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14 - 15 / 09 / 2019

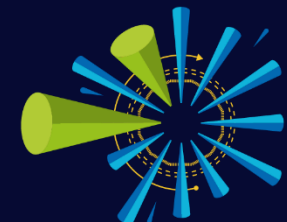
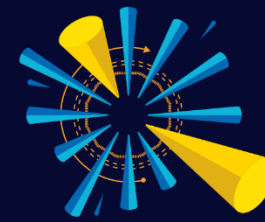
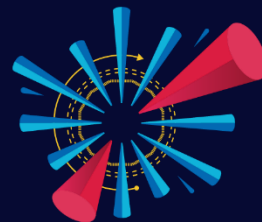
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ALICE

Safety Briefing for the ALICE / LHC-P2” Supervised Area Guides and Crowd Marshals

K. BARTH, LEXGLIMOS & RSO ALICE



Outline

- Safety File OD2019 « ALICE - LHC2 UNDERGROUND »
- Safety Training Requirements



- Safety Hazards and Measures
- Evacuation
- Communication
- Basic rules + First Aid Response + Safety Organization
- Questions & Answers -> Practical Tour

OD2019 ALICE / LHC-P2 Safety File

- The supervised area underground guides (UG) and crowd marshals (UCM) have all necessary safety training.
- They know the visits itinerary and associated safety hazards.
- They have the responsibility for the accompanied visitors and know how to react in case of emergency.



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**DOSSIER DE SÉCURITÉ CIRCUIT
DE VISITE OD2019
« ALICE UNDERGROUND »**

**IN CASE OF EMERGENCY OR INCIDENT PLEASE CALL :
+41 22 76 74444 (74444)**

Résumé
Le document présent est le Dossier de Sécurité d'un circuit officiel de visite pour les Open Days 2019. Il regroupe l'ensemble des données relatives « à l'évaluation de la Sécurité de la visite à toutes les étapes de leur cycle de vie et aux mesures et procédures correspondantes », conformément à l'Instruction Générale de Sécurité GSI-SH-1.





Documents de référence
[1] INSTRUCTION GENERALE DE SECURITE GSI-SH-1 – VISITES SUR LE DOMAINE DU CERN (EDMS [1137263](#))

Traçabilité	
Le responsable de l'organisation de la visite	Pour le project OD2019: Dominique Bertolla PSO : Yann Léchevin HSE-OHS, Meriem Chniba HSE-RP Site Manager pour le point de visite : Arturo Tauro, EP-AIO
Délégué(s) à la sécurité concerné(s) (p. ex. DSO, TSO, PSO, LEXGLIMOS, RPO Experiment, RPO LHC etc...)	LEXGLIMOS : Klaus Barth, EP-AIO Deputy-LEXGIMOS: Andre Augustinus, EP-AIO DSO-IR: Carine Pivadori HSE-OHS RPO: Nadine Conan HSE-RP-AS and Isabel Brunner HSE-RP-AS Christophe Tromel HSE-RP-AS
Correspondant HSE	Gunnar Lindell HSE-DI, Marc NAS HSE-FB, Jordan Cumin, HSE-OHS PE
Référent document	EDMS n° : 2112252 v.1


DISTRIBUTION


Personnes mentionnées ci-dessus	Date	Description des changements
N° ver.		

Safety Training Requirements




Safety at CERN / La Sécurité au CERN
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person entering CERN site.




CERN - Beam Facilities / CERN - Installations faisceaux
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person entering a CERN beam facility.



CERN - LHC Large Experiments / CERN - Grandes Expériences du LHC
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person entering CERN's experiments (ALICE, ATLAS, CMS, LHCb)




ALICE - Surface and Underground Areas / ALICE - Zones de Surface et Souterraines
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person requiring access to the surface areas of ALICE.




Radiation Protection - Awareness / Radioprotection - Sensibilisation
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person entering CERN site.



Radiation Protection - Supervised Area / Radioprotection - Zone Surveillée
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person who needs to work in Supervised Radiation Areas.



Emergency Evacuation / Évacuation en cas d'urgence
Skip to Session
 [Description and sessions in English](#)
TARGET AUDIENCE: Any person entering CERN site.




OD2019 - Life-Saving Actions (Auditorium)
Skip to Session
 [Description and sessions in English](#)




OD2019 - General Session (Auditorium)
Skip to Session
 [Description and sessions in English](#)

