This manual has been prepared
in accordance with DIN EN ISO 9001:2015

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0  Foreword

GKW Consult GmbH (hereinafter called GKW) maintains a Quality Management System (QM system) according to requirements as defined in DIN EN ISO 9001:2015. Being member of the Lahmeyer Group, GKW has been included together with Lahmeyer Deutschland GmbH (LD), Lahmeyer München GmbH (LM) and the Lahmeyer branch office Abu Dhabi (BOAE) into the matrix certification of Lahmeyer International GmbH (LI).

It is our intention to streamline our internal processes and thus to continuously increase our corporate quality. These endeavours are given expression in the form of a clearly formulated Quality Management Documentation.

The present manual defines the quality policy and principles. It is available through the GKW Intranet (Quality Management) and shall serve as guideline for all activities within the company and for interaction with our business partners and stakeholders. Since our business is mainly international, the manual and all related documented information has been prepared in English language.

1  Scope

This manual and all subsequent processes are applicable for GKW and cover consulting services for public and private clients provided in environmental engineering, with emphasis in the fields of water supply, wastewater treatment and disposal, solid waste management, regional development and management advice.

The scope of the present QMS extends to our head office in Mannheim and does not cover our international branches and affiliated companies. GKW India Branch Office maintains a QMS on its own (as per DIN EN ISO 9001:2008).

2  Normative References

All documented information or regulations referred to in this manual, are printed in .

3  Terms and definitions

The terms and definitions given in DIN EN ISO 9001:2015 apply for this Manual and all related documented information. They are based on gender equality. Whenever reference is made to "he" / "his" or any male title for profession, task or duty description, this is to be understood and read as synonymous for "he or she", "his or her", or the respective female title.
4 Context of the organization

4.1 Understanding the organization and its context

GKW Consult GmbH was founded in 1953 and has been developing and implementing projects and advisory services for public and private Clients for more than 60 years in over 50 countries worldwide, mainly financed through bilateral and multilateral funding agencies. With more than 140 experts, GKW ranks as one of the leading German consulting companies, engaged in environmental engineering, with emphasis in the fields of water supply, wastewater treatment and disposal, regional development and management advice. Our team is formed of experts who are either specialized in engineering sectors, such as civil engineering, electrical and mechanical engineering, process engineering and geotechnical services or in economics, sociology or natural sciences and environmental consulting. In addition, GKW is member of numerous German and foreign professional associations, committees and societies.

Since May 2016 GKW is part of the Lahmeyer Group, which belongs to Tractebel Engineering, and the ENGIE Group.

Figure 1 – Organization Chart Lahmeyer Group (as per 1st April 2017)
4.2 Understanding the needs and expectations of interested parties

Due to this context and related requirements, different stakeholders can be defined, which have a major influence on our activities. An evaluation of internal and external stakeholders, as well as assessment of their expectation is done within the yearly Management Review. We have categorized our stakeholders as follows:

4.2.1 Internal stakeholders

Shareholder, management, employees, workers council.

4.2.2 External stakeholders with high impact

Clients, international financing agencies (IFIs), strategic partners and sub-consultants, freelance experts, suppliers, other business partners.

4.2.3 External stakeholders with low impact

Bank, auditors, legal counsels, insurance companies, tax authorities, health insurance companies, trade register, associations (e.g. VBI, FIDIC), neighbours and candidates, press and media, competitors.

4.2.4 Our business philosophy

Our ethical principles are a key component of our business philosophy. Our reputation within the business community is one of our most important assets. Clients and stakeholders expect us to work based on high ethical standards, to fulfil all our obligations and to act honestly and with integrity. Our reputation very much depends on the strict observance of these values. Based on the above, we expect our employees to act in accordance with our ethical principles. We assume that our senior managers live by these ethical principles, that they convey and encourage these values and that they set exemplary standards to make sure that these principles are being observed. They are the first persons to be contacted by the employees whenever ethical questions arise.

