



BUSINESS PLAN
CEN/TC 19
GASEOUS AND LIQUID FUELS, LUBRICANTS AND RELATED PRODUCTS OF
PETROLEUM, SYNTHETIC AND BIOLOGICAL ORIGIN

EXECUTIVE SUMMARY

CEN/TC 19 writes standards for the downstream oil industry, including those providing intermediates to the industry (such as biofuel producers) or using its products (such as engine and equipment manufacturers). It covers the fossil-based and naturally occurring materials as well as the products derived from processing of these materials. The standards include those for characterizing the product quality, for quantity measurement and for operational procedures, e.g. a quality monitoring system for fuels or guidance for good housekeeping in the logistic chain.

The fuel market in Europe is more and more stabilizing. The amount of car kilometres and energy (heating, electricity) request increases, but due to energy reduction measures and the entrance of alternative energy carriers on the market, the amount of sold oil based products just slightly increases. On the other hand there is enormous attention for and parallel development of biofuels. Both for limited use (in fleets or inner cities) or as blend component for the regular fuel market. More recently, attention for alternatives such as bio-based products or biorefinery streams has been presented to CEN. This is strongly supported by the EU and national authorities, sometimes presenting risks of diverge of requirements to the market. All these new requirements cause a continuously movement in the market and especially in (the focus of) CEN/TC 19 work.

For years, CEN/TC 19 has worked on standardization of the European fuel market. All this to support requirements of the industry (safety, precise and concise test methods) on one hand and the needs of the EC (fuels quality, emissions, allowance of biofuels, infrastructure for alternative energy carriers) on the other hand. More than half of its Standards are (in) directly related to EU Directives and Mandates. Future benefits will be that the European aim of enlarging the use of alternative energy sources, when supported by the TC's Standards, will accustom all industries requirements.

Main objectives of the TC are in short:

- to provide, for European parties, a platform for discussion on the standardization for every area of the sector as well as on the implementation and use of (European) standards;
- to develop any standards requested by the EC, or needed, without formal EC-request, in view of EU Directives;
- to elaborate on (draft) EU policies in order to provide upfront the best technical standards input as guidance to European policy makers;
- to shorten the period of development of its Standards, with a goal to have 95% of its work items published within the three-years period as targeted by CEN;
- to elaborate standards eliminating commercial trade barriers between the European countries, on the request of users/applicants and producers, and for other petroleum products and non-petroleum based products e.g. hydraulic fluids;
- to develop any European standard needed for reference in other European standards of CEN/TC 19, specifically methods of sampling and test;

CEN/TC 19 Business Plan

Date: 2014-05-05

Page: 2

- to develop any European standards for new "European" subjects (e.g. captive fleet usage, biofuel for use as heating oil, fuel based on regenerated used oil, fuel cell vehicle liquids, etc.), when enough CEN members find it more efficient or necessary to draft an European standard rather than write a national standard.

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal and social dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

Petroleum products are generally commodities, traded in bulk quantities on a worldwide scale. Based on current and foreseeable trends in downstream oil business, CEN/TC 19 expects that the business will remain in a state of continuous change, with increasing emphasis on product quality and environmental concerns as well as a drive towards reducing costs. There will be increased emphasis on safety, environmental and health issues with resultant liability, reliance by companies on suppliers for fit-to-use products and services, and more stringent company product specifications due to changes in technology. These pressures are apparent to both the industry and to the end-user / consumer.

Market parties are primarily the following: the downstream petroleum industry, purchasers/users of petroleum products, industry related to the different fields of application of petroleum products, e.g. the car/engine industry, additive and performance enhancer producers, the lubricants and hydraulics industry, etc., governmental institutions and (independent) laboratories. With an increasing interest in so called alternative or advanced motor fuels. New parties on the market are fuel and other product re-sellers, (bio) ethanol and FAME (biodiesel) producers, hydrogen fuel suppliers, MTBE/ETBE producers and from the hardware side the fuel cell producers, biofuel factory and oil mill constructors and investors. Supported by EU policies, new alternative products slowly enter the market. New fuel concepts like e.g. hydrous ethanol, Fischer-Tropsch product, hydrogenated oils, di-methyl-ether, pyrolysis oil or algal products will need to be studied for their standardization needs. All these products mainly start application for fleet purposes, also high-level regular biofuel blends beyond the general market fuels actually addressed in EU Directives. But the demand from the initiators for fuel specifications to allow for market penetration (and local government conviction) comes earlier during the process.