+ one of the two specific ALICE OD2019 trainings






OD2019: training for underground guides and crowd marshals 

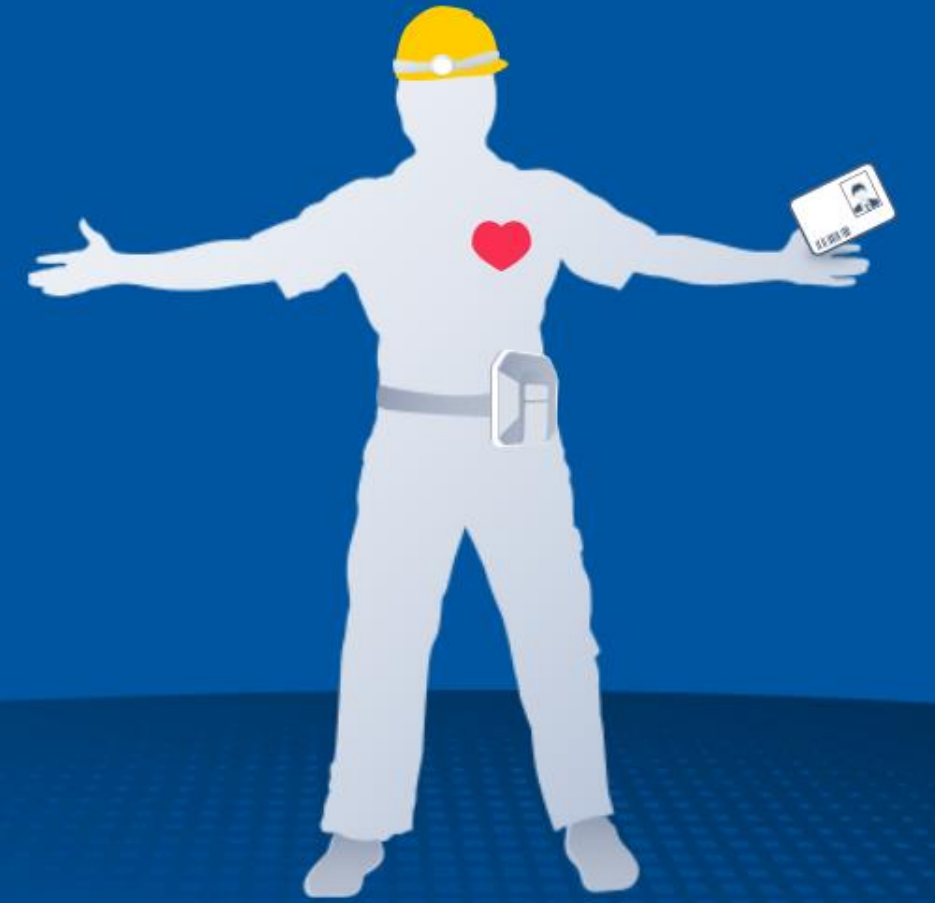
 Thursday 12.Sep 2019, 14:00 → 16:00 Europe/Zurich
 3294/R-008 - Point 2 (CERN)
 Andre Augustinus (CERN) , Arturo Tauro (CERN) , Despina Hatzifotiadou (Universita e INFN, Bologna (IT)) , Klaus Barth (CERN) , Roberto Divia (CERN)



OD2019: training for underground guides and crowd marshals

 Friday 13 Sep 2019, 10:30 → 12:30 Europe/Zurich
 3294/R-008 - Point 2 (CERN)
 Andre Augustinus (CERN) , Arturo Tauro (CERN) , Despina Hatzifotiadou (Universita e INFN, Bologna (IT)) , Klaus Barth (CERN) , Roberto Divia (CERN)

PPE for Underground Guides (UG) and Crowd Marshals (UCM)



PPE =
personal protective
equipment

- Helmet with headlight
- Safety shoes
- Personal Dosimeter
- Operational Dosimeter for monitoring zero-exposure of visitors

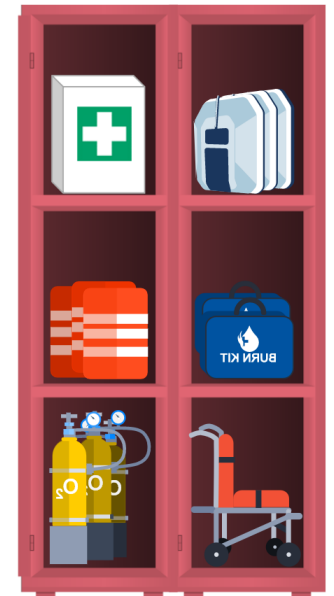
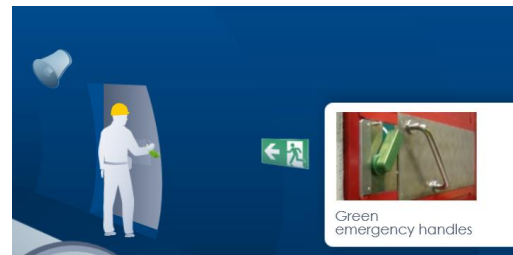
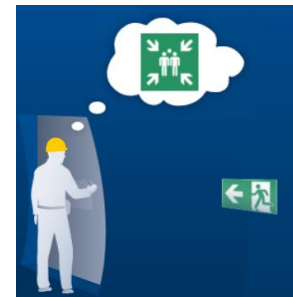
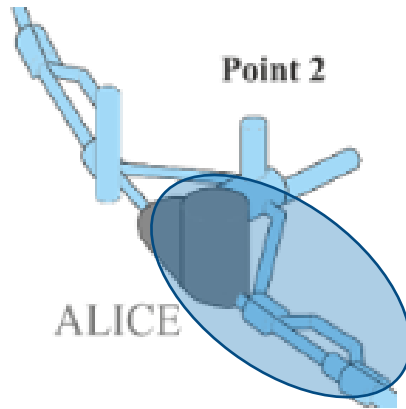
- ~~Self-Rescue Mask~~

Replaced for OD19 only by this safety briefing

Remark:

- UG and CM to check that visitors have close shoes and no bags.
- There will be one TETRA handset carried by UG or UCM per group. All UGs and UCMs should carry their mobile phone.