GKW is fully committed to the basic principles as they have been laid down in the ENGIE Ethics Charter, FIDIC Code of Ethics and in the OECD Convention of 1997.

4.2.5 Our Compliance Management System

As one of the forerunners in industry, GKW introduced a Compliance Management System, designed to meet the challenges of highly varied international business activities. Its implementation is based on the knowledge that our competitiveness can only be ensured by fair and transparent business operations. Based on our compliance guidelines and extensive training, we have introduced uniform standards of conduct, implementation and monitoring procedures which have compliance embedded throughout our entire business activities.
4.3 Determining the scope of the quality management system

Our QM system covers the company as a whole and includes the interaction with our external stakeholders. The process map (Figure 2 below) visualises this scope. GKW is only commissioned to perform planning and supervision services and does not design or develop any services on its own. All orders are project-specific and implemented according to the specifications defined by our Clients. For that reason, design and development of products and services (clause 8.3 below) are not applicable for GKW and excluded from our QM system.

4.4 Quality management system and its processes

The goal of our QM system is to implement the quality policy and objectives within the GKW and to enhance our Clients’ satisfaction levels. A systematic and methodical process is ensured by defining all processes that affect the services delivered to our Clients. Our QM system is structured according to the requirements as of DIN EN ISO 9001:2015 Quality Management Systems.

4.4.1 Organization of our quality management system

The overall responsibility for the implementation and continual improvement of the QM system within GKW remains with the management. It is supported by the GKW quality manager who contributes to the effectiveness of the QM system and ensures that the processes are delivering their intended outputs. As far as Lahmeyer group-wide topics are discussed, the GKW quality manager participates in the Lahmeyer Quality Workshops.

4.4.2 Process map

The process map shows the interaction between our processes, which are divided into quality management, core and support processes. The core processes describe the complete project cycle and thus form the basis. They are controlled by the quality management processes and supported by the support processes.
Figure 2 – Process map
5 Leadership

5.1 Leadership and Commitment

GKW Consult GmbH (GKW) is an independent consulting engineering company, with the impartiality, independence and integrity required for the provision of its services.

Since 2012 GKW maintains a Quality Management System (QM system), which guarantees that all work will be planned, controlled and supervised and that all services correspond exactly to the requirements specified by the Clients. The quality orientation of the company is exemplified by the management and our senior staff. They and all employees have committed themselves to adapt their actions to the documented quality policy and practices. The management requires all GKW employees to carry out their work in accordance with the quality regulations described in this manual and assures that

- we commit to offer highly professional consulting for our Clients, paying particular attention to changes in Clients’ interests and needs;
- there is no financial influence exerted on investigation and inspection results;
- any influence on investigation and inspection results by external persons or organizations is excluded;
- GKW and its employees are free from any commercial, financial and other influences potentially compromising their technical judgment;
- we are not involved with activities potentially compromising confidence in the company’s independence of evaluation and its integrity concerning the testing activities.

Compliance with the given quality policy and the quality objectives is continuously monitored by the management and documented in the annual Management Review.

Mannheim, 01. June 2018

Dr. Christoph Theune
Managing Director

Patrick Kaminsky
Managing Director

i.A. Cornelia Clemm
GKW Quality Manager


5.2 Policy

5.2.1 Establishing the quality policy

Since the establishment of the company in 1953, employees and senior staff have enjoyed an outstanding reputation as independent technical consultant. This image motivates us to improve continually. We strive to offer our Clients the best quality and to assure our employees attractive and secure employment with potential for further development.

These endeavours are given expression in the form of a clearly formulated quality policy, which is binding for all employees. Deviations from corporate objectives are investigated based on operating results and the current status is documented in audit reports and, where appropriate, give rise to corrective or preventive action, and the definition of new key performance indicators.

