
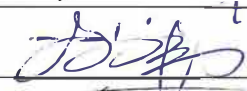



MANAGEMENT RESPONSE

Evaluation Title:	Evaluation of the UNECE ITC support to governments in climate change mitigation: lessons from the use of ForFITS tool that links policy choices and CO2 emission scenarios for inland transport		
Period of Review:	September 2018 – January 2019		
Date of Evaluation Report:	25/02/2019		
Approved by	Catherine Haswell Chief, Programme Management Unit	Date	Signature
		24/05/2019	
Cleared by:	Director of Division Mr. Yuwei Li	24/05/2019	
Prepared by:	Manager of the evaluation Mr. Francois Cuenot	24/05/2019	

Recommendation 1:

Revisit the desired roles of ForFITS within the purview of UNECE and define its targeted users.

Management Response:

UNECE fully accepts the recommendation.

UNECE acknowledges that further engagement from Contracting Parties participating at Inland Transport Committee (ITC) meetings would be desirable to steer the use, deployment and development of ForFITS. The initial aim of ForFITS to provide an independent, transparent modelling platform to contracting parties was not entirely successful, with the vast majority of ForFITS use being internal within UNECE. Thus, there is need to review the future use and targeted users of the existing tool.

Follow up actions and responsibilities:

UNECE will continuously inform the Inland Transport Committee (ITC) at its forthcoming sessions on the potential evolution of ForFITS and how the work programme will be adapted to better fit the resources available. UNECE will prepare a vision for the future linking ForFITS activities to the ITC strategy (responsible - Mr. Francois Cuenot, deadline Q1 2020).

Prepare ITC feedback (draft decisions) in terms of intended targeted users of ForFITS to guide the follow-up actions for Recommendations 9 and 10 (responsible – Francois Cuenot, deadline Q1 2020).

Recommendation 2:

Develop targeted “ForFITS activities” according to allocated resources for a more sustainable ForFITS programme.

Management Response:

UNECE fully accepts the recommendation.

Existing resources for the ForFITS tool are not enough to maintain, update and support a full transport and energy modelling framework. If, despite several attempts for fund raising, no more funds are made available, it would be suggested to focus ForFITS activities towards targeted activities where the visibility of the activities would be higher, the potential for fund raising easier to materialize and the added value would benefit a wider community of modelers, policy makers and stakeholders involved in sustainable and clean mobility.

A complete transport, energy and greenhouse gases model framework such as ForFITS required significant resources to be maintained, developed and kept up-to-date with latest trends both in modelling standards and evolution of the transport sector.

Other international organizations performing transport modelling, such as the International Transport Forum, the International Energy Agency have significantly higher human and financial resources to maintain and develop their modelling framework.

Follow up actions and responsibilities:

Even if attempts to increase the ForFITS team resources have so far not been successful, they will be pursued and intensified in the future to maintain, update and develop ForFITS and to broaden its use and attractiveness. To have a higher chance of success, fund raising will be focused on targeted activities where there is today high interest from funding institutions such as development agencies or banks, philanthropies or foundations.

For example, targeted activities on specific topics such as emission factors, trade of used vehicles and life cycle would today offer a more adequate balance of required tasks versus available resources, with a higher added value where other transport modelling framework are lacking knowledge and expertise. AS a first step, activities are being developed with GIZ on the harmonization of emission factors for the transport sector, to convert traffic activity into emissions. (responsible - Mr. Francois Cuenot, deadline Q2 2020)

Recommendation 3:

Improve the human and financial resources allocation and provide adequate support.

Management Response:

UNECE fully accepts the recommendation.

Once the UNDA funding for the creating of ForFITS stopped early in 2014, limited resources were available to disseminate ForFITS and provide support and built capacity to use the model. The staff engaged in the tool support provided adequate and timely assistance to external users as positively rated in the evaluation report.

Nevertheless, the development of the tool to latest modelling standards and to the evolution of the transport sector has lacked consistency and the scarce resources available are not enough to ensure a proper and sustainable transport modelling project.

Despite several attempts, in the past, to get funds for ForFITS developments, both on regular and extra budgetary funds, only some funding from Environment Canada were available to perform a feasibility study on the addition of Non-Road Mobile Machinery to ForFITS. This has not led to any further funding to implement the conclusions of the feasibility study.