Political, economical, social, technical, legal and international factors that either directly require some or all of the standardisation activities proposed by the CEN/TC, or significantly influence the way these activities are carried out are the following:

- In the trading, handling and application of petroleum products, health, safety and environmental aspects (HSE-aspects), often supported by regulatory measures, play an increasingly important role, thus calling for new standards and amendment of existing ones.
- Developments in the field of quality assurance and quality management also call for new standards and the upgrading of existing standards, in particular with respect to traceability of test results and repeatability and reproducibility of test methods.
- The political and legal environment for the standardization of automotive fuel specifications and test methods are given by European Directive 98/70/EC (and its recent Amendments¹).

¹ Directive 98/70/EC of the European Parliament and of the Council of 13 October 1998 relating to the quality of petrol and diesel fuels and amending Council Directive 93/12/EEC, Directive 2009/30/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 98/70/EC as regards the specification of petrol, diesel and gas oil and introducing a mechanism to monitor and reduce greenhouse gas emissions and amending Council Directive 1999/32/EC as regards the specification of fuel used by inland waterway vessels and repealing Directive 93/12/EEC and Directive 2011/63/EU of the European Parliament and of the Council of 1 June 2011 amending, for

Furthermore, the European discussion and regulations on the stimulation of the use of biofuels², the lowering of vehicle emissions³ and the use of renewable and sustainable (energy) products⁴ sets further goals for the fuels and lubricants industry.

1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN/TC:

The petroleum industry is a major market player, comprising mainly large multinational companies. The same holds by at large for the car/engine industry. For instance, the amount of passenger cars per 1000 inhabitants in the EU has gone up from 184 in 1970 to 479 in 2000. Oil is the most traded raw product in the world; the European crude oil imports and deliveries in 2012 had an overall worth of nearly 450 billion US\$. Given the limited reserves of oil in the Member States, the EU is a net importer of crude oil. Net imports comprised the largest share of crude oil inputs into EU refineries. However, in refined petroleum products EU27 imports and exports are close to balance: the EU has to import gasoil (mainly from the Russian Federation), while it exports its excessive gasoline (mainly to the United States of America)⁵. Of the total worldwide energy production 31,7 % originated of petroleum products in 2010. In the EU 39 % of the energy consumption in 1995 was based on petroleum products, lowering to 35 % in 2010, with renewables having largely replaced the oil derivatives⁵. Looking at the different sectors, transport is using 364,1 Mtoe of energy in EU 27 in 2010 and roughly 100 Mtoe of petroleum products is used in other energy sectors. Over the last years, energy intensity and energy per capita have declined in the EU. As the amount of car kilometres still increases, these figures are indications that the environmental measures in Europe are beneficial: cars are less fuel consuming, less diesel is used for heating and alternative energy carriers come on the market.

When we are looking to each commodity, we see that the use of automotive diesel in the EU increases, where gasoline tends to decrease in the last few years. In addition, the emission requirements for both products are leveraged. For instance, sulfur requirements are the same as from 2005 and from 2010 all non-automotive diesel fuel needs to fulfil the same low sulfur requirement. The EU uses around the nearly the same amount of diesel as the USA, but nearly a third of its gasoline consumption. The last years, the European refineries supply a surplus of petrol, due to the increasing local demand for diesel. From this perspective, these major partners in the world of motor fuels are completely different.

the purpose of its adaptation to technical progress, Directive 98/70/EC of the European Parliament and of the Council relating to the quality of petrol and diesel fuels

² Directives on the promotion of the use of biofuels for transport (COM (2002) 508 and COM (2001) 547), White Paper Energy for the Future (COM (97) 599 and COM(2001) 370) and Proposal for a Directive of the European Parliament and of the Council on the deployment of alternative fuels infrastructure (2013/0012/COD).

³ Regulation 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO2 emissions from light-duty vehicles

⁴ Action Plan for Energy Efficiency: Realising the Potential (COM (2006)545), Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC, and Ad-hoc Advisory Group for Bio-based Products in the framework of the European Commission's Lead Market Initiative (2009), Taking Bio-Based From Promise To Market - Measures to promote the market introduction of innovative bio-based products, Report.

