

HiRadMat Facility Visit Safety Briefing

F. Harden (on behalf of the HiRadMat team)

CERN

Safety rules

- All visitors must **remain with official HiRadMat guides** at all times.
- Those who are **under 18** are not permitted to take part in the visit.
- Those who are **pregnant** are not permitted to take part in the visit.
- Those who **suffer from claustrophobia** are not permitted to take part in the visit.
- Those **allergic to Latex** are not permitted to take part in the visit.
- Those who **have difficulties climbing several flights of stairs** are not permitted to take part in the visit.

Mandatory PPE

- High-heeled shoes, open-toed shoes, flip-flops and sandals **ARE NOT PERMITTED** (a few safety shoes are available if required) – **ALL AREAS.**
- Hard Hat and Front Lamp – **UNDERGROUND AREAS.**
- Self-Rescue Mask – **UNDERGROUND AREAS.**
- Operational Dosimeter (DMC) – **UNDERGROUND AREAS.** Note that you will receive the DMC before you enter the underground area. Upon your exit of the underground area, your DMC will be checked by a member of radiation protection.

Please note that an **IMPACT** (Intervention Management Planning and Coordination Tool) has been completed with participant details prior to the visit (number .

Self-Rescue Mask

- Due to the risk of fire and the distance from exit points, it is mandatory to wear a self rescue mask in the SPS.
- For workers a 2 hours training is mandatory.
- For professional visitors, a briefing and a short visit circuit with guide are set-up.

3. What is the Self-Rescue Mask?

SavOx (MSA) SRM



Leak Tight Container
(2 Half Shells)
Sealing
Lock

Breathing Bag
Breathing Tube
Strap
Mouthpiece
Nose Clip
Goggles

3. What is the Self-Rescue Mask?

Functioning of the SRM



Closed circuit:

- 1 **Exhaled air:** H_2O , CO_2
- 2 **Chemical reaction:**
Potassium dioxide (KO_2):
 - Absorbing CO_2
 - Removing H_2O
 - Generating O_2
- 3 **Inhaled air:** O_2

i SRM autonomy: 30 minutes normalized

4. How to respond in emergency situations?

Emergency indicators and actions (1/3)



Indicator:

Only (!) hearing the Evacuation Alarm



Action:



- **Do not (!)** put mask on
- **Evacuate** to the nearest safe exit

4. How to respond in emergency situations?

Emergency indicators and actions (2/3)



Indicator:

- Vapour cloud
- Fire and/or smoke
- ODH alarm
- Portable ODH detector
- Seeing somebody else evacuating with a SRM



Action:



