

CEC Operating Guidelines and Proformas

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Guideline 1

CEC Purpose, Structure and Contacts

1. CECs Purpose

The Automotive and Petroleum Industries, use standards and specifications to define the quality of fuels and lubricants. Such standards and specifications require test methods to measure particular aspects of quality. CEC was formed to develop such test methods. Its focus is on “performance” which most closely simulates real world experience by using engines, transmissions, rigs and similar equipment. Laboratory bench tests may be developed to support performance tests.

CECs geographical focus is Europe. The ‘customer’ for its test developments will usually be the European Motor Industry, which needs to define the qualities of fuels and lubricants to be used in the equipment it manufactures. New test methods are needed to keep pace with automotive engineering and fluids developments.

2. CECs Structure

CEC has a Management Board currently drawn from industry organisations having interest in the development of performance tests for fuels and lubricants. The CEC Secretariat is outsourced. Test method development is carried out by Working Groups with membership drawn from laboratories and other organisations having relevant experience and interest in the subject. Funding of test development may be by a variety of mechanisms.

Each member Industry Association shall pay a subscription, as determined by the Management Board, to cover the administrative expenses of CEC. Subscriptions shall be shared on an equal basis.

Decisions are made in accordance with Guideline 4.

3. Contacting CEC

The primary point of contact with CEC is the Secretariat:

Interlynk Administrative Services Ltd
PO Box 6475
Earl Shilton
Leicestershire
LE9 9ZB
UK
Phone: +44 (0)1455 821993
Fax: +44 (0)1455 821994
Email: cecinfo@interlynk.co.uk
Web Site: www.cectests.org

Guideline 1, Appendix 1

Industry Associations currently represented on the CEC Management Board

ACEA	Association des Constructeurs Européens d'Automobiles	<i>Avenue des Nerviens 85 B-1040 Brussels Belgium</i>
ATC	Technical Committee of Petroleum Additive Manufacturers in Europe (ATC)	<i>Sector Group of CEFIC Av. E. Van Nieuwenhuysse, 4 B-1160 Brussels Belgium</i>
ATIEL	Association Technique de l'Industrie Européenne des Lubrifiants	<i>Boulevard du Souverain 165 B-1160 Brussels Belgium</i>
CONCAWE	The Oil Companies' European Organisation for Environment, Health and Safety	<i>Boulevard du Souverain 165 B-1160 Brussels Belgium</i>

Guideline 2

CEC Management Board

1. Role and Responsibilities

These shall include:

- Establish and maintain the general policies, Guidelines and strategies of CEC and direct test development activities.
- Respond to requests for test developments from relevant industry groups (see Appendix 1).
- Establish the Technical Development Groups (TDGs), Surveillance Groups (SGs) and Support Groups from the contracted laboratories and other participating sponsors. Oversee the activities of these groups and approve their leaders.
- Recommend / agree methodology for each test development and its funding.
- Appoint and oversee the CEC Secretariat, and contractors.
- Appoint the internal and external auditors.
- Manage the process for awarding test development contracts and the control of expenditure against budget.
- Liaise with external organisations.
- Decide on communication and technical exchange activities e.g. technical workshops, conferences, and symposia.
- Appoint a Board of Directors, which shall, under Belgian law, represent CEC against third parties.
- Ensure that CEC adheres to European competition law and anti-trust regulations.
- Hold Management Board Meeting Minutes for a minimum of 10 years as a legal requirement.

2. Decision-Making

All decisions made and positions agreed by the Management Board will be by consensus. Consensus recognises that an Industry Association, whilst not agreeing with a view being expressed by a majority, will not unreasonably block the decision. . The dissenting Industry Association will be required to explain their position. In this case consensus fails, and CEC will not adopt that decision/position.

Guideline 2, Appendix 1

Template for Acceptance of New Test Procedures into CEC System

1. Demonstrated Need

- If replacement for an existing test, there must be a continuing need for the measurement of the proposed parameters.
- If new, there must be technical significance and potential for use.
- Alternative tests, e.g. existing International tests with adequate quality, must be considered.

2. Endorsement

The template must be supported with a documented need that is, preferably, with full endorsement of ACEA WG-FL and other involved CEC member associations.

Note: For Lubricant tests, test development must be intended to lead to the test forming an element of ACEA test sequences, or, an oil approval requirement for a minimum of two OEMs.

3. Availability of Support

Sponsoring OEM(s) or Industry Bodies will be required to ensure availability of:

- Engine, fuel system or transmission hardware and management system
- Technical Support
- Advice on reference oils & fuels
- Hardware for 5 years minimum
- Identified correlation fluids which correlate with field performance or OEM performance experience and which can be used to calibrate the test method

4. Confidentiality

The submitter must confirm that the confidentiality requirements as outlined in Guideline 5 have been met.

Guideline 3

Role of the CEC Secretariat

The Management Board will choose the supplier of secretariat services. The supplier will be accountable to the Management Board and report to the Chairman under the terms of an agreed contract.

The secretariat will:

- Provide administrative and technical support.
- Work in accordance with the Articles of Association, Guidelines, Management Board and Board of Directors decisions.
- Provide financial management of CEC funds.
- Support the CEC Management Board by arranging Board meetings, production and distribution of agendas, taking minutes and updating the Management Board on financial and technical matters, which are defined as supplier responsibilities.
- Control the preparation, sale and distribution of new and updated publications.
- Maintain the CEC website.
- Assist TDGs in their test development task by preparing contracts, and monitoring costs and expenses against budget, through to the final production of the test method.
- Monitor progress of test developments.

Guideline 4

General Principles for Running CEC Groups and their Meetings

1. Responsibility of the Chairman

It is the Chairman's responsibility to:

- Ensure compliance with applicable laws including the Competition Laws of the EU (See Article 34 of the CEC Articles of Association).
- Ensure compliance with CEC requirements on membership, decision-taking and quality principles.
- Read out the Confidentiality Statement outlined in Guideline GL/05 at the beginning of every meeting
- Ensure compliance with CEC Articles of Association and Guidelines.
- Provide a Progress Report to the Management Board on a 6-monthly basis for TDGs and on an annual basis for SDGs. Upon request from the Management Board the frequency of reporting may be increased.
- Set the frequency of meetings to ensure swift progress of test development and/or ongoing quality assurance or improvement of the test method. For mature tests the meeting frequency can be reduced to once per year.
- Represent the Group to the Management Board.

2. Confidentiality of Meetings

See Guideline 5.

3. Minutes of Meetings

3.1. Preparation

The minutes shall be prepared either by the secretary of the relevant group or by a member of the group selected by the Chairman, on CEC –headed paper.

3.2. Confirmation of Minutes

Minutes of CEC Group meetings shall be sent for checking, amendments and confirmation to the Chairman and Deputy Chairman of the relevant meeting. Responses are expected within five working days from the receipt of the draft minutes.

3.3. Distribution

The Minutes of a meeting must be distributed to all members of the relevant group as well as the CEC Secretariat. It is expected that, where possible, minutes be distributed within 20 working days from the date of the meeting.

3.4. Approval of Minutes and Amendments

The Committee/Group members shall approve the Minutes during the next meeting of the relevant Committee or Group.

3.5. Archive

Copies of all minutes of meetings will be retained within the Secretariat for a period not less than 5 years.

4. Decision Making

4.1. Working Groups Operating Under Sponsor-Funded Options

Decisions will be reached by consensus amongst the sponsors, including the sponsoring OEM, wherever possible. Consensus here is defined as an agreement without dissent. Failure to reach consensus should be reported to the Management Board, with full details of majority and minority positions.

The Management Board will decide on the issue and their decision will be final.

4.2. Voluntary Working Groups, or Working Groups Formed Before 2001

Decisions will be reached by consensus, amongst contributing members, wherever possible.

Failure to reach consensus should be reported to the Management Board, with full details of majority and minority positions.

The Management Board will decide on the issue and their decision will be final.

4.3. Support Groups

Decisions will be reached by consensus. Failure to reach consensus should be reported to the Management Board, with full details of majority and minority positions.

The Management Board will decide on the issue and their decision will be final.

4.4. Special Groups

Decisions will be reached by consensus. Failure to reach consensus should be reported to the Management Board, with full details of majority and minority positions.

The Management Board will decide on the issue and their decision will be final.

Guideline 5

Membership of CEC Working Groups and Confidentiality of CEC Information

1. Membership

A member of a CEC Working Group is a company, not an individual. However, in order to ensure confidentiality of information within a TDG / SG, members are obliged to name one company representative who will represent them in a Group. This representative will be responsible for conveying the views of its company to the TDG / SG and making decisions about Group matters, on behalf of its company.

A third party contractor or consultant may represent a member company on a CEC Working Group providing that there is a formal relationship between the two parties. Any contractor or consultant will be bound by the same confidentiality rules as if he was an employee of the member company.

1.1. Sponsored Groups

A company providing financial sponsorship for the test development is entitled to be a member of a Test Development Group and can remain a member when it becomes a Surveillance Group, even if it chooses not to install the test.

Support to the group should be given by

- Taking on an Officer position in the Group
- Having a continuing interest in the proper operation of the test, by running tests at third party laboratories and freely sharing operational experience within the TDG / SG.

The sponsoring OEM shall be a member of the Group by virtue of the technical support and hardware provided to the Group.

The Test Development Laboratory shall contribute sponsorship funds equal to that of other sponsors.

Membership of a Surveillance Group for non-sponsors is achieved by purchasing access to the test method after it has been developed. Non-sponsors will be obliged to contribute to the work of the Group by sharing costs equitably for any additional work that is agreed and participating in one or more of the following ways:

- Contribute reference test data, as specified by the test procedure, to the test monitoring / ERC database and freely share operational experience within the SG
- Be SDG representative to the SG
- Having a continuing interest in the proper operation of the test, by running tests at third party laboratories and freely sharing operational experience within the SG.

If a member does not contribute in one or more of these ways to the work of the TDG/SG then the Chairman must recommend removal of the member from the Group. The CEC Secretariat must be informed immediately, so that the ID and password for access to the Group's area of the CEC website may be withdrawn.

