

Sixteenth Plenary meeting of the Working Group On Off-Cycle Emissions

10 May 2007, Tokyo, Japan

The Chairperson welcomed all of the attendees to the meeting and expressed his thanks to JASIC for hosting both the Plenary and Editorial meetings of the OCE working group.

Mr. Narasawa expressed his thanks to all of the attendees. He indicated that it was JASIC's pleasure to host the meetings and expressed his hope that the meetings will yield good results.

The Chairperson announced to the Group that this would be his last meeting as Chair of the working group and as the US representative to GRPE. The new Chairperson of this working group and US representative to GRPE will be Mr. Todd Sherwood of the US EPA.

Agenda Item 1

- A. The draft agenda was reviewed and approved by the group.

Agenda Items 2 and 3

Presentations from three organizations were made to the Plenary group.

- A. **OICA Presentation.** OICA updated the presentation they had made at the 15th Plenary meeting on the correction factors to be used in the GTR. At the last meeting OICA was asked to develop a modified function for NO_x which is modeled more closely to the US NTE. OICA has developed an additive factor for inclusion in the GTR rather than a multiplicative factor as is used in the US NTE. The proposed NO_x correction factor is more stringent than the current US NTE factor. The modified NO_x function has a fixed value at 0 (.963) which brings the NTE factor closer to the US factor. The proposed factor is slightly higher than the current US factor, but this can perhaps be justified because the WNTE zone is larger than the US NTE zone. OICA is not recommending a change to the PM function at this time. The WNTE limits are a function of the existing emission standards.

The EC asked if the "y" axis can start at "0" because it will be more clearly visible if the axis starts at "0". OICA stated that the "y" axis not start at "0" intentionally, because they wanted to start at the current emission limits. The y-axis is not a "0" because the "x" axis ends at the current limit values.

The Chair asked if this proposed concept breaks down as the limit values get lower and if it is wise to show both the equations and the tables with values in the GTR. OICA stated that when these correction factors were first proposed OICA just showed the function and it was not well received by the group. Therefore it would be wise to have a table with the values and a place where one can refer to the function perhaps as a footnote or in an annex; therefore as the emission limits become lower, one will know what the function is. US EPA stated that it makes sense to put both the table and the function in the GTR, but not to include the graphs in the GTR. EMA suggested that the group make it clear in the GTR that the equation is the underlying limit. EMA also suggested that group has to take rounding conventions into consideration. OICA agreed with the suggestions. The Chair said that US EPA will look closely at the values in the post 2010 time frame especially NO_x and will also take the US concept of Family Emission Limits ("FEL") into consideration when looking at this and will also look closely at applying the US EPA rounding conventions.

The EC asked how the basis for the standard factors was derived. OICA stated that it took what it thought was necessary to comply with measurement accuracy. Due to the issues surrounding measurement accuracy we cannot go down to "0" and this is as low as we go based on current measurement accuracy. This also fits in with the WHDC requirements for mass based PM. EMA stated that this is not solely a measurement issue, because calibration maps are not necessarily flat through the NTE zone.

The Chair stated that the new equations will be inserted in the draft GTR at section 5.2 for NO_x, HC, CO and PM and the group will include one example in the GTR of how the calculations are done. The tables may be added in an annex to the GTR for illustration purposes. OICA committed to making the modifications to the remaining functions before the next Plenary meeting.

B. **JARI Presentation**. JARI made a presentation on PEMS testing in Japan.

EMA stated that the data presented indicated that a drop from 30 seconds to 10 seconds resulted in more NTE events, but it does not look like it exercises the engine at a wider range of its performance map, so what is the advantage of reducing the event from 30 seconds to 10 seconds. JARI indicated that shortening the time period helps to increase the NTE events based on Japanese driving conditions.

JARI indicated that the two vehicles tested were a naturally aspirated 2004 vehicle which meets the new short term Japanese standards and a 2005 standard vehicle which meets the new long term standards. Both engines had EGR but no aftertreatment. The analyzer used was a Horiba OBS 2200, which is commercially available today.

