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NAV Portugal, E.P.E.
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Agenda

Safety Data Base

- Why?
  - The safety life cycle
  - Tying loose ends
- Existing situation
- Solution
- Future

Why? – safety lifecycle

- Safety Assessments
  - Identify hazards
  - Define safety objectives
  - Produce safety recommendations
  - When is it done?
  - What are the results?

- Follow-up
  - During the project
  - In operations
  - Passing information

Why? – safety lifecycle

- On-going safety monitoring
  - Analysing occurrences
  - Is the system complying with its safety targets?
  - What is the impact of a change?
  - How to measure?

- Learning
  - Where is the information?
  - How can one read / search it?
  - Is it up to date?

Why? – Tying loose ends

- An occurrence is analysed
  - Is it the result of an "known" hazard?
    - Yes – Measure
    - No – Add to the list
  - Is its severity as expected?
  - What about mitigations?
  - What were the causes?

Where is this knowledge kept?

Existing situation

- Safety Assessments
  - Input:
    - List of requirements
    - Participants knowledge
  - Output:
    - FHA report
    - Safety recommendations

Where are the reports?

Are they maintained?

Existing situation

- Occurrence investigation
  - Get severity (to report…)
  - Define mitigations
  - Identify causes

Does not look at hazards

Does it make sense to look at hazards?

Existing situation

- Difficult collaboration and information exchange
- No link between hazards and occurrences
- No follow-up of:
  - Hazards
  - Mitigations
  - Barriers