Attendance at meetings is for bona-fide members only. The Chairman may, under exceptional circumstances, where the TDG/SG feels that attendance by other experts

would assist it to deliver against its targets, invite experts to the meeting subject to the agreement of all the Group members.

Ideally, all officers of a Sponsored Group shall be members of the Test Development Laboratory and / or Sponsoring Companies. If this is not possible, an Officer may be appointed by the Group from an outside specialist company (e.g. Reference Fuel Supplier), however his company will not be entitled to the completed Test Method, though they will have access to the Group's area on the CEC Web Site. The appointment must be approved by the Management Board.

1.2. Voluntary Groups

All members of a Voluntary Group must contribute to the working of the Group. Members will be expected to share costs equitably, but individual members must contribute in one or more of the following ways:

- Contribute reference test data, as specified by the test procedure, to the test monitoring / ERC database and freely share operational experience within the TDG/SG
- Be OEM sponsor
- Be SDG representative to the TDG/SG
- Having a continuing interest in the proper operation of the test, by running tests at third party laboratories and freely sharing operational experience within the TDG / SG.

If a member does not contribute in one or more of these ways to the work of the TDG/SG then the Chairman must recommend removal of the member from the Group. The CEC Secretariat must be informed immediately, so that the ID and password for access to the Group's area of the CEC website may be withdrawn.

Attendance at meetings is for bona-fide members only. The Chairman may invite experts to the meeting, in exceptional circumstances, where the TDG/SG feels that attendance by other experts would assist it to deliver against its targets.

2. Confidentiality of Certain Information

Certain information being discussed or reviewed by a Technical Development Group (TDG), a Surveillance Group (SG), or by the CEC, may be confidential.

Should an OEM sponsor affirm that proprietary information remain confidential and not be released to other OEM's then agreement will be required from all other ACEA members that they will refrain from participation in TDGs and SGs and purchasing or obtaining the test method. This will be handled on a case-by-case basis, sharing legal opinion with the sponsoring OEM. A provider of information may require that confidential information may only be made available if subject to the terms of a confidentiality agreement.

Should confidential information be reflected in the minutes of a TDG, SG or CEC meeting, the company providing the confidential information can request that the relevant minutes bear the following text:

"This document and its contents contain confidential information. It has been provided to the recipient subject to the provisions of a confidentiality agreement entered into with

[provider of information]. This document should not be disclosed to anyone unless that person is allowed, under the terms of the confidentiality agreement, to receive or review it.”

3. Test Methods and Test Results

CEC Test Methods produced electronically via the CEC Web Site are accessible to designated member company representatives and more than one named representative may have access. In addition, they are available to named representatives of companies who purchase the Test Method.

Test results obtained through Test Monitoring or Round Robins organized within a TDG / SG are strictly confidential to TDG / SG members. Information to anyone outside of the TDG / SG will only be provided by the Group Chairman, after Management Board approval and any test results will be coded to conceal the name of the contributing laboratory. It is acceptable, however, for TDG/SG members to communicate their own test results, shown amongst the Group’s coded results, to their own customers, without referral to the Management Board.

4. Confidentiality Statement

To be read out by the Chairman at the beginning of every meeting:

“Information discussed at this meeting is confidential to the Group and its members.

To be a member of this Group, you must contribute to the work of the Group as explained on the Attendance List.

All people present at this meeting must sign the Attendance List and state their reason for attending.”

5. Other CEC Communications

Management Board minutes may be conveyed to relevant representatives of member companies and participating industry association members.

Permission for making presentations or publications on behalf of CEC must first receive the approval of the Management Board.

Newsletters are not confidential and may be conveyed to everybody.

Guideline 6

Types of Working Group and their Structure

1. Formation and Closure

All Working Groups are established and closed by the Management Board.

2. Structure / Organisation of Groups

This is a typical arrangement for Officers of CEC Working Groups:

	TDG	SG	SDG	RFG	ROG	SPG / SLG
Chairman	✓	✓	✓	✓	✓	✓
Vice or Deputy Chairman	✓	✓	✓	✓	✓	✓
Secretary	✓	✓	✓	✓	✓	✓
Ref. Oil Coordinator	✓	✓				
Ref. Fuel Coordinator	✓	✓				
SDG Liaison Officer	✓	✓				
Test Procedure Coordinator	✓	✓				
Members	✓	✓	✓	✓	✓	✓

3. Types of Groups

3.1. Test Development Group (TDG)

Responsible for taking a proposed new test procedure from the concept stage to publication of a CEC Test Method. The work is usually in two phases. Phase 1 takes the work to the stage of acceptable repeatability and discrimination normally in a single laboratory leading to production of a draft Test Method. Phase 2 requires reproducibility to be established in multiple laboratories and a test method to be published.

New Test Development Groups are normally sponsored groups (see Guideline 11). In exceptional cases a voluntary group could be established (see Guideline 12)

3.2. Test Surveillance Group (SG)

Responsible for maintaining and, if possible, enhancing the quality of a test developed by a Test Development Group. A key feature of the activity is to run regular “round-robins”, or carry out test monitoring among participating laboratories to ensure that quality is maintained.

3.3. Support Groups

3.3.1. Statistical Development Group (SDG)

The Statistical Development Group supports the Management Board, TDGs and SGs with statistical expertise, especially with respect to planning test programmes and interpretation of test results.

3.3.2. Reference Fuels and Reference Oils Groups (RFG, ROG)

These groups provide expertise and support to TDGs and SGs on the fuels and lubricants used in test development.

3.3.3. Rating Group

This group provides expert advice on rating of key components to all working groups, and ensures that rating is of a consistent and high quality.

3.3.4. Analytical or Bench Test Support Groups

Such a group may be set up by the Management Board, at the request of a TDG if there is a need for a supporting analytical test. The group will be a sub-group of the TDG, but any resulting test method will be published independently of the TDG method.

3.3.5. Special Project and Liaison Groups (SPGs, SLGs)

These groups are established by the Management Board as needed, to undertake specific tasks. SLGs will liaise with external bodies.

More details of Working Groups are given in other Guidelines.

4. Chairmen

Chairmen of Working Groups are chosen by the Group membership and are subject to ratification by the Management Board. They may be appointed by the Management Board. Note – All other officers are appointed by the Group.

Guideline 7

Support Groups

1. The Statistical Development Group (SDG)

1.1. Purpose

To provide expert advice to the Management Board and Working Groups on matters related to the application and development of statistics.

1.2. Membership

Members should possess experience in application of statistics and in the area of performance test development.

1.3. Activity

Activities include (but are not limited to):

- To maintain and update the Statistics Manual on the CEC website.
- To give advice to the Management Board on such issues as the quality of competing bids for business from tendering laboratories.
- To assign “liaison officers” to each TDG and SG. SDG members participate at TDG or SG meetings on request of TDG / SG Chairman. They will advise on the planning of new programmes to ensure robustness and cost-effectiveness. They will also analyse the data from test programmes and ensure that statistical quality standards for repeatability, discrimination and reproducibility are maintained.
- To establish general statistical standards for CEC activity and maintain a watching brief on related external activities.

1.4. Further Information

See the CEC Statistics Manual.

2. The Reference Oils Group (ROG)

2.1. Purpose

To manage the development, production and supply of reference lubricants for use in CEC tests.

2.2. Membership

Members should have experience in the use, development or supply of reference oils.

2.3. Activity

- To maintain and update the CEC Reference Oils Manual on the CEC website in conjunction with the relevant working group chairmen/TDG/SG leaders.
- To assist TDG/SG and Management Board in the selection / preparation of suitable Reference and/or Standardisation Oils.
- To provide stocks of Reference/Standardisation Oils.
- To rationalise the CEC Reference Oils portfolio.
- To support TDG/SG in supply issues: batch size, technical release procedures, and survey of oil analysis data, ensuring batch consistency.

- To support TDG/SG in planning of round robins.

2.4. Further information

See the Reference Oils Manual

3. The Reference Fuels Group (RFG)

3.1. Purpose

To manage the development, manufacture and supply of reference fuels for CEC tests and legislative purposes.

3.2. Membership

Members should have experience in the use, development or supply of reference fuels.

3.3. Activity

- To design new experimentation fuel specifications as requested by the Management Board and CEC Test Development and Surveillance Groups (TDG/SG).
- To arrange for suppliers to hold stocks of the Reference Fuels and make them available for sale.
- To act as a centre of expertise on Test Fuel Quality.
- To support TDG/SG in supply issues: batch size, technical release procedures, survey of fuel analysis data, fuel quality assurance.
- To support SG in planning of round robins.
- To maintain and update the Reference Fuels Manual on the CEC website, containing existing specifications of all Reference Fuels recommended by RFG.
- To undertake specific activities at the request of the CEC Management Board.

3.4 Further information

See the Reference Fuels Manual.

4. The Rating Group

4.1. Purpose

To provide expert advise to the Management Board and Working Groups on rating issues.

4.2. Membership

Members should be expert at rating.

4.3 Activity

- To ensure high and consistent quality of rating measurements in all laboratories running CEC tests.
- To address problems which may arise from e.g. new tests, new components, new or unusual phenomena, and differences in interpretation of written instructions.
- To hold Workshops on specific topics when needed.
- To give advice to individual Working Groups on request.
- To encourage use of global CRC Rating System in ALL development of new CEC Tests requiring parts rating.

5. Analytical and Bench Test Support Groups

5.1. Purpose

To develop new analytical or bench tests when required.

5.2. Membership

Members should have appropriate analytical experience.

5.3. Activity

- Analytical or Bench Test Support Groups shall be established by the Management Board at the request of a TDG or SG that has identified a need for a specific analytical method, which is not currently available.
- The Working Group that they support shall be responsible for the terms of reference of the Analytical or Bench Test Support Group.
- Each Support Group will have its own Group designation and produce its own test procedure.
- The chairmen of Analytical and Bench Test Support Groups will be elected from among the group's membership or nominated by the parent working group, and endorsed by the Management Board.
- Analytical and Bench Test Support Groups will report via the Chairman to the parent group and as requested to the Management Board.

