**Risk Analysis**

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| Objectives:At the end of the module, participants:* Will be able to the assess risks related to an operation.
* Will understand that the major risks are assessed using risk analyses called TRA.
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**This sequence is to be built locally. To this end, 2 options are available to you:**

* **either a local (or branch) training exists and meets these objectives. In this case, it can be used instead of this module.**
* **if this is not the case, you must build your own training session by following the suggestions below.**

**This document contains content suggestions and educational activities to achieve the goals of this module.**

**You will find the necessary elements to build your slides in the "TCT 5.1 Ressources.pptx" file.**

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| Key elements | Support/activities |
| The logic of risk analysis: identify the risks, assess them, determine the precautions to take and check that they are implemented. |  |
| Hazard = severity x probability |  |
| Differences between risk analysis methodologies: the technological risk assessment method is different from performing a risk analysis on an operation. | MRT Pyramid e-learning |

**Estimated duration:**

2 hours 20 minutes (1 hour 30 minutes of which is practice)

**Teaching method recommendations:**

After presenting in the classroom, there is an exercise designed to get participants involved in a risk analysis on an operation

1. Pre-requisite modules for the sequence
* None
1. Preparing the sequence

Before beginning this module, we recommend you ensure:

* The “MRT” e-learning is available.
* You have chosen an activity where participants can get involved in analyzing an operation.
* The documents related to your branch and site/subsidiary on operational risk analyses are up to date on the slides.
1. Suggestion for sequence roll-out

Instructions legend for the trainer:

* Comments for the trainer
* Key content elements
* **Type of activity**
* *“Question to ask”/statement of instructions*

| **Phase/Timing** | **Trainer** | **Module content suggestion** |
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| 1.Introduction5 minutes  | **Welcome participants and present the module objectives.** **Share** the objectives of the module with the following comments: *The objectives of this module are:**- to understand then carry out a risk analysis related to an operation.**- to be aware that technological risks are analyzed using another method (not developed in this module)*  | Slide with the objectives:At the end of this module, you:* Will be able to assess risks related to an operation.
* Will understand that the major risks are assessed using risk analyses called TRA.
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| 2. Hazard, risks, severity, probability.20 minutes -> 25 minutes | The aim of this sequence is for participants to know the difference between risk and hazard. And for them to be able to characterize the 2 components of a hazard: severity and probability.To do this:- **Reminder of the difference between hazard and risk.***“Who can remind us of the difference between risk and hazard?”*The resource slide may be useful.The aim is for participants to understand that a risk exists from the moment it is uncovered. If it is not uncovered, there is no risk (e.g. if a knife is in the kitchen while you are at the opposite end of the house, the danger (of cutting yourself) exists but there is no risk to you.In summary, **present** the definition of what a hazard is and an example.**- Hazard = severity x probability**Start with an actual situation:*"Which is the most dangerous?* *A meteorite to the head or spraining your ankle while going down the stairs?"*And in this situation, **ask** how they would classify them? What means are there?**Let them discuss** and note on the board (classification according to severity and probability).Present a slide to sum up. | Slide: definition and example of hazard vs risk   |
| 3. Risk assessment method 25 minutes -> 50 minutes | The aim of this sequence is for participants to know the steps of the risk analysis and understand that the technological risks have a specific analysis method (which does not relate to them in their current job).To do this:**- Show the MRT e-learning.** Or ask participants to navigate to it.**Scroll through** the 2 e-learning sequences: introduction and then, when the pyramid is displayed, the "Risk analysis" module (do not show the "Analysis of technological risks" part).Before launching the e-learning, **give** the instructions, which are to note the key points as they come up.**- Organize a debriefing following the e-learning in the form of questions/answers.****Ask** the questions on the slide and **ask** participants to answer them.Questions on the following topics, which are in the e-learning:* *What are the steps for risk analysis?*
* *Can you cite examples of specific risks and technological risks?*
* *Are the operational risks dealt with using the same method as the technological risks?*
* *What are the methods/circumstances for analyzing the “specific” risks (rounds, Work Permit, particular operations)?*
* *What is the residual risk?*

**- Present the risk analysis regulations for your branch/site/subsidiary.****Show** the reference regulations: their name, number, and major points of the content.**Remind** participants of, and **show them,** the matrix used in the branch or at the site/subsidiary, as well as the method in force at the site/subsidiary. |  |
| 5. Exercise on the risk analysis 01:10 -> 02:00 | The aim of this sequence is for participants to experiment in the classroom with the risk analysis on an operation (which you will choose).To do this:- **Present** the sequence We will start by doing an example together, then you will complete an exercise on an operation in groups, then debrief.- **Present** the method to be used.**List** the steps on the board and explain **them**. In particular the last one on residual risk (make it clear that it is this risk we want to assess at the end to decide if the operation can be launched).- **Do an example (together)** **Start** with an example of an operation that can be either in the professional field (and in line with the site/subsidiary activities) or in a different context (for example: changing the air conditioning or changing a water tap (with weld) close to an electric meter).**Do** the example with the participants, step by step.**- Organize the exercise in groups****Organize** the groups (3 people) and ask each one to **identify** an operation to be completed.**Monitor** the groups in turn.**Ask** a group to present the outcome of their analysis. Then **ask** the others to suggest improvements (if needed).In conclusion, ask the other participants **to comment** on the difficulties they encountered. | Slide: the steps:* Identification of the tasks to perform
* Identification of the hazards for each task
* Identification and assessment of relative risks
* Definition of one or more compensatory measures
* Assessment of the residual risk
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| 6. What about you? 20 minutes - > 2 hours 20 minutes | The aim of this sequence is to gather what participants have understood and any difficulties they encountered. **Ask** the participants to answer the following questions:* *“What lessons have you retained from this module?*
* *Do you think you will be involved in risk analyses in your day-to-day work? If so, for what type of operations?*
* *What difficulties can you foresee?"*

Organize a **round table discussion**.And ask the other participants (or yourself) for solutions to address these challenges.**Thank the participants and conclude.** |  |