

# ATIEL and its role in European Lubricants industry

## Promoting and safeguarding engine lubricant quality

LOTOS Technical Seminar  
20 November 2019, Wrocław, Poland

## What we will cover

- ATIEL and its role in the lubricants industry.
- Overview of the European Engine Lubricant Quality Management System (EELQMS) and the ATIEL Code of Practice.
- Compliance and monitoring through quality surveys

A large, faint, light-colored graphic of water being poured from a bottle is positioned on the left side of the slide. The water is captured in motion, creating a dynamic splash and ripples. The bottle's neck and the initial pour are visible on the far left, while the water spreads out towards the center and right. The overall effect is a sense of freshness and movement, serving as a background element for the central text.

**ATIEL**

# ATIEL

**The technical association of the European lubricants industry**

- *A European Economic Interest Grouping (EEIG), registered in Brussels.*

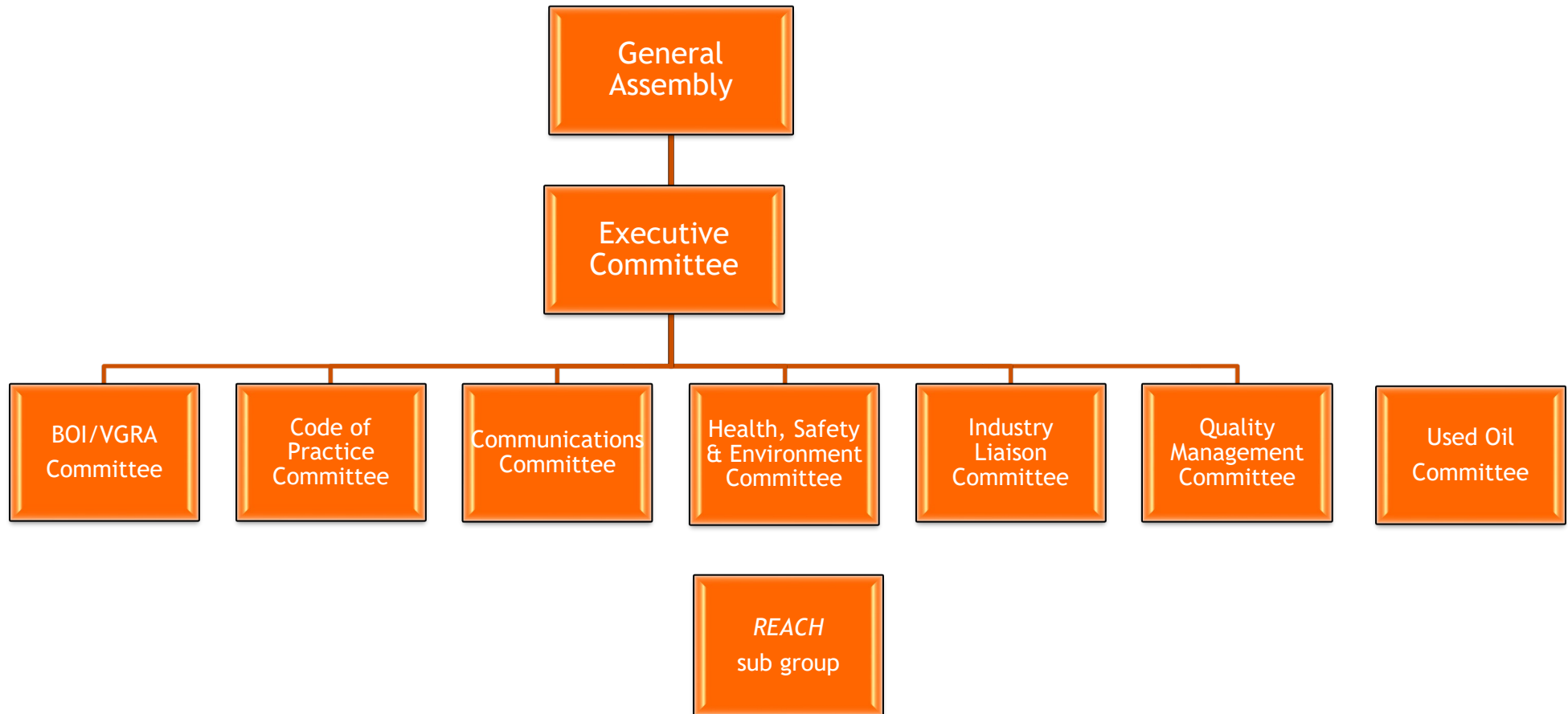
**Represents the common interests of European lubricant manufacturing and marketing companies**

- *Membership open to companies actively engaged in the marketing and/or manufacture of lubricants in Europe.*
- *Promotes dialogue between its members and associated industries on technical issues, regulations, specifications and Codes of Practice.*

