

INTEGRATED MANAGEMENT SYSTEM MANUAL



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RECORD OF CHANGES TO DOCUMENT		
Ed.	Paragraph	Reason for change
18	General	Adaptation to the new procedures for the monitoring and control of works (TPS group).
19	General	TYPESA's Occupational Health and Safety Management system adapted to the OHSAS 18001:2007 standard Incorporation and adaptation of TYPESA's Occupational Health and Safety Management System to TYPESA Group's Quality, Environmental and R&D Management System.
20	0.1. Presentation 1.2. Scope. 9.1. Process diagram.	TEyS presentation incorporated. Included under the scope 'Services: Official documentation processing'.
21	0.1. Presentation 9.6. List of procedures.	MEXTYPSA presentation incorporated. QHSE Management System procedure list updated.
22	General 9.6. List of procedures	MEXTYPSA presentation incorporated. QHSE Management System procedure list updated.
23	1.3. Organisation's context. 7.3.7. 9.6. List of procedures	Organisation's context defined. TPP-02 'Variation management in design work' and TPO-34 'Role of the CAD Manager' incorporated.
24	1.2 1.3 1.4 6.5 7.5.5. 7.6 Annex 9.1 Annex 9.5	Renewable energy activity incorporated. SWOT analysis. Definition of the needs and expectations of the parties concerned. Definition of organisational knowledge. Definition of external supplier property. Definition of post-delivery activities. Update to the processes map. New TPO-10 Role of the Technical and R&D Management Area
25	5.5.2.	Figure of the OHSAS 18001 management representative redefined.
26	7.2.3.	Update regarding notifying environmental performance to interested parties.
27	General 0.1 5.2	Currency denomination of the system: QHSE Management System Extension of OHSAS 18001:2007 certification Responsibility for updating OHS legal requirements
28	General	Integrity management aspects and ISO 37001 requirements incorporated.
29	General 1.3	Amendments required to cover aspects that became apparent in the first phase of the external audit of the Anti-bribery management system. External and internal Management System issues are updated, incorporating public officials and the sector in which the company operates (construction consultancy) as external factors, and developing the Group's organisational matrix structure (divisions -technical management areas -, departments - technical production areas -, DDTTs -geographical areas-, and Group Subsidiaries) as an internal factor. Public bodies incorporated as an external party.

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0. INTRODUCTION.

0.1. PRESENTATION

TYPESA Group is a group of independent consulting firms working in the fields of civil engineering, buildings, industry, energy and the environment.

Since it was founded in 1966, TYPESA has continuously participated in the development of all kinds of infrastructure and facilities in Spain and in countries around the world, helping to improve quality of life.

TYPESA Group has experience in every country on every continent. At present, international contracts represent a very large majority percentage of the Group's total work.

TYPESA Group has highly specialized multidisciplinary teams that make up a workforce of over 2,500 professionals, of which 70% are engineers, architects and other university graduates. The company has consolidated its position as one of Spain's leading firms of consulting engineers and architects in the preparation of reports, studies and designs (hereinafter called 'desk work'¹) and in construction supervision and control in the various fields of engineering, buildings, architecture and environment, with a broad national and global scope. TYPESA also has its own laboratories for both chemical and bacteriological quality analysis of materials and the environment.

TYPESA Group has a Quality, Environment, Occupational Health and Safety and R+D Management System in accordance with UNE EN ISO 9001, UNE EN ISO 14001, OHSAS 18001 and UNE 166002, respectively. It also has an Integrity Management System in accordance with ISO 37001 (anti-bribery management). The group of systems defined here form the TYPESA Group Integrated Management System.

In accordance with the principles set out in the aforementioned standards, TYPESA Group's Management System focuses on:

- the client and the stakeholders, by analysing and providing solutions to their needs;
- leadership, both from the point of view of its managers and those in charge of creating, managing, maintaining and improving the Management System, and with a view to maintaining TYPESA Group's leading position in its field;
- risk management;
- the staff, by promoting their professional development, making them active participants in the company's success and providing them with the best possible means and conditions—including occupational health and safety (hereinafter OHS) measures—to improve their performance within the company;
- knowledge management;
- processes², by addressing them in an integrated way rather than as isolated or independent elements;

¹ **Designs and studies:** Tasks including (a) information processing: work aimed at compiling and sorting information; and (b) studies: work leading to conclusions or recommendations. May include sketches, diagrams and financial estimates. c) design work: work which defines and determines the quality, features and budget of the works or products to be constructed, installed or assembled.

² **Process:** Set of activities that interact with each other or are mutually related with each other and transform input into results.

- continuous improvement³ in the fulfilment of its obligations and in the development and implementation of its products⁴ and processes;
- objective decision-taking;
- suppliers⁵, setting up relations that are mutually beneficial;
- suitable compliance with the legal requirements in force according to the place and time, as well as with any other voluntary commitment made by TYPESA Group;
- ensuring and promoting OHS⁶;
- The upright behaviour⁷ of the company and all its employees, respect for the law and the prevention of illegal activities within the scope of performance.
- protecting the environment⁸, sustainable development, seeking a balance between the environment, society and the economy.
- Improve the environmental performance of the environmental aspects of activities determined by TYPESA, considering the life cycle.

The work performed by TYPESA Group companies affects the environment in two ways:

- a) through the results of consultancy or construction supervision work, identifying the legal requirements regarding the environment and establishing or influencing on the measures required to minimise negative environmental impact and promote positive impact during the execution of the works — a substantial part of their quality⁹ — which is guaranteed by compliance with the UNE-EN-ISO 9001 standard;
- b) through office work in permanent or temporary site offices, in which consumption, waste, etc. are controlled seeking to improve environmental performance. Also, compliance with legal requirements and correct environmental management is guaranteed by compliance with the UNE-EN-ISO 14001 standard.

³ **Continuous improvement:** Recurring process which establishes objectives and identifies opportunities for increasing the capacity for continuously meeting quality, environmental and OHS requirements through the reports and conclusions drawn from audits, data analysis, Management reviews and other means and which generally gives rise to corrective or preventive actions.

⁴ **Product:** Result of a process. In the ISO 9001 standard and this document, the term "product" applies exclusively to that which is made for or requested by a client.

⁵ **Supplier:** Organisation or individual that provides a product to TYPESA Group.

⁶ **Occupational health and safety (OHS):** Conditions and factors that affect or could affect the health and safety of employees or other workers (including temporary workers and contracted personnel), visitors or any other person in the workplace. N.B. Organisations may be subject to legal requirements on the health and safety of people beyond their immediate workplace or of those exposed to the activities performed in the workplace.

⁷ **Upright behaviour:** Honest and upright conduct, governed by ethical principles and values that guarantee responsible behaviour that respects the law in force and the rules of professional conduct that govern the scope of performance.

⁸ **Environment:** Environment in which an organisation operates, including the air, water, land, natural resources, flora, fauna, human beings, and the interactions among them. NOTE 1: The environment can include the inside of an organisation and the local, regional and global systems. Note2: The environment can be described in terms of its biodiversity, ecosystems, climate or other features.

⁹ **Quality:** Set of an organisation's characteristics that enable it to meet both implicit and established requirements.

0.2. OFFICES AND AREA OFFICES.

The head office of both TYPESA and TYPESA Group are located at calle La Gomera 9, 28703 San Sebastián de los Reyes (Madrid). Tel. (34) 91 722 73 00 Fax: (34) 91 6517588 e-mail: madrid@TYPESA.es.

TYPESA Group has offices in Spain and abroad. Its office network is available on the Group's website. (www.typsa.com).

1. PURPOSE AND SCOPE

1.1. PURPOSE

This document lays down and describes the minimum Management System requirements to be met by the TYPESA Group companies in order to:

- a) demonstrate their ability to provide products, through an integrity-based approach, that satisfy the following requirements:
 - a. Applicable legislation and regulations.
 - b. Those specified by clients, including requirements for delivery and subsequent activities.
 - c. Those not established by clients but necessary for a specified or planned use, if known by TYPESA Group.
 - d. Any additional requirement, as determined by TYPESA Group, on account of the regulations voluntarily entered into by TYPESA Group.
- b) increase customer satisfaction;
- c) promote R&D tasks;
- d) protect the environment;
- e) promote OHS by implementing measures and taking action as required to prevent work-related risks.

1.2. SCOPE

This document lays down the general framework for the development and application of the Integrated Management system and is mandatory for all the individuals who work for TYPESA Group or on its behalf in the following areas:

- a) Integrated Management system administration and management .
- b) Consultancy services, studies and projects for the following:
 - Freshwater treatment and supply, sanitation and urban and industrial waste water treatment.
 - Water quality.
 - Noise and vibration control.
 - Management and treatment of solid urban and industrial waste.
 - Pollution control.
 - Study and recovery of contaminated soils.

- Correction and regeneration of the environment.
 - Assessment of environmental impacts.
 - Territorial planning.
 - Statistics, surveys and censuses.
 - Land acquisition procedures.
 - Official documentation processing.
 - Architecture.
 - Water, ports and coasts.
 - Transport infrastructure.
 - Agronomy.
 - Industrial facilities.
 - Renewable energy.
 - Environmental and forestry engineering.
 - Information and communication systems.
 - Environment laboratory (chemical and microbiological tests and analyses).
 - Health and safety.
 - R&D.
- c) The management, supervision, control and monitoring of construction, hydraulic, transport infrastructure and industrial facility works.
- d) The management and maintenance of infrastructure and systems.
- e) Health and safety coordination both in the design stage and during the execution of the project.

In the same way, the System requirements also apply to corporate management areas and cross-cutting services (Administration Management Area, Corporate Affairs Management Area Corporate Quality Management Area and Corporate Technical Management Area).

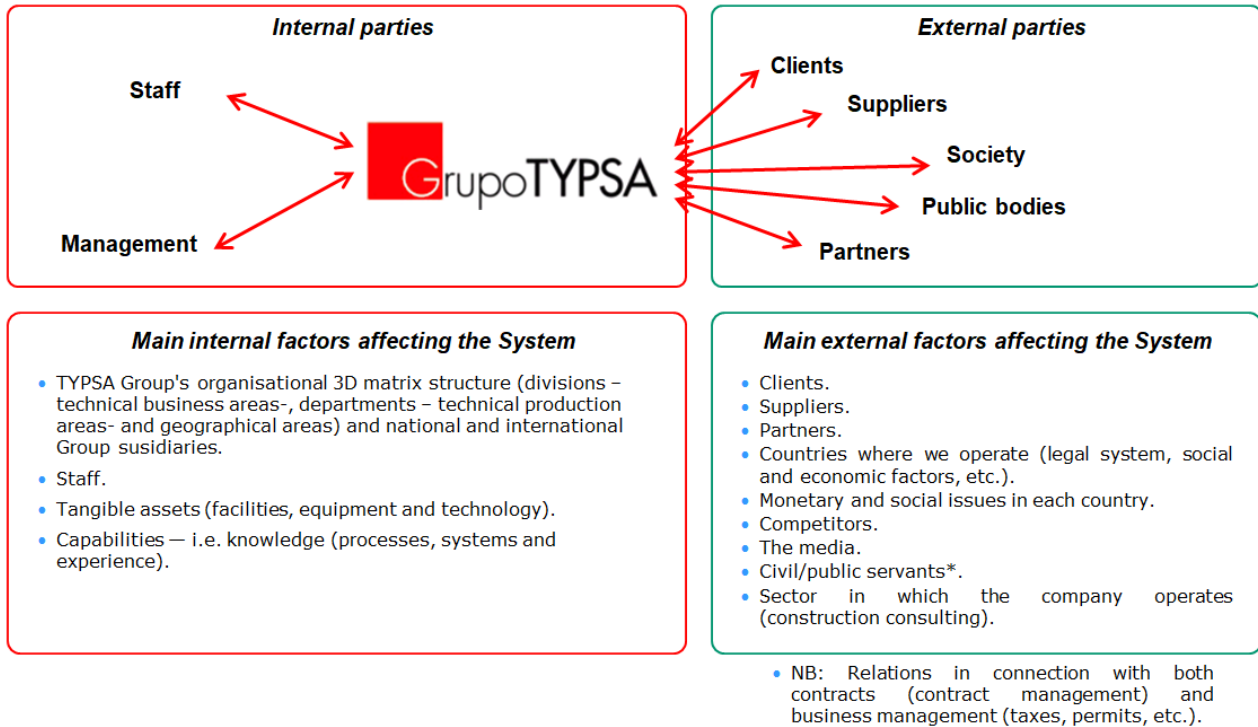
In accordance with the annexes to the UNE-EN-ISO 9001, UNE-EN-ISO 14001, OHSAS 18001, ISO 37001, and UNE 166002 standards, TYPESA Group combines in this document quality, environmental, OHS, R&D and integrity management systems in complete accordance with these standards. All of the manuals, procedures, memoranda, forms, records or any other documents that constitute or form part of the systems mentioned here are governed by this manual, and should be interpreted in accordance with its requirements. The requirements in this manual and in all the other documents of each system are mutually complementary, and together they form a complete set of documents.

The quality system for the TYPESA laboratories comprises the provisions laid down in the company's own manuals and procedures¹⁰ as per the UNE-EN-ISO/IEC 17025 and 17020 standards.

A minimum period in operation is a requirement for formal certification by the appropriate certification or accreditation bodies and regardless of whether new permanent workplaces have been formally certified, it is TYPESA Group's policy and mission for all its permanent workplaces to be certified in quality, environmental, OHS and crime prevention management.

¹⁰ **Procedure:** Specified method, documented or otherwise, for carrying out a certain activity or process.

1.3. ORGANISATIONAL CONTEXT



Once a year, during the System Review, and occasionally, in the System Follow-up meetings, senior management¹¹ will study any organisational changes or changes in connection with external or internal issues related to the Management System by performing a SWOT analysis in order to understand our Organisation's actual situation in terms of its strengths, weaknesses, opportunities and possible threats, and plan a strategy for the future.

Bearing in mind that a significant percentage of TYP SA's contracts are with public bodies, it is important that our integrity management address the relationship with public officials, both during the tender phase and the construction phase, due to their particular commitment to transparency in connection with managing public funds, and because this sector is particularly notorious for the most famous cases of corruption. The category of public official that TYP SA deals with, and which involves risks of corruption, includes contracting authorities (in the tender phase) and, to a lesser extent, construction supervision teams (in the construction phase). Therefore, public contracts, and especially the tender process, should be highlighted as a particular bribery risk. Risk evaluation criteria are specified in the Integrity Management Manual, Special Part, considering business in the public sector for each criminal activity analysed.

1.4. STAKEHOLDERS' NEEDS AND EXPECTATIONS

Senior management: Senior management seek to lawfully obtain information to make decisions aimed at generating profit and sustainability both for the company and for all the people involved in its organisation and functioning. They also seek prestige and leadership in the national and international markets and aim to contribute to the general well-being of our society. Senior management pursue

¹¹ The Compliance Committee and Senior Management perform the integrity management System Review.

excellence by assuring the quality of our products and processes promoting innovation in the search for solutions with high added value. They seek to guarantee the good name of the company and show their commitment to upright behaviour, respecting the law and scrupulously fulfilling their duties and observing principles of ethical conduct, setting an example to other companies. To achieve these goals, they focus on client loyalty and ensuring their satisfaction.

In relation with the environment, senior management aim to secure a responsible commitment to environmental sustainability, going beyond compliance with legal obligations to help increase social well-being and genuine progress. Senior management aim for environmentally-friendly commercial practices that help minimise environmental impact. They also work on any direct or indirect impact produced by TYPESA Group's activity. This responsible commitment is divided into three main lines: using resources responsibly; managing our waste properly; and demanding environmentally friendly practices from employees and suppliers.

Employees: They aim for professional recognition and to be adequately compensated for their work. Employees seek safe working conditions and opportunities for enhancing their capacities and expanding the knowledge and experience required to develop their career with TYPESA. Employees require that all company policies, especially their work responsibilities, be fully explained to them. They also need to receive constructive feedback from senior management. They aspire to engagement with the project and to being proud of belonging to a leading and ethically exemplary business group, and feeling satisfied with their performance.