Safety Hazards and Measures (1)



OD2019 Radiation Areas



IMPACTs

Activity 136371 - OD2019 - ATLAS

Activity 137211 - OD2019 - ALICE +Pt2

Activity 137212 - OD2019 - Point 4

Activity 137213 - OD2019 - CMS

Activity 137214 - OD2019 - Point 6

Activity 137215 - OD2019 - LHCB

Activity 137220 - OD2019 - AD

Activity 137222 - OD2019 - CLIC _ CTF3

Activity 137226 - OD2019 - LINAC2

Activity 137229 - OD2019 - LINAC4

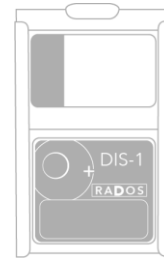
Activity 137230 - OD2019 - COMPASS

Activity 137233 - OD2019 - EHN1

Activity 137234 - OD2019 - NA62

Each Supervised Radiation Area Guide :

Mandatory



Personal dosimeter
(passive)



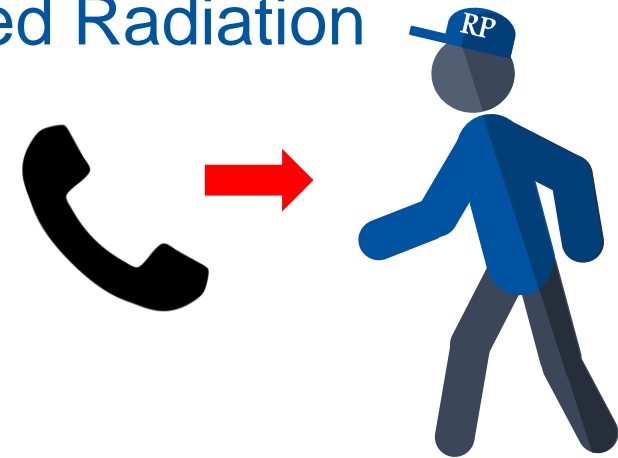
Operational
dosimeter (active)

- Operational dosimeters activated : **Mandatory**
 - Specific IMPACT
 - Each Shift (Beginning 1st guide: activation – End last guide: reset)
- Before after each visit : Guides:
 - Write down : Name, CERN id, time of the visit and the dose on the dosimeter

Contact RP

- If :
 - The dose on the dosimeter $\geq 3\mu\text{Sv}$
 - Issues with the dosimeters
 - Any doubt concerning radiation areas
 - Use on an emergency exit going through Supervised Radiation Areas

Call LEXGLIMOS / RSO 163204



Safety Hazards and Measures

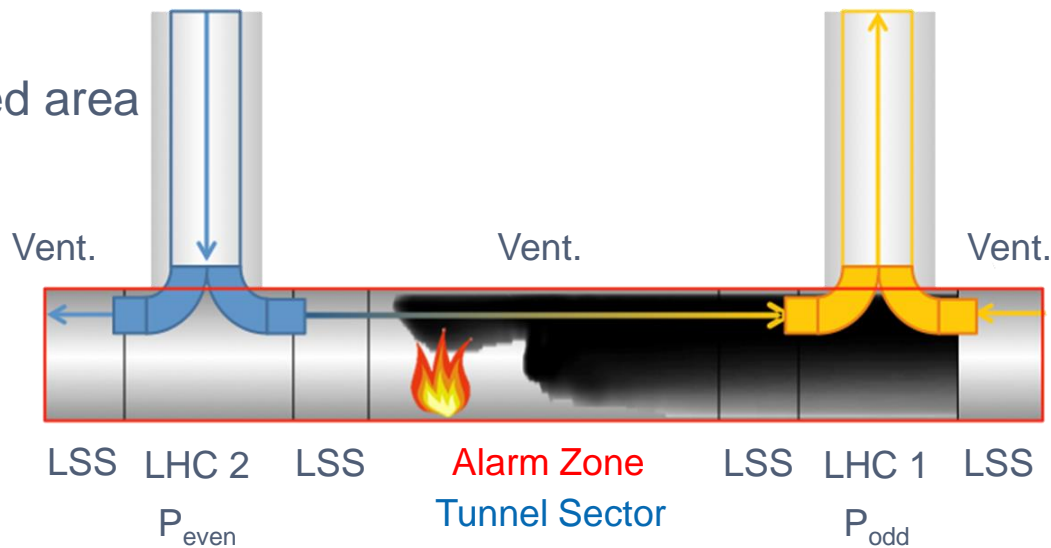
Hazardous scenario: Fire - ODH

Main causes: Electrical equipment, hot work and welding

Dangerous aspects of a fire:

- Toxic fumes
- Oxygen deficiency in an enclosed area
- Heat and hot smoke
- Reduction of the visibility

Alarm & Evacuate calmly via nearest safest exit to assembly point!



Do not cross the smoke cloud / fire hazard for evacuation!

Evacuation

If:



You hear the evacuation alarm or the BIW

OR



The oxygen deficiency detector light is flashing

OR



You hear or smell a gas leak, see smoke or a cryogenic leak



Stay calm and **evacuate the area** with the visitors immediately, following the green evacuation signs. UCM and UG to take to make sure not to lose a visitor during evacuation!

Trigger the evacuation alarm manually (if it is not already sounding) by breaking the glass of the box without putting you in danger.

Force the emergency handles of the doors if needed.

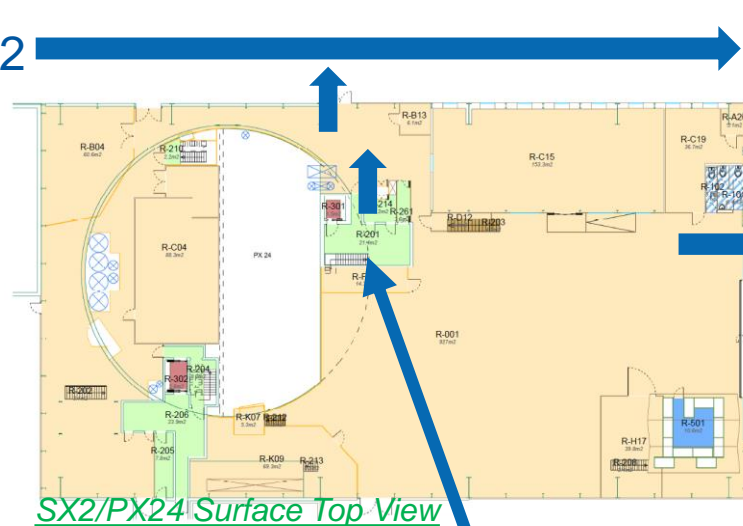
Emergency guides might be present in order to help you evacuate: follow their instructions.

