Our success depends on the satisfaction of our clients. We must all strive together to become the industry benchmark and their preferred partner. It is critical to listen to their needs and respond with speed, ingenuity and flexibility. We must equally listen to their feedback and use this both to commend our staff and to ensure we have the improvement plans in place to better address their requirements in the future.

Continually increasing our clients’ satisfaction is essential to the ongoing success of our business. We must also focus on project management, ensuring that our processes are lean and effective, and that our costs are managed in line with our objectives, including the operational costs associated with non-quality.

I strongly believe that a robust quality management system plays a significant role in helping us achieve our ambitions, ensuring that CGGVeritas takes its place as the leading international geophysical company.

Through our transverse Global Operational Excellence Function, we will share our Group quality strategy, strengthen transverse processes and coordinate the quality activity across the Group.

Within each Division, our Quality Management Systems must provide a platform for improving our clients’ experience with CGGVeritas and effectively address our risks. Our performance action plans must be well executed, Divisional quality audit programs must be focused on identifying improvement opportunities and management reviews must use measurable performance metrics to ensure we are able to learn and continually improve from our actions.

Delivering improvement requires commitment from us all. With each person doing their part and working together as a team along with a shared goal and ambition, we can achieve our vision.

Jean-Georges Malcor
Purpose
The purpose of this Quality Manual is to present the CGGVeritas Group, its organization and quality management approach.

Scope
This manual is applicable to the five Divisions of CGGVeritas:

- Land
- Marine
- Processing, Imaging & Reservoir
- Equipment
- Multi-Client & New Ventures

Control and Distribution of this Manual
This manual is updated by the Manager of Quality Processes each time there is a significant change to the Quality Management System. It may be freely distributed to clients, company personnel and all other interested parties.

This manual is published on the Group Documentation Management System (G-DMS) to facilitate access by all employees.

Readers are encouraged to report any suggestions for improvement or concerns.
CGGVeritas is the world’s leading provider of geophysical data, equipment, technology, and services to the oil and gas industry. CGGVeritas has been a pioneer in the advancement of geophysical exploration and reservoir characterization (or reservoir seismic) since 1931.

Core Business

Marine
Our Marine Division offers a complete range of towed streamer and seabed acquisition. Our seismic fleet gives our clients unrivalled access to high-end vessels with a variety of towing configurations to suit their requirements for high resolution 3D, wide-azimuth and BroadSeis broadband acquisition. We have a record of successful seabed projects around the world, ranging from retrievable OBC and node surveys to permanent reservoir monitoring.

Land
The Land Division provides unparalleled experience and industry-leading resources and operational expertise in land and shallow water seismic data acquisition activities, especially in environmentally sensitive areas such as the Arctic. This combination guarantees we will always design and implement the best acquisition solutions to overcome project challenges.

Our technology, HPVA and V1 High-Performance Vibroseis Acquisition together with SeisMovie permanent seismic monitoring, ensures highest-quality data without compromising productivity.

Processing, Imaging & Reservoir
The Processing, Imaging & Reservoir Division is the recognized leader in data processing and imaging and our Hampson-Russell software and services are recognized as leaders in providing advanced geophysical interpretation and seismic reservoir property analysis.

Technologically, our geovation software is the industry benchmark evolving from 35 years of experience and encompassing industry-leading technology. This is delivered through our regional computer hubs offering vast globally distributed compute power.

Equipment
The Equipment Division working under the Sercel brand designs, manufactures and supports a full range of high-tech integrated equipment for hydrocarbon exploration and production in land, transition zone, ocean-bottom cable, marine and downhole environments.

Our engineers and technicians apply the skills they have acquired through long-standing R&D work and experience in the field to constantly push back the limits of seismic acquisition.

Multi-Client & New Ventures
Our Multi-Client & New Ventures Division manages a library of recent-vintage land and marine datasets, well-positioned in the most attractive basins and emerging provinces. The Geologic Services Department provides unrivalled geologic and geophysical expertise, resources and a unique set of tools with which to fully realize the value of acreage.
CGGVeritas is organized into five Divisions (Marine, Land, Processing, Imaging & Reservoir, Equipment and Multi-Client & New Ventures). Each Division is responsible for their entire core business at an international level. Within each Division, local business units manage operations at country level.