⁵ Source: EU DG Energy, http://ec.europa.eu/energy/observatory/oil/oil_en.htm

The consumption of biofuels within the EU has increased during the last years. On the other hand, the EU biodiesel production has stabilized in recent periods, due to large imports from outside Europe, insecurity in EU regulations and cancellation of certain tax incentives in some Member States. Worldwide the biofuel production and use is increasing, as is the interest. Also the type of alternative fuels (biodiesel, bio-ethanol, MTBE, ETBE, LPG, natural gas, gas-to-liquid, etc.) on the market will enlarge up to 2030. This is withstanding the actually uncertainty around the EU targets. There is no doubt that the impact of biofuels on the market and on CEN/TC 19 will increase in the coming period. Moreover, new companies with a total different background and history (winery, feedstock) enter the market.

CEN/TC 19 standardization of a fuel is essential and most of the time required by legislation. The refineries and even more the fuel traders have discovered cost savings as the TC's Standards (e.g. vapour pressure, cold flow properties) are introduced over national standards varying from Accession country to Accession country. Moreover, CEN/TC 19 Standards (specifications) are incorporated in national standardization in South-American and Asian-Pacific standards (e.g. Israel, Thailand, Argentina, Hong Kong, New Zealand⁶). Also in the LPG and biofuels field, the Standards are used as examples for Australia, South-Africa and China.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

Standards for the sector are needed to facilitate the regional and worldwide trade of petroleum products:

- A common terminology, to avoid misunderstandings between trade partners.
- Common and precise methods of sampling and testing, to avoid double sampling and testing in evaluating the quality of a product, are extremely essential when it comes to trading fuels and quality testing by (tax) authorities and excise duty bodies.
- Common measurement methods avoid double testing in evaluating the quantity of a product.
- Product classifications and specifications are, due to the character of the trade, preferred to have in publicly available reference documents rather than in individual contracts between supplier and purchaser.
- Common operational procedures avoid differences in checking of the quality of a product.
- National authorities are given both good monitoring documents and general accepted qualities to base excise duty exemptions on. EU-wide fuel specifications give the EC the benefit to refer to them in legislation and to tune its fuel requirements and promotions on.
- Precise and optimal test methods give a save product for the consumer, for instance regarding cold operability, flammability and volatility, and a reliable product for the OEMs that know what to expect from the components in the fuel.
- With the leading role the CEN/TC and its experts play in worldwide standardization in coordination with the American (ASTM) and International (ISO) standardization bodies, a worldwide implementation of EU technical requirements will lead to cost savings and removal of technical barriers to both the oil and engine manufacturing industry.

The European Union, especially DG Energy and DG Environment, has specific targets with regards to (bio)fuels. This is based on the Kyoto-protocol requirement and on the wish to support its own energy resources. Enlarging the use of alternative energy sources should however not harm the engine emissions or reliability, plus the safety around fuel delivery. This

⁶ Source: International Fuel Quality Centre, Brussels

will be both a challenge to as a benefit of the work of CEN/TC 19, as deliberations have to be made based on technical merits only.

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. In the past, Affiliate Members, such as TSE (Turkey) and ISRM (Macedonia), have been eager to participate in CEN/TC 19 work as one of their first activities before becoming a full CEN Member.

Participation as observers of recognized European or international organizations is also possible under certain conditions. The CEN/TC has a relatively large attendance (10 or more) from these so-called liaison organizations. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

Based on the considerations above, the CEN/TC proposes the following objectives and strategic directions for its future work:

- to provide, for European parties, a platform for discussion on the standardization for every area of the sector (e.g. relative needs, alignments, deviations) as well as on the implementation and use of (European) standards;
- to develop any standards requested by the EC (as approved by the EU Member States), or needed, without formal EC-request, in view of EU Directives, in particular specification standards for automotive (bio-)fuels in relation to Fuels Quality Directive 98/70/EC and its future revision(s), plus the Renewable Energy Directives;
- to elaborate on (draft) EU policies (Mandates, Directives, etc.) in order to provide upfront the best technical standards input as guidance to European policy makers;
- to shorten the period of development of its Standards, with a goal to have 95% of its work items published within the three-years period as targeted by CEN and using shorter procedural possibilities where feasible;
- to elaborate standards eliminating commercial trade barriers between the European countries, on the request of users/applicants and producers, and for other petroleum products and non-petroleum based products e.g. hydraulic fluids;
- to develop any European standard needed for reference in other European standards of CEN/TC 19, specifically methods of sampling and test;
- to develop any European standards for new "European" subjects (e.g. captive fleet usage, biofuel for use as heating oil, fuel based on regenerated used oil, fuel cell vehicle liquids, etc.), when enough CEN members find it more efficient or necessary to draft an European standard rather than write national standard.

