

MUSIC – The RATP Trial

The RATP¹ trial consists of a set of MUSIC demonstrators that relate to the Metro traveller's needs and will be demonstrated using the RATP infrastructure. The main purpose of the RATP trial is to assess the MUSIC development framework. In addition, the trial will be used to communicate and promote the MUSIC technology outside the project. The RATP trial consists in a set of MUSIC demonstrators that relate to the Metro traveller's needs and will be demonstrated using the RATP infrastructure.

The RATP trial is based on five different scenarios. Three of these scenarios describe regular travelling situations. They differ in that they involve users with different needs, i.e. *a frequent traveller*, *a tourist* and *a person with reduced mobility*. These scenarios take into account that the travellers might be more or less familiar with travelling in the Metro or they might have different ability to move. The fourth scenario, which we refer to the *Björk's Concert scenario*, focuses on entertainment during travelling. Finally the last scenario, the *IROP (Irregular Operations) scenario*, describes an emergency case.

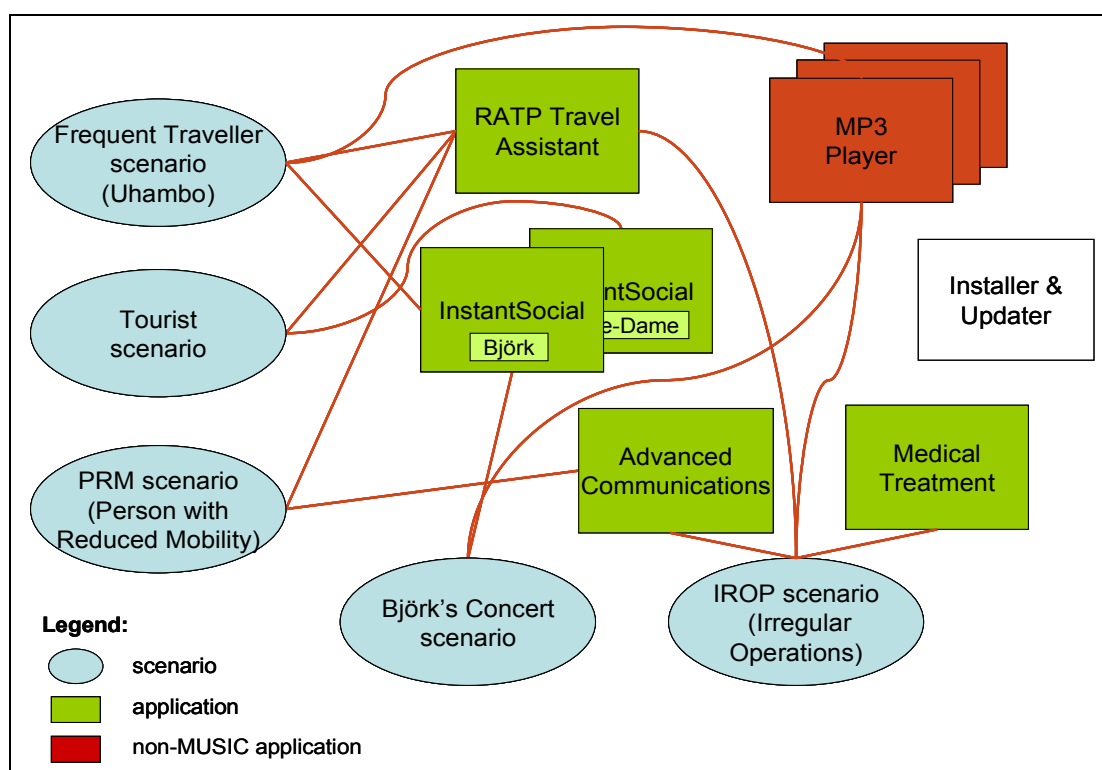


Figure 1 RATP trial overview: scenarios and applications

¹ RATP: The *Régie Autonome des Transports Parisiens* (RATP/Autonomous Operator of Parisian Transports) is the major transit operator responsible for public transportation in Paris and its surroundings. It is under the authority of the Syndicat des transports d'Île-de-France (STIF), the Paris region transit authority. Its operational divisions include the Paris Métro system (16 lines), part of the RER, an extensive bus system, and three tram lines. It also operates the Montmartre funicular.

Each of the above scenarios involves two or more applications, where each application can be applied in several scenarios. The applications are based on different architectural paradigms (i.e. client-server, peer-to-peer) and may involve one or more users. They depend on multiple and various context types and exploit various adaptation mechanisms. The following applications are under development:

- The *RATP Travel Assistant* is an application that supports the user to plan and execute his travel. It provides support for planning itineraries, guiding the user (i.e. by voice, text or graphics), purchasing and validating digital tickets and interacting with RATP equipment (e.g. the Urbam pod). Several profiles of the application can be defined allowing the customization of the application to different needs.
- The *InstantSocial application* is an entertainment application, which supports media contents sharing with various interest groups. *InstantSocial* is built upon a distributed server infrastructure in P2P mobile environments. It can operate in ad-hoc networks and provides support for sharing contents, sharing server computations (e.g. presentation, video broadcast), buddy discovery and content recommender.
- The *Advanced Communications application* is an application that supports different communication modes between several users. This includes communication between RATP agents and travellers with first aid education, information broadcast, messaging and conferencing (i.e. using chat, voice or video).
- The *Medical Treatment application* provides support for setting up diagnosis. This includes patient data acquisition, medical information retrieval and diagnosis using external expert support.
- The *Installer & Adapter application* is a domain independent application that simplifies the installation of new MUSIC applications. The application is distributed with the MUSIC middleware and might be exploited in any scenario.

In addition to these applications that will be specified using the MUSIC development methodology and tools, the scenarios also involve non-MUSIC applications. A *non-MUSIC application* is an application that is developed without using the MUSIC development framework. *Non-MUSIC applications* might not be adaptable and limited description of their properties (such as, for example, the needed memory resources) might be available. However, it should be possible to execute such applications in a MUSIC environment and to control their execution. For example, *non-MUSIC applications* may be switched 'on' or 'off' depending on resource availability.

Main contact:

Geir Horn. SINTEF ICT.

Tel: + 47 93059335

Fax: + 47 22067787

email: geir.horn@sintef.no