Our commitment to the quality of our services is expressed in our daily business as follows:

- We offer professional consulting for our Clients, tailored to their needs
- We strictly comply with the Ethics / Compliance Management System
- We act in accordance with laws and regulations
- We support our business processes through state-of-the-art adaptation
- We constantly adapt to technological development in our fields of work
- We stay an attractive employer
- We recruit competent staff and qualify them by regular training
- We co-operate with business partners based on mutual trust
- We select freelance staff and subcontractors based on our values
- We improve our QM system by continually optimizing our processes

5.2.2 Communicating the quality policy

Within the scope of its overall management tasks, the management revises and defines the company’s strategy during the regular management meetings. It is founded on the conviction that not only the quality of the services rendered is decisive for meeting Clients’ requirements, but also to a high degree factors such as technical and personal competence, reliability and speed of reaction, should problems arise. The goal is a continuous increase of corporate quality.

GKW’s corporate performance is defined using key performance indicators from significant processes within the company. The management commits itself to review and communicate the status and the efficiency of the QM system by preparing a yearly Management Review published in the GKW Intranet (Quality Management / Audit Documents).
Moreover, training measures ensure that our quality principles and resulting key performance indicators are communicated to all employees, thus raising awareness of its importance and encouraging all staff members to improve the existing system.

5.3 Organizational roles, responsibilities and authorities

GKW is structured into the technical departments Water, Wastewater, Regional Development / Solid Waste as well as Industrial Water Management, which are represented by heads of department. In addition, regional departments for three strategic target areas have been established with the leadership of the respective regional directors. To avoid internal conflicts, close communication between all departments is essential and assured by regular management meetings.

In case of absence or unavailability of a person leading to the inability of carrying out a role and/or competence according to our QM system, the absent person must delegate the respective role or function to another person within the organization. The substitute should not be more than one level below the hierarchic level of the absent person. Standing delegations are possible. As regards the delegation of the roles of the Managing Director (Operations) and the Managing Director (Finance & Administration), the role of Managing Director (Operations) is automatically delegated in his absence to the Managing Director (Finance & Administration) and vice versa.

Figure 3 –Organization Chart GKW Consult (as per 1st January 2018)
6 Planning

6.1 Actions to address risks and opportunities

The management of risks is an integral part of GKW’s business management and internal control framework. The aim is to enable the achievement of the strategic and financial objectives and targets in a controlled manner. As an on-going controlled process, it is closely tied to our business processes. All risks are categorized, and the clear focus has been set on proactive preventive and protective measures and actions. In case of materialized risks, decisive and structured actions are taken and followed up.

Risks that cannot be prevented or mitigated at all or only with an unreasonably big effort, or risks, that GKW cannot influence on are excluded from our risk management. This includes risks such as the destruction of the building by external influences (earthquakes, aircraft crash, etc.) or the downtime of business operations by e.g. armed conflicts or epidemics.

Opportunities for Overseas Development Assistance (ODA) projects are identified on a regular basis either through internet based tender services (Assortis, GTAI), or through information “from the field”. This includes the direct approach by the Client or business partners (quite often due to outstanding reputation), an active search by project managers on-site or by management staff during acquisition trips.

Non-ODA projects follow a different route of identification, which mostly includes proactive acquisition measures. Additional information comes from Tractebel (TE) sources such as business developers, country managers, sales agents, GKW staff and business partners.

6.2 Quality objectives and planning to achieve them

It is the objective of GKW to retain and strengthen its position among the top international independent consultants for environmental engineering. Offering a full range of services for sustainable solutions in water supply and wastewater treatment as well as in applications involving high technology is vitally important for our business. Open and competently managed communications in compliance with the regulatory requirements are essential for our credibility and success. At the same time, the confidentiality of the business and trade secrets entrusted by the Clients must be guaranteed.

Within our ODA business we place our focus on India and selected adjacent countries, Eastern Africa, Maghreb, selected South-Eastern countries (e.g. Vietnam), Western Africa and Anglophone Africa, and Latin America (Peru, Colombia, Ecuador). Within the Non-ODA business, we concentrate on Contractor’s Engineering, Developer’s, Owner’s and Lender’s Assistance (BOT route), and Advisory Services Utilities.

