud computing through main data protection concerns**
  - **control list (18)**
  - **practical examples (5)**

- **Control list**
  - for **data controllers** and/or **cloud providers**
  - containes **specific** and minimal **controls**
  - **guideliness for implementaion** of controls

If minimal controls are not implemented – reconsider moving to the cloud!

Examples of controls

- The client knows which categories of data will be transferred to the cloud.
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- The client has to be informed at all times about any sub-processors, that may process its data on behalf of the cloud provider, and about the types of data processing they execute (transparency principle).

- Before using cloud services the client has conducted a risk analysis, alone or with a trusted third party.

- Physical location of the personal data is known in every phase of the processing.

- The provider encrypts the data transferred to or inside the cloud over unprotected communication networks.

Practical examples

1. **SME and cloud–based office software suite**

   (location transparency, export to third countries, standard ToU)

2. **Public sector data controllers**

   (legal ground)

3. **Two enterprise-level examples**

   (focus on information security)

4. **SME and cloud –based CRM**

   (ToU negotiations)

5. **Local cloud provider**

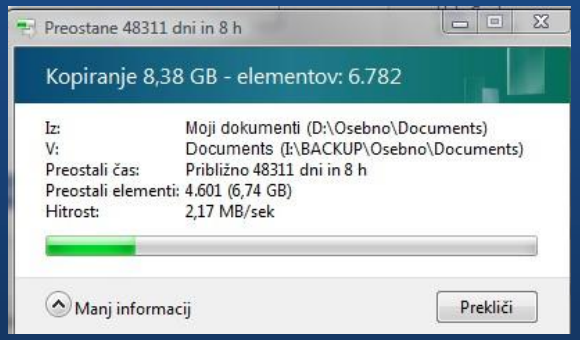
   (using data centers in third coutries)

Towards trust

- Trust is essential for legal and practical acceptance of cloud computing and exploitation of its potentials.

- Cloud computing should not lower data protection standards!

- Trust must be complete and similiar to trusting yourself:
  - **security**
  - **data protection**
  - **accessibility**
  - **reliability**
  - **fairness….**



- Privacy by Design – how to **seize opportunities** and **salvage privacy**
- Transparency as a necesary, but not a sufficient precondition
- Strike a new balance using third parties‘ services: standardization, certification (Privacy seals), independent third party auditing

Useful resources

- **Information Commissioner's guidelines**
  - http://bit.ly/MeOGun (*Slovenian*)
  - http://bit.ly/RWSoeR (*English*)
  - **Summary for SMEs**
    - http://bit.ly/NQxJIo

- **Article 29 Working Party opinion**
  - http://bit.ly/LuGOC4
- **IWGDPT opinion (Sopot Memorandum)**
  - http://bit.ly/Idj04U

Thank you for your attention!

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