Subject
Vehicle emissions in "real world" operating conditions

List of proponents (with e-mail address of the responsible person)
Federico Millo (federico.millo@polito.it)
Carlo Ferraro (carlo.ferraro@polito.it)

Description of the international background of the proposal
Several proposal of modifications of the standardized driving cycles which are currently used to evaluate engine emissions have been recently made, to take into account that the "real world" operating conditions are usually more severe than the standardized ones and may hinder some of the engine control strategies which are usually tailored for standardized driving cycles, such as for instance, EGR. Moreover, the models which are currently used to predict emissions may become inappropriate when applied to "real world" driving cycles.

Research program objectives (intermediate and final) and expected results
The research activity will be focused on the analysis of "real world" operating conditions of automotive internal combustion engines, trying to highlight if pollutant reduction strategies (such as, for instance, EGR) which are usually tailored for standardized driving cycles, can lose part of their effectiveness when applied to different operating conditions, and to point out if the models which are usually employed to predict emissions are still appropriate when applied to "real world" driving cycles.

List of publications of the proponents and/or specific references (with titles)