Clients: When clients have their own commitments to integrity and ethical behaviour, they require us to meet their expectations and to solve their problems, in compliance with the law and with those commitments. Clients wish to see us as their collaborators, able to identify and meet their requirements and needs and give them adequate solutions. They want us to be professional, get ahead of any problems and provide high quality, dedicated service with timely fulfilment of the commitments taken on. They expect us not only to provide the service for which they have formally hired us but the one they really need. Clients demand honesty, integrity and loyalty. They sometimes demand additional corporate social responsibility measures.

They expect us to meet all environmentally-related legal requirements and make an effort to minimise any risk or negative impact on the natural and social environment.

Society: Society expects TYPESA to work for the greater good and the progress of society; to improve living conditions, sustainability, compliance with current legislation and to behave according to national and international ethical standards.

Partners: They aim for the long term profitability and sustainability of the company.

Suppliers: They expect adequate and justifiable pay according to the work performed. They expect TYPESA to provide them with the requirements and the necessary information to enable it to meet its commitments in an orderly and timely manner. They may expect to earn TYPESA's loyalty.

Public bodies: Public bodies expects TYPESA to comply with your legal obligations.

2. STANDARDS FOR CONSULTATION

2.1. INITIAL DATA

This document has been written in accordance with the requirements and definitions contained in:

- ISO 9001 'Quality management systems – Requirements'.
- ISO 9000 'Quality management systems – Basis and vocabulary'.
- ISO 14001 'Environmental management systems – Requirements with guidance for use';
- ISO 14004 'Environmental management systems – General guidelines on support techniques, systems and principles'.
- ISO 10005 'Quality management systems – Guidelines for quality plans'.
- UNE 166000 'R&D Management – Terminology and definitions of R&D activities'.
- UNE 166002 'R&D Management – R&D requirements of a QHSE Management System '.
- OHSAS 18001 'Occupational health and safety management systems – Requirements'.
- OHSAS 18002 'Occupational health and safety management systems – Directions for implementing the OHSAS 18001 standard'.
- ISO 37001 "Anti-bribery management systems: Requirements".

3. TERMS AND DEFINITIONS

The definitions of the concepts laid down in ISO 9001, ISO 9000, ISO 14001, UNE 166000, OHSAS 18001, ISO 37001 and UNE 166002 (hereinafter called the *basic standards*), adapted to the characteristics and peculiarities of the work carried out by TYPESA Group, are defined in footnotes on the page on which they appear for the first time and in alphabetical order in section 9.6. In particular, special mention is made of the fact that the broad sense given to the term *client*¹² by the ISO 9001 standard, fully assumed by TYPESA Group, includes the buyers and users of the products and services made and provided by TYPESA Group.

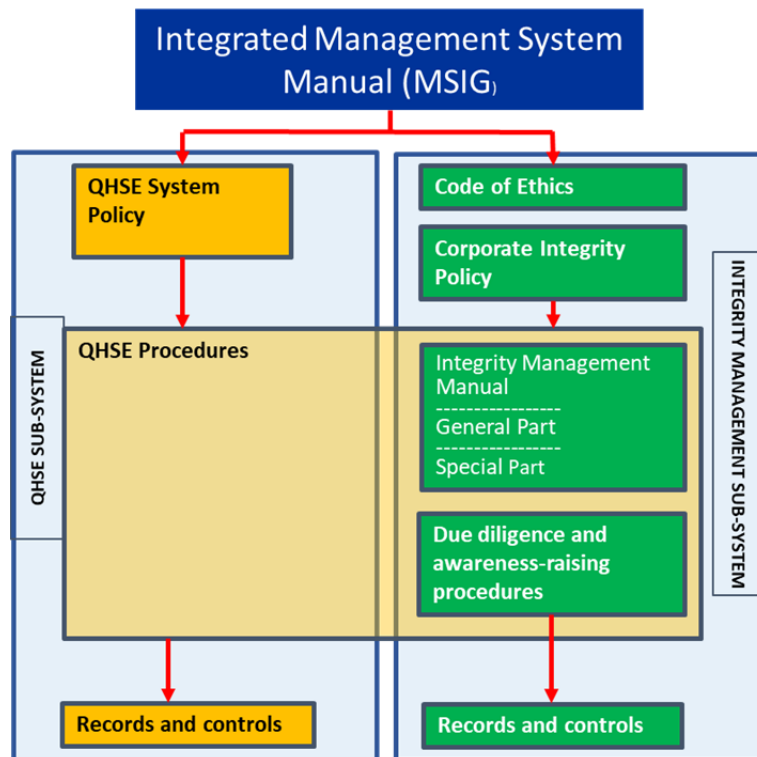
In accordance with the above, the terms product and process apply to those which are generated to satisfy clients' requirements and to those resulting from any of TYPESA Group's activities that may affect the environment, OHS or R&D activities.

The term *product* can also mean service, as specified in the ISO 9001 standard.

4. INTEGRATED MANAGEMENT SYSTEM

TYPESA Group's Integrated Management System comprises a a general and universally applicable Integrated Management Manual and two sub-systems, that while independent and autonomous, are both interrelated: The Quality, Environment and Health and Safety sub-system (hereinafter, QHSE system), and the Integrity Management sub-system (hereinafter, the Integrity Management System).

¹² **Client:** Organisation or environment that receives or is affected by TYPESA Group's products or processes.



In order to facilitate the combined knowledge and application of the rules set out in UNE 166002, ISO 9001, ISO 14001, ISO 37001 and OHSAS 18001 standards and, given that their requirements are compatible, the Management System includes the requirements of these standards with the following comments and observations:

- The chapters and sections in this manual follow the ISO 9001 table of contents, incorporating the necessary requirements in each chapter or section. Whenever necessary, a new sub-section has been introduced.
- Some ISO 37001 requirements are explained in depth in the Integrity Management Manual, which must therefore be consulted together with this document, since both complement each other.

4.1. GENERAL REQUIREMENTS

The processes and tools that TYP SA Group considers necessary for the development and application of its Integrated Management system have been grouped together and classified as follows:

- Direct or from production¹³.
- Indirect, ancillary or support¹⁴.
- Management¹⁵ or strategic processes.

¹³ Processes associated with the contract with a direct influence on the product delivered to the client.

¹⁴ Processes required to carry out and measure operational processes efficiently.

¹⁵ Processes required to establish and measure the fulfilment of TYP SA Group's environment and quality objectives.

The sequence and interaction of the above processes are given in sections 9.1. and 0.1. , and those related to the completion and control of the corresponding tests and analyses by TYPESA laboratories are identified and laid down in the corresponding manuals and procedures.

The documented procedures that are set out in the Integrated Management System are accessible on the Group's intranet (www.TYPESA.net).

The environmental scope is defined in sections 1.1. and 1.2. of this manual.

4.2. DOCUMENTATION REQUIREMENTS

4.2.1. General considerations:

The Integrated Management system is developed and documented¹⁶ in:

- a) this Manual;
- b) the Policy¹⁷, quality, environment, OHS and R&D goals¹⁸ (QHSE Policy).
- c) the documented QHSE System procedures that are listed in annex 9.5. .These procedures may be supplemented with written compulsory instructions or any other documents (memoranda or meeting minutes). The system is supplemented with guides providing recommendations to provide guidance on certain aspects;
- d) The records¹⁹ referred to in paragraph 4.2.4. and all other Integrated Management System documents;
- e) external communications, linked to the Integrated Management System.
- f) In the lists and summaries of the legal requirements applicable to each of TYPESA Group's work centres.
- g) the planned programmes and resources for fulfilling the aforementioned objectives and goals, whenever their characteristics require it.
- h) the Occupational Health and Safety plan²⁰ (hereinafter, OHSP) and its main management and application tools, namely occupational risk²¹ assessment²² and preventive action planning²³;

¹⁶ **Document:** minimum self-sufficient information for a specific objective, contained on any medium, generated by an individual and related to one single entity or logical group of several entities. The medium can be paper, magnetic disk, optical disc or electronic format, photograph or standard samples or a combination thereof.

¹⁷ **(Quality, Environment, OHS, and R&D, or Integrity) Policy:** An organisation's general product-quality, environmental performance, OHS and R&D or integrity management guidelines and intentions as formally stated by Senior Management, providing a framework for the organisation's action and for establishing its objectives and goals.

¹⁸ **Quality, environment, OHS and R&D or integrity management goals:** detailed action requirement, to be quantified wherever possible, to be applied to an organisation or a part of it, arising from quality, environmental, R&D or integrity objectives, and which must be established and complied with in order to achieve those objectives.

¹⁹ **Record:** Document containing obtained results or providing evidence of activities carried out.

²⁰ **Occupational Health and Safety plan:** The tool that incorporates TYPESA Group's preventive activity into its General Management System and sets its Occupational Health and Safety policy.

²¹ **Risk assessment:** The process of assessing the risk or risks that arise from one or several hazards, taking into account the adequacy of existing controls, and deciding if the risk or risks are acceptable or not.

²² **OHS risk assessment:** Process aimed at estimating the magnitude of unavoidable risks, obtaining the necessary information so that the employer can properly decide on the need to take preventive measures and, in such case, on the type of measures to be taken.

- i) the Code of Ethics;
- j) the Integrity Policy;
- k) the Integrity Management Manual, general and special part, objectives and goals.
- l) due-diligence and awareness-raising procedures in the Integrity Management system.

The documents in the QHSE system are the basic regulations that form and underpin both the general and cross-cutting aspects of the entire Integrated Management System.

Both the general TYPESA Group QHSE system policy and the Code of Ethics and Integrity Policy can be freely consulted on the Website, www.typsa.com (under "Corporate Information").

This Integrated Management System Manual is distributed in computer readable format to all clients and interested parties who request it, while the procedures are for internal use and are available to staff by entering their username and password on the Group's intranet page (<http://www.TYPESAonline.com>), where this manual can also be found. Current versions of the System can only be found on the intranet.

The purpose and scope of the Integrated Management system procedures shall apply to the R&D activities within its purview.

Clients can examine the general procedures that apply to a specific contract at TYPESA Group's offices. Procedures specifically developed for a contract are included in the Group's quality and environment plan in accordance with what is laid down in 7.1. .

Whenever possible, and to reduce the consumption of paper, documents shall be disseminated and read on a computer and printed on paper only when absolutely necessary.

4.2.2. Integrated Management System Manual

This is the Integrated Management System manual and it follows the structure and order of the ISO 9001 standard. In order to facilitate application of the ISO 14001, OSHAS 18001, UNE 166002, and ISO 37001 standards:

- chapters 5. 6. , 7. and 8. , together with the requirements laid down by TYPESA Group for compliance with the ISO 9001 standard, contain the requirements for compliance with the equivalent requirements of ISO 14001, OSHAS 18001, UNE 166002 and ISO 37001 standards;
- chapter 9. includes the annexes with the TYPESA Group QHSE policy, as well as glossaries and others.
- Some of the specific Integrity Management System requirements are included in the Integrity Management Manual.

4.2.3. Document control

TYPESA Group has and applies procedures TPD-01 'Document and record identification', TPD-02 'QHSE System documentation control', TDP-04a 'Project documentation storage' and TPD04b 'Works

²³ **Preventive action planning:** establishing, designing and programming the activities and measures — including the necessary human, material and financial resources — that must be adopted in order to eliminate or control and reduce any risks deemed unavoidable following risk assessment.

documentation storage'. These procedures lay down the general methods to guarantee that the general QHSE System documents and those specifically related to consultancy work or construction site management, control and monitoring work, all of which are listed in section 4.2.1. , comply with the requirements laid down in the basic standards.

Control is guaranteed through application of the aforementioned procedures by TYPESA Group personnel. In accordance with the provisions laid down in 1.2. , the control of the exclusive documents corresponding to the TYPESA laboratories is contained in its own manuals and procedures.

The Corporate Quality Management Area, the Technical Management Area, the members of the Compliance Committee and the Personnel Department identify and permanently update the QHSE System, TYPESA laboratory and Integrity Management System manuals, procedures and general forms at <http://www.typpsa.net> to ensure that modified documents are generally available and updated.

These are reviewed and approved²⁴ by the individuals indicated in this document or in the corresponding procedures.

TYPESA Group does not undertake to update any uncontrolled copies of Integrated Management System documents.

4.2.4. Record control

Procedures TPD-03 'Records' and TDP-01 'Identification of documents and records' lay down the general requirements for the identification, collection, coding, filing, storage, protection, retention time, retrieval and final destination of Integrated Management System records.

Below is a general list including but not limited to the records kept by TYPESA Group:

- checking²⁵ and approval of QHSE System documents;
- Actions arising from the Integrated Management system reviews carried out by Senior Management.
- The education, training, skills and experience of staff.
- Initial design and development data²⁶.
- The review and verification of the design and development, and validation, whenever possible.
- The changes to the study and project documents approved by the client.
- The nature of the non-conformities²⁷ and whatsoever subsequent action, including authorisations²⁸.

²⁴ **Approval:** Formal action whereby an officially qualified body authorises the use of the document, service or process in a particular area for a specific use.

²⁵ **Document check (review):** checking a document or logical set of documents to ensure that there are no overlaps, voids, contradictions or conceptual or formal errors and that they comply with the instructions received for their preparation and are coherent with the initial data.

²⁶ **Baseline data:** Baseline data for an assignment or for design and development: Corresponding external conditions which must be known for the corresponding implementation, such as requirements issued by other stakeholders, legislation, by-laws and applicable standards, requirements laid down by the client, physical, environmental and socio-economic specifications of the environment and, where applicable, an environmental impact study.

²⁷ **Nonconformity:** failure to meet a specified requirement.

²⁸ **Concession:** authorisation to use a non-compliant product or document or continue with the next stage of a non-compliant process.

- Waste generated.
- Identification of environmental issues.
- Consumption of natural resources.
- Waste collection.
- Communications, complaints or claims from clients.
- The unique identification of the product, when traceability²⁹ is a client requirement.
- Repair³⁰, corrective³¹ or preventive³² actions.
- Audit reports.
- Inspection reports.
- The results of the calibration and verification³³ of the measuring equipment.
- The validity of the measurement results if the measuring equipment is found to be non-compliant with the requirements.
- The various OHS activities and actions (documentation on accidents, incidents, health surveillance, delivery of personal protective equipment, OHS meetings, etc.)
- Complaints and inquiries into them, within the framework of application of the Integrity Management System, their results and records.

The minimum retention period for environmental and quality records begins with the completion of the contract and shall last three years as a general rule, except in those cases in which a greater retention period is agreed upon with the client. The specific nature of certain record procedures shall also be taken into account.

5. RESPONSIBILITY OF MANAGEMENT

5.1. MANAGEMENT COMMITMENT

The Chairman fully assumes the Integrated Management system principles and communicates his full backing to all the individuals working for TYPESA Group or on its behalf and demonstrates³⁴ his commitment and compliance with the requirements laid down in the basic standards by means of the following:

- a) the definition and publication of quality and environment objectives and policy (see section 0), as well as OHS, R&D and integrity management objectives and policy;

²⁹ **Traceability:** Ability to trace the history, use or location of an entity using recorded information.

³⁰ **Repair action or repair:** Action taken on a non-compliant product to reduce the nonconformity to acceptable values, even though it is not compliant with the requirements that were originally specified.

³¹ **Corrective action:** Action taken to eliminate the causes of a detected nonconformity, defect or any other undesirable situation in order to prevent its recurrence.

³² **Preventive action:** Action taken to eliminate the causes of a potential nonconformity, defect or any other undesirable situation in order to prevent its occurrence.

³³ **Verification of measuring equipment:** Confirmation of compliance with the specified requirements through the examination and provision of objective evidence.

³⁴ **Evidence:** Information whose truthfulness can be demonstrated objectively since it is based on facts obtained via observation, measurement, testing or other means.