Kneel down



Put the mask on



Evacuate to nearest safe exit

5. How to put the mask on?

SavOx - Applying the mask in 9 steps: 1 – 6



1 Open Container



2 Grasp the mask



3 Pull white plug out of mouth piece



4 Pull neck strap over head & unfold bag



5 Pull up breathing tube



6 Place mouth piece in mouth & put on the nose-clip



5. How to put the mask on?

SavOx - Applying the mask in 9 steps: 7 - 9



- 7 Adjust orange neck



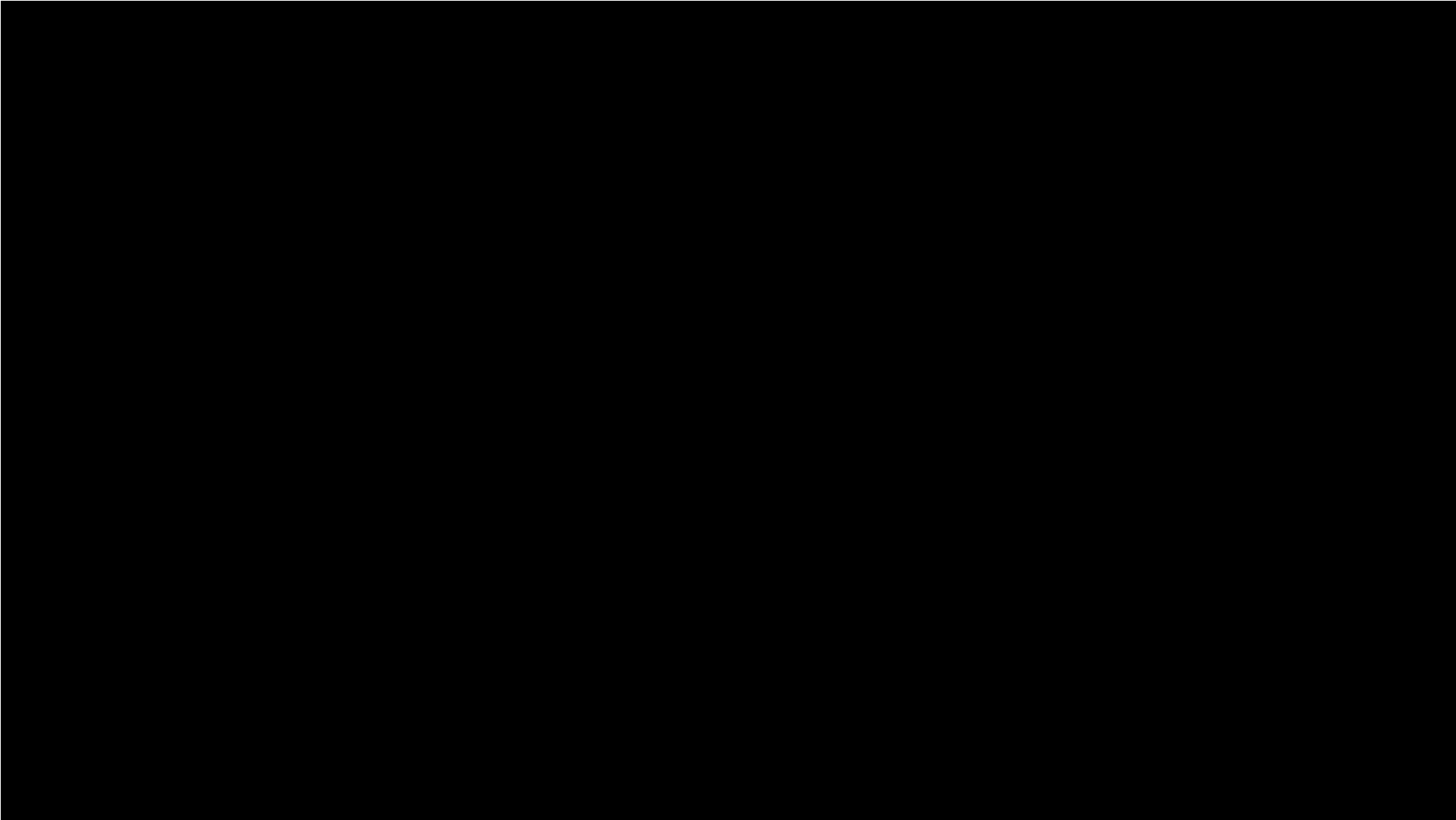
- 8 Detach goggles & adjust them to your size



- 9 Tie black belt around waist



Welcome to the Self-Rescue Mask Training



HSE
Occupational Health & Safety
and Environmental Protection Unit

The course will start soon...

Visit itinerary



Route of transfer bus

Visit itinerary



BA7 – HiRadMat surface lab and entrance to underground area

3 visit points on surface

- HiRadMat Surface Lab (**Pt 1**)



- HiRadMat Control Room (**Pt 2**)



3 visit points on surface

- Poster Viewing (**Pt 3**)

For those waiting to enter the underground area, posters will be displayed to provide you with details of past experiments.



1 visit point underground

- HiRadMat Experimental Area (**Pt 4**)



