

CEC ACTIVITY REPORT JULY 2019 – JULY 2020

1. Chairman's Introduction

It has been a very different few months and I hope everyone is well and safe. During these times the Management Board and Working Groups have been meeting online and I thank everyone for their patience and support to keep CEC and CEC tests running.

Following the last report we have started to make good progress on the new strategic items for 2020. This includes starting the development of the new CEC website on a more secure hosting platform with enhanced features over the current website. The new website will go live later this year after testing. We have also been working on updating the CEC guidelines, which is the main working document for CEC activities. The current guidelines have many inconsistencies and duplications and so the team leading this have started to re-write the guidelines from the beginning. As you can imagine this is no small task and I would like to thank Adrian Fitzpatrick for his contribution during his time on the Management Board and Mike Conroy for his continued leadership of this activity. Again, as with the website we expect the new guidelines to be launched later this year. As we progress with these initiatives, we also plan further roles and responsibility training for groups at the next workshop, which will likely be sometime in 2021 all being well.

At the end of 2019 and in early 2020 the CEC Management Board has been on the road with ISP and APL providing the venue. The Management Board would like to express their thanks to ISP and APL for hosting the meetings and also for their hospitality and openness during discussions. The idea was to expand on the workshop from November 2018 and gain insights about CEC from users of test methods. We would also be happy to hear from anyone with any feedback (positive or negative) about CEC and if you would be willing to host a future meeting we would consider any invitations.

There has also been some good success on the TDG's with L-114 (Toyota turbo deposits) and L-107 (M271EVO sludge) now moved to SG status and the test methods being available for the industry. L-115 (low soot bearing wear test) and L-116 (low soot piston ring/liner wear) are both actively trying to address challenges with the test developments, and we are well underway with L-117 with the support of VW to replace the current TDI test (L-078).

On the fuels side we have F-113 (injector fouling) and F110 (injector deposits) back in TDG status and are progressing requests for an octane booster corrosion testing and also a replacement for F-098 (injector nozzle coking).

Further details on TDG's can be found below.

2. List of Board Members and Responsibilities

2.1. List of Board Members

Nick Clague	ATIEL (Chair)
Mike Conroy	CONCAWE (Vice-Chair)
Frank Stunnenberg	ATC (Treasurer/Compliance)
Bengt Otterholm	ACEA
Paul Decker-Brentano	ACEA
Nigel Britton	ATC
Nikolay Doroshenko	ATIEL
Andrew Bailey	ATIEL
Angela Spieckermann	CONCAWE

2.2. Management Board Responsibilities

Issue	Leader	Backup	Admin, Secretariat
General Administration, Finance	Nick/Frank (Finance)	Frank	Kellen
Monitoring Lubricants Groups (SG)	Nikolay (engine)/Andrew (Bench)	Andrew/Nikolay	Kellen
Monitoring Fuels Groups (SG)	Mike	Nigel	Kellen
Monitoring Transmissions (SG)	Frank	Bengt	Kellen
Monitoring Reference Fluids Groups + Rating	Nigel (Lubes)/Mike (Fuels)		Kellen
Articles of Association / Guidelines	Nick	Mike	Kellen
External Communications	Nick	Frank	Kellen
Quality/SDG	Nigel (Lubes)/Mike (Fuels)		Kellen
Lubricant Tests:			
TDG-L-115 – Bearing Wear Test	Bengt	Nigel	Kellen
TDG-L-116 – Ring Liner Wear Test	Nigel	Bengt	Kellen
TDG-L-117	Paul	Andrew	Kellen
Fuel Test Development:			
TDG-F-113 - IDID	Mike	Nigel	Kellen
Confidentiality Issues	Nick	Mike	Kellen
CEC Strategic items	Nick	Mike	Kellen

3. Update on TDG's - Activity report – timeframe July 2019 – July 2020

3.1. TDG-F-113 – DISI test

The TDG has created the two following subgroups:

- The Fuel SubGroup for addressing severity issue observed with clean-up candidate fuel (CAF W18-935). This fuel is not considered as market relevant due to its limited response to clean-up additive
- The Test Method SubGroup is in charge of harmonizing the methodology between labs currently running the test and identify possible deviations from original test method

The TDG also came with a proposal to amend the Fuel Terms of Reference. The original Fuels tender specifies a target of 25% increase in injection pulse width for the high fouling fuel. This raised discussion among the group and the TDG F-113 Fuel Subgroup has agreed to a redefinition for a reduced fouling target in the range 15-20% to allow for more effective and market relevant clean-up potential. This proposal was endorsed by the full TDG at their last meeting but still needs to be discussed by ATC FAG before approving.

3.2. TDG-L-107 – M271 Sludge Test

Tim Hadaway (Chair of the TDG), has presented the results of the TDG work to the Management Board during the meeting on November 26th, 2019. The Management Board approved the work done by the TDG and the TDG has moved to SG status.

3.3. TDG-T-108 - Pitting Test

The CEC MB has approved the T-108 test method and the move to SG status. However the CEC MB representative will work with the group Chair to make sure that all labs complete their results.

More reference data came in and results are still being generated. A number of further tests has been performed by different labs and a statistical analysis was done. Based on this evaluation, all required statistical data are now available even if more data certainly are necessary to increase the reliability. Therefore, all labs were asked to continue testing of the reference fluids.

