

EUROPEAN ENGINE LUBRICANTS QUALITY MANAGEMENT SYSTEM EELQMS

About the EELQMS

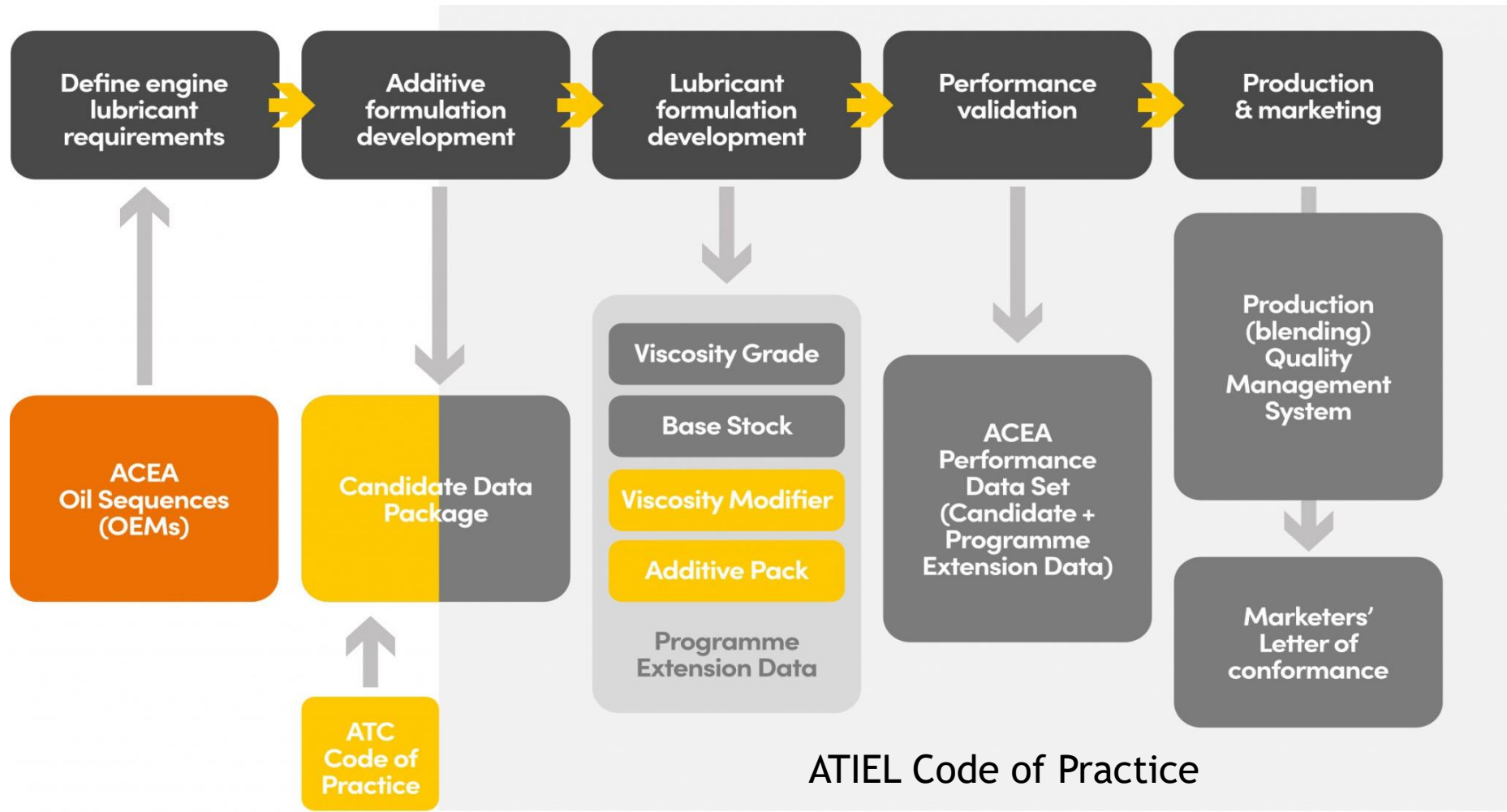
- The European Engine Lubricant Quality Management System (EELQMS) is a quality management system for automotive engine lubricants
- It has been developed jointly by ATIEL, ATC and ACEA
- Although the EELQMS is a voluntary system, it is a mandatory requirement to meet the ACEA sequences
- Provides assurance of the quality of engine lubricants on the market that claim to meet the performance requirements of ACEA
- It is administered by SAIL <https://www.sail-europe.eu/>



