

Our BUSINESS LINES

OUR GROUP

35

OFFICES IN
FRANCE

50

OFFICES IN
40 COUNTRIES

CERTIFICATIONS*

ISO 9001-2008

ISO 14001

OHSAS 18001

QUALIFICATION

OPQIBI

ENGINEERING

- Socio-economic and institutional studies, master plans
- Feasibility and planning studies
- Design services and construction supervision
- Assistance to owners
- Technical and economic studies
- Statutory and safety studies
- Design and build schemes
- Supervision of works / Assistance for project commissioning

CONSULTANCY, AUDITS AND TRAINING

- Market studies
- Financial engineering: funding and cost recovery
- Assistance with public-private partnerships
- Due diligence audits for technical, operational, social and environmental aspects of projects
- Transfer of technical know-how in the context of engineering, consultancy, or project management assignments
- Assistance with operations and maintenance
- Personalised technical training

PROJECT MANAGEMENT

- General co-ordination
- Construction management
- Risk management
- Quality control



Coteba & Sogreah, same team, enhanced expertise

www.arteliagroup.com

DAMS AND HYDROPOWER SCHEMES



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Artelia's **Dams and Hydropower Schemes** activity has developed in France and around the world over the past **50 years**. Built on a historic core business and the **world-class expertise** of **Sogreah**, it is totally **independent** of any other industry player.



OUR CLIENTS

- . Public project owners (Ministries of energy, irrigation, water resources)
- . Organisations in charge of managing major river basins
- . Construction, EPC and industrial companies
- . Banks, funding organisations
- . Investors, operators

OUR ASSETS

- . Computation software for structural, geotechnical, and hydraulic aspects
- . Power grid software
- . DAO/CAD software
- . A **laboratory** for testing hydraulic physical models.

Our multi-disciplinary teams provide the full range of skills required to produce complete dimensional design studies, supervise works, commission or assist with operating dams or hydropower development schemes.

OUR PROJECT ASSIGNMENTS

- Site inventories and energy master plans
- Pre-feasibility and feasibility studies
- Preliminary and detailed design studies
- Tender documents
- Assistance for contract negotiations
- Construction design
- Supervision of works (construction supervision, assistance to project owners)
- Assistance for project commissioning
- Assessment and appraisal of existing structures
- Safety studies
- Monitoring
- Audits, due diligence
- Assistance to the operators

OUR SKILLS

- Topography
- Geology and geotechnics
- Hydrology, sediment management
- Hydraulics (including physical scale-model laboratory and innovative numerical modeling)
- Civil engineering (dams, power plants, water intakes and bottom outlets)
- Hydromechanics (gates, turbines, pipes)
- Electricity (control/monitoring, power lines and substations)
- Economics and cost planning
- Environment (impact assessments)
- Contract management
- Structural risks and safety

OUR MARKETS

- Dams: reservoir dams (arch/gravity/earth dams), run-of-river dams
- Ancillary hydraulic structures of water intakes, flood spillways, bottom outlets
- Hydropower plants (high, average and low head, pumped storage)
- Hydraulic tunnels
- Penstocks
- Steel-lined shafts
- Channels (headraces, tailraces)
- Locks
- Lifting and handling of equipment
- Electrical substations
- Power transmission lines
- Irrigation areas
- Water transfer networks (pipes), including pumping stations