Guideline 8

Special Groups

1. Purpose

Special working groups may be formed at the request of the Management Board. There are currently two types of Special Group:

- Special Project Groups (SPG)
- Special Liaison Groups (SLG)

2. Formation and Closure

Special groups will be of a temporary nature. They will be established and closed by the Management Board.

3. Membership

Group members shall have specialist competence in the area for which the group was established.

4. Funding

The costs shall be met by contributions from participants, either in the form of finance (grants or donations), provision of test facilities or via the contribution of specialised skills.

5. Function and Responsibilities

5.1. Special Project Groups

These groups may handle any task requested by the Management Board, which falls outside the scope of an existing group. The Management Board will set the terms of reference.

5.2. Special Liaison Groups

These groups may be asked to liaise with any external organisations, within or outside Europe, which are engaged on activities, which relate to those of CEC. The Management Board will set the terms of reference.

Guideline 9

The CEC Test Method Development Process

No.	Activity	Who	Action
1.	Request a new test method	Anybody	Submit request using appropriate template-see Guideline 2, Appendix 1.
2.	Review request.	Board	Confirm that need is agreed.
3.	Identify sponsors	Board	See Guideline 13. If group is voluntary go straight to 7
4.	Choose test laboratory	Board	In case of tender, see Guideline 10.
5	Confirm sponsors and obtain letters of intent	Secretariat	See Guideline 13.
6	Form TDG	Board	Convene first meeting. See Guideline 11
7.	Develop phase 1 of the test	TDG	Lab(s) conducts test work. TDG meets regularly to review progress. See Guideline 11.
8.	Complete phase 1 of test development	TDG.	Demonstrate satisfactory repeatability and discrimination. Write up draft test method.
9.	Check and issue draft test method	Secretariat	See Guideline 15.
10.	Sign off Phase 1	Board	Confirm that test meets Contract requirements (if applicable) and CEC standards.
11.	Identify sponsors and funding for Phase 2.	Board	Commission phase 2. See Guideline 13
12.	Develop phase 2 of the test in multiple labs.	TDG	See Procedure 1 (CEC Statistics Manual)
13.	Complete test development in multiple laboratories.	TDG	Meet reproducibility targets. Modify test method if necessary and send to Secretariat for publication.
14.	Sign off TDG and Phase 2	Board with help from SDG	Endorse acceptable reproducibility and accept method for publication.
15.	Identify sponsors and funding for surveillance.	Board	Set up SG and nominate officers.
16.	Maintain test quality.	SG	Run ongoing Round-Robin tests / Test Monitoring. See Procedure 1, Statistics Manual.

Note: At any time during the test development process:

- If consensus cannot be reached, the minority view must be conveyed to the Management Board.
- Changes to tests that have significant cost implications must be referred to the Management Board

Guideline 10

The Tendering Process

No.	Activity	Who	What and How
1.	Develop invitation to tender.	Board plus experts inc. SDG.	<p>The tender document should include:</p> <ul style="list-style-type: none"> Reason for the development Summary of the targets Description of the hardware Availability of hardware Availability of reference fuel Availability of reference oil Objective of development Outline of development Timetable for development Quality targets for Phase I development Additional analyses e.g. used oil analysis A commitment to confidentiality A requirement that the test laboratory to which the tender is awarded agrees to support installation in other laboratories. A requirement that the test laboratories meet current CEC quality standard.
2.	Advertise invitation.	Secretariat	<p>The CEC Secretariat will advise potential laboratories about the issue of the draft tender. Dissemination of this information will be by one or more of the following communication channels:</p> <ul style="list-style-type: none"> Posting on the CEC Website Sending to contacts through the four Industry Associations Sending to all Laboratories who are on the CEC list as interested in developing tests for CEC
3.	Pre-Meeting	Labs wanting to tender, plus experts / Board representatives	<p>The CEC Secretariat will arrange a meeting to discuss the terms of the tender with the aim of making the information as detailed and understandable as possible and the bids as uniform as possible</p>
4.	Distribute tender document	Secretariat	<p>The CEC Secretariat will advise potential laboratories about the issue of the tender and the latest date for bids to be received. Dissemination of this information will be by one or more of the following communication channels:</p> <ul style="list-style-type: none"> Posting on the CEC Website Sending to contacts through the four Industry Associations Sending to all Laboratories who are on the CEC list as interested in developing tests for CEC

5.	Choose test laboratory	Board plus experts	<p>(a) Acceptance. Unless otherwise agreed by the Management Board, the following process will be followed: The Management Board will convene, or experts and Board representatives will meet to examine the bids within 10 working days of the tender deadline The Management Board may, at its discretion and with the bidders' agreement elect to send a technical expert to their laboratory for an on-site assessment If the Management Board requires a laboratory inspection, this will take place within 20 working days of the tender deadline. The Management Board will communicate the result in writing to all bidders. The successful laboratory will be obliged to sign a Letter of Intent (see example in Pro-forma 1).</p> <p>(b) Criteria The Management Board will decide the criteria for each specific development. The criteria may include the following: Ability to deliver project Ability to lead project, chair and manage working group Accreditation to industry and CEC standards Experience with CEC tests Experience with the specific type of test Response to tender document Response to quality/technical questionnaire Potential conflicts of interest. Costs The results of these assessments will be used to assist the Management Board in choosing a laboratory to lead the Test Development Group. In examining and deciding between bids, the Management Board may seek expert advice to assist them. The responses to the questionnaire will provide input to the Management Board to allow them to assess the capability and commitment of the laboratory.</p> <p>(c) Limitations If a Standard Reply Form is enclosed with the tender document, then bids will only be accepted using this format. Bids received after the deadline will be declared invalid. Bids that modify the tender document in any way, for example, the equipment or procedure, will be</p>
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			declared invalid.
6.	Exchange Letters of Intent.	Board and chosen lab.	See draft example in Pro-forma 1.

Guideline 11

Sponsored Test Development and Surveillance Groups (TDGs/SGs)

Objective: To outline the key activities needed to develop a new test.

No.	Activity	Who	What and How
1.	Set Group objective and key test parameters	Management Board	e.g. “Develop a test to measure ring sticking and bore polishing in modern European heavy-duty diesel engines”
2.	Agree TDG Phase 1 membership and funding.	Management Board	See Guideline 10 if tendering is required and Guideline 13. Organise first meeting.
3.	Elect a Chairman	TDG-MB	TDG propose with ratification by Management Board, or Management Board appoint.
4.	Establish operating conditions	TDG	If not defined: (a) choose type of hardware (b) choose initial operating conditions (c) agree key variables to be measured (d) agree items to be measured, tightly controlled, e.g. piston rings (e) choose reference fuel(s) and lubricant(s).
5.	Set up hardware and check feasibility	Lab	Lab. sets up hardware and runs first tests. Revise procedure as needed.
6.	Test discrimination	TDG/Lab	Run appropriately chosen reference products with “good” and “bad” field performance to establish discrimination. Revise procedure if needed.
7.	Test repeatability	TDG/Lab	Run repeat tests at different quality levels to ensure adequate repeatability. Revise procedure if needed.
8.	Demonstrate acceptable precision	TDG/SDG	Design and run a test procedure to demonstrate acceptable repeatability and discrimination.
9.	Write up draft test method	TDG	Obtain standard template from CEC Secretariat.
10	Phase 1 completion	TDG/ Management Board	TDG requests endorsement from Management Board of acceptable completion of Phase 1. The Management Board must respond within four weeks.
11.	Start Phase 2	Management Board	It may be possible to accept a test from an external source at this stage if Phase 1 targets have been demonstrated. See Guideline 10 if tendering is required and

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			Guideline 13.
12.	Consider changes to membership and funding	Management Board	See Guideline 10 if tendering is required and Guideline 13.
13.	Chairmanship	TDG – MB	Reconfirm or change
14.	Prepare for multiple testing	TDG/Labs	Distribute test procedure and set up hardware in participating labs.
15.	Trial runs	Labs	Run tests in new labs to establish familiarity with equipment and procedures. Modify equipment as needed.
16.	Establish reproducibility	TDG/SDG	Develop and run reproducibility test programme. Evaluate results and rework if needed.
17.	Modify Test Method	TDG/Labs	Modify TM if necessary and send to Secretariat for publication.
18.	Phase 2 completion	TDG/ Management Board	Submit method to Management Board for approval.
19.	Close TDG	Management Board	
20.	Set up Surveillance Group.	Management Board	A Surveillance Group is established when a Test Development Group has developed and published a CEC Test Method. All TDG Members may join SG, even if they are not running the test.
21	Choose Chairman	SG/ Management Board	The choice needs to be ratified by the Management Board.
22	If required, establish funding for improvements to test	SG	May come from SG members or from sales of sponsored test procedures instead of returning funds to original sponsors. All sponsors to agree in writing. New tests developed in TDGs created after 1Jul08 surplus funds will remain in CEC.
23	If required, propose best lab to run additional tests / issue tender and/or workplan	SG (Management Board)	Board to be kept informed of process, price, payment terms before work commences. Depending on the number of tests and costs involved, the Management Board may recommend a tender process, or SG may decide on tender process anyway
24	Maintain test quality	SG	Run round-robin test programmes / test monitoring at agreed intervals and in accordance with guidance from SDG. Report results to Management Board. See Procedure 1 (CEC Statistics Manual) for details.

25	Close SG	Management Board	The SG would usually only be closed if the test procedure has been declared obsolete or otherwise unfit for purpose.
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Note 1:

The above table does not attempt to give details of all activities of a Test Development or Surveillance Group but merely outlines typical key steps.

Note 2:

TDGs will be required to submit Progress Reports at six monthly or other intervals as required by the Management Board.
 SGs will be required to submit an annual Progress Report or more frequently as required by the Management Board.
 See Pro-forma 6 for details of format and contents of Progress Reports.