Precise objectives can in general not be given, but CEN/TC 19 has the obligation to keep track of the relevance of revisions of test methods called up in its fuel specifications EN 228, EN 589 and EN 590 (see also §5). It will continuously monitor revisions and their related precision. Furthermore, it will adequately (time-wise and standard-wise) respond to the EC Mandates.

Another objective is to expedite the production of work items, both in the working draft as in the enquiry stage, to reach the goal of 3-years development for 95% of its items. Meaning they will

become final Standards without request for extension of development time as allowed by CEN rules. For this a 100 weeks development time path, plus several other internal guidance documents, have been defined.

4.2 Identified strategies to achieve the CEN/TC's defined objectives

4.2.1 Standards development

The standards developed by CEN/TC 19 are usually based on available publications as national standards, documents from other organizations or general scientific/professional documents. It may also be new work. For all new work items, however, a reference document and a project leader shall be available prior to acceptance of the new work. For any item emerging in CEN/TC 19 that is not exclusively relevant for the European situation, CEN/TC 19 will submit the item to ISO (TC 28) for parallel development, or will implement an existing International Standard. If an item is not accepted in ISO, CEN/TC 19 will reconsider its position on that item.

If the relevance to the European situation is less important (too restricted areas of use, specific local circumstances) or a European-wide standard is too complicated because of EU or diversified national regulations, CEN/TC 19 will not take up the work. Then parties are referred to national standardization or other CEN deliverables, such as CEN Workshop Agreements. CEN/TC 19 will however be more open for producing CEN Technical Specifications for products for captive fleet or other limited usage that might in a near future grow in EU market share.

Under the responsibility of CEN/TC 19, several Working Groups are established for any (group of) item(s) for which still technical development work has to be done. For a single work item, for instance supported by a reference document, on which no further technical development work is foreseen, a Task Force or just a project leader is appointed. All groups are requested to make minutes of their decisions. Its participants subscribe to the CEN exploitation rights' agreements, as the use of each others intellectual property is essential in this field. Internal guidance documents in addition to CEN regulations and BT decisions, such as on Round Robin organization and on the work and reporting by taskforces have been defined by CEN/TC 19.

Once a standard is issued, it remains allocated to a working group or at least a project leader. The Working Group/Project Leader shall be addressed for questions on the use and implementation of the standard and shall advise the TC/SC on any necessary correction, amendment, (early) revision or withdrawal of the standard. For quick response to (changing) market needs, and for maintenance of a high quality up-to-date package of standards, such a continuous allocation of existing, finished standards is an absolute prerequisite.

A point of attention is the enlargement of the EU and of CEN, and the requirement that the Accession Countries should implement as national standards the CEN/TC 19 fuels specifications and quality systems. Harmonisation of the European oil market is essential. CEN/TC 19 supports all activities that inform these new markets of (the backgrounds of) our standards.

Already in the field of fire-resistant hydraulic fluids discussion on health, safety and environment (HSE) requirements has taken place. Separately, CEN/TR's on good housekeeping in refineries and distribution systems have been written. The reason for this is that the handling of fuels becomes more and more essential for the quality of the tightly specified product. Regulations on emissions (Euro IV to VI) and the blending of alternative components require stricter conditions. Both HSE and house keeping issues are related and could be part of the discussion with regulatory bodies. These issues do not have to be mandatory parts of CEN/TC 19 Standards, but considering them might be a future issue. The same is valid for consumer information and

CEN/TC 19 Business Plan

Date: 2014-05-05

Page: 8

pump marking, being a brand- and country-specific issue in general. Harmonization thereof seems to become more and more an issue, especially when it concerns distinctions based on the content of bio-blends.

To look for fuel specification opportunities and needs and to balance the amount of time and expertise available towards the demands for different standards, CEN/TC 19 has an active New Fuels Coordination Working Group. This WG 38 advises on feasibility and time frames of promising alternative liquid and gaseous fuels for transport and stationary applications. It advises if certain fuels are feasible for general European Standards or a CEN Workshop Agreement. Already four workshop initiatives within the scope of CEN/TC 19 have been developed as they standardize fuels that have limited geographical application or are meant for fleet or adapted engine usage. Initiatives for European standard specifications for new fuels are usually not for niche products, but require sufficient usage by several car marks and in a certain amount of countries.

