

BUFFER

ZONE

EHNI



# Why TREC & buffer zones?

- ⦿ Radiological control of material leaving beam areas is a legal obligation

## « Visite de contrôle » of the French and Swiss Authorities, June 2010

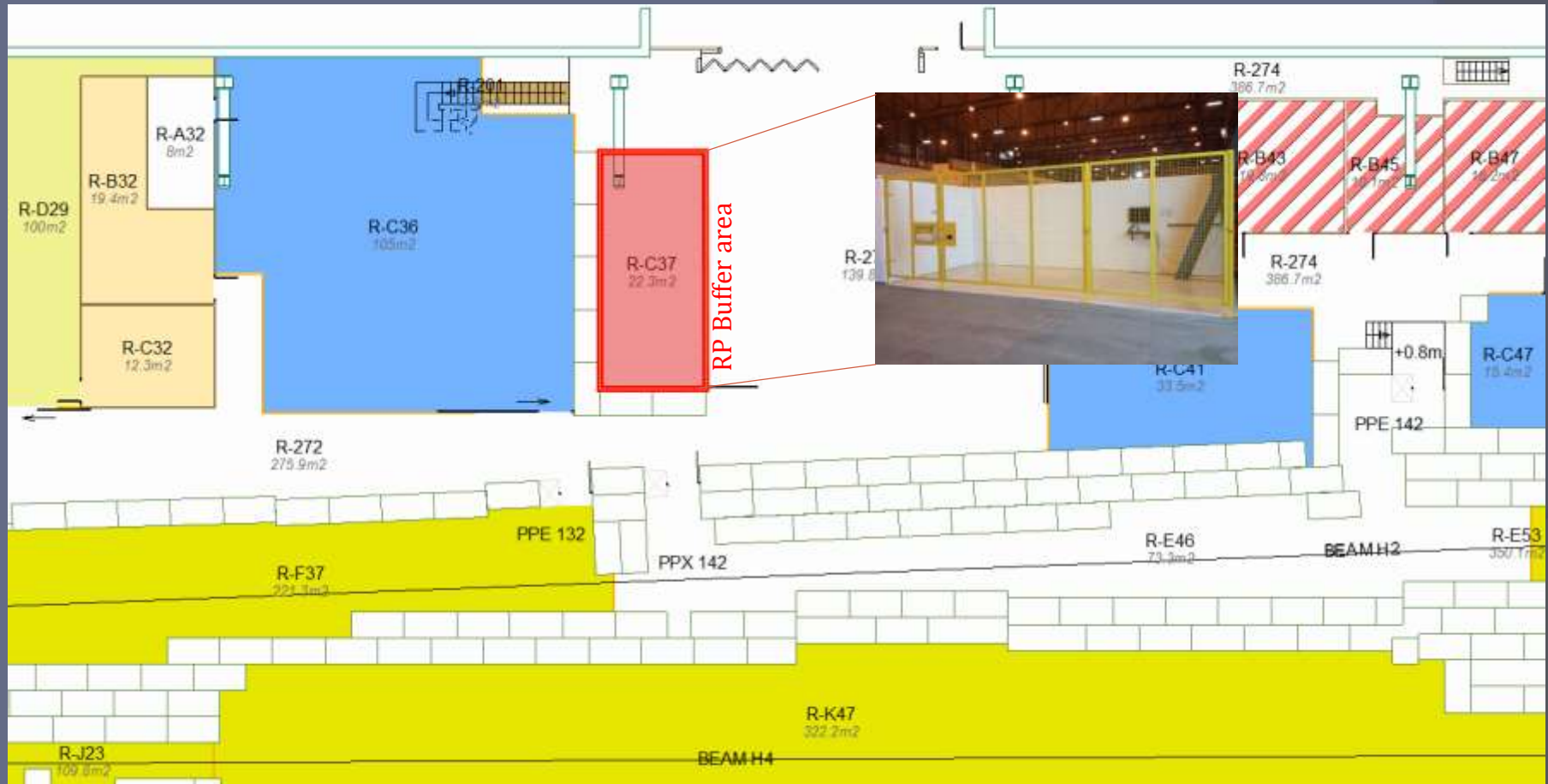
- ▣ “Je vous demande de bien vouloir harmoniser les procédures concernant la sortie du matériel radioactif de zones contrôlées pour tous les accélérateurs et salles expérimentales du CERN (et pas uniquement pour le LHC) et mettre en place un système informatique permettant la gestion de tous les matériels sortants de ce zones.”