Note 3:

When the test is fully accepted into CEC, the CEC Secretariat will send an email to all TDG members along the following lines:

Quote

Gentlemen,
 I can now confirm, on behalf of the CEC Management Board, that theTest, using the engine, is formally accepted into CEC. The test designation will be CEC

The CEC Secretariat is in receipt of the test method and is currently checking it and making formatting changes. It will then be passed to the CEC Chairman for approval to publish. Once the test method is published, other companies will be able to purchase a licence to access and use the test and to join SG-..... The cost will be Euro

Please refer to Guideline 18 part 5 regarding the validity of CEC candidate test results.

TDG-..... Group becomes a Surveillance Group – SG-.....– with immediate effect.

Unquote

Note 4:

If running candidate tests before the test method has been approved by the CEC Management Board the conditions of Guideline 18.5 will apply. CEC accepts no responsibility for any liability if reference oil and candidate tests are declared invalid during the subsequent setting of the acceptance limits for the reference oils.

Guideline 12

Voluntary Test Development and Surveillance Groups (TDGs/SGs)

1. Objective

To explain the operation of Voluntary Test Development and Surveillance Groups.

2. Background

Prior to 2001, all CEC development activity was “Voluntary” in that individual companies made contributions as they thought fit when joining a TDG/SG. Since the restructuring of CEC, new test development activity has been “Sponsored” by individual companies agreeing to commit funds in advance. However some voluntary groups have continued from the “old” CEC and it may be appropriate for new voluntary groups to be set up in the future.

3. Differences from Sponsored Groups

In general, Voluntary Groups will follow the same procedures as outlined in Guideline 11 for Sponsored Groups. The decision to form the Group will be made by the Management Board. The key difference is that financing of test development will be entirely a responsibility of the Group itself. Costs and workload need not be spread equally amongst members. However all members of a Voluntary Group must contribute to the working of the Group.

Guideline 13

Sponsorship and Funding of CEC Test Method Development

1. The Process

A CEC test may be developed from start to finish within CEC, or may be incorporated into the CEC system in a partially developed state.

A test may be proposed by anybody.

For a development requiring funding a “Letter of Invitation to Sponsor” will be issued describing:

- The Development Requirement
- The Development Timing and best estimate of costs.
- The mechanism for sharing costs.
- The deadline for responses.

At the end of Phase 1 sponsors and funding are reconfirmed or modified for Phase 2. Following successful completion of the test, a Surveillance Group will be established.

2. Ownership

CEC is the owner of the Test Method

3. Financial Contributions

The CEC Management Board will decide, on a case-by-case basis, the funding mechanism for each new TDG and SG. A test programme will be designed with the help of SDG on which the total funding will be based. Sponsoring companies or organisations will usually share development costs equally between them. Any sponsorship funds remaining at the end of a test development will be returned in equal parts to those sponsors who originally paid them. Alternatively, whenever the requirements of the terms of reference are not met, additional funding may be required from the sponsors. The outstanding test programme will be defined by the SDG representative in the group. The additional funds will be equally paid by all sponsors. In case a sponsor decides not to pay his share, his membership to the group will be terminated. If, after the test method has become available as a CEC method, this sponsor wants to purchase the test, then the sponsor contribution already paid will be subtracted from the normal purchasing price of this test method.

4. Representation

Each Sponsoring Company shall send a suitably qualified representative to attend TDG/SG meetings.

5. Joining a TDG During the Test Development

The absolute deadline for commitment to Sponsor is the day prior to the first meeting of the new Group. After this time, no further applications to join a TDG will be considered until Phase 1 repeatability is completed.

A new sponsor may be accepted to join the Group at the beginning of Phase 2 (reproducibility) at a sponsorship cost and with terms equal to that of buying the completed Test Method within the first two years of test development completion (See Guideline 17, section 2.1.)

In exceptional circumstances, all sponsors may be required to provide further funding at the beginning of Phase 2. Any new sponsor joining at this stage will be required to pay this additional charge as well.

6. Installation of Test at Sponsor's Laboratory.

The development laboratory is obliged to assist all TDG members in the setting up of the Test in their nominated laboratory under mutually agreed conditions. This would usually take the form of free advice around Group meetings or by telephone. If a sponsoring laboratory required a visit from the developing laboratory, then a consultancy rate and travel costs would be applicable and would be arranged directly between participants under mutually agreed conditions.

If a Sponsor does not have its own laboratory facilities, it is permitted to install a test stand at another laboratory that is not a sponsor / member of the Group, **provided that the test stand is for the exclusive use of the Sponsor**. In addition, the laboratory employed to install the test stand can also represent their client (the sponsoring company) in the Working Group on a consultancy basis, if required. Note that the rules for claiming a 'CEC Result', as defined in Guideline 18, still apply.

7. Licence to Use

CEC will own all intellectual property rights in respect of the test and it has the sole right to publish and grant licences. Members of sponsored groups (including those companies joining the Group and buying access to the Test Method at the Surveillance Group stage) will be granted a licence. This licence may be extended to their affiliates, upon application to the CEC Secretariat. Once the Test Method is published, any company may buy a licence, whether an original sponsor or not.

8. Applicable Law

English Law shall apply and any disputes or claims shall be subject to the non-exclusive jurisdiction of the High Court of Justice in England.

Guideline 14

CEC Test Methods - the Basics

1. Definitions

1.1. Test Methods

These are test procedures run in specified engines, transmissions, rigs or other apparatus under specified operating conditions, for the evaluation of the performance of transportation lubricants, fuels and other fluids.

1.2. Codes of Practice

These are procedures specified in such a way that they can be adapted and applied to any of a range of engines, transmissions, or other equipment for the evaluation of the performance of transportation lubricants, fuels and other fluids.

1.3. Phases of Test Development

Phase 1 is development until repeatability and discrimination are satisfactory and a draft method has been produced in CEC format. Phase 2 includes demonstration of acceptable reproducibility and the establishment of a precision statement. It leads to test method publication.

1.4. Draft Test Method

A method produced at the end of Phase 1 of Test Development. It should be endorsed by the Chairman of the TDG and by the Management Board. It will be available for internal use within the TDG. It will not have CEC coding (see 3 below).

1.5. Published Test Method

A method approved by the Management Board on completion of test development (end of Phase 2). It is given CEC coding and is available to sponsors and for sale to others, under defined conditions.

2. Layout

The standard template for test method publication is available from the CEC Secretariat and must be used to ensure consistency of presentation.

3. Nomenclature

CEC test procedures are codified according to the following system:

i) the **CEC** initials.

ii) a letter indicating the field of application or the nature of the standard:

L indicates a Test Method for lubricants.

F indicates a Test Method for fuels.

M indicates a Code of Practice.

A indicates the specification of any laboratory apparatus that the CEC has developed in relation to test procedures.

P indicates general publications.

- iii) two digits indicating the CEC Working Group number
- iv) two figures indicating the year of approval by the Management Board.
e.g. **CEC L-99-03**

Modifications to the test procedure will be identified by an issue number for the test method. See Guideline 16.

4. Validity

Test Methods and Test Method updates (see Guidelines 15 and 16) become valid on the release date issued by the CEC Secretariat. Test methods may be updated periodically and a current list is maintained on the CEC website

5. Copyright.

All published CEC documents are covered by the law of copyright. See Guideline 15 for more information.

6. Performance Criteria

The Test Method defines the requirements for each performance criterion. Each Test Method includes a precision statement in Section 11 and a quality checklist in Section 13. This checklist defines the quality and set-up requirements for the test.

7. Publication

See Guideline 15 for more information.

8. Reference Fluids

New test developments require reference fuels and/or lubricants. Current specification data on reference fluids is available on the CEC Web-Site.

9. Criteria for Claiming a CEC Test Result

The Testing Laboratory **MUST** meet all of the following criteria:

- be a member of the relevant CEC Working Group.
- meet CEC quality requirements, as specified in Guideline 18
- meet the requirements of the test procedure.
- meet the control limits as developed by the CEC Surveillance Group.

Guideline 15

Publication of Test Methods, Codes of Practice and Technical Papers

1. Requirements for Publication of a Test Method

Official publication of a CEC Test Method requires the author or the TDG / SG Chairman to send electronically to the CEC Secretariat the complete Test Method in CEC format together with all Appendices, Attachments, Tables and Photographs, which must be listed in the contents page of the relevant section.

2. Approval and Publication of Test Methods

There are 3 key steps to the approval and publication of a CEC Test Method.

- All technical / procedural content is the responsibility of the TDG/SG. The front page of sections 2 –14 must be signed as approved by the TDG / SG Chairman, prior to submission to the Management Board for approval and publication.
- The Management Board Chairman will check for compliance with CECs publication requirements. If acceptable, he will sign-off the document on the front page of Section 1.
- The CEC Secretariat will then assign an Official Release Date and make the Test Method available to authorised users on the CEC website.

A summary of Test Methods will be made available on the website.

3. Distribution

Distribution will be determined according to Test Development Group / Surveillance Group (TDG/SG) structure and funding model as per Guideline 17.

Access to Test Methods published on the CEC website will be free of charge to Surveillance Group members. Before giving access, the CEC Secretariat will require the SG Chairman to provide a list of bona-fide members of the Group.

4. Registration of Holders

Guideline 14 gives information about the test method coding system, format, registration and the requirements and obligations on the test method user for generating bona fide CEC test results. Guideline 1 gives contact details for the CEC Secretariat.

The Registration Form (Pro-forma 5) is for completion by the Company's Official Holder of the test method. This will ensure that the Official Holder receives notification of all updates.

5. Codes of Practice and Other CEC Publications

Codes of Practice and other CEC Publications need not follow the rigorous style requirements of CEC Test Methods. Format and layout should follow that of existing examples where possible or that of best industry practice. Drafts should be submitted to the Secretariat in suitable electronic format. Approval and publication will follow the same process as for Test Methods, except that there is no requirement for signature from the Group Chairman, and there is no formal requirement for updating.