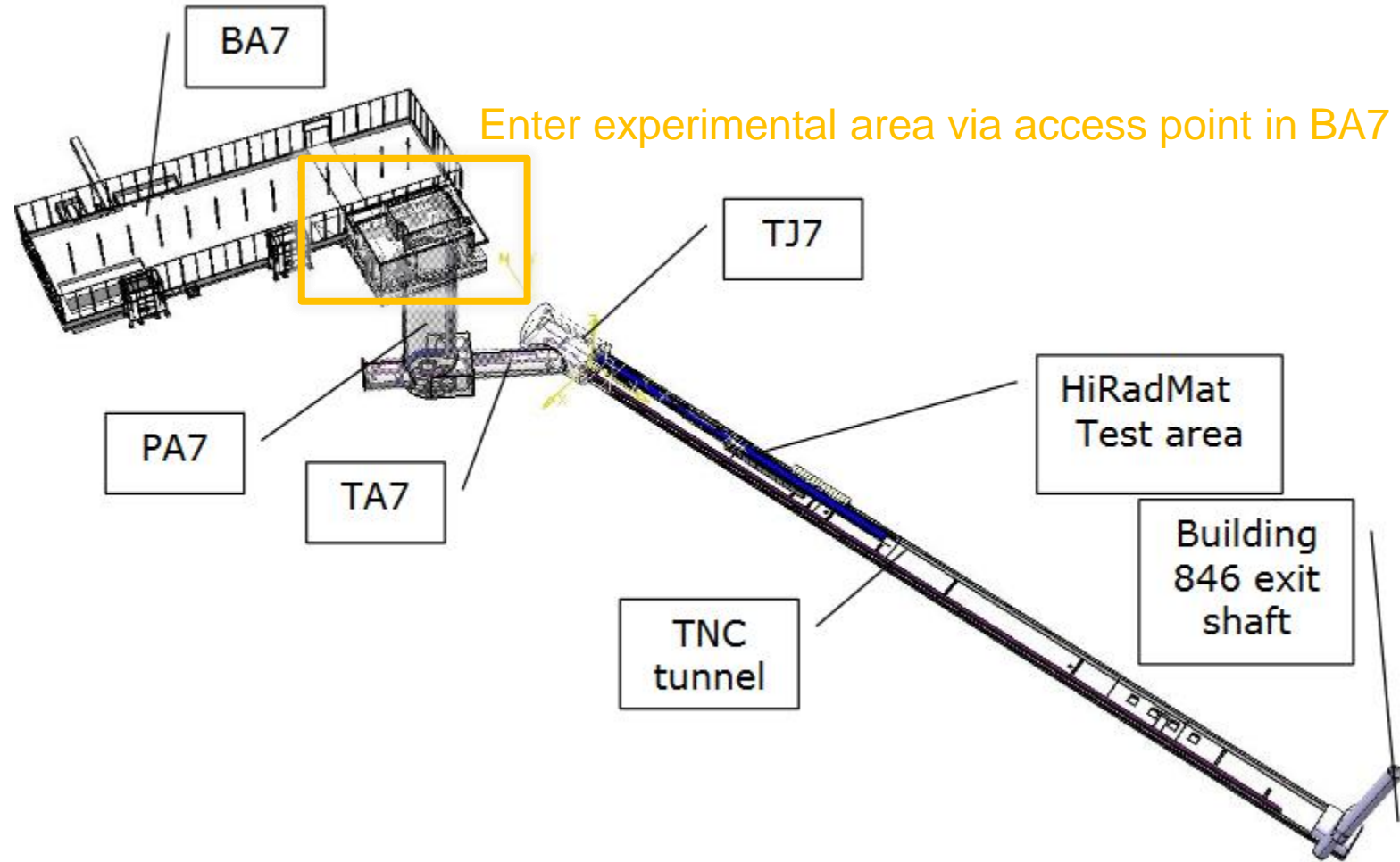
A guard is stationed at the entrance of the underground area (due to current maintenance of access system).

Each visitor will provide the guard with their name before entry to the access point is permitted.

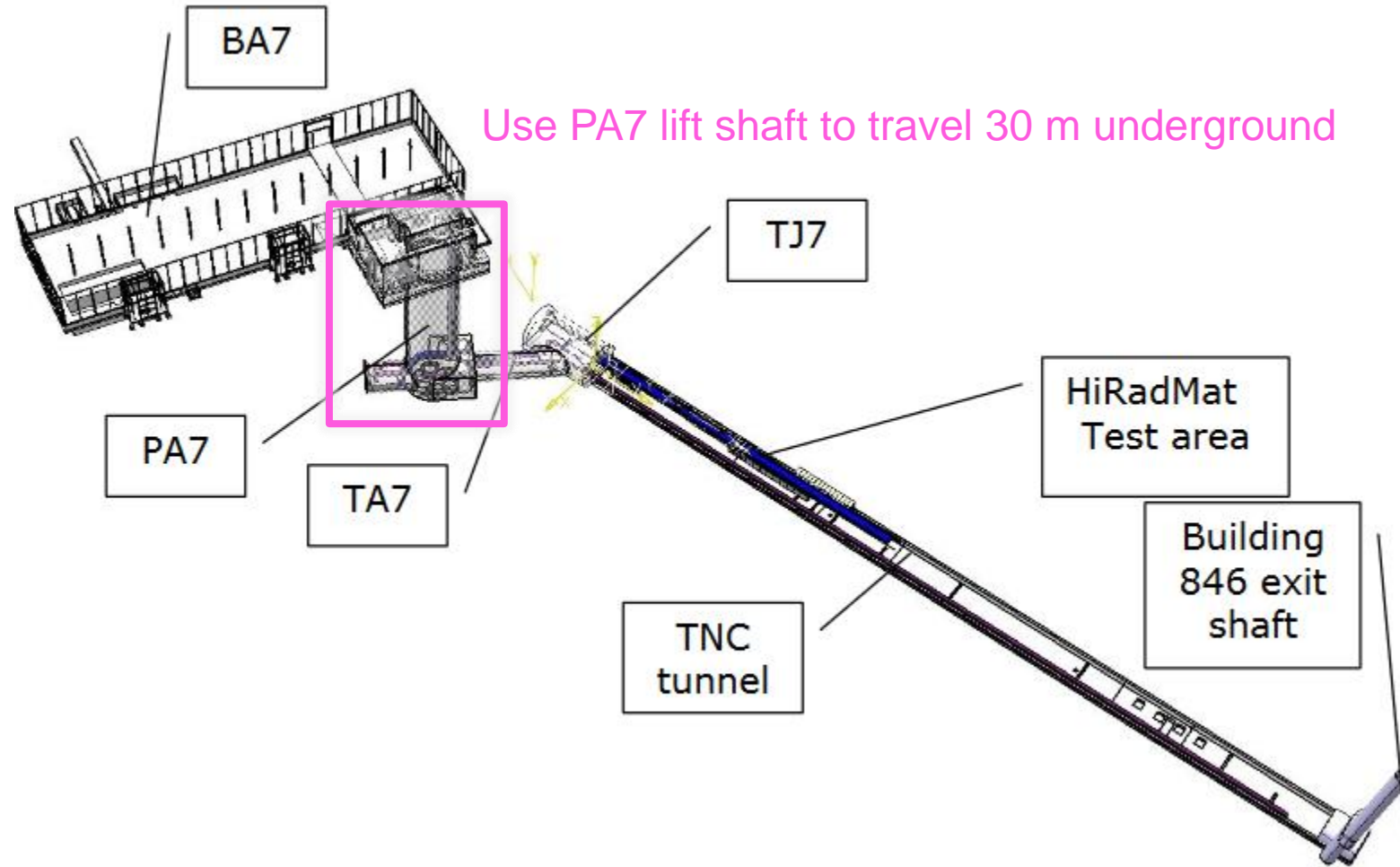
Visitors will be provided with:

- Hard Hat and Helmut
- Self-Rescue Mask
- DMC

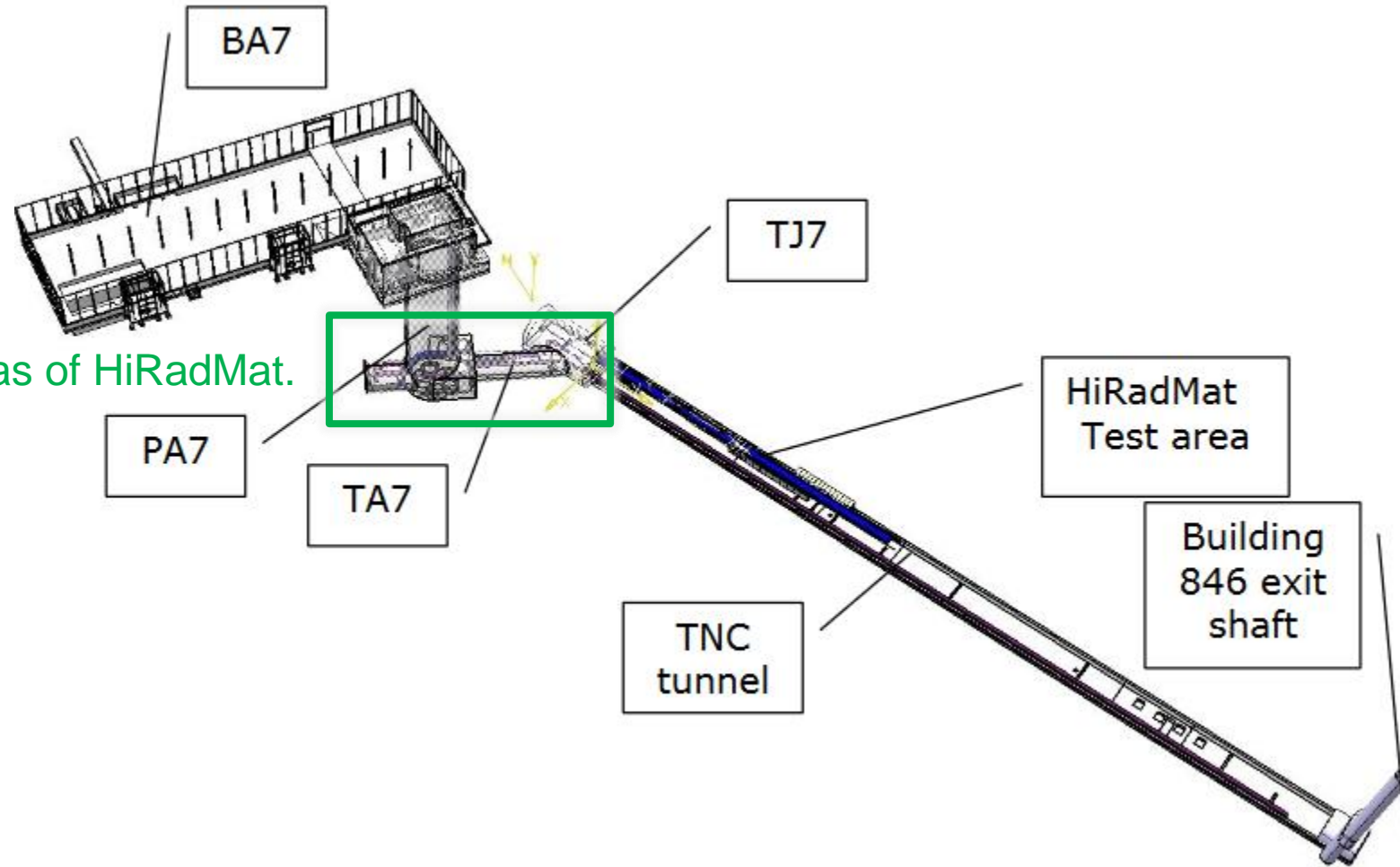
HiRadMat experimental area route



