

Draft meeting minutes of SG3's 2nd meeting

On-line only

20th July 2023, 12:00 PM to 13:15 PM cet.

Meeting documents available at:

[https://wiki.unece.org/display/trans/2nd meeting](https://wiki.unece.org/display/trans/2nd+meeting)

Agenda

Meeting Information				
Date	20th July, 2023			
Time	12:00 AM CET			
Venue	On-line			
Link				
Time	No.	Agenda Item	Lead	Purpose or Target
12:00 ~	1	Welcome and introduction	NIER	Information share
~ 12:10	2	Adoption of the agenda	NIER	Agreement
~ 12:20	3	Adoption of the last meeting minutes	NIER	Agreement
~ 13:00	4	Further discussion: - leveling concept, overarching aspects	Participants	Discussion
~ 13:10	5	Any other Business	Participants	-
~ 13:15	6	Closing	NIER	-

Meeting minutes

Agenda Item 1: Welcome and introduction

The leader started the A-LCA IWG SG3 Teams meeting at 12:00 (cet.) and welcomes the participants.

Agenda Item 2: Adoption of the agenda

The meeting agenda was presented and reviewed.

No comments

Agenda Item 3: Adoption of the last meeting minutes

The leader briefly explained the contents of the meeting, explained one by one, and received questions and comments. The contents of the meeting were explained in the order of leveling concept, overarching aspects, and meeting plan.

No comments

Agenda Item 4: Further discussion (leveling concept, overarching aspects)

1. Discussion topic 1: Leveling concept

1.1. Presentation/documentation

○ Leveling concept

SUPPLY CHAIN & PRODUCTION	Possible Comparison ¹⁾	Vehicle modelling	Representativeness ²⁾	Supply chain modelling	OEM manufacturing Processes	Supplier manufacturing process	Individual decarbonisation measures
Level 1	General concept of drivetrains (e.g. BEV vs. ICEV)	Generic material composition & average vehicle curb weight	Global average / regional	generic footprint per kg of vehicle curb weight			none
Level 2	General concept of drivetrains (e.g. BEV vs. ICEV) based on exemplary „real“ car vehicle model	BOM & Material information system (CMDS / IMDS ³⁾)	Global average / regional	global secondary data material footprints (incl. generic information for production processes)			none
Level 3	A representative vehicle of OEM A VS A representative vehicle of OEM B	BOM & Material information system (CMDS / IMDS) & „part-by-part“ for hotspots	Regional & individual SC for hotspots	primary information for the vehicle hotspot parts	Optional: primary data for OEM's inhouse hotspot processes	primary information for or the manufacturing of vehicle hotspot parts	included
				secondary information for the rest	Secondary information for the rest or average values per vehicle from OEM's Scope 1 & 2 emissions	secondary information for the rest	
Level 4	e.g. OEM A's BEV model vs. OEM B's BEV model	BOM („part-by-part“)	individual SC	regional or primary data based part (& material) footprints	included	included	included

- 1) a column describing comparable objects to help you understand the concepts at each level, giving hints about how to access them by level and what data to find
- 2) data information characteristics that can be used for evaluation
- 3) 3) (CDMS) Chinese Material Data System, (IMDS) International Material Data System

○ Discussion points

Discussion points	Details
Possible comparison	<ul style="list-style-type: none"> • Possible comparison is written make it easier to understand the concept of each level through comparison • (Rewrite) In level 3, OEM A's BEV fleet Europe vs OEM B's BEV fleet Europe → A representative vehicle OEM A vs A representative vehicle OEM B • For any rules or criteria to define a representative vehicle, we do not need to define it in detail at this moment
Levels	<ul style="list-style-type: none"> • (Suggestion by OICA) collect example studies for all different levels to make it easier to understand each level

1.1. Questions / Comments:

(Lindner, Kseniia/CLEPA) At the last meeting, we discussed evaluating the life cycle of automobiles, comparing and selecting representative vehicles in various OEMs. I think that it is difficult to find the same vehicle for direct comparison, and that the focus should be on developing methodologies for evaluating carbon footprints rather than focusing on defining accurate representative vehicles. Going forward, our goal should focus on developing a methodology for evaluating carbon footprints. This will likely allow us to effectively compare the environmental impacts of vehicles and make decisions with more information.

