



P3.3. Rescue and Firefighting &

Aerodrome Emergency Plan

Your safety is our mission.



Oversight of RFFS requirements

REG 139/2014
OPERATIONS REQUIREMENTS. SUBPART B —
AERODROME OPERATIONAL SERVICES,
EQUIPMENT AND INSTALLATIONS



Regulation – Implementing Rules ADR.OPS.B.010 Rescue and firefighting services

a.1-3) Facilities, equipment, fire extinguishing agents, personnel

- a.4) Medical aptitude
- b) Training programme
- c) Proficiency checks
- d) Training: instructors + means and facilities
- e) RFFS personnel records
- f) Level of protection reduction









Regulation – Implementing Rules ADR.OPS.B.010 Rescue and firefighting services

















Fire category; 10. (1)

Rescue equipment: In accordance with the fire category published. Removal of disabled aircraft: 8 bags with several capacities, 1 compressor and 2 air distributors. 7 cross beams with several capacities, 4 elevation groups to arrange around the fuselage and 4 groups to raise from wings with several capacities, 10 slings with several capacities, 1 group of two straps of (A380) elevation, 11 mats and 1 stacker crane to place mats.

Remarks: (1) Response time to THR:







Oversight of RFFS requirements
EU REQUIREMENTS ABOUT
COMMUNICATION AND ALERTING
SYSTEMS



EU requirements about communication and alerting systems







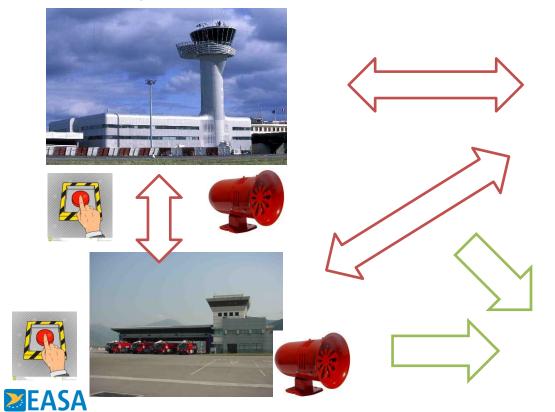








EU requirements about communication and alerting systems











EU requirements about communication and alerting systems





















EU requirements about communication and alerting systems

Summoning of designated personnel not on standby duty



<u>Defined</u> procedure



Identify the needs



Find available personnel



Make the summoning call







EU requirements about communication and alerting systems



Recording communications













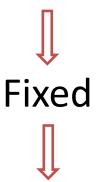
Oversight of RFFS requirements RFFS CATEGORY AND LEVEL OF PROTECTION







Aerodrome Category ≠ Level of protection



Movements





Variable



Airport manager's choice



Aerodrome Category

Longest/widest plane normally using the aerodrome

Aerodrome category for rescue and firefighting					
Aerodrome category (1)	Aeroplane overall length (2)	Maximum fuselage width (3)			
1	0 m up to but not including 9 m	2 m			
2	9 m up to but not including 12 m	2 m			
3	12 m up to but not including 18 m	3 m			
4	18 m up to but not including 24 m	4 m			
5	24 m up to but not including 28 m	4 m			
6	28 m up to but not including 39 m	5 m			
7	39 m up to but not including 49 m	5 m			
8	49 m up to but not including 61 m	7 m			
9	61 m up to but not including 76 m	7 m			
10	76 m up to but not including 90 m	8 m			









Normally



When the number of movements in a category is 24 or more, during the three busiest months

