Universidade do Minho
Escola de Engenharia

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Design and implementation of a corporate management system in Toyota Caetano Portugal S.A.

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Dissertação de Mestrado
Mestrado Integrado em Engenharia e Gestão Industrial

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STATEMENT OF INTEGRITY

I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism or any form of undue use of information or falsification of results along the process leading to its elaboration.

I further declare that I have fully acknowledged the Code of Ethical Conduct of the University of Minho.

Design e implementação de um sistema de gestão corporativo na Toyota Caetano Portugal S.A.

RESUMO

O presente projeto de dissertação está inserido no Mestrado Integrado em Engenharia e Gestão Industrial da Universidade do Minho, tendo este como título "Design e implementação de um sistema de gestão corporativo na Toyota Caetano Portugal S.A.". Trata-se da integração dos sistemas de gestão de três dos setores desta empresa, o National Marketing Sales Company e as Divisões de Equipamentos Industriais do Norte e Sul.

A metodologia utilizada neste projeto de dissertação foi a Investigação-Ação, sendo que numa primeira fase foi realizado o diagnóstico da situação atual, isto é, recolheu-se os dados relevantes da organização, através da leitura e análise de documentos relacionados com os sistemas de gestão integrados de cada um dos setores. Esta fase inclui a análise dos processos que estavam já definidos, bem como os procedimentos de gestão e as instruções de trabalho existentes previamente.

De seguida, foi feito um planeamento das ações necessárias para integrar os processos e toda a documentação existentes, assim como outros métodos utilizados na gestão dos sistemas, cumprindo todos os requisitos das normas ISO 9001, 14001, 45001, e 50001.

Passando-se, depois, para a implementação destas mesmas ações, desde a definição de cada um dos processos num diagrama SIPOC, a construção de uma metodologia única para seleção e avaliação de fornecedores, identificação e avaliação dos aspetos ambientais, gestão de documentos e dados, identificação de riscos e oportunidades, entre outros.

Com a implementação destas ações é possível percecionar uma melhoria significativa na cultura organizacional, uma vez que levou a uma colaboração intensa entre os três setores, e criou uma normalização dos métodos utilizados pela empresa. Isto leva a que haja uma diminuição significativa na documentação, mas também a que se torne mais fácil a mobilidade interna dos colaboradores, já que estão familiarizados com as metodologias utilizadas. Espera-se, a nível monetário, uma poupança anual significativa, tendo em conta a redução de custos da certificação externa e do tempo despendido pelos colaboradores na realização e acompanhamento de auditorias.

PALAVRAS-CHAVE

Sistema de Gestão Corporativo; ISO 9001; ISO 14001; ISO 45001; ISO 50001

Design and implementation of a corporate management system in Toyota Caetano Portugal S.A.

ABSTRACT

This dissertation project is part of the Integrated Master in Industrial Engineering and Management of University of Minho, being named "Design and implementation of a corporate management system in Toyota Caetano Portugal S.A.". It concerns the integration of the management systems of three sectors of this company, the National Marketing Sales Company and the North and South Industrial Equipment Divisions.

The methodology used on this dissertation project was Action-Research, and in a first phase the diagnosis of the current situation was conducted, namely, the collection of relevant data from the organisation, through the analysis and comprehension of the documentation regarding the integrated management systems of each of the sectors. This included the examination of the existing processes, as well as the current management procedures and work instructions of each system.

This was followed by a planning of the actions required to integrate the different processes and all existing documents, as well as other methods used in the management of the systems, while complying with all the requirement from the ISO 9001, 14001, 45001, and 50001 standards.

These actions were then implemented, from the definition of each of the processes in a SIPOC diagram, to the construction of a single methodology for supplier selection and evaluation, identification and evaluation of environmental aspects, document and data management, identification of risks and opportunities, among others.

With the implementation of these actions it is possible to perceive a significant improvement in the organisational culture, since it led to an intense collaboration between the three sectors, and created a standardisation of the methods used by the company. This leads to a significant decrease in documentation, but also makes internal mobility easier for employees, as they are familiar with the methodologies used. In monetary terms, a significant annual saving is expected, taking into account the reduction in costs of external certification and the time spent by employees in performing and monitoring audits.

