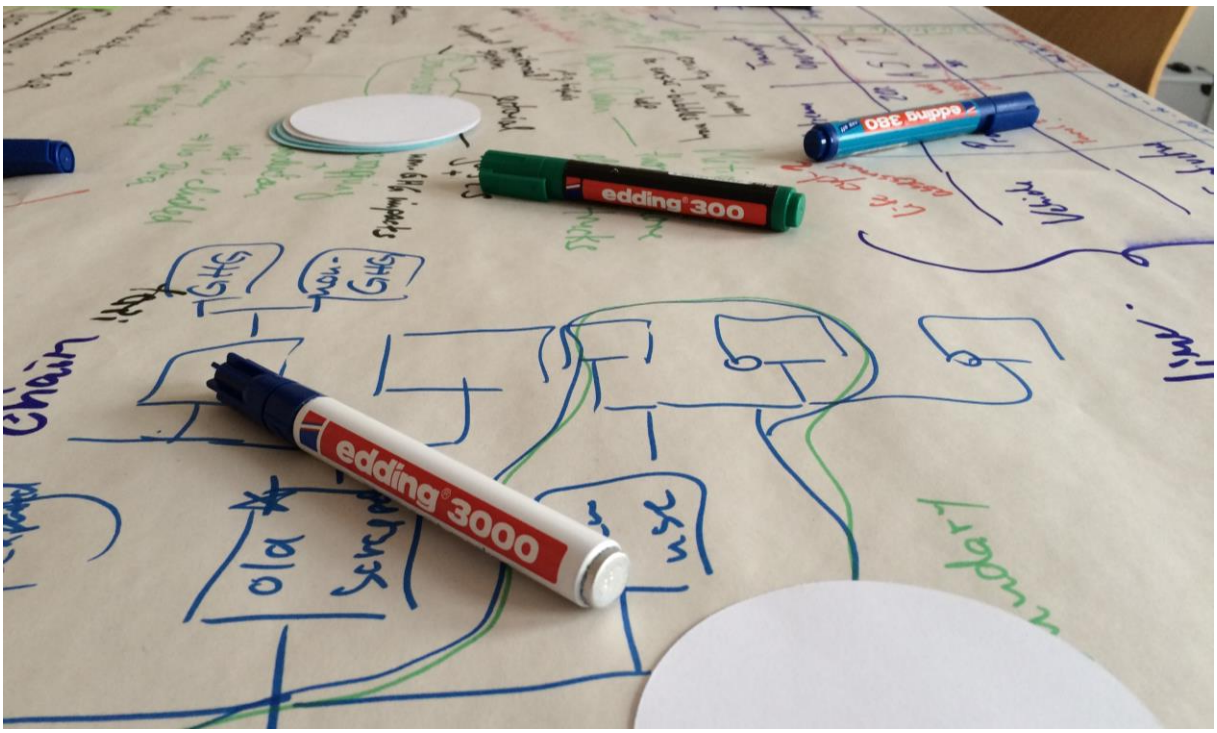

MRV BLUEPRINTS FOR TRANSPORT NAMAS

3rd MRV Expert Group Meeting – Bonn, 20 March 2015

Workshop Report

giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

On behalf of:
Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
of the Federal Republic of Germany

Background Information on the TRANSfer Project

The TRANSfer project is run by GIZ and funded by the International Climate Initiative of the German Ministry for the Environment, Nature Conversation, Building and Nuclear Safety (BMUB). Its objective is to support developing countries to develop and implement climate change mitigation strategies in the transport sector as „Nationally Appropriate Mitigation Actions“ (NAMAs). The project follows a multi-level approach:

- At country level, TRANSfer supports selected partner countries in developing and implementing NAMAs in the transport sector. The NAMAs supported by the project cover a broad variety of approaches in the partner countries Indonesia, South Africa, Peru and Colombia.
- At international level and closely linked to the UNFCCC process, the project helps accelerate the learning process on transport NAMAs with a comprehensive set of measures (events, trainings, facilitation of expert groups, documents with guidance and lessons learned such as the transport NAMA handbook and a database which is an interactive wiki-based portal that provides access to transport NAMAs.

Activities at country and international level are closely linked and designed in a mutually beneficial way. While specific country experience is brought to the international stage (bottom-up) to facilitate appropriate consideration of transport sector specifics in the climate change regime, recent developments in the climate change discussions are fed into the work in the partner countries (top-down).

For more information see: http://www.transferproject.org

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1 Background and Aims of the Workshop

The MRV expert group workshop on 20 March 2015 brought together members of the expert group from Europe, Asia, North America and Latin America for the third time.

The MRV expert group of the TRANSfer project was established in 2014 with the aim to further the understanding of Measurement, Reporting and Verification (MRV) of transport NAMAs and to support the development of MRV methodologies and MRV guidance for transport activities. To do so, the TRANSfer team and the expert group agreed for TRANSfer to support a) the development of a *Reference Document on Monitoring Systems for the Transport Sector* on how to develop comprehensive and consistent national systems for monitoring transport related emissions; and b) a set of MRV methodologies for different types of transport NAMAs (MRV blueprints) that complement the Reference Document with more specific methodological support for different cases.

It is the explicit aim of TRANSfer to develop a common understanding of elements and structure of an MRV system for transport and MRV methodologies for NAMAs across the members of the MRV expert group (for more details on the expert group, please visit the TRANSfer website).