The Chair asked for clarification on Slide 10 of the presentation and the table which shows the number of 10 second events for urban driving as 1.77 times per hour, as to what this meant. JARI indicated it was the number of WNTe events.

The Chair also wanted clarification on the Slide 10 as to what "measurements of exhaust gas density" means and why is the temperature of the catalyst causing problems. The Chair stated that if the duration is reduced from 30 seconds to 10 seconds, he has some anxiety that catalyst temperature will not increase to the right temperature for steady-state operation. If engines have a catalyst, then the catalyst may not function as it should due to the short time duration.

The Chair asked if the data on Slide 13 is from both vehicles or one of the vehicles. JARI stated it is from the 5.2L vehicle. All of the data is on highway data at 50% load and the results are a summary of the WNTe events.

C. **EC Presentation**. The EC's contractor TNO had made a presentation at the last Plenary meeting based on the interim Executive Summary ("ES"). This time the EC has a revised and final version of the ES which was shared with working group member prior to the meeting. In addition, the EC has been thinking how the GTR will move forward and the outcome of this is summarized in the EC informal document which was also circulated prior to the meeting.

The Chair asked if the ES final and what the status of the full report is. EC stated that they do not have final version of the main report and that the ES was finalized first. The full report is pending and expected in the next few weeks. The EC does not know if the full report will be available for the next GRPE meeting. As well, the EC does not know if the full report will be shared with all participants because it is an internal EC document, though a final decision is pending on this issue.

The Chair asked if the EC will have TNO do another presentation on the final report. EC stated this was not within the scope of the original contract with TNO. It is still possible to request this, but there will not be enough time between now and the next Plenary meeting.

The Chair stated when he read the ES, at the bottom of Page 2 there is a quote from the current draft GTR:

"One of the key issues discussed during the development of the OCE GTR was the scope of the GTR with respect to in-use, on-vehicle emissions testing. After considerable debate by the OCE working group, it was decided the OCE GTR would not include specifications for in-use, on-vehicle emission measurement equipment. However, it was also decided that the OCE GTR was developed with the specific intent to enable the testing of compliance with the WNTe during in-use, on the road operation of the engine. It may be appropriate in the future to consider the

development of a GTR which would include harmonized test procedures for in-use on vehicle emission measurement."

This is of concern because it may be read broadly to mean that the working group does not have consensus on this point. What the group does not have consensus on is that there would be no in-use test procedure in the GTR, regarding the remainder of the quote there was consensus in the group. Also when the group drafted the GTR, it agreed that some countries may want to impose in-use requirements, but this would be up to the individual country. Therefore want to ensure that the ES is correctly characterizing this. The Chair said he will leave it up to the EC to decide what to do about this quote. At the time comment was put in the draft GTR it was a comment from EMA, but applying it to this paragraph may not be truly reflective of the intention of the comment. EMA agrees with the Chair's concerns in that there may be some confusion when reading this part of the ES.

The EC went through the summary document it prepared to share with the group. The key elements are contained in the bullet points of the document circulated:

- (1) *The OCE GTR should clearly enable the use of the WNTE as a laboratory based type-approval/certification procedure. The structure and the wording of the GTR needs to be reviewed to ensure that there is no remaining uncertainty about this.*

The EC is not convinced that it wants to use the NTE for on-vehicle in-service testing and wants to examine other approaches. WNTE can provide the basis for laboratory based compliance testing using the structure and the wording of the current GTR. It has been noted that individuals who are reviewing the draft GTR and are looking at it for the first time, are often confused by the GTR and how to use it. The EC feels that the GTR can be improved to ensure that it is properly applied by the Contracting parties.

- (2) *When using the WNTE as a laboratory based procedure, there is no need for the 30 second rule. This should be removed from the GTR.*

The EC does not want to use the 30 second rule because it adds no value if the GTR is going to be a laboratory based procedure. Some Contracting parties may choose to allow it as a regional option.

