



FCC kick-off meeting Feb. 2014



**Future Circular Collider Study
Kick-off Meeting**

**12-15 February 2014,
University of Geneva,
Switzerland**

LOCAL ORGANIZING COMMITTEE
University of Geneva
C. Blanchard, A. Blondel,
C. Dogliani, G. Iacobucci,
M. Koratzinos

CERN
M. Benedikt, E. Delucinge,
J. Cutleber, D. Hudson,
C. Potter, F. Zimmermann

**SCIENTIFIC ORGANIZING
COMMITTEE**
FCC Coordination Group
A. Ball, M. Benedikt, A. Blondel,
F. Bordry, L. Bottura, D. Brüning,
P. Collier, J. Ellis, F. Gianotti,
B. Goddard, P. Janot, E. Jensen,
J. M. Jimenez, M. Klein, P. Lebrun,
M. Mangano, D. Schulte,
F. Sonnemann, L. Tavian,
J. Wenninger, F. Zimmermann

  **UNIVERSITÉ
DE GENÈVE**   [http://indico.cern.ch/
e/fcc-kickoff](http://indico.cern.ch/e/fcc-kickoff)

The conclusion slide of RT presentation

Some final remarks

Integration of all safety aspects as early as possible will allow *experiments, machine(s) & infrastructures* of the FCC project to implement **best practice and new concepts**

- to ensure the best possible prevention and protection,
- to limit the impact on the environment.

This will save time and resources during all project phases.

Particular attention shall be paid to what concerns:

- material characteristics in view of radiation protection and **fire prevention**
- remote transport, handling and manipulation
- tunnel layout: *concept of hazard-intermediate-safe zone*
- air management systems in view of radiological aspects, *fire protection and oxygen deficiency hazard*



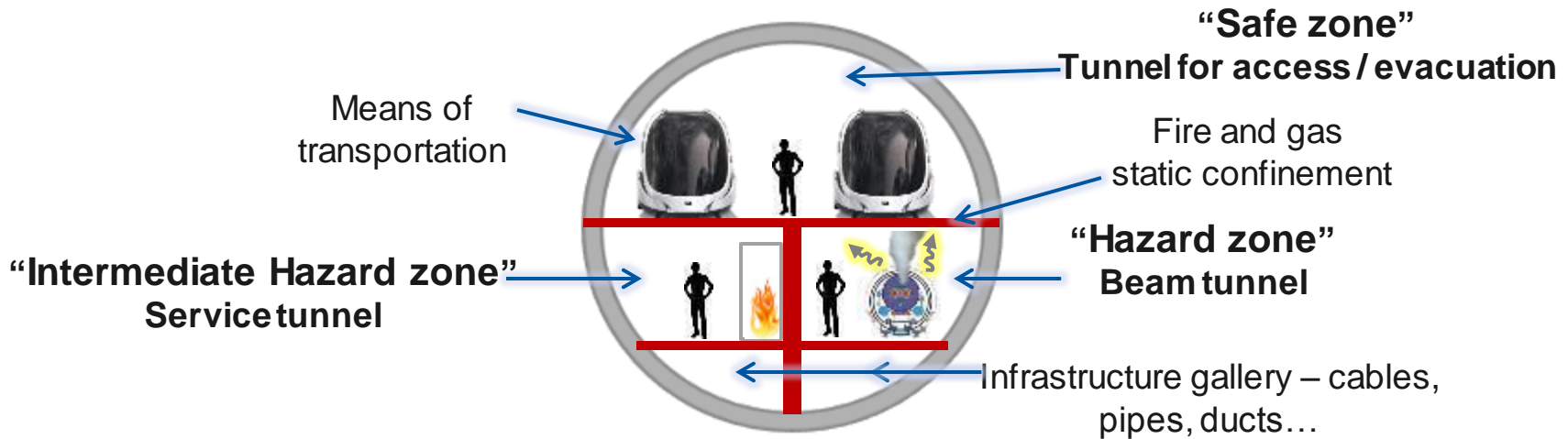
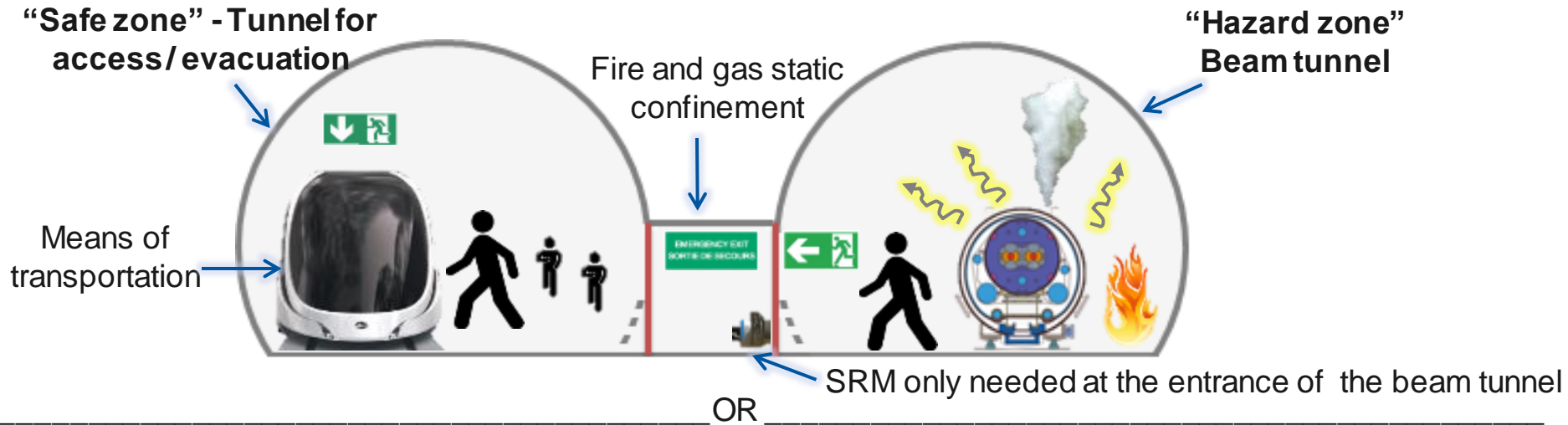
R. Trant 14/02/14

