

Our key figures

€29 M
of revenue

200 engineers, experts
and test technicians

8 sites in France and
1 in the United Kingdom

1 training organisation, AEMC
expert in EMC (electromagnetic
compatibility) and Mechanic-Climatic
tests

4,000
customers in France
and internationally

5,000
projects completed per year

Our strengths

Technical and regulatory expertise in
environmental testing and technical support,
recognised by the authorities and by our
customers.

The power of a network of test centres located
in France and abroad.



Teams of specialists and expert engineers
adapted to each project.

Calculation centres and a large pool of test
resources able to respond to specific problems
in different markets.

Test standards

- Civil Aeronautics and Space: DO 160, ABD100
- Space: ISS specifications, Airbus Defence & Space
- Defence: MIL STD 810 & 461, STANAG 4370 (AECTP), DEF STAN 00-35
- Railway: NF EN 61373, CEI 62236, NF EN 50 121
- Energy: CRT 80C012, CRT 91C 112, CRT 91C 113, RCC-E, RCC-M, CEI60068-2-X
- Automotive: PSA Peugeot-Citroën (B21 71XX) specifications, Renault Group...
- Medical: IEC 60601, GEMS specifications
- Consumer: CE marking, EN 6100-6-1 to 7, products and testing IEC 61000-4-X, IEC 62305-1 and IEC 61643-11, IEC 60529

Sopemea, expert for your equipment qualifications

6 business solutions for your projects

SUBSIDIARY



Contact

US

Sopemea
Sales Department
Inovel Parc Sud BP48
5 rue du Gal Valérie André
78142 Vélizy-Villacoublay - France

+33 (0)1 45 37 64 64
commercial@sopemea.fr

sopemea.apave.com



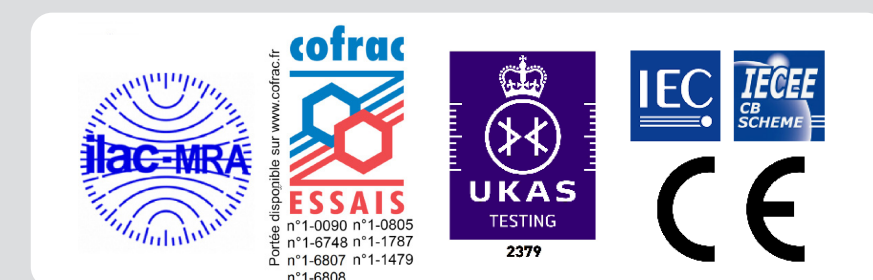
Dedicated test experts for your projects

To meet the new expectations of industrial markets, each player must be able to provide proof of the safety and performance level of its products before they are launched onto the market. Sopemea, a subsidiary of the Apave Group and specialist in industrial equipment qualification tests, manages frame of reference for industrial risk and supports its customers on a daily basis and at all the stages of their projects.

Sopemea will work with you to develop the test strategy for your equipment up to the final stage of qualification

For more than 75 years, Sopemea has been offering its customers a full range of engineering and testing services for the testing of any type of equipment in the areas of mechanical, vibration, climatic, electrical, hydraulic and electromagnetic compatibility, EC marking and on-site measurements.

Our experts are there to support you at every stage of the development of your projects: studies file, justification file or digital simulation file, qualification strategy and tests, vulnerability analysis, systems evaluation by tests, process audit. As an independent third party, our laboratories are accredited by COFRAC in France and UKAS in the United Kingdom.



Sopemea's French laboratories are accredited to ISO / IEC 17025 by COFRAC.

PARC the UK Subsidiary is accredited to ISO / IEC 17025 by UKAS

Sopemea and its subsidiaries AxesSim and PARC cover the Aeronautics, Space, Defence, Railway, Energy, Automotive, Medical and Consumer Electrical and Electronic Equipment markets.

Our core businesses

Environmental tests

Sopemea has a wide range of test facilities available at its various sites, with the capacity to test your hardware and equipment in as per your needs, under all conditions of use and in compliance with international standards.