- b) the transmission and publication for all the individuals working for TYPESA Group or on its behalf of the commitment to satisfying client and all other stakeholders' requirements;
- c) the allocation of the necessary resources;
- d) Assuming responsibility and accountability for the effectiveness of the Integrated Management System.
- e) Promoting continuous improvement.
- f) Ensuring that the Environmental Management System requirements are integrated into the organisation's business processes.
- g) Attending and leading meetings aimed at setting objectives and monitoring and reviewing³⁵ the effectiveness of those objectives and of the Integrated Management system;
- h) allocating the technical means and necessary authority to the executives, managers and persons responsible in order to:
 - a. Launch actions to prevent the occurrence of Integrated Management System nonconformities;
 - b. Identify, present and record nonconformities, complaints or claims from clients or any other interested parties, that affect quality, the environment, OHS or integrity management, and inform the director, head or manager concerned, as per the channels, conditions and scopes established in the System;
 - c. Monitoring nonconformity and complaints processes until the defect or unsatisfactory situation has been remedied.

5.2. FOCUS ON THE CLIENT

For the purposes of this point and in accordance with section 3. , TYPESA Group defines *client* from the environmental point of view as society in general; from the point of view of quality and R&D, as any organisation that hires, applies or is affected by its products or services (hereinafter, stakeholders); and, from the point of view of OHS and integrity, as all of the above plus the employees and all the staff who carry out work for the Group. Points 5.5. and 7.2. and headings 8.2.1. , 8.5.1. and 7.3.2. , contain the measures established by TYPESA Group to guarantee the fulfilment of the legal requirements, the requirements laid down in its policy, those regarding determination, satisfaction and continuous improvement of the needs of its clients, those to do with the environment and those related to OHS. The Integrity Management Manual contains specific integrity management requirements.

For legal requirements applicable to the environment, QHSE System procedure TPA-01 'Identification and assessment of environmental aspects and legal requirements' describes the method used by TYPESA Group for identifying:

- The environmental legislation and its requirements which are applicable to the Group's activities and services.
- Other requirements, including those stemming from environmental commitments taken on by TYPESA Group.

It also describes the method followed for evaluating legal compliance periodically.

³⁵ **Review:** Activity carried out to guarantee the convenience, adaptation and effectiveness of the matter under review to reach the objectives that have been established.

In terms of OHS, those ultimately responsible for the different organisational units (regional areas, regional offices, construction work units, permanent workplaces, and so on) shall be responsible for ensuring that the legal requirements are identified, with the advice and support of the Health and Safety Services. The identification and permanent monitoring of the applicable legal requirements and the control to ensure their compliance shall be reviewed and updated on a regular basis. Quality, Environment, OHS and R&D policy.

The integrity, quality, environment, OHS and R&D policy is set by the Chairman. Applying this manual and the procedures assures compliance with the policy in accordance with the following basic principles:

- a) Work is assigned to duly trained, motivated and skilled personnel who are equipped with the appropriate means.
- b) It is essential that all TYPESA Group staff know and understand this document and the people who develop it, so they may be aware of the importance of quality, of the commitment to environmental protection and to OHS, complying with and respecting the ethical principles of honesty and integrity set out in the integrity management system. Accordingly, the policy, manual and general Integrated Management System procedures are made available to all staff;
- c) All staff are responsible for knowing and applying the parts of the Integrated Management system that are applicable their work.
- d) Executives and managers are responsible for their staff carrying out the work that may affect quality or OHS or generate a significant environmental impact, in accordance with the provisions laid down in the manual, the procedures or instructions in force when the contract is signed and the applicable OHS conditions.
- e) The integrity management manual, and the TPO procedures, contain the responsibilities applicable to integrity management, and define the roles and responsibilities of the relevant positions in the organisation.
- f) Responsibility is not delegated. Any individual delegating functions shall always be responsible for those functions.

One permanent feature considered at the Integrated Management System review is the review of its policy content, checking that policies adapt to the purposes of the organisation, including a commitment to comply with the requirements mentioned above, improving the efficiency of the Integrated Management System itself; and setting the guidelines for defining goals. The policies are circulated to all staff by publishing them on the company intranet and posting a printed copy on the notice board of all permanent and temporary offices, as well as by handing out a set of required reading documents to every new Group employee.

5.3. PLANNING

5.3.1. Quality, environment, OHS and R&D, and integrity management objectives

TYPESA Group senior management³⁶ establish yearly goals which are consistent with the defined policies, the legal requirements and other requirements signed by TYPESA Group and with the specific characteristics of each management or regional area, regional office, division or department.

³⁶ Senior management comprise the President Chief Executive Officer and the Deputy to the CEO.

Compliance with the qualitative objectives is analysed during the (annual) QHSE System review meetings attended by the Quality Committee³⁷ and presided by the Chairman. The R&D Committee, presided by the Chief Technical Officer, is in charge of monitoring R&D objectives in accordance with what is stated in section 5.5. .

Compliance with integrity objectives is reviewed annually by the Compliance Committee and Senior Management, preceded by an annual report in which the Compliance Committee gives an account of the most significant events and circumstances of the year, the status of previous review actions, changes in the organisational context, system performance, the effectiveness of controls as well as recommendations and suggestions for improvement.

The Committee gives an executive summary of the meeting to the Board of Directors.

5.3.2. Planning the Integrated Management system

During the review meetings or follow-up, the following are established:

- a) The individuals or areas responsible for introducing the Integrated Management System and the objectives.
- b) The calendar or programme for implementation.
- c) The specific and measurable human, financial and material means required to achieve the objectives.

Changes to the basic Integrated Management System documentation are approved in the System review, and sometimes in the system follow-up, meetings, regardless of any urgent memos on specific mandatory system aspects that might be issued by the Quality, Environment and OHS Management Area or Compliance Committee.

The specific planning required for a contract or work assignment has been established in 7.1. .

Every year, a specific document on OHS, the Annual Health and Safety action plan (AHSAP), is presented to Senior Management for approval. This document includes the general OHS planning for the whole year.

5.4. RESPONSIBILITY, AUTHORITY AND COMMUNICATION

5.4.1. Responsibility and authority

The organisation chart in procedure TPO-01 shows how TYP SA Group is organised. Each organisational unit has a director, manager or person responsible whose authority and responsibility for managing and applying the requirements of the Integrated Management System to the allocated tasks is laid down in this manual and in the Integrated Management System documents.

TYP SA Group considers that a single individual can have several technical or management roles as long as they do not interfere or constitute a conflict of interest with the assigned roles of monitoring, supervising, reviewing and verifying.

The specific roles and responsibilities of the staff who manage, carry out or verify work related to quality, environment, OHS or R&D or integrity management are described in this document, in the Integrity

³⁷ **Quality Committee:** executive and control body comprising the Chairman, the CEO and the corporate, global and regional directors.

Management Manual, in the general procedures referred to in annex9.5. or in the work-specific procedures in the quality plans stated in 7.1.

5.4.2. Management representatives

The Chairman appoints TYPESA Group's Corporate Quality Director as the management representative with responsibility and authority for quality management as per ISO 9001 and environmental management as per ISO 14001. The Head of the Personnel Department is appointed as the management representative with responsibility and authority as per clause 4.4.1 of OHSAS 18001; and the Chief Technical Officer as the management representative with responsibility and authority as stated in clause 4.2.5.4.of UNE 166002. Compliance Committee integrity management roles and responsibilities are described in the integrity management manual and assigned directly by the Board of Directors. They are all allocated the technical and financial resources necessary to comply with the requirements and thus:

- a) Guarantee that the QHSE System is compliant with the current ISO 9001, ISO 14001, OHSAS 18001, UNE-EN-ISO 17020, UNE-EN-ISO 17025 , ISO 37001 and UNE 166002 standards applicable at any given time.
- b) Assure compliance with this manual and all other complementary documents and procedures;
- c) Assure that the processes required for the development and application of the Integrated Management system are established, implemented and maintained.
- d) Guarantee that the Integrated Management system complies with the basic rules and regulations applicable at any time and in any place.
- e) Assure TYPESA Group's continued commitment to continuous improvement in all aspects related to quality, the environment, OHS, integrity and R&D.
- f) Analyse and assess the Integrated Management System on a regular basis and inform the Chairman and the other members of the Quality Committee of the environmental performance, effectiveness and efficiency³⁸ of the Integrated Management System and of the necessary improvements.
- g) Assure that awareness of the client's requirements is encouraged at all levels within the TYPESA Group.
- h) Inform the Chairman and the other corporate and global directors of the operation and effectiveness of the QHSE System and of the needs for improvement in their areas of responsibility.
- i) Preventing the delivery or execution of a product with critical or major nonconformities (see 8.3.) until the nonconformity is corrected or reduced to levels that are acceptable to the client.
- j) Verifying the selection and implementation of corrective or preventive actions, and validating their effectiveness.
- k) Maintain the Integrated Management System procedures and manual up to date.

The Quality Committee appoints the quality³⁹ and environment⁴⁰ coordinators. Management appoints the members of the Health and Safety Service, granting them the necessary authority to analyse and

³⁸ **Efficiency:** Ratio between the result obtained and the resources used.

³⁹ **Quality Coordinator:** Person responsible for managing Quality in the work centres assigned and for providing quality support in his/her regional management area, including: carrying out internal audits; providing quality support during design and technical proposal development; maintaining the System within his or her Regional Area and adapting it, where necessary, to the special features of the area; managing suggestions for improvement, incidents and non-conformities that affect or involve people from the regional area; giving training courses on the QHSE

investigate the compliance and effectiveness of the System, and provide the Chief Technical Officer, the Head of the Personnel Department or the Corporate Quality Director, as appropriate, with the information required to carry out their work. Quality coordinators who are trained to audit the Integrity Management System, support the Compliance Committee.

5.4.3. Internal communications

The following areas provide relevant information on the Integrated Management system to all TYPESA Group staff:

- a) the Corporate Administration Department, the Corporate Human Resources Department and the Health and Safety Service provide information and documentation to new employees when they join the Group.
- b) the Corporate Quality Management Area, the Corporate Technical Management Area and the Compliance Committee, who all offer courses on the Integrated Management System through system documentation published on the website <http://www.typsa.net/>, through memos, by circulating QHSE System review and follow-up meeting minutes to all the executive management, and by publishing relevant Integrated Management System news on the post-it on the intranet. The Compliance Committee makes Integrity Management performance evaluation information available to staff, and keeps them up to date with the monitoring and achievement of integrity management goals and any changes made to the system, by publishing an executive summary of the report prepared for the Senior Management annual meeting.
- c) leaders or managers while carrying out their work and by circulating the Integrated Management System information they receive from their managers, which they deliver to the teams they manage.
- d) the Chairman provides information during the annual general meeting on the state of the TYPESA Group and in the regular system follow-up meetings held with corporate and business areas and technical departments.
- e) Senior management informs during the annual meetings held with each division, department, area, regional and area office.
- f) The workers' representatives, if any.

The Chairman and the management areas encourage staff to participate in identifying weak points and proposing ideas or suggestions for improvement on any matter affecting the efficiency, quality or sustainable development of work, by applying a proactive recognition and reward system. In addition, senior management holds annual meetings with each work team (divisions, departments, regional areas and regional offices).

Management System to the regional area staff who request it; informing the Corporate Quality Department of the degree of implementation of the System and the data required for the review or follow-up to the QHSE Management System.

⁴⁰ **Environmental Coordinator:** Person in charge of environmental management at the assigned workplace. Their job is to identify environmental aspects, monitor consumption, identify environmental legislation and assess the degree of compliance with the requirements; document how waste is managed and those who manage it (as suppliers); define specific objectives and periodically assess their compliance; spark staff interest in environmental issues, in particular those related to saving energy and water and reducing waste. Perform internal audits and the preparation of reports for the monitoring and review of the system.

Any Group employee may make proposals for improvement through the incidents, improvement and queries tools on the intranet, as well as through any other direct means of communicating with their immediate superior. Employees can also present their proposals in the annual meetings with senior management.

R&D proposals are collected and processed following procedures TPV-01 and 02.

TYPESA Group's personnel have been informed through training talks and courses that they can communicate or request the information they consider relevant from any of their hierarchical superiors, the Corporate Technical Director, the Corporate Quality Director, the Quality and Environmental Management Coordinators or the OHS coordinators and delegates when they consider that:

- a) their suggestions for improvement have not been taken into account;
- b) they need information about the Integrated Management system;
- c) the methods used and measures taken to apply and implement the Integrated Management system are not effective.

In addition to the foregoing, all workers are guaranteed participation and consultation in matters related to OHS through their OHS representatives and delegates — if any — and especially through the Health and Safety Committees of the various work centres.

The Integrity Management manual covers the channels for filing complaints, as well as the system for dealing with them.

5.5. REVIEW BY MANAGEMENT

5.5.1. QHSE System review

5.5.1.1. Frequency and content.

Once a year, the Quality Committee reviews the QHSE System at a meeting presided by the Chairman in which it:

- a) analyses and reviews the effectiveness of the QHSE System and the compliance with legal requirements, with commitments to the client and those acquired with other stakeholders;
- b) assesses the opportunities for improvement and the need to make changes to the QHSE System, the targets policy and goals;
- c) reviews QHSE System the targets and goals and incorporates new targets and goals;
- d) plans the actions and human, material and economic resources, including maintenance, to ensure that they are carried out under the necessary conditions as specified for their fulfilment.

This review is complemented with other follow-up meetings (at least once a year), aimed exclusively at effecting a follow-up of the QHSE System and its objectives.

Apart from the above meetings, the Corporate Quality Director, the Chief Technical Officer and the Head of the Personnel Department permanently assess the effectiveness of the QHSE System and achievement of its objectives, reporting their findings to the other members of the committee in accordance with the provisions set out in section 8.3. . If significant deviations are detected, the Chairman and the person responsible for the affected area are informed. An extraordinary meeting is held to establish the necessary corrective actions and provisions.

A record of the minutes of these meetings is kept and sent to all staff via the TYPESA intranet.

5.5.1.2. Information for the review

The Corporate Quality Department, together with the Technical and R&D Management Area and the Personnel Department's management, include the following information in the QHSE System review report:

- a) the results of the audits and the assessments of compliance with legal requirements and with all other requirements to which TYPESA Group subscribes;
- b) the results of the consultation and participation;
- c) feedback from the client, other interested parties and their communications, complaints and claims;
- d) the execution and conformity of the processes and products;
- e) the status of the nonconformities, accident investigations, corrective and preventive actions and recommendations for improvement;
- f) the monitoring of the actions resulting from the reviews previously carried out by senior management;
- g) the changes in circumstances, TYPESA Group organisational changes, changes in the scope of works or the requirements, including legal requirements and others, which may affect the QHSE System;
- h) compliance with the objectives and goals;
- i) the type and scope of the products provided by clients;
- j) the environmental and OHS performance^{41 42};
- k) the maintenance of the facilities and vehicles and the monitoring of the operations or processes that may have a significant environmental impact;
- l) relevant environment communications from external interested parties;
- m) the specifications and trends of the processes and products; and
- n) recommendations for improvement.

5.5.1.3. Results of the review

During the QHSE System review the following are set out:

- a) The maintenance or modification of the policy and the rest of the QHSE System documents.
- b) The actions resulting from changes to the policy (where applicable).
- c) The necessary corrections for the proper compliance and adaptation of the applicable legal requirements in force at any place and at any time and in each specific QHSE System area.
- d) The quality and environmental objectives and targets.
- e) Changes to TYPESA Group's organisation or to the scope of the services it offers.

⁴¹ **Environmental performance:** Measurable results of the company's management of its environmental issues.

⁴² **OHS performance:** Measurable results of the manner in which a company manages its OHS risks. NOTE 1: Measuring OHS performance involves measuring the effectiveness of the organisation's inspections. NOTE 2: OHS management system results can be measured against the OHS policy, the organisation's OHS objectives and other OHS performance requirements.

- f) The standards and requirements applicable to the QHSE System and to the services offered.
- g) The necessary actions if the environmental objectives are not met.
- h) The necessary resources.

The Committee documents the results and actions arising from the reviews and issues the corresponding reports or minutes with the appropriate conclusions, which are considered as Integrated Management system records.