Go to the assembly point at the entrance of the site. Once there, wait for instructions from the Fire Brigade.



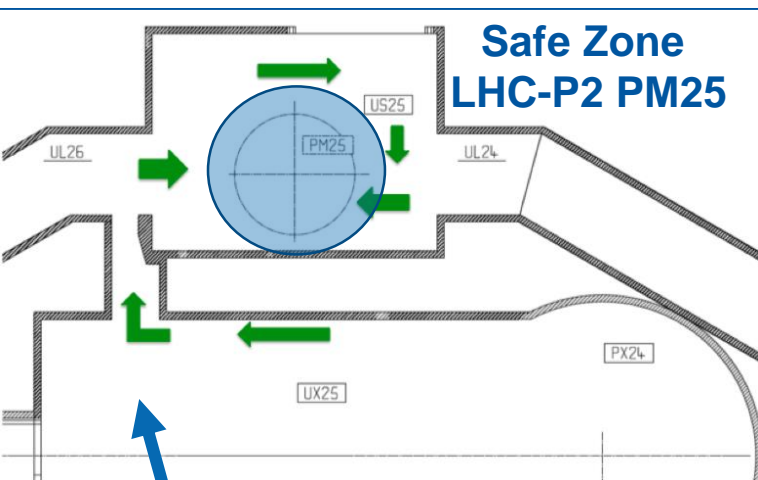
Evacuation Path

From PM25/SD2

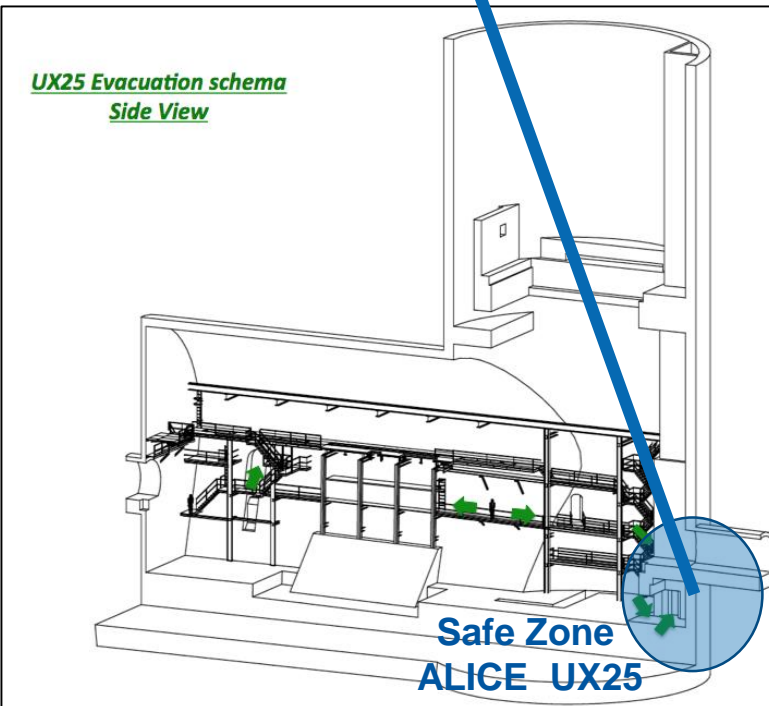


From tunnel return back to **Safe Zone PM25!**

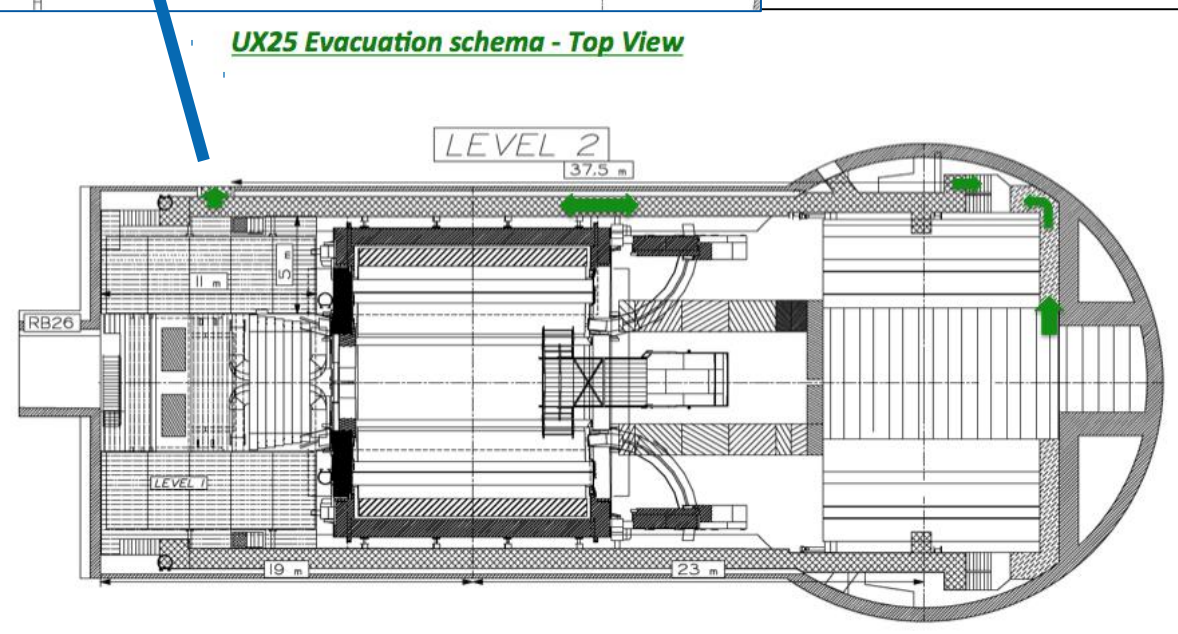
If safety hazard is between you and PM25, evacuate to **LHC-P1!**