# Objectives

- This buffer zone is reserved for the **temporary storage** of all **material, equipment used during an experiment** in EHN1 (**beam-line areas & corridors**), as well as small waste.
- **Bulky equipment** (e.g. beam-line elements like magnets, collimators etc.) will not be stored in the buffer zone but **still has to be registered** in the **TREC** traceability system like all other equipment.
- All these objects require a **systematic radiological control** before they can be removed from EHN1
- **A control takes time** (might require additional analysis) → take this into account when planning your experiment

# Where can I find the buffer zone?

## Central door Jura side



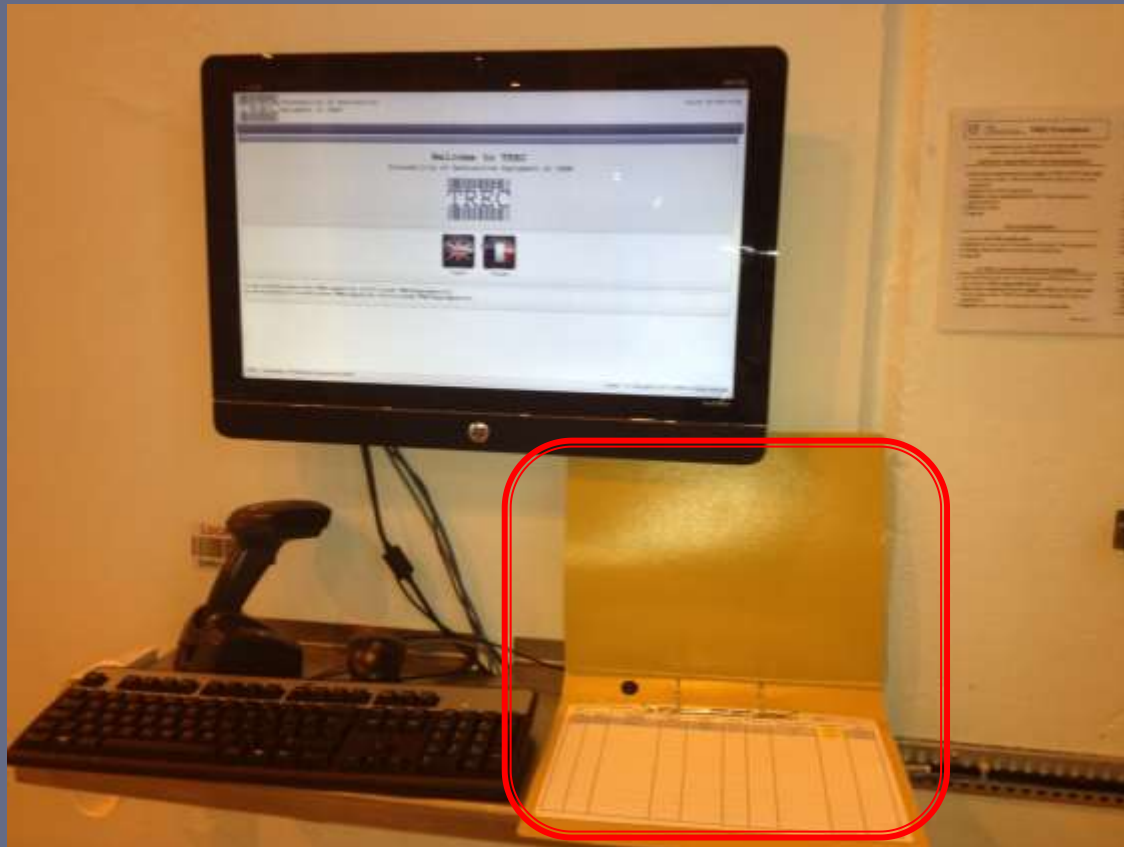
# TREC : Traceability of Radioactive Equipment at CERN

Material provided in the buffer zone:

- Touch screen and bar-code reader for TREC
- Traceability paper forms (yellow folder) in case the computer system does not work
- Bar-code labels
- Plastic bags to wrap dirty or oil-stained equipment
- Cupboard for the temporary storage of small items



In the buffer zone one can always find paper forms for traceability. Their use is obligatory if the computer system is not working. Otherwise the web-based system should be used!