CAT	Movemer		
10	5		
9	10	K	15
8	50		<mark>65</mark> >24
7	1200		

CAT	Movements	
5	5	
4	5	10
3	10	20
2	90	X

Maximum 2 reductions for Category



Aerodrome Category

 $\hat{ }$

Level of protection

= Aerodrome Category

< **700 movements** of highest category

= Aerodrome Category -1

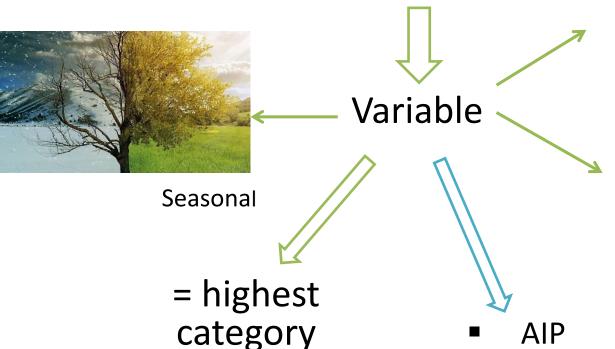


CAT	Movements
10	5
CAT 9	100
LoP 8	1000
7	1200

105 > 24 105 < 700

Maximum 1 reduction for Level of Protection

Level of protection





Working day / Weekends



Morning / afternoon / night



NOTAM

All-cargo, mail, ferry, training, test, positioning and end-of-life airplane operations

CAT	Level
1	1
2	2
3	3
4	4
5	5
6	5
7	6
8	6
9	7
10	7



Other aspects:

- Annual traffic forecast
- Unforeseen circumstances are "accepted"
- Emergency landings allow CAT required > CAT available (better than diversion)



Oversight of RFFS requirements VEHICLES AND RESCUE EQUIPMENT









Level of protection	Number of RFFS vehicles
1	1
2	1
3	1
4	1
5	1
6	2
7	2
8	3
9	3
10	3







Rescue equipment:

PROCEDURE

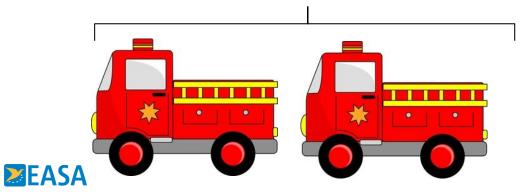




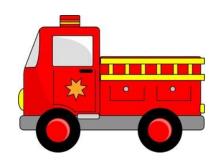


ICAO Doc. 9137 - Airport Services Manual. Part 1. RFFS

Active



Standby





Difficult environment



















Availability of suitable rescue equipment and services

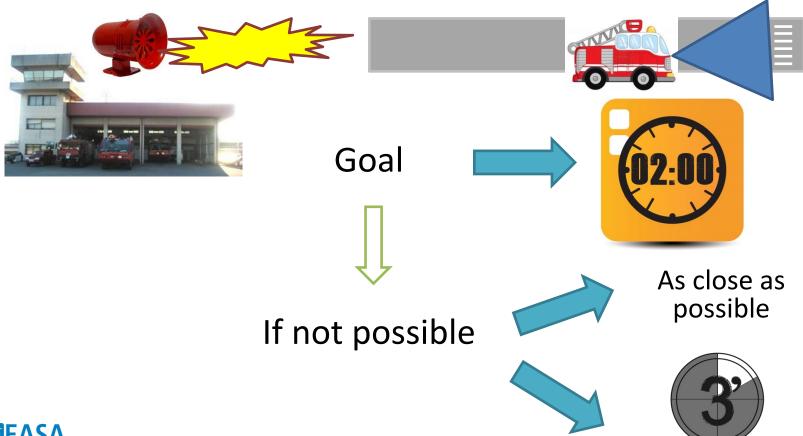


Oversight of RFFS requirements RESPONSE TIME











Other vehicles







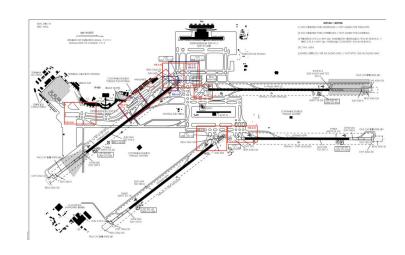




Other parts of the movement area



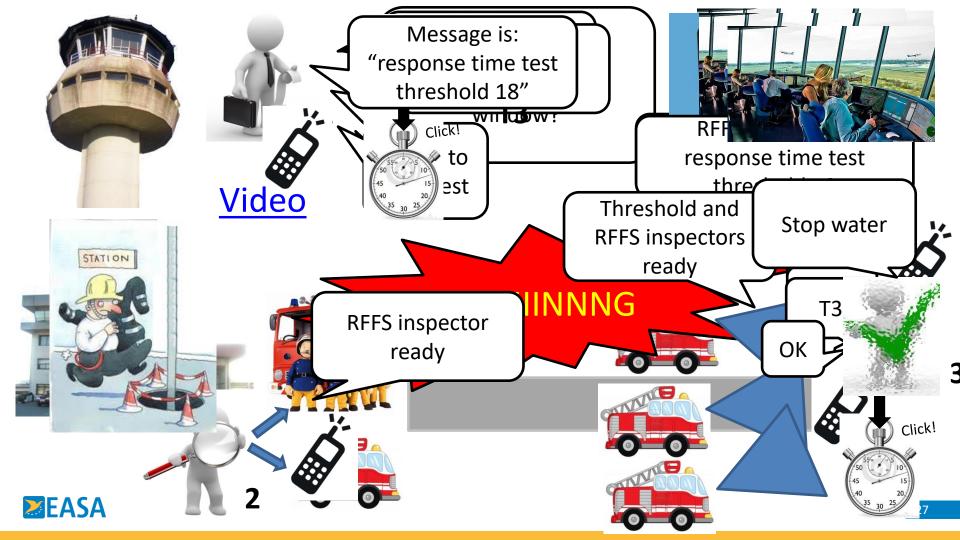
Calculated





Meeting with Expected airport responsible conditions for the test Inspector's equipment





Water availability



Refill time



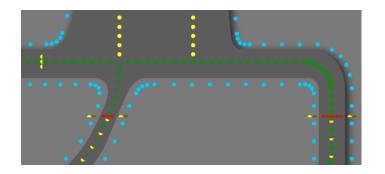












Lighting







Low visibility conditions







Radar





Oversight of RFFS requirements OPERATIONAL PROCEDURES FOR RFFS







Foam + complementary agent + water



Personnel



Reserves



RFFS Requirements

(AMC)





Response time



Facilities



Vehicles



Communications + alarms





RFFS Requirements (AMC)

PROCEDURES









Responsible



Activities



Reports/Records

DATE: STORM NAME: SCHOOL NAME:								
BUILDING # / ROOM # TASK(S) PERFORMED								
MAINTENANCE DEPAI	TMENT WORK O	RDER #:	00					
2000000			HOURS HOURLY RATE					
NAME	3081	TITLE	REG OT REG OT			SOCIAL	SECURITY NUM.	
			\vdash					
			\vdash		-			
		EQUIPME		0	SUSED			
DESC. OF EQUIP.	OWNED	RENTED	Η,	40UF	IS USED		COST	OF EQUIP.IMAT.
			-	_				
		VEHICLE	SUSEC					, i
VEH NUMBER STAF	EAGE T END TOTAL	END TOTAL NO. HOURS		DESCRIPTION OF V			IC TOTAL	
			-	_				
			-7	Ē	_	_	_	
		MATERO						
DESCRIPTION OF MA	AMOUNT USE	COST	INVO	CE	O. FOR	MAT.		TOTAL
			-	_				
			-	_	_	_		
SUPERVISOR	-	1	longo					TOATE
SUPERVISOR			UNEC	TUR				DATE:



Inspection of foam, complimentary agent and water supplies available at vehicles

Foam + complementary agent + water

Response time

Planning,
realization and
evaluation of
response time tests
and other practices

Procedure for personal management: shifts, summoning of personnel, etc.

Personnel

PROCEDURES

Check of maintenance of

RFFS facilities

Facilities

Check and test of vehicles and their systems

Vehicles

Inspection of available foam reserves and procedure to request supplies

> Equipment

Communicatio

alarms

Reserves

equipment (with a checklist)

Inspection

of available

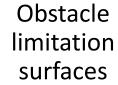
Check of alarm
systems and
communications
correct functioning

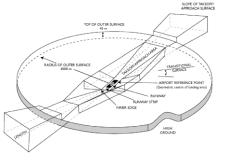


& AE



Winter conditions





Wildlife



NON-RFFS requirements (AMC)

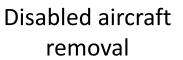
Dangerous goods (fuel spills)





Other...











