Data Processing in Radiation Protection Dosimetry

15 th EURADOS School

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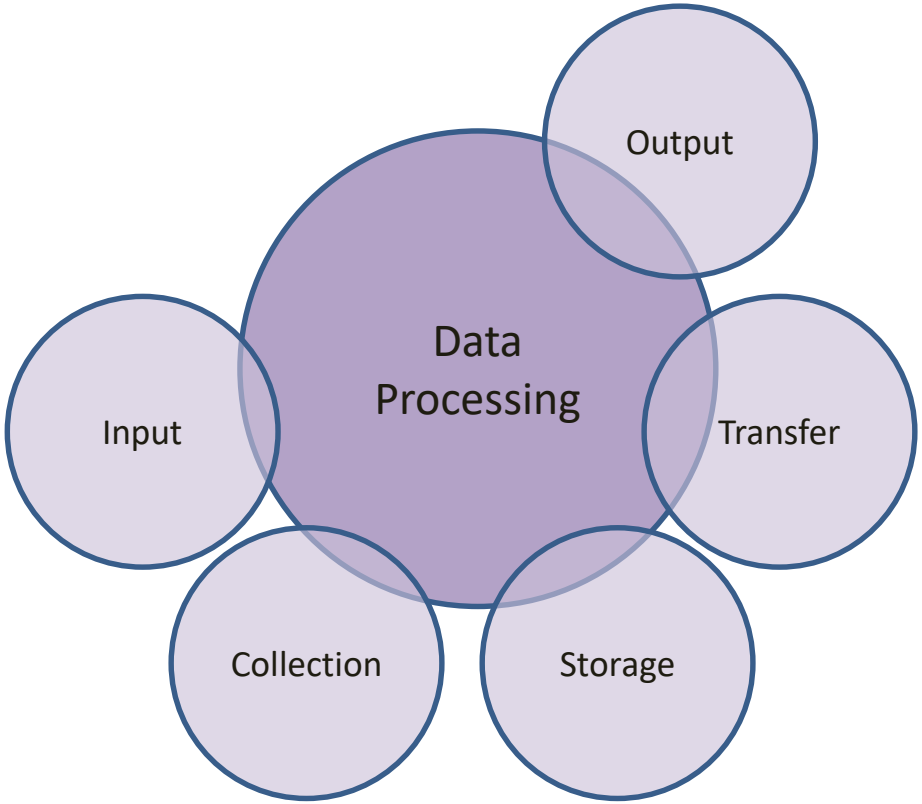
Introduction

- **EURADOS Working group 2: Harmonization of Individual Monitoring**
  - Task group on Dosimetry and Information Technology was formed in 2020
- **Identify Data and IT questions/ problems facing dosimetry services and make recommendations to solve**
- **Identified tasks:**
  - Data storage
  - Data encryption
  - Safe and effective communication paths and safe and effective data transfer
  - GDPR (right to be forgotten, data minimization, privacy of personal data and dosimetry)

Data Processing

- **The converting of information into something that is understood by a computer or simply manipulation of data by computer**



Data storage

- Data availability
- Integrity of data
- Backup
- General network design
- Data storage scaling

Data encryption

Comunication Paths and Data Transfer

- **Types of communication paths**
  - Paper
  - Voice based
  - Digital based (emails, web portals, cloud servers, VPN)
- **Types of records**
- **Security measures**
- **Data Portability**

GDPR

- **Regulation (EU) 2016/679 on the protection of natural persons with regard to the processing of personal data and the free movement of such data**
  - Right to be forgotten
    - Yes, but only if the worker reached the age of 75 years, but in any case not less than 30 years after termination of the work involving exposure
  - Data minimization

Summary of Privacy of Personal Data

When is allowed o process data?

- **The data subject has given specific, explicit consent to the processing of the data**
- **Processing is necessary to execute or prepare a contract to which the data subject is a party**
- **The data process complies with a legal obligation or is needed to save somebody's life**
- **Processing is necessary to perform a task in the public interest or carry out some official function**
- **There is a legitimate interest in processing personal data. Although it is the most flexible part of GDPR, the "fundamental rights and freedoms of the data subject" always override processor interests, especially if it's a child's data**

Data Protection Principles

- Accountability: GDPR compliance must be proven and demonstrated
- Accuracy. Personal data shall be accurate and up to date
- Data minimization. Data shall be limited to what is necessary
- Lawfulness, fairness and transparency: Processing shall be lawful, fair and transparent to the data subject
- Purpose limitation: Data process is allowed only in case of legitimate purposes, specified explicitly to the data subject
- Storage limitation: Personally identifying data must be stored for as long as necessary for the specified purpose
- Integrity and confidentiality: Processing must be performed in such a way as to ensure appropriate security, integrity and confidentiality

Risk Assessment

- **It’s necessary to identify risks measures to reduce those risks**
- **Use quantitative of qualitative method for risk assessment**
- **Examples**
  - Use of cloud storage
  - sending data without encryption
  - Backup not used

Thank you!