Management, senior staff and all employees have committed themselves to support the quality orientation of the company:

- Highly professional consulting for our Clients;
- Co-operation with our business partners based on mutual trust;
- Improvement of our competitiveness by continually optimizing our processes and structures;
- Retaining our reputation and practices as an attractive employer;
- Implementation of legal requirements;
- Measures to enhance health and productivity of each employee.

During the half-year and the strategy meeting the management revises and defines the quality objectives, which are founded on the conviction that not only the quality of the services rendered is decisive for meeting Clients’ requirements, but also - to a high degree - factors such as technical and personal competence, reliability and speed of reaction, should problems arise. The goal is a continual increase of corporate quality. GKW’s corporate performance is defined using figures from significant processes within the company. The management ensures, that the employees are informed about these principles and the resulting objectives in the form of key performance indicators, which are published in the yearly Management Review.

6.3 Planning of changes

Quality objectives are revised and redefined - if necessary - during the regular management meetings. All employees are informed at regular intervals about the current situation of the company and the status of individual projects through the GKW Newsletter and staff information meetings, which are also published in the GKW Intranet, thus making the information available throughout the whole company. The status and the efficiency of the QM system are reviewed by preparing the Management Review. Based on the Review, measures are defined, and objectives are set for ensuring continual improvement. Management Reviews are prepared once a year and published in the GKW Intranet, section Quality Management/Audit Documents.
7 Support

7.1 Resources

7.1.1 General

In the consulting and engineering business, competent and skilled employees are the backbone of the company's competitiveness and the success of a project substantially depends on the personality and competence of the project staff. GKW pays high attention to the selection of its employees. Apart from technical knowledge and expertise, the ability of staff to organize and communicate, as well as proficiency in foreign languages is of main interest.

An overall understanding between staff members and the corresponding line managers, as well as the clarification of company and individual objectives, targets and questions are the basic condition for a target-oriented and trusting collaboration. It is furthermore GKW’s intent to promote the staff member in his specific and interdisciplinary qualification. In this respect, the employee dialogue is a very important element to increase motivation and to develop and support the employee’s activities.

In addition, and to support our permanent work forces and to add specific expertise, we count on the appointment of Freelance Experts. Regulations for contracting Freelance Experts, their assignment, duties and responsibilities have been defined and are subject to regular control.

7.1.2 People

The overall responsibility for the implementation and continual improvement of the QM system within GKW remains with the management. It is supported by the GKW quality manager who contributes to the effectiveness of the QM system and ensures that the processes are delivering their intended outputs. The GKW quality manager assumes a consultative function vis-à-vis the management and provides advice and assistance regarding the implementation of the system.

Our processes are defined and described in documented procedures. Process managers have been appointed to monitor each process and the related forms and documents and - with assistance of the GKW quality manager – to prepare revisions – if necessary.

7.1.3 Infrastructure

GKW office space, IT infrastructure including hardware and software as well as information and communication technology (video conference facilities) are continually brought up-to-date according to requirements needed for the daily business. Legal provisions on workplace environment are respected. Additional administrative support (IT, Human Resources) is provided by LI, if required.

In addition to the standard office applications, several additional technical software is being used, the selection and application of which is defined according to the GKW strategy and project requirements.
7.1.4 Environment for the operation of processes

Variable working hours and part-time agreements offer flexibility to realize given tasks. For travellers and expatriates abroad, adequate assistance in cases of emergency is provided by an external provider for medical and travel security services (International SOS). Company-level agreements regarding social issues, offers for company sports activities or get-togethers are positively received by all employees.

7.1.5 Monitoring and measuring resources

Not applicable

7.1.6 Organizational knowledge

GKW has determined the organizational knowledge that is necessary to manage and execute its processes and to ensure conformity of our services. Our knowledge is based on internal (intellectual property, lessons learned, best practices, BID project database) and external resources (DIN Standards / DWA Rules, FIDIC Books and selected technical literature). The knowledge is being maintained and made accessible to all employees through the GKW Intranet.