(Castagnini, Alberto / NGVA Europe) I would like to suggest discuss level concepts and related comparisons. I don't think I should spend too much time discussing this part when this part is not included in ToR. However, I agree that a methodology for analyzing carbon footprints should be defined. As previously mentioned in the IWG discussion, my proposal is to start the analysis from level 4, which represents the final goal of our evaluation. If possible, we can work backwards to define an analysis for lower levels (level 3, level 2, level 1). Although it includes three lower levels, I don't think it's going to be a big deal for us. This approach is consistent with the ToR requirements and will help us move forward effectively.

(Christ Ansgar/CLEPA) I agree with Alberto, and I would like to talk about Kseniia 's comments. We have had extensive discussions about the need to define 'representation' in more detail. Ultimately, we believe that the concept of representation is associated with the specific purpose of analysis. The elaboration of highly detailed definitions may prevent us from making meaningful comparisons that serve our intended purpose. For example, it may be appropriate to analyze and compare 'worst-case' vehicles in terms of pollutant emissions if they are related to representation issues or specific quality. But this is not common. We are not making a complete analysis at a detailed level, but presenting a

general framework for meaningful comparisons. In this regard, I think 'representation' should be clearly defined and described to anyone who performs comparison.

(Dettmer, Tina/OICA) I think transparency is important when it comes to selecting the majority. In particular, it becomes important to avoid evaluating a large number of representative differences for Level 4 and Level 3 analyses. Therefore, it is necessary to prepare a standardized method for selecting a representative car. I think there is time to solve this part. First of all, the process and criteria for selecting a representative difference should be transparent.

(Christ Ansgar/CLEPA) I totally agree with Alberto that we should not spend too much time on level definition. However, I think Tina's proposal to provide examples of levels as presented in our table is quite valuable. Clarify discussions with other subgroups and better understand the table through further discussions. I think this will help us proceed with our discussion.

(Castagnini, Alberto / NGVA Europe) Although it is not directly related to the specific slides in today's data, I believe that key components and components should be included in various levels of analysis. Level 4 should include components in the entire supply chain. But I'm not sure how to deal with batteries or electric cars at different levels of analysis. It is essential to consistently deal with the inclusion of batteries across all levels, but the difference among level 1, 2, and 3 is not clear to me.

(Dettmer, Tina/OICA) I think batteries should be included in all levels of analysis. For battery electric vehicles, it is necessary to consider including primary data from step 3, in which case it is clear that batteries will be the main hotspot. It is clear that battery inclusion is essential at all levels. The aforementioned 'hotspot' was intended to emphasize that primary data collection was reasonable.

(Castagnini, Alberto / NGVA Europe) What's the difference among level 1, 2, 3 for batteries?

(Dettmer, Tina/OICA) At Level 1, batteries are likely to be considered common components of automobiles and may not be subject to detailed review. However, at level 3 and above, the batteries will be scrutinized and modeled as primary data.

(Christ Ansgar/CLEPA) Level 1 assumes that there is no detailed information on the type of battery and that the vehicle is not further subdivided and that it is an average battery configuration. Level 2 considers the vehicle-specific amount of material, including batteries, while still relying on general data. Level 3 and 4 analyze detailed information about the battery itself, including material content, production, and sub-components. To analyze at this level, the battery's environmental footprint must be accurately evaluated using primary data. Considering batteries as hotspot components of environmental impact, there may not be much difference between level 3 and 4 in how they are approached. In both cases, primary data are likely to be used to thoroughly analyze and model the

impact of the battery.

However, what we discussed may make sense for OICA to conduct a survey with OICA members to see which parts are considered hotspot parts for vehicles within other companies. In this way, we can make a list of the hotspot parts of the vehicle.

(Bedenian, George/OICA) I think it is important to consider efficiency in addition to the discussion. It would be beneficial to be able to assign specific tasks to solve hotspot issues efficiently. For example, OICA can conduct a survey to discuss the hotspot part with members. For a productive discussion, all members may share some tasks. I think we can start discussions with the members at the September meeting after the summer vacation and proceed with the next step together.