The workshop focused on MRV blueprints. MRV blueprints for transport NAMAs were conceptualised prior to the workshop as detailed step-by-step documentations of MRV methodologies for specific transport NAMAs, each exemplified by a case study. As part of the documentation and to be transparent and replicable, blueprints also provide an analysis and explanation of the choice for a certain baseline and monitoring approach. Aim of the blueprints is to provide NAMA developers with ready-to-use methodologies for different transport NAMAs in order to decrease transaction costs of NAMA development and foster replication.

A template on structure and content of MRV blueprints had been developed by INFRAS for TRANSfer and circulated amongst the MRV expert group in September 2014 to include comparable content in the MRV blueprints. Authors were nevertheless free to adjust the blueprint structure where they saw fit. So far, three draft blueprints have been developed by members of the expert group, which were presented at the meeting:

- Expansion of the rail sector in India (Grütter consulting)
- Low rolling resistance tires in Europe (IFEU)
- Truck scrapping in Mexico (GIZ)

Aims of the workshop were:

1. To agree - as far as possible – on a common structure and contents for MRV blueprints for transport NAMAs based on the presentation of three cases.
2. To collect ideas on the potential and possibilities to scale-up MRV blueprint development.

This time, the meeting was held in Bonn to take advantage of the meeting of the CDM Methodologies Panel in the same week to add a half-day discussion on MRV methodologies for

transport NAMAs with members of the CDM Methodologies Panel on 21 March 2015 (see chapter 3).

2 Workshop Structure and Outcomes

The workshop began with a short introduction of the idea behind MRV blueprints and an overview of the day by Daniel Bongardt (GIZ), followed by self-introductions of all participants, including their expectations of the workshop. Most expectations revolved around a clearer understanding of the content and scope of MRV blueprints and how they related to inventories on the one hand and the *Reference Document on Monitoring Systems for the Transport Sector* (the second major output of the MRV expert group) on the other hand. Participants also voiced the concern that NAMA MRV should be simpler than monitoring in the CDM, that MRV blueprints should provide clarity to NAMA developers on NAMA MRV in the transport sector and that blueprints must ultimately be a helpful tool for developing countries.

2.1 TOWARDS A COMMON UNDERSTANDING OF MRV BLUEPRINTS

The core of the workshop was organised around the three draft MRV blueprints. Blueprint authors gave a **ten-minute presentation on** their **case studies** in the plenum followed by Q&A, before participants split up into three groups (all presentations can be viewed here, under Meetings and Further Reading). Jürg Grütter (Grütter Consulting) presented on the expansion of the rail sector in India, Frank Dünnebeil (IFEU) reported on MRV of low rolling resistance tires in Europe, and Georg Schmid (GIZ) illustrated the MRV blueprint on truck scrapping in Mexico.

2.1.1 General feedback on draft MRV blueprint presentations

The Q&A session to the three blueprint presentations showed, that there was still a need to specify more clearly and in more detail the definition of the MRV blueprints, especially in relation to national MRV systems. I.e. should MRV blueprints only explain how to quantify the effects of a specific NAMA or also how to set up MRV systems?

Conclusions of this first round of feedback were:

- Conclusions that can be drawn from the specific case for data collection and data requirements in general, as well as suggestions for improvements in the NAMAs should be included in the MRV blueprints. This way, when new NAMAs of the same type are set up, they can already be designed in a way that better accommodates MRV and data collection, e.g. if manufacturers were required to publish annual data on shares of sales of low rolling resistance tires, MRV of tire labelling schemes would be much easier.
- Similarly, it would be helpful to include a separate chapter on lessons from the specific NAMA for setting up a larger MRV system.
- MRV blueprints should also explain how blueprints are different from CDM methodologies in the introductory chapter, i.e. that you can start out with what you have and can improve your MRV over time. Not all data needs to be available from the start.
- Some tensions exist between gathering better data for solid GHG calculations first and calculating emissions later in the project and requirements from either national governments or NAMA funders, who would often like to see ex-post estimates of emission reductions quickly to show success of their investments.

2.1.2 Break-out group discussion of cases and blueprint elements

The group discussion followed a world café inspired format in which three groups formed around the topics of 1) **Impact chains and boundaries**, 2) **Baseline choice**, and 3) **Indicators and Monitoring**. Each group met around one table with one moderator each. Whereas participants stayed with one topic, the blueprint authors moved from one table to the next to discuss impact chains and boundaries, baselines and indicators and monitoring for their cases with the topical groups. The groups first discussed the specifics of each case, but also drew conclusions for the blueprint template and gathered their thoughts on paper as they discussed. The moderator updated each new "case bearer" on the current status of the discussion and yet unanswered questions. In the last 10 minutes, each group sorted their findings with help of the moderator on a pin board. In this manner, the group achieved to improve their common understanding of the scope of each of the 3 topics and gathered a range of suggestions for refinement of the content of MRV blueprints.

Group 1: Impact Chains and Boundaries

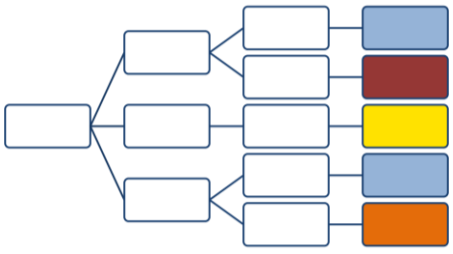
As a starting point for the analysis of the impact chain and the definition of boundaries, the group recommends to visualise the impact chain. Impacts to be considered should include GHG and non-GHG impacts, as well as rebound effects. It would add to the transparency and clarity of the document if the visualized impact chain were included in the blueprint.