HiRadMat experimental area route

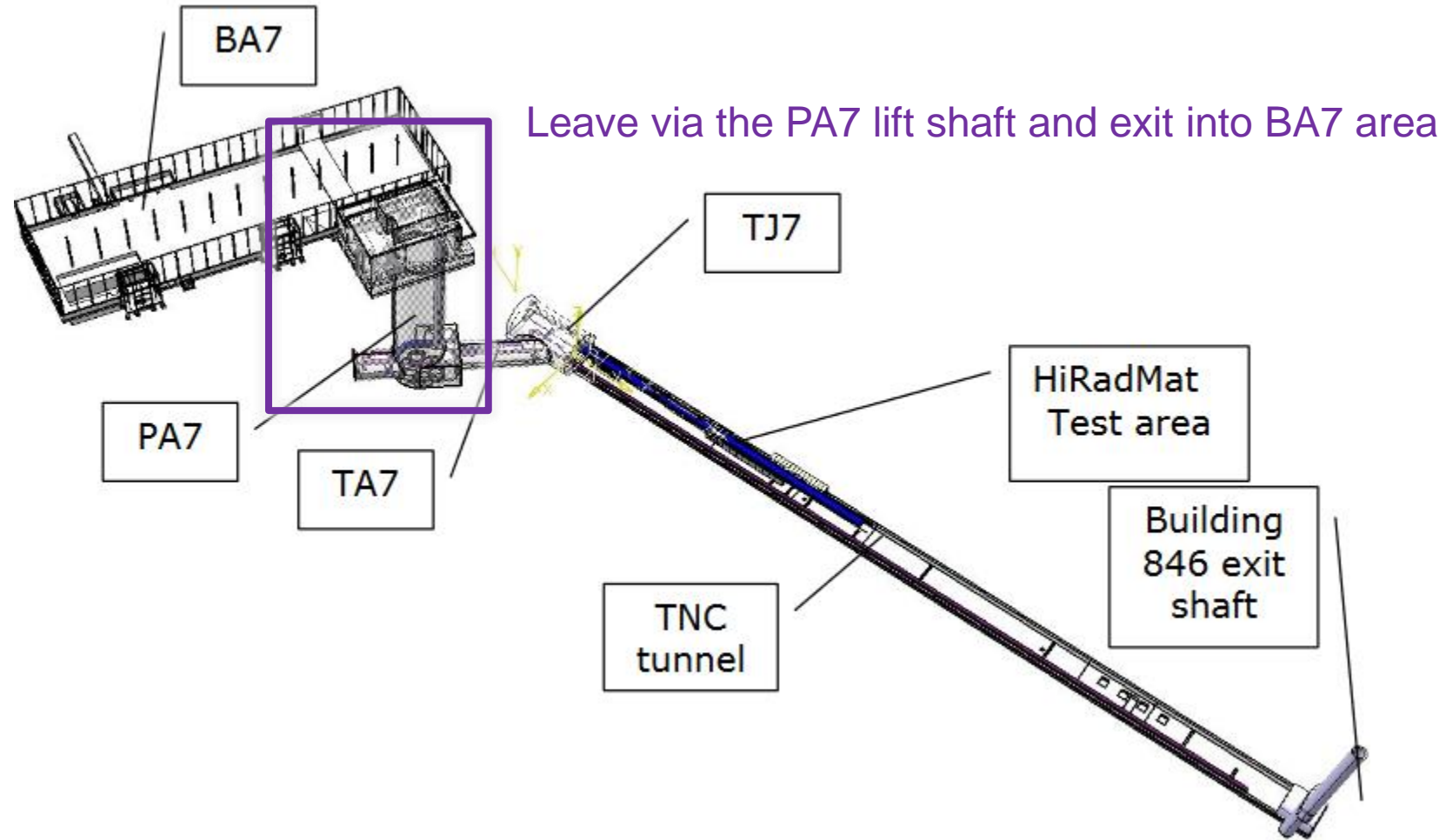


HiRadMat experimental area route



Visit TA7 and TJ7 areas of HiRadMat.

