



AD Experiments Safety improvements in 2017 and objectives for 2018 & LS2

Introduction

EDMS: 1894662



Thank you to all the contributor

Responsibility	General Infrastructure	Experimental Areas	ELENA	
Department-Group	EN-EA	EP-UAD	BE-OP	
Infrastructure & Service Coordination	AFTC	EP-UAD + AFTC	AFTC	
Consolidation Program & Planning/Coordination	AFTC	EP-UAD + AFTC	N/A	
YETS/LS2 Planning & Supervision	AFTC	EP-UAD	BE-OP + BE-ABP + AFTC	
Safety	EN-DSO	EP-DSO	BE-DSO	
Master-Plan Management	AFTC	EP-UAD + AFTC	BE-OP + BE-ABP + AFTC	

Outline



- Incident & Evacuation drill
 - Incidents / Accidents
 - Evacuation drill
 - Lesson learnt
- II. Improvement in 2017 & Objective for 2018-LS2
 - Experiment side
 - 2. Building side
 - 3. Objectives 2018-LS2

III. Reminder

- Evacuation path
- 2. Transport

EP

Accidents

- Finger cut with a scalpel
- Finger burnt with cryogenic fluid (He)

Incidents

- Guides without operational dosimeter
- A barrier fell on the visitor path
- 200Bar gas bottles moved with sling(s) using the crane
- People walking on the crane





Safety deviations

- Removal of a RP fence
- Beam sent in the experimental area without the beam permit fully approved
- Error on lockout procedure

Since 2012

- Electrisation
- Loads fell
- Caps flying over the experiment
- Pregnant woman on the visitor path
- •

Evacuation drill



- 1st exercise in the building
- Occasion to:

- Update the evacuation path
- Take a picture of the situation in case of real evacuation
- Train emergency guides



Lesson learnt



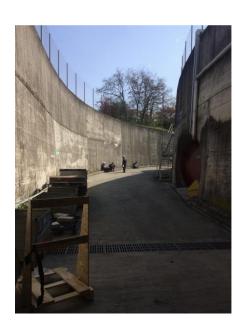
People did not evacuate



- ➤ Go to their office (B.93)
- Stay in the ramp

- Sound of the sirens not loud enough
- Evacuation path not really clear





Outline



- Incident & Evacuation drill
 - Incidents / Accidents
 - Evacuation drill
 - Lesson learnt
- II. Improvement in 2017 & Objective for 2018-LS2
 - 1. Experiment side
 - 2. Building side
 - 3. Objectives 2018-LS2

III. Reminder

- Evacuation path
- 2. Transport



Experiment side

- New AUL network
- Relocation of the Fire extinguishers
- New laser interlock system (collaboration with BE-ICS)
 - For ATRAP in 2017
 - > For GBAR in 2018
- Implementation of the Safety Permit Strategy
- New experiment: GBAR

- Radiation leak on the bunker (fully recover)
- Presentation to the authorities
- No impact on the other experiments







- New evacuation path <u>EDMS</u>
- New evacuation alarm
- New AUG position and modification of the chains
- New emergency lights
- Creation of a new IMPACT facility
- New defibrillator





- Fire detection
- Validation of the new evacuation system
- Laser interlock system
 - AEgIS
 - ASACUSA
- Creation of a new AD hall training
 - Generic course for the hall
 - Access / Guide / Visitor
 - Hazards identification and location
- New electrical course HxBx in classroom (3hours)
 - For the CERN users community

Outline



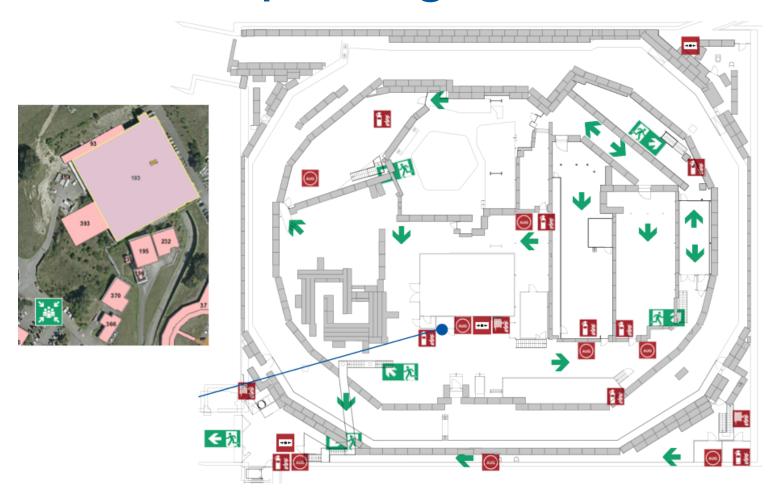
- Incident & Evacuation drill
 - Incidents / Accidents
 - Evacuation drill
 - Lesson learnt
- II. Improvement in 2017 & Objective for 2018-LS2
 - Experiment side
 - 2. Building side
 - 3. Objectives 2018-LS2

III. Reminder

- Evacuation path
- 2. Transport



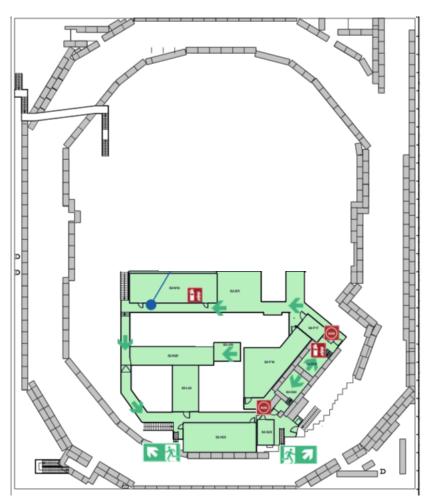
Evacuation path: ground floor





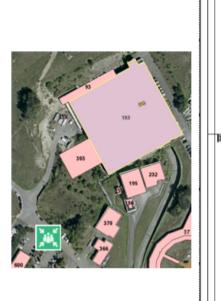








Evacuation path: top floor





Transport









Declare all the deviations in the hall to the DSO, TSO or AFTC

Thank you for your attention!



he integer part with evidenceing \$1 clid mas not bound in the file.	 		