(Dettmer, Tina/OICA) OICA can take the initiative to prepare various hotspot analysis data for different types of vehicles and discuss what it considers to be hotspots. If you have specific data, you can have productive discussions. This is just a suggestion, and I think we can move the discussion forward quickly.

(Christ Ansgar/CLEPA) I believe hotspots should be defined from the end of the supply chain.

(Bedenian, George/OICA) I would like to add one more comment, and I would also like to know if other members are willing to participate in this discussion. Although it is not necessary to discuss the hotspot topic directly, as we can address in OICA, for example, if we define a methodology, we can discuss what is necessary to advance the discussion.

(Chong, Hwansoo/NIER) It would be nice to have further discussions as Tina's suggestion is a good one for clarifying the leveling concept. Why don't we collect all levels of case studies at the next meeting, including hotspot concepts? I'd like to hear your opinions on this proposal.

(Dettmer, Tina/OICA) I would like to suggest that people share the exemplary studies they have. It would be beneficial to create a comprehensive collection of cases for different levels and conduct various studies. One may be to make a table with different studies of the four levels, starting with a few examples first, or vice versa. Then further discussion can be made to make everyone understand the concept better. If there is an early case, further research may be easier. If possible, I think Ansgar can provide support in this process. We can start by bringing some information to the next meeting, and we can have a discussion based on that. If you are thinking of a specific LCA study comparing vehicle or general vehicle concepts, everyone is free to contribute. They can be shared by everyone, and I think they will help us get started. It doesn't seem to matter where we start. The important thing is to start and refine the method as we go along. Everyone should be able to contribute and participate in the debate.

2. Discussion topic 2: Overarching aspects

2.1. Presentation/documentation

Slide illustrates the overarching aspects that should be considered in SG3.

Overarching aspects	Further action
System boundary	
Boundary of supply chain	discuss with SG2, 4
Vehicle production	
Vehicle / parts production categories	
Logistics and distribution	discuss with SG2
Maintenance part	discuss with SG4
End of life (waste treatment)	post consumer recycle
	post industry recycle
Data quality and validity, format	
Secondary data source	
Punitive of secondary data utilization	

- (System boundary) how do we define system boundaries for each part and vehicle production
- (Logistics and distribution) how do we set to system boundaries for transportation and distribution of materials, parts, etc. in SG2
- (Maintenance part) Carbon emissions related to maintenance part production can be included in SG4 or not.
- (End of life, waste treatment) How do we define and calculate CO2 footprint for waste treatment in the supply chain and other processes. For instance, some scrap from the part production processes can be used to make some parts.
- (Secondary data source) where should we can get the secondary data? Scholar paper or some kind of association reports. Basically, look for the best possible secondary data that we can find.
- (Punitive of secondary data utilization) most of the secondary data are more optimistic than the primary data utilization.

2.2. Questions / Comments:

(Bedenian, George/OICA) I have one question about this table. I should discuss it with another subgroup and I think this is a good idea. I wonder if other subgroups have been contacted. There seems to be a willingness to discuss in other subgroups as well, and I feel that all subgroups need to discuss in the last IWG. So, I think it would be good if the person in charge of the leading team tried to connect with another subgroup.

(Christ Ansgar/CLEPA) I contacted SG2 to the question regarding the boundaries of the supply chain. But I haven't received any answer yet. We tried to contact but so far there has been no answer from anyone. If we do not succeed in proceeding with this discussion, perhaps Hans could help with the situation.

(Bedenian, George/OICA) We will be able to bring this up to the leadership team at the next IWG meeting. It is important to establish connections between different subgroups. This is just my opinion, but I think we need to take a step back and rethink how we define LCA for complete vehicles. There are conceptual stages that start with the use stage and end of life. We also need to consider discussions about cut-offs or other aspects, and we need to address how to integrate and loop back steps from disposal to production. These discussions should take place between subgroups. The correct level may vary depending on the purpose of the study. For example, other assumptions about the future are used if we want to adopt a lower-level general approach to technology selection. In contrast, distinguishing greenhouse gas emissions between different producers of essentially the same car model requires a four-step approach, including a detailed analysis. However, it is difficult to gather key data about what happens in the future, and it can only be based on what is currently known. I wonder if we need to take a step back and decide on how to integrate all of this.