4.2.2 The global perspective

For the petroleum products that are worldwide business, standards should preferably be developed on the international level, i.e. in ISO. Therefore, the liaison with ISO/TC 28 "Petroleum products and lubricants" is firmly established. CEN/TC 19 also follows closely the developments in ASTM D02. These three committees have expressed their wish to develop worldwide standard test methods with the idea: "One standard for all from a process that suits all". Once in a while combine efforts (such as for octane testing or work under the ISO/TC 28/SC 7 on biofuels test methods) have taken place. Since May 2013, the ISO/TC 28 Secretary is also supplied by NEN, which should make harmonization easier... The CEN and the other European standards organisations are currently looking at the possibilities to develop a framework for cooperation with the standardization bodies in the USA that may allow for more formal and structured cooperation between the American standards development organisations, such as ASTM or AOCS, and CEN/TC 19.

European players take part in the worldwide activities on petroleum products and the general market characterization as given above also holds for the European situation. European players can, and do, bring in their needs for standards in ISO/TC 28 and ASTM D02. CEN/TC 19 may (on the basis of the already existing Vienna Agreement) assist in channelling wishes from European parties to ISO(/TC 28), but concentrates itself on standards for which there is a specifically European need. Specifically European needs are standards that:

- support EU legislation, predominantly on health, safety and environmental issues
- eliminate commercial trade barriers between the European countries.

This also means that CEN/TC 19 will adopt existing standards from liaised organizations if they are more up to date or precise. Speed of publication prevails over use of home-grown material.

4.2.3 Other liaisons

CEN/TC 19 has set-up co-ordination and co-operation with CEN/TC 139 "Paints and varnishes". A Joint Working Group (JWG) on flash point test methods is maintained, to pursue a coherent set of European standards in this area. This JWG is meanwhile paralleled in ISO as a JWG between ISO/TC 28 and ISO/TC 35. The intention is to extend to the field of adhesives, ISO/TC 61(/SC 11) and CEN/TC 193.

Mandated work on biodiesel (FAME) has been initiated in coordination with CEN/TC 307 "Fats and oils". As improvements of some actual test methods for FAME under CEN/TC 307 is needed, CEN/TC 19 has developed a set of co-operation conditions. Basically new biodiesel test method deliverables and joint-work will be balloted and discussed in both TC's.

Outside CEN, liaisons are maintained with organizations with whom exchange of information is judged beneficial for both parties. Present liaisons in the fuels production and distribution field include AEGPL (LPG), CEFIC-ATC (additives), CONCAWE (oil) and UPEI (fuel distributors) and for the car and engine parts manufactures ACEA and AECC. Biofuel organizations such as EBB (biodiesel), ePure (ethanol) and the Methanol Institute have also established a liaison with the TC. Review of all these liaisons' (two-way) effectiveness will take place at each plenary meeting.

Next, informal liaison contacts with the International Fuel Quality Committee, the American Oil Chemist Society and the Advanced Motor Fuels Group of the International Energy Agency (IEA/AMF) are maintained. To fully balance the alternative transport fuels field and the "other products related to petroleum, CEN/TC 19 realizes that it needs to seek expertise from and liaison with more (representing) organisations in that particular field.

4.2.4 CEN/TC 19 Steering Group

Conveners and project leaders have professional standardization support that shall be committed by one of the CEN member-bodies. They are entitled to general guidance from the supporting Member Body and when it concerns TC specifics from the TC Secretariat, to help them concentrate on the technical quality of their work.

To support the drafting process within WG's and TF's and to assist both them and the secretariat to provide standards in a timely manner a CEN/TC 19 Steering Group (SG) has been established. The SG is part of CEN/TC 19 and therefore accountable to TC plenary. The tasks of the SG are:

- make sure that the project scope is clear and feasible;
- improve the CEN/TC 19 standards delivery process (including the administrative part of the process, even outside CEN/TC 19),
- help define or refine WGs scopes of work where necessary and to verify whether the resulting documents meets the scope,
- assist all working groups and task forces as necessary,
- mediate in discussions and issues between TC groups on their scope or work and advice the TC where necessary,
- assist the CEN/TC 19 secretariat in monitoring the WG and TF activities and in the timely answering of the comments from the ballots by the TF or WG;

Members of the SG are professional standardization supporters of (four) petroleum institutes that supply secretaries for and support CEN/TC 19/WGs, together with the secretary and chairman of CEN/TC 19 at NEN. The SG is the forum where general organizational matters of the TC are discussed, from which proposals to the TC and guidance for convenors and project leaders emerge.