NON-RFFS requirements (AMC)



PROCEDURES











Oversight of RFFS requirements EMERGENCY PLAN PROCEDURES FOR RFFS



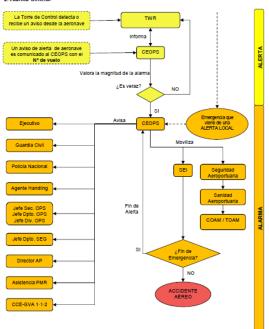


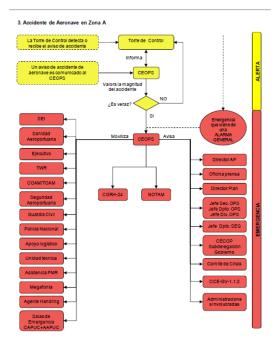


1. Initial activation



2. Alarma General

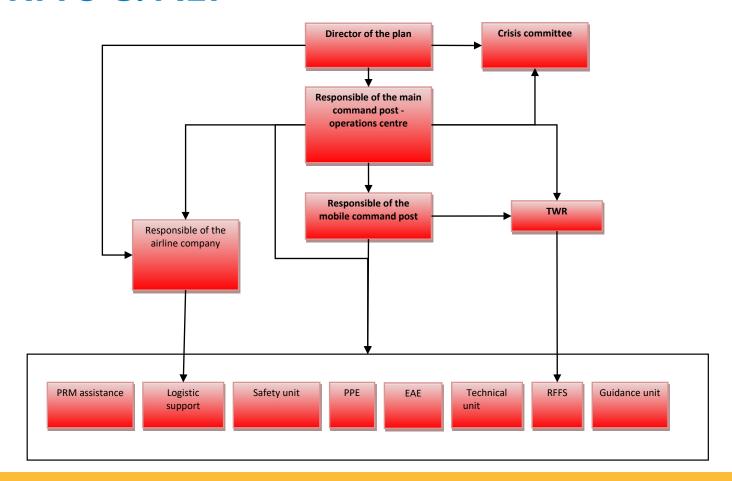






Desactivación de la Emergencia: El CEOPS comunicará el Fin de la Emergencia a los mismos que avisó cuando se activó.

2. Coordination





2. Coordination

Airport RFFS







Mobile Command Post















Other RFFS Services





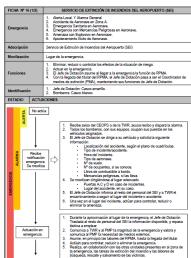
3. Intervention

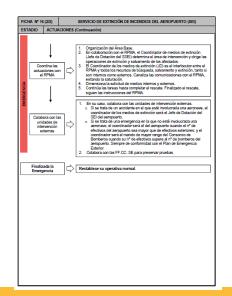
Responsibilities sheet in the Emergency Plan



Phase of the emergency

Type of emergency

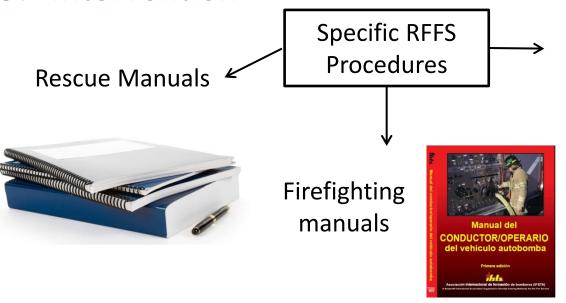




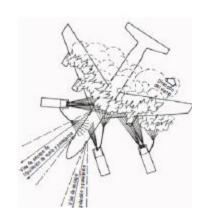




3. Intervention



Internal procedures













Oversight of RFFS requirements

RFFS PERSONNEL REQUIREMENTS: QUANTITY OF FIREFIGHTERS, ORGANISATION AND STRUCTURE, TRAINING AND PROFICIENCY CHECKS





Number of Firefighters

☐ AMC: number of vehicles

☐ GM: Task Resource Analysis



Level of protection	Level
1	1 Chief or 1 FF
2	2 FF or 1 Chief + 1 FF
3	2 FF or 1 Chief + 1 FF
4	2 FF or 1 Chief + 1 FF
5	2 FF or 1 Chief + 1 FF
6	1 Chief + 4 FF
7	1 Chief + 4 FF
8	1 Chief + 4 FF
9	1 Chief + 6 FF
10	1 Chief + 6 FF



Organisation and structure

Responsible Airport Unit



Firefighting Chief(s)



Firefighters



- Develop procedures
- Guarantee personnel, equipment, facilities, vehicles...
- Incident review and management
- Other...
- Coordination
- Shifts
- Planning and coordination of response time tests
- Incident coordination with airport responsible unit
 - Scheduled inspection and tests
- Emergency, RFFS and non-RFFS activities