(Christ Ansgar/CLEPA) I agree with your point. The flexibility of the level concept allows us to adjust the details of the analysis according to our goals. The low levels such as level 1 and level 2 may be more appropriate if we are considering future developments. It allows us to identify broader trends and changes without getting lost in detail. However, detailed analyses such as level 4 are also important to understand our current situation. It can help us know where we're starting and provide a benchmark for predicting future changes. In other words, different levels of analysis serve different purposes, and they can be complemented by each other. I think it is important to keep this flexibility in mind when we continue our discussions.

(Bedenian, George/OICA) I completely agree with you. I agree. It may vary in the purpose and scope of the study. We must be able to define the current situation accurately, because it forms the basis for improvement and change. At the same time, we must consider future improvements and changes, which may require a different level of analysis. Therefore, our approach must be flexible enough to accommodate other scenarios and objectives. I think this is why we have different levels in our methodology. Each level serves a different purpose, and in a way with different requirements and details, can effectively address both current and future scenarios.

(Christ Ansgar/CLEPA) I agree that not all discussions need to be overly complex, and that some aspects, such as defining the boundaries of the supply chain, can be quickly resolved through bilateral discussions between SG2 and SG4. It is important to accurately define the point of responsibility for each subgroup so that there are no gaps in the different stages. It should also be clarified whether the vehicle is a fully assembled vehicle at the outbound gate at the assembly site, and whether it is in the showroom when the customer takes over the vehicle. By clearly specifying these aspects, we can establish an accurate range for our analysis. However, some extremely important issues, such as the cut-off issue, need to be discussed with all groups. In particular, it is essential to have a common understanding and methodology of analysis over the life cycle stage.

(Bedenian, George/OICA) I think it should be noted how to raise interactions between groups and interact effectively with other groups. It is essential to prioritize this discussion and ensure access between all groups. Furthermore, I need to look into my schedule and see if I have time to internally coordinate or prepare for the presentation or proposal for the next IWG meeting.

(Dettmer, Tina/OICA) When defining an overall structure or leveling concept, I think we should determine the perfect concept for a particular region or purpose. When we perform LCA to compare vehicles in the same way, it is necessary to consider the necessary standardization factors. I also think that to avoid confusion and unnecessary complexity, all aspects should be integrated. In order to consider various perspectives such as prediction, it is necessary to structure in time, region, and application. As Ansgar mentioned, what we are doing here is not rocket science, but calling for information to be organized and structured effectively. I think the example of comparisons to different levels that we discussed earlier is the right direction. With a clear approach, it will be much clearer.

(Christ Ansgar/CLEPA) I would like to add to what Tina said that there is one more task that we need to consider. In addition to occasionally analyzing or performing analyses regularly, we will also have the task of providing very regular reporting in the future. As everyone knows, there are battery regulations in Europe, which are not intended to conduct in-house comparisons, but to provide data on battery usage on the market. These regular reports should be well defined. As this reporting point is fast approaching, I think we should also give priority to our discussions. In particular, the question of whether to use cut-offs or other allocation methods for end-of-life considerations when evaluating the production and usage of automobiles needs to be urgently clarified. I think this should be considered one of the top priorities of discussion across the Working Group.

(Dettmer, Tina/OICA) I have a question for Ansgar, and I'm wondering if the IWG sg leader also needs a role in controlling or facilitating exchanges between different subgroups, or do you think it's important for subgroups to communicate directly between the two. If you're not expecting a subgroup to communicate between the two, I'm wondering if you're planning on inviting everyone to have a very important harmonious meeting.

(Christ Ansgar/CLEPA) I don't think we've discussed this with other teams yet. I would like to include

it on the agenda for the next informal working group meeting in early September. If more specific discussions are needed, it would be a good idea to hold separate bilateral consultations between the two subgroups and present the results to the entire informal working group. However, I think it is essential to have a discussion in which all subgroups participate together. I also see the need for consultation with the leadership team to decide whether to hold a dedicated meeting alone with the sub-group leaders at informal working group meetings or to cover a broader topic. What do other people think about this?