5.5.2. Integrity Management System review

5.5.2.1. Frequency and content.

Once a year, the Compliance Committee and Senior Management review the Integrity Management System at a meeting presided over by the Chairman, in which:

- a) The effectiveness of the Integrity Management System and compliance with legal requirements are analysed and reviewed;
- b) Improvement opportunities and the need to make changes to the Integrity Management System, the policy, objectives and goals, are assessed;
- c) The objectives and goals of the Integrity Management System are reviewed and new objectives and goals are incorporated; and
- d) The actions and human, material and economic resources, including maintenance, are planned to ensure that they are carried out under the necessary conditions specified for their achievement.

The Committee holds further follow-up meetings on a regular basis, as indicated in the Integrity Management Manual, to complement this review, as well as however many extraordinary sessions may be required, all in accordance with the Manual.

5.5.2.2. Information for the review

The Compliance Committee presents a report containing the following information for the Integrity Management System review:

- a) audit results and effectiveness of the controls introduced;
- b) the category and number of complaints received, with the relevant details on the communication channels used to present them, and indicating the status of the inquiries opened during the period and resolutions adopted.
- c) feedback from the client, from other interested parties and on their communications, complaints and claims;
- d) the status of nonconformities, corrective and preventive actions and recommendations for improvement;
- e) follow-up on actions arising from the reviews previously carried out by senior management;
- f) changes in circumstances or in TYPESA Group's organisation, the scope of works or the requirements, including legal requirements and others, which may affect the Integrity Management System;
- g) compliance with the objectives and goals;
- h) recommendations for improvement.

The table below sets out the following aspects (without limitation) to be controlled, including managers and frequencies. Results must be reported to the Compliance Committee for annual review.

Client knowledge of our Integrity Management System	Corporate Quality Management Area	Annually, in the client satisfaction survey
Internal awareness	People Management and Training	Annual In the internal climate survey
Training feedback	Training management	Annual In staff training examinations
Procedural compliance with the System	Corporate Quality Management Area	According to the audit plan
Incidents reported in the System	Compliance Committee	Annually, from the date the Committee receives them.

5.5.2.3. Results of the review

The following are established in the Integrity Management System review:

- i) Integrity Management System policy and other document maintenance or modification.
- j) Actions resulting from changes to the policy (where applicable).
- k) The appropriate corrections to comply with and adapt to applicable legal requirements in force at each time and place and in each specific Integrity Management System area.
- l) Integrity management goals and objectives;
- m) TYPESA Group organisational changes;
- n) The standards and requirements applicable to the Integrity Management System and to the services offered.
- o) The necessary actions if the environmental objectives are not met.
- p) The necessary resources.

The Committee documents the results and actions arising from the reviews, by issuing the corresponding reports or minutes with the relevant conclusions, which are regarded as Integrated Management System records and are made available to the Board of Directors, giving the main results in an executive summary report.

5.5.3. Role of the Board of Directors in integrity management

In addition to any roles assigned under other points in the System, the Board of Directors' roles include:

Studying and analysing periodic Compliance Committee and Senior Management reports, as well as any occasional and specific reports resulting from an event or circumstance which, according to the system, should be communicated.

- Approving the Integrity Management Manual and its modifications, either at the Senior Management's or the Compliance Committee's proposal, or acting on their own initiative.

- Approving amendments to the Integrity Policy and Code of Ethics.
- Appointing and removing members of the Compliance Committee.
- Applying sanctions deriving from the Integrity Management Manual.
- Approving the annual budget for implementing the Integrity Management System.

6. RESOURCE MANAGEMENT

6.1. PROVISION OF RESOURCES

Depending on the workload and the needs indicated by their staff, the directors and managers shall notify their immediate superior of the financial, human or material resources needed to manage, execute, verify or audit the work, apply the Integrated Management system, and meet goals and clients' requirements.

The Director concerned reviews and resolves the applications. If new staff are needed, he or she will work with the Corporate Human Resources Director to recruit them.

The human resources necessary to complete the work or products required by the clients and/or interested parties are laid down in the Quality Management plans in accordance with the provisions laid down in 7.1. and 7.8. .

The Management allocates the material (including technological and financial resources) and human resources necessary to achieve the OHS and integrity management targets set out in its policy. Internal health and safety resources are specified in the PPRLs (Health and Safety Plans) and are programmed annually when planning Annual Health and Safety Activities. The budget allocated to integrity management is determined in the annual Compliance Committee meeting with the Senior Management.

6.2. HUMAN RESOURCES

6.2.1. General considerations:

TYPESA Group's staff is the company's most valuable asset. It is therefore in the greatest interest of senior management for the staff to have the knowledge, capacity and experience required to develop their work and for them to be personally and professionally satisfied in order to ensure they meet corporate goals in accordance with its policies.

In accordance with the above and in order to motivate and encourage company staff and help them realise the importance of satisfying clients' needs, respecting the environment, promoting OHS practices, complying with the Integrity Management System and seeking innovative solutions, senior management organises meetings with all staff and has also set up an award allocation system to recognise outstanding innovative ideas and proposals. This encourages all staff to participate and fosters their creativity and teamwork through R&D tools detailed in UNE 166002 and set out in section 7.8. of this document.

TYPESA Group assumes the concept of integrated OHS, which implies the participation of all staff in health and safety tasks, assuming all obligations and responsibilities in the area of health and safety. Moreover, in-house Occupational Health and Safety Services, Outsourced OHS Services and company staff who collaborate with these services, are available for the technical part of OHS management. The Occupational Health and Safety Plan specifies the OHS organisational structures.

Each job profile's integrity management roles and responsibilities are described in the corresponding organisational procedures (TPO), as well as in the integrity management manual.

6.2.2. Competence, awareness and training

Measures that are generally applicable in TYPESA Group, have been set out in procedure TPR-01 'Training', to detect, identify and satisfy staff training needs, ensuring that staff are aware of the need and importance of their activities, of how they contribute to achieving Integrated Management System objectives, and of the potential consequences of failing to follow the procedures. Accordingly:

- a) Directors and managers analyse the competence and training needs of their staff, assess the effectiveness of the training given and provide their corporate and global directors with training plans.
- b) When new employees join the Group, the Corporate Human Resources Department distributes the TYPESA Group guide and the list of Integrated Management System required reading documents.
- c) The Corporate Quality Department and Health and Safety Services provide, respectively, the general and specific training on quality, environment, R&D, and OHS needed for TYPESA Group staff to perform their tasks in accordance with the provisions of the QHSE System.
- d) All TYPESA Group staff must observe procedure TPR-01 'Training' to ensure they are adequately informed and trained in OHS and integrity management.
- e) The Corporate Operations and Human Resources Department keeps continually updated records of the qualifications, experience and training of staff, as well as the minimum skills required for the various work posts.

The effectiveness of the training given is assessed:

- a) by the attendees themselves, through surveys upon completion of the training course; and
- b) by the managers or direct superiors of the attendees, no more than six months from the completion of the training course, by analysing how staff apply the acquired knowledge to their work and how the training has helped to improve the effectiveness of their work.

The results of the above tasks are sent to the Training Department as stipulated in 5.5. .

In addition, organisational TPO procedures set out the role of the heads of division, department, section, project managers, technical coordinators, heads of unit and division coordinators, notably:

- a) Division, department and section heads, coordinators and the Technical and R&D Management Area who work together to report on the purchase of books and subscriptions to magazines and on training needs, the availability or need for means and resources and the tasks inherent to knowledge management.
- b) Contribute to training their staff, sharing knowledge and experience, to keep staff up to date on the latest developments and the latest practices within their field of activity;
- c) Add outstanding project innovations and activities to the Integrated Management System to enhance knowledge management.
- d) Taking part in associations, attending conferences, publishing and giving conferences in order to maintain TYPESA Group's quality image in the market.

6.3. INFRASTRUCTURE.

To carry out its work, TYPESA Group requires only infrastructure for consultancy work, such as office computers, air conditioning and ergonomic work posts, except for TYPESA laboratories and its associated

R&D activities, which require special equipment and facilities as laid down in the corresponding manuals, procedures and instructions.

Specific material resources for certain control and measurement tasks, commonly used for construction supervision, are subject to measuring equipment control procedure requirements. Applying this procedure ensures the reliability of the results obtained.

Any infrastructure required for any R&D activity not included in the above point shall be assessed to decide whether to purchase it or adapt an existing infrastructure.

6.4. WORK ENVIRONMENT.

With the exception of TYPESA's laboratory work and its associated R&D activities — which require specific environmental conditions for certain tests as laid down in the corresponding manuals, procedures and instructions — the human element is central to TYPESA Group's work. Consequently, the required work environment⁴³ is that of an office, as stated above.

6.5. ORGANISATIONAL KNOWLEDGE

Knowledge is the result of accumulated personal experience and information learned, acquired, produced or made available by employees during their career. It includes lessons learned from successes and failures which strengthen or improve our professional skills.

Knowledge management is a process whereby an employee's personal knowledge becomes a shared asset available to all. It enables information and skills to be shared among employees in a systematic and efficient manner.

Procedure TP0-10 describes the role and responsibilities of the Technical and R&D Management Area when it comes to managing the organisational knowledge that TYPESA Group needs for its products and services.

Procedure TPV-02 describes the main tools that make up TYPESA Group's Knowledge Management System. The system manages accumulated talent and experience to deliver solutions tailored to the specific needs of the client. It focuses on our vital business processes to significantly improve the effectiveness and quality of our services, ultimately bringing value to our clients.

7. CARRYING OUT THE WORK

7.1. PLANNING THE SERVICES

The general methods used by TYPESA Group to plan the work, manage risk during the contract and operational phases and identify the environmental impacts and issues are defined in procedures TPG-02 *Planning and starting work*, TPA-01 *Identifying and assessing environmental issues and legal requirements*, TPA-02 'Operational control' and TPG-05 *Concluding work*, as well as the specific procedures laid down in each contract, which are defined and documented in the corresponding Quality and Environmental Management plan, which is prepared in accordance with the provisions laid down in TPG-03 *Quality plans*.

⁴³ **Work environment:** Set of conditions under which the work is carried out. Conditions include physical, social, psychological and environment factors (such as temperature, recognition schemes, ergonomics and atmosphere quality).

The quality objectives pursued in the development of the works in the scope of a contract include identifying at all times the requirements that the service provided must meet, and the procedures that must be applied by all the staff involved. In this way, our ultimate aim is to meet the Client' needs, both during the course of the work and after its completion, providing the services under the contract in compliance with its objective and documentary requirements, and to prove TYPESA Group's technical competence in the area of the contract to all the organisations involved. We also aim to learn and improve for future assignments, detecting any isolated imperfections or non-compliances in our daily work, as well as any procedures or solutions that may improve our work in the future, while providing feedback to the company through the relevant reports.

The operations and activities associated with OHS dangers and risks, are identified through risk assessments, which provide the basis for the necessary controls to manage or eliminate them, or prevent unwanted consequences, reducing them as much as possible. Plans for corrective measures are drawn up on the basis of these assessments, identifying the activities and controls needed in order to avoid risks, including those related to the goods, equipment or services purchased.

Quality and Environmental Management plans lay down or refer to the modifications or exceptions to this manual, if any, as a result of the scope of the services, legal requirements, standards, clients' needs or TYPESA Group's requirements for the work.

The Quality and Environmental Management plan is structured on the basis of the organisation manuals and contractual procedures.

The organisation manual lays down or refers to the following:

- a) The definition of the work, which identifies the requirements of the product or service and contains or refers to:
 - a. The scope of TYPESA Group's services and activities. (e.g. the terms of reference or similar document, TYPESA Group's technical proposal and the contract signed with the client);
 - b. the general or specific agreements for the work signed between TYPESA Group and its possible associates;
 - c. the reference to the documents that contain the definition of the scopes of the services and works corresponding to the other parties involved, such as clients, contractors and independent inspection agencies;
 - d. other basic details stemming from the rules or legal or statutory requirements of the job;
- b) the planning of the work, which lays down the tasks required for the development, execution, control and approval of the consultancy work or the design stages, the technical documentation that is to be created, the partial deliveries to the client, including the checking of documents and verifications, reviews and validations of the design and development, those responsible for carrying them out and all the milestones in which the approval or comments of the client are expected. This programme is maintained permanently up to date;
- c) the organisation and the means it contains or refers to:
 - a. the general organisation chart and the relations between the various parties involved including the client or owner, TYPESA Group and other companies (such as engineering firms and independent inspection agencies);
 - b. TYPESA Group's nominal organisation for the work;

- c. organisations outside TYPESA Group with interfaces⁴⁴ and the scope thereof;
- d) TYPESA Group's suppliers for the work; and
- e) the special computer equipment, measuring equipment, mobile material and other that TYPESA Group will use during the execution of the contract.

The procedure manual lays down or refers to the documented procedures that are applicable to the work and, in particular, to the following:

- a) procedures which are required by basic standards and form part of TYPESA Group's procedures;
- b) procedures provided by the client, or newly produced or adapted specific procedures (owing to the fact that a necessary issue was not considered in the previous point);
- c) inspection point programmes⁴⁵ corresponding to the contractor and to TYPESA Group in the control and monitoring work;
- d) the anticipated environmental issues;
- e) environmental legislation; and
- f) OHS issues and their legal requirements.

In particular, if there is another company sharing the work with TYPESA Group, the Project Manager or Head of Unit, as appropriate, will define the scopes and responsibilities for each company. In these cases, everything relating to OHS is regulated by compliance with the provisions of procedures TPG-04 "Subcontracting and purchasing" and TPH-03 "Coordination of business activities".

In the consultancy work, this scope comprises the following:

- a) the planning of works, which is included or referenced in the Quality and Environmental Management plan;
- b) the list of activities and documents containing the corresponding specialities and documents to be generated in order to fulfil the contract and the quality and environmental requirements;

the exact nomenclature of the documents indicated in this system may vary according to the provisions laid down in the particular technical terms and conditions of the contract.

ITYPESA laboratory work planning methods are included in their own procedures.

The necessary records to provide evidence that the processes and the resulting product meet the requirements are specified in the corresponding procedures.

7.2. CLIENT-RELATED PROCESSES

7.2.1. Determining the service requirements

The technical, environmental, quality, integrity management, OHS, cost and time-related requirements for the service requested by the client or interested party are first defined during the preparation of the

⁴⁴ **Interface:** Information shared by two or more organisations. It includes the document that enables the relations between the said organisations.

⁴⁵ **Inspection:** Measuring, examining, testing or contrasting one or several *entity* characteristics using a standard and comparing the results obtained with the specified requirements in order to determine the conformity of each specification.

technical proposal. Procedure TPG-01 'Proposal supervision' defines the tasks and records related to this activity. In the case of R&D projects, this is done during the idea selection process, according to procedure TPV-01.

In this phase, the Head of Division or Regional Manager of the area concerned or, where appropriate, the R&D Management Committee appoint an author, who analyses the needs and requirements expressed by the client or interested party in his bidding or work offer, to identify the following:

- the TYPESA Group areas that will take part in the technical proposal or in the selection and analysis of R&D ideas;
- the client's requirements and the scope of the work that is to be carried out;
- the work that will be carried out directly by TYPESA Group and that which will be subcontracted to third parties;
- the legal and regulatory requirements related to the work;
- the environmental requirements related to the site on which the work is to be carried out;
- the OHS requirements related to the work;
- integrity management requirements the client expects, such as express declarations of compliance with the client's code of ethics, confidentiality agreements, and data protection, etc.
- additional requirements determined by TYPESA Group; and
- the methods or processes necessary for satisfying the requirements indicated above.

The author prepares the bid in accordance with the instructions given in the client's request for bid or terms and conditions, whether given verbally or in writing.

Section 7.5.1. and procedures TPA-01 'Identification and assessment of environmental aspects and legal requirements' and TPA-02 'Operational control' sets out the identification of the environmental issues related to the activities, products and services that TYPESA Group can control and influence and which may generate significant environmental impacts.

Before we can identify the hazards that may affect TYPESA Group processes and activities and determine which of these can be found in each specific process or activity, we must consider that OHS affects TYPESA Group processes from the following fields:

- a) OHS as part of the portfolio of products TYPESA offers its clients in the preliminary or detailed design stage, where it analyses, plans, controls and monitors or coordinates OHS through OHS studies, OHS monitoring and control or OHS coordination.

