

FGC implements a pioneering system to control fare-dodging at station entrances automatically

- **The new system, based on artificial intelligence and a pioneer at global level, warns if users try to dodge fares by slipping through the barrier behind another person**
- **FGC and AWAAIT sign a cooperation agreement to deploy and market the new product**

Barcelona, 30th April 2014

Ferrocarrils de la Generalitat de Catalunya (FGC) and the Barcelona firm Awaait Artificial Intelligence, SL (AWAAIT) have signed a cooperation agreement to deploy a pioneering system to help monitor payment of fares and access to stations on the Barcelona-Vallès i Llobregat-Anoia lines.

This system for controlling fare-dodging, named “Detector”, generates real-time alerts when it spots what are known locally as “trenets” (users entering or leaving stations without stamping tickets by slipping through the machines behind another user, taking advantage of the time the gates stay open after they pass through). This makes it possible to identify and intercept fare-dodgers immediately and impose the relevant fine to deter them from this practice, which is restricted to a very few people at the entrances to FGC stations, but which has a major impact on other passengers’ perceptions.

How the system works

'Detector' consists of a camera watching the ticket stamping area which sends an alert when it spots a suspected fare-dodger going past. This alert is sent to mobile terminals as a sequence of images just a few seconds after the user in question goes through.

An inspector equipped with a mobile terminal (with the “Detector” application installed) receives the alert and decides whether to intercept the suspected fare-dodger. If they do, they stop the person identified in the image and ask them for their ticket or travel pass. If the ticket or pass has not been stamped, is not in order or the person simply has no ticket, they are fined.





The system also represents a management tool, as it automatically generates statistics on fare-dodging in real time so that their development over time can be monitored.

FGC at the leading edge of stopping fare-dodging

FGC is at the leading edge in the public transport sector with the gradual deployment of technology and operational measures to stop fare-dodging.

In this respect, since 2011, to reinforce measures on its sites, it uses the system of stamping the ticket or travel pass both on entering and on leaving stations. This measure has cut fare-dodging significantly: in 2013 it stood at 0.041% for the network as a whole.

Up to now, the FGC integrated control centre has monitored the video cameras at the ticket barriers in stations on an occasional basis and telephoned inspection staff with the physical descriptions of fare-dodgers to assist inspection tasks. The new application automates this process and allows constant surveillance of ticket barriers.

This new inspection system has the advantage that it does not get in the way of other travellers: it makes it possible to reduce the number of mass checks and the inconvenience these can cause, replacing them with selective checks at any time by smaller inspection teams.

The pilot trial at one of the entrances to Provença station led to a drastic reduction in this type of fare-dodging.

FGC is planning to roll out this solution at Catalunya and Muntaner stations and at the other entrances to Provença station in the course of 2014.

Agreement to market the system

The agreement signed by FGC and AWAAIT also establishes cooperation to market the new product. Thus, each side will market the product within their own area of competence, with FGC offering the consulting service to make the best use of it in each customer's specific circumstances and AWAAIT supplying the support application.



FGC makes progress in the SmartTrain concept

With this fare-dodging control project using an application designed on the basis of artificial intelligence algorithms, FGC is making progress in the SmartTrain concept, pursuing innovative initiatives and solutions to achieve smart railway management, conducting research in the field of mobility and implementing technology and innovation to improve efficiency and sustainability in its region.

FGC Communication

www.fgc.cat

Segueix-nos a:
Síguenos en:
Follow us on:



Aplicació Android
FGC Oficial App



Aplicació iPhone
FGC App