KEYWORDS

Corporate Management System; ISO 9001; ISO 14001; ISO 45001; ISO 50001

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LIST OF ABBREVIATIONS AND ACRONYMS

CMS	Corporate Management System
DAF	Administrative and Financial Department
DEIN	Division of Industrial Equipment North
DEIS	Division of Industrial Equipment South
DPC	Corporate Department of People, Brand and Communication
EA	Environmental Aspects
EMS	Environmental Management System
EnMS	Energy Management System
GSC	Grupo Salvador Caetano
IMS	Integrated Management System
IP	Interested Party
ISO	International Organisation for Standardization
KPI	Key Performance Indicator
MS	Management System
MSS	Management System Standard
NMSC	National Marketing Sales Company
OHS	Occupational Health and Safety
OHSMS	Occupational Health and Safety Management System
PDCA	Plan-Do-Check-Act cycle
QES	Quality, Environment and Safety
QESE	Quality, Environment, Safety and Energy
QMS	Quality Management System
SIPOC	Suppliers, Inputs, Process, Outputs and Customers
SWOT	Strengths, Weaknesses, Opportunities and Threats
TCAP	Toyota Caetano Portugal
TME	Toyota Motor Europe
TMHE	Toyota Material Handling Europe

1. INTRODUCTION

For an organization to remain competitive in today's world, it is not enough to focus on the raw performance of the business in question, such as its profits, liquidity, financial solvency, indebtedness, among others. 21st century companies must tackle other aspects if they want to achieve good economic and financial results in a sustainable way over time. It is necessary to focus on other outcomes like the satisfaction of all stakeholders, which includes customers, employees, shareholders, and suppliers, the process performance, and internal business outcomes. Therefore, to achieve "good business results", it is important to look past the common economic performance indicators and give attention to the factors that influence or induce such outcomes, and that will drive the organisation to long-term success. With this in mind, and in order to ensure that the organisation's products and services meet all the applicable legal and regulatory requirements, the company needs to manage its activities and resources, define responsibilities, establish methodologies and programs, etc (Antonini, 2016).

Therefore, it is crucial for organisations to be run through efficient management. As a response to this imminent need, the implementation and certification of different management systems (MS) becomes essential and even a central pillar of continuous improvement in companies that aim for excellence (O. J. De Oliveira, 2013; Kraus & Grosskopf, 2008; Lança & Brito, 2018).

However, if the only motivators for implementing MSs are external, such as the demand from customers and the government, it is likely that the organisation will not acquire the capabilities to obtain competitive advantages in the marketplace. Therefore, it is important that the company is aligned with the mindset of each MS that it decides to adopt and has a strategic vision, since that it is the only way to achieve operational and organisational improvements, that can enable financial enhancement (Veiga & Sampaio, 2019).

Throughout the years, the implementation and certification of diverse management systems, such as quality (QMS), environmental (EMS), occupational health and safety (OHSMS), and energy (EnMS) has become increasingly common in most high-performance companies. This has required a constant evolution in this field, especially through the introduction of the integrated management system (IMS) concept. Previous research has focused initially on how a company can implement any of the management system standards (MSS) individually, but in more recent years the focus has been on strategies for their integration. This is seen as a natural step for organisations, since they are constantly seeking for ways to improve, while optimizing their resources. In this light, companies might also be

interested in a multi-site certification, if the organisation comprises several divisions or locations with legal and contractual links to the headquarters. However, there are barely any reports of companies that have managed to transition from "individual" IMSs to a corporate multi-site one.

Therefore, this dissertation contributes to narrowing the gap between theory and practice in the field of corporate management systems (CMS) by providing examples of the steps, strategies, benefits and challenges that organizations can encounter when trying to transition from multiple IMSs to a multi-site implementation and certification.

1.1 Project objectives

This project aims to design and implement a CMS, to obtain multi-site certification of the existing IMSs of three sectors inside Toyota Caetano Portugal (TCAP), the National Marketing Sales Company (NMSC) from Toyota and Lexus and the Divisions of Industrial Equipment North and South (DEIN and DEIS). This dissertation had the following main objectives:

- Sharing of good practices among the different sites regarding IMSs and defining the best methodology to be implemented in the CMS;
- Reduction of external and internal costs, through the extension of the cycle of audits by certifying companies and the reduction of consultancy support per sector;
- Reinforcement of Built-in-Quality in the services area and improvement of the results perceived by customers and other stakeholders.

For this to be possible, it was necessary to achieve the following:

- Establish a unified policy and a corporate management manual;
- Define an integrated process map;
- Adapt the shared platform used by the divisions for compliance with all requirements (legal and normative);
- Develop a shared platform to manage all identified improvement opportunities;
- Integration with the Kaizen Lean MS.

The research question is: How to design and implement a corporate management system for three distinct divisions?

1.2 Research methodology

Based on the model of Saunders et al. (2016), this project is part of the philosophical current of interpretivism, which assumes that reality is a social construction that can change. It is also considered that meanings are subjective, as they depend on the details of the situation and the perspective of the different people facing it. In this case, the research is value-bounded and the researcher is an integral part of the project.

The approach used for the research is inductive, as it starts by collecting data to explore a phenomenon and from there generates or builds theory, in the form of a conceptual model.

For the collection and analysis of data in scientific research, the qualitative multi-method is used, since the reading and analysis of existing documents in the organisation will be carried out, as well as notes from meetings including people with various responsibilities in the company.