- (3) *Europe will need to develop alternative or additional procedures to test 'off-cycle' emissions during on-vehicle, in-service testing using PEMS. Therefore, another issue is whether these further procedures should be defined at a global level through a GTR.*

Given that the EC wants to explore other options for the EU, do the procedures get developed regionally or do we want to look globally and extend the GTR or have a new GTR. May want to consider at a future stage having an in-service GTR.

These are the key points. It may be useful to spend some time to get a reaction from the group. To see if there are any options for going forward.

The Chair asked what kind of options does this mean for moving forward. The Chair stated that he personally can think of some potential options but does not want it to be a specific US EPA position because do not know what the full report says and have not had time to fully develop a position.

EMA wanted to better understand what is meant by the "language changes" and the need to clarify the scope of the GTR. The EC stated that there are no specific examples in the text, but based on feedback from a number of individuals at the Commission who have looked at the GTR, have interpreted it in different ways. Questions have been asked if the GTR is setting a framework for in-use testing or shutting off methodology or other possible procedures. Therefore, the GTR needs to be clear to avoid misunderstandings and uncertainties by different individuals who are reading it. EMA stated there should be no confusion in the GTR as to how in-use testing is to be done. This is still an NTE

concept and cannot see where the GTR lacks clarity. Furthermore, the footnote on page 4 of the GTR is clear on this:

"⁴¹ While the Application section of this GTR (Section B.2.) refers specifically to engines, the GTR also often discusses vehicles. The reason for including vehicles in the GTR is that many Contracting Parties allow the certification or type-approval of a heavy-duty vehicle, not just an engine. This GTR at a minimum applies to engines, but at the discretion of the Contracting Party it could apply to vehicles as well, when adopted into their country or regional regulations."

The Chair wanted to know if when the EC talks about "in-service requirements" if it implies mandatory in-use requirements. The EC stated that some sort of compliance testing in-use, not necessarily just emission testing, is implied.

Japan asked by is meant by the following in the ES located on page 3 at line 10:

"At the moment there is no legal requirement in Europe with respect to in-use, on vehicle emissions testing for type approval." The EC stated that at this point in time, there is no formal requirement in an EU Directive dealing with in-use testing, but the EC is looking to develop it in the future. There is no legislation procedure currently initiated but the EC is actively working on it.

OICA added that there are legal requirements in EURO 4 & 5 Directives outlining how Auxiliary Emission Control Strategies are to be used and a prohibition against Defeat Strategies, but there is not way to test it/implement it in-use. The Chair asked if the current Directives have emission limits associated with this or is it just a requirement to meet. OICA stated that this is just a requirement to meet. A manufacturer tests the engine on the dynamometer, shows that the emission limits are met, but it is not enforced in-use.

The Chair asked the EC if there has been any dialogue on the appropriate mechanism and need for in-service requirements and should the group interpret the EC's intent that this will be on-vehicle testing? The EC has a preference for on-vehicle testing and wants to avoid removing engines and taking them to a laboratory to test compliance.

The Chair asked if discussions have taken place between the Commission and European based engine manufacturers on this subject and what the potential time frame is for establishing this in the EU. The EC stated that discussions have taken place and the Commission would like to do something soon to address this issue. There is an upcoming opportunity to implement something in the EURO 6 proposal, but there is not defined time frame. The EC also stated that based on the current scope, care will have to be taken to ensure that a proposal will not impose a retroactive requirement on older engines.

The Chair stated that the way the GTR is currently drafted, a contracting party can develop its own in-use test procedures. Is the intention that all references to in-use compliance testing be removed from the GTR? The EC stated no. The GTR will be primarily used as a lab-based system, but if other contracting parties want to use it for in-use, there is no need to limit the GTR in this way. The Commission wants the option to use other procedures for in-use compliance.

Regarding the 3rd point above, the Chair asked what the range of processes is by which this can happen? The EC can either develop a regulation through its own process outside the GRPE or can go to GRPE and use that process. Are these the only two options for a process by which a regulation can be developed as an EU requirement. In the absence of an EU requirement, or a GTR, individual states can develop their own process.