# ATIEL Members

## How we work in ATIEL





# Key activities

For its members -

- ATIEL provides a forum for debate on topical, non-competitive industry issues and a platform for sharing resources and expertise.
- Through the work of technical committees and working groups ATIEL:
  - monitors current and future technical trends and regulatory programmes
  - facilitates the development of scientifically sound responses to changes in market needs
  - promotes European quality standards and best practices around the world
  - carries out quality surveys to assess levels of quality compliance in the marketplace



# Key activities

For regulators, industry partners and end users -

- Through **collective expertise** of members ATIEL contributes to development of best practices and standards that promote superior quality products in the market:
  - Sets clear and consistent technical guidelines that address the needs of vehicle manufacturers and consumers.
  - Acts as a focal point for technical issues relating to the performance and environmental demands of engine oils.
  - Acts as a respected partner and advisor on lubricants matters to all external stakeholders.





# EU emissions legislation challenge

- EU is targeting progressive GHG emissions reduction (including CO<sub>2</sub>) by 2050.
- European Commission (EC) has set two targets for transport emissions:
  - **20% reduction from 2008 levels by 2030**
  - **60% reduction from 1990 levels by 2060**
- This is the main driver for vehicle fuel efficiency improvements.



# Road transport CO<sub>2</sub> emissions

- Road transport is a key source of emissions so must be addressed to achieve EU objective.
- EC's latest targets require average CO<sub>2</sub> emissions from new cars/vans to be **37.5%/31% lower** (respectively) in 2030 than in 2021.
- Similar targets for heavy duty trucks/lorries require **30% reduction**.
- Engine and vehicle technologies are changing to meet the demand for increased fuel economy and lower emissions.

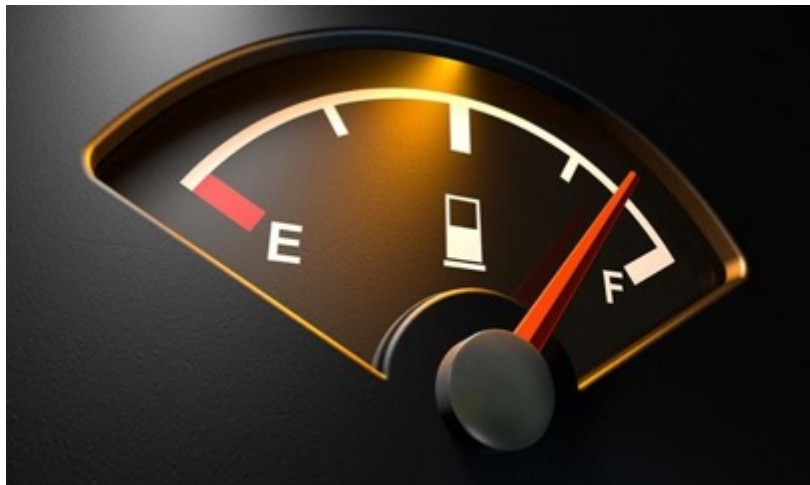


## ATIEL strategic objective of promoting the lubricants industry and its importance for automotive sector and low carbon economy

- *Educate public and private stakeholders*
- *Promote achievements and innovations of members*

## Fuel economy

- ❖ Quantify contribution to fuel economy / emissions reduction
- ❖ Realize the potential, communicate and commit



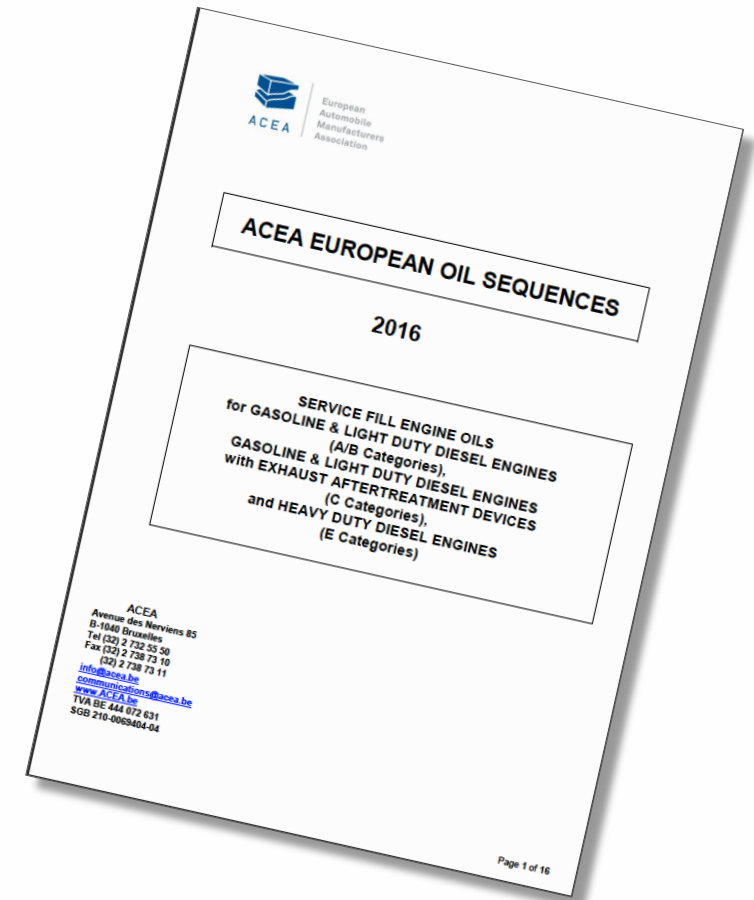
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# The European Engine Lubricants Quality Management System (EELQMS)



