

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 (February 2019)

Final Progress report as of 31 December 2021

#	Recommendation	Management response	Responsibility	Target date/deadline	Date of implementation/comments
1	Revisit the desired roles of ForFITS within the purview of UNECE and define its targeted users.	<p>UNECE accepts the recommendation.</p> <p>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.</p> <p>Prepare ITC feedback (draft decisions) in terms of intended targeted users of ForFITS to guide the follow-up actions for Recommendations 9 and 10.</p>	<p>Francois Cuenot, Vehicle Regulations and Transport Innovations Section</p>		<p>Implemented in June 2020</p> <p>UNECE produced a report setting a vision of different possibilities for ForFITS, depending on the resources available and the interests from stakeholders.</p> <p>The paper proposes a 2-string approach:</p> <ol style="list-style-type: none"> 1- ForFITS 1.0 where no extra resources are identified to expand the development and where the use of ForFITS is mainly internal and /or specialized audience with selected collaboration on specific topics with other interested parties. 2- ForFITS 2.0 where a new model is developed as a webtool for a broad audience proposing a policy tool and visual interactions.
2	Develop targeted “ForFITS activities” according to allocated resources for a more sustainable ForFITS programme.	<p>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.</p> <p>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</p>	<p>Francois Cuenot, Vehicle Regulations and Transport Innovations Section</p>		<p>Implemented in June 2020</p> <p>COVID-19 has slowed down the internal and external discussions to have specific and targeted collaboration with other stakeholders. Discussions are on-going with the following stakeholders to build up activities on specific issues where high added value could be delivered:</p> <ol style="list-style-type: none"> 1- GIZ on the development of a global emission factor database for transport. 2- IEA for ForFTIS to join the IEA MoMo partnership; 3- ADB and the Asian Transport Outlook 4- The Circular Car Initiative of the Work Economic Forum <p>Such task is nevertheless aimed at being continuous as opportunities arise and can be considered finalized as it has been initiated with</p>

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		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.			interest from high level stakeholders that has not yet materialized.
3	Improve the human and financial resources allocation and provide adequate support.	UNECE accepts the recommendation. 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.	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		Implemented as of 31 December 2021 Funds have been obtained from the ECE/ENV to perform data collection for ForFITS runs in Uzbekistan. Other funding requests have been directed both towards regular budgets requests and extra budgetary requests, to both UN funds and resources (eg. UNDA 12 th tranche, UN Road Safety Fund) and other external stakeholders (German technical aid -GIZ, World Business Council on Sustainable development - WBCSD, World Economic Forum - WEF); none have materialized to date, but follow-up are expected in the coming months, and other opportunities explored on a continuous basis. A summary of fund raising activities can be found in ECE/TRANS/2022/17).
4	Adopt a new programming environment for the ForFITS model.	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.	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		Implemented as of 31 December 2021 A comparative assessment of existing ForFITS programming language and other potential programming tools and available tools has been performed to find out the best way forward in case funds to develop / update ForFITS will be made available at a later stage.
5	Offer mode-specific or intervention-specific modules in the ForFITS model.	UNECE partially accepts this recommendation. 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.	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		Implemented as of 31 December 2021 A specific assessment of other tools with potential contribution to offer additional ForFITS results has been performed. Additionally, the development of a ForFITS module of real-time emissions of electric vehicle recharge has been initiated and is expected to be delivered in Q1 2022.

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6	Develop a more user-friendly interface for the ForFITS model.	<p>UNECE partially accepts this recommendation.</p> <p>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.</p> <p>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.</p>	Nathan Menton, Vehicle Regulations and Transport Innovations Section		<p>Implemented in March 2021</p> <p>In line with ForFITS 1.0 strategy as outlined in recommendation 1, several interactive infographics have been developed using Tableau Software (eg. example on Well-to-Wheel emissions) to be used in forthcoming ForFITS analysis containing on-line features, to ease the understanding of ForFITS analysis and to improve end-user experience with ForFITS results and outcomes</p>
7	Integrate co-benefits into the ForFITS model.	<p>UNECE partially accepts the recommendation.</p> <p>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.</p>	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		<p>Implemented as of 31 December 2021</p> <p>Assessment on potential feasibility of adding co-benefits such as air quality using other existing tools has been performed. External integration of air pollution using Copert has been done, based on ForFITS partial results on traffic demand activity. Such effort has highlighted the need for extended data granularity for the vehicle fleet to derive air pollution. This also linked with recommendation 8.</p>
8	Review and update the modelling relationships in the	<p>UNECE partially accepts this recommendation.</p> <p>Such recommendation will be part of the future modelling platform analysis to be developed as part of</p>	Francois Cuenot, Vehicle		<p>Implemented as of 31 December 2021</p>

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	ForFITS model.	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.	Regulations and Transport Innovations Section		A review of existing ForFITS modelling relationship has been undertaken internally, showing the relevance of ForFITS projections (ECE/TRANS/2022/17). For existing use, no need to update the modelling relationships has been identified; for further use and full integration of other co-benefits, dedicated resources would be needed but have not been identified for such activities.
9	Develop an online platform for engaging the community of ForFITS users.	UNECE partially accepts this recommendation. 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.	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		Implemented in September 2019 The user survey (done for users downloading the tool from May 2019) showed that half of the users downloading the tool did not wish to be informed about latest ForFITS evolution, out of 25 answers. In the foreseeable future, ForFITS Webpage will be used as a mean to show latest news and development about ForFITS. The contacts gained will built a nucleus to create a ForFITS community, as the ForFITS user survey is getting populated.
11	Ensure that gender balance is considered in the planning, implementation, and monitoring of activities relating to ForFITS.	UNECE fully accepts the recommendation. To download the publicly-available version of ForFITS, a form will be developed to voluntary 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.	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		Implemented in June 2019 On-line questionnaire requiring optional information about the entity/person downloading ForFITS, including gender has been deployed since May 2019. The survey has shown that 40 % of ForFITS user that downloaded the tool from May 2019 are female, based on the declaration of user who filled the questionnaire. Further tracking of gender parity will be carried on to see how this parameter evolves over time.
12	Increase UNECE's participation to key international fora on transport emissions/energy modelling.	UNECE fully accepts the recommendation. 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	Francois Cuenot, Vehicle Regulations and Transport Innovations Section		Implemented as of 31 December 2021 1- Involvement in various international initiatives on transport and mobility modelling, such as the International Transport Forum (ITF) Decarbonizing Transport Initiative, the International Transport and Energy Models (iTEM) partnership, the Energy Demand changes Induced by Technological and Social innovations (EDITS) network. 2- ForFITS has also been invited to join the IEA Mobility Model Partnership (see recommendations 1 and 2); This activity has been delayed because of the Covid-19 pandemic. 3- ForFITS team has shared modelling results and historical and forward-looking projections time series with the iTEM partnership into

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					their Cross model comparison effort to gauge different models outputs. 4- ForFITS is an accredited model to supply results to the IPPC AR6 report to be published in 2021 5- ForFITS has been working with ADB on the Asian Transport Outlook