Impacts may result from different project phases: Direct activity emissions from the "use phase" can be differentiated from upstream and downstream emissions. Blueprints were suggested to give an extensive overview of the types of impacts the measure may cause. The table below shows how the impacts can be categorized along the categories "vehicle, fuel, infrastructure" and "upstream, transport activity, and downstream".

	Upstream	**Transport activity/operation**	**Downstream**
Vehicle	Default	ASI	Default
Fuel	Electricity ↯	F	_
Infrastructure	Default	Default	Default

Group 1 discussed that any potential impact may fit into one of the cells of the above categorisation and that it could also be used to categorise the impacts in the impact chain, using different colours (see illustration below). The colour coding of the impact chain could then also support delineating the system boundaries, by e.g. excluding all dark coloured impacts, if no upstream emissions will be included.

	Upstream	**Activity**	**Downstr.**
Vehicle			
Fuel			
Infrastructure			



The practical examples discussed in the workshop showed that in many cases it would be difficult to collect specific data for some impacts, especially when referring to upstream or downstream

impacts of a NAMA. Furthermore, some of the impacts could easily be identified as very small or negligible. Based on these criteria, the author of a blueprint may decide to use default values or even ignore specific impacts in the MRV, as long as this decision is based on careful consideration and made transparent in the document. The focus should be put on minimising those uncertainties associated with the largest emission reductions, e.g. for railways, uncertainties associated with ASIF aspects may have a bigger influence on the mitigation outcome than some of the upstream or downstream emissions. The group also suggested to use ranges in case remaining uncertainties do not allow using exact numbers.

When considering upstream or downstream emissions, some of the data may be situated within inventories of other sectors, e.g. industry or construction which means they would be reported under these sectors in the BURs (e.g. emissions from construction of BRT bus stations). Nevertheless, the group noted that such impacts should however nevertheless be addressed in the NAMA MRV, since they are part of the impacts caused by the NAMA.

If upstream and/or downstream emissions for the NAMA activity are included, this should also apply to upstream and/or downstream emissions for the baseline (a simple rule that, however, was found to be often forgotten).

For the assessment of some impacts that intensely interact with other elements of a transport system and therefore create multiple side and rebound effects, it may be easier to look at the impacts on a more aggregated level, e.g. at city level for a bundle of measures, instead of evaluating, for instance, parking policy as stand alone measure.

When discussing the boundaries of the MRV system, these can refer to five dimensions, all of which need to be defined: boundaries may refer to temporal aspects (e.g. whether to consider future impacts and with what time horizon), sectorial (e.g. inclusion of impacts in the energy or construction sectors for upstream impacts)), territorial or system related (geographic, e.g. externalised impacts though trade), types of GHG, and non-GHG (sustainability) impacts.

The group also discussed criteria to be used to decide which impacts to include in the MRV boundary. As a pragmatic approach the group discussed that data availability, and the relevance of the respective impacts should be considered when delineating the boundaries. One blueprint author solved this tension by defining an optimal boundary first and then an actual boundary that was limited to the impacts that could be assessed at the moment.

There was great consensus that no matter on what basis the boundaries are defined it is vital to be transparent in the blueprint about how the boundary has been delineated and for what reasons specific elements were included and others excluded.

Additional comments included to consider discounting of future emissions over short-term impacts and to at least include a qualitative assessment of the climate forcing impacts on/of black carbon under the section of GHG impacts.

Suggestions from group 1 for the blueprint template:

- The boundary section should…
  - be clearly structured into the different dimensions temporal, sectorial, territorial/system, GHGs, non-GHG (sustainability) impacts;
  - provide suggestions on which co-benefits to include in the boundary (if any);
  - give suggestions on suitable temporal boundaries for the specific NAMA type.

- The blueprint structure should include a section on conclusions that should contain lessons learned and also discuss the transferability of the blueprint. This may include a

discussion on which of the default values used in the blueprint case can be easily transferred and which not. The blueprint template should provide guiding questions to assess the transferability potential of the case.

Group 2: Baseline choice

The baselines group stated that there was not only one correct baseline, but that the baseline depended on the objective and perspective of the NAMA. It was found that there is no standard approach regarding how to account in the baseline for additional measures that are already planned to be introduced in the future. E.g. from a national perspective of own contributions of the host country, implemented and planned policies and measures are part of the national effort to reach a commitment and should therefore not be included in the baseline. On the other hand in the context of crediting, baselines should take national efforts into account so that only those mitigation outcomes are credited and transferred abroad that are additional to the national effort to avoid double counting/claiming of mitigation outcomes. The group found that it may be useful to provide a range of potential baselines rather than only one and to document the final baseline choice.

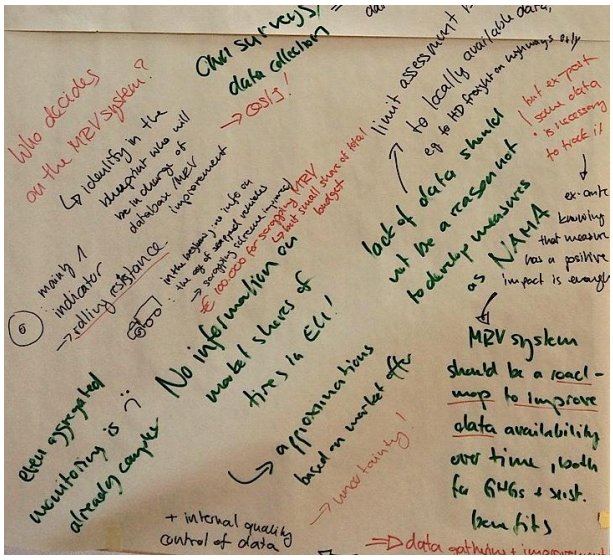
Different parameters were identified that need to be differentiated for baseline setting: Activity data, emission factors and intensities (e.g. litres/km). Some of these parameters may remain static while others need to be adjusted over time, so that the baseline will be dynamic.