4.3 Environmental aspects

As it fuel quality specifications are being referenced in EU Directives, CEN/TC 19 covers several of the EC needs to lower emissions, also by introducing more alternative energy carriers, and improve energy-efficiency. The work executed on alternative, CO₂-lowering fuels also underlines the environmental perspective of the committee. Introduction of many experts on biofuels, bio-oil and bio-lubricants, including the many new and expected work items on the work programme reflect this focus. CEN/TC 19 is open to all new fuel concepts, should they have a broad enough European need (see also 4.2.1)

HSE is a big topic in the petroleum industry. As the aim is to develop lab and field test methods under ISO, the major environmental steps (for instance type and amount of used chemicals) lay

there. CEN/TC 19 develops mostly test methods that relate to biofuels or specific European needs. This is roughly half of the test methods standards used, so the opportunities to look for alternatives are limited. Next, some tests are intended to detect components that impact human health or the environment, such as lead, benzene or manganese. For that reason, alternative chemicals are not always possible. Another issue might be that precision needs require less attractive chemicals to be used. Examples are mercury-thermometers and lead-containing reference fluids for the determination of octane. But alternatives are always looked for. There is still a strong tendency in CEN/TC 19 that the use of more-environmental friendly, though less attractive in terms of precision should be standardized at a national level in order to limit the amount of test methods referenced in the fuel quality specification to the necessary minimum. This might however change in the near future.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

Any change of European legislation on the quality parameters of petrol and diesel (influencing the car emission values and improving the vehicle robustness in the field) requires immediate revision of the corresponding specification standards. To avoid misunderstandings in European countries and specifically to avoid contradictions in those countries which have already legally adopted the fuels specification standards, CEN/TC 19 tries to revise its specification up front, based on communications from the EC. Moreover, the specifications are incorporated in actual and future EC Directives. This new approach of the European legislator means that CEN/TC 19 has to validate its specification and the referred test methods. In view of this requirement, the maximum speed to produce revised standards in relation with the necessary steps to be followed within the CEN system standards development process is of great concern. Besides this, the need to unambiguously refer to other documents within our standards, by dating, means that all WG's, TF's and work items need to be brought in line and carefully managed. The assistance of CCMC in the production of our standards is required to achieve this.

The growing interest of both the Commission and the market for biofuels and other alternatives brings forward other legal discussions. CEN/TC 19 has to judge whether the increasing demand is compatible with the required engine performance and restrictions set by DG Environment or other authorities. CEN/TC 19 has to be aware of potential contradictions and is not a forum to solve EU political issues. In such situations the partners and experts within CEN/TC 19 might assist in feasibility studies based on technical market investigation or in developing more specific products (such as CEN Workshop Agreements) which can be used at a local basis.

The professional standardization support available within CEN/TC 19 can just cope with the average annual workload of the TC for organization and coordination and with the standards production process. However, an increasing amount of requirements in (biofuel) specifications and mandated work, results in more standards that need regular updating. This has increased the workload of the Secretariat, although for this maintenance work no funding is incorporated in EC Mandated work. The recent obtaining of the ISO/TC 28 Secretariat and the necessary informal exchanges with ASTM to secure global harmonization, imply a change of activities and process management. Also, links to work on (natural) gaseous fuels, sustainable biomass and energy management will lead to a broader scope of work, besides the political pressure to mirror the CEN/TC 19 biofuels requirements and test methods with worldwide counterparts. The European stakeholders prefer close liaison and even shared secretariats of certain working groups.

The overall availability of adequate resources of technical expertise is of some concern. The lean organization policy has led to concentration of companies and a reduction of their research capacity, often with USA based companies leaving very little research capacity in Europe. Finding (technical) experts becomes difficult on both national and CEN level, especially when the same experts need to pay attention to regular and new fuel concepts. To overcome this problem, optimizing cooperation with ASTM and ISO, is already in progress on the level of individual experts in the refinery industry and measurement equipment manufacturers. However, test labs and OEMs have less and fewer experts available for standardization that need to be consulted on all new fuel concepts brought to CEN/TC 19.