

Folding anti-smoke escape gallery (GEPE system) in-tunnel demonstration Invitation for 'In Tunnel Demonstration' on 27 April 2004

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Introduction

Analysis of the series of fatal fires in the European tunnels clearly shows that whatever the conventional layout and equipment of the tunnel, the **victims are unable to reach the emergency exits several hundred meters away**, mainly because they are blinded by the **smoke** and/or incapacitated by its toxic effects. At the time they take the decision to leave his cars it's often already to late...

To deal with this inescapable problem, we have developed the GEPE system. GEPE is the French acronym of "*Galerie d'Evacuation Parafumée Escamotable*", a **folding anti-smoke escape gallery** for road, rail and subway tunnels.

Under normal conditions the GEPE is folded away against the emergency exits sidewall ("Vulcain" model) or the ceiling of the tunnel ("Domino" model). **In case of fire it folds down, providing a corridor of fresh air along the tunnel sidewalk.** The fresh air is supplied through louvers by the standard transverse ventilation of the tunnel (road) or through a floor grate on the rail evacuation platform. The GEPE is immediately accessible via a metallic curtain running along its whole length, affording users **time** to reach the emergency exits in full safety, protected from the smoke. It also makes **the work of the emergency services much easier and safer.**

The opening of the GEPE operates remotely (from the tunnel control room) and sequentially in two times. First it opens the roof ("Vulcain" model) or the curtain hatch ("Domino" model), and secondly it folds down slowly the curtain under the control of an airbrake. In this way the GEPE is able to folds down in a few seconds even if there are already users on the sidewalk or on the rail evacuation platform.

In-tunnel Demonstration

With the support of the Republic and Canton of Jura (Switzerland) a **full trial and demonstration** (with smoke, air currents and evacuation exercise) of the GEPE will take place over 50 m **in the Banné tunnel** on the A16 motorway (Transjurane) on **Tuesday, 27 April 2004**. There will also be a joint exercise by the Porrentruy and the Delémont fire brigades, based on the scenario of an accident in the tunnel. On the same day, in Manchester, the GEPE system will be submitted for integration to the Steering Board of the European UPTUN project.

The GEPE demonstration in the Banné tunnel, as a world premiere, is especially **organized for the whole "Tunnel Community"** (professionals) and dissemination through the present medias for the more general public.

In view of the large number of people who are expected, please let us know (**before 15 April by Email, regular mail or otherwise**) whether or not you will be attending the demonstration, so that we can make the necessary arrangements (transport and access to the site, lunch offered to attendees, etc.). The demonstration is of course free of charge.

We look forward to meeting you at Porrentruy in Switzerland for the demonstration.

Yours faithfully,

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Photos gallery of the first prototype of the GEPE-Vulcain module (6m) in the test laboratory

Folding anti-smoke escape gallery (GEPE system) Demonstration in the Banné tunnel (Jura Switzerland)

Tuesday 27 April 2004

Program

Meeting point (preliminary presentation in the lecture room):

Patinoire d'Ajoie (ice rink), route de Courgenay, 21 in Porrentruy (Tel. +41 32 466 54 14)

A shuttle (fire brigade) will run between the rail station and the Patinoire d'Ajoie (5 min.)!

- 09H00 : Welcome & registration (coffee, croissant)

- 09H30 : Presentation of the GEPE system and review of the demonstration
- 10H30 : Transport toward the Banné tunnel (5 minutes by coach)
- 11H00 : Demonstration of the GEPE (unfolding, cold smoke and air current)
- 11H30 : Evacuation Exercice & fire brigades intervention

- 12H30 : Transport by coach toward the restaurant of the College St-Charles (5 min.)
- 13H00 : lunch (offered)
- 14H30 : Transport back toward the Patinoire d'Ajoie (lecture room)

- 15H00: Presentation of the UPTUN project (without committing oneself)
- 15H30 : Debriefing and closure of the meeting

- 16H00: Possibility to return toward the tunnel (photos, explanations, etc.)

PS: For hotel reservations: www.jura.ch