6. Technical Papers and Presentations

The CEC Management Board welcomes the presentation of Technical Papers and / or Presentations by Working Groups at appropriate conferences or seminars anywhere in the world. Both the abstract and paper must be approved in advance by the Management Board who will consider the appropriateness of the sponsors, timing and location of the event and well as the quality of the paper.

External Technical Papers and Presentations made on behalf of CEC must exclude member company logos. The CEC logo should be added, if permitted by the organiser of the conference or seminar.

Contribution towards expenses will be considered on a case-by-case basis, but as a general rule CEC would contribute towards costs of producing the paper in acceptable format, but not towards travelling costs of presenters.

7. Copyright of CEC Publications

All published CEC documents are covered by the law of copyright.

A company, having purchased access to a Test Method on the CEC Web Site, is entitled to take paper or electronic copies for internal company use, but copyright law does not allow the distribution or sale of copies to third parties.

Access to Test Methods on the Web Site is via a personal CEC Username and Password. The CEC Secretariat issues this to an 'Official Holder' appointed by the purchasing company. The Official Holder's personal CEC Username and Password shall not be made available to anyone else.

The Official Holder is kept informed by email of all updates to the Test Method Master Copy on the CEC Web-Site. The Official Holder is then responsible for updating any copies distributed for internal company use

Note: Sponsored Groups

Access to a CEC Test Method developed by a closed group of sponsors is covered in Guideline 13, part 7, where a licence to use the Test is given upon application to the CEC Secretariat.

Note: Voluntary Groups

Access to a CEC Test Method developed by a voluntary group is free of charge to an existing Group member if it is electronically available on the CEC Web Site. New Members to an existing voluntary Surveillance Group must purchase access to the electronic Test Method before joining. If it is an old Test Method, only available in paper format, it must be purchased by all Members. Whether electronic or paper, these CEC Test Methods must be purchased for EACH company site.

8. Disclaimer

CEC Test Methods, Codes of Practice and all its other publications do not purport to address all of the safety concerns, if any, associated with their use. It is the responsibility of the user to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

Guideline 16

Revision of Test Methods

1. Summary of Activity

	Activity	Who	What and How
1	Nominate Author	TDG/SG	Choose someone within Group to be responsible for written Test Method
2	Propose update	TDG/SG	Agree technical need and wording
3	Prepare in correct format	Author	See Guideline 14, clause 2 for layout and Guideline 15, clause 1 for other requirements
4	Approve	Group Chairman	Sign front page of revised sections 2-14
5	Send to Secretariat	Author	See Guideline 15, clause 1. Secretariat will pass to Board Chairman.
6	Approve	Board Chairman	Check for Quality Compliance and if OK, sign front page of Section 1.
7	Assign release date	Secretariat	Advise date to Group Chairman.
8	Publish revised method	Secretariat	

2. Notes

To avoid delay, the TDG/SG may implement the improvements in the revised Test Method, prior to publication, providing that:

- The revisions have been fully documented in the Minutes of a TDG/SG meeting.
- The CEC Secretariat has been advised to expect modifications.

3. Normal Updates

For each update Section 1’s issue number will be increased by one whole number. Revised sections 2 – 14 will have their revision number increased by one whole number.

4. Minor Updates

In instances where a TDG/SG wishes to make revisions that would not significantly affect test severity, a system of decimalised issue numbers for Section 1 will be used. Section 1’s issue number will be increased by point one (e.g. 2.1, 2.2, 2.3.).

The decimalised Section 1 issue number indicates that sets of results obtained from methods with the same whole issue number (e.g. 2.0, 2.1, 2.2), are comparable. Revisions to Sections 2-14 will still have their revision number increased to the next whole number.

Guideline 17

Sales of CEC Test Methods

1. General

This Guideline covers the sale of test methods to parties who have not participated in the test development and deals with the provision of data and support to these parties to the same level as that provided to the original participants. This will enable purchasers of the test method to install and run the test.

CECs' overall policy is to encourage the adoption and use of test methods as widely as possible. The guidelines herein are designed to encourage participation at the first stage of development to maximise the chance of success, but also to ensure that parties wishing to purchase later are not disadvantaged.

All income from CEC test methods will be retained by CEC in a development fund, which may be used for further test developments and / or as a contribution to CEC running costs.

There may be cases that fall outside these rules. The Management Board will review them on a case-by-case basis.

2. Calculation of Selling Price

2.1. For a Test Method Developed by a Sponsored Group

CEC will establish the cost that has been incurred by an individual sponsor or voluntary working group member based on the total development expenditure to date.

Parties wishing to purchase a method within two years of the test development completion will pay CEC the original sponsor's share plus a premium of 10 percent. This premium recognises the risk element taken by the original contributors.

Parties wishing to purchase a method after 2 years from development completion will pay CEC on the following sliding scale:

Year 3: Original sponsor share cost.

Year 4: Original sponsor share cost, less 20 percent.

Year 5 and beyond: Original sponsor share cost, less 50 percent.

These arrangements will be subject to Management Board review.

NOTE:

'Test Development Completion' is defined as the date on which the Management Board agreed that the test development had been successfully completed.

2.2. For a Test Method Developed by a Voluntary Group

The CEC Management Board will establish a base value for the sale of test methods produced by these Groups, taking into consideration any suggestions made by each

Group upon test development completion. The Management Board will review prices for all current Test Methods produced by voluntary groups as required.

A Company wishing to join an existing Voluntary Surveillance Group, without previously having contributed to the development of the test, will be obliged to purchase access to the Test Method on the CEC Web Site, before becoming a member and participating in Working Group meetings.

Guideline 18

Quality Standards for Test Laboratories

1. Objectives

- To ensure the standards of excellence of CEC tests.
- To ensure that data are reliable and of high quality.
- To ensure that laboratories are contributing effectively.
- To promote CEC as a benchmark for excellence.

2. Introduction

CEC Test Methods are developed to the highest levels of quality in accordance with the quality principles specified in the current CEC Constitution.

The CEC Management Board may instruct a third party through the Secretariat to visit laboratories, meet key personnel and examine test facilities, accreditation, documentation, procedures, results and statistics.

3. The Development Process

The stages of test development are described in Guideline 14.

4. Acceptance Requirements

A valid CEC Test Result requires that the Testing Laboratory comply with CECs' Quality Requirements as defined below:

Type of Test	Internationally recognised Quality Management System (e.g. ISO9001, QS9000, ISO/TS 16949)	ISO 17025	ERC Database or CEC Test Monitoring Database (as appropriate)	CEC WG Membership
Engine & Transmission Tests (Performance Claims)	YES	YES	YES	FULL (1)
Bench Tests (Performance Claims)	YES	YES	YES	FULL (1)
Bench Tests & Transmission Tests (Quality Monitoring)	YES	NO	YES	OTHER (2)

(1) Full Membership requires attendance at Working Group meetings.

- (2) If membership of a Working Group is for Quality Monitoring purposes only, a member will be defined as a 'Corresponding Member' only. This means participation in the form of regular submissions of reference data to the test monitoring system, but no necessity to attend Working Group meetings.

Laboratories not meeting these requirements have to state this clearly on the first page of the Test Report as:

“THE TEST RESULTS CONTAINED IN THIS REPORT WERE NOT ACHIEVED UNDER THE CONTROL OF THE CEC QUALITY PROCESS”

Explanation of the Quality Control Process used for any test carried out using this Test Method should be included in the Test Report.

NB: * Where ISO 17025 is required, a Laboratory must achieve this accreditation within 12 months after set-up of the corresponding Surveillance Group by the Management Board. Only accredited laboratories can generate a “*CEC result*”.

CEC understands that there may be several business reasons for running these tests with an alternative method of accreditation or assurance.

The laboratories will be responsible for assuring the repeatability and discrimination (for instance with a history of testing their own products). **However, they will not be able to generate a ‘CEC result’.**

5. Validity of CEC Candidate Test Results

In principle valid CEC candidate test results can only be obtained after the test method is approved and published on the CEC website. The reference test results which are included in the statistical data supporting the approval of the test shall be considered as the first results in the test referencing and laboratory/stand approval process as set out in section 11 of the test method. Once the test acceptance limits and laboratory acceptance rules are set, they shall be applied retrospectively to the aforementioned reference test results (and any subsequent tests on the same reference fluids). If a laboratory/stand is retrospectively found to be “out of control” when these limits are applied, then the lab must run the necessary reference tests to get back “in control” before running further candidates. If there is more than one reference fluid, it is normally necessary to be in control for each individual fluid, in order to obtain valid candidate results.

Laboratories should be aware that until the method becomes approved, any candidate testing is done at their own risk. A test run before the test method is approved and published, can become a valid CEC candidate test provided that when laboratory acceptance rules and thereafter control chart acceptance rules are retrospectively applied, the laboratory is found to be in control immediately prior to the aforementioned candidate test. In particular, candidate tests will not be considered valid if the last reference test(s) before the candidate test are outside the acceptance limits, or if the number of candidate tests or elapsed time since the last reference exceeds the permitted maximum.

6. Monitoring Process.

Test laboratories must monitor and maintain a statistical control record of their reference tests to assist both the laboratory and the working groups to maintain test stability. From June 1st 2006 a web-based Test Monitoring system for reference results is being introduced by the CEC Management Board. This will be phased in for all CEC¹ tests. It is a requirement for working groups to input reference data into this system, when it becomes available.

All concerns and divergences must be analysed and resolved. A surveillance group chairman will require participating laboratories to report on divergences and take appropriate action.

A SG will monitor the performance of Individual laboratories, and, if there are major concerns the SG chairman will inform the Management Board. The Management Board will request a report from the relevant working groups, and may request that a technical expert be appointed to visit the laboratory.

7. Conformance of Candidate and Reference Tests with the Method

Engine tests are complex and costly and their proper operation in full compliance with the test procedure is fundamental to the assessment of product quality.