Moreover, and as a result of being owned by TE, GKW has access to a comprehensive information system provided by the group and thus benefits from the collective knowledge shared across the organization: myPortal (Tractebel intranet), C-Force (CRM tool to optimize acquisition processes), Yammer (Tractebel social network), and COMREF (global database for managing commercial references, to be fully implemented by end of 2018).

Regulations for physical and electronic filing of project documents facilitates the traceability of proceedings and thus represents an important contribution to the transfer of the organization’s knowledge.

7.2 Competence

Project success substantially depends on the personality and competence of the project staff. GKW pays high attention to the selection of its employees. Apart from technical knowledge and expertise, the ability of staff to organize and communicate, as well as proficiency in foreign languages is of main interest.

The basic condition, which allows GKW to render high-quality services, is best-qualified staff. It is our intent to promote the employee in his specific and interdisciplinary qualification. In addition to the knowledge that has been acquired in the scope of the professional education and experience, a constant and additional training is required to meet the continually changing requirements. GKW has defined the need for training and assures proper documentation of training measures performed.

Moreover, an overall understanding between staff members and their line managers, as well as the clarification of company and individual objectives, targets and questions are the basic condition for a
target-oriented and trusting collaboration. In this respect, the employee dialogue is a very important element to increase motivation and to develop and support the employee’s activities.

As a result of the TE ownership, GKW has access to training tools offered by the group: Tractebel School, E-campus and ENGIE University provide showcase courses designed to transmit existing knowledge and expertise. All these tools are accessible through the TE intranet (myPortal).

### 7.3 Awareness

All employees are requested to respect and to perform their activities in accordance with our quality management system and our stipulated quality standards. Regular workshops on the quality management system and selected processes ensure awareness of our quality processes and objectives. In the case of nonconformities stated during internal audits measures are taken and followed-up.

### 7.4 Communication

The GKW Intranet is the most important internal communications channel and meeting place and features a wide range of services. Information has been categorized according to the sectors Marketing, Quality Management, Business Support and Internal Organization.

Additionally, the Management informs the employees at regular intervals about the current situation of the company and the status of individual projects through the GKW News. Information is given on compliance and quality topics and major strategical issues decided during the management meetings which are held on a regular basis. Additionally, up-to-date topics are communicated via mail, Yammer or within the News section of the GKW Intranet.

All documents related to quality management are available in the GKW Intranet (Quality Management). Any changes or updates made to the QM documentation, as well as the publication of other QM documents (e.g. audit reports, management reviews) are published in the Quality News section of the intranet (with automatic distribution by mail), thus making the information available throughout the whole company.
Clients and other stakeholders are informed on news of external interest through the GKW's website, from where News may be subscribed to by a RSS feed.

7.5 Documented information

7.5.1 General

As described in the chapter 7.4 above, all documented information is available through the GKW Intranet (Quality Management), which is available throughout the whole company. Any changes or updates made are communicated through in the Quality News section of the intranet (with automatic distribution by mail).
Our documented information is based on our processes. Quality management processes comprise mainly the tasks of quality management that define the framework of the company’s activities and guarantee a continual improvement of the organization. Core processes describe the complete project cycle and thus constitute essential contributions to Client satisfaction. Support processes provide the prerequisites and the necessary resources for smooth progress of the core and management processes.

Figure 6 – Structure of our quality management documentation

7.5.2 Creating and updating

We have committed to the fact that the documented information

- is correct and complete,
- is valid and up-to-date,
- meets all internal requirements,
- can be used as evidence of correct practice in the case of liability claims, and
- that clear regulations will be applied

All quality management documents are clearly marked and identifiable and all employees have access to the currently valid versions. By the defined check respectively approval procedure, all parties concerned have the possibility to contribute their needs and ideas. Process managers have been appointed to monitor each process and the related forms and documents and - with assistance of the GKW quality manager – to prepare revisions – if necessary.