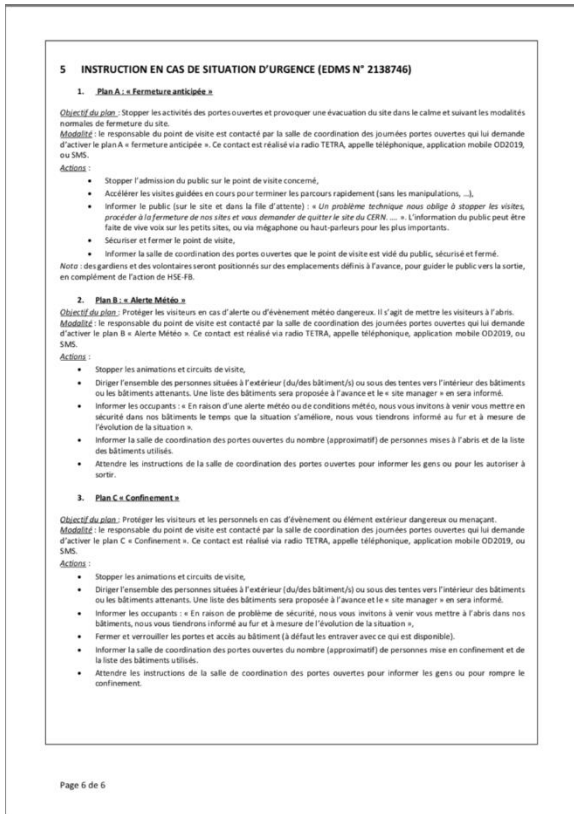
UX25 Evacuation schema - Top View















From cavern **C-side** continue tour to reach **PM25 Safe Zone** through **UP25**.
 From cavern **A-side** go back to tunnel to reach **PM25 Safe Zone** through **UJ24**.
 Alternatively, go **down stairs to UX25 Safe Zone**. In this case visitor group has to be split in 2 (part with UG, part with UCM).

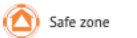


OD2019 ALICE / LHC-P2 Safety File



- Three scenarios:
 - Plan A: Early closure
 - Goal – “soft” evacuation of sites
 - Plan B: Weather alert 
 - Goal – harbor visitors in safe buildings
 - Plan C: Confinement from harmful exterior event 
 - Goal – harbor visitors in safe buildings
- List of safe buildings ALICE / LHC-P2: **SXL2, SX2 and SD2**

- ✓ Safety
-  Safe zone
-  Meeting point
-  General SIP A0
-  General SIP A1
-  General SIP A2
-  No visitor behind this point
-  Exit
-  Watch your head
-  First Aid Point
-  First Aid Sign



Communication

- **Urgencies:** (Managed by SCR) **red phone** or **74444** or **TETRA emergency call** (without delay transferred to PCO).
- **Incidents and non-urgent demands:** (managed by Site Manager and transferred to PCO) call **162529 / 163534 / 163204** or **TETRA**
- **ALICE P2 Site Manager** has a **TETRA emergency link** to PCO as well as a satellite phone link to PCO.
- **TETRA handsets** are backup and local broadcast medium between UGs / CMs and Site Manager.