The MRV blueprint should make transparent which data is generated by the NAMA activity itself and which is taken from the national MRV system (existing national statistics); at the same time data gathered by the NAMA may be relevant for a national MRV system, where this is the case it should also be made explicit. No matter which data is used, the MRV approach should ensure that meaningful verification can be done (E.g. a clear definition of data sources and quality standards should be given). But at the same time, members of the group also noticed to keep in mind that the practice of ex-post emission monitoring of individual mitigation actions is often poor and seldom done in western countries, when asking DCs for ambitious emission monitoring. On the other hand donor countries may require higher MRV standards than are required for domestic actions of a host country. Finally, the group found that it could be useful to provide a range of the emission reductions (tCO_2) rather than one number to account for the uncertainty in the calculations and make the uncertainties transparent.

Suggestions from group 2 for the blueprint template:

- The baseline choice should be explicitly documented (baseline x was chosen because of xyz...).
- The blueprint template in the data availability section should prompt authors to document workarounds in case of data gaps, when optimal data is not available for baseline settings and to provide a brief assessment, where and how approximate data was collected and what this implies for robustness.
- As a conclusion from the discussion on uncertainty and data availability/quality, the blueprint should ideally include provisions for the improvement of the MRV system over time.
- The blueprint may further include a discussion on the applicability of the baseline and on what may have to be done if the blueprint approach is transferred to another context.

Group 3: Monitoring and Indicators



The monitoring and indicators group discussed that the overarching goal of MRV blueprints was to trigger more transport NAMAs in order to foster more action on sustainable transport. For that matter poor data availability should not stop NAMA development. Instead, the group agreed that NAMAs could start with poor data and averages to make a rough ex-ante assessment and design the MRV approach so as to continuously improve. The discussed cases showed that even at an aggregated level, MRV is often already complex and data availability is usually not ideal in the beginning, e.g. there are no data on market shares of low rolling resistance tires in the EU and in Mexico no information existed on the age of the scrapped vehicles. NAMAs should therefore include a roadmap for longer-term MRV improvement as part of their MRV framework. Nonetheless, the group agreed that it was essential to identify core indicators, for which data has to be gathered to be able to make an ex-post assessment of the GHG emission reduction effect. In the two cases a workaround was developed to accommodate the data gaps. For the low rolling resistance tires market offers were used as proxy indicator for market share of low rolling resistance tires in Europe and a recommendation was included in the blueprint to include market share data in tire legislation, if the policy was to be transferred elsewhere. In the case of Mexico the scrapping scheme was improved over time and data on the age of the vehicles was made available.

Subsequently, the group described the aims of MRV to be threefold: 1) assess GHG emission development, 2) improve data availability of transport indicators over time and 3) assess sustainability benefits. Indicators where not discussed in detail by the group, but the following four major types of indicators were identified: GHGs (as a function of transport activity data and emission factors), sustainable development indicators and progress indicators. For sustainability benefits some group members underscored that it was important to try to monetise them to show the benefits (and macro-economic "return of investment") beyond GHGs. The monitoring system should provide data that convinces stakeholders in the countries of the benefits of sustainable transport measures. In that sense, the group discussed that it may be useful to also include a communication plan for the MRV results in order to make better use of the success of sustainable transport interventions beyond reporting to mitigation effects to NAMA funders. Such a communication plan would differentiate different actors, such as government, society, funders, other individual stakeholders, etc. The communication plan could be part of the reporting section of NAMA proposals and be summarised in MRV blueprints. Lessons learned for data collection, as well as how monitoring systems can be improved over time should also be documented in the MRV blueprints.

Members of the group further identified that it was important to include a clear description of the institutional setting and which actors in the countries are responsible for data collection, maintenance and improvement of the database over time to guarantee that MRV processes are firmly anchored in local institutions. It was advised not to set up separate monitoring and reporting structures specific to the NAMA MRV, but to build on existing structures as far as possible. These should ideally also include structures for internal quality control.

The blueprints need to balance the level of detail provided. Additional information may be described in the monitoring plan of the NAMA, whereas very general principles on monitoring may be explained in the Reference Document, so that blueprints can focus on the specific monitoring aspects of the case without, however, repeating every last (procedural) detail of the monitoring plan.

Finally, costs were seen as an important aspect to NAMA monitoring. MRV blueprints should provide information on the required costs for one-off and recurring monitoring costs in the specific blueprint case. The costs are known to vary greatly, depending on the data availability in the country. E.g. while for the railway NAMA in India, roughly US$ 300,000 were needed for baseline establishment due to a good data basis, the same exercise in Kenya cost around US$ 1,000,000 due to a lack of baseline data for trucks and buses. Recurring monitoring costs in India were estimated at US$ 50,000 annually without consultant fees. Here India Railway is in charge of monitoring, much of which builds on existing structures for data collection. Nevertheless India Railway staff received a 2-year training on monitoring and reporting and a detailed guide for monitoring and reporting was provided to them.

Regarding data, the group saw an urgent need for localised default values, such as for load factors, which could be provided in the Reference Document, so that MRV blueprints could refer to them.