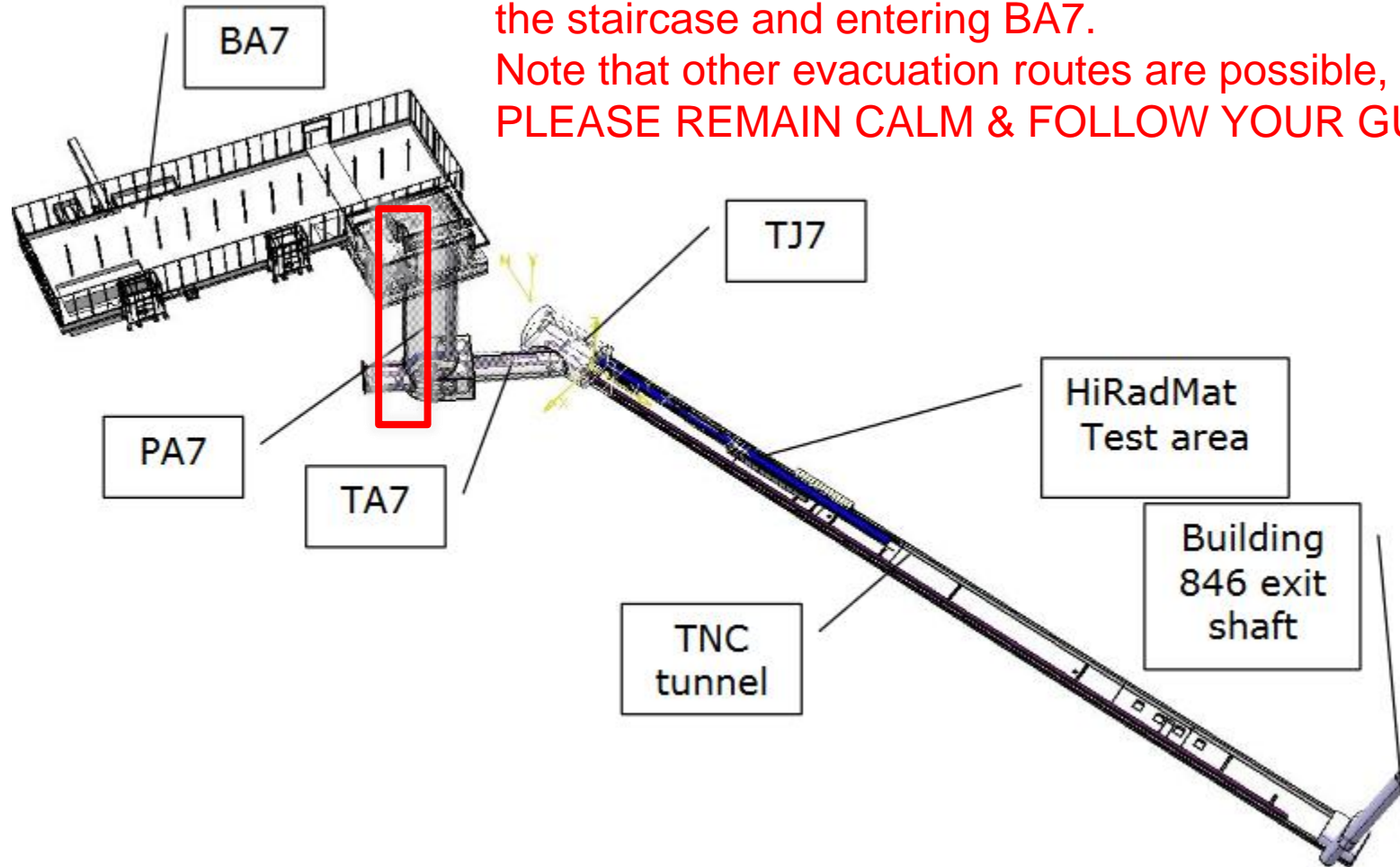
HiRadMat experimental area route



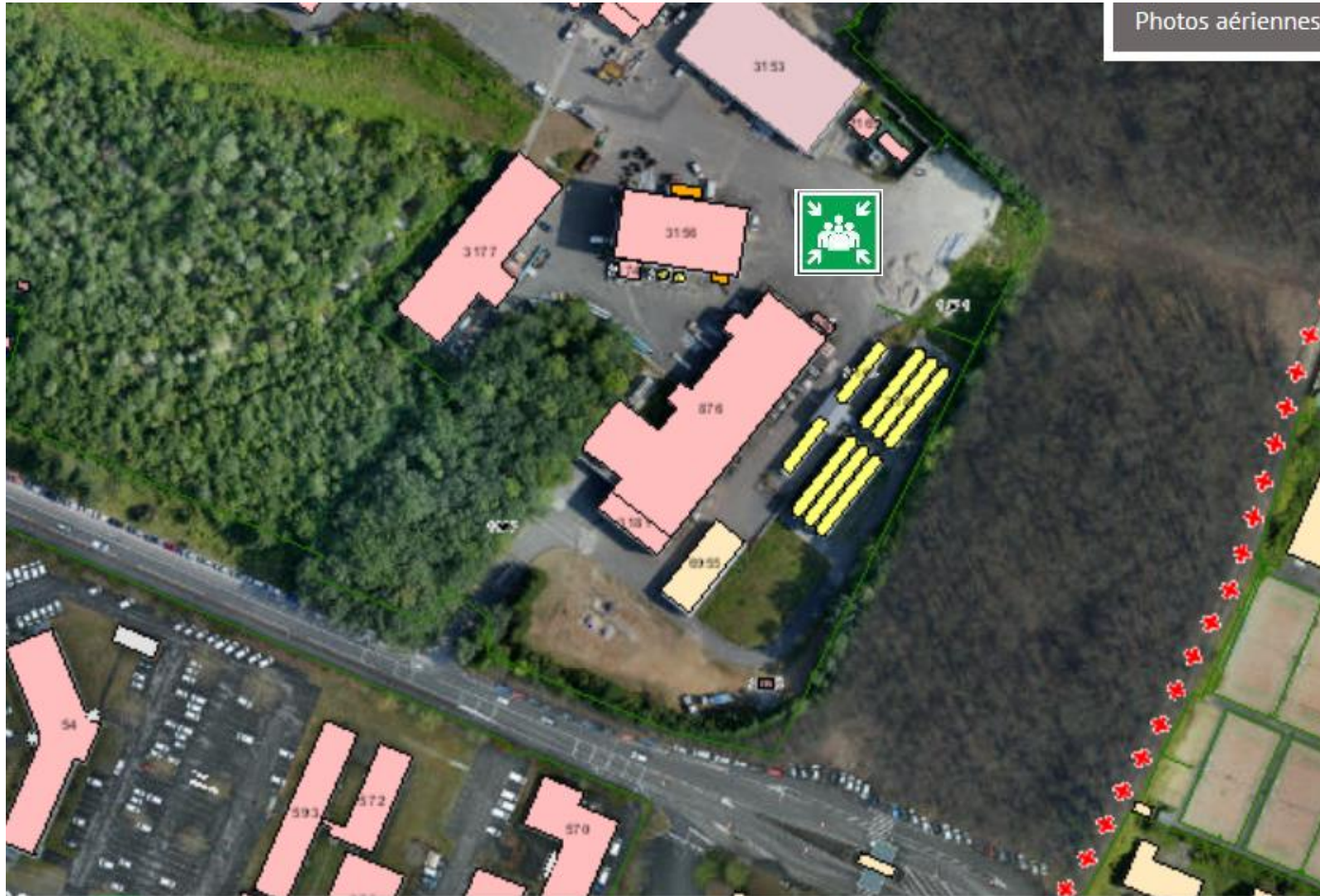
Evacuation procedure in experimental area

Calmly evacuate the area (following all instructions of the guide) via the staircase and entering BA7.

Note that other evacuation routes are possible, if necessary, so **PLEASE REMAIN CALM & FOLLOW YOUR GUIDE.**



Evacuation procedure in BA7



Leave the building, go the Assembly Point and await further instruction.

Follow the guide who will direct you to the assembly point.