7.5.3 Control of documented information

Documented information required by the QM system or of external origin provide evidence that regulations set forth in our QM system have been respected. They serve as an important tool to prove that procedures were duly followed in compliance with the quality standards. In case of any disputes they may help to clarify the circumstances.
We have defined clear regulations for electronic and physical filing of project documents, including documented information from external origin, which ensure that these documents shall be filed in such a way that they will not be damaged, affected or lost and that a quick access is guaranteed.
8 Operation

8.1 Operational planning and control

GKW is implementing projects and advisory services worldwide. Our Clients are either local Water Boards or Authorities, which are funded by the IFIs or, on the other hand, Private and Public Clients (Non-IFIs). To secure and extend our market position as one of the leading German consulting companies, it is our aim to maintain close contacts to all stakeholders and to recognize business opportunities at an early stage.

Within our ODA business we place our focus on India and selected adjacent countries, Eastern Africa, Maghreb, selected South-Eastern Countries (example Vietnam), Western and Anglophone Africa, as well as Latin America (Colombia, Ecuador, Peru). Within our Non-ODA business, we focus on Contractor’s Engineering, as well as Developer’s, Owner’s and Lender’s Assistance (BOT route), and advisory services. In addition, it has been agreed upon during strategy meetings on LI and GKW levels further develop projects in the desalination sector, EPCM services in Germany, M&A activities, and to increase number of our staff.

8.2 Requirements for products and services

8.2.1 Customer communication

In addition to technical know-how, personal contact with our Clients is important. Therefore, we attach much importance to the personal integrity of our project team and their ability to communicate. This competence allows us to better serve our Clients and to meet their specific requirements. To recognize their demands and requests with regard to our services can best be achieved through permanent dialogue and exchange, which is in our vital interest. During the complete project cycle a close communication is maintained, through regular Clients visits or e.g. by conducting Client interviews at suitable intervals.

Additionally, and on a regular basis, our website informs about services and new activities. Brochures and reference lists present updated information on latest projects.

8.2.2 Determining the requirements for products and services

For us, customer orientation means to offer services tailored to Client’s requirements, considering legal and official requirements. It is therefore necessary that all employees have the highest professional competence. This competence is also a decisive criterion when GKW recruits staff and is supplemented by deliberate corporate orientation and additional training.

In addition to a steady interchange of technical know-how, personal contact with our Clients is important. Therefore, we attach much importance to the personal integrity of our project members and their ability to communicate. This competence allows us to serve our Clients better and to meet their specific requirements.
8.2.3 Review of the requirements for products and services

The contract documents (together with the technical proposal) contain among other the full scope of works, work schedule, staff planning, and a list of project deliverables. They are the main guidelines for the execution of the project, because all activities, tasks, duties, reports to be produced, invoices to be prepared etc. are described extensively. Risks that are likely to endanger timely project completion, being technical, financial, organizational, or compliance related shall be pointed out during the project kick off meeting. During project execution the requirements for products and services are continuously monitored based on regular project status reports.

8.2.4 Changes to requirements for products and services

Major modifications respectively additional services to contracts awarded are controlled through addenda signed with the Client.

8.3 Design and development of products and services

Excluded:
GKW is only commissioned to perform planning and supervision tasks. An independent design and development of services does not apply. All orders are specific to projects and implemented according to the specifications of the Client. GKW does not undertake construction work concerning building activities. For that reason, this clause is not applicable and excluded from the QM system.

8.4 Control of externally provided processes, products and services

8.4.1 General

To support permanent work forces and to add specific expertise, GKW counts on the appointment of freelance experts. Relevant information on freelance experts, their experience, education and references are managed in the (GKW) Information System Experts, a specific information system, which also serves as tool when searching for adequate freelance personnel. Clear regulations have been defined for contracting experts and outlining their duties and responsibilities.

8.4.2 Type and extent of control

The performance of freelance experts is assessed on a regular basis by using a pre-defined questionnaire. The evaluation is entered in the (GKW) Information System Experts.