# ACEA European Oil Sequences

- ACEA European Oil Sequences cover light duty passenger cars & heavy duty trucks.
- The ACEA Oil Sequences are updated regularly to address:
  - Changes in European legislation
  - Changes in engine technology
  - Changes in fuel composition
- The current issue of the Oil Sequences is ACEA 2016, released 1 December 2016.
- After 1 December 2018, all ACEA claims have had to be to the 2016 Sequences and the 2012 and all other previous ACEA Sequences will be obsolete.



# ACEA performance claims

- All lubricant **marketers** are responsible for all aspects of product liability when making ACEA claims!
- Lubricant marketers claiming ACEA performance can include claims for specific engine categories on their product labelling.
- For these claims to be valid ACEA **requires** these engine lubricants to be developed in accordance with the European Engine Lubricant Quality Management System (EELQMS).



# About the EELQMS

- Voluntary quality management system for automotive engine lubricants - but ACEA requires marketers making claims to comply with EELQMS.
- The ONLY system that can be used to qualify engine lubricants against ACEA Oil Sequences.
- Developed by industry stakeholders to promote development of improved, fit-for-purpose engine lubricants that meet increasing technical requirements.
- Designed to assist lubricant marketers in assuring the quality of their lubricants and performance claims made for them in the marketplace.
- The ATIEL Code of Practice is a key element of the EELQMS.
- Visit: [www.eelqms.eu](http://www.eelqms.eu)



# Summary of EELQMS guidelines

Lubricant marketers developing engine lubricants in compliance with ACEA Oil Sequences shall carry out formulation development, blending and marketing in accordance with the guidelines in the ATIEL Code of Practice :

- Incorporating EELQMS guidelines in a quality management system (eg ISO 9001, or ISO TS 16949).
- Ensuring an **independent** audit of the lubricant development process.
- Having Code of Practice checklists signed off by an authorized company representative.
- Blending products according to requirements of ATIEL Code of Practice, including accreditation to an auditable QMS.
- Signing a Marketers' Letter of Conformance and submitting the Letter and quality certificates to the EELQMS administrators, SAIL.





## Why quality is important

- Vehicle OEMs need to know that appropriate quality engine lubricants will be available in all their markets.
- Trade/workshops need assurance that inadequate lubricant performance will not lead to warranty claims.
- Consumers need confidence in the quality of the products being used in their vehicles.





## OEMs - ACEA

- ACEA (European Automobile Manufacturers Association) represents the interests of major European car, truck and bus manufacturers.
- Sets performance specifications for engine lubricants through its European Oil Sequences.
- ACEA performance specifications increasingly adopted outside Europe.



# ATIEL Code of Practice

- Been in existence since 1996.
- Provides guidelines to help formulators and marketers in the development of lubricants that meet ACEA performance requirements.
- Has evolved in line with ACEA Oil Sequences



## Code of Practice - contribution to quality

- The existence of the ATIEL Code of Practice has contributed to:
  - Higher quality lubricants in the market
  - More precise engine & lab tests
  - Clearer formulation guidelines
  - Development of a robust lubricant quality management system



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## Quality Compliance and Monitoring

02

## Marketing

Compliance with the EELQMS includes signing a Lubricant Marketers' **Letter of Conformance**:

Required for ACEA performance claims

Confirms compliance with EELQMS

Renewed every two years

Membership of ATIEL is not required to be a signatory





# ATIEL Compliance Policy

- Launched to support LoC signatory marketers who make valid ACEA performance claims.
- Encourages greater compliance across the industry through:
  - continuous monitoring of lubricant quality in the market
  - exchange of information and technical data that supports education of lubricant marketers.
- Provides framework for supporting marketers in taking corrective action to address non-compliance issues.
- Sets out procedures for ATIEL to give feedback and advice to marketers, or to take action against them, depending on the severity of non-compliance.
- Available on the ATIEL website: [www.atiel.org/code-of-practice/compliance-policy](http://www.atiel.org/code-of-practice/compliance-policy).