As the present dissertation is oriented towards the development of solutions for the real problems of an organisation, through a participatory and collaborative approach, the application of the Action-Research methodology is best suited for this project (Coghlan, 2011). In this approach, those who are most likely to be affected or involved in the implementation of these changes should, as far as possible, collaborate in the research process, i.e., in addition to the researcher, the current IMS managers play a key role in this project by allowing their working practices to be studied (Easterby-Smith et al., 2015). This change in organisational patterns of thought and action, however, can lead to potential resistance from stakeholders to new suggestions for action (Argyris et al., 1985).

Nevertheless, this type of methodology is intended to contribute both to academic theory, so that new principles can be extrapolated and applied in other contexts, and to practical action, supporting the improvement of TCAP processes (Eden & Huxham, 1996). Winter (1989) also considers that the results of this type of research are readable, relevant, and interesting to practitioners and academics alike.

Finally, this will be a longitudinal study since the change and development of the organisation over a period of time will be studied.

According to the above-mentioned methodology, this study was carried in six different phases:

Phase 1: Bibliographic review: General approach on IMSs and CMSs, as well as implementation of multi-site certification in organisations. Defining the procedures that needed to be included in the CMS.

Phase 2: Diagnosis: In order to formulate a diagnosis, it was necessary to collect data from the organisation, by reading and analysing documents related to the current IMS of each division, as well as notes from meetings with those responsible for managing these or other relevant stakeholders.

Phase 3: Action planning: According to the lessons learnt, the action planning was started, in which the necessary changes were proposed to harmonise and integrate the different IMS into a single CMS.

Phase 4: Implementation of measures (Action): The planned measures were implemented, intending to act on the different processes of the new IMS with the objective of establishing the best possible practices and creating synergies between the different entities.

Phase 5: Evaluation of the actions: After this action and organisational change, it was important to evaluate the results obtained in order to assess their relevance and to discuss them, helping in the process of continuous improvement. In this case, to a certain extent, this evaluation will be made later by the external certifier, who will report the opportunities for improvement of the new CMS.

Phase 6: Specification of learning: At the end of this process, a synthesis is drawn up, which includes the results obtained and the objectives that were not achieved, constituting a support for future research cycles (lessons learnt). It is a learning process, where the main knowledge associated to the investigation is identified.

1.3 Dissertation structure

This dissertation is divided into seven chapters. The purpose of this chapter is to establish the framework of the dissertation topic, the objectives to be achieved and the research methodology used. The second chapter presents a review of the literature relevant to the development of the dissertation.

Meanwhile, in the third chapter, a general presentation of the company where the dissertation was developed is made. Subsequently, in the fourth chapter, a brief description of the current integrated systems is given. Then, in the fifth chapter, the modifications implemented for the construction of a cohesive CMS are presented. In the sixth chapter, the improvements perceived are described. Finally, the seventh and last chapter presents a conclusion of the work, the limitations found and suggestions for future work.

2. Literature Review

2.1 Management systems standards

A MS is one of the main processes or procedures for completing tasks, attaining standards, achieving objectives, and establishing policies within a company or organisation. In other words, it is the way in which the enterprise manages the interrelated parts of its business. The MSSs have become a central part of continuous improvement and business excellence in many organisations around the world (Kraus & Grosskopf, 2008).

However, this would not have been possible without the work of the International Organisation for Standardization (ISO) that was founded in 1947 as a non-profit federation of national standards bodies. The name ISO, used by the organisation, is connected to its mission of making world trade easier by promoting global harmonization, since it is derived from the Greek word ISOS, which means uniform or homogeneous. Its portfolio consists of more than 20.000 different standards, and has been built through international consensus among recognized groups of experts appointed by their respective member organizations (APCER, 2015).

The ISO 9000 series of quality standards was released in 1987 and has become an essential part of worldwide businesses ever since. Within this family, it is only possible to be certified to the ISO 9001, which specifies the criteria for a QMS. Certifying a system is recognizing that it meets a certain normative standard, in this case, the quality standard. This certification is granted by a certifying agency accredited by a supervisory body, such as Instituto Português de Acreditação (IPAC) in Portugal (O. J. De Oliveira, 2013). The demand for this quality certification is reaching an increasing number of companies, large and small, from the public and private sectors, which is reflected in the amount of certificates being issued every year. Over one million sites in the world were certified to this standard, including 8.434 ones in Portugal (ISO, 2019).

ISO 9001 is not a performance standard that measures the quality of a firm's products or services, but rather sets guidelines for corporate processes' systematization based on seven quality management principles. The most important one is customer focus since it is crucial to meet the customers' current and future requirements and expectations to operate a quality business. Other principles include the motivation and implication of top management, evidence-based decision-making, and continuous improvement. Overall, following the ISO 9001 guidelines ensures that customers get consistent, quality

products and services, leading to increased profitability, and improved market share and export numbers (ISO, 2015b; Tarí et al., 2012).