Reporting – Best practices

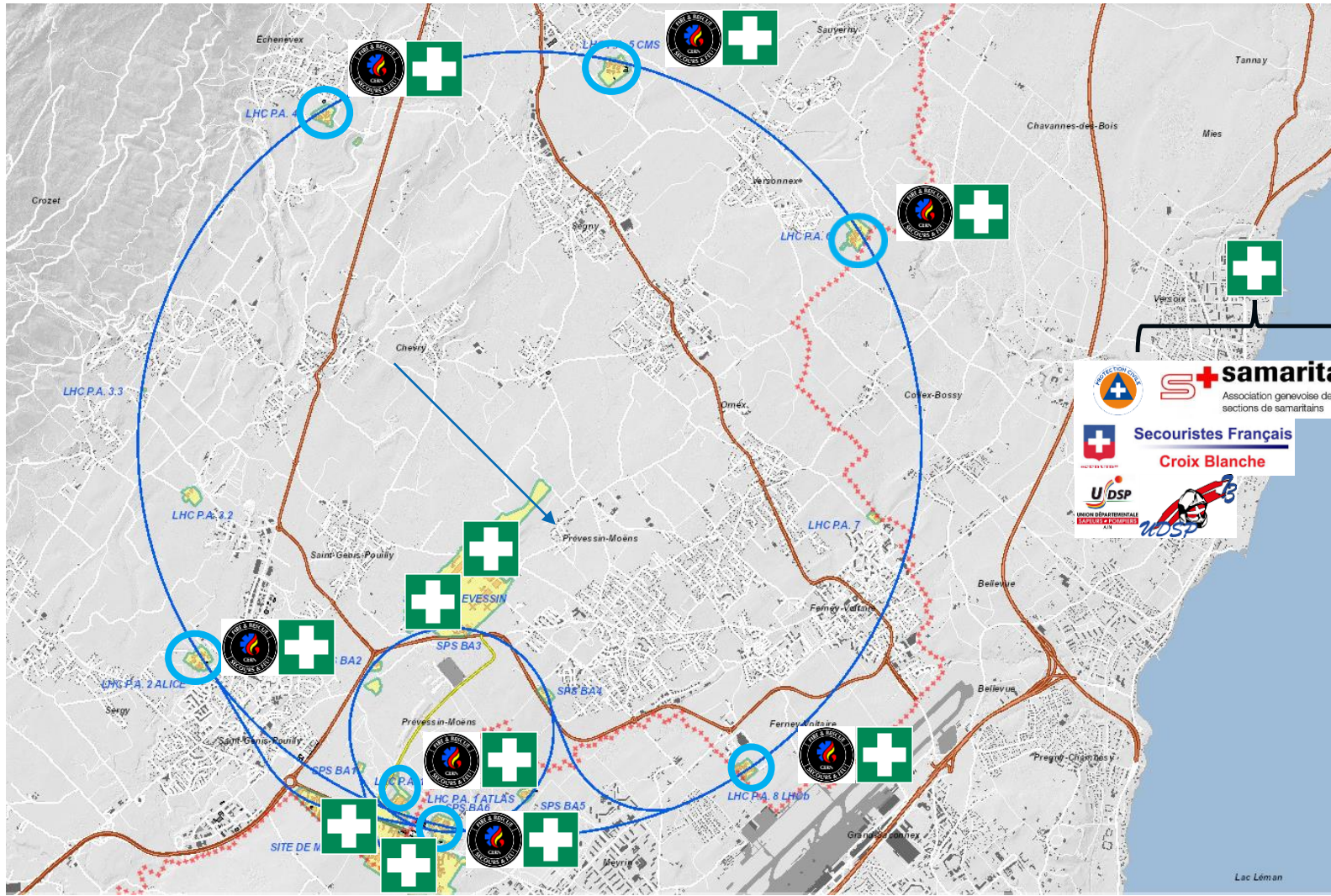
- In case of doubt about an object or a situation, do not hesitate to report it to the **74444 (00 41 22 767 4444)**, the **guards** nearby or **PCO** (66001 or 66002), depending on the urgency.
 - Do not rely on anyone else to do so.
 - It is better to warn 10 times for nothing than not to do it.
- **Safety is everyone's matter!**

Basic rules during visit

- **Keep group together** (between UG and UCM)
- Make sure Visitors **do not touch anything**
- If Visitors are “difficult” to not hesitate to call help / report via **TETRA or GSM**
- **Monitor (UCR) and respect (UG)** the timing of the visit !
- In case of emergency, incidents and evacuation stay calm.



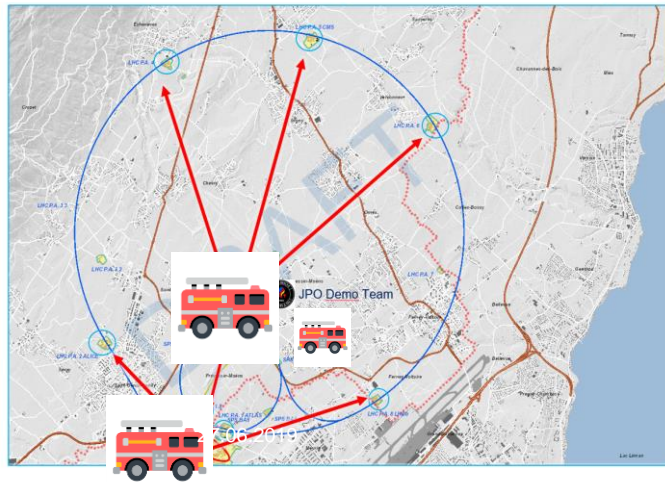
First aid response - Medical



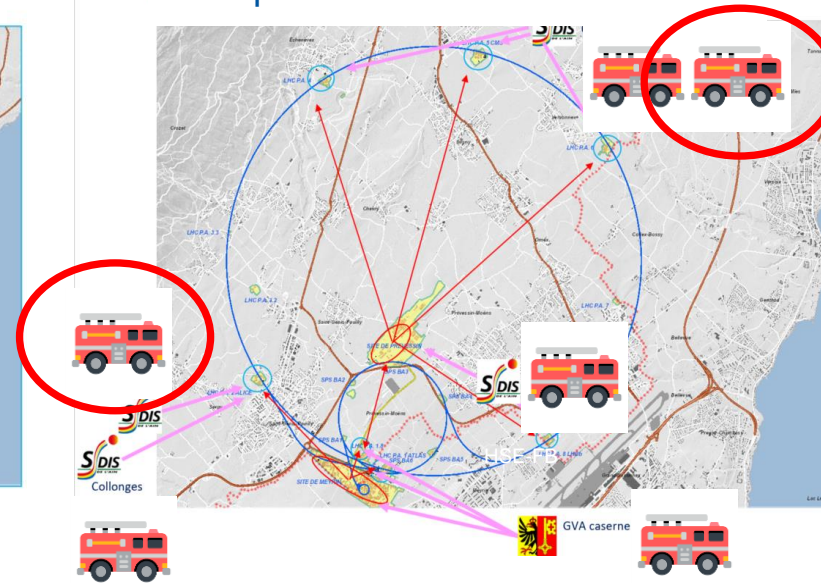
*Remark:
There is a defibrillator available in
UX25 Safe Zone.*