EELQMS Structure

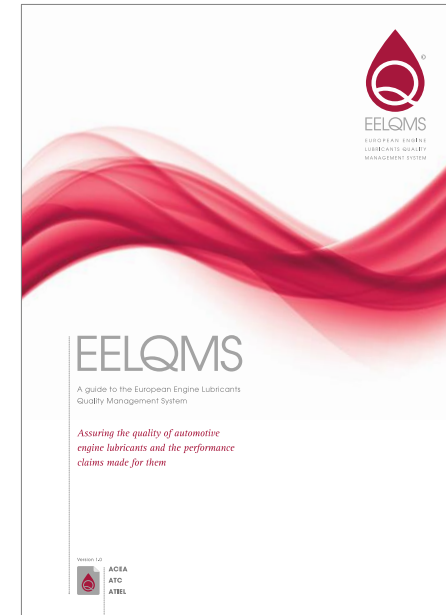


EELQMS: applying the ATC and ATIEL codes of practice according to ACEA sequences



Summary of EELQMS Guidelines

- Lubricant marketers claiming to meet ACEA Oil Sequences must ensure formulation development, manufacture and marketing is in accordance with the guidelines in the ATIEL Code of Practice and ATC Code of Practice:
 - incorporating EELQMS guidelines in a quality management system (e.g., ISO 9001, or IATF 16949).
 - ensuring independent audit of the lubricant development, manufacture and marketing
 - manufacture products according to requirements of ATIEL Code of Practice
 - signing a Marketers' Letter of Conformance and registering it with ATIEL



Lubricant Marketer's letter of conformance

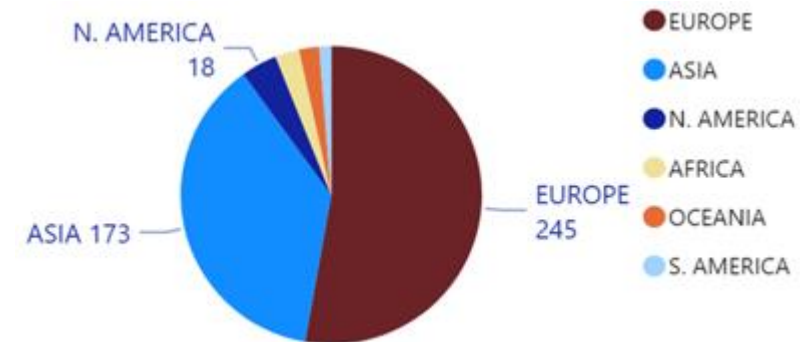
- Required for ACEA performance claims
- Confirms compliance with EELQMS by relevant company signatory
- Signed Letters held by independent SAIL (EELQMS administrator)
- SAIL confirms relevant quality system is implemented by the marketer or manufacturer
- Includes fee for administration and costs of market quality surveys
- Renewable every year
- Membership of ATIEL not required to be a signatory
- List of registered companies and their brands publicly available on SAIL website www.sail-europe.eu



Oil Marketers registration

Number of registrants with signed Letter of Conformance to EELQMS (1 Oct 2021)

- ✓ Listed on website = 464
- ✓ All listed participants signed latest version of LoC
- ✓ Number of countries: 69



Quality Certificates

- ✓ 460 participants provided a quality certificate from the company or from the manufacturer of their products
 - ✓ 322 from their own company
 - ✓ 138 from the manufacturer of the products
- ✓ 4 participants in the process of certification

CONTINENT	1-QC-Comp	2-QC-Blender	3-IMPL Ongoing	Total
AFRICA	12			12
ASIA	123	49	1	173
EUROPE	158	84	3	245
N. AMERICA	16	2		18
OCEANIA	7	3		10
S. AMERICA	6			6
Total	322	138	4	464

Market quality surveys

- The management of the Quality Survey is done by SAIL, the administrator of EELQMS
- SAIL is a subsidiary of ATIEL, but has independent employees, and all data and information within SAIL remains confidential and is not shared with ATIEL members
- Lubricants are tested for conformance against the ACEA specifications that are being claimed
- Lubricant brands tested are marketed by signatories of the EELQMS Marketers' Letter of Conformance (LoC), including those of ACEA members
- Where a product is marketed with an ACEA claim by a marketer that has not signed the LoC, the marketer is informed of the position of ACEA and encouraged to sign or remove the ACEA claim(s) from their products
- Oil products are purchased by independent contractor from retail outlets and authorised distributors
- Objective is to test three different samples from each oil marketer, each three-year period

Surveys Methodology and Feedback

- Products are tested by an independent laboratory according to ISO 17025 accredited standards
- The tests carried out on the samples are Viscosity at high and low temperature, Volatility, Sulphated ash, Total base number, and Elements (sulphur and phosphorus)
- The test lab automatically re-tests a sample in case of borderline data
- All test data is kept anonymous and only the test laboratory and the SAIL Manager know the identity of the oils that have been tested. The anonymised data is shared with the Technical Experts Committee on a monthly basis for evaluation against the ACEA specification limits
- SAIL issues a report to the marketer, data remains the property of SAIL, and the marketer may not use the data in external or marketing communications
- In case of perceived non-conformance, the oil marketer must respond with proposal for actions they will take to ensure the product is brought into compliance
- Feedback from the marketer is analysed by the ATIEL Quality Management Committee in line with the requirements of the ATIEL Compliance Policy

Continuous Improvement

- Compliance framework continues to be clarified and strengthened
- Registration, Letters of Conformance and Surveys yield valuable data and insights
- Targeted communications about the EELQMS and Codes of Practice
 - Targeted to Trade / Lubricants Industry
 - Standards and Expectations
- Developing auditing standards and best practices
 - Through product design to Final ACEA Performance Data Set
 - Through development, marketing claims and manufacturing