Follow up actions and responsibilities:

Funding request will be sought from different sources to ensure that ForFITS activities are developed. In order to maintain and update a modelling framework in the medium to long term, extra budgetary (XB) funding will be sought to deliver on specific tasks and activities (responsible - Mr. Francois Cuenot, deadline Q1 2021).

Recommendation 4:

Adopt a new programming environment for the ForFITS model.

Management Response:

UNECE partially accepts the recommendation.

The programming language used for ForFITS, Vensim, has aged, and is no longer state-of-the-art in modelling programming languages. The size and requirements of ForFITS has also reached the limits of Vensim, potentially requiring a new platform for any model expansion that would be developed and implemented. Adopting a new programming language could potentially help solving some of the issues raised by the evaluator, such as the complexity of the tool and its lack of user friendliness, and would be conditional to deliver on Recommendations 5, 6, 7 and 8.

Such activities would nevertheless require significant resources to be implemented and would not be possible with existing resources.

Follow up actions and responsibilities:

A review of potential programming languages will be performed to assess potential platforms that could fit the needs of ForFITS. Such assessment will include cost and resources needed to adopt such new programming environment for ForFITS (responsible - Mr. Francois Cuenot, deadline Q4 2021).

Recommendation 5:

Offer mode-specific or intervention-specific modules in the ForFITS model.

Management Response:

UNECE partially accepts the recommendation.

Such activity would be useful to improve the user friendliness, relevance of the results and the adaptability of the tool for more refined modelling activities. For example, city scale modelling is more and more popular for energy, greenhouse gas and air quality, and a more flexible ForFITS modular approach could help improve the accuracy and relevance of city modelling.

This recommendation nevertheless would be conditional to the prior realization of Recommendation 4, as the existing Vensim programming language has reached its limits with ForFITS, and a more detailed modelling approach will probably not be possible with Vensim.

Follow up actions and responsibilities:

Included in the assessment of future programming language for ForFITS as explained in Recommendation 4, the possibility of any given option to offer mode specific and/or intervention-specific module will be evaluated. Added development and programming cost and resources will be included in the assessment (responsible - Mr. Francois Cuenot, deadline Q4 2021).

Recommendation 6:

Develop a more user-friendly interface for the ForFITS model.

Management Response:

UNECE partially accepts the recommendation.

As detailed in the evaluation report, most of ForFITS use is internal where the model is run by UNECE staff to provide insights in reports and other types of publications. Improving user friendliness would only be beneficial to external users with limited experience with ForFITS, and so, depending on the

outcomes of Recommendation 1 and the intended users of the tool, user friendliness might not be a high priority if the tool use remain mainly internal.

To raise external interest and engage external users into using ForFITS, interactive and state-of-the-art data visualization would offer a better visibility to ForFITS, as a first step.

The full development of a more user-friendly interface is likely to require a shift away from Vensim and would therefore be conditional to the implementation of Recommendation 4.

Follow up actions and responsibilities:

Development of a data visualization interface has been initiated to make the data from the model more accessible and to increase the attractiveness of the tools' outputs. Data visualization is a first step and only partially helps improving user friendliness, as it first engages external users into using ForFITS, but actually adds extra time to prepare the data in an adequate format for the data visualization interface.

Several business intelligence software are being evaluated to assess their relevance, ease of use, support community and compatibility with ForFITS before a final selection is made. Prototype visuals have been presented during the February 2019 session of ITC (Informal Document ITC (2019) No. 3).

Finalization and publication of selected data visualization infographics will be performed to show and assess the potential of those tool to increase the attractiveness of ForFITS (responsible - Mr. Nathan Menton, deadline Q1 2021).

Recommendation 7:

Integrate co-benefits into the ForFITS model.

Management Response:

UNECE partially accepts the recommendation.

This recommendation would increase the visibility of ForFITS and its attractiveness as it would broaden its scope beyond climate to also look at air quality, which is an area of rising concerns in countries, and especially in cities where transport contributes significantly to emissions of pollutant emissions.

Such upgrade had already been identified previously and would be subject to the realization of Recommendations 4 and 5.