First aid response - Fire

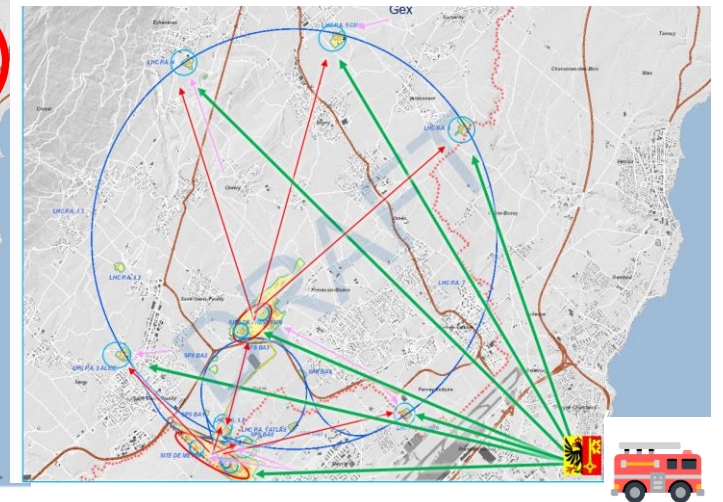
Réponse SSF



Réponse SDIS 01 / SIS

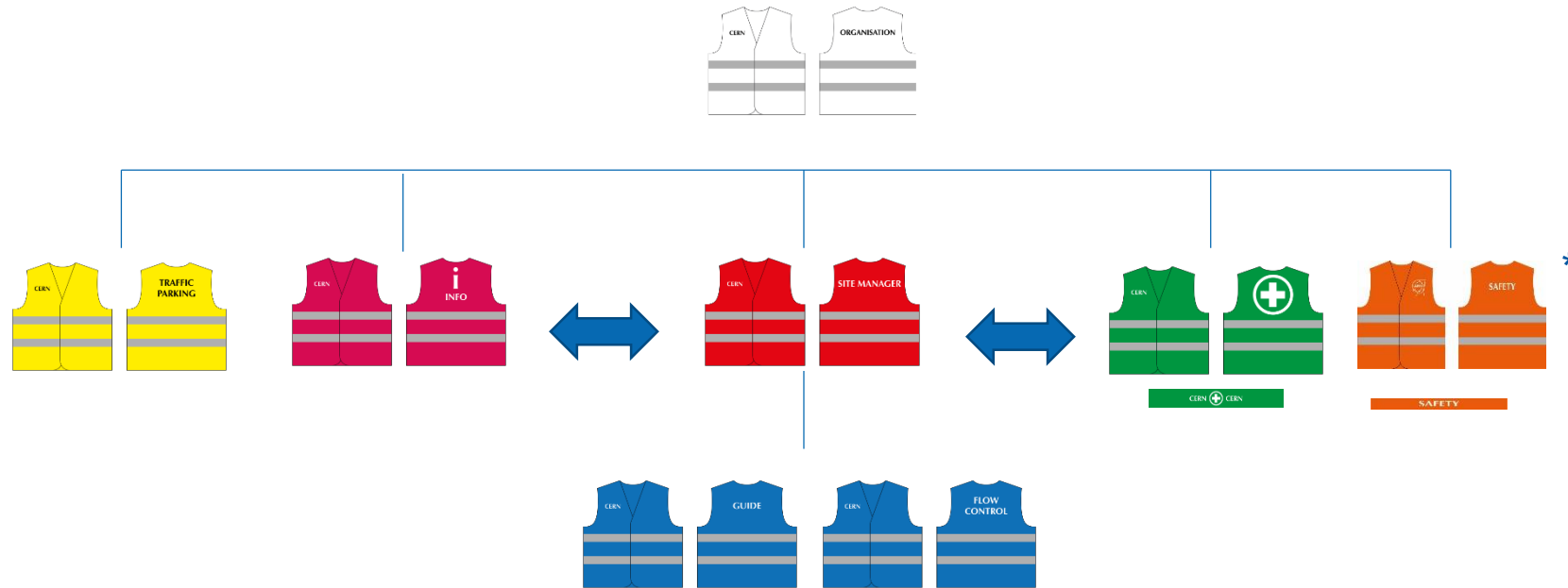


SIS Back up



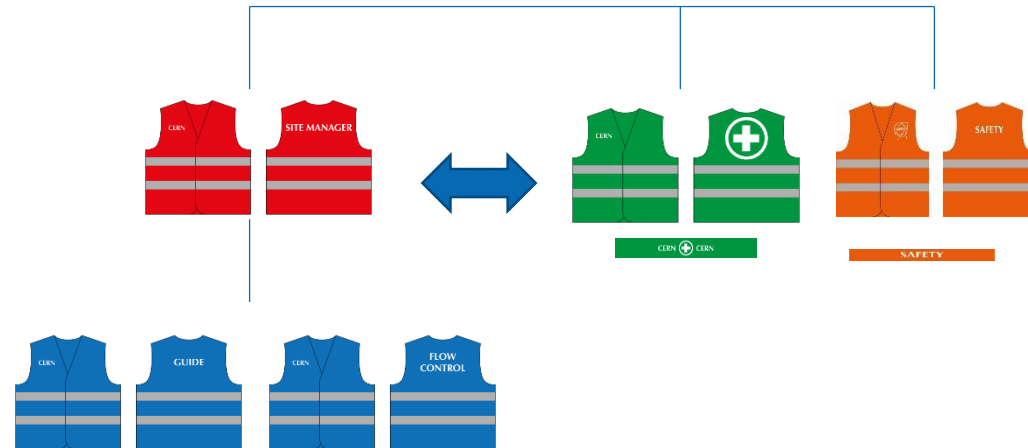
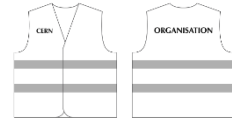
Source : M. NAS HSE-FB