Suggestions from group 3 for the blueprint template:

- The monitoring chapter of MRV blueprints should include a section that describes steps for MRV improvement over time (roadmap).
- The blueprint should also include a lessons learned section for data collection and how to improve monitoring over time.
- The section on institutional setting for monitoring may prompt blueprint authors to clearly describe which local government agencies are or will be in charge of NAMA monitoring and data maintenance.
- The monitoring section may include a paragraph on the related costs, distinguished by one-off costs and recurring costs.
- The blueprint may include a section on Verification that describes possible steps.
- An additional sub section on a communication plan for MRV results (or at least a note that it may be useful to develop such a plan) may be added to the blueprint.

2.1.3 Panel discussion of group work

After the lunch break, the group moderators Frank Krämer (GIZ), Jürg Füssler (INFRAS) and Urda Eichhorst (Wuppertal Institute) summarised the findings of the breakout groups. Then Daniel Bongardt (GIZ) and Cornie Huizenga (SloCaT) moderated the panel discussion on what the findings implied for the further development of MRV blueprints, also referring back to the need for a clearer definition of the scope of MRV blueprints and the distinction from the *Reference Document on Monitoring Systems for the Transport Sector*.

The discussion found that MRV blueprints are something between the description of a case study and methodological help, i.e. MRV blueprints should formulate lessons learned from the case studies and possible critical issues for transferring the blueprint to a different context. At the same time authors of MRV blueprints might also draw conclusions from the specific MRV methodology for setting up national MRV systems. However, the limited experiences from MRV implementation so far, where seen as a difficulty to draw lessons learned already.

On the other hand, elements such as good practice on the definition of boundaries or baselines should be described in generic terms in the Reference Document, the blueprints should instead only describe the specifics that need to be taken into account in the specific cases. Otherwise there would be a lot of repetition in the blueprints.

Further propositions by participants included that the blueprint template could be formulated in the form of questions to be answered by blueprint authors; and that the term blueprint may raise expectations that go beyond what the blueprints currently offer and that therefore GIZ could consider changing the name.

Regarding the further development of MRV blueprints, the MRV expert group agreed that MRV blueprints will not be static but may develop over time. A dynamic approach appeared more appropriate at this stage, because there is not yet enough experience with MRV of transport NAMAs. From this finding, the idea originated that MRV blueprints might be more of a knowledge base than static documents. One participant suggested that the blueprint template (or possibly also more general information on MRV of transport) could be a wiki that is fed and improved over time. Providing some sort of online platform may also allow asking NAMA developers to contribute to such an expert knowledge repository and e.g. gather default values over time.

It further became clear in the discussion, that a collaborate mechanism is needed to achieve such an aim and that such a system needs to provide an incentive for others to contribute. It was emphasized that, for the time being, the available resources need to be considered and used so that MRV blueprints could still be a first methodological support to develop NAMAs, even though they may have to be improved. Yet again, one participant noted that if MRV blueprints should be meaningful they needed to address the whole transport sector not just a few arbitrary measures – this in turn means that more capacity will be needed to develop MRV blueprints for different interventions (see session on scaling-up).

Ideas for additional MRV blueprints:

- Freight transport (rail, waterways)
- Fuel economy standards
- Transit-Oriented Development
- Electric and hybrid vehicles

* See annex for a longer list of blueprint ideas gathered over the past year.

Key findings:

→ TRANSfer will develop a definition of MRV blueprints, defining the difference of a MRV blueprint and a NAMA proposal on the one hand, and the relation to the Reference Document on the other. The definition will be circulated and refined amongst the MRV expert group.

→ Due to a lack of time during the workshop to further improve the structure of the template for MRV blueprints together, TRANSfer will develop an updated structure for the MRV blueprint template based on all the suggestions from the three breakout-out groups and circulate it amongst the MRV expert group for comments.

→ Despite not being based on a lot of experience, blueprints should draw lessons a) for transferring the blueprint to another context and b) for the improvement of (national) MRV systems as far as possible.

2.2 SCALING UP BLUEPRINT DEVELOPMENT AND THE ROLE OF THE UNFCCC

Building on the consensus of the MRV expert group that developing additional MRV blueprints would be useful, the session on scaling up blueprint development, moderated by Cornie Huizenga (SloCaT), examined in more detail WHO would need to be involved (only from the

transport sector or also other sectors) with WHAT responsibility and HOW the MRV expert group could approach them.

As a first step, Daniel Bongardt for GIZ agreed to refine the template for MRV blueprints, perhaps revise the drafts that have already been developed, and make sure that at least one MRV blueprint is implemented according to the revised template.

Then the idea of a knowledge repository was discussed further. One participant suggested that it could build on the NAMAs that are currently being developed and develop MRV blueprints out of them in collaboration. The blueprints could then be voluntarily submitted to a knowledge repository. The group agreed that a knowledge management system should not become a long reference list, but would need to extract the most vital information and make it easily accessible to users. Such a platform would not only include blueprints, but also the Reference Document, and should include default values for different regions. One important question was how the legitimacy and acceptance of such a knowledge repository could be ensured. One participant noted that it would be important to understand why someone would visit such a knowledge platform and what their expectations are.

Regarding WHO needs to be involved in such a collaborative effort, expert group members identified the following actors: UNFCCC, Glean Climate Fund (Monitoring and Evaluation group), NAMA Facility, TRANSfer and SLoCaT. The Asian Development Bank (ADB) was identified as interested in MRV methodologies, because they do not want to develop their own guidelines.