☐ Initial: new workers

Types of training

☐ Recurrent: 12 month interval

☐ Refresher: not performed duties for a long time

☐ Differences: new airport or manager





Content







RFFS specific training









Training



Content

Team coordination



Airport procedures







Fire drills (including pressure fed)





Instructors



Training



Evaluation







Proficiency ☐ Job offer requirements checks ΛESΛ ☐ Initial training Ability to Continuing training perform satisfactorily ☐ Medical condition Assessors ☐ Duties performance



Training and proficiency checks





Training itinerary

Records



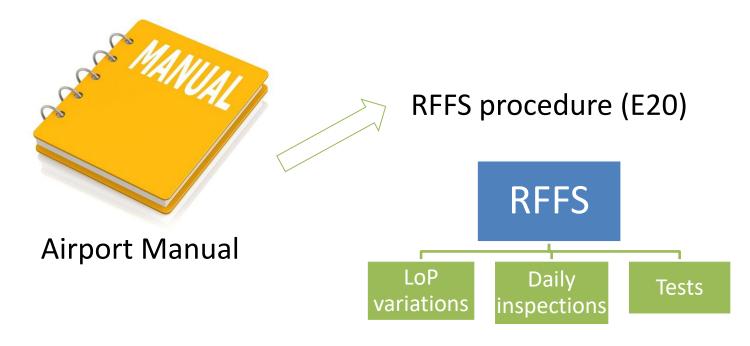
Oversight of RFFS requirements INSPECTION PROCEDURES, PROTOCOLS.





P3.3. RFFS & AEP How to develop

Documentary Inspection: Airport Manual RFFS procedure





Lower Level Procedures

Documentary Inspection: Airport Manual RFFS procedure

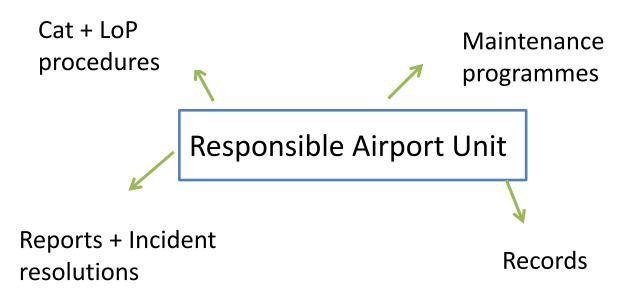
- 1. Procedure description and objectives
- 2. Personnel and responsibilities
- 3. Category and Level of Protection
- 4. Facilities, means, equipment and human resources
- 5. Response time



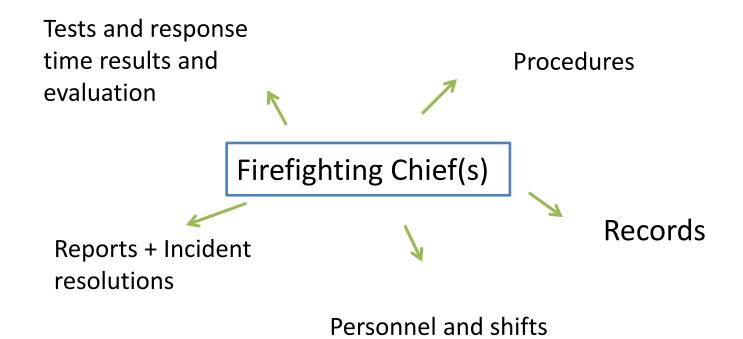
Documentary Inspection: Airport Manual RFFS procedure

- 6. RFFS routes and intervention areas
- 7. Emergency procedures
- 8. RFFS procedures
- 9. Non-RFFS procedures
- 10. Records