All aspects related to this field of OHS, comprising all aspects related to quality standard 9001 and environmental standard 14001, where TYPESA Group professionals provide all their experience and knowledge on OHS, including the OHS management in accordance with OHSAS 18001 standards.

- b) OHS in terms of what affects its own activity with reference to its own staff.

TYPESA Group considers the following aspects to be essential for OHS:

- a) Any work-related aspect or factor which may damage the health of its employees or other persons (e.g. staff who perform activities for the Group).
- b) Comply at all times with current OHS legislation.

- c) Avoid damages and losses in production and profit as a result of poor OHS management.
- d) Avoid damaging the public image of TYPESA Group.
- e) Continually improving OHS conditions within TYPESA Group.

Sections 4.2.3. and 4.2.4. and chapters 5. ,6. ,7. and 8. of this manual describe TYPESA Group's processes and interactions, stating who is responsible for what and presenting the necessary measures foreseen in the Integrated Management System to ensure:

- a) processes are efficiently operated and controlled;
- b) the availability of the resources and documents required to support in the operation and monitoring of said processes;
- c) the monitoring, measurement and analysis of said processes;
- d) the implantation of the actions required for achieving the planned results and the continuous improvement of said processes.
- e) the purchase or subcontracting of any good or service that may affect the product or compliance with the Integrated Management System, is controlled.

Procedure TPH-02 'Hazard identification and risk assessment (HIRA)' states the hazards and risks in the TYPESA Group processes and activities with a potential impact on its staff's safety or health. They also explain how the activities associated to those risks are identified, the evaluation criteria applied and the control measures needed to eliminate or reduce them. As a general rule, TYPESA Group encounters the following OHS risk types:

- a) Security risks (accidents): because most of TYPESA Group's work and production — including most site work and activities — takes place inside an office, the potential risks are those attributable to the administrative, technical and management work that is usually carried out in an enclosed workplace under controllable and programmable safety conditions and which therefore entails a minimal accident risk and a low accident rate. Some field or site work activities such as topography, site supervision, inspection and data collection, and so on, entail a higher safety risk because they require numerous trips, with the additional risks involved.
- b) Ergonomic and psychosocial risks (fatigue or dissatisfaction): Most TYPESA Group staff activities generate a high level of mental stress. Moreover, since most activities take place in an office, the risks are mainly ergonomic and psychosocial.
- c) Health hazards: With the exception of TYPESA's laboratory work and of field and site work, TYPESA Group staff activities are carried out under quite controlled conditions. Therefore, health hazards tend to be related to the control of environmental conditions in indoor workplaces.

Hazards and risks related to critical aspects, such as particularly sensitive risk groups, are regulated in specific clauses of the corresponding procedures, such as the "Risk Assessment of Particularly Sensitive Groups" in TPH-02 "Hazard Identification and Risk Assessment (HIRA)". On the other hand, those aspects that require special management controls, such as those related to change management, are regulated through the different QHSE System procedures. Risk assessments are carried out by technically competent staff in accordance with the legal requirements in each place and at all times. The Corrective Measures Plan (CMP) is developed based on these assessments.

TYPESA Group will identify the features of new jobs, activities or tasks that may have an influence on OHS to determine the risks or hazards that they can produce.

7.2.2. Review of service-related requirements

Once the proposal has been prepared, the author will:

- Check that the requirements of the product or service to be provided have been clearly defined; that TYPESA Group has the capacity to meet the requirements set forth and that the proposal meets the requirements of the specifications —or equivalent document. If they don't, the author checks that the exceptions have been stated in a quality control sheet which will be filled in and filed together with the proposal.
- Send the proposal and the quality control sheet to the corresponding manager with legal powers of representation for signature of both documents.

Any omissions or faults detected during the preparation or review of the proposal on the lists or in the summaries of the applicable environmental legislation as per 4.2.1. shall be notified to the Chief Technical Officer or the Corporate Quality Director for their updating.

If the proposal is accepted, the Project Manager, Head of Unit or Laboratory Manager, as applicable (hereinafter Project Manager⁴⁶) checks prior to the signing of the contract that no situations affecting TYPESA Group's capacity for complying with the terms and conditions of the contract have occurred and that said contract does not include additional undertakings regarding the proposal presented.

Otherwise, the head of unit notifies his or her global or regional director, who may assume the role or negotiate directly with the client.

The presence of a legal representative's signature on a contract provides evidence that it has been checked, notwithstanding the system's procedures for specific cases.

Any changes to the legal requirements or to quality and environmental standards arising during the work are registered and approved by the project manager. They are reported to the client and carried out only if the corresponding authorisation is received, except if TYPESA Group is in charge of the project management and therefore responsible for said changes.

The Integrated Management system provides a continuous review of OHS hazard identification and risk assessment by:

- identifying dangers and assessing the initial risk.
- analyses for preparing the Annual Health and Safety action plan (AHSAP);
- continual monitoring of the established corrective measure and control schedules;
- periodic reviews of the risk assessments;
- annual reports assessing the effectiveness of integrating the preventive action; and
- the results of monitoring the different OHS aspects as set out in the QHSE System procedures (emergencies, accident investigation, tidiness and cleanliness, etc.); and
- annual reviews by the Integrated Management System management team.

7.2.3. External communications

Any individual receiving verbal or written communication from the client or interested parties which is directly or indirectly related to a specific contract (e.g. information about the service or the execution of

⁴⁶ If the client has assigned TYPESA Group the project management, the role is assigned to the Unit Manager.

the work; modifications, satisfaction and client's attitude, including complaints), informs the corresponding project manager to be registered, analysed and replied to in the shortest possible time.

If the communication or query is related to the QHSE Management System, the project manager reports the results of the analysis and the corresponding actions to senior management, who, after the corresponding analysis, take the final decision on the need and scope of the response which shall be made by the Project Manager.

To ensure that the above actions are effectively fulfilled, sections 5.5. , 7.2.1. , 7.2.2. and 8.3. are applied. Additionally, the client is given password-protected access to updated information on both designs (documents, plans, calculations and measurements, references, etc.), and construction controls and supervision (progress, regular reports, certificates, photographs, etc.) via <http://www.typsa.com/en>.

Regardless of the above, the client's opinion is also analysed and assessed as stated in section 8.2.1. of this manual.

TYPESA Group systematically transmits its Integrated Management System information to external parties (clients, or potential clients and society in general) through its website and the annual management report, the Corporate Affairs Director being responsible for its publication.

Information is provided on the following quality, environment and integrity management aspects:

- General
 - a. Certifications of the systems the Group implements,
 - b. Average performance rating obtained through internal audits.
- Quality
 - a. Average rating obtained through the Client satisfaction survey,
 - b. Evolution of the average supplier rating,
 - c. Training actions during the year
 - d. Number of internal audits carried out.
- Environment
 - a. Carbon footprint
 - b. Electricity, water and paper consumption in their offices.
- Integrity
 - a. Number of complaints received,
 - b. Number of cases processed by the Committee.

The Compliance Committee is obliged to inform the competent authorities about any situations in connection with integrity that represent or may represent evidence of criminal activity, as described in the manual. It also has a duty to inform and help external agents with their investigations in any matter related to inquiries opened by that agent in connection with integrity management.

If an inquiry concludes that management system provisions affecting the client have been breached, the Compliance Committee shall notify the client of the discovery and the measures taken.

All aspects relating to external OHS relations and communications are laid down in the different procedures of the Integrated Management system, and especially in TPH-03 'Business activity coordination'.

7.3. DESIGN AND DEVELOPMENT

Procedure TPP-01 'Design and development control' lays down the general control measures applicable during the preparation of the designs and section 7.5. states those corresponding to the preparation of studies and reports⁴⁷.

All individuals involved in the preparation of a project carry out their tasks in accordance with:

- this document;
- procedure TPP-01 'Design and development control'; and
- the procedures, guides and instructions laid down in the corresponding Quality plan and the legal requirements and standards laid down in the technical specifications of the contract or selected by TYPESA Group from among those which are applicable.

7.3.1. Design and development planning

The design and development planning begins during the proposal writing stage. Following the award, the project manager updates and maintains the planning in the project's Quality and Environmental Management plan (see 7.1.).

7.3.2. Initial design and development data

The Project Manager is in charge of monitoring and updating the initial design and development data. According to procedure TPD-04a 'Project documentation storage and processing', upon starting the work, the Project Manager must create a computer directory available to all staff for storing the documents containing the data or the instructions on where to find these. The directory must always be kept up to date.

The project manager must identify the applicable environmental legislation and requirements in accordance with procedure TPA-01.

The project manager shall inform the corresponding technical team leader of any changes made to the initial data — especially those made by the client — so that they can be applied once their effect on both the completed work and the pending work has been analysed.

Finally, the project manager stores the initial data in the project report or equivalent document in the case of studies.

7.3.3. Results of the design and development and the R&D process.

In the cases in which the purpose of the contract is the preparation or management of a project, the final design and development results are included in the report, annexes, plans, terms and conditions and budgets.

Depending on the features and requirements of the clients or interested parties of the R&D project, the project manager selects one or more of the methods required in section 4.4.8.1 to inform the head of division.

⁴⁷ TPS procedures describe the methodology to be applied to service provision control in the case of construction management and supervision. In general, a design load is not considered to have been assigned to this kind of work. When this kind of work includes preparing designs (variations, additional designs, etc.) or other work involving design, then it must follow the TPP-01 requirements.

7.3.4. Design and development review

Design and development reviews⁴⁸ are carried out in accordance with procedure TPP-01 Design and development control' by an expert (hereinafter called the design and development review manager) in a meeting with the project manager and the persons responsible for the participating technical specialities.

Based on a list of staff trained as design reviewers, the project manager assigns a project reviewer and establishes the stages or milestones at which the design and development reviews are to be made in the Quality and Environmental Management plan.

If the term for execution is very short, the design and development review can be carried out together with the design verification described in section 7.3.5. as long as the design is simple and those responsible have experience doing similar work. If one of the design stages overlaps with the construction stage, the design will be reviewed before the works acceptance.

Whatever the case, the reviewer may request technical support as he or she considers appropriate.

The design and development reviews are carried out in conjunction with checklists and the results are documented as minutes which contain the comments and actions requested.

Any defects⁴⁹ or nonconformities directly affecting the quality of the work are corrected as stated in 8.3. . Any notable design and development issues and the actions required to avoid the repetition of nonconformities, problems and weak points found during the execution of other projects are distributed among the affected personnel to improve the effectiveness of future work, as per 8.5.2. and 8.5.3. , as applicable.

7.3.5. Design and development verification

When preparing studies and designs, the design and the development⁵⁰ are verified in two stages. During the first stage, an engineer other than the author and with at least the same level of technical training checks the technical documents to ensure that they comply with the initial data, including data deriving from the applicable environmental legislation; that they are coherent and complete and that any connections⁵¹ have been satisfactorily resolved. Subsequently, before delivering the documents to the client, the TRA of the activity under verification — together with any associated TRAs, the Project Manager and the project's Quality Manager, unless the role is assigned to the Project Manager — must check that any changes to the initial data and any connections made after the date of the check have been resolved⁵².

⁴⁸ **Design and development review:** Complete, documented and systematic examination of the evidence generated during the various design and development stages, carried out at least at the end of the process to assess and confirm (a) compliance with cost, term, quality and environmental requirements ; (b) the effectiveness of the production process and of actions aimed at minimising the environmental impact; and (c) the client's satisfaction with the completed work, the way he/she was treated, and the way in which problems were identified and solved and corrective and preventive actions were proposed.

⁴⁹ **Defect:** Failure to meet a reasonable expectation or requirement associated with anticipated use, including those related to safety.

⁵⁰ **Design and development verification:** A confirmation that the result of a project stage meets its initial data requirements achieved by obtaining and examining objective evidence.

⁵¹ Checking releases the document internally, which means that the technical area in charge validates it so it can be integrated into the project.

⁵² If the verification is positive, the product (set of documents which constitute a project or a part thereof corresponding to a stage or delivery) is approved.

During the check or verification, the following can be carried out, if necessary:

- Alternative calculations.
- Models or model tests, in which case the verification includes the checking of the studies, calculations and reports generated.

The above tasks are carried out using checklists in accordance with TPP-01 'Design and development control'.

The results of the check and the verification are registered on the lists of documents and activities or in the document itself when the client so allows. The Project Manager or — where appropriate — the Technical Team Leader shall notify their staff of any errors or omissions detected during the check or verification process which may affect other project documents, and determine the actions required to solve them.

7.3.6. Design and development validation

If the scope of the work is limited to preparing the design, TYPESA Group understands that the concept of design and development validation⁵³ is included in the design and development review and verification as per the above sections.

If TYPESA Group is responsible for preparing the design and managing, controlling or monitoring the works, the Unit Manager shall validate the design and development of the project by sending reports to the Corporate Technical Department to be analysed, sorted and sent to any areas able to make use of them. These reports contain any omissions or errors detected in the project or in the final test results as well as any possible improvements for future works (known as feedback reports).

The requested recommendations and actions shall be documented and registered in corrective, preventive or repair action proposals as per the provisions laid down in 8.3. , 8.5.2. and 8.5.3. , as applicable.

7.3.7. Design and development change control

Any changes or modifications made to the agreement signed between TYPESA and the client (technical scope, period or budget), are managed following procedure TPP-02 'Change Management of design work'. This procedure defines the management and technical activities to be carried out in relation to the Client when circumstances arise that may or will affect the price or completion periods of the services, in order to keep clients informed in a timely manner of any eventualities that might alter their expectations and enable them to be forewarned of the effects that such circumstances may have on the final service, its price or its delivery period, thereby facilitating decision making.

It also defines the methodology to ensure that the contract budget is controlled throughout the production process and is at all times aligned with the scope of work, price and term conditions approved by the Client, while ensuring the appropriate documentary traceability of the process.

The Project Manager shall ensure that changes are notified to all staff concerned and that relevant records are produced.

⁵³ **Design and development validation:** Confirmation through the provision of evidence that the executed design complies with the requirements laid down for its use or application.

7.4. PURCHASES

7.4.1. Purchasing process

The generic term of purchase comprises any type of business in which TYPESA Group purchases goods or services related to its activity from a supplier.

There are two different types of purchase, based on the contractual relationship on which the transaction is based, and two categories, based on how the purchased product or service is linked to or depends on the services or products that the Group has agreed to provide to its client.

According to the type of type of relationship, contracts can be signed for providing services or selling goods. Depending on how the purchase is linked to the Group's contract with the client, we talk of subcontracts when the product or service provided is part of the Group's agreement with the client, or (conventional) contracts when this is not the case.

Based on the ISO 9001 standard definition of the term *purchases* and in accordance with the nature of the goods and services provided by TYPESA Group, the Integrated Management system places special emphasis on the subcontracting process. Since the Group is a service provider and aims to achieve client satisfaction, a product received from a subcontractor must meet the client's requirements.

Suppliers are selected based on the ability to meet the order requirements (including those related to quality, environmental and OHS management) they have demonstrated in the past, either in relation to TYPESA Group or by means of their general references, keeping a database of registered acceptable suppliers (which serves as a criterion for selection, assessment and reassessment) in accordance with procedure TPG-04 'Subcontracts and purchases'. Integrity management criteria must also be taken into account, as set out in the specific paragraphs in the Integrity Management Manual.

TYPESA laboratory purchases are carried out according to its own procedures.

7.4.2. Purchasing information

The project manager or technical team leader, as applicable, determines the products or services that are to be purchased, the term, the quality, environmental and OHS requirements and acceptance criteria, and designates the person responsible for preparing the purchase documentation.

If a significant environmental impact is generated during the application of the goods or services purchased by TYPESA Group and the suppliers do not have the ISO14001 or EMAS certificates, they shall be notified of the environmental requirements and procedures they must apply.

The products and services that may generate a significant environmental impact during their manufacture or application are verified in accordance with what is laid down in section 7.4.3. below.

Health and Safety Services provide the purchase team with the necessary advice and information on OHS to purchase any product or hire any service, as long as it complies with the legal requirements for marketing and use.

Health and safety risk assessment criteria shall determine the requirements and aspects for work equipment and machinery. Special consideration is given in certain QHSE System procedures to purchases closely related to OHS issues, especially those relating to emergencies and personal protective equipment.