As presented by Victoria Novikova from the UNFCCC Secretariat, the UNFCCC is starting to develop a so-called Baselines Compendium for all IPCCC sectors from national level, to sectorial baselines to facility level – the Compendium should ultimately be made available on a web portal together with an e-learning course. UNFCCC is still looking for answers on what kind of information must be provided; the transport sector will be used as a pilot for the Compendium and GIZ (via BMUB funding) has been asked to support the transport sector chapter of the compendium[1]. Daniel Bongardt explained that the motivation behind the involvement of GIZ is to involve the MRV expert group in this process. So this could be one entry point for a knowledge repository on MRV of transport. Furthermore, the UNFCCC organises a NAMA Day at the COP in Paris, to which the MRV expert group could provide key messages on transport NAMA MRV.

At the same time, Cornie Huizenga reminded that the input of SloCaT to the transport-related indicators of the Green Climate Fund (which was provided earlier in March 2015, including contributions from expert group members) helped to improve the legitimacy of the MRV expert group and that this connection should be further used. TRANSfer added that they would update the GCF Monitoring and Evaluation contacts on the outcomes of the meeting and encourage them to use the resources of the MRV Expert Group to define the guidance of the GCF on transport monitoring and evaluation.

SloCaT is furthermore reviewing around 50 transport methodologies with the help of Sudhir Gota in regard to how co-benefits are included etc.; the outcomes could also be fed into the knowledge repository on MRV of transport.

[1] Jürg Füssler from INFRAS has been approached to coordinate the transport sector chapter.

One participant mentioned that the NAMA Facility was currently developing guidance for MRV, so this should ideally be linked to the efforts in TRANSfer; at the same time the NAMA Facility could ask their projects to develop blueprints and to reuse existing ones.

Key findings:

→ More blueprints based on real-world cases should be developed. The blueprint concept may also be useful for other sectors, so to scale-up blueprint development other sectors may also be involved.
→ Key issue for scaling up is to gather further knowledge. To do so, TRANSfer/the MRV Expert Group needs to draw in more expertise, gather and make available the knowledge.
→ Setting up a collaborate mechanism to build an online knowledge repository for MRV of transport NAMAs is an effort that goes beyond the development of MRV blueprints; the MRV expert group will follow up the idea.
→ TRANSfer needs to be in touch with the key players working on the issue (GCF, NAMA Facility, UNFCCC)
→ Several connections have already been established to the UNFCCC, the Green Climate Fund Monitoring and Evaluation group and others that should be further used and expanded.
→ GIZ will contact the NAMA Facility to see where synergies could be exploited to provide methodological support for NAMA MRV.
→ TRANSfer will coordinate key messages on transport NAMA MRV of the MRV expert group to provide to Victoria Novikova (UNFCCC Secretariat) for NAMA Day in Paris.
→ The expert group offered to discuss questions of the UNFCCC on baselines for transport through video conferencing to draw together those experts interested in baselines.

2.3 UPDATE ON THE REFERENCE DOCUMENT

In the late afternoon, Jürg Füssler (INFRAS) as chief editor of the Reference Document updated the expert group that a first draft for comments had been circulated and reviewed by a number of members of the expert group. The received feedback showed that it was a challenge to ensure the consistency of the document, including definitions and wording – this will be improved. Chapter 5 on steps for implementing an MRV system is still pending. The authors decided to include a few more examples to make the document more tangible. At the same time, the final draft will improve links to the MRV blueprints by focusing more on the methodological aspects of the examples than on the NAMA activity itself.

2.4 WRAP UP, OUTCOMES & NEXT STEPS

In the final session, Daniel Bongardt summarised the next steps for the work of the MRV expert group as follows:

- The Reference Document should be finalised in May 2015.
- There will be a side event at the SB Meetings of the NAMA Partnership on 1 June, where the Reference Document should be presented.
- TRANSfer will revise the blueprint template and see whether or not to revise the drafts – TRANSfer will organise a virtual meeting on the blueprint template to discuss it, once a revised version has been circulated.
- TRANSfer will approach NAMA funders to identify possibilities for cooperation on methodological support for MRV.

- TRANSfer plans to organise another expert group meeting before or during Paris to report back on the contacts with GCF and possible other topics – the specific topic will be agreed by the expert group later in the year.

Lastly, the majority of the group was in favour to continue the MRV expert group beyond its current outputs.

3 Exchange with CDM Methodologies Panel on 21 March

In the morning of 21 March 2015, some members of the MRV Expert Group met members of the CDM Methodologies Panel and the UNFCCC Secretariat at the Wissenschaftszentrum Bonn.

The meeting was used to present the idea of MRV blueprints for (transport) NAMAs and to exchange with members of the CDM Meth Panel on lessons learnt from the CDM for advancing the development of consistent monitoring (MRV) methodologies for transport sector mitigation actions. After a short introduction by Daniel Bongardt, Jürg Füssler presented the concept and structure of MRV blueprints and their difference to CDM methodologies. After a short Q&A, Hugh Sealy, chair of the CDM Meth Panel, briefly reported on the work and lessons learned for transport from the CDM. The ensuing discussion, moderated by Cornie Huizenga (SloCaT), followed to major questions: 1) General feedback on the blueprints and methodological lessons from the CDM; 2) Lessons regarding review processes for MRV blueprints.

Feedback on MRV Blueprints from the meth panel included:

In NAMAs, some members of the Meth Panel argued, "nationally appropriate" is linked to national policies and strategies, so co-benefits and their economic impact are more important than GHGs. Co-benefits should therefore have their own chapter, in the MRV blueprints, especially illustrating economic benefits. At the same time MRV blueprint must not dictate which sustainable development benefits have to be looked at, because these are nationally appropriate and should be determined by the countries (comment by member of the expert group that it is not the intention of the MRV blueprints to dictate anything, but merely to make propositions on what could be included for specific NAMA types).