Visit groups

- Visitor badges have a number from 1-5 indicating your group.
- For the visit:
 - HiRadMat surface lab (12 people maximum at one time) (SL)
 - HiRadMat control room (12 people maximum at one time) (CR)
 - HiRadMat experimental area (6 people maximum at one time) (EA)
- Organisation of groups (**TBC**):

1st session:

- 1&2 (split 10 mins) (EA/P)
- 3&4 (20 mins) (SL)
- 5 (20 mins) (CR)

2nd session:

- 3&4 (split 10 mins) (EA/P)
- 5 (20 mins) (SL)
- 1&2 (20 mins) (CR)

3rd session:

- 5 (split 10 mins) (EA/P)
- 1&2 (20 mins) (SL)
- 3&4 (20 mins) (CR)

Groups

- G1

- Alessandra Benuzzi Mounaix
- Alexander Gottberg
- Andreas Waets
- Bernie Riemer
- Chris Densham
- Christoph Wiesner

- G2

- Daniel Laube
- Francois Plewinski
- Gianmario Cesarini
- H-Ulrich Wienands
- Hiroki Okuno
- Jeffrey Dooling

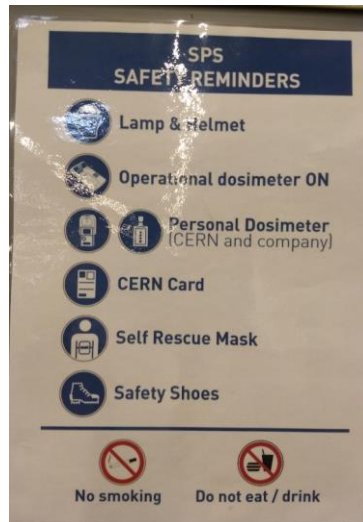
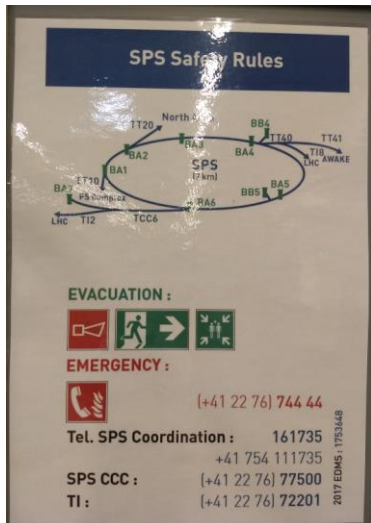
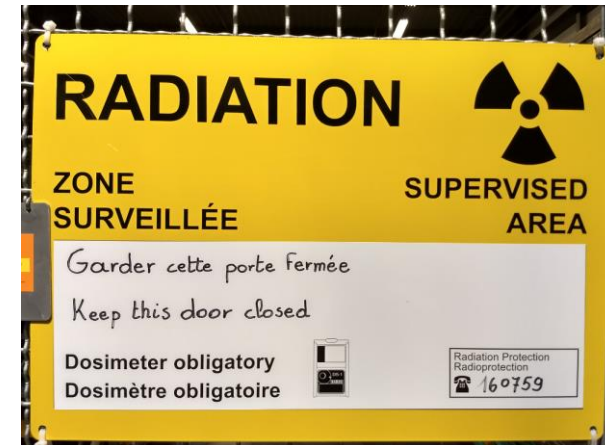
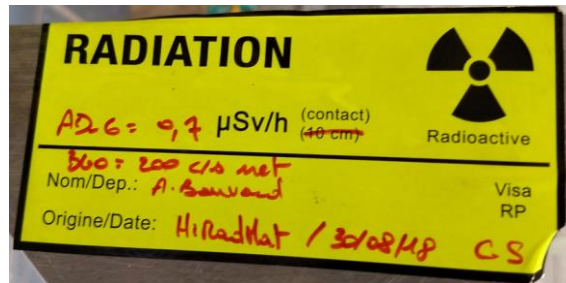
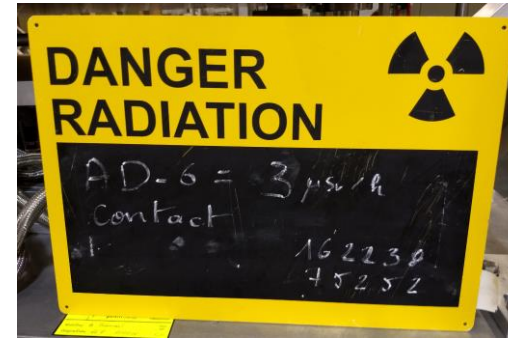
Groups

- G3
 - Joao Pedro Ramos
 - Marco Garattini
 - Mark Palmer
 - Tadeusz Kurtyka
 - Maurizio Serluca
- G4
 - Nick Simos
 - Peter Sievers
 - Piotr Cupial
 - Rafael Alberto Vila Vazquez
 - Sergey Rogozhkin

Groups

- G5
 - Masatoshi Futakawa
 - Shin-ichiro Meigo
 - Shunsuke Makimura
 - Takeshi Nakadaira
 - Taku Ishida

Signs you may encounter



Other information

- Photographs, filming is permitted in all areas of this visit.
- Please sign the safety sheet as you leave the auditorium which acknowledges that you have participated in the visit safety briefing and understood all the information provided.

ENJOY THE HIRADMAT VISIT

Questions?