Safety Vest - General organization



* : HSE Teams, HSE RP Teams, LEXGLIMOS / DSO Teams

Safety Vest - General organization

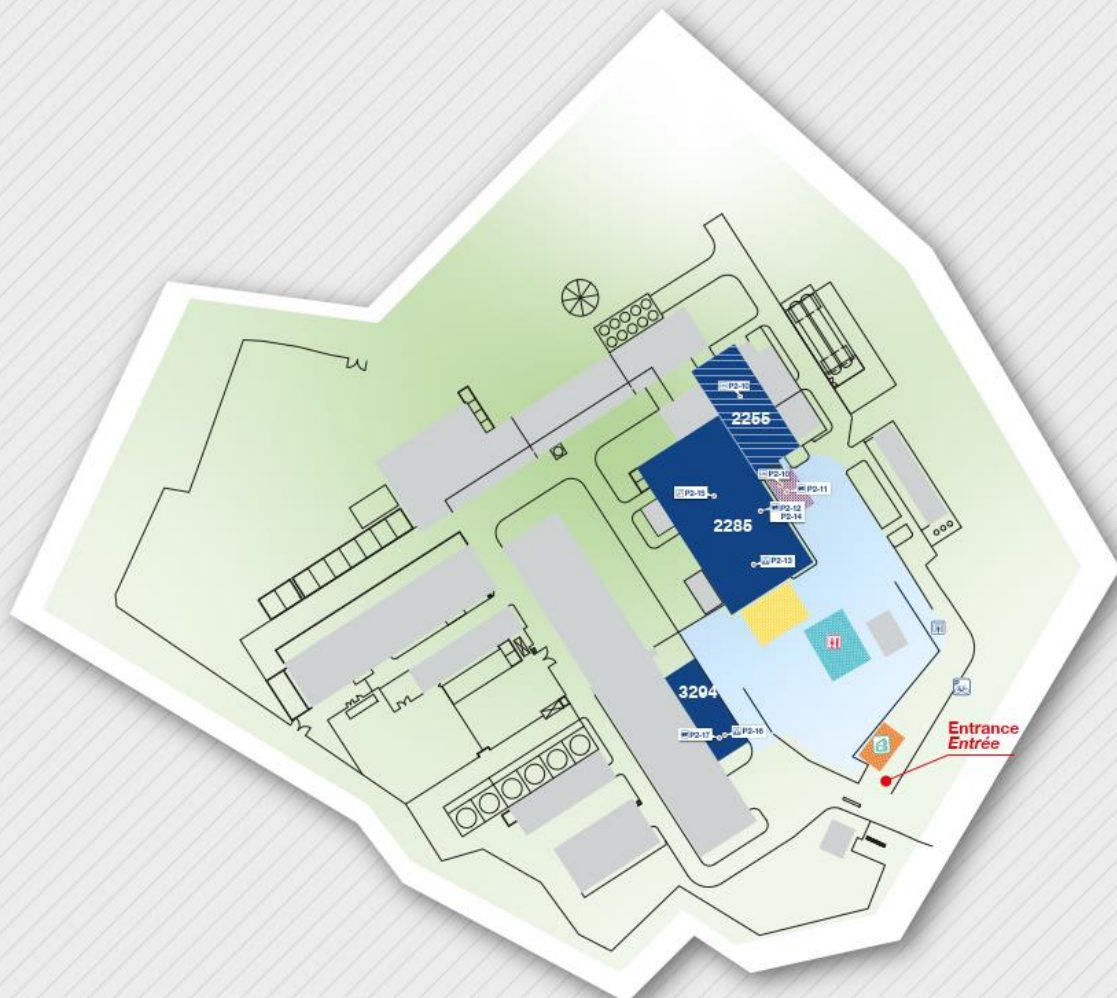




POINT 2: ALICE (LHC 2)

Questions & Answer Session

- Coordination Center (JPO):
Bldg. 160, manned Sat. & Sun. 7:30 – 20:30
- Site Managers OD2019 ALICE & LHC-P2:
A. Tauro (162529),
Deputy: A. Augustinus (163534)
Safety (LEXGLIMOS,RSO): K. Barth (163204)



CAPTION: LÉGENDE :

	CHECK-IN		EXPLORE EXPLORER
	FOOD RESTAURATION		INTERACT ÉCHANGER
	FOOD TRUCK		PLAY S'AMUSER
	CERN BUS STOP ARRÊT DE BUS CERN		INFO INFO
	BIKE PARKING PARKING VELO		CHECK-IN TENTS TENTES CHECK-IN
	GATE ENTRÉE		EXHIBITION TENTS TENTES EXPOSITION
	FIRST AID POINT POSTE DE SECOURS		RESTAURANT TENTS TENTES RESTAURANT
	DRINKING WATER EAU POTABLE		GROUP ASSEMBLY TENTS TENTES RASSEMBLEMENT DES GROUPES
	WC		OPEN DAYS BUILDING BÂTIMENT PORTES OUVERTES – VISITE SANS GUIDE
			OPEN DAYS BUILDING WITH GUIDE



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