Another Meth Panel member stated that the institutional structure for monitoring is very important and that blueprints should include which government agency will be in charge of data collection – the institutional structure should also be linked to the BURs and describe how data for the BURs are used for monitoring of the NAMA.

Discussants further suggested that the current CDM might be useful in terms of standard emission factors, conservative default values or approaches to standardised baselines, but in terms of monitoring it may be too detailed. Furthermore, the CDM does not offer many methodologies for the transport sector.

One methodological question that was raised by a member of the Meth Panel regarded how to deal with suppressed demand in baselines and MRV of NAMAs as well as with upstream and downstream emissions. How to address suppressed demand turned out to have been a much-debated topic in the CDM and Guidance was developed that could also inform NAMAs. Regarding up- and downstream emissions, a member of the MRV Expert Group stated that it needed to be identified individually for each NAMA whether they are significant or not.

There was a fundamental disagreement between several members of the Meth Panel whether the same mantra that "a ton is a ton is a ton" that was applied in the CDM should also be valid for monitoring of NAMAs or if there should be more flexibility in MRV of NAMAs with the

majority of participants feeling that there is no need to be as exact in emission calculations in NAMAs (as long as they are not credited and that transport did not exactly lend itself to credited NAMAs).

Discussion of possible review processes for MRV blueprints for transport NAMAs:

The discussion showed that it remained an open issue how to establish an institutionalised review process of NAMA MRV approaches, even though there are no strict rules regarding NAMA MRV. On the other hand, one participant from Indonesia emphasized that a review process was very much needed and could be set up at the international level, but also at the national level – and that this was an area where much could be learned from the CDM in terms of processes.

Anil Raut, Secretary to the CDM Methodologies Panel, summarised the standardised review process of CDM methodologies, in which methodologies are developed bottom-up, then submitted to the CDM Executive Board, first undergo a completeness check, then a pre-assessment (more detailed look at the included information), only then to certain meth panel members (sometimes also external sectorial experts) before being discussed by the whole Meth Panel; in parallel stakeholder input is gathered. There are clear rules for each step. A similar process exists for review and verification of each PDD.

Even though there is no formal approval of MRV approaches of NAMAs, participants thought that it would be useful to look at other types of quality assurance without a formal approval.

One meth panel member suggested to make a call for public inputs to the draft MRV blueprints, or at least to one and use this to make the efforts to develop MRV blueprints for transport NAMAs better known and visible; to use it as a marketing strategy while gaining additional inputs and possibly legitimacy.

Another member of the Meth Panel noted that it was a good idea to start with MRV blueprints based on case studies and only later look at standardisation of methodological approaches, once more NAMAs will have been developed.

Wrap-up:

Even though there were diverging views on the rigour of NAMA MRV (a ton is a ton is a ton vs. flexibility and higher acceptable levels of uncertainty), all discussants agreed that methodologies to support more transport actions as NAMAs are needed. Hugh Sealy supported a Technical Expert Meeting (TEM) on transport and several members of the Meth Panel showed an interest in reviewing MRV blueprints for transport NAMAs. Finally, it was found that the MRV blueprint approach might also be useful for other sectors than transport.

Key findings of the two meetings were:

- MRV blueprints are more than MRV methodologies, they provide an MRV methodology for a certain type of mitigation action and illustrate its application with a specific NAMA case, including lessons learned from this case for further improvement of MRV and NAMA design in the future.
- MRV blueprints provide methodological options and suggestions for good MRV; they are not prescriptive or mandatory.
- MRV blueprints draw lessons learned based on the case analysis regarding data collection and MRV design, may contain implications for national MRV systems and provide support for replication elsewhere; these should be clearly elaborated either in an additional section of

the MRV blueprint or highlighted in each chapter.

- GIZ will propose a definition of MRV blueprints and their relation to the Reference Document on Monitoring Systems in the Transport Sector; GIZ will revise the structure for the MRV blueprint template based on the discussions.
- To facilitate even better exchange on MRV of transport activities, a collaborative effort to build a knowledge repository for MRV of transport NAMAs, including the Reference Document, MRV blueprints, as well as information on local default values and possibly other information was identified as a mid-term goal. However, one that would need additional resources.
- The MRV Expert Group agreed that it would like to continue its work and networking beyond the outputs under the framework of TRANSfer 2.

4 Annexes

Annex 1: List of participants – 3rd MRV Expert Group workshop

No	Name	Organisation
1	Alvin Mejia	Clean Air Asia
2	Charles Kooshian	Center for Clean Air Policy
3	Christian Mettke	GIZ
4	Cornie Huizenga	Partnership on Sustainable Low Carbon Transport
5	Danang Parikesit	University Yogyakarta
6	Daniel Bongardt	GIZ
7	Frank Dünnebeil	IFEU
8	Frank Kraemer	GIZ
9	Georg Schmid	GIZ
10	Hilda Martinez	Embarq Mexico
11	Jane Romero	Consultant to the ADB
12	Jürg Füssler	INFRAS
13	Jürg Grütter	Grütter Consulting
14	Marion Vieweg-Mersmann	Current Future
15	Martin Herren	INFRAS
16	Martin Schmied	INFRAS
17	Michael Replogle	ITDP
18	Stefan Bakker	GIZ
19	Urda Eichhorst	Wuppertal Institute
20	Uwe Tietge	ICCT
22	Victoria Novikova	UNFCCC

Annex 2: Agenda – 3rd International MRV Expert Group workshop

MRV Blueprints for Transport NAMAs

Friday, 20 March 2015
GIZ Office, Bonn

Methodology

The workshop will be organised around the presentation of three draft 'MRV Blueprints' for real (2) or possible (1) transport NAMAs, followed by interactive sessions to discuss in-depth:

- Structure and content of MRV blueprints;
- Replicability of transport NAMAs based on MRV blueprints;
- Required processes and potential governance structures for scaling-up MRV blueprint development and quality assurance.