(Dettmer, Tina/OICA) I agree. It can be beneficial for both sides to have smaller, focused discussions to deal with specific details, and to bring everything together in one place and connect with each other. Smaller rounds are more manageable, but it is essential to provide everyone with the opportunity to challenge and comment on this issue.

(Christ Ansgar/CLEPA) I think we should raise this topic at this informal working group meeting and take it from there. Once the agenda is reached, I think we can discuss it further and decide the best direction.

(Bedenian, George/OICA) Since we meet in early September, we now have a month-long break due to the summer season. I would like to ask if there are any assignments or homework assigned to the members during this break so that we can prepare and discuss efficiently when we convene again in September. It seems to me that there are only two meetings left until the next IWG meeting in Brussels. So, I would appreciate it if you could clarify if there are any specific tasks to be completed before the next meeting.

(Christ Ansgar/CLEPA) Sure, previous discussions have shown that two key points need to be considered. First, we asked members to provide a Life Cycle Assessment (LCA) analysis that we believe is a good example of the different levels we are discussing. This will be of great help to our discussion. As CLEPA, we tend to focus on Europe, so it is essential to share their insights in all other regions. We do not want to confine the discussion to the case of Europe. The second is related to verifying the interconnection between different workgroups. It is important to include these interconnections in the discussion. Each individual should take the time to email the leading team to highlight the associated interconnections.

(Castagnini, Alberto / NGVA Europe) Are hotspot components also defined for each type of vehicle?

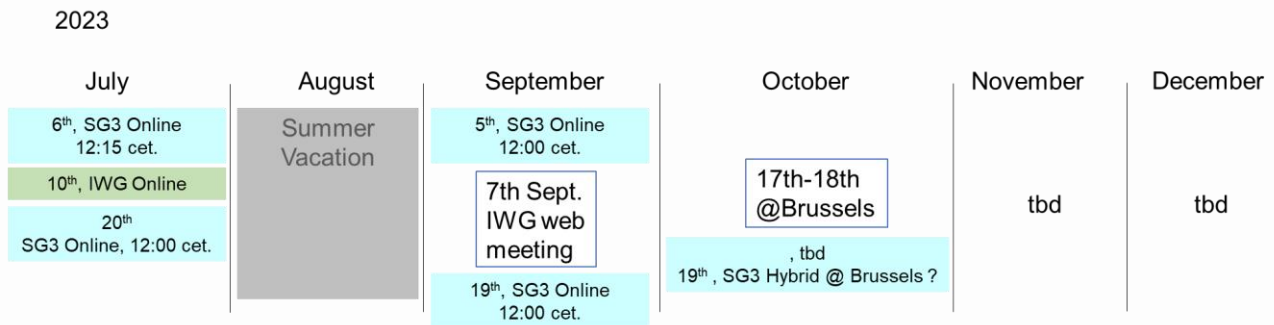
(Dettmer, Tina/OICA) Yes, at least we can provide that basis. Our plan will provide a collection of various hotspot analysis data from other OEMs and use it as a basis for future discussions. I have already mentioned this as a task that OICA should do.

3. Discussion topic 3: Meeting schedule

3.1. Presentation/documentation

Slide illustrates the meeting schedule of SG3.

Meeting schedule:



Biweekly meeting (Tuesday) from July 5th

The 2nd meeting: 18th July (Tuesday) or 20 July (Thursday), 12:15 pm ~ 14:15 pm(cet.)

August is the summer vacation period, so we will not have a meeting and start in September.

After August, the meeting will start again in September, and the first meeting in September will be 5th September. Meetings will be held every two weeks (Tuesday), and specific hours will be determined at the group meeting.

The October meeting is a hybrid meeting in Brussels on 19 October, meeting place will be shared by CLEPA or OICA to participants before October after deciding on a location that can accommodate 25 people.

After the meeting, the meeting data and results are uploaded to SG3 folder on wiki.unece.org.