# Usage of bar-code stickers for the identification of equipment

Take a bar-code sticker from the dispenser and stick it onto your equipment.

The bar-codes are unique and identify the equipment until its end-of-life.

If your material is already identified with such an MTF bar-code,



there is no need to put on another one. The material is already traced and only the information asked by the TREC system needs to be provided.





# Placement of potentially activated material

- Place the material on the upper two compartments of the shelf if the size & weight allows.
- The lower two compartments are reserved for material already controlled by RP







**HSE**  
Occupational Health & Safety  
and Environmental Protection Unit



Traceability of  
Radioactive Equipment at  
CERN

# How to use TREC?



Visit the safety course web-site for a tutorial & video demos on how to use TREC  
<http://sir.cern.ch>

# How to use the buffer zone in EHN1?

The buffer zone in EHN1 should be used for **temporary storage of ALL material (including waste)** coming from beam-facilities (fenced beam-line areas & adjacent corridors).

Procedure to be followed:

- All people with valid access rights to building 887 automatically have access to the buffer zone
- **ATTENTION : access to the buffer zone requires identification with your DIS dosimeter!**
- **The material must only come from EHN1 and not from other buildings**
- Dirty or oil-stained material should be wrapped in the provided plastic bags
- For the placement of material the responsible **must** fill out the information required by TREC or, if the computer is unavailable, the paper forms found in the yellow folder (**tel. nr. is obligatory**)
- All registered material will be systematically controlled by RP
- An e-mail with a link to the results of the control is automatically generated and sent to the equipment owner
- If the material is found to be radioactive the appropriate labelling will be done by RP

**IF THE MATERIAL IS NOT PICKED UP WITHIN ONE WEEK AFTER THE CONTROL, THE RP GROUP RETAINS THE RIGHT TO ARRANGE FOR THE DISPOSAL OF THE EQUIPMENT**

TREC can be accessed from any computer at CERN via the following link:

[www.cern.ch/trec](http://www.cern.ch/trec)

A direct link is also available via:

[www.cern.ch/rp-lhc](http://www.cern.ch/rp-lhc)

or simply type «TREC» in your browser

The screenshot shows a web browser window displaying the 'Radiation Protection for the LHC & SPS' website. The browser's address bar shows the URL <https://www.cern.ch/rp-lhc/index.aspx>. The website header includes the CERN logo and the title 'Radiation Protection for the LHC & SPS'. A navigation menu at the top lists various sections: Home, Point 1, Point 2, Point 3, Point 4, Point 5, Point 6, Point 7, Point 8, ALICE, ATLAS, CMS, LHCb, SPS, and RP Internal. A left sidebar menu is organized into categories: 'General Information' (Radiol, classification; Material control; Work planning; Radiation Vets; Workshops; Dosimeters; Contacts), 'Rules & Procedures' (Safety Code F; Radiation Areas; ALARA; Radioactive material; Radioactive waste; Visitors, contractors; RP for experiments; Specific work), 'Instrumentation' (RAMSES underground; RAMSES surface; Survey instruments), and 'Training' (RP course). The main content area features a map titled 'LHC Map' showing the LHC ring with several points marked: Point 4, Point 5, Point 6, Point 7, Point 3, and Point 3.2. Points 4 and 5 are circled in red. The map also shows the CERN Site de Prévessin and nearby towns like Crozet, Chevry, Ségny, Ornex, and Collex-Bossy. On the right side, there is a logo for 'RP-LHC' and a 'Quick launch' section with a list of links: Who we are; Piquet 2011; Radiological classification; Access conditions; LHC page 1; LHC page 2; Latest LHC News; LHC elogbook (1st server); LHC elogbook (2nd server); LHC statistics; Combined monitoring tool; Traceability system (TREC) (circled in red); and Add new link. Below this is an 'Announcements' section with a news item: 'News from the 8:30 LHC meeting: 30/06/2011' dated 30/06/2011 09:02 AM by Joachim Voltaire, with a 'NEW' icon. The browser's status bar at the bottom indicates 'Local intranet | Protected Mode On' and '100%' zoom.