Historically, procedural compliance has been assessed by monitoring the level of selected parameters at defined intervals and then reporting the mean, max, min and standard deviations for each parameter determined over the entire test. The values are then assessed, perhaps relative to the scale of the test's alarm limits, and a judgement made about the validity of the test.

As the sophistication of computer control and logging systems has increased, alternative conformance techniques have become feasible and the Management Board now favour the Quality Index technique for all new engine tests being developed within CEC. The QI method is favoured because:

- it encourages alignment with set point values
- individual QI values can be used to compare the operation of tests run on the same stand, different stands and different laboratories
- it quantifies procedural alignment
- it can be used to stimulate discussion within Surveillance Groups
- it encourages improvements in test quality

The technique is motivated and detailed in this presentation



Quality_Index_Scheme_Generic.pptx

and evaluates:

Note 1. Excluding those CEC engine tests included in ACEA sequences, which are monitored by the European Registration Centre (ERC) database.

$$QI = 1 - \frac{1}{n} \sum_{i=1}^n \left\{ \frac{U + L - 2X_i}{U - L} \right\}^2$$

$X_i = \text{Current_Value}$

$U = \text{Upper_control_value}$

$L = \text{Lower_control_value}$

$n = \text{number_of_measurements}$

for each critical parameter throughout the test. Values of U and L are assigned following a discussion within the Surveillance Group and set at a level which gives a QI = 0 for a marginally acceptable test, thus reserving the range 0<QI<1 for wholly acceptable tests and QI<0 for tests which conform less well with the procedure.

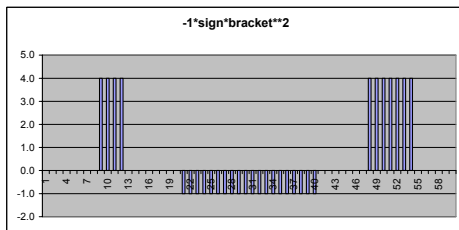
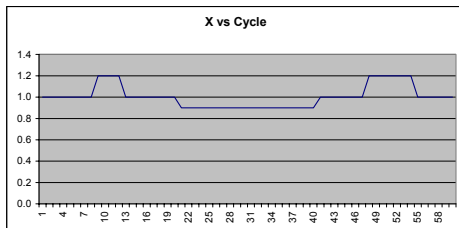
The Management Board expect each test report to contain plots of:

- point values of each variable relative to its set point and control values
- squared deviation from set point
- cumulative QI values

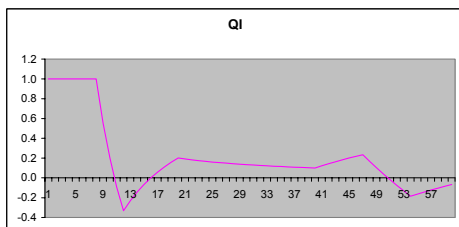
for each of the test's critical variables as outlined below.

EOT QI = -0.08

End of test QI value for X



Squared deviation from set point
Highlights where the major contributions to QI occur



QI = cumulative normalised mean square deviation from the set point
Depicts how QI evolves over the whole test

Guideline 19

Use of Statistics within CEC

1. Background

When the Protocols (now Guidelines) were revised in 2004, it was felt that some of those dealing with the activities of the Statistical Development Group and statistical applications in general were too detailed to fit comfortably with the other Protocols. It was decided that all Protocols relating primarily to statistical issues should be reproduced as Procedures in a Statistics Manual to be managed and updated by the Statistical Development Group. In terms of the working practises of CEC, the material in the Statistics Manual will continue to carry the same weight as the Guidelines.

2. Procedures Managed by the Statistical Development Group

Procedure 1 – Round Robins.

This describes the purpose, design, conduct and statistical analysis of round robin programmes. These are used to determine the precision and severity of test methods and the performance of reference oil/fuel batches.

Procedure 2 - Working Group Test Monitoring Systems.

This procedure describes how Test Monitoring Systems are managed within CEC.

Procedure 3 - Statistical Requirements for CEC Test Methods.

CEC requires that all test methods are fit for their intended purpose, as defined by the Management Board. These procedures shall be used to set precision targets, and demonstrate that the targets have been met.

Procedure 4 - CEC Test Methods - The Use of Precision Statistics.

This explains how the precision statements contained in CEC Test Methods can be applied.

3. Future Developments

The Statistical Development Group is empowered to propose amendments to these Procedures, as well as to add new Procedures within the Statistics Manual, if deemed necessary. The Management Board must approve any amendments or additions to the Statistics Manual.

Proforma 1
Revision 10 – May 2010

Example Letter of Intent for Test Development Laboratories
Letter of Intent between CEC and Laboratory X (Name and Address) for the
Development of Test Y (Full Title of Test)
And General Terms and Conditions for the Test Development

This Letter of Intent commits Laboratory X (Name and Address) to develop Test Y (Full Title of Test) against the CEC requirements as defined in Tender Document ZZZ dated dd/mm/yy. Acceptance of the Letter of Intent by both parties recognizes the need for trust, good faith and reasonableness between both parties in a process where unforeseen circumstances may arise, despite the best endeavours and efforts of both parties.

CEC requires Laboratory X and Laboratory X agrees to:

- (a) Develop Test Y (Full Title of Test) to the requirements agreed in TDG 999 and make all reasonable efforts to complete the development to the agreed timetable and within the agreed budget.
- (b) Commence the development work as soon as the appropriate hardware and fluids are on site and the principles and procedures have been agreed in the TDG.
- (c) Avoid additional work or material deviations unless agreed by the TDG and costed proposals approved by the CEC Management Board.
- (d) The test development contract may not be assigned, nor the work sub-contracted.
- (e) Conduct the work and report progress and results to the CEC Management Board as defined in the relevant Guidelines at all times respecting confidentiality.
- (f) Provide assistance to other TDG members wishing to install the test.
- (g) Maintain confidential to CEC and the test sponsors all information relating to the test development.
- (h) Become a Sponsor of the Test.

CEC will arrange payment to Laboratory X according to an agreed payment schedule.

NOTES:

- 1) Decisions will be taken in accordance with Guideline 4 of the CEC Constitution.
- 2) The test development shall not be considered complete until formally confirmed by the CEC Board. If for any reason a test cannot be developed, CEC shall only be obliged to pay for work completed to that point.
- 3) CEC reserves the right to terminate the contract if the Test Laboratory is in breach of its obligations.
- 4) The Test Laboratory shall be responsible for any damage to motors, transmissions and other test objects, as well as injury or death to any person working on or visiting the test development and must secure suitable insurance to cover these risks.
- 5) Claims for warranty damage and other compensation by CEC shall lapse 6 years after the test development is completed in line with the statutory limitation period under English Law.
- 6) CEC will be the owner of Test Method Y and have sole rights of publication.
- 7) English Law shall govern this contract, under the exclusive jurisdiction of the English Courts.

Signed on Behalf of Laboratory X Name and Address:

(Authorised Signatory).....

Print Name Date of Signature

Signed on Behalf of CEC
(Chairman)

Print NameDate of Signature

Proforma 2
Revision 10 – May 2010

**Examples of Letters of Intent for Sponsors at Different Stages of CEC
Test Development Groups**

**Letter of Intent between Co-ordinating European Council (CEC) having its
Registered Office at Bd. du Souverain, B-1160 Brussels, Belgium and
Sponsor Z Name and Full Registered Address to fund the Development of Test Y
(Full Title of Test) at the beginning of Phase 1**

CEC has signed a Letter of Intent with Laboratory X (Full Name and Address) to develop Test Y (Full Title of Test) in response to a needs statement agreed by the relevant industry associations. Copies of the needs statement and the Letter of Intent are attached as Attachments 1 and 2 respectively.

CEC now seeks Sponsors to fund the development and the covering letter gives details of the financial arrangements

This Letter of Intent commits Sponsor Z Name and Address to part fund the Development of Test Y. On receipt by CEC of the signed Letter of Intent and payment of the agreed sponsorship funds Sponsor Z Name will become a member of TDG 999 and participate in the test development under the terms of the appropriate CEC Guidelines governing the conduct of the development, the commitment to Confidentiality, and the rights granted to the sponsor.

Acceptance of the Letter of Intent by all parties recognizes the need for trust, good faith and reasonableness between both parties in a process where unforeseen circumstances may arise despite the best endeavours and efforts of either party. Both parties understand that decisions will be taken in accordance with Guideline 4 part 4, sub-section 4.1 of the CEC Constitution.

CEC requires Sponsor Z Name and Sponsor Z Name agrees to:

Commit to be a sponsor by signing this Letter of Intent and returning it to CEC

Promptly pay CEC their sponsorship share of Euro XXX (plus VAT and other duties if required), when invoiced by CEC.

Participate and contribute to the development by regular attendance at TDG meetings.

Operate within the TDG according to the CEC Guidelines.

CEC will own the developed method and have the sole right of publication of the method. Sponsors will have full rights to install and use the method according to CEC Guideline 13. A licence to use the test will also be given to Sponsors affiliates upon application to the CEC Secretariat, once the test is developed and approved by the CEC Management Board. In addition, Sponsors affiliates will be permitted to join the Surveillance Group that looks after the test, after it is developed.

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If running candidate tests before the test method has been approved by the CEC Management Board the conditions of Guideline 18.5 will apply. CEC accepts no responsibility for any liability if reference oil and candidate tests are declared invalid during the subsequent setting of the acceptance limits for the reference oils.

The protocols and procedures used in the test development do not purport to address all of the safety concerns, if any, associated with the test development or any resulting test method. It is the responsibility of the participant of this test development, and all subsequent users of any test method, to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

For the purposes of the Contracts (Rights of Third Parties) Act 1999 the directors of CEC and those acting under contract with CEC, on the CEC Management Board's behalf, and only those parties, shall be deemed to be third party beneficiaries hereunder.