The TDG proposes to include the calculated values into the test procedure after the next group meeting, The Chair stepped down and currently nobody volunteered to take up the roles of Chair and Vice Chair.

3.4. TDG-L-114 - Toyota Diesel Turbocharger Compressor Deposit test proposal

After refreshing the group with the last progresses made with regards to the finalization of the TDG the last version of the Test procedure was checked and approved.

Precision analysis was done including the new data points of reference runs made by the two labs.

The corrections of the soot level was discussed and the group decided to go for the average slope as communicated with the CEC Management Board. In the future modifications will be needed due to the available data set.

The group will look into a defined procedure for oil top up - both labs will do some investigations.

There is currently a low demand of the industry but there is sufficient hardware on stock to provide two additional test stands.

A meeting took place on 12 February. There is a surplus of funds from the TDG Phase and the amount has been refunded equally among the initial sponsors.

3.5. TDG-L-115 – Low Soot Bearing Wear Test

For TDG-L-115 the Management Board accepted the deviation from the original ToR (as a low calibration oil could not be identified) and recommended that the group use LCO of TDG-116 as first priority.

The calibration oils are being tested; the high calibration oil is a commercial oil and various low calibration oils are being investigated. Tests are also being run on fresh oil and aged oil.

The test is not likely to be available until end 2021.

3.6. TDG-L-116 –Low Soot Ring Liner Wear Test

High and low calibration oils have been identified. Testing shows discrimination but it is not repeatable (very low wear levels). The poor repeatability is likely due to the test and further testing is ongoing (test length vs temperature). A TDG meeting took place in July 2020.

3.7. TDG-L-117 – Light-Duty Diesel Piston Cleanliness Test

TDG-L-117 is an existing VW test method that VW has offered to CEC. The current TDI engine test is running out of parts and VW has offered a new TDI engine for the ACEA 2020 sequences.

The Needs Statement and ToR have been written by AAA and both documents were approved by the 4 associations.

The TDG is currently in phase 2 and the test is expected to be available in Q3 2020. The last meeting took place in June 2020.

4. Update on SG's - Activity report – timeframe July 2019 – July 2020

4.1. SG-F-110

The group went back to TDG status to give the opportunity to improve the test quality. Members of the group had the energy to work on improving the test, but were not ready to spend more money in running more tests; therefore, the group relied on historical data.

The test meets the criteria of Phase 1 (repeatability) but is not reproducible between labs (Phase 2). The group continues to identify ways forward and has not found a solution so far to have a good repeatable and reproducible test.

The group continues to be proactive and has identified future actions to take. There is no clear forecast when the test will go back to SG stage.

4.2. SG-L-104 & SG-L-099

The engine supply is confirmed until 2022. ACEA is looking for replacement hardware.

5. Update on TMS

5.1. SG-L-014

For the mechanical shear stability test covered by SG-L-014, there are now two versions available to participants on TMS: KO30 remains in place, and KO90 is now available for uploads.

5.2. SG-L-036

We are pleased to announce that a new version of the lubricant dynamic viscosity test HTHS100 has been released, and is now live on the TMS. The original versions, HTHS150, remains available to participants.

5.3. SG-F-110

The data dictionary for this internal diesel injector deposit test type has been heavily revised. The new version, with a revised data dictionary and upload proforma, is available for results to be posted on CEC-TMS as DW10C2.

The previous version, DW10CIDID, is still available on TMS. Participants will be able to list and chart registration data, but will not be able to upload results.

5.4. SG-L-108

We are pleased to announce that the Pitting Test for Gear Lubricants FZG108 has been released and is now live on the TMS. This test is chaired by Dr. Thomas Tobie from FZG Institut TU München.

5.5. TDG-F-113

The test type for the ISI (Direct Injection spark ignited engine) Injector fouling Test, DISI113 is being developed on the Test Monitoring System. The data dictionary and upload proforma are being finalised, and the test type will be released in due course.

6. Progress with CEC's New Website

- PDC have been making good progress with the development of CEC's website and member's portal. The website and extranet will feature a large upgrade in all respects.
- A large variety of documents will be able to be indexed and searched for a specific word or phrase. The live documents repository will allow for collaborative remote working.
- The permissions structure will be fully developed, allowing a user to see only the information that they need to.
- Single sign-on across both the main site and the TMS will enhance security, and each user will need their own login. Temporary users will also be set up by admins.
- Data will be managed to remove inactive users and unnecessary files before the old system migrates to the new.

7. Events and representation

- CEC presentation at the Open technology forum during ICIS London – 19th February 2020

8. Strategic items

As mentioned in the introduction there has been some good progress on the strategic items. They are mainly focused on improved communication including working with stakeholders and external collaborators, re-developing the CEC website and optimising working group management.

There will be training for stakeholders, TDG's and SG's on roles and responsibilities at the next workshop and we will look towards greater interaction between these groups and the Management Board. We will also look to increase the awareness of CEC and its activities with the wider industry through increased promotion of CEC.

Finally we will continue to work on the development of new fuels tests through work with the fuels industry.

9. Upcoming events and activity for 2020

- Management Board Meeting on September 9th, 2020 at CEC offices in Brussels
- Management Board Meeting on November 25th, 2020 at CEC offices in Brussels
- SG-L-103 Meeting on October 7th, 2020 at WIWEB, Erding, Germany

Because of COVID-19 several meetings were postponed to later dates which have not been fixed yet.