



*ICAO Safety Management
Systems (SMS) Course
Handout N° 3 – International
airport construction work*



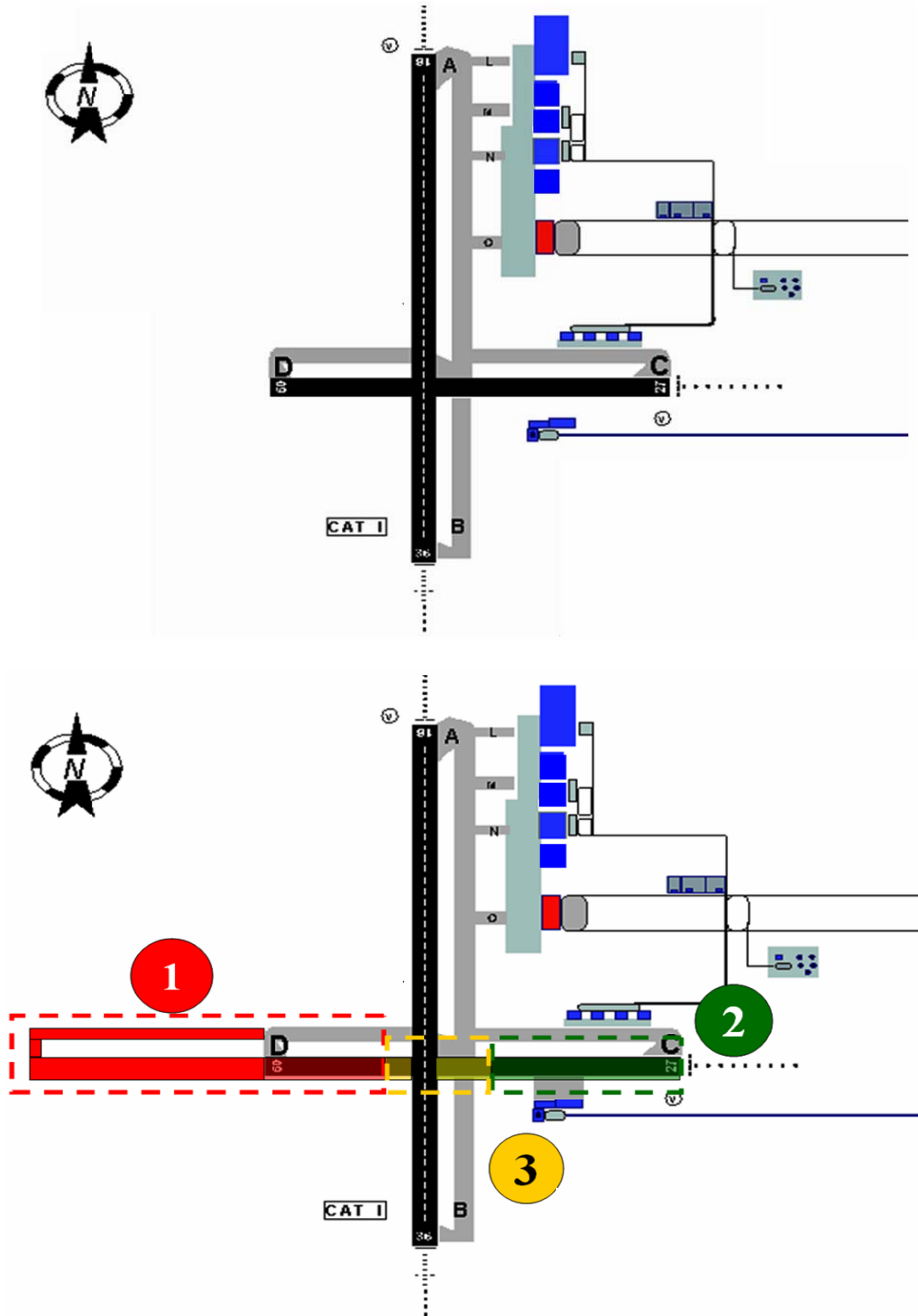
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SAFETY MANAGEMENT SYSTEMS (SMS) COURSE

Exercise 04/01 – International airport construction work

Scenario

This is a construction project to repave one of the two crossing runways at an international airport (100,000 movements a year). It's a three-phase construction project.



Scope of the work

- **Phase 1:**
 - Extend the length of RWY 09-27 by 900 meters westward and width from 30 to 45 meters from a point 100 m from the intersection with RWY 18-36, and strengthen the runway extension (from asphalt to concrete) to increase its Pavement Classification Number (PCN).
 - Extend the length of TWY Delta by 900 meters westward.
 - Estimated time to complete the work: seven (7) months.
- **Phase 2:**
 - Construct and enlarge new threshold entrance and holding zone at TWY Charlie.
 - Extend the width of RWY 09-27 from 30 to 45 meters and strengthen (from asphalt to concrete) this part of the runway up to a point 200 m before intersection TWY A-B to increase its PCN.
 - Estimated time to complete the work: five (5) months.
- **Phase 3:**
 - Complete the construction work of RWY 09-27 for the central area of the last 350 m at the intersection of RWY 09-27 and RWY 18-36 (from asphalt to concrete), increase its width from 30 to 45 meters and its PCN.
 - Estimated time to complete the work: two (2) months.
- **Runway utilization during the construction work**
 - Continuous utilization of RWY 18-36 during the three-phase construction project.
 - RWY 18-36 length is 3.850 m and the distance available from threshold RWY 18 to intersection RWY 09-27 is 2.600 m.
 - Information must be provided to airport users.

Group activity

A facilitator will be appointed, who will coordinate the discussion. A summary of the discussion will be written on flip charts, and a member of the group will brief on their findings in a plenary session.

Your task

- 1) Identify the hazards using brainstorming techniques.
 - a) Brainstorm a list of possible hazards, their components and their consequences (*use a flip chart*).
- 2) Complete the attached log (*Table 04/01*) as follows:
 - a) List type of operation or activity
 - b) State the generic hazard (*hazard statement*)
 - c) Identify specific components of the hazard
 - d) List hazard-related consequences
- 3) It is recommended to conduct the analysis per phase of construction.

TABLE 04/01 – HAZARD IDENTIFICATION

N°	Type of operation or activity	Generic hazard (hazard statement)	Specific components of the hazard	Hazard-related consequences
1	<i>Air Traffic Services</i>	<i>Aerodrome construction.</i>	<ul style="list-style-type: none"> - <i>Single runway operation</i> - <i>Runway congestion</i> - ... 	-
2				
3				
4				
5				



N°	Type of operation or activity	Generic hazard (hazard statement)	Specific components of the hazard	Hazard-related consequences
6				
7				
8				
9				
10				
