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Joint ICTP-IAEA School of Nuclear Knowledge Management

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Capturing & Transferring Knowledge: Basic Concepts

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Capturing and Transferring Knowledge - basic concepts

(D1.05 – presentations and practical session)

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Issues addressed

- Knowledge
- Explicit knowledge vs. Implicit knowledge
- Knowledge capture and transfer
  - Practical exercise
- Knowledge gaps and targets

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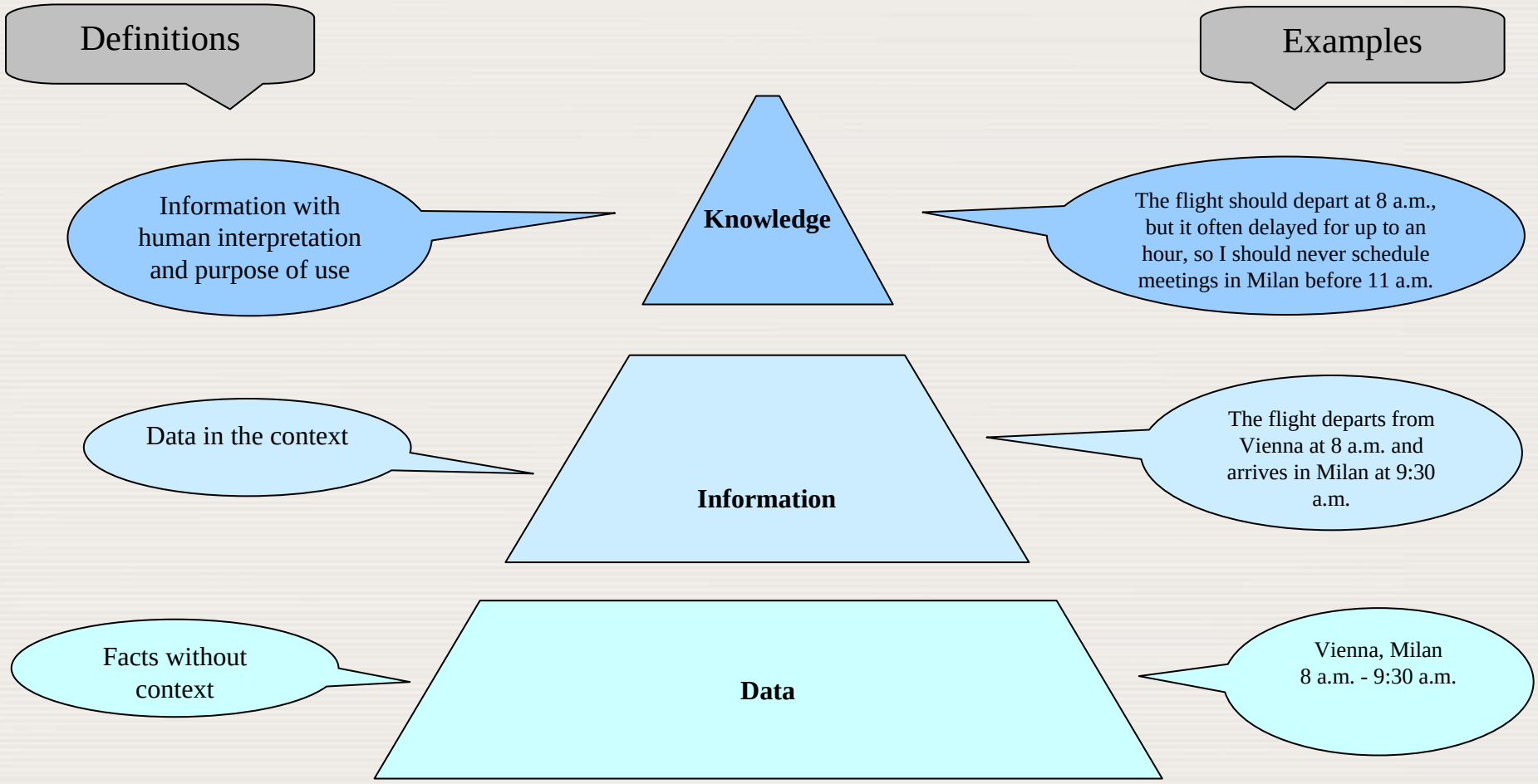
Data, Information and Knowledge



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Explicit knowledge vs.
Implicit knowledge vs. Tacit knowledge

- Explicit knowledge –
  - 20% (captured, recorded, codified)
- Implicit knowledge –
  - 30% (not been captured yet)
- Tacit knowledge
  - 50% (difficult to recall)

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Explicit knowledge

- Organizational
  - Organization chart, who is who
- Environmental
  - Nuclear industry, member states
- Formal or procedural
  - Manuals, guides, procedures
- Theoretical or academic
  - Theorems, equations, math, physics

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Implicit knowledge

- Intuitive organizational
  - Undocumented or informal rules
- Practices
  - How to format document

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Tacit knowledge

- Skills
  - How to ride a bicycle,
  - How to organize a meeting
- Attitudes
  - How to persuade other people
  - Social network
- Automatisms
  - Write software
  - Type a document

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Implicit vs. Tacit

- Not a big difference
- In most cases – as synonyms
- In a person's mind
- Tacit -> Implicit -> Explicit

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Basic aspects

- Knowledge capture
- Knowledge transfer
- Knowledge gaps
- Knowledge targets

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Capturing tacit knowledge

- Why capture tacit knowledge?
- What kind of knowledge could be captured?

- From whom might you wish to capture?
- How could it be captured?

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Transferring knowledge

- From whom to whom?
- How might it be transferred (explicit vs. implicit)?

- How might it be utilized in the future?
- What might be the benefits?

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Exercise

- Split into 4 groups
- 2 groups are assigned with one of the 2 areas
  - Knowledge capture
  - Knowledge transfer
- Discuss 4 questions posed for the selected area
  - 15 mins
- The designated reporter reports the results
  - 3-5 mins for each group

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Capturing

- Why capture implicit knowledge?
- What kind of knowledge could be captured?
- From whom might you wish to capture?
- How could it be captured?

Transferring

- From whom to whom?
- How might it be transferred (explicit vs. implicit)?
- How might it be utilized in the future?
- What might be the benefits?

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Exercise

- Summary Reports from each group

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IAEA test case on capturing and transferring knowledge

- Insight series session
- INIS and NKM Section
- Brainstorming – IAEA staff members
- Common responses from grouped participants

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Knowledge gaps

- Are there age gaps in your organization?
- Is your organization losing experienced people?
- Does your organization have a graduate recruitment programme?
- Do you still have access to retired staff?

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Knowledge targets

- Is there a need within your organization to preserve knowledge for further re-use?
- Which areas (with focus on nuclear knowledge) would you target?
- Which knowledge is important for your organization?
  - Now
  - In the future
- Are there projects ore areas in which you feel sufficient knowledge has not been captured yet?

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Summary

- Conclusions
- Question and answers
- Thank you!

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