OICA stated that this GTR can be developed to be the principle methodology for in-use testing. Need assurance for manufacturers that if comply in the laboratory you have assurance that will comply in-use. OICA shares the position of the EC in that the GTR needs to include clarity regarding in-use testing. There is a need to clarify the full intention of the GTR. OICA feels that the GTR should be restricted to type approval only and wants to examine how we can restructure the GTR to make it used for type approval.

The Chair stated hypothetically, that the group finishes the GTR type approval only and the Contracting parties adopt it. A manufacturer comes in for type approval and says it meets all of the requirements in

the lab and in-use and makes a certification statement to that effect. Now the EC is saying it is going to spend some additional time in the context of GRPE or as an EU Directive and it will come up with a new in-service requirement which will have a limit value associated with it. The question to manufacturers is how important is it for manufactures to have a global in-use test procedure?

OICA stated it would prefer a global in-use test procedure, but it is clear from the Japanese presentation and the EC report that they are not completely satisfied with the US based approach. Therefore significant movement will have to come from the US if the goal is to achieve global harmonization. OICA would be satisfied to have a GTR that gives manufacturers a degree of confidence that when the engine is designed to comply with the GTR in the lab, it will also comply in-use, but this will require a lot of time and work between manufacturers and type approval authorities. Therefore the group needed to finalize the GTR as it is but then have a different in-use process.

The Chair stated that if in the future there is a new in-use process and a decision is made that global harmonization is important to the US manufacturers, the US EPA will evaluate it, and if it is not less stringent than current EPA requirements, the Agency will consider it, taking into consideration the US requirements for lead time and how new regulations are implemented.

EMA stated it is still struggling with the concept of having a WNTE procedure that applies at certification, and then having another procedure that meets in-use. Engines will need to be designed to meet both requirements, though those requirements may overlap or be redundant. EMA is not certain how a manufacturer can be assured that an engine which meets type approval in a lab would meet a work-based window or CO2 approach or some other approach in-use. On this point, OICA feels confident that any in-use requirement in EU will be in-line with the GTR, though this requires further discussion. There is a need to do some more extensive testing and discuss what this approach will look like. Furthermore, this is mainly a function of the compliance factors: if they are large enough, then it should not be an issue, but if they are tight, then there may be a problem, when the type approval process differs from the in-use process. EMA stated that unfortunately, it does not have an official voice within the EU and therefore there is real concern that things may not evolve as OICA anticipates.

The EC stated it wants to keep open the potential for equivalence between the WNTE and the new procedure. There is a need to understand what having different approaches will mean. The EC does not want the GTR to limit the exploration of other in-use procedures. EMA asked if perhaps we need to consider slowing down the work on this GTR until we see how an in-use test procedure develops. The EC stated that short of stopping the work, perhaps we can do something modular and when the in-use review is done, then we can go back and adjust the WNTE GTR. EMA stated that at the end of the day, the adjustments to the GTR may not be minor if going from an NTE approach to a work-based window or CO2 approach.

The Chair asked if the group decides to finish the GTR now as it is, and there is an option to go back and make adjustments, can the EC adopt this document as it is now. The EC stated that in the first page of the ES, it states that the WNTE GTR can incorporate some points into a Directive, so it is possible.

The Chair asked if know now that the WNTE will not be used for in-use but for something else why do we need two GTRs or two processes, if one is ultimately better. The EC stated it may be a question of being able to phase one in sooner than the other. We can implement the WNTE earlier than the in-use requirement, which can be implemented later. They can be viewed as two separate procedures.

OICA stated that if can agree that there is no need to have a type approval procedure for engines and just have in-use requirements, that would be acceptable to them, but the reality is that it is not an option. In the EURO 6 timeframe, the EC needs to have something in the type approval process that relates back to WHDC, therefore this OCE GTR needs to be completed.