Over the years, the standard has changed on numerous occasions. In 2000, the more pragmatic "process approach" was introduced, with a change in emphasis from "documented procedures" to "management by processes" and from "records" to "demonstrated results". The latest standard update from 2015, requires the adoption of risk-based thinking to support and improve the understanding and application of the process approach. More specifically, this mindset drives organisations to design and implement MSs, integrating them into the strategical processes of the organisations, using the 'Plan-Do-Check-Act' cycle (PDCA), which underpins all ISO management systems standards. Additionally, the current standard is considered to have a better applicability to services than before, which benefits NMSC, DEIN and DEIS that will more easily adopt its principles (Bravi et al., 2019; Campailla et al., 2018).

After the success of the ISO 9000 standards, the ISO 14000 family of standards on environmental issues was released.

Just as ISO 9001, the EMS standard is applicable to any organization, regardless of size, type and nature, and is the second most certified standard in the world with almost half a million sites (ISO, 2019). It concerns those environmental aspects (EA) of a company's activities, products, and services which, considering a life cycle perspective, the organisation determines can be either controlled or influenced. The current ISO 14001 standard, issued in 2015, provides requirements for managing the environmental aspects more effectively compared to the previous versions, by taking into account environmental protection, pollution prevention, legal compliance and socio-economic needs (APCER, 2016).

As the quality standard, ISO 14001 does not state specific environmental performance criteria, since it does not measure the firm's environmental results (ISO, 2015a).

According to Psomas et al., (2011), the implementation of a EMS entails many benefits, such as improved positioning on the market, a smoother transition from conventional to sustainable practices, as well as an enhanced waste processing culture.

Unlike the previously mentioned MSSs, ISO 45001 certification is not as prevalent across companies. In March 2018, ISO published this standard, allowing organizations that wanted to retain a recognized certification to migrate from the previous BS OHSAS 18001 by March 2021. OHSAS 18001 was a British standard for OHSMS and was first released in 1999. Although it is similar to OHSAS 18001, the

new standard adopts the same harmonized high-level structure (Annex SL), present in all ISO MSSs (Campailla et al., 2018).

OHSMS aims to prevent work-related injuries and health problems for employees, and others affected by the organisation's activities. A key aspect in achieving this is promoting and protecting the physical, psychological, and mental health of all stakeholders, by eliminating and minimizing occupational health and safety (OHS) risks through effective prevention and protection measures.

The main benefit of implementing and subsequently certifying a company according to this standard is the reduction of workplace incidents. This will lead to a reduction in absenteeism, staff turnover, cost of insurance premiums, and increased productivity. As with other standards, the OHSMS certification allows the organisation to meet all the legal and regulatory requirements related to this subject and enhance its reputation. Additionally, it creates a health and safety culture inside of the company since there is a reinforced leadership commitment to proactively improve OHS performance (ISO, 2018b).

According to the aforementioned survey, ISO 50001 is the standard with the least number of certified sites among the four MSS referenced (ISO, 2019). However, its importance should not be diminished since it helps companies to reduce their energy costs and greenhouse gas (GHG) emissions, while achieving other positive environmental impacts. Additionally, the EnMS standard can also be a driver in the usage of alternative and renewable energy sources.

It is important to state that, as it happens with other standards, the ISO 50001 does not set any energy performance obligations, but provides a set of requirements and supporting methodologies for organisations to define their objectives and continuously improve their energetical performance (ISO, 2018c).

All the MSSs that were discussed above have in cases been implemented merely on the basis of the benefits they provide. However, in others, companies chose to be certified, in order to prove to external parties, they have implemented such MS.

2.2 Integrated management systems

A common goal of MSSs is managing the risks that organizations face when supplying products or services to its customers and stakeholders. However, the MSs are often split into multiple parts or sub-systems since firms need to balance the expectations of different stakeholders. This translates into the usage of the different standards, which were previously mentioned, and the need for an IMS (ISO, 2018d).

An IMS can be seen as one united comprehensive MS that aims to deal with all requirements of the certified MSs and combines all business components that enable the achievement of its goals and mission. Through such synergy, the organisation avoids developing plans and programs that might be colliding or contradictory, in favour of such that are coherent and aligned with its business objectives and needs (Kraus & Grosskopf, 2008). However, for this to be possible, and to comply with the different standards governing the management systems in question, the enterprise needs to share the necessary tools and methodologies and systematically manage these different areas. Therefore, IMSs can be understood as a series of interconnected processes that share human resources, information, materials, infrastructure and financial resources (Muzaimi et al., 2017; Setyorini & Latief, 2019; Simon, 2012). By utilizing a synergetic IMS, organizations can both improve performance and reduce costs compared to multiple independent certification management systems (R. Oliveira et al., 2015). IMSs are a new strategy for some organisations, based on transparency, efficiency, and integrity (Paraschivescu, 2016).