Agenda

08:30	REGISTRATION
09:00	**Welcome and Introduction** Daniel Bongardt (GIZ)
09:30	**Input presentation of 3 MRV-Blueprints** Jürg Grütter (Grütter Consulting), Frank Dünnebeil (IFEU), Georg Schmid (GIZ)
10:15	COFFEE BREAK
10:45	**Making MRV blueprints work – case discussion and standard elements** *Break-out session: In-depth discussion of draft MRV blueprints and World Café on standard content*
12:45	LUNCH
14:00	**Feedback on MRV-Blueprints** 3 small group moderators, all *Report back and plenary synthesis discussion towards a 'standard' for MRV blueprints*
15:15	COFFEE BREAK
15:30	**Scaling-up MRV blueprint development – what could be the role of the UNFCCC?** Daniel Bongardt and Cornie Huizenga (SloCaT), all *Short input and plenary discussion of future processes*
17:00	**Status of the 'Reference Document on Transport MRV-Systems'** Jürg Füssler (INFRAS)
17:30	**Wrap up session: outcomes and next steps** Daniel Bongardt
19:00	JOINT DINNER

Annex 3: List of participants – CDM Meth Panel exchange

No.	Name	Organisation
1	Ambachew F. Admassie	CDM Meth Panel
2	Amr Osama Abdel-Aziz	CDM Meth Panel
3	Anil Raut	UNFCCC
4	Charles Kooshian	Center for Clean Air Policy
5	Cornie Huizenga	Partnership on Sustainable Low Carbon Transport
6	Danang Parikesit	University Yogyakarta
7	Daniel Bongardt	GIZ
8	Daniel Perczyk	CDM Meth Panel
9	Georg Schmid	GIZ
10	Hilda Martinez	Embarq Mexico
11	Hugh Sealy	CDM Meth Panel
12	Jane Romero	Consultant to the ADB
13	Jessica Wade-Murphy	CDM Meth Panel
14	Jürg Füssler	INFRAS
15	Luis Alberto De La Torre	CDM Meth Panel
16	Martin Herren	INFRAS
17	Michael Replogle	ITDP
18	Stefan Bakker	GIZ
19	Sudhir Sharma	CDM Meth Panel
20	Urda Eichhorst	Wuppertal Institute
21	Victoria Novikova	UNFCCC

Annex 4: MRV Expert Group & CDM Meth Panel members exchange

MRV Blueprints for Transport NAMAs: Chances for authorised MRV methodologies for NAMAs? – Lessons from the CDM Meth Panel.

Saturday, 21 March 2015

Wissenschaftszentrum Bonn, Room S2

Background

The TRANSfer project (www.transport-namas.org) in 2014 established a MRV expert group with the aim to further the understanding of Measuring Reporting and Verification (MRV) of transport NAMAs and to support the development of MRV methodologies and MRV guidance.

The expert group draws together leading institutions in the field of GHG quantification and NAMA development in the transport sector. Expert group meetings provide a platform for exchange on on-going activities in the field and are used to discuss MRV approaches and methodologies. The group would like to exchange with members of the CDM Meth Panel to discuss the prospects and requirements for authorised MRV methodologies for NAMAs.

Draft Agenda

09:00	Arrival and coffee/tea
09:30	**Welcome and Introduction** ***Daniel Bongardt, GIZ and Hugh Sealy, St. George's University***
09:45	**The idea of MRV blueprints: facilitating transport NAMA development** ***Jürg Füssler, INFRAS***
10:15	**Q&A**
10:30	**Moderated discussion: Future for authorised MRV blueprints? – Lessons from the CDM Meth Panel** ***Cornie Huizenga, SloCaT***
12:30	**Wrap-up** ***Daniel Bongardt, GIZ***
13:00	Lunch

Annex 5: List of ideas for MRV blueprints for transport NAMAs

NAMA-type	
Sector strategy / target	
▪ Passenger transport sector strategy (Peru) [*ex-ante*?]	
Policies / Programmes (national level)	
▪ Vehicle performance standards (China, Colombia)	
▪ National Urban Transport Policy (Mexico, Indonesia)	
▪ Truck Scrapping Scheme (Mexico)	Draft
▪ Fiscal instruments, such as fuel price policies, vehicle taxation policies	
▪ National or municipal level emissions trading (10 Model cities in China)	
▪ Labelling of low-rolling resistance tires (EU)	Draft
▪ Low-resistance tires and improved aerodynamics in freight vehicles (Asia)	
▪ Eco-driving (freight, busses)	
▪ Efficient fleet programme (includes trucks, buses, taxis, rickshaws)	
▪ Clean fuel policies (includes biofuels)	
▪ Electric and hybrid vehicles (China, Malaysia?)	
▪ Commuter strategies (India?)	
▪ Urban public transit	
▪ International shipping efficiency improvement	
▪ Shift road (passenger and freight) to rail (India)	Draft
Project-type	
▪ Congestion charging (Beijing, China)	
▪ Transit oriented development (Colombia)	
▪ Short sea shipping (Europe, Indonesia)	