The Chair asked if for the EC a long term goal is to have a harmonized in-use procedure. Is it possible to implement this GTR in the EU and then come back and see if there is a need for a new GTR in the future or do we need to deal with this now? The EC stated it does not matter for the EU because the

end result is the same. The EC wants to hear the views of the stakeholders and contracting parties to see if there is a different, perhaps better option.

The Chair had a comment on Issue 2, about the 30 second period and what does the EC mean that it is not necessary, whether there is no time limit or some other time limit? The EC stated that this is primarily because the NTE is a data reduction rule and within the EU it cuts out a huge amount of vehicle data.

The Chair then asked, what would replace the 30 second period. The EC stated that a measurement from a laboratory could replace it. OICA stated that the 30 second rule applies as long as the engine operates in the NTE zone, whereas in a laboratory you are in the NTE zone all of the time. EMA asked if the EC is envisioning a WNTE test in a laboratory that mimics in-use and some transient mode be defined.

The Chair stated that there needs to be a number, keeping in mind the limitations, some type of test to be developed based on the cycle around the zone. To the extent where this has been said already, to limit contracting parties to only do all testing in a laboratory, some value needs to be associated for in-use, does the EC visualize 2 values, one for the lab and another for in-use. OICA stated that the group can try to find a solution here. There is no problem to leave the 30 second as a minimum requirement, but need to decide how to formulate it, to work both in the US and the EU.

The Chair stated that he still does not understand how 30 seconds are a limiting factor in the cell. If 30 seconds is not necessary, what will be there instead? OICA stated it depends on how group designs the test. The 30 seconds could work, depending on how it is formulated and make it clear for Contracting parties that apply the WNTE to in-use. The Netherlands suggested in lieu of the 30 seconds, it can be something else in-use, but does not know what this is. There is a firm stake in the ground with the work done on this GTR, but nothing is limiting us from using this GTR in type-approval because we can design procedures that work.

The Chair stated that from a US perspective, the US would like this to be less than 30 seconds as well. But trying to determine how accurate we can be under lower/shorter periods of time and how accurate we can measure 10 seconds when the measurement technology may not be good enough. EMA stated that if we go to a shorter time interval, then the emission factors will have to be increased.

The Chair stated that the group needs to discuss some potential options to determine what the future path of this GTR will be.

Option 1:

Finish development of the OCE GTR using the existing framework. This would include the application of the WNTE for in-use on-vehicle testing and/or laboratory testing. The GTR would be edited to increase clarity regarding the application of the WNTE for laboratory type-approval testing.

Through a future GTR process (either a new GTR or an amendment to the OCE GTR, which could be done using a modular approach) develop alternative test procedures and associated emission limits covering a wider scope of in-use operation than covered by the current draft WNTE.

Option 2:

Finish development of the OCE GTR using the existing framework. This would include the application of the WNTE for in-use on-vehicle testing and/or laboratory testing. The GTR would be edited to increase clarity regarding the application of the WNTE for laboratory type-approval testing.

Individual countries/regions could develop in-use on vehicle test procedures and associated emission limits independent from the GTR process.

Option 3:

Develop a revised GTR framework that address both type approval and in-use testing covering a wider scope of in-use operation than covered by the current draft WNTE.

Option 4:

Have a GTR which only establishes a prohibition against defeat strategies and associated definitions.

Individual countries/regions could develop on their own (independent from the GTR process) off-cycle requirements, including in-use on vehicle test procedures and/or laboratory type approval procedures and associated emission limits.

Option 5:

At this time finalize a GTR which only establishes a prohibition against defeat strategies and associated definitions.

Through a future GTR process develop a GTR that addresses both type approval and in-use testing covering a wider scope of in-use operation than covered by the current draft WNTE.

16th Plenary Meeting Discussion

The Chair stated that Option 1 suggests the group completed the GTR with the concept of making it clear for the type approval process and with some options to revisit it at a later date.

EMA stated that there are a variety of options on what the in-use procedures would/could be.

OICA stated that Option 5 would not be desirable. The local initiatives would diverge and there are too many variables. Furthermore, this would be impossible to propose to GRPE for consideration.

