

Coordinating European Council for the Development of Performance Tests for Transportation Fuels, Lubricants and Other Fluids.

CEC ACTIVITY REPORT JANUARY – JULY 2017

1. Chairman's Introduction

I am very pleased with the first issue of the CEC Activity Report. This Activity Report is part of efforts of the CEC Management Board (MB) to enhance dialogue and engagement with our stakeholders. In this first issue, we will look back at the first half of 2017; update you on relevant aspects of our Test Development Groups (TDG's), Surveillance Groups (SG's) and other CEC groups.

Last November we hosted our CEC Workshop to share with you our plans regarding the strategic topics we identified end 2015 based on input from our 4 sponsor organizations. We'll update you on the progress made since the Workshop.

The CEC Management Board hopes this Activity Report will give you a better flavor of our work and the progress we make. We realize that our stakeholders are quite diverse and therefore please let us know what *you* think of this Activity Report and please let us know (info@cectests.org) how we may further increase the added value for *you personally*. We hope to hear from you.

Best regards,

Frank Stunnenberg

2. List of Board Members and Responsibilities

2.1. List of Board Members

Frank Stunnenberg ATC (Chairman)

Mike Conroy CONCAWE (Vice-Chairman)

Suhair Abdelhalim **ACEA** Paul Greening **ACEA** Anders Röj **ACEA** Adrian Fitzpatrick ATC Thomas Buenemann **ATC** Volker Null ATIEL Vincent Panel ATIEL Maximilian Staudacher **CONCAWE**

2.2. Management Board Responsibilities

Issue	Leader	Backup	Admin, Secretariat
General Administration, Finance	Frank	Mike	Kellen
Monitoring Lubricants Groups (SG)	Volker	Suhair	Kellen
Monitoring Fuels Groups (SG)	Max	Mike	Kellen
Monitoring Transmissions (SG)	Frank	Volker	Kellen
Monitoring Reference Fluids Groups + Rating	Volker (Lubes) / Max (Fuels)	Mike (Fuels)	Kellen

Constitution	Frank	Mike	Kellen
External Communications	Frank	Paul	Kellen
Quality/SDG	Volker (Lubes)/ Mike	Max	Kellen
Lubricant Tests:			
TDG-L-107 - Sludge	Adrian	Vincent	Kellen
TDG-T-108 - Pitting	Frank	Vincent	Kellen
Fuel Test Development:			
TDG-F-113 - IDID	Max	Mike	Kellen
SPG – GDi Wear	Volker	Vincent	Kellen
SPG – Toyota Test	Adrian	Suhair	Kellen
SPG - Low Soot Wear	Thomas		Kellen
Confidentiality Issues	Frank	Mike	Kellen
CEC Future Role	Frank	Mike	Kellen

3. Overall activity report - timeframe Jan-July

3.1. TDG-F-113 - DISI test

This new test will address injector deposits in direct injection spark ignition engines (DISI) and the deposit control ability of gasoline. Injector fouling influences the spray pattern and the injected fuel volume of the injector and therefore affects directly the driveability and performance and the exhaust gas emissions of the vehicle.

In December 2016, ISP Grand-Couronne SARL was selected as the lead lab by the CEC tender committee.

A kick-off meeting took place on February 2nd, 2017 where the group mainly discussed the Terms of Reference (ToR) and the further steps in the test development.

The test should be ready by the end of 2018. The fuel tender was launched and a pre-tender call took place with potential suppliers. By the end of August the fuel supplier will be selected.

3.2. TDG-L-107 - M271 Sludge Test

The group had to go back to phase 1 in November last year. The fuel provider has had problems with the fuel being contaminated by a water leak. However the problem was resolved and the test is back in progress. The first two reference tests were completed and showed positive results. There are still some issues with the fuel filters that supply fuel to the engine, as they can have an influence on the test result. The third test has just started. The Round Robin (RR) is to be expected to be finished around July/August and the test is foreseen to be available around September 2017.

3.3. TDG-T-108 - Pitting Test

Following some unexpected results and failures, the group made some suggestions to the Management Board in September 2016.

The Management Board decided to go for suggestion 2 (Calibration / low Reference with FVA 2A at 120°C) and move to suggestion 1 (Find a new, suitable low ref. oil at 90°C) once a suitable low reference oil has been found. This was agreed with the very explicit understanding that the group continues doing work on finding the correct reference oil.

Pre-testing with the two new proposed low reference candidate oils was done and one has been selected to start the RR. At some labs the RR will also be started with the high reference candidate oil. The results are to be provided at the next group meeting that is scheduled for October 16, 2017.

3.4. SPG on Low Soot Wear Test

Nigel Britton of Lubrizol is the Chair of this Special Project Group (SPG) and has organized the first meeting in Brussels on May 12th. There was a consensus that an engine test would be preferred and would provide the best way to evaluate wear performance; however no suitable new engines are currently being offered for inclusion into future ACEA specifications.

The possibility of a no-soot as an alternative for a low-soot bench test was discussed and it was agreed that addition of artificial soot is not a representative option.

This test should be introduced in ACEA 2018, meaning that the test development work has to be finalized by Q3/Q4 2018.

3.5. Toyota Diesel Turbocharger Compressor Deposit test proposal

Toyota has developed a TC Deposit test that is presently proposed to CEC for finalization as a CEC test. This work has been carried out in cooperation with an independent laboratory and funded fully by Toyota up to now. After several meetings and discussions, the test method is written and the ToR have been endorsed. Some final items need to be checked and reviewed with ISP after which the TDG can be setup.