As mentioned previously, all ISO standards share the same high-level structure, displayed in Table 1, which was developed to meet the organizational need for an easier integration process into an IMS. The clause numbers, clause titles, and text are identical, and the terms and core definitions are the same across the MSSs. What may be added to the ISO standards are sub-clauses and specific texts for each discipline or segment, depending exclusively on the standard and its scope. Through this structure, ISO provides a company that has two or more certified MSSs easier compatibility between the different disciplines/segments, while also reducing redundancies both in the IMS and during the certification and recertification audits.

Table 1 - High level structure of ISO MSS
(ISO, 2021)

1. Scope	6. Planning
2. Normative reference	7. Support
3. Terms and definitions	8. Operation
4. Context of the organization	9. Performance evaluation
5. Leadership	10. Improvement

Besides this high-level structure, there are other factors that can ease the integration of management systems. The four standards in question, ISO 9001, ISO 14001, ISO 45001 and ISO 50001 have a common underlying management principle, namely continuous improvement based on the PDCA cycle. Seen in Figure 1, the PDCA cycle is intended to enable companies to meet customer satisfaction

(Quality), and impact both society (Environment and Energy) and their own workers (OHS) (Nunhes et al., 2016; Zeng et al., 2010). Additionally, all of these MSSs share a process-based approach and a focus on achieving results (Simon, 2012).

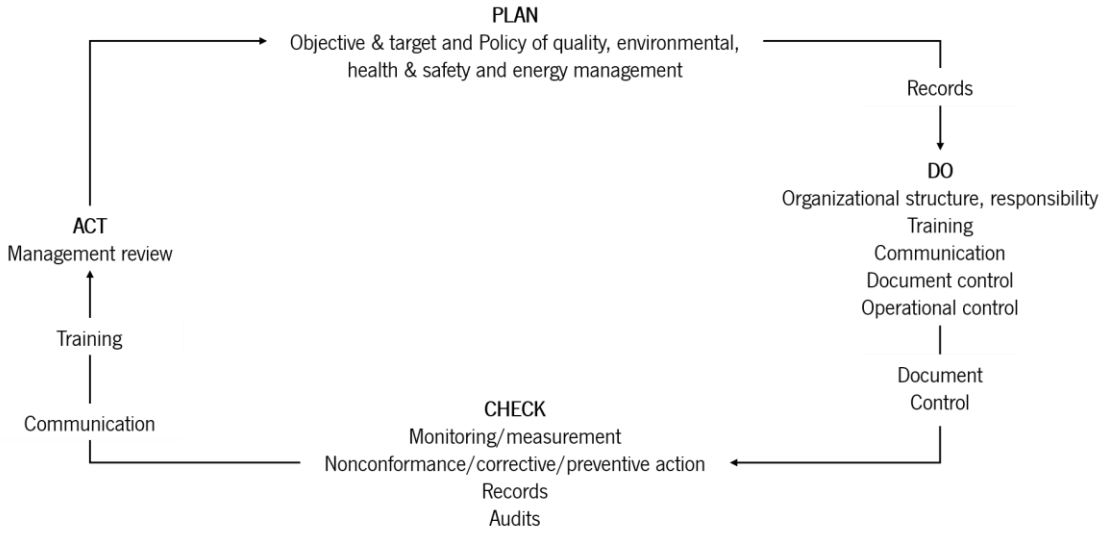

Figure 1 - PDCA cycle structure in MSSs
(Zeng et al., 2010)

However, while developing an IMS, it is important to note that there will be a series of requirements that can be integrated and shared among MSs, while others do not allow integration with any other MS. This is the exact concept of integration – it is not possible to integrate everything (Almeida et al., 2014).

According to Bernardo et al. (2015), the integration process can be defined by four main aspects: integration strategy, which consists in the "number and implementation sequence of MSs that the organization decides to integrate", integration methodology, which refers to the "models or tools used in the process", integration level, which is related to the degree achieved by the IMS, and audit systems' integration, which is about internal and external audits' integration level.

2.3 Benefits and obstacles in implementing an integrated management system

Having in mind that it is easier to achieve collaboration between employees through a single system than for two or more systems that are separately managed, companies already have an incentive to integrate their MSs. Additionally, integration allows companies to define a more strategic vision for the whole business, since it provides a more complete and in-depth view of the impact that quality, environment, safety and energy (QESE) programs have on business performance, and this is a natural

evolution in light of continuous improvement for the firm's MSs (O. J. De Oliveira, 2013; Kraus & Grosskopf, 2008; Santos et al., 2012).