Subcontract templates for hiring a service or product as part of the client's assignment to TYPESA Group contain specific quality, environment and OHS information and requirements which are generally required of the supplier.

7.4.3. Verification of the purchased products and services

TYPESA laboratories apply what is stated in their own procedures.

The products or services to be purchased, as well as their requirements and inspection criteria, will be determined and assessed in the R&D project analysis and selection stage.

In the case of studies and projects or the subcontracted part thereof, the verification is carried out in accordance with what is laid down in 7.3.5. as part of the design.

The remaining products (test equipment, consumables, cleaning services, maintenance, etc.) that may affect the service quality, OHS or generate an environmental impact are verified before they are made available to the client by the user and subject to regular controls, where applicable, by a TYPESA Group technician as indicated in the purchase documents and in 8.2.4. or by an approved independent team.

Should it be possible to separate the service under contract into even parts and for the parts to be received separately, the decision shall be left to the project manager if it corresponds to a contract, or to the technical purchase manager if it is a generally applicable good or service, taking into account the type of product supplied, the use that is to be made thereof and the possibility of carrying out partial verifications.

In the cases in which the client or TYPESA Group wishes to verify the product or service at the supplier's facilities, the supplier is notified by means of the purchase documentation.

If, owing to urgency, a product that may affect quality, OHS or generate a significant environmental impact is used without the inspection or control laid down in the above sections, the product is identified directly or indirectly by the technical purchasing manager, ensuring its traceability and the possibility of recovering it and replacing it if the result of the controls is negative.

Whatever the case, the level and intensity of the control depends on the supplier's capacity and experience; the inspections⁵⁴, controls and tests carried out previously; and the evidence provided. The corresponding records are generated according to 4.2.4. and the supplier database is updated.

7.5. PRODUCTION AND SERVICE PROVISION

7.5.1. Control of the production and provision of the service

Project design and development control measures are set in section 7.3. .

Construction supervision, control or monitoring work is controlled as per sections 8.2.3. and 8.2.4. and as per the following procedures: TPS-01 'Initial works control and monitoring tasks'; TPS-02 'Quantitative deadline control', TPS-03 'Quality control', TPS-04 'Control of the contractor's documentation, management of modified and complementary documents', TPA-01 'Identification and assessment of environmental aspects and legal requirements' and TPA-02 'Operational control' and adapted to the contract's Quality and Environmental Management plan.

⁵⁴ **Inspection:** Measuring, examining, testing or contrasting one or several *entity* characteristics using a standard and comparing the results obtained with the specified requirements in order to determine the conformity of each specification.

Equivalent procedures to those described above shall be applied to control subcontracted integrating or testing works for systems or equipment designed by TYPESA Group.

Whatever the case, specific measures to control production and service provision and the processes associated with a specific contract are specified in the corresponding Quality and Environmental Management plan as mentioned in 7.1.

TYPESA's laboratory follows its own manuals and procedures for test controls.

Environmental impact during the construction of the designed work is minimised by incorporating environmental concepts at the design review and verification phase, as indicated in section 7.3. 'Design control'.

Work performed by TYPESA Group or by organisations controlled by the Group is associated with environmental aspects⁵⁵ that can generate one or more of the following environmental impacts⁵⁶:

- heat or cold generation;
- alterations to the landscape, flora or fauna;
- alterations to the historical, artistic or cultural heritage;
- alteration or pollution of the atmosphere, soil, surface or ground water;
- consumption of water, energy, natural resources and manufactured products;
- light, noise, vibration or odour emissions;
- gas emissions into the atmosphere;
- discharges to the ground, drainage network or surface water;
- generation of gaseous, liquid or solid waste (routine or accidental);
- radioactive contamination (routine or accidental);
- noise pollution (routine or accidental);

TYPESA Group considers environmental impacts to be significant if they:

- give rise to criminal or administrative penalties;
- damage TYPESA Group's public image;
- increase the cost of the relevant insurance policies due to the probability of occurrence; or
- become very significant due to their type, number or duration.

Annex 9.2. provides the link between tasks, environmental aspects and their impact. Environmental aspects are analysed during the construction, operation and dismantling of the construction site, the system or equipment designed. Potential impacts identified during the design or construction phase are indicated in the design documentation. Legal environmental requirements are implemented; studies, environmental impact statements and environmental integration annexes are prepared and incorporated into the control measure specifications to be applied during execution of the work, all as per section 7.3.

⁵⁵ **Environmental aspect:** Element of an organisation's activities, products or services which can interact with the environment.

⁵⁶ **Environmental impact:** Any change in the environment whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products and services.

Other elements that need to be controlled during the works include direct environmental issues generated by TYPESA Group's own activity, such as waste generated in the Group's offices, the fuel consumption of work vehicles or the consumption of natural resources.

The procedures followed to identify environmental issues are specified in 7.2.1. Paragraphs 4.2.3. and 4.2.4. and chapters 5. , 6. , 7. and 8. of this manual describe the processes and their interactions, determine the staff responsible and present the measures provided in the QHSE System to make sure that:

- a) processes are efficiently operated and controlled;
- b) resources and documents required for operation and monitoring of the said processes are available;
- c) processes are monitored, measured and analysed;
- d) actions required to achieve the planned results and the continuous improvement of the said processes are implemented; and
- e) the purchase or subcontracting of any goods or services that may generate a significant environmental impact or affect the quality of the services requested by the clients is controlled.

TYPESA Group will define the environmental issues arising from new jobs or tasks which it can control, in order to determine which might produce significant impacts.

As indicated in paragraph 5.5. in this document, the environmental issues generated by new jobs or tasks over which TYPESA Group can exercise control are analysed in the senior management's QHSE System review meetings, in order to determine which might produce significant impacts.

Section 7.2. , specifies what types of OHS controls are included in the QHSE System.

7.5.2. Validation of the processes for the production and provision of services

In the study and design work, the so-called special processes⁵⁷ are carried out mainly during the survey campaigns required to obtain geotechnical data for the project. These campaigns are subcontracted in accordance with the provisions laid down in section 7.4. and are controlled directly by qualified personnel from the Geotechnics Department.

TYPESA's laboratory follows its own manuals and procedures for test validation⁵⁸.

In construction supervision, control or monitoring, equipment or system integration or maintenance work, special processes are performed by the works contractor, appointed by the client or by the supplier selected by TYPESA Group.

Where necessary, TYPESA Group supervises the execution and implementation of the special processes checking that they are performed:

⁵⁷ **Special process:** production process or service provision where the quality of the product depends basically on the worker's training and the equipment used, and for which no inspection or control performed during the manufacture of the product or provision of the service or upon its completion can guarantee that there will not be any defects once the product is in use or the service has been provided. The special processes shall be subject to supervision and shall be carried out (a) by qualified personnel, (b) in accordance with approved procedures and (c) using approved materials and equipment.

⁵⁸ **Validation:** Confirmation through the examination and provision of objective evidence that the specific requirements of a particular planned use have been met.

- in accordance with current legislation or with procedures reviewed and approved by the contractor, the client or TYPESA GROUP, as applicable; and The special processes not covered by these standards or procedures shall be assessed before use at the works through the analysis of the information supplied by the contractor. The results shall be documented, registered and identified as quality registers.
- by staff trained and assessed by any of the methods set out in paragraph 6.2. , or a similar one in the case of contractor or supplier staff.
- Using equipment maintained and controlled as often as specified in the instructions for use.

In all cases, contractor and supplier performance is controlled as per section 7.4.3.

7.5.3. Identification and traceability

Documents generated by TYPESA Group shall be identified as per point 4.2.3.

Traceability of materials and equipment for measurement and testing is carried out and controlled as per section 7.6.

Where traceability is a client requirement in construction supervision, control or monitoring work, the applicable procedures shall be laid down in the Quality plan.

7.5.4. Client property

Given the nature of TYPESA Group's services, its clients do not supply physical products to be included in the contracted works. They may, however, supply documents, criteria or data which are controlled in accordance with their nature and origin as per 4.2.3. and 7.3. .

Should a future client supply other goods or services covered by this section of the UNE-EN-ISO 9001 standard, TYPESA Group would define and document the procedures required to ensure control in the corresponding Quality Management plan.

Samples delivered by clients for analysis to TYPESA laboratories are controlled in accordance with UNE-EN-ISO/IEC 17025 standard requirements.

7.5.5. External supplier assets

The Group's suppliers do not supply TYPESA with physical products to carry out the outsourced services.

They can supply documents, criteria or data which are controlled in accordance with their nature and origin as indicated in clause 4.2.3. (control of documents) and 7.3. (design and development control).

TYPESA signs a subcontract with the supplier which covers the intellectual property of all documents, models, samples, programs and work tools created especially for TYPESA by the supplier to carry out the works included in the contract signed between TYPESA and its client. Said subcontract determines that all of the subcontractor's works are considered to be the property of TYPESA from the moment they are produced.

7.5.6. Preservation of the product

Given that the 'products' that TYPESA Group provides are design, study or report documents, these are controlled as per 4.2.3. .

7.6. POST-DELIVERY ACTIVITIES

TYPESA is aware of the responsibility it bears after providing its services. With this in mind, TYPESA has signed a civil liability insurance policy. The policy covers operational civil liability, cross liability, employer's liability and professional liability as a result of any personal damage or damage to property and its consequences (damages) which may occur for any reason related to work performed by TYPESA under the insured activity. The policy covers all countries.

The insured amount or insurance threshold is enough to protect against any type of incident concerning said coverage. The following are also insured:

- TYPESA, together with its subsidiaries and national and international branches.
- Subcontractors and collaborators on a service contract.
- Clients and/or public authorities (where required by the contract or the specifications, and without losing their third party status).
- Also, joint venture or consortium partners exceptionally included ad hoc for specific projects.

On the other hand, once a year, TYPESA carries out a client satisfaction survey for work completed during the tax year to take note of our how our clients value the work performed and our company in general, and to detect any signs of dissatisfaction which may not have reached us by other means. With this survey, we also note down market trends and detect opportunities for improvement.

Procedure TMP-04 describes TYPESA Group's method for obtaining feedback from concerned parties, including our clients.

Surveys give clients the chance to openly provide their opinion in as much detail as the wish, make suggestions and mention any weak points they may have detected which justify their appraisal.

After analysing the input received, the Corporate Quality Department issues a report which is included in the QHSE System review. Additionally, the most relevant information obtained from the survey will be sent to all participating clients, irrespective of whether or not they provided their answers.

Any negative feedback will be analysed and given special treatment, as it can potentially lead to system nonconformities or risky situations, in which case the necessary remedial, corrective and/or preventive actions shall be triggered to solve the issue and prevent recurrence.

Any sign of dissatisfaction shown by our clients is registered in the 'Problems, suggestions for improvement and queries' program. This on-line application can be used to notify and register issues and to monitor them effectively.

Once the actions have been resolved and their effectiveness has been evaluated, either the Corporate Quality Department or the corresponding management area shall contact the affected client to notify them of the outcome and provide appropriate evidence.

The survey is sent on-line in the Client's main language, with a unique link for access from the client's e-mail address.

Following delivery of the works, TYPESA also offers the client an on-line client support tool through a link on our corporate website at www.typsa.com. Here, clients can access a form where they can express themselves freely. Their message is sent directly to the Corporate Quality Department, without going through the Project Manager or any other production-related area. This ensures independent and impartial treatment of the same.

Clients can also use this tool to make recommendations or suggestions for improvement; this will in turn strengthen our relationship and trust.

7.7. CONTROL OF MONITORING AND MEASUREMENT DEVICES

Procedure TPM-03 'Control of measuring equipment' specifies the methods required to:

- link the tests or measurements to the instruments used;
- ensure that the measuring equipment gives reliable measurements by identifying it and setting maintenance, calibration and control programmes; and
- generate and maintain records of the condition and calibration status of measuring equipment.

If regular adjustment, monitoring or calibration processes show that measuring equipment does not comply, the procedure covers actions to:

- identify tests with potentially altered measurements;
- assess the effect on the acceptance of the tested elements with supporting evidence;
- apply the corresponding corrective measures or provisions, if necessary; and
- record the entire process.

In processes involving construction supervision, control and monitoring, manufacturer inspection or monitoring or integration, or system or equipment testing, TYPESA Group ensures that the contractor or supplier, as applicable, has procedures in place that are equivalent to those indicated above and that they are followed within the scope assigned by the client at all times.

7.8. R&D ACTIVITIES NOT COVERED IN THE PREVIOUS POINTS

This manual and Group V R&D management procedures reflect the general methods for measuring correct R&D system management and for developing R&D projects. In addition, provisions are made to ensure that the R&D Committee and the project teams fulfil their obligations, including:

R&D COMMITTEE:

- Use of R&D tools (technology forecasting, technology prospecting, creativity, and external and internal analysis).
- Identifying and analysing threats and opportunities.
- Analysing and selecting R&D ideas.
- Planning, monitoring and control of the project backlog.
- Technology transfer.
- Monitoring, control and use of procedures for the documentation of results.
- Protection and use of results.
- Measurement, analysis and improvement

R&D PROJECT TEAMS:

- Use of R&D tools (technology forecasting, technology prospecting, creativity, and external and internal analysis).
- Implementing R&D projects in accordance with quality criteria.

- Generating and transferring knowledge.
- Developing new technologies and/or improvements to existing technologies.

7.8.1. Our tools

Staff are trained as indicated above in 6.6.2 and in TPR-01 procedure to ensure that R&D tools are applied. Work is monitored and coordinated by the R&D Management Committee and the Project Manager and the project team TTL who decide which are the most appropriate tools for each project, depending on the procedures indicated in the TPV-01 and TPV-02, and in the R+D Activities guide and SWOT analysis.

7.8.2. Internal and external analysis

The result of external analysis to assess and compare TYPESA Group's innovative ideas with other agencies is reflected in the Strengths and Weaknesses in the SWOT analysis and the result of the internal analysis is reflected in Opportunities and Threats.

Senior management establishes technology transfer methods in its strategic plan.

The following control measures have been introduced in order to protect the results obtained:

- All TYPESA Group staff are obliged and formally committed to professional secrecy regarding any information obtained in the performance of both their work in the provision of services and in administrative data processing tasks as a result of the work carried out. They must sign a confidentiality agreement attached to their employment contract.
- Any information received, regardless of the means, will be treated as confidential.
- Information provided by the client or third party may not be wholly or partially reproduced for purposes other than those specific to the work entrusted to us, without the express authorization of the Technical and R&D Management Area.
- Documents generated during a project are the property of TYPESA Group or of the client, according to what is stipulated in the contract, and must be treated confidentially and may not be reproduced without prior permission.
- TYPESA's intellectual ownership of the material is registered before a public notary.

In accordance with the scope of the work carried out by TYPESA Group the use of the products obtained as a result focuses on the preparation of designs or studies for external clients, to which knowledge acquired in R&D work is applied.

8. MEASUREMENT, ANALYSIS AND IMPROVEMENT

8.1. GENERAL CONSIDERATIONS

In accordance with the above, the methods and procedures used by TYPESA Group for the monitoring, measurement, analysis and continuous improvement of its Integrated Management System and of the services provided to our clients and stakeholders, are based fundamentally on the continual control of the work carried out (see sections 4.2.3. and 7.3.) and on the regular review of the system carried out by TYPESA Group senior management, as indicated in section 5.5.

The use of statistical techniques is limited to inspection and testing work carried out during execution and on completion of items of work completed by the contractor, as part of the construction supervision, monitoring or control.

The methods, statistical parameters (sizes and specifications of the samples, test percentages, etc.) required to apply the said statistical techniques are laid down in the inspection points programme included in the Quality and Environment Management plan mentioned in section 7.1.

The QHSE System specifies a continual OHS tracking and measurement system through:

- external OHS Management System audits;
- internal audits as described in 8.2. ;
- managing non-conformities;
- investigating accidents;
- emergency reports;
- accident statistics and reports;
- health monitoring;
- cleanliness and tidiness controls and reports;
- continual monitoring of the established corrective measure and control schedules;
- periodic reviews of the risk assessments;
- annual reports assessing the effectiveness of integrating the preventive action; and
- annual QHSE System reviews carried out by senior management.