EDMS # 1354520

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Some thoughts for the layout

- Isolate the main hazards form the occupants!



IT20 SF14 International Technical Safety Forum 2014

September 8 -12, 2014 · Fermilab, Batavia, IL USA


International
Technical
Safety
Forum

Topics

Lessons learned, Risk assessment, Laser safety, Continuous Improvement in HSE matters,
New projects and challenges, Equipment certification, Sustainability, Communications,
Nanoparticles, Incident/accident management

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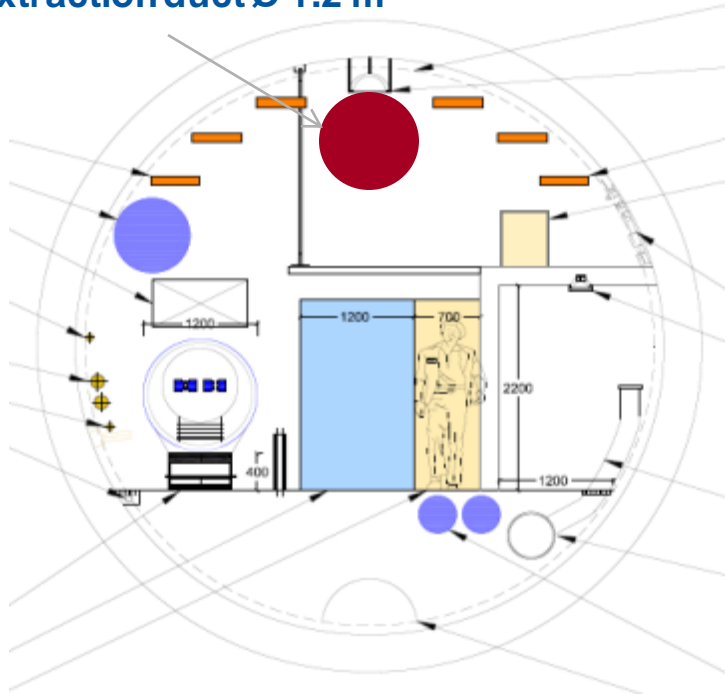
tunnel layout - Smoke extraction duct & curtains