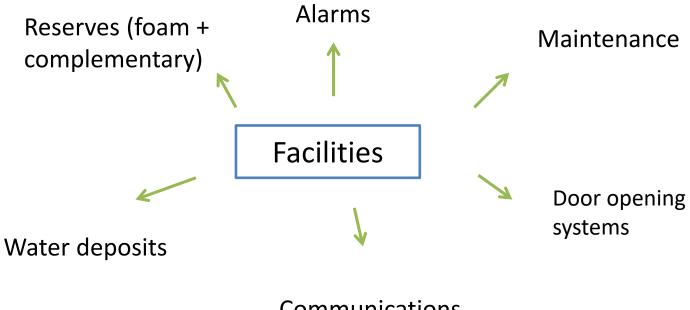




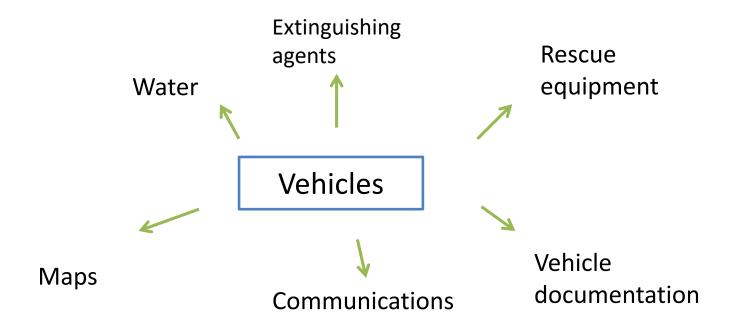




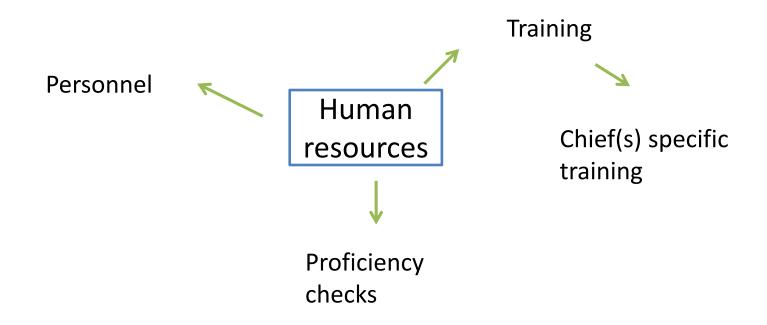














Field Inspection



Authority's choice



Response time test





Refill test



Other...



Emergency Planning

REG 139/2014
OPERATIONS REQUIREMENTS. SUBPART B —
AERODROME OPERATIONAL SERVICES,
EQUIPMENT AND INSTALLATIONS







Requirements



Regulation 139/2014: ADR.OPS.B.005 Aerodrome emergency planning

≈ ICAO Annex 14 chapter 9.1









Information in the Emergency Plan Document:

Definition of scope Participants Equipment



Types of emergencies



Incidents and accidents



Public health emergencies



Unlawful seizure



Bomb threat **EASA**



Dangerous goods occurrences



Building fires



Phases of the emergency



Emergency



General alarm



Local alarm





P3.3. RFFS & AEP Areas where emergencies happen

Inside the airport





Outside the airport

Outside the airport: bodies of water

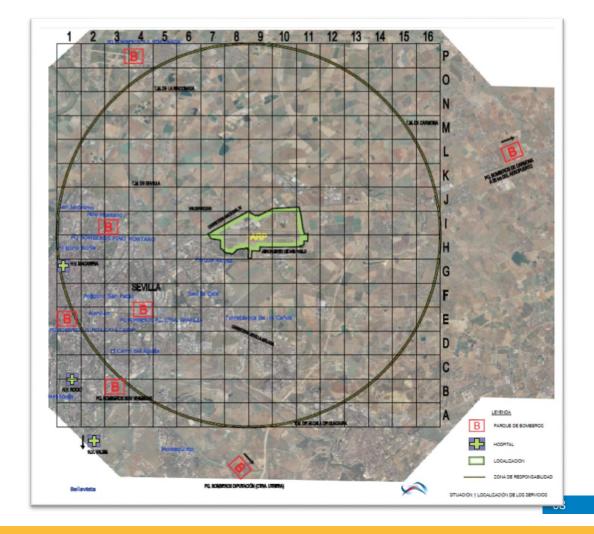




Outside the airport: difficult access areas



Grid map of the aerodrome and its immediate vicinity identifying all the different areas (r=8km)





Participants from <u>inside</u> the airport



















Participants from outside the airport















Equipment available inside the airport

Rooms



Communications



Mobile posts





Rescue equipment, first aid equipment, etc.