8.2. MONITORING AND MEASUREMENT

8.2.1. Client satisfaction

During the work and on completion, the project managers inform their immediate superiors of the client's level of satisfaction with the work carried out by TYPESA Group. The Head shall determine what measures must be taken in each particular case and report to the Corporate Quality Department if the client seems dissatisfied with the work done. This will then be recorded as an incident. Any congratulatory messages received in writing shall be reported to the Corporate Quality Department to be incorporated into the System follow-up and review reports.

In addition, and on an annual basis, client satisfaction surveys are conducted for the most important works. These surveys are emailed or posted by the Corporate Quality Department to the clients indicated by the Head of each project in the current or immediately preceding year. The survey campaign starts in July and letters are sent in September, to obtain and process the data in time for the system review. The results of these surveys are analysed and discussed at the aforementioned system review meetings. All those that show negative results are discussed as a separate case and considered client complaints as applicable.

8.2.2. Internal system audits

TPM-02 procedure 'Audits' includes the general methods for carrying out the following audits:

- System: to assess monitoring, effectiveness and adaptation.

- Management: to assess the way in which heads of division and area offices follow up on the system and fulfilment of the quality goals for which they are responsible.
- Contract: to assess monitoring, effectiveness and adaptation to the system in the case of work performed by the area audited in ongoing or completed contracts.
- Environmental: to assess compliance with the obligations in the Environmental Management System, in permanent work centres.
- OHS: To assess compliance with the obligations specified in the OHS Management System in each work place.

All of them consider integrity management aspects which in addition are treated separately.

These procedures include selecting auditors, independence requirements and launching, developing and documenting the audits and their results.

QHSE System and Integrity Management System audits are carried out at least every three years and cover those points in the standard not covered by project and management audits. In addition, project-specific audits are carried out depending on importance, complexity, and client or stakeholders' requirements. They are planned, implemented and documented in accordance with procedure TPM-02 'Audits'.

Project and management audits are scheduled every six months, and the audit schedule is published in the annexes of the QHSE Management System follow-up or review meeting minutes. Every year, at least one contract audit is carried out for each division, department and area office as well as an environmental audit for each permanent workplace.

TPM-02 defines the responsibilities and requirements to plan and carry out audits as well as record and report on the results.

8.2.3. Monitoring and measuring of processes

The Corporate Quality Department conducts audits to compare the methods stipulated for monitoring and measuring in the QHSE System with those actually applied. These audits shall be carried out and documented in accordance with what is detailed in paragraph 8.2.2. 'Internal system audits'.

Project or construction managers or directors analyse and assess whether the processes can achieve the anticipated results and report to their respective corporate, global or regional directors, who report to the appropriate Committee. The Committee assesses the effectiveness and efficiency of the QHSE System processes in accordance with the provisions specified in section 5.5. and establishes the remedial, corrective and preventive actions necessary, pursuant to the provisions specified in section 8.3. and paragraphs 8.5.2. and 8.5.3. , respectively.

The Compliance Committee receives the results of audit reports and analyses the sections on integrity management, assessing compliance with the System and its effectiveness. Conclusions on performance, indicators and actions for improvement are obtained from the results of this analysis. All these conclusions are included in the annual report for Senior Management.

In addition to these internal audits, OHS is regularly audited pursuant to legal OHS Management System requirements, verifying, among other points, compliance with legal requirements and with all voluntary requirements assumed by TYPESA Group.

Every year the effectiveness of preventive activity is assessed in the Prevention Services' annual report. Accident rates are presented by which processes can be judged to be suitable or not and their validity for achieving the objectives can be evaluated.

Finally, the level of OHS process compliance is monitored in the Management's annual reviews.

8.2.4. Monitoring and measurement of product

Checks are made to monitor and control studies. Designs are monitored and controlled by verifying, reviewing and validating design and development, as mentioned in 7.3. . Monitoring and control of construction supervision, control and monitoring is carried out as specified in the inspection points plans in accordance with the provisions of TPS-03 procedure. Laboratory tests are monitored and controlled in accordance with their own manuals and procedures. These control measures are complemented with internal audits.

The key features of operations that might generate a significant impact on the environment are monitored and controlled by the Committee in the QHSE System review and monitoring meetings, in accordance with the provisions in section 5.5.

As already mentioned in point 8.2.3. on OHS, legally required OHS Management System audits are conducted regularly, verifying, among other points, compliance with legal requirements and with requirements voluntarily assumed by TYPESA Group.

OHS development compliance is monitored in the annual Management reviews.

R&D activities are monitored and controlled by checking the project workload and its operation. These control measures are complemented with internal audits.

Conventional and R&D project verification constitutes the record of products released to the client.

8.3. CONTROL OF A NON-CONFORMING PRODUCT

Within the scope of TYPESA Group's services, any processes and products that do not comply with the Integrated Management System requirements or with the requirements defined and agreed with clients are detected mainly when:

- Preparing the bid, locating and recruiting partners and appointing subcontractors
- recruiting staff or freelancers;
- reviewing or verifying the design and development;
- contracting or supervising subcontracted work;
- receiving products that might generate a significant environmental impact;
- conducting permanent supervision of work carried out by managers or team leaders;
- clients of independent inspection agencies conduct internal audits or inspections;
- analysing relevant internal or external environmental communications;
- analysing claims from clients made directly or through external agencies; or
- investigating accidents and incidents;
- analysing internal incidents;
- investigating allegations made in connection with integrity.

TPM-01 procedure 'Control and resolution of non-conformities' stipulates the general methods applied by TYPESA Group to ensure that non-compliant products are identified and controlled both from the point of view of quality and environment, in order to avoid inadvertent use and to ensure that the corrected goods or services are inspected again. Likewise, processes or actions that breach prescribed integrity management obligations are identified.

In addition to giving rise to possible nonconformity reports and, where applicable, the corresponding mitigating actions,

- In TYPESA Group work, where the 'products' are documents, 'non-conformities' are treated by correcting and re-printing them.
- In any kind of construction supervision, control and monitoring works, the non-compliant products (which are taken to include tasks within TYPESA Group's responsibility which have been omitted or incorrectly performed) are processed depending on their nature and on the provisions specified in the construction Quality plan. In the case of non-compliant goods or services supplied by the contractor, TYPESA Group is responsible for stipulating and monitoring their correction depending on the type of supervision. Responsibilities are defined in the contract, in TYPESA Group's quality management plan for the site and in the master Quality plan or similar document, where applicable.

In addition to controlling OHS nonconformities, the Integrated Management System has a procedure known as TPM-04 'Investigation of accidents and incidents' which establishes and determines the actions necessary to investigate accidents and incidents that occur in the workplace in order to take the necessary measures to prevent re-occurrence.

To avoid accidents and OHS incidents and ensure responsiveness, TYPESA Group has emergency plans or measures in place in its work centres as described in procedure TPH-04 'Emergency'.

Environmental contingency plans exist in order to limit the environmental impacts generated and ensure response capacity in the event of an accident, in accordance with procedure TPA-03 Emergency Plans.

The Integrity Management Manual contains the procedure for inspecting and dealing with formal integrity management complaints.

In order to limit deviations from expected R&D project results, Group V Monitoring procedure is applied.

8.4. DATA ANALYSIS

The Quality Committee determines, compiles and analyses the data indicated in the process files included in section 0.1. to assess and demonstrate the suitability and effectiveness of the QHSE System, detect processes or activities that can be improved and provide information about the following:

- a) Client and stakeholder satisfaction (see 8.2.1.).
- b) Compliance with product requirements (see 7.2.1.)
- c) Features and trends of processes and products, including opportunities for carrying out preventive or improvement actions (see 8.5.2. and 8.5.3.).
- d) Suppliers (see 7.4.).

All OHS data, such as accident statistics and audit results, are analysed in the annual reviews to assess the effectiveness of OHS integration and implementation and serve to determine the policy and objectives in the short and long term.

8.5. IMPROVEMENT

8.5.1. Continuous improvement

The commitment to continuous improvement is presented by the Chairman in his Policy and it is developed and implemented by the Committee by analysing the data contained in the process files and it is complemented by implementing a system of TYPESA Group staff incentives, based on activities or ideas which, directly or indirectly, help to improve aspects such as quality, how innovative activities are carried out and the effectiveness of the resulting work, respect for the environment and improvement of OHS conditions.

Continuous improvement is one of the fundamental aspects of the Integrated Management System, to be carried out through annual reviews and promoted by controlling non-conformities, implementing the system of internal and external audits and the different controls of the various aspects of the Integrated Management System.

8.5.2. Corrective actions.

TPM-01 procedure 'Control and resolution of non-conformities' establishes the general methods applied by TYPESA Group for the detection, processing and resolution of nonconformities in order to document their occurrence, possible causes and corrective actions, where necessary, as well as for monitoring their implementation and effectiveness.

In addition to this, procedure TPM-04 'Investigation of accidents and incidents' aims to establish and determine the actions required to investigate accidents and incidents occurring in the workplace in order to take the necessary measures to prevent their recurrence.

System non-conformities detected while investigating integrity management accidents and incidents are dealt with in accordance with procedure TPM-01, as a separate part of the case under investigation.

8.5.3. Preventive actions.

TYPESA Group examines recorded nonconformities, **monitors the works and their peculiarities** as per the general methods stipulated in TPM-01 procedure 'Control and resolution of non-conformities' to anticipate situations which, because of their similarity with previous situations, may give rise to potential risk for quality, the environment, integrity or R&D activities.

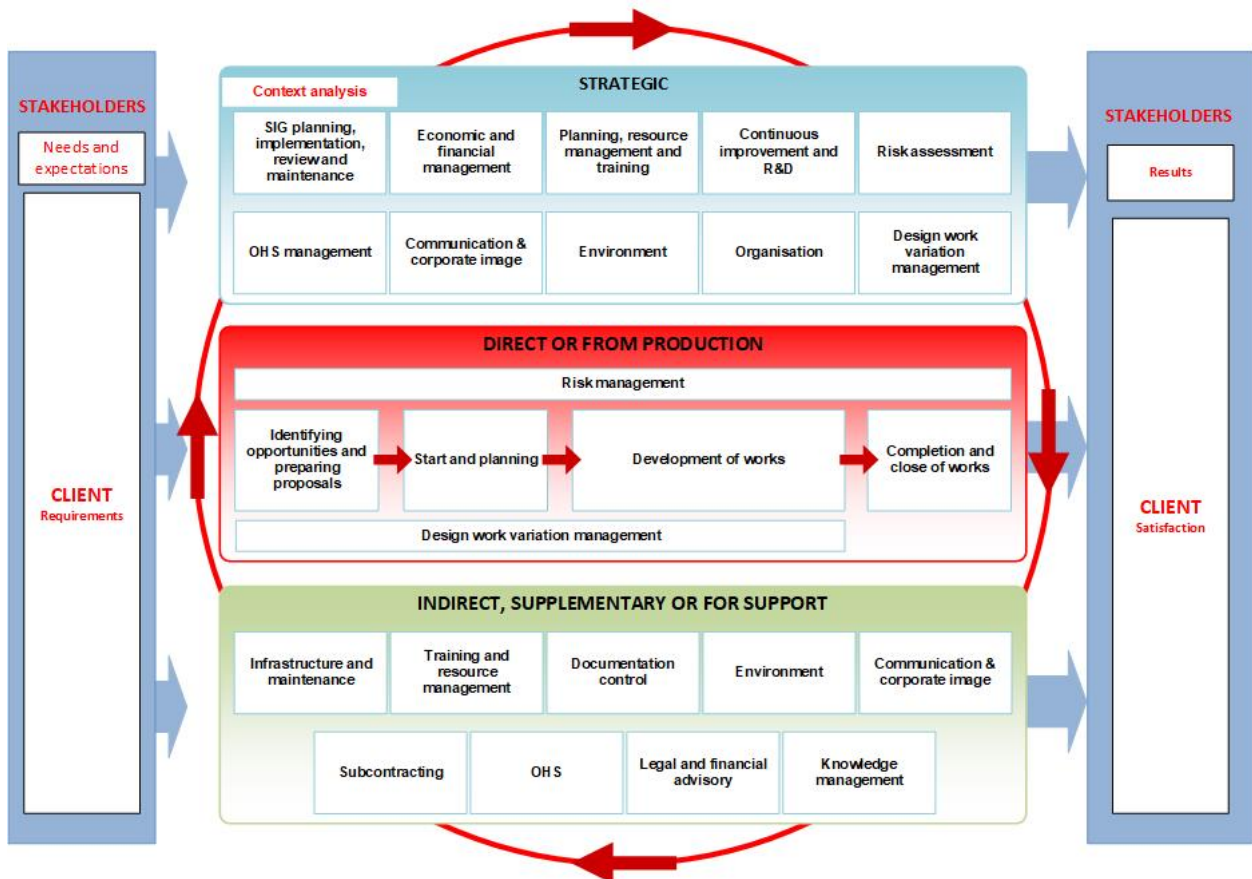
Once the situation in which these risks may occur has been detected, the process for stipulating and controlling preventive actions is similar to that used for corrective actions.

Regarding OHS, procedure TPH-04 'Emergency' indicates how to respond to possible potential emergency situations, prevent and mitigate their consequences should they occur and prevent accidents and incidents or act properly should any accident or incident occur.

9. ANNEXES

- 9.1. Annex. Process diagram
- 9.2. Annex. Environmental issues
- 9.3. Annex. Organisation chart
- 9.4. Annex. TYPESA Group's Quality, Environment, OHS and R&D Management Policy
- 9.5. Annex. List of general QHSE System procedures that develop and complement this manual.
- 9.6. Annex: Abbreviations and definitions
- 9.7. Quality, Environment, OHS and R&D Management certifications

9.1. ANNEX. PROCESS DIAGRAM



9.2. ANNEX. ENVIRONMENTAL ISSUES

See procedures '**TPA-01 Identification and assessment of environmental issues and legal requirements**' and '**TPA-02 Operational control**'.

9.3. ANNEX. ORGANISATION CHART

See the organisation tab on

<http://www.typsa.net/calidad/index.html>

9.4. ANNEX. TYPESA GROUP'S QUALITY, ENVIRONMENT, OHS AND R&D MANAGEMENT POLICY

See http://www.typsa.com/01_2a_politica.html.

9.5. ANNEX. LIST OF GENERAL PROCEDURES THAT DEVELOP AND COMPLEMENT THIS MANUAL.

Group O: ORGANISATION

- TPO-01 TYPESA Group organisation charts
- TPO-10 Role of the Chief Technical Officer
- TPO-20 Role of the Head of Division
- TPO-25 Role of the Head of Department
- TPO-30 Role of the Head of Section
- TPO-27 Role of the Division Coordinator
- TPO-30 Role of the Project Manager
- TP0-32 Role of the BIM Manager
- TP0-34 Role of the CAD Manager
- TPO-35 Role of the Head of Unit
- TPO-40 Role of the Technical Team Leader
- TPO-45 Role of the Technical Coordinator
- TPO-50 Vehicle management
- TPO-60 Role and responsibilities in OHS

GROUP D: DOCUMENT CONTROL

- TPD-01 Identification of documents and registers
- TPD-02 Control of documentation and data
- TPD-03 Records
- TPD-04a Project documentation storage and processing
- TPD-04a Works documentation storage and processing

GROUP G: GENERAL REQUIREMENTS WORK PROCESS

- TPG-01 Proposal control
- TPG-02 Planning and starting work
- TPG-03 Quality plans

- TPG-04 Subcontracts and purchases
- TPG-05 Close of work

GROUP P: STUDIES AND DESIGNS

- TPP-01 Design and development control
- TPP-02 Design work variation management

GROUP S: CONSTRUCTION SUPERVISION

- TPS-01 Initial construction control and supervision work
- TPS-02 Quantitative and deadline control
- TPS-03 Qualitative control
- TPS-04 Review of contractor's documentation. Design variation and complementary design management.
- TPS-05 Construction work management

GROUP C: PROJECT AND CONSTRUCTION MANAGEMENT

- TPC-01 'Contract Management'

GROUP M: MEASURING AND IMPROVING

- TPM-01 Control and resolution of nonconformities
- TPM-02 Audits
- TPM-03 Control of measuring equipment
- TPM-04 Feedback
- TPG-06 Proposals for improvement

GROUP R: RESOURCE MANAGEMENT

- TPR-01 Training
- TPR-02 Discrimination prevention procedure

GROUP A: ENVIRONMENTAL MANAGEMENT

- TPA-01 Identification and evaluation of environmental aspects and legal requirements
- TPA-02 Operational control
- TPA-03 Environmental emergency plans

GROUP V: R&D MANAGEMENT

- TPV-01 R&D management
- TPV-02 Technological surveillance

GROUP VI: OHS MANAGEMENT

- TPH-01 Control and delivery of individual work equipment
- TPH-02 Hazard Identification and risk assessment (HIRA)
- TPH-03 Business activity coordination
- TPH-04 Emergency
- TPH-05 Accidents

9.6. ANNEX: ABBREVIATIONS AND DEFINITIONS

9.6.1. Abbreviations

DQA: Corporate Quality Management Area.