Apart from that, taking into account that MSs are a global phenomenon, integration is justified by its various benefits, such as: the simplification of standards and requirements for MSs; the reduction of audit and registration costs; the use of a one-stop approach for audits; flexibility in the choice of MSs to be integrated; simple transition from existing MSs and standards, rather than a radically new approach; reduced costs in the areas of interpretation and implementation of standards; harmonisation of MS documentation; alignment of objectives, processes and resources in different functional areas, leading to improved internal management methods and interdisciplinary teamwork; easier understanding of an integrated policy; reduced bureaucracy; synergy effects; redundancies and duplicated efforts are eliminated; involvement and consolidation, by all employees, of a continual improvement culture, attitudes and values of QESE scope; and increased system effectiveness and efficiency (Beckmerhagen et al., 2003; Karapetrovic & Willborn, 1998; Ribeiro et al., 2017; Santos et al., 2012). Even more important than the mentioned advantages, the history and culture behind the implementation of IMSs prove that organisational commitment, aimed at improving performance, can result in higher employee and customer satisfaction, and promotes sustainable organisational development (Setyorini & Latief, 2019).

However, the integration of MSs may bring some concerns to organisations, such as: the existence of a culture/perception that existing MSs are sufficient and should remain separate; doubts about the added value of IMSs; expected loss of unique function identities, which causes hesitation and outright rejection of integration efforts by some quality, environment, safety, and energy professionals; inability to find common denominators for various business functions; external and internal audits may continue to be conducted separately, although systems and standards are integrated, resulting in high costs of multiple audits inadequacies of audit methodologies to catalyze improvement, assess system effectiveness, or systematically address differences in the scope and purpose of management system standards requirements; scepticism of middle management, partly due to inadequate information; lack of communication and involvement between supervisors and employees; in case of certification through a third-party audit to one or more standards, a nonconformance against a requirement of one of the may carry over to another standard, which can, in the worst-case scenario, put all registrations at risk; negative past experience with failed quality programs, management by objectives, or other management models; lack of pressure from customers or competitors to implement an IMS

(Beckmerhagen et al., 2003; Jonker & Karapetrovic, 2004; Karapetrovic, 2002; Kraus & Grosskopf, 2008).

2.4 Integration strategy

When an organisation needs to integrate different MSs, one of the main matters to tackle is the choice of strategy, including the number and sequence of MSs that the firm decides to integrate (Asif et al., 2009; Bernardo et al., 2009; Karapetrovic & Willborn, 1998; Leopoulos et al., 2010). There is not a standard IMS, since this covers a wide range of different combinations of MSs. However, the most common one consists of the integration of a QMS, an EMS, and an OHSMS. Nonetheless, companies should integrate MSs according to their own strategy. An organisation may choose to only integrate the QMS and the EMS, as it is the case of NMSC and DEIS, while another may choose to integrate the QMS, the EMS, the OHSMS, and the EnMS, like DEIN (Rasmussen & Jørgensen, 2007).

There are multiple strategies for the integration of standardized MSs, the most cited one in the literature is based on the integration of QMSs and EMSs. The strategy in question was suggested by Karapetrovic & Willborn (1998) and entails three possible logical sequences: establishing the QMS first and the EMS second, the other way around, or implementing both simultaneously.

Karapetrovic (2002) later proposed an extension of the previously mentioned strategy. The sequence adopted by the organisation is always dependent on the MSs that have already been established and those that are required to be implemented. Therefore, the five possibilities are: implementation of the QMS or the EMS first, followed by the others, these two MSs simultaneously and then the others, or the fundamental elements of the IMS first, any function-specific subsystems after.

However, the implementation sequence follows, in most situations, the standards publication sequence. Therefore, usually, organisations implement ISO 14001, ISO 45001, and ISO 50001 after a pre-existing and entrenched QMS (Almeida et al., 2014; Beechner & Koch, 1997; Douglas & Glen, 2000; Karapetrovic & Willborn, 1998).

2.5 Integration methodology

The methodology, or tools used in the integration process, is another key aspect in successfully implementing an IMS, and obviously depends on each firm's individual decision. The chosen method(s) used to integrate the MSs will depend on the size and nature of the firm, as well as on its culture and the resources it has available (Zutshi & Sohal, 2005).

Currently, there is not an internationally successful standard covering integration methodologies. Nevertheless, several guidelines as the British PAS 99, the Spanish UNE 66177, and the ISO handbook (IUMSS) have been developed to assist companies in the integration process (Bernardo et al., 2009; Kopia et al., 2016). The IUMSS, first published in 2008, combines expertise from an international level, implementation cases from a diverse variety of industries, and guidelines for best practice when integrating IMS standards.