3.6. CEC Communication tools

The current CEC communications tools such as the website, newsletter workshop, conference participation etc. were reviewed and evaluated in order to improve current processes. It was decided to issue a survey to understand from individuals how they use the current CEC communication tools and to better understand their expectations. This survey is currently being distributed within the companies by the Management Board Representatives.

Also this activity report will be issued on a bi-annually basis in order to provide the CEC membership and stakeholders with a condensed summary of the CEC activities that were carried out throughout the year. The Management Board has worked on a definition of CEC's Mission and Role and has included this in a

document which has been added to the CEC website.

3.7. CEC Management Board Chairmanship & Vice-Chairmanship

As of January 1st, 2017 Frank Stunnenberg (ATC) has taken over the CEC Chairmanship from Peter Tjan (ATIEL).

Frank's position of CEC Vice-Chair has been taken over by Mike Conroy (CONCAWE) as of February 3rd, 2017. This is the first time CONCAWE has put a Chair or Vice-Chair forward so join us in welcoming Mike. Thomas Buenemann has replaced Frank Stunnenberg as ATC representative on the CEC Management Board.

4. Update on TDG's and SG's

4.1. SG-L-039

CEC has decided to close the Surveillance Group as it becomes more and more difficult to produce elastomers for this old seal compatibility test (RE1 and RE2) and the new elastomer group SG L-112 is well in place. Labs will still be allowed to run the test but they cannot claim a CEC result. If you don't have the full set of elastomer for L-039, then they should use CEC L-112. A note will be added in the ACEA 2012 sequences and on CEC website to reflect this decision.

5. Events and representation

On 22 November 2016, CEC held its first workshop in Brussels. The event was very successful and around 50 participants were present. Very interesting and valuable contributions were given and useful discussions took place.

Topics that were covered were a critical review of the role of the Management Board, of the Test Development process, the development of the ToR and the processes related to the maintenance of approved tests.

The presentations of the workshop are available on the website and can be accessed from "My CEC" in the section CEC Information/Presentations/CEC Workshop – 22 November 2016.

In terms of next steps, the CEC Management Board has been actively working on the action items as proposed in the workshop as well as some additional improvements that were suggested. An overview of these as well as the status will be provided soon.

It was decided to organize the workshop every two years - the next one will take place in 2018.

6. Strategic Outlook

6.1. Fuel Test Development

CEC is starting an investigation on how new fuel test developments can be more efficiently initiated.

6.2. Enhancements to CEC Test Development Process

All aspects of the test development process have been thoroughly reviewed. Two focus areas were identified: Test Development Process enhancements and Support to the TDG by CEC MB.

Improvements for the Test Development Process Enhancements were suggested such as implementing guidelines for the ToR; form Special Project Groups when the ToR development is hampered by lack of alignment between industry representatives; putting more emphasis on the project management skills of the TDG Chairs and Co-Chairs and have the MB ratify the appointments. With regards to the project management, the lead lab should develop a project plan with clear achievable milestones; conduct quarterly reviews of the TDG to check timing and costs versus ToR, plan and budget and Measurement Uncertainty Panel (MUP) needs to be addressed during Test Development and formal sign off is mandatory. Decisions need to be made quickly either by consensus at the meetings but also via email to save time. If consensus cannot be reached, the issue needs to be brought to the MB.

For the support by the CEC MB to the TDG it was suggested to have alternative arrangements for TDG funding; to capture and share 'lessons learnt' between the groups; active involvement of the CEC MB representative with the TDG and monitor progress and to take final decision in case of conflicts.

These improvements will be issued shortly in a revision of the Guidelines, which will then be rolled out to the TDG Chairs.

6.3. CEC Role in engine hardware supply?

Supply of engine hardware for CEC tests is not a trivial matter but is essential for our industry. Following an investigation of the US situation on hardware supply in 2016, the CEC MB has contacted European stakeholders in engine hardware supply to understand the situation in Europe. The goal is to assess whether there may be a role for CEC in facilitating hardware availability in Europe. To be continued...

6.4. CEC Stakeholder Engagement

To improve engagement of our external stakeholders, the CEC Secretariat proposed to regularly issue an Activity Report to keep our stakeholders updated on CEC's and the Management Board's activities. Today you are looking at our first Activity Report!

6.5. Activities of the SGs

The CEC MB has looked at developing procedure to facilitate the interaction with the Surveillance Groups and seeking opportunities to focus the SG activities on test improvements. This has resulted in establishing performance indicators which will allow MB and SG members to monitor and appraise performance. The test life plan was updated to include those performance indicators.

7. Partnerships

Frank Stunnenberg, CEC's Chairman will be speaking at the 2017 European Base Oils and Lubricants Interactive Summit, taking place on November 29th and 30th, 2017 at the Crowne Plaza Antwerp in Belgium.

8. Upcoming event and activity for the 2nd semester of 2017

- Management Board Conference Call on August 30th
- Management Board Meeting on September 26th at ATIEL offices in Brussels
- SG-F-005 & SG-F-020 meeting on September 27th, 2017 at APL GmbH, Landau, Germany
- Management Board Conference call on October 12th, 2017
- TDG-T-108 group meeting on October 16th, 2017 at FZG, Garching, Germany
- Management Board Meeting on November 28th at CEC offices in Brussels
- European Base Oil & Lubricants Summit: 28-30 November, 2017 in Antwerp, Belgium