3.2. Questions / Comments:

(Chong, Hwansoo/NIER) I would like to move on to the next slide. The meeting frequency should be determined because the discussion on the meeting schedule was not finalized in the last meeting. We have two options: bi-weekly meetings starting in September or October, monthly meetings, or other proposals. I want to hear everyone's opinion on this matter.

(Castagnini, Alberto / NGVA Europe) I think having a monthly meeting will be beneficial because it gives you the right time to prepare materials, collect homework, and handle the necessary tasks. If it is necessary to discuss more often, we can have bi-weekly meetings as needed. That's my suggestion.

(Dettmer, Tina/OICA) I understand and sympathize with the proposal to have a monthly meeting to avoid the overload of frequent meetings. Having less frequent meetings can give us more time to

prepare and make progress. However, it is important to actively use or make meetings more efficient so that the workload is affordable to everyone.

(Christ Ansgar/CLEPA) This could be a potential compromise. We can have bi-weekly meetings, but we can limit the discussion time to one hour, or set a specific agenda so that the discussion is focused and discussed productively in time.

(Chong, Hwansoo/NIER) So, we seem to agree to set a meeting time of an hour or an hour and a half and have a biweekly meeting. I think that we can avoid meetings for too long and have the necessary discussions effectively within a set time.

(Christ Ansgar/CLEPA) I agree with your point. Limiting bi-weekly meetings to one hour will give us a higher frequency and more opportunities to move things forward. If we can't deal with everything in one meeting, it doesn't matter because we will soon have another meeting to continue the discussion. We can always adjust the frequency if necessary, and cancel some meetings if progress is well being made. I think it would be a wise decision to start a bi-weekly meeting after the IWG meeting in September.

(Chong, Hwansoo/NIER) I think we should hear if there are any other opinions about the meeting schedule. Is everyone okay with the biweekly hour-long meeting schedule? If anyone has any other ideas or suggestions, feel free to make suggestions. If there is no objection, we would like to decide to hold a biweekly one-hour meeting from October.

(Bedenian, George/OICA) Will we meet on September 5th and 19th?

(Chong, Hwansoo/NIER) We have to decide on these. So, I wonder if it's okay for you to have a meeting on September 5th and 19th.

(Christ Ansgar/CLEPA) Well, I think it would be okay to have a meeting on the 5th and a meeting on the 19th to prepare for the IWG meeting.

(Bedenian, George/OICA) Okay. I think it would be better to specify the meeting on the calendar so that everyone knows for sure that this meeting will go ahead.

(Christ Ansgar/CLEPA) Yes, I think it would be reasonable to send an Outlook invitation so that everyone knows when.

(Chong, Hwansoo/NIER) I would like to make sure that the September 19 meeting will be held at 12:00 Central European time. Everyone, are you okay? Do you have any objections?

(Christ Ansgar/CLEPA) I'd like to give you my opinion on the last slide. The October meeting seems to have been mentioned, and as far as I know, we will have a meeting at ACEA. Basically, the location is fixed.

(Dettmer, Tina/OICA) There is no exact address, but there is an office in ACEA for the meeting.

(Bedenian, George/OICA) We can share it later.

(Dettmer, Tina/OICA) The ACEA is the European Union, a member of the OICA, and they have an office in Brussels, so we can meet there.

(Chong, Hwansoo/NIER) I'd like to put ACEA in the meeting place on October 19th, do you have any other opinions on the meeting schedule?

(Bedenian, George/OICA) That's right. There may be a limit to the room capacity in ACEA. We need to check the maximum number of participants they can accommodate.

(Dettmer, Tina/OICA) We have 29 and we are not sure if everyone can come to Brussels. So, I think it's a smaller number when we plan. So, I think the size of the room is appropriate. But George, I'll double-check and send you the exact address.

(Chong, Hwansoo/NIER) In Brussels we will have a hybrid meeting. Some people can come online and some people can meet in person during meetings. So, I think 25 people can be fine.

Thank you for your active participation and contribution to today's meeting. There are two challenges, and I hope everyone can share their progress at the next meeting.

Thank you. Have a nice summer vacation.

Agenda Item 4: Any other business

There was no any other business.

The meeting was closed at 13:15 PM.