Challenge@PoliTo _By Firms

KPIs for Green Mobility Services
_By HITACHI RAIL

October 2021 – January 2022

CALL for IDEAS

Nowadays, the attractiveness of public transport is still too low to obtain a modal shift from private vehicles.
Route planners offer the fastest or most direct routes without consideration to how pleasant and healthy they are. They usually take into account the length of a journey, the expected travel time, the number of modal shifts and, lately, crowding. Additional environmental parameters have to be considered to accelerate the transition towards a sustainable energy strategy in mobility. Awareness of the environmental impact is crucial to lead the choice for both; operators during their planning process and end-users in choosing the best path solution.

Hitachi Rail aims to promote innovative solutions to meet changing mobility needs, towards a new green and integrated mobility framework (railway, buses, bike sharing, etc.). Hitachi wants to consider environmental factors that play a significant role in the shift towards low-carbon societies. A new framework integrating a multi decision criterion related to environmental policies should be presented.

Starting from a real use case set in Genoa City, what are the KPIs useful for the transport providers to offer more sustainable services? The implementation of possible services could consider:
• The characteristics of different vehicles, minimizing energy consumption;
• The impact on the area’s morphology;
• The impact on air quality and soundscape;
• The difference between scheduled and real time to evaluate the network congestion;
• Other KPIs selected by Challenge’s Teams;

Hitachi Rail wants to create a KPIs dashboard to provide optimized services and allow companies and decision makers to implement policies suitable to sustainable urban mobility plans (SUMPs).

The Challenges are worth 8 curricular or extra-curricular credits. Check the curriculum of your degree programme to verify if you have the possibility to choose a Challenge in substitution of your free choice credits.

Check your institutional email, look for ‘Challenge@PoliTo’ and read the regulation carefully.

SIGN UP NOW! Places are limited!
For any questions, write to clik@polito.it

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