Equipment that participants from <u>outside</u> the airport will supply







Information in the Emergency Plan Document:

Organisation

Procedures

Coordination during an emergency

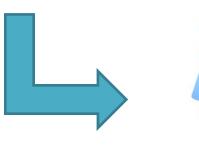


Crisis committee Director of the plan Clear structure for all the Responsible of the main command post operations centre participants inside the airport Responsible of the TWR mobile command post Responsible of the airline company Logistic Safety unit PPE EAE Technical **RFFS** Guidance unit PRM assistance support



Emergency Operations Centre







- OVERALL COORDINATION OF THE EMERGENCY
- It is an aerodrome facility
- An overall responsible person shall be designated
- Supports mobile command post
- Important personnel with decision power
- Equipment: communications, screens/view of the emergency, maps,













- ON SITE COORDINATION OF THE EMERGENCY
- It is an aerodrome facility
- Facility capable of being moved rapidly
- Coordinates with Emergency Operations Centre
- A mobile command post responsible person shall be designated
- Equipment: communications, loudspeakers, identification signs



Emergency Operations Centre & Mobile command post







Emergency Operations Centre



























Mobile command post: intermediate coordinators





















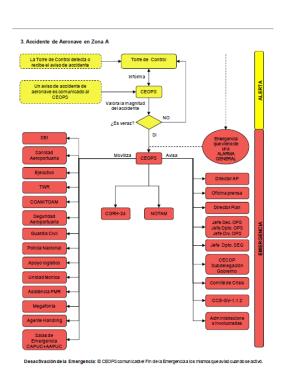






2. Alarma General La Torre de Control detecta o recibe un aviso desde la aeronave Informa CEOPS es comunicado al CEOPS con el Nº de vuelo Valora la magnitud de la alarma ¿Es veraz? viene de una ALERTA LOCAL Ejecutivo Guardia Civil Policía Nacional Agente Handling Fin de Alerta COAM / TOAM Jefe DIV. OPS Jefe Dpto. SEG Emergencia? Director AP Asistencia PMR ACCIDENTE AÉREO CCE-GVA 1-1-2

Desactivación de la Emergencia: El CEOPS comunicará el Fin de la Emergencia a los mismos que avisó cuando se activó.



Activation

Clear definition of:

- Who decides if the emergency plan is activated
- Who has to be called
- Who makes the calls

* Calling checklists or automatic calling systems are highly advised



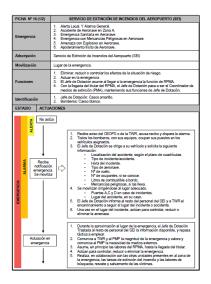
Responsibilities sheet in the Emergency Plan

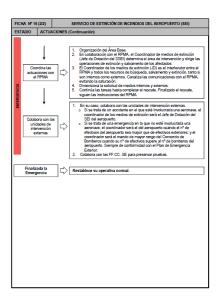


Phase of the emergency











Coordination with participants from outside the airport



Are any other local or **regional plans** activated?

What is the **command structure** once other plans are activated?

Are there any **authorities** from outside the airport that will join the command post?

Do this authorities take over responsibility of the emergency?

Do **other participants** from outside the airport take over responsibilities in the emergency area (MCP)?

Coordination with participants from outside the airport

Internal participants

(IMPORTANT)

SIGNED AGREEMENTS

Aerodrome manager

COORDINATION

External participants

EMERGENCY PLAN COMMITTEE



Coordination with participants from outside the airport

EMERGENCY PLAN
COMMITTEE

- Coordinate and accept changes on the emergency plan
- Transmit important information
- Feedback
- Emergency test preparation
- Emergency test analysis



Implementation of the Emergency Plan





When do we consider the Emergency Plan is fully operative in an airport?

- 1. The Emergency Plan Document has been **distributed** to all participants
- 2. All participants have received training on the Emergency Plan
- 3. Appropriate **coordination** with participants from outside the airport has been agreed
- 4. An emergency exercise has to be carried out
- 5. The airport accountable manager has to **sign a document** indicating that the Emergency Plan is fully operative



Emergency Exercises







Full-scale aerodrome emergency exercise (EASA - 2 years, ICAO 2/3 years) and partial emergency exercises







EASA recommends tabletop emergency exercises

















Emergencies in difficult environments shall be tested too







END

Thanks for your attention!!

easa.europa.eu/connect