Follow up actions and responsibilities:

Included in the assessment of future programming language for ForFITS as explained in Recommendations 4 and 5, an analysis of selected programming languages to include co-benefits such as air quality would be performed as an additional criterion for the modelling platform assessments. Added development and programming cost and resources will be included in the assessment (responsible - Mr. Francois Cuenot, deadline Q4 2021).

Recommendation 8:

Review and update the modelling relationships in the ForFITS model.

Management Response:

UNECE partially accepts the recommendation.

ForFITS is based on modelling paradigms that are likely to strongly evolve in the next decades, such as changing car ownership with emergence of autonomous and shared vehicles, or the mode split in urban areas with the development of mobility as a service, and other type of dockless mobility services. A profound revision of the model architecture would be needed to achieve that recommendation and would also be conditional to the prior realization of Recommendation 4.

Follow up actions and responsibilities:

Such recommendation will be part of the future modelling platform analysis to be developed as part of Recommendations 4, 5 and 7. The resource intensiveness of updated ForFITS with the existing modelling framework will also be evaluated, taking the appropriateness and adequacy of performing such an update on the existing ForFITS model (responsible - Mr. Francois Cuenot, deadline Q4 2021).

Recommendation 9:

Develop an online platform for engaging the community of ForFITS users.

Management Response:

UNECE partially accepts the recommendation.

As shown in the evaluation report, the external audience of ForFITS is flattening, and the number of external users is reducing over time. Such recommendation to develop an online platform for the community of users might revive the interest of external users to the model, but could represent an extensive resource mobilization for limited impact. Until now, there is no knowledge on the user profiles of ForFITS users, and the first step of such ForFITS user's community would be to build such community by collecting and compiling information about ForFITS users. The outcome of Recommendation 1 is expected to have an impact on the targeted users and whether ForFITS should remain internal or aimed at being used by any interested parties.

Follow up actions and responsibilities:

To build the ForFITS users' community, a form will be developed to collect basic information about people downloading ForFITS on-line. Part of this information collected from interested parties will be to know the interest of users to be informed about ForFITS future evolution and to create of a contact database of users who those wishing to fill in their identity and contact details (responsible - Mr. Francois Cuenot, deadline Q3 2019).

Recommendation 10:

Develop an on-line training course.

Management Response:

UNECE rejects the recommendation.

The training material for ForFITS is already extensive and publicly available on UNECE website, as highlighted in the evaluation report. The evaluation report also shows the external audience of ForFITS is flattening, and the number of external users has reduced over time. Such recommendation to develop on-line training courses might revive and assist new users into using ForFITS, but could represent an extensive resource mobilization for limited impact.

Depending on the outcome of Recommendation 1 on the targeted users, such action could be undertaken after consultation with the community of users to assess whether the existing documentation is not sufficient to learn how to use ForFITS. UNECE would rather not engage in such effort without some certainties about its usefulness.

Recommendation 11:

Ensure that gender balance is considered in the planning, implementation, and monitoring of activities relating to ForFITS.

Management Response:

UNECE fully accepts the recommendation.

UNECE will ensure that gender is mainstreamed in the future planning, implementation and monitoring activities of ForFITS.

Follow up actions and responsibilities:

To download the publicly-available version of ForFITS, a form will be developed to voluntarily collect information about the user of ForFITS. Gender will be required on a voluntary basis and tracked to assess the parity in ForFITS users, which is unknown until now (responsible - Mr. Francois Cuenot, deadline Q3 2019).

Recommendation 12:

Increase UNECE's participation to key international fora on transport emissions/energy modelling.

Management Response:

UNECE fully accepts the recommendation.

Promoting a tool such as ForFITS, broadening its use and finding new collaborative projects and raising funds for targeted activities require a presence in key transport modelling groups, research arenas and important conferences. Since 2018, ForFITS is a member of the International Transport and Energy Modelling (iTEM) network, where academia, private institutions and international organizations exchange on best practices for transport and energy modelling.

UNECE is also engaged in key conferences such as Transport and Air Pollution (TAP) where many relevant stakeholders are participating and looking for partnerships.

Follow up actions and responsibilities:

Continue active engagement and international presence in key events to look for fund raising opportunities and potential partnerships for the development and dissemination of ForFITS (responsible - Mr. Francois Cuenot, on-going).