Aligned with the underlying management principle of the four MSSs, a clear objective when developing an IMS is always the continuous improvement of the organisation's global performance. Therefore, the maturity level of the IMS should be constantly measured using a tool that best fits the organisation (key performance indicators (KPIs), balanced scorecard, the EFQM excellence model, the Shingo Model, etc.) (Kopia et al., 2016; Santos et al., 2012).

According to Santos et al. (2013), the ideal approach to start the integration is to identify all the common elements in the MSs to be implemented and guarantee that as many documented processes and procedures as possible are shared between them. Therefore, for each phase of the PDCA cycle, seen in Figure 1, and at each stage of the IMS development, all differences in standard requirements under equivalent clauses need to be carefully and methodically analysed. This will ensure the IMS compliance and provide evidence of its full conformity (M. Rebelo et al., 2014; M. F. Rebelo et al., 2014a, 2014b).

Such an identification process allows the Quality, Environment, OHS and Energy sub-management systems to be structured and aligned for later implementation of the IMS. Through this referential, the organizational structure of the company is orientated and aligned in the same direction, and the organisation has a starting point for subsequent activities of integration, simplification and optimization (Santos et al., 2012).

In summary, typically, the integration process follows the steps represented in Figure 2.

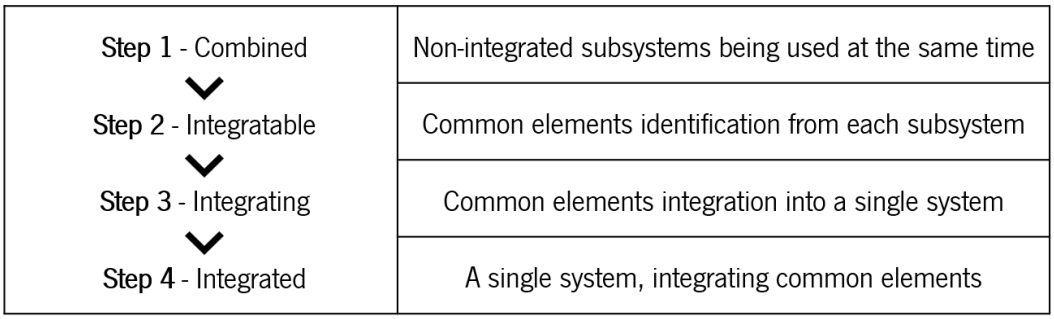

Figure 2 - Typical steps of the integration process
(Domingues et al., 2014)

Nowadays, the guidelines provided by the international bodies combined with the all the previously mentioned similarities between the MSSs in question, simplifies the integration process for companies, compared to what used to happen in the past.

2.6 Integration levels

The integration level/degree is another major aspect mentioned by several authors in the literature, and it is defined as the management elements unification degree of two or more MSs (Okrepilov, 2010). There is no consensus on the topic, although several scales for measuring the level of integration are recurring (Bernardo et al., 2009).

According to Karapetrovic (2003), there are three types of organisations: those that only have integrated documentation, those with integrated processes, objectives and capabilities, and lastly, those who have all the elements of an IMS in a single management system. The author adds that, on the one hand, full-scale integration comes at the cost of replacing the individual characteristics of each of the involved systems. To expand the system across functional boundaries and meet objectives related to quality, environmental factors, safety, energy and others, specific policies and processes with shared resources have been defined. On the other hand, partial integration, that appears to be more common, can take many forms, ranging from small-scale collaboration between different MSs to aligning their objectives, processes and resources.

Jørgensen et al. (2006) presented another perspective, while also introducing three levels of integration. Level 1 is 'corresponding', where the compatibility is increased through references between parallel systems. Level 2 is 'coordinated and coherent', where generic processes are focused on the task cycle's management. Level 3 is 'strategic and inherent', with a learning organizational culture, added involvement of internal/external challenge stakeholders, and continuous performance improvement.

Sampaio et al. (2012) proposed four evolution levels towards complete integration based on information collected and analysed from case studies. These levels are documentation integration, management tools integration, common policies and goals, and common organisational structure.

According to Bernardo et al., 2012, the simultaneous integration of MSs provides greater levels of their integration. A potential explanation for this is that since the MSs were implemented together, the companies found it easier to exploit synergies between the different MSs (Bernardo et al., 2009; Douglas & Glen, 2000; Karapetrovic & Jonker, 2003; Karapetrovic & Willborn, 1998; Wilkinson & Dale, 1999; Zutshi & Sohal, 2005).

2.7 Audit systems' integration

According to ISO (2018a), an 'audit' is defined as a "systematic, independent and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which audit criteria are fulfilled".