Mechanical

- 35 electrodynamic generators (from 30 to 300 kN)
- 1 triaxial table 2.2 m x 2.2 m on equipment up to 2 tonnes
- 2 bi-axial tables (2 cylinders 55 kN, 2 cylinders 300 kN)
- 4 impact machines (up to 1.5 tonne)
- Centrifuge (up to 80 g)
- Electrical, pneumatic, mechanical and hydraulic auxiliary services enabling the functional implementation of your equipment

- 100 mobile accelerometer measurement channels

Climatic

- 80 environmental chambers (from 0.05 to 200m³) including rapid decompression chamber and chilled water spray chamber

EMC

- 1 direct-effect lightning generator (200 kA) aeronautical waveform
- 20 semi-anechoic chambers
- 7 reverberating chambers with mode mixing (2 of which mobile)

Studies and expertise

Our multidisciplinary teams define the standards framework and your qualification strategy for your products, equipment, systems, subsystems or infrastructures. Our services cover system analyses and studies in climatic, mechanical and EMC environments, qualification plans, EMC compliance studies for installations, experimental modal analysis on systems, lightning risk and ETF, EMC and vibration measurements.

Digital simulations

Our simulation department offers numerical calculations in electromagnetic compatibility, vibrations and earthquakes, and has developed 4 software packages dedicated to EMC (EM radiation, cable harness models, antenna positioning and SAR). Our experts carry out model prediction and recalibration with actual tests in the fields of vibration, earthquakes and lightning.

Electrical product compliance

Our experts support you in your efforts to meet the compliance requirements for electrical products on the European or international markets, offering you the expertise of COFRAC and IECEE accredited laboratories (CB Scheme).

Training

AEMC, the EMC training and expertise organisation of the Sopemea Division, provides training in the following areas: EMC, mechanical, climatic and risk analysis. Our training courses are available in-person and online.

Maintenance of test facilities

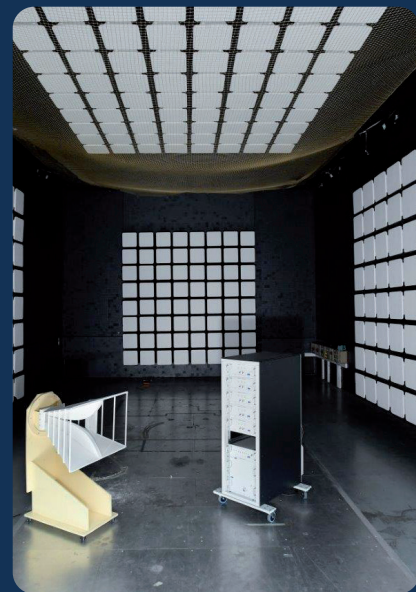
Sopemea supports its testing services with a maintenance service for test facilities. The teams operate across France and Europe in three main areas:

- vibration (exciters, power amplifiers, etc.),
- simulation (positioning and simulation tables),
- climatic chambers.

A range of adapted services

EMC & electrical tests

- Conducted and radiated susceptibility
- Conducted and radiated emission
- Direct/indirect effect lightning
- Strong fields
- Electrostatic discharges
- Insulation resistance
- Electrical continuity measurement
- RADIO
- IEMN
- On-site and on-aircraft tests



Climatic tests

- Hot and cold
- Thermal shock
- Rapid change temperature tests
- Cooling tests
- Humidity
- Ice and snow
- Solar radiation
- Altitude and rapid decompression
- Sand and dust
- Fluid susceptibility
- Rain and wind
- Salt spray
- Mould
- LOCA
- IP/IK



Mechanical tests

- Vibration
- Shock
- Fall
- Static and fatigue
- Seismic
- Hydraulic
- Impact
- Mechanism endurance



Measurements, studies & calculations

- Calculation and simulation
- EMC studies and assessments
- Lightning and ETF risk analysis
- Aeronautics certification support
- Environment characterisation
- Test customisation
- Updating of digital models
- On-board measurements
- Modal analysis
- On-site measurements