8.4.3 Information for external providers

As stated in chapter 8.4.1 above any kind of information on freelance experts is available through the (GKW) Information System Experts. Selected freelance experts (core freelancers) were given access to a restricted section within the GKW Intranet (Freelancer), from where they can download any kind of material, which is necessary for project activities, like QM and Compliance related documents, marketing material or letter and report templates.
8.5 Production and service provision

8.5.1 Control of production and service provision

GKW has defined two core processes which describe the complete project cycle.

8.5.1.1 Preparation of PQs and proposals

The quality of a Prequalification (PQ), an Expression of Interest (EOI), a Letter of Interest (LOI), or a Proposal is of decisive importance for the possible awarding of contracts. Regulations on the process for the preparation of PQs and proposals and the formal design of the submitted documents have been defined.

8.5.1.2 Project execution and management

Projects are executed according to specifications stated in the contract and in internal procedures. Standardized procedures are not always possible, as projects differ widely in nature and scope. However, GKW has defined basic instructions as to the project phases kick-off, implementation, and completion. In addition, design and construction supervision manuals present templates that should be used for basic contract administration and site supervision activities.

8.5.2 Identification and traceability

During the complete project cycle, all project deliverables are clearly marked, according to GKW stipulations - if not otherwise required by the terms of reference or the IFI’s directives - and filed according to a pre-defined filing plan.

8.5.3 Property belonging to customers or external providers

Assets provided by the Client or other stakeholders are considered as company property and subject to secrecy wherever required. After the technical completion of the project, the project will be formally handed over to the Client and closed out. The return of documents provided by the Client or other stakeholders is documented during the project closure meeting.

8.5.4 Preservation

All project results are systematically collected, filed and archived during and at the end of the project. Regulations for physical (archive) and electronic (file server) filing of project documents have been set-up and are applied throughout the whole company.
8.5.5 Post-delivery activities

Clear filing rules are needed, because many projects run for several years, and have long defects liability periods. In addition, requirements for retention of legal documents shall apply. Guidelines ensure that all processes are verifiable at any time and that even years after the termination of the project the documents can be easily retrieved.

8.5.6 Control of changes

As stated in chapter 8.2.4 above, major modifications respectively additional services to contracts awarded are controlled through addenda signed with the Client.

Regarding the preparation of project documents, all reports submitted as draft version shall be marked “DRAFT” on the cover page. The internal quality check is documented on page 2 of each report (quality check box). Written comments and reviews of the Client and/or the IFI are integrated and filed – for documentation - as stipulated in the filing plan. As soon as notified deficiencies have been eliminated, the final version of the related document shall be elaborated and submitted to the Client and/or IFI for final approval/no objection. This report shall be marked “FINAL” on the cover page.

8.6 Release of products and services

The project manager and the head of department have to agree on a procedure for quality control prior to submission of the first documents. This procedure has to be documented during the project kick off meeting and shall guarantee that any official project documents are subject to a final quality control prior to their submission. For this purpose, each report shall have a quality check box on page 2 where the author of the report, the person who checked the report and the person who approved the report are indicated.

8.7 Control of nonconforming outputs

GKW has specified nonconformities that may occur as well as their control, with the target to register them, to have them analysed and to take measures to eliminate them. Additionally, measures to prevent their occurrence have been determined.
9 Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

The performance of our quality management system is monitored through the evaluation of the Client satisfaction by means of the Client interview and the number of Client certificates received. Results from internal audits and the key performance indicators are evaluated in the yearly Management Review.

9.1.2 Customer satisfaction

GKW has a vital interest in the satisfaction of its Clients and monitors if the Client’s requirements have been met. Client’s satisfaction is recorded systematically by means of a pre-defined questionnaire and the request for a certificate to be issued by the Client after project closure and confirming the successful completion of all services contracted.

9.1.3 Analysis and evaluation

All projects are subject to a regular control by the responsible head of department, thus ensuring that risks can be identified and eliminated at an early stage. The assessment of our freelance experts (refer to chapter 8.4.2 above) and of the Clients’ satisfaction constitute an essential contribution in ensuring our quality principles.