# Execution delegated to SAIL

- Administers LoC submissions and approves company registrations;
- Manages product surveys on behalf of ATIEL;
- Interacts with all stakeholders and protects confidentiality of survey process
- Licences use of EELQMS trademark and logo
- Collects registration fees
- Detailed information available on the SAIL website:  
[www.sail-europe.eu](http://www.sail-europe.eu)



# Products/brands registration and compliance

- Register with SAIL and submit a signed Marketers' Letter of Conformance
- Template letter available on SAIL website: [www.sail-europe.eu](http://www.sail-europe.eu)
- Registrants have exclusive right to use of the EELQMS quality logo on product documentation and labels
- Quality of products claiming compliance are checked regularly through SAIL's product survey programme, covering all LoC signatories
- Pay annual registration fee (€975/year)



## ATIEL quality surveys

- Enhance the overall robustness of quality management.
- One of the most effective ways to measure levels of compliance with EELQMS.
- Has become an ongoing activity and a core part of ATIEL's Quality Management Committee's initiatives.
- Conducted and administered on behalf of ATIEL by SAIL.



## Purpose of quality surveys

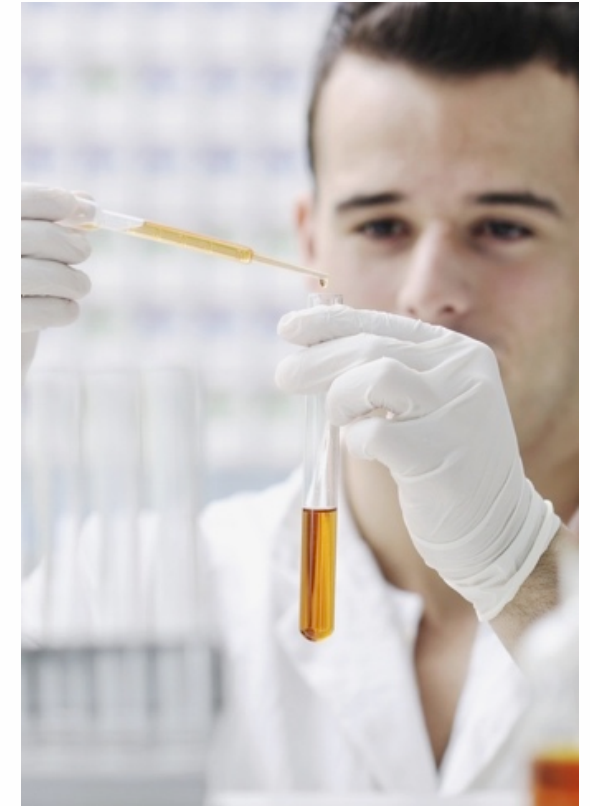
- Establish a base line for compliance with quality standards in Europe.
- Replicate to some extent best practice from other markets (eg API programme in North America).
- Test validity of anecdotal evidence of inaccurate performance claims of some lubricants on the market.
- Demonstrate the benefits of full adoption and application of the EELQMS.
- Enhance the overall robustness of quality management.





# Quality survey methodology

- All samples sourced independently, coded and 'blind' tested.
- Tested against most appropriate ACEA European Oil Sequences and parameters including:
  - Viscosity (high and low temp)
  - Noack volatility
  - SAPS (Sulphated Ash, Phosphorous & Sulphur)
  - TBN (Total Base Number)
- Testing and statistical analysis conducted by independent expert laboratory.
- Individual results shared only with respective marketer.
- Appropriate follow-up actions and sanctions in case of serious breaches of compliance.



## 2017/2018 quality survey

- 184 samples from ATIEL members, LoCs & OEMs tested over the year 2017.
- Countries tested included Germany, UK, Russia, Poland, Belgium/Netherlands, Norway, Turkey, Spain/Portugal, Sweden and Italy
- Monthly review of data by ATIEL QMS Committee.
- Most failures due to incompatible combined claims e.g. A3/B4, C3.  
Sulphated ash and TBN will fail for one of the specs.
- Other failures included TBN, Sulphated ash, NOACK, HTHS, Phosphorus, MRV and CCS.
- But number of failing oils is small.
- In the 2018 survey we see the number of failures decreasing significantly.



# Summary of stakeholder benefits

## OEMs

- Controlled and consistent quality of engine lubricants
- Wide availability of lubricants meeting ACEA requirements
- Protection against warranty claims



## End user

- Trouble-free operation
- Confidence in lubricant performance claims
- Wide availability of lubricants of appropriate quality



## Lubricant and additive industry

- Timely, cost-effective engine lubricant development
- Common approach & standards (level playing field)
- Formulation optimisation and controlled flexibility



# THANK YOU

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