EMA stated that at a minimum we would achieve Option 4, and then just eliminate the others.

OICA stated that without having had detailed discussions within OICA, there is a preference for Option 1.

The Chair stated if the group decides to keep Option 1 moving forward, maybe it will help to understand what the timing of Option 1 will be. What will the timing of a new GTR or the amendment of this GTR be since additional data will be available in 2 to 3 years. OICA stated that this also depends on the timing of the completion of the Japanese in-use testing program.

EMA stated that if the goal is to go with Option 1, Option 3 should also be considered because it gets us to the same place. Option 1 is a two step process with the potential for more work for the group, whereas Option 3 is a one step process, though it too will result in more work for this group. OICA stated it will be hard to defend this to GRPE because this GTR has been pending for four years and the GTR must be completed for EURO 6. Furthermore, the work on the GTR for type approval is almost complete. There are administrative difficulties with Option 3 and Option 4. GRPE has established strict drafting guidelines for GTRs. A GTR must include test procedures and thus cannot have a GTR without them, because then it becomes something other than a GTR.

EMA asked if the second part of Option 1 is needed for EURO 6 as well. OICA stated that EURO 6 will include some type of off-cycle control, since it will be based on WHDC, and this GTR is a logical option. The EC added that it is a two stage process for EURO 6: first the proposal stage and second implementing the legislation.

The Chair asked if EURO 6 will be completed before PEMS process is completed? The EC stated this could be in parallel, but if PEMS is close to being complete, it may delay EURO 6.

OICA opined that it maybe it is wise to finish the GTR, as this first stage, which is nearly finished and which can be used by the Contracting parties when they are ready to use it. The Chair stated that this

is what is being done today in the US. It is a known process even though there may be a new process that is different or complimentary.

The EC stated that from its perspective, options 1/2/3 are the same. There is no great effect on the requirements, just the timetable would vary based on EC/industry/political input. In the current Directive, there is the Maximum Allowance Emission Limit for off-cycle compliance, but with EURO 6, there is a need to replace this and the WNTE is one of the options to replace it or a version of the WNTE.

The EC prefers not to go to Option 4. The Chair stated that Options 1 & 3 are explicit in that a GTR for in-use will exist at some point in time. Even with Option 4 individual countries can still develop their own in-use test procedures.

EMA asked if it is possible for Option 3 to be completed in same time frame as Option 1. Conceptually, it seems as if it can, but if we go directly to Option 3, can jump over some of the issues we have faced. Under option 3, we just go directly to test procedures and no options.

The Chair stated that the concept for Option 3 is to abandon the WNTE and come up with other procedures for type approval and/or in-use. The timing of Option 3 is in question; perhaps have to be compliant by 2010/EURO 6, but under Option 1 the first step is to finish the current GTR and this can be done within 1 year, but the second step can possibly be done around 2010 because the PEMS work in the EU will be done by 2009, as will the Japanese work on this issue.

The EC suggested perhaps the group can consider combining Options 3 & 4. A simple GTR on the prohibition of defeat strategies will be completed and then a 2nd GTR on type approval and in-use procedures. Chair, we still need to establish a framework for doing this.

EMA wanted to emphasize that under Option 1, there is a critical distinction to be made. If a manufacturer has to meet one test in the laboratory, and then something else in-use, this could be very challenging. The entire group needs to fully understand this. EMA would prefer to have the same evaluation method for in-use as for type approval. Option 1 opens the possibility of having differing procedures.

For the EC to support an in-service program, it needs a reference value at the time of type approval. What does this mean in practice for manufacturers? A correlation of some sort to understand how the engine performed at type approval.

EMA stated that once we know what on vehicle test protocol looks like, we can develop a lab test that gives manufacturers good confidence that they would meet in-use on vehicle requirements and this gives manufacturers added confidence when signing the compliance statement.

The Chair feels that Option 3 would probably be a substantial delay in the process and the group should avoid putting forward options that are not possible.