The main outcome of the audit is a report that should include all the findings and conclusions regarding the effectiveness of the MSs with the requirements of the standards. The remarks can be both positive and negative. Furthermore, the non-positive aspects for each MSS and for the IMS as a whole may be classified as non-conformities and/or opportunities for improvement (Djekic & Smigic, 2013; Simon et al., 2011). Therefore, the audit system is a key aspect of any MS, integrated or not, since it ensures that the processes and requirements are correctly implemented (Beckmerhagen et al., 2003).

Kraus & Grosskopf (2008) proposed four different types of audits that could act with an IMS: fully integrated, simultaneous, overlapping, and sequential, as shown in Figure 3.

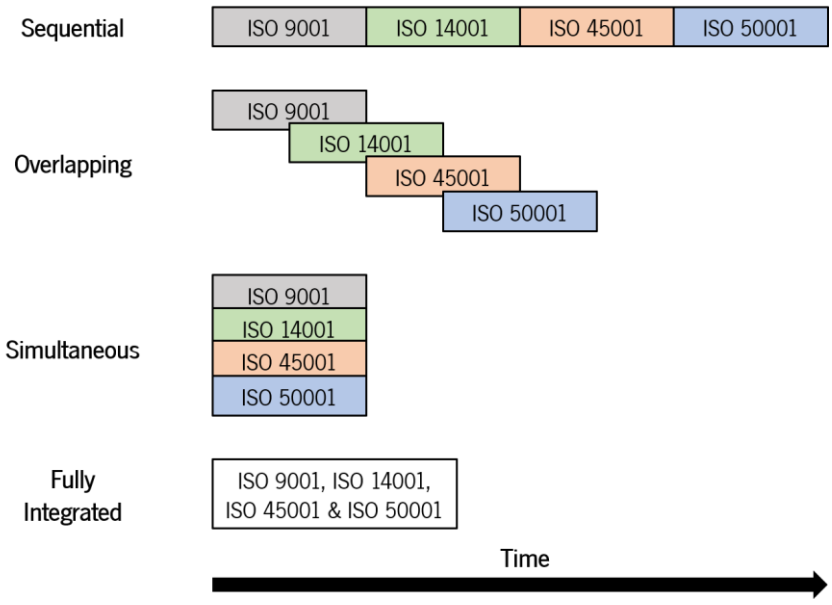

Figure 3 - Audit types for an IMS
Adapted from (Kraus & Grosskopf, 2008)

However, as mentioned before, in presence of an IMS, it is beneficial to have an integrated audit since it allows cost, resources, and time optimization, involves less internal and external audits, and reduces the external certification cost (Domingues et al., 2015). Additionally, auditing different management systems for the same process has proven to be problematic (Mourougan, 2015).

Other benefits of the audit integration is the increasement of the internal and external auditors' competences with different MSs, and requires only one evaluation, which reduces the amount of work during all the audit steps, from planning to implementation, and even follow-up stages (Dewi et al., 2020).

2.8 Multi-site certification

Regardless of whether a company pursues integration, both single-site and multi-site certification are possible options. Multi-site certification involves several entities from within the organization, but the process, including internal audits, assessment of conformity, continuous improvement metrics, corrective action systems, and management review, must be managed from a one central office or entity.

While there might be some risks associated with the multi-site transition, these are minimal for organisations that already have mature MSs and robust internal audit processes. Additionally, the benefits can be tremendous, from cost saving to significant efficiencies in managing the certifications.

Most importantly, by having a multi-site certification, the company is creating an environment conducive to the sharing of good practices and lessons learned among professionals from the various sites.

However, to achieve successful certification, it is crucial to have frequent and clear communication among all the local facilities stakeholders. This will ensure that everything is under control and the deadlines will be met, since the non-compliance of any of the sites could put in danger the whole certification (Brooke-Lander & Kuykendall, 2016). Therefore, it is important that the central office guarantees that all the sites are following the exact same procedures and methodologies, while using the same tools, in order to have coherence throughout the certified entities.

3. GRUPO SALVADOR CAETANO

In 1946, a determined young man with a great entrepreneurial spirit, called Salvador Fernandes Caetano, founded a bus body factory called "Martins, Caetano & Irmão, Lda.", which turned out to be the embryo of Grupo Salvador Caetano (GSC). The organisation has been growing throughout the years on a national and international level, currently acting in multiple sectors.

This chapter focuses on the characterisation of the organisation, GSC, specifically TCAP, where the dissertation project was developed.

3.1 Toyota in Grupo Salvador Caetano

Not long after being established, the small firm, "Martins, Caetano & Irmão", saw two of its founders leaving, Alfredo Caetano and Joaquim Martins. Salvador had to continue the work that was being done and, after a few years, the company started to close some relevant national and international buses' deals. However, it was not until 1968 that one of the biggest and most important achievements took place, signing the contract for the exclusive import and distribution of Toyota vehicles in mainland Portugal and its islands, which nowadays is the responsibility of NMSC.

Later, in 1970, the activity related to industrial vehicles