In addition, six globally transverse Functions are in place, reporting directly to the CEO. Their role is to provide functional leadership and ensure consistency in practices between Divisions as well as providing a platform for global improvement.

The Group Executive Committee comprises the CEO and the Executive Vice-Presidents of each Division and Function. The role of this body is to define global strategy and direction, which is communicated through Group Policies and Annual Objectives to the Divisions and Functions.

Each Division is responsible for cascading objectives and ensuring that adequate processes and plans are in place to deliver the expected results.
To achieve its objectives, the CGGVeritas Group has developed a Quality Management System based on:

- The Group Quality Policy and Annual Objectives
- The management of key business processes
- The definition of Group General Instructions and procedures managed and controlled through a Document Management System
- The Continuous Improvement Program
- Quality and Performance scorecards

This approach is in line with the CGGVeritas Vision, Values and Ethics.

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**Vision and Values**

The Vision of CGGVeritas is to be the leading international partner in developing natural resources through geophysics:

- Be the industry benchmark
- Deliver breakthrough technologies and innovative solutions
- Attract, develop and recognize talent
- Promote a culture of performance creating long-term value

Our Values: “Our focus on performance and passion for innovation are powered by people and delivered with integrity.”

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**Quality Policy**

CGGVeritas is fully committed to working in partnership with our clients and suppliers to achieve the vision of being the international leading partner in developing natural resources through geophysics.

We make a relentless effort to continually improve our products and services:

- Exceeding our customers’ expectations
- Meeting or exceeding our turnaround commitments
- Delivering superior operational and financial results

We deliver by listening to our customers’ needs and concerns; meeting our commitments; and improving our staff, technology, and processes.

To achieve this result we commit to the following:

**Strong Line Management Leadership**

Providing resources and creating an environment in which our employees can operate effectively and deliver improvements to our products, services, and processes.

**Clear Targets and Objectives**

Set and monitored by management to deliver our strategy and achieve the desired results for our stakeholders.

**Exceptional Talents and Technology**

Leveraged to continually improve products and services, enhancing customer satisfaction and generating value for CGGVeritas.

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**Motivated and Involved Staff**

- Trained to anticipate customer needs and respond swiftly and effectively in a rapidly changing industry.
- Rewarded for their initiative and efforts to improve our operational performance, technology, and customer service.

**Mutually Beneficial Supplier Relationships**

Creating long-term sustainable value for both CGGVeritas and our preferred suppliers.

**Optimized Business Processes**

Streamlined to efficiently and effectively support operations.

**Robust Quality Management Practices**

In place to deliver continuous improvement in our products, services, and practices through

- Compliance with international standards and industry regulations.
- The use of audits and management reviews to ensure that the CGGVeritas quality system remains effective and capable of meeting management and customer expectations.
Key Business Processes

The CGGVeritas Quality System is built around two types of processes:

- **Client-Facing Processes**, co-ordinated with project and program milestones, and conducted to provide clients with the products and services that meet their requirements and expectations
- **Management and Support Processes**, including all the activities required for managing the company, its resources and processes, and conducted in support of the operational processes
The Quality System also comprises the high-level policies, objectives, manuals and instructions defined to ensure optimal management of core processes.

- **Policies**: The overall intentions and direction of the organization as formally expressed by the CEO
- **Objectives**: Defined annual goals set for specific management system (Quality, HSE, Financial Security). They are aligned to the policies and comprise measurable targets
- **Manuals**: Framework documents that provide descriptions of the individual systems and subsystems that exist within CGGVeritas (e.g. Group Quality Manual)
- **General Instructions**: These are documents, issued by a Function to describe how policy is to be executed. They apply to all CGGVeritas Group entities and define expected actions, roles and responsibilities

The Reference System Applies to:
- Group governance documentation
- Division reference documentation

The Document Management System is managed by the Quality and Performance team within the Global Operational Excellence Function and published on the company intranet.

To ensure efficient management, document reference ID’s are used to define document metadata and assist in control.
Management Principles

Plan

Strong Management Commitment
The Group Executive Committee (COMEX) defines the strategic objectives for the Group. The Division and Function management teams develop the strategies necessary to reach the desired goals, including development of action plans and metrics to assess achievement.

