

Agenda item 4.1(c)(i)

Paragraph 30 of the annotated agenda

AMS-III.XX: Efficient operation of public transportation

CDM EB 101

Katowice, Poland, 26 to 29 November 2018

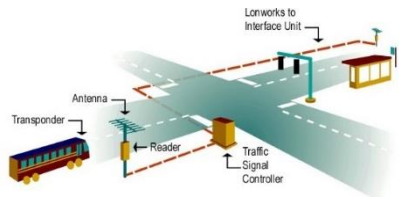


Procedural background

- EB 100: considered the draft methodology and requested MP to revise to:
 - Address potential uncertainties with regard to the baseline estimation;
 - Propose simplified/reliable methods for the above issue.



Types of projects covered



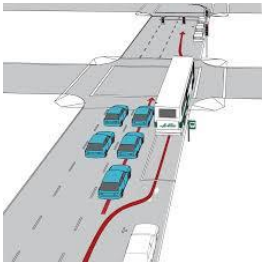
Implementation of ITS measures

Express service connecting high demand stops



Re-design of bus routes

Queue jump lane



Construction of viaducts, tunnels or other improvements

Rehabilitation of pavement with high-quality pavement



Priority lanes for buses



Applicability

- a) Implementation of ITS measures to improve the operation of buses (e.g. sensors in the bus and in roads to give priority to buses at traffic light);
 - b) Improvements in bus routes such as:
 - Re-design of bus routes;
 - Construction of viaducts/tunnels for improving infra-structure of dedicated bus lanes that are not part of a BRT system;
 - Implementation of priority lanes for buses that are not part of a BRT system;
 - Implementation of an express service connecting high demand stops by reducing the number of intermediate stops during peak hours;
 - Implementation of a bus queue jump lane;
 - Use high quality pavement
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Purpose

- To address the concerns expressed by the Board's at its one-hundredth meeting.



Key issues and proposed solutions

- Previous version:
 - a) Baseline emissions:
 - based on historical data, or
 - based on a baseline campaign.
 - b) Project emissions:
 - based on the monitored fuel and electricity consumed.
 - **Issue:** potential impacts on baseline emissions/ERs (positive or negative)
 - Approach does not consider situations that are not under the control of the PPs but influence the baseline/ERs.
 - **Proposal:** Adjust the baseline emissions by applying a Baseline Adjustment Factor parameter (BAF_y), based on ex-post monitoring of the project parameters.
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Key issues and proposed solutions (cont)

$$BE_y = \sum_k \mathbf{BAF}_{k,y} \times P_{k,y} \times AVD_{k,y} \times EF_{CO_2,PKM,k-BL}$$

$$\mathbf{BAF}_{k,y} = \frac{EF_{CO_2,VKM,k,y}}{EF_{CO_2,VKM,k,1}}$$

CO₂ emission factor per vehicle-kilometre in project route k in **year y** of the crediting period (tCO₂/vkm)

CO₂ emission factor per vehicle-kilometre in project route k in **year 1** of the crediting period (tCO₂/vkm)

$$EF_{CO_2,PKM,k,y} = \frac{PE_{k,y}}{VKM_{k,y}}$$

Project emissions in the project route k in **year y** (tCO₂e)

Total vehicle-kilometres travelled by buses in project route k in **year y** (vkm)

Total vehicle km travelled in project routes in year y is monitored (via odometer readings, number of trips and length per trip)



Impacts

The proposed new methodology will broaden the portfolio of methodological standards in the area of transport.



Recommendation to the Board

The MP recommends that the Board to approve the methodology.