Considering:

- Extraction flow rate of $12 \text{ m}^3/\text{s}$;
- Velocity in duct of 10 m/s ;
- Linear pressure drop of $\approx 6 \text{ kPa}$;
- Smoke compartment length of 200 m

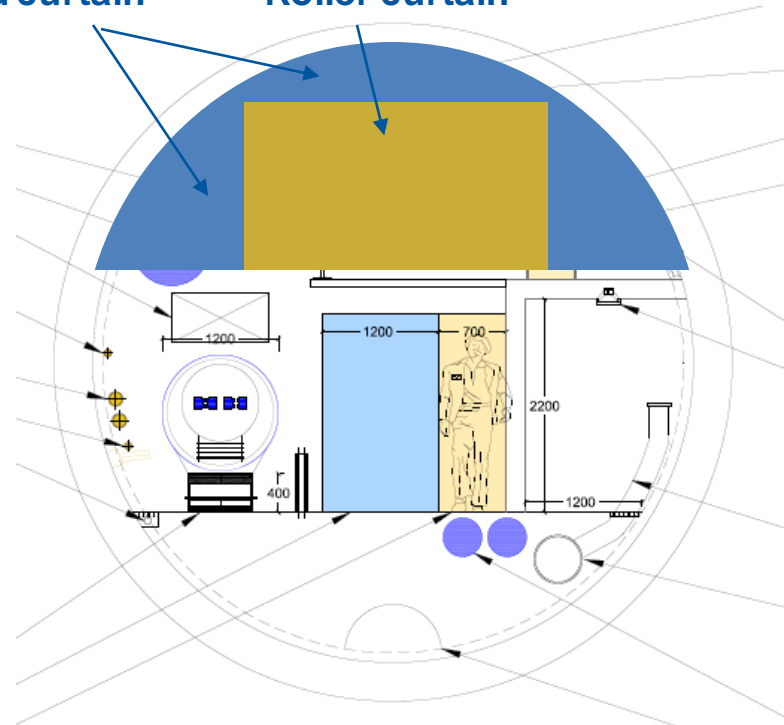
Provides an extraction duct of 1.2 m

Extraction duct $\varnothing 1.2 \text{ m}$



Fixed curtain

Roller curtain



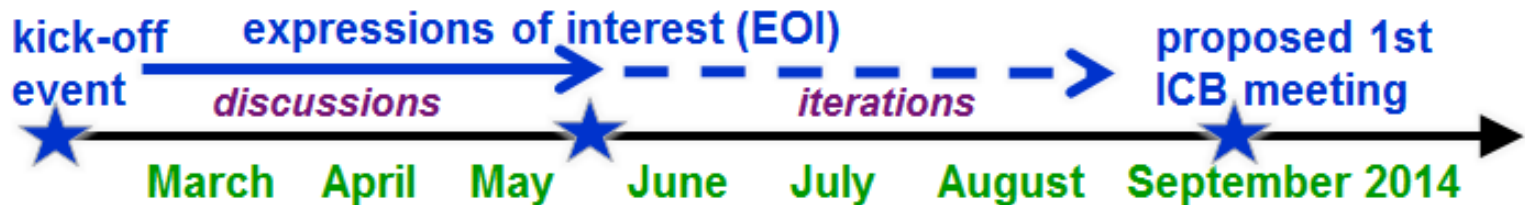
Some final remarks

A unique chance For US ALL to develop **TOGETHER SOLUTIONS FOR ACCELERATOR AND SIMILAR FACILITIES**

From the presentation “FCC study” by M. Benedikt and F. Zimmermann, FCC study kick-off meeting, February 2014, Geneva

Kick-off event should start process of internat. collaboration

- presenting preparatory work as basis for discussion
→ **draft parameter sets & WBS documents available**
- inviting feedback and suggestions
- working towards formation of a **global design study collaboration** integrating **all aspects of machines, physics and detectors**
- Suggestions and comments from international community and **discussion on study contents, organisation and resources**
- Invitation of non-committing **expressions of interest for contributions** from worldwide institutes **by end May 2014**
- Prepare for formation of **International Collaboration Board (ICB)**; proposed date first meeting **9-11 September 2014, to start FCC study**



I wish you a fruitful workshop

....One of a series.