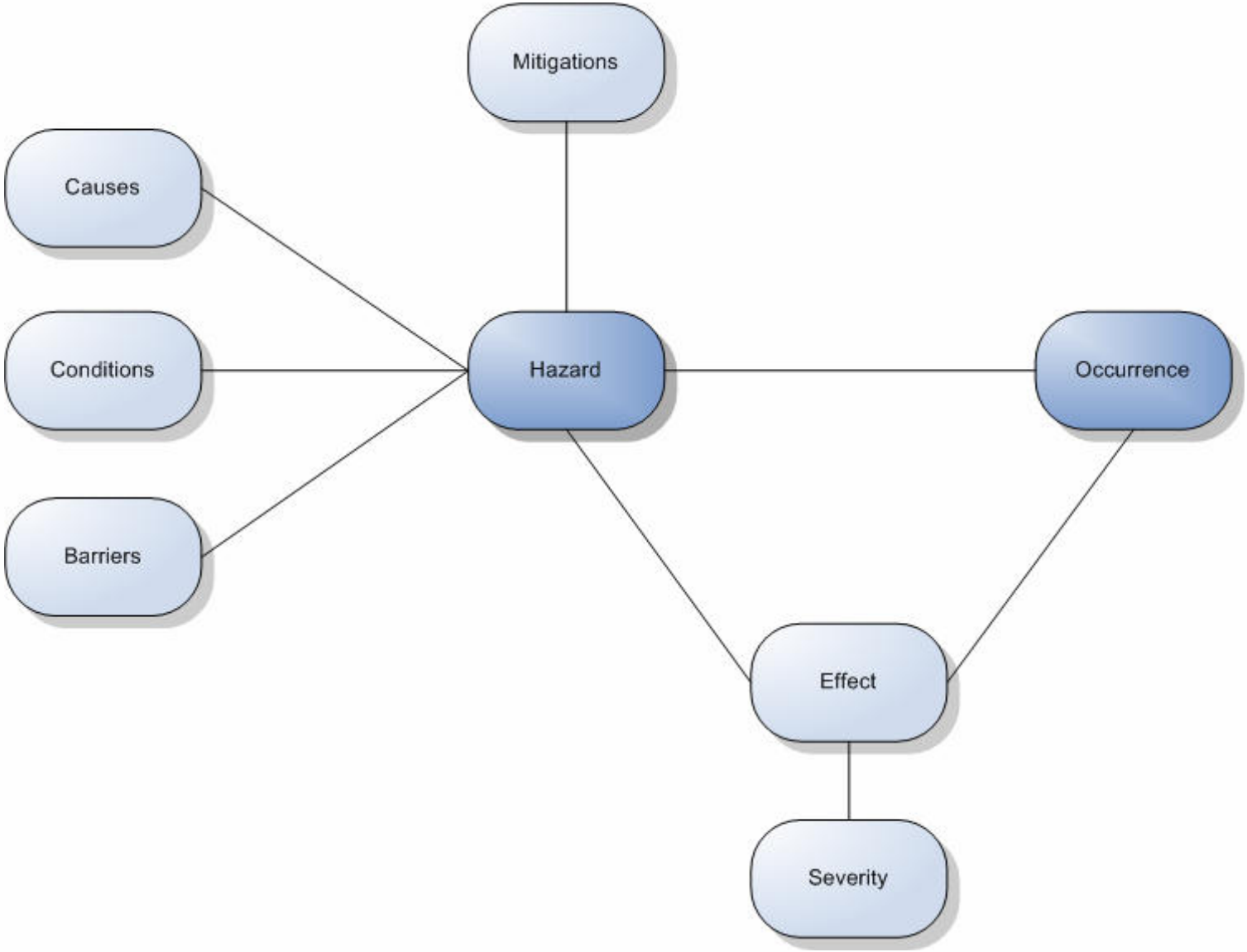
Solution

- The solution should:
  - Promote collaboration
  - Make the hazard logging and management process more agile
  - Ease hazard understanding

Solution

- Requirements
  - Simple solution
  - Learning with inputs
  - Easy to access and maintain
  - Evolving data – not all items required
  - Cover the whole safety life cycle
  - Link hazards with causes, barriers, mitigations, occurrences
  - Determine the frequency of occurrences
  - Check if the frequency of occurrences are compliant with safety objectives
  - Simultaneous user access (WEB)
  - Access permissions

Solution


Mitigations
Causes
Conditions
Barriers
Hazard
Occurrence
Effect
Severity

Solution

Maria João Leal

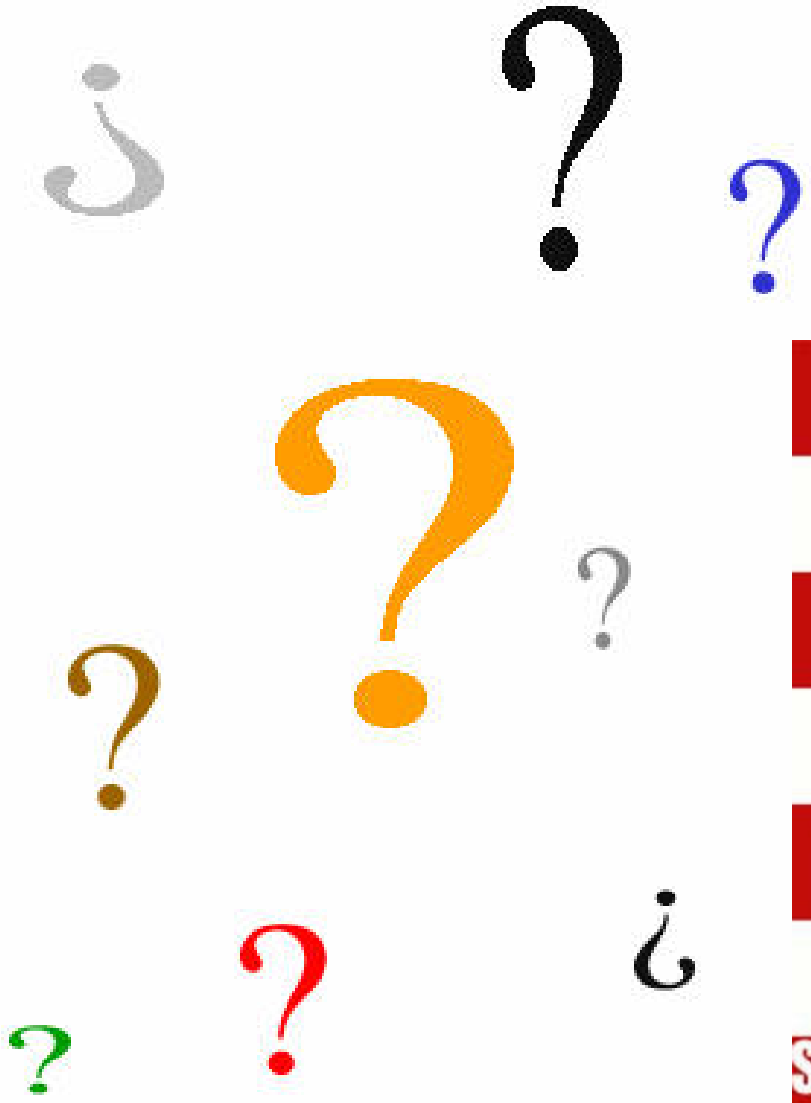
Future

- Populate data base with hazards
  - Harmonize descriptions
  - Causes, barriers, mitigations (???)
  - Likelihood of hazard leading to…
  - Occurrences (reference, if known)

Build knowledge

- Use in Safety Assessments
- Monitor evolution
- Extend – automatic reports

The end




HEY YOU
STOP ASKING QUESTIONS!
OR ELSE WE'LL PERMANENTLY DETAIN YOU
A MESSAGE FROM THE MINISTRY OF HOMELAND SECURITY