For major improvement initiatives, a project sponsor or steering team is assigned to oversee the project, provide management support and visibly demonstrate commitment.

For all projects, a leader (and support team) is assigned, responsible for deploying and implementing the plan.

The Quality and Performance department has overall responsibility for managing process improvement initiatives.

Act

Product and Service Improvement is Key
Continuous improvement is at the heart of the CGGVeritas Quality Management System. This includes all activity implemented or planned to improve the quality of our products and services and enhance our client experience.

Our improvement loop is driven by client feedback and the reporting of quality-related incidents and near misses. Improvement opportunities are also identified through reviews, internal audits and risk assessments.

CGGVeritas strives to ensure that actions taken to improve our products and services are efficiently handled, effective, sustainable and communicated across the organization.

Within Divisions, “Continuous Improvement Plans” are developed and managed to drive improvements in our products and services, enhance client satisfaction and address identified business risks.
**Do**

**Quality is Everyone’s Job**

A rigorous project management approach is followed to ensure projects are delivered on time, to budget and meet stakeholder expectations.

Managers and project leaders, supported by members of the Quality and Performance department are responsible for deploying best practice in their teams.

To assist them, project leaders may develop deployment plans that comprise communication, training and coaching.

Project leaders must also ensure that best practices implemented are captured and adequately documented in the Group or Division Documentation System to facilitate sharing and wider deployment.

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**Check**

**What Gets Measured, Gets Improved**

Various means are used to detect and measure the effective deployment of strategy and improvement plans.

These include audits conducted by internal bodies, clients and third party certification bodies, client feedback, scorecards, internal surveys, etc.

Based on the results of these metrics, subsequent analysis is undertaken and reviewed by Division management in regular quality reviews.

These reviews are crucial to engaging management and defining whether new improvement projects are needed.
The Quality and Performance department is one of the pillars of the Global Operational Excellence Function. The primary objective is to conduct a relentless effort to deliver high-quality services and products to our clients and to increase operational competitiveness.

The Group VP, Quality and Performance, leads a team of specialists in improving a range of transverse processes affecting multiple divisions.

These Include:

• Leading Division quality teams to deliver high-quality services and products to our clients’ satisfaction.
• Defining and delivering annual quality objectives aligned to Group strategy.
• Ensuring processes are in place for reporting and analyzing nonconformities and client feedback.
• Developing and deploying continuous improvement programs.
• Conducting effective quality management reviews.
• Developing and delivering annual quality audit programs.

Quality Managers within each Division report functionally to the Group VP, Quality and Performance, and are responsible for the proper implementation of the Quality Management System and continuous improvement within their Divisions.

These Include:

• Leading process-improvement initiatives.
• Developing and delivering quality training.
• Managing information security.
• Maintaining and controlling the Documentation Management System.
• Managing the performance improvement system.

Contact Details

Should you have questions or require more information on how quality is addressed within the CGGVeritas organization, please email: quality@cggveritas.com
External Certifications

To demonstrate our ability to meet our clients’ requirements, we have obtained and maintain certification to ISO 9001:2008 for our Quality Management Systems in the following locations:

Processing, Reservoir & Imaging

ISO 9001:2008

Seismic Data Processing Services

United Kingdom
- UK Processing Center, Crawley
- Aberdeen Open Center, Aberdeen
- BP Dedicated Processing Center, Aberdeen
- Total Dedicated Processing Center, Aberdeen
- ITO at EAME Operations Center, Redhill

France
- Massy Processing Center, Massy
- Open Processing Centre, Pau

Sultanate of Oman
- Dedicated Processing Center, PDO, Muscat

Netherlands
- Shell Dedicated Processing Center, Assen

Norway
- Oslo Center, Oslo
- Statoil Dedicated Center, Stavanger

Mexico
- Seismic Data Processing, Imaging & Reservoir Center, Villahermosa

Marine Acquisition

ISO 9001:2008

Acquisition and Onboard Processing of Marine Seismic Data

Equipment

ISO 9001:2008
- Sercel, St. Gaudens, France
- Sercel, Houston, USA
- Sercel, Alfreton, UK
- Sercel, Nantes, France
- Sercel, Leu-Usis, France
- Sercel, Singapore
- Sercel Junfeng, Xushui, China
- Sercel Optoplan, Trondheim, Norway
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