The CEC takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this test development. Participants of this test development are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

Signed on behalf of Sponsor Z Name and Address:
(Authorised signatory)

Print Name Date of Signature:

Signed on behalf of CEC:
(Chairman)

Print Name Date of Signature:

Letter of Intent between Co-ordinating European Council (CEC) having its Registered Office at Bd. du Souverain, B-1160 Brussels, Belgium and Sponsor Z Name and Full Registered address to fund the continuation of a partially developed test (partially developed outside CEC)

CEC has agreed to take on the development of the XYZ test (Full Title of Test) in response to a needs statement agreed by the relevant industry associations. Copies of the Terms of Reference are attached.

You have provided an email indicating a firm commitment to become a Sponsor to fund this development and to promptly pay the sponsorship funds. This amounts to EURO XXX per sponsor.

This letter of Intent commits Sponsor Z Name and Address to part fund the continued Development of a XYZ Test (Full Title of Test). On receipt by CEC of the signed Letter of Intent and payment of the agreed sponsorship funds, Sponsor Z Name and Address will become a member of TDG-X-YYY and participate in the test development under the terms of the appropriate CEC Guidelines governing the conduct of the development, the commitment to Confidentiality, and the rights granted to the sponsor.

Acceptance of the Letter of Intent by all parties recognizes the need for trust, good faith and reasonableness between both parties, in a process where unforeseen circumstances may arise despite the best endeavours and efforts of either party. Both parties understand that decisions will be taken in accordance with Guideline 4 part 4, sub-section 4.1 of the CEC Constitution.

CEC requires Sponsor Z Name and Address and Sponsor Z Name and Address agrees to:

Commit to be a sponsor by signing this Letter of Intent and returning it to CEC.

If installing the test at your facility, once the test is accepted by the CEC Board, running the required reference tests and submitting data to the group.

Promptly pay CEC their sponsorship share of Euro XXX (plus VAT and other duties if required), when invoiced by CEC.

Participate and contribute to the development by regular attendance at TDG meetings.

Operate within the TDG according to the CEC Guidelines.

CEC will own the developed method and have the sole right of publication of the method. Sponsors will have full rights to install and use the method according to CEC Guideline 13. A licence to use the test will also be given to Sponsors affiliates upon application to the CEC Secretariat, once the test is developed and approved by the CEC Management Board. In addition, Sponsors affiliates will be permitted to join the Surveillance Group that looks after the test, after it is developed.

If running candidate tests before the test method has been approved by the CEC Management Board the conditions of Guideline 18.5 will apply. CEC accepts no

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responsibility for any liability if reference oil and candidate tests are declared invalid during the subsequent setting of the acceptance limits for the reference oils.

The protocols and procedures used in the test development do not purport to address all of the safety concerns, if any, associated with the test development or any resulting test method. It is the responsibility of the participant of this test development, and all subsequent users of any test method, to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

For the purposes of the Contracts (Rights of Third Parties) Act 1999 the directors of CEC and those acting under contract with CEC, on the CEC Management Board's behalf, and only those parties, shall be deemed to be third party beneficiaries hereunder.

The CEC takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this test development. Participants of this test development are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

Signed on behalf of Sponsor Z Name and Address:
(Authorised signatory)

Print Name Date of Signature:

Signed on behalf of CEC:
(Chairman)

Print Name Date of Signature:

Letter of Intent between Co-ordinating European Council (CEC) having its Registered Office at Bd. du Souverain, B-1160 Brussels, Belgium and Sponsor Z Name and Full Registered address to join a partially developed Test without further funding (partially developed outside CEC).

CEC has agreed to continue the development of the XYZ test (Full Title of Test) in response to a needs statement agreed by the relevant industry associations. Copies of the Terms of Reference are attached. As a member of the original Industry Group that, independently from CEC, commenced development of this test, you are entitled to membership of the CEC Working Group TDG-X-YYY.

On receipt of the signed Letter of Intent, Sponsor Z (Full Name and Address) will become a member of TDG-X-YYY and participate in the test development under the terms of the appropriate CEC Guidelines governing the conduct of the development, the commitment to Confidentiality, and the rights granted to the sponsor.

Acceptance of the Letter of Intent by all parties recognizes the need for trust, good faith and reasonableness between both parties, in a process where unforeseen circumstances may arise despite the best endeavours and efforts of either party. Both parties understand that decisions will be taken in accordance with Guideline 4 part 4, sub-section 4.1 of the CEC Constitution.

CEC requires Sponsor Z Name and Address and Sponsor Z Name and agrees to:

Commit to be a sponsor / member of this Group by signing this Letter of Intent and returning it to CEC

Participate and contribute to the development by regular attendance at TDG meetings.

Operate within the TDG according to the CEC Guidelines.

CEC will own the developed method and have the sole right of publication of the method. Sponsors will have full rights to install and use the method according to CEC Guideline 13. A licence to use the test will also be given to Sponsors affiliates upon application to the CEC Secretariat, once the test is developed and approved by the CEC Management Board. In addition, Sponsors affiliates will be permitted to join the Surveillance Group that looks after the test, after it is developed.

If running candidate tests before the test method has been approved by the CEC Management Board the conditions of Guideline 18.5 will apply. CEC accepts no responsibility for any liability if reference oil and candidate tests are declared invalid during the subsequent setting of the acceptance limits for the reference oils.

The protocols and procedures used in the test development do not purport to address all of the safety concerns, if any, associated with the test development or any resulting test method. It is the responsibility of the participant of this test development, and all subsequent users of any test method, to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

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For the purposes of the Contracts (Rights of Third Parties) Act 1999 the directors of CEC and those acting under contract with CEC, on the CEC Management Board's behalf, and only those parties, shall be deemed to be third party beneficiaries hereunder.

The CEC takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this test development. Participants of this test development are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

Signed on behalf of Sponsor Z Name and Address:
(Authorised signatory)

Print Name Date of Signature:

Signed on behalf of CEC:
(Chairman)

Print Name Date of Signature:

Additional Letter of Intent between Co-ordinating European Council (CEC) having its Registered Office at Bd. du Souverain, B-1160 Brussels, Belgium and Sponsor Z Name and Full Registered address, to continue the funding of the Development of a CEC Test

CEC continues to support the process of developing an XYZ Test (Full Title of Test). As an original sponsor of this test you have already supplied sponsorship funding of Euro XXX.

In order that this test development may proceed through to completion, the Group Members, with the support of the Statistical Liaison Officer has recommended ABC, in order to meet the CEC quality requirements. As a result, further funding of Euro XXX is now required.

In line with the CEC Guidelines it is expected that all sponsors share the costs equally and you have already indicated a willingness to make the additional contribution of Euro XXX

This letter of Intent and payment of the sum indicated permits Sponsor Z Name and Address, to remain a member of TDG-X-XXX and to continue its participation in the test development under the terms of the appropriate CEC Guidelines governing the conduct of the development, the commitment to Confidentiality, and the rights granted to sponsors.

Acceptance of this additional Letter of Intent by all parties continues to recognise the need for trust, good faith and reasonableness between both parties, in a process where unforeseen circumstances may arise despite the reasonable endeavours and efforts of either party. Both parties understand that decisions will be taken in accordance with Guideline 4 part 4, sub-section 4.1 of the CEC Constitution.

The Terms and Conditions outlined in the original Letter of Intent for this development remain valid. In addition, CEC requires Sponsor Z Name and Sponsor Z Name, agrees to:

- ❖ Commit to continuing to be a member of the Group by signing this Letter of Intent and returning it to CEC.
- ❖ Pay CEC the additional amount of Euro XXX, (including VAT and other duties if required) within 30 days of the date of invoice.

If running candidate tests before the test method has been approved by the CEC Management Board the conditions of Guideline 18.5 will apply. CEC accepts no responsibility for any liability if reference oil and candidate tests are declared invalid during the subsequent setting of the acceptance limits for the reference oils.

The protocols and procedures used in the test development do not purport to address all of the safety concerns, if any, associated with the test development or any resulting test method. It is the responsibility of the participant of this test development, and all subsequent users of any test method, to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

For the purposes of the Contracts (Rights of Third Parties) Act 1999 the directors of CEC and those acting under contract with CEC, on the CEC Management Board's behalf, and only those parties, shall be deemed to be third party beneficiaries hereunder.

CEC Constitution – Operating Guidelines –Issue 17 – August 2010

The CEC takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this test development. Participants of this test development are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

Signed on behalf of Sponsor Z Name and Address:
(Authorised signatory)

Print Name Date of Signature:

Signed on behalf of CEC:
(Chairman)

Print Name Date of Signature:

Letter of Intent between Co-ordinating European Council (CEC) having its Registered Office at Bd. du Souverain, B-1160 Brussels, Belgium and Sponsor Z Full Registered Name and Address, to join Phase 2 of a CEC Test Development

CEC is in the process of developing a test XYZ (Full Title of Test), in response to a needs statement agreed by the relevant industry associations. This test has successfully achieved Phase 1 repeatability and discrimination in line with CEC's quality requirements.

Sponsor Z Name and Address has indicated a wish to join the Group prior to completion and acceptance of the test by CEC and understands that CEC will not be liable for any costs and/or obligations should the test fail to be published because it has not been possible to develop it to the satisfaction of the CEC Board.

This letter of Intent and payment of the sum indicated below permits Sponsor Z Name to become a member of TDG-X-XXX and participate in the test development under the terms of the appropriate CEC Guidelines governing the conduct of the development, the commitment to Confidentiality, and the rights granted to the Phase 1 sponsor(s) and group member(s).

Acceptance of the Letter of Intent by all parties recognizes the need for trust, good faith and reasonableness between both parties, in a process where unforeseen circumstances may arise despite the reasonable endeavours and efforts of either party. Both parties understand that decisions will be taken in accordance with Guideline 4 part 4, sub-section 4.1 of the CEC Constitution.