The Clients’ satisfaction is assessed in form of an interview by the project manager or the head of department. The interview shall be made at suitable intervals during the project duration, but at latest after project completion. The completed form is handed over to the GKW quality manager, who will evaluate the results. The total points received shall be divided by the number of questions answered. At a result of less than 1.5, a meeting shall be held between the project manager and the head of department to agree upon measures to improve the Client’s satisfaction. The results are published in the yearly Management Review.

9.2 Internal audit

In addition to external audits, regular internal audits are carried out, which shall review the usefulness and effectiveness of our QM system and check the compliance with instructions specified by the standard. They shall furthermore review conformance to the specified quality targets and policy and find out, if there is any need for changes to improve our QM system. In coordination with the LI quality manager, the GKW quality manager prepares the audit plan, and publishes it in the GKW Intranet (Quality Management / Audit Documents).

All audit results are documented by the GKW quality manager using a pre-defined form. The reports are published in the GKW Intranet (Quality Management / Audit Documents). In case of nonconform-
identities identified, measures to be taken shall be defined, and discussed or arranged with the responsible auditees, and implementation and effectiveness of these measures shall be checked by the GKW quality manager. Each audit shall be concluded by a final discussion of the audit results with all participants. A summary of all open and concluded measures is stated in the yearly Management Review.

9.3 Management Review

9.3.1 General

The management commits to review regularly the status and the efficiency of the quality management system by preparing a Management Review. The review is prepared once a year and serves for continual development and improvement of our QM system.

9.3.2 Management Review inputs

The basis for the Management Review are, among others, status of actions from previous management reviews, findings resulting from audits performed, quality measures planned, status of training measures performed, a consideration of relevant stakeholders, assessment of risks and opportunities at a strategic level and the achievement of quality objectives based on key performance indicators assessed. Based on the recorded results, measures are defined, and objectives are set for ensuring continuous improvement.

9.3.3 Management Review outputs

On basis of the review it will be decided on opportunities for improvement and any need for changes of our existing QM system. New targets for the following business year are established by the management. The Management Review is published in GKW Intranet (Quality Management / Audit Documents).
10 Improvement

10.1 General

The goal of our QM system is to implement and continually improve our quality processes within the company and thus to enhance our stakeholder’s satisfaction levels. Processes have been defined which ensure early warnings and methods for correction. Moreover, all processes within GKW are subject to regular reviews to guarantee continual improvement.

10.2 Nonconformity and corrective action

If, despite of any due diligence, a nonconformity or Clients’ complaint occurs, they will be registered according to regulations set forth in our QM system and corrective measures will be initiated.

Project related nonconformities shall be reported monthly to the responsible head of department. The idea behind is to inform the head of department as early as possible if any major changes or deviations have occurred or are imminent regarding change in scope of works, budget, personnel, time schedule, problems, risks and compliance issues or if major comments on any submitted reports have been received, in order to allow suitable corrective action, in time.

Company related nonconformities are to be reported by the head of department in the monthly Business Status Report (BSR), which is being discussed in the regular management meetings. Topics comprise, among other, lowlights, outstanding invoices, major project budget adjustments needed, claims and risks, as well as early warnings on financial upsides and downsides.

10.3 Continual improvement

All processes, which GKW has defined through documented procedures, aim at optimizing our services quality. The collection and systematic evaluation of project data is an important contributing factor, for which we use mainly IT-based systems. Subsequent analysis of the reasons for any nonconformity enables us to implement appropriate measures and to define new objectives. Processes, which will be implemented soon to improve the quality of our services, are defined and their implementation monitored in the yearly Management Review. A continuous improvement enhances Client’s satisfaction and helps to serve for long-term success of GKW.
**Figure 7 - PDCA Cycle**

- **PLAN**: We carefully plan our resources
- **DO**: We perform our services as required
- **CHECK**: Our services are subject to continual control
- **ACT**: Findings from our regular reviews result in improvement