OICE asked how will this document be made know to GRPE, because it may not be appropriate to present this Option list as it may confuse GRPE, and the group is currently on a good path towards completing this GTR. Options 3 to 5 should not be given to GRPE for consideration because it will delay the work and OICA will take a strong position against this. We are in the 6th year of this GTR and so close to being finished.

The Chair stated that this is a working document for the Plenary group. It will be referenced in the minutes and the group should take this document and be prepared to make a decision at the next plenary meeting as to what we will present to GRPE. Unfortunately at this point in time the EC decided to undertake this work and it is reasonable to take the time between now and the next plenary meeting to see if a preferred list of options is developed. Ideally, at the next meeting, the group can come to a decision on one or some of the options. If the group is at an impasse or chooses an option that is so different from where we are today, then there will be a need to go to GRPE. The EC suggested advising GRPE and asking what it considers the best option and present this to GRPE for its approval, provided the group reaches consensus.

OICA restated its preference for either Option 1 or Option 2 because the others will not be well received this late in the development of the GTR. Some options are not in the framework of harmonization and not to the advantage of engine manufacturers and vehicle manufacturers. The EC feels that if all contracting parties are of similar mind, there should not be any issues.

EMA asked if Option 1 is selected, the group will finalize the GTR as it is today and the WNTTE will apply for both type approval and in-use testing. Subsequent to this, will be looking at another approach that will give better coverage but for a period of time only the WNTTE will be available. The EC clarified by saying that the GTR may be used for in-use testing and that the actual method would be optional for a contracting party. The EC does not see any value in implementing the GTR for in-use, it because there is no value in the outcome. The Chair stated that the GTR does not place any obligation on a contracting party to enforce it in-use. The contracting party will decide how they want to apply the GTR. The GTR does not say you must do testing in-use. The intention of the GTR, if it does a good enough job, is to be an option for adoption by a contracting party who would be disinclined to do something different. The Netherlands stated the GTR is not an in-use requirement. It is just an off-cycle requirement and how it is used, either as a type approval or in-use, is at the discretion of the contracting parties.

EMA feels it is highly likely if the group elects to go with Option 1 the only contracting party that would enforce the GTR is the US. The group needs to be honest about this because other contracting parties are still doing their own testing to decide what to do for in-use. It is one thing for a contracting party to say it is not going to do an in-use program, but completely different if it will do something that is completely different in the interim. Thus, there is no harmonization until phase 2 of Option 1 is completed. EMA stated it needs to have discussion with other EMA members as to which Option it will endorse.

Japan confirmed that they are just validating technology right now and there are a number of issues which still need to be resolved, since they are only talking about the technical possibilities. Japan stated it will also need to have some time to review the options before a recommendation can be made to support one option over another. Japan feels that the group needs some type of result after 6 years of activity. Therefore it is important for the group to have a tangible outcome because a lot of work has gone into this already. Japan will try to be prepared with a recommended Option by the next meeting.

OICA will also look at all of the options at the next OICA meeting and will have an OICA position by the time of the 17th plenary meeting in June

The Chair stated that the US EPA will think about this as well, and will consult with US manufacturers on this issue.

- D. **Next Steps.** The members are asked to take sometime between this and the next Plenary meeting to contemplate the options for going forward with this GTR and think about an option to support and why. The Chairperson will inform GRPE that the working group is contemplating various options for the further development of the GTR.

Agenda Item 4

Barring further developments, and depending on the outcome at the next Plenary meeting, it is anticipated that the GTR will be finalized by January 2008.

The group will plan to have a Plenary and Editorial meeting in the fall with a view to having it in conjunction with the fall WHDC meeting scheduled for October.

Agenda Item 5

The Chairperson stated that the next Plenary meeting will take place in Geneva, Switzerland, at the Palais des Nation on Tuesday, 5 June, starting at 14:30 h. Following a short break after the completion of the Plenary meeting, an Editorial Committee meeting will take place on the same date at a location to be announced.

Joanna Vardas, Secretariat
Dated May 26, 2007