CEC requires Sponsor Z Name and Sponsor Z Name agrees to:

- ❖ Commit to be a member of the Group by signing this Letter of Intent and returning it to CEC.
- ❖ If installing the test at your facility running relevant reference tests and submitting data to the group.
- ❖ Pay CEC the amount of Euro XXX, (including VAT and other duties if required) within 30 days of the date of invoice. This fee reflects the perceived cost of the Test Method upon official publication (being the Phase 1 original sponsors share, plus 10 percent). If additional funding is required in Phase 2 then all sponsors and members of the Group will equally contribute (by installing the test and running references or by financial input).
- ❖ Participate and contribute to the development by regular attendance at TDG meetings.
- ❖ Operate within the TDG according to the CEC Guidelines.

CEC will own the developed method and have the sole right of publication of the method. Sponsors and members will have full rights to install and use the method according to CEC Guideline 13. A licence to use the test will also be given to Sponsors affiliates upon application to the CEC Secretariat, once the test is developed and approved by the CEC Management Board. In addition, Sponsors affiliates will be permitted to join the Surveillance Group that looks after the test, after it is developed.

If running candidate tests before the test method has been approved by the CEC Management Board the conditions of Guideline 18.5 will apply. CEC accepts no responsibility for any liability if reference oil and candidate tests are declared invalid during the subsequent setting of the acceptance limits for the reference oils.

The protocols and procedures used in the test development do not purport to address all of the safety concerns, if any, associated with the test development or any resulting test method. It is the responsibility of the participant of this test development, and all subsequent users of any test method, to establish appropriate safety and health practices and to determine the applicability of regulatory limitations prior to use.

For the purposes of the Contracts (Rights of Third Parties) Act 1999 the directors of CEC and those acting under contract with CEC, on the CEC Management Board's behalf, and only those parties, shall be deemed to be third party beneficiaries hereunder.

The CEC takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this test development. Participants of this test development are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

Signed on behalf of Sponsor Z Name and Address:
(Authorised signatory)

Print Name Date of Signature:

Signed on behalf of CEC:
(Chairman)

Print Name Date of Signature:

Proforma 3

Revision 9 - 30th August 2007

REFERENCE TEST ACCEPTANCE AND IDENTIFICATION FORM

1. Test Identification. I have identified the reference results on the attached spreadsheet and indicated which tests should be used by the SDG Representative to calculate the precision for the test.
2. I confirm that the results I have identified in the spreadsheet to be used for the precision calculation satisfy the referencing Guidelines as stated in the latest version of the test procedure.
3. I confirm that the identified reference test was run using the latest version of the test procedure.
4. The test stand used to run the identified reference tests is accredited. *Please delete as appropriate:- YES/NO.*
5. *For CEC Lubricant Engine tests only.* The Reference Test identified above has been reconciled in the ERC database. Please delete as appropriate: - YES/NO.

Signed: _____

Company: _____

Date: _____

Please return completed form to SG Chairman or SG Database Administrator.

Proforma 5

Revision 9 - 30th August 2007

CEC TEST METHOD REGISTRATION FORM

To ensure that all updates are dispatched directly to the Official Holder of the Test Method it is essential to return this form.

Please return by fax or email to the CEC Secretariat:

Fax no: 44-(0)1455-821994

Email: cecsales@interlynk.co.uk

Test Method:

Copy No: (paper format only)

Official Holder's Name:

Email address:

Company:

Address:

City:

Post Code:

Country:

Telephone:

Fax:

Signed:

For Official Use Only	Actioned
Holders List	
<i>U/P Allocated</i>	
<i>U/P Recorded</i>	
<i>Access Given</i>	
<i>Holder Notified</i>	

Proforma 6

Revision 12 – August 2010

Progress Report
Group Reference Indicator (Method Short Name)

Method Full Name
Report Date

Officers and Membership

Chairman		Deputy Chairman	
Secretary		Ref. Oil Co-ordinator	
SDG Liaison Member		Ref. Fuel Co-ordinator	
Method Author		Management Board Rep	
Number of members		Number of labs/stands	

Management Board Guidance Required

•

Summary of Recent Activity

•

Synopsis of Method

Hardware

Test

CEC Target parameters

Auxiliary parameters

Specifications

Major current purpose of the group

Key Dates

Date of last meeting		Date and location of next meeting	
Date of last Test Procedure review		Date of next Test Procedure review	
Estimated Life Expectancy of Test **		Estimate of availability of Hardware	

** This is to include the availability of the components of the reference fluids, including the additive pack

Group Objectives, Target Dates and Progress

	Objectives	Target Date
1		
2		
3		
4		
5		
6		

Test Quality Data For Target Parameter – From **Start Date to **End Date**.**

	Parameter X	Parameter Y
Rating scale		
Rating method		
Specification		
Reference fluids		
Mean value		
Relevant Statistic		
Target statistic		
Actual statistic		
Qr = Actual/Target		
CEC Approved? [Qr<1]		
Range of applicability		
Uncertainty [95%] in the true value [+/-]		
Has severity changed?		
Has precision changed?		

Test Monitoring and Severity

Choose relevant graphic[s] to illustrate the method's stability in terms of severity and precision over time: data can be accessed from CEC's TMS or the ERC Database

References

[Method Overview on the CEC Web](#)
[Method Short Name on the CEC Web](#)
[Test monitoring on the CEC web](#)
[CEC Statistics manual](#)
[ACEA Sequence](#)

APPENDIX 2: Notes

- 1 If a global value of repeatability and/or reproducibility cannot be determined for a parameter, use the results for a reference fluid. In this case, the associated targets must be for the same reference fluid. Estimates of repeatability and reproducibility should be based on the most recent data collection period only.
- 2 The precision of a test method may or may not depend on the test result level X. Therefore the repeatability r and reproducibility R should be tabulated, as appropriate, as (a) constants or (b) equations (e.g. $r = a + bX$, $R = c + dX$) or (c) on a reference fluid-by-fluid basis. r_{target} and R_{target} should be tabulated accordingly as (a) constants or (b) targets set at a fixed value of X or (c) on a fluid-by-fluid basis.
- 3 If r and R are tabulated as (a) constants or (b) equations, quote the Range of applicability. If r and R are tabulated on (c) a reference fluid-by-fluid basis, quote the Reference fluid and Mean value. Delete non-applicable rows and add/remove columns & sub-columns as appropriate.
- 4 After a single test, 95% confidence limits for the true value are the test result +/- the tabulated value (= 0.71R).
- 5 Analysis 1 should be the first Round Robin for current status level.
- 6 Period over which the data were collected needs to be stated explicitly.
- 7 Append similar tables for any additional parameters.

Guidance Notes

COMPANY – more than 1 person per company acceptable

REGISTERED GROUP MEMBER – on the membership list of the Group

CONTRIBUTING MEMBER – OEM/Hardware Supplier, Participating in Round Robins / Test Monitoring, Financial Sponsor

OFFICER – Chairman, Vice-Chairman, Secretary, SDG Liaison Officer, Reference Oils or Reference Fuels Coordinator, Test Method or Database Coordinator etc.

EXPERTS – officially invited by the Chairman to bring added value to the meeting

CEC BOARD REPRESENTATIVE – member of the CEC Board

OTHER – Please explain your reason for attendance

Important Extract from Constitution Guideline GL/05

1. Membership

A member of a CEC Working Group is a company, not an individual. However, in order to ensure confidentiality of information within a TDG / SG, members are obliged to name one company representative who will represent them in a Group. This representative will be responsible for conveying the views of its company to the TDG / SG and making decisions about Group matters, on behalf of its company.

1.1. Sponsored Groups

A company providing financial sponsorship for the test development is entitled to be a member of a Test Development Group and can remain a member when it becomes a Surveillance Group, even if it chooses not to run the test, nor to contribute data, nor to take on an Officer position in the Group.

The sponsoring OEM shall be a member of the Group by virtue of the technical support and hardware provided to the Group.

Membership of a Surveillance Group for non-sponsors is achieved by purchasing the test method.

Attendance at meetings is for bona-fide members only. The Chairman may, under exceptional circumstances, where the TDG/SG feels that attendance by other experts would assist it to deliver against its targets, invite experts to the meeting subject to the agreement of all the Group members.

1.2. Voluntary Groups

All members of a Voluntary Group must contribute to the working of the Group. Members will be expected to share costs equitably, but individual members must contribute in one or more of the following ways:

- Contribute reference test data to the TDG/SG as specified by the test procedure and freely share operational experience within the TDG/SG
- Be OEM sponsor
- Be SDG representative to the TDG/SG
- Have a continuing interest in the proper operation of the test, by sponsoring a commonly agreed number of candidate tests per year and freely share operational experience within the TDG / SG.

If a member does not contribute in one or more of these ways to the work of the TDG/SG then the Chairman must remove the member from the Group. The CEC Secretariat must be informed immediately, so that the ID and password for access to the Group's area of the CEC website may be withdrawn.

Attendance at meetings is for bona-fide members only. The Chairman may invite experts to the meeting, in exceptional circumstances, where the TDG/SG feels that attendance by other experts would assist it to deliver against its targets.

GLOSSARY

ACEA	Association des Constructeurs Européens d'Automobiles
ASTM	American Society for Testing Materials (USA)
ATC	Technical Committee of Petroleum Additive Manufacturers in Europe (ATC)
ATIEL	Association Technique de l'Industrie Européenne des Lubrifiants
CEC	Co-ordinating European Council
CONCAWE	The Oil Companies' European Organisation for Environment, Health and Safety
CRC	Co-ordinating Research Council (USA)
EN	European Norm
ERC	European Registration Centre (see Note 1)
EUROPIA	European Petroleum Industry Association
ISO	International Standardisation Organisation
JASO	Japanese Standards Organisation
OEM	Original Equipment Manufacturer
RFG	Reference Fuels Group
ROG	Reference Oils Group
SAE	Society of Automotive Engineers
SDG	Statistical Development Group
SG	Surveillance Group
TDG	Test Development Group
WG-FL	(ACEA) Working Group for Fuels and Lubricants

Note 1

ERC - European Registration Centre is the organisation that provides conformity assessment services for engine tests run under the European Engine Lubricant Quality Management System (EELQMS) developed by ATC, ATIEL and ACEA. It includes engine test registration, data validation, and database management of engine test results.