DD.GG. Management Areas.

DD.TT.: Regional Areas.

EMAS: Eco-Management and Audit Scheme.

JJ.AA: Generic term for referring to the heads of divisions or departments or to the project managers or heads of work units affected by or responsible for one or more actions or processes.

RD: Design Review Manager.

SW: Software.

TRA: Technical Team Leader.

Corrective action: Action taken to eliminate the causes of a detected nonconformity, fault or any other undesirable situation in order to prevent its recurrence.

Preventive action: Action taken to eliminate the causes of a potential nonconformity, fault or any other undesirable situation in order to prevent its occurrence.

Repair action or repair: Action taken on a non-compliant product to reduce the nonconformity to acceptable values, even though it is not compliant with the requirements that were originally specified.

R&D activities: Those relating to research, technological development and innovation, as defined in this standard.

Working environment: Set of conditions under which the work is carried out. Conditions include physical, social, psychological and environment factors (such as temperature, recognition schemes, ergonomics and atmosphere quality).

Approval: Formal action whereby an officially qualified body authorises the use of the document, service or process in a particular area for a specific use.

Quality assurance: Set of planned and systematic actions implemented in the Quality system, which can be demonstrated if necessary, to provide sufficient confidence in an organisation's compliance with quality requirements.

Environmental aspect: Element of an organisation's activities, products or services that may interact with the environment.

Auditor: Person with competence to carry out an audit.

Internal audit: Systematic, independent and documented process for obtaining audit evidence and assessing it objectively in order to determine the degree of compliance with the audit criteria.

Quality: Set of an organisation's characteristics that enable it to meet both implicit and established requirements.

Check or review of a document: Examination of a document or logical set of documents to ensure that there are no overlaps, voids or contradictions, conceptual or formal errors and that they comply with the instructions received for their preparation and are coherent with the initial data.

Client: Organisation or environment that receives or is affected by TYPESA Group's products or processes. In accordance with the broad sense the UNE-EN-ISO 9001:2008 standard gives to the term *client*, it is considered that this term includes the environment and the buyers and users of the products and services made and provided by TYPESA Group.

Quality Committee: Executive and control body comprising the Chairman, the CEO, the corporate, global and regional directors, regional and area managers and QHSE System coordinators.

R&D Management Committee: Executive and control body chaired by the Corporate Technical Director, the corporate and global directors, the regional directors and the R&D management coordinators.

Environmental behaviour: measurable results of the environmental QHSE System related to the control of an organisation's environmental aspects based on its environment policy, objectives, policies and goals.

Innovative behaviour: Measurable QHSE System R&D results related to an organisation's control of its environmental issues based on its technology policy, objectives, policies and goals.

Verification: Confirmation through the examination and provision of objective evidence of the fact that the specified requirements have been met.

Concession: Authorisation for the use of a non-compliant product or document or for continuing with the next stage of a non-compliant process.

Quality control: Operative techniques and tasks used to comply with quality requirements.

Quality Coordinator: Person in charge of quality management in his or her assigned work centres. (to be reviewed).

Environmental Coordinator: Person in charge of environmental management at the assigned workplaces. Their job is to identify environmental aspects, monitor consumption, identify environmental legislation and assess the degree of compliance with the requirements; document how waste is managed and those who manage it (as suppliers); define specific objectives and periodically assess their compliance; spark staff interest in environmental issues, in particular those related to saving energy and water and reducing waste. Perform internal audits and the preparation of reports for the monitoring and review of the System.

Initial data for a work or for the design and development: Corresponding external conditions which must be known for the corresponding implementation, such as requirements issued by other stakeholders, legislation, by-laws and applicable standards, requirements laid down by the client, physical, environmental and socio-economic specifications of the environment and, where applicable, an environmental impact study.

Fault: Failure to meet a reasonable expectation or requirement associated with anticipated use, including those related to safety.

Development of own technology: Using personal knowledge and experience to produce new materials, devices, products, processes, systems or services, or to improve these substantially. This includes creating prototypes and pilot plants.

Technological development: Using the results of an investigation or any other kind of scientific knowledge to manufacture new materials or products for designing new processes or production systems or providing services, as well as substantially improving current technological materials, products, processes or systems. This includes turning the results of the research into a plan, diagram or design, as well as creating non-marketable prototypes and pilot designs, provided that they do not become industrial products, that they are used as such or that they are commercially exploited.

Environmental performance: Measurable results of the manner in which a company manages its environmental aspects.

OHS performance: Measurable results of the manner in which a company manages its OHS risks. NOTE 1: Measuring OHS performance involves measuring the effectiveness of the organisation's inspections. NOTE 2: OHS management system results can be measured against the OHS policy, the organisation's OHS objectives and other OHS performance requirements.

Engineering or industrial design: Consecutive design stages including the design and elaboration of plans, drawings and mediums aimed at defining the descriptive elements, technical specifications and operating characteristics necessary to manufacture, test, install and use a product.

Document: Minimum self-sufficient information for a specific objective, contained on any medium, generated by an individual and related to one single entity or logical group of several entities. The medium can be paper, magnetic disk, optical disc or electronic format, photograph or standard samples or a combination thereof.

Efficiency: Ratio between the result obtained and the resources used.

For R&D projects, there is a common interest in the output of the project organisation and the environment in which it operates. In this case, the interested parties can be: (a) the client who receives the product of the project; (b) the consumer who uses the product of the project; (c) the owner who originated the project; (d) the partner, for example, in a consortium (each entity that participates in a joint project); (e) the financing entity, as a funding institution; (f) the subcontractor, as the organisation that provides products to the project organisation; (g) society — for example, the jurisdictional or regulatory entities and the general public; and (h) the internal staff at TYPESA Group, as members of the project organisation.

Personal Protective Equipment (EPI): Any equipment designed to be worn or carried by workers to protect them against any number of risks that could threaten their health or safety at work, as well as any accessory designed for such purpose.

Risk assessment: The process of assessing the risk or risks that arise from one or several hazards, taking into account the adequacy of existing controls, and deciding if the risk or risks are acceptable or not.

Assessment of occupational health and safety risks: Process aimed at estimating the magnitude of unavoidable risks, obtaining the necessary information so that the employer is in a position to make an appropriate decision on the need to take preventive measures and, in such case, on the type of measures to be taken.

Evidence: information whose truthfulness can be demonstrated objectively since it is based on facts obtained via observation, measurement, testing or other means.

Quality, Environmental, OHS and R&D management: Set of general management tasks which determine the policy, objectives and responsibilities on quality, environmental, OHS and R&D issues and which are implemented by means such as planning, control, assurance and continuous improvement of all these aspects within the framework of the General Management System. Quality management includes quality control and assurance.

Hazard identification: Process whereby a hazard is recognised and its characteristics are defined.

Environmental impact: Any environmental change, whether adverse or beneficial, affecting all or part of an organisation's activities, products or services.

Innovation: Activity resulting in the creation of new products or processes or the substantial improvement of existing ones.

Technological innovation: Incorporating the basic technologies that are available in the market into the development of a new product or process.

Innovation in technology: Generating and implementing new technologies in the market which, once consolidated, will begin to be used by other innovative processes associated with products and processes.

Fundamental or basic research: Expanding general technical and scientific knowledge not directly linked with industrial or commercial products or processes.

Industrial or applied research: Research aimed at acquiring new knowledge with a view to using it to develop new products or processes or to incite significant improvement of existing products or processes.

Innovation in the management : related improvements in the way of organizing the resources needed to achieve innovative products or processes.

Inspection: measuring, examining, testing or contrasting one or several *entity* characteristics using a standard and comparing the results obtained with the specified requirements in order to determine the conformity of each specification.

Interface: Information shared by two or more organisations. It includes the document that enables the relations between the said organisations.

Research: Original and planned investigation aimed at uncovering new knowledge and reaching greater understanding in the field of science and technology.

Innovation activities comprise: the incorporation of tangible and intangible technologies, industrial design, equipment and industrial engineering, launching the manufacture and marketing new products and processes.

Place of work: Any physical place where work-related activities take place under the control of the organisation. NOTE 1: When considering the workplace, the organisation should take into account the effect on OHS for staff who are, for example, travelling or in transit (driving, flying or travelling by boat or train, for example), working in the client's premises or working from home.

The environment: Environment in which an organisation operates, including the air, water, land, natural resources, flora, fauna, human beings and the interactions among them.

Continuous improvement: Process whereby the Integrated Environmental and OHS Management system is optimised to improve its overall performance, in accordance with the organisation's environmental and OHS policy.

Continuous improvement: Recurring process of establishing objectives and identifying opportunities to increase the capacity for continuously meeting quality, environmental and OHS requirements through the reports and conclusions drawn from audits, data analysis, Management reviews and other means and which generally gives rise to corrective or preventive actions.

Environmental target: Detailed action requirement, to be quantified wherever possible, to be applied to an organisation or to a part thereof, arising from the environmental objectives, and which must be established and complied with in order to reach said objectives.

Quality, environment, OHS and R&D goal: detailed action requirement arising from the quality, environmental, OHS or R&D objectives. The action must be quantified wherever possible, and is applicable to an organisation or a part thereof. This requirement must be established and complied with in order to meet the OHS and R&D objectives.

Nonconformity: Failure to meet a specified requirement.

New products or processes: Products or processes whose features or uses differ substantially from current ones from the technological point of view.

Environmental objective: General environmental goal which is consistent with an organisation's environmental policy.

Organisation: Any company, corporation, firm, enterprise, authority or institution or part or combination thereof, whether or not a partnership, either public or private, with its own functions and administrative system.

Interested party: Any person or group inside or outside the workplace that has an interest or is affected by the quality, the environmental performance or the OHS performance of an entity or by the R&D actions of an organisation.

Hazard: Source, situation or act with the potential for causing harm in terms of damaging people or their health or both.

Quality, Environment and R&D Management plan: Document that sets out the processes, procedures, human and material resources and the sequence of specific activities aimed at establishing, achieving and measuring quality, environmental and R&D objectives and requirements, stating who shall apply them to a specific product, project or contract, as well as when and where.

Occupational Health and Safety plan: The tool that incorporates TYPESA Group's preventive activity into its General Management System and sets its Occupational Health and Safety policy.

Preventive action planning: Establishing, designing and programming the activities and measures — including the necessary human, material and financial resources — that must be adopted in order to eliminate or control and reduce any risks deemed unavoidable following risk assessment.

Quality, Environment, OHS and R&D policy: An organisation's general guidelines and intentions regarding the quality of its products and its environmental and R&D performance as formally stated by senior management, providing a framework for the organisation's action and for establishing its objectives and goals.

Procedure: Specified method, documented or otherwise, for carrying out a certain activity or process.

Prevention: A set of activities or measures taken or planned for every stage of the company's activity in order to avoid or reduce work-related risks.

Special process: Process of producing a product or providing a service such that the quality of the product depends basically on the worker's training and the equipment used, and in which no inspection or control performed during the manufacture of the product or provision of the service or upon its completion can guarantee faultlessness once the product has been used or the service has been provided. The special processes shall be subject to supervision and shall be carried out (a) by qualified personnel, (b) in accordance with approved procedures and (c) using approved materials and equipment.

Process: Set of activities that interact with each other or are mutually related with each other and transform input into results.

Product: Result of a process.

Supplier: Organisation or individual that provides a product to TYPESA Group.

Record: Document containing the results obtained or providing evidence of the activities carried out.

Design and development review: Complete, documented and systematic examination of the evidence generated during the various design and development stages, carried out at least at the end of the process to assess and confirm (a) compliance with requirements regarding cost, term, quality and the environment; (b) the effectiveness of the production process and the actions aimed at minimising the environmental impact; and (c) the client's satisfaction with the completed work and the treatment given to identify and solve problems, where applicable, and propose corrective or preventive actions.

Review: Activity carried out to guarantee the convenience, adaptation and effectiveness of the matter under review to reach the objectives that have been established.

Risk: The likelihood of a dangerous event or exposure combined with the severity of the damage or deterioration to health it can cause.

Occupational risk: Possibility of a worker suffering damage caused by work. To determine the seriousness of a risk, both the probability of the damage taking place and the severity of the same shall be taken into account.

Occupational Health and Safety: Conditions and factors that affect or might affect the health and safety of employees or other workers (including temporary workers and hired staff), visitors or any other person in the workplace. N.B. Organisations may be subject to legal requirements on the health and safety of people beyond their immediate workplace or of those exposed to the activities performed in the workplace.

OHS Management System: The part of an organisation's management system dedicated to developing and implementing its OHS policy and managing its OHS risks.

QHSE Quality, Environmental, OHS and R&D System: quality, environmental, OHS and R&D policy and objectives, the methods used to achieve them and the human and material resources required to carry them out, considered as a whole. This includes quality control and assurance activities.

QHSE R&D system: part of the general management System that includes the organisational structure, the planning of activities, the responsibilities, practices, procedures, processes and resources needed to develop, implement, carry out, review and update an organisation's R&D policy.

Intangible technology: Purchased technology in the form of patents, non-patented inventions, licenses, know-how reports, trademarks, designs, utility models, R&D services and other services with a technological content.

Material technology: Purchased machinery and equipment with a technological component which is related to the product or process innovations introduced by the organisation.

Desk work: Tasks including (a) information processing: work aimed at compiling and sorting information; and (b) studies: work leading to conclusions or recommendations — this may include sketches, diagrams and estimates; (c) designs: work which defines and determines the quality, specifications and budget of the works or products that are to be built, installed or assembled.

Technology transfer: The process of transmitting scientific and technological, information, knowledge and the means and the rights to use it to a third party for manufacturing a product, developing a process or providing a service, thus contributing to developing their capacities.

Traceability: Ability to trace the history, use or location of an entity using recorded information.

R&D Management Unit (UG): Staff designated by senior management who have the necessary means and who work part-time or full-time on: (a) managing the R&D projects portfolio; b) managing technology transfer; c) managing the protection and use of the results; and d) measuring, analysing and improving the results. TYPESA Group's unit is called the R&D Project Team.

R&D Unit or R&D Technical Unit (TU): Staff designated by senior management who have the necessary means and who work part-time or full-time on: (a) ensuring that all scientific and technological knowledge which is useful to the organisation is obtained; (b) developing new technologies or improving current ones; and (c) implementing new technological developments on products and processes.

Validation: Confirmation through the examination and provision of objective evidence that the specific requirements of a particular planned use have been met.

Design and development validation: Confirmation through the provision of evidence that the executed design complies with the requirements laid down for its use or application.

Verification: Obtaining and analysing evidence to confirm that the specified requirements have been met.

Design and development verification: A confirmation that the result of a project stage meets its initial data requirements obtained by obtaining and examining objective evidence.

Technological surveillance: Organised , selective and systematic process of capturing information on science and technology from within and without the organisation and then selecting, analysing, disseminating and communicating it to turn it into knowledge with the aim of taking lower risk decisions and anticipating changes.

9.7. QUALITY, ENVIRONMENT, OHS AND R&D MANAGEMENT CERTIFICATES

See the list of certificates at <http://www.typsa.net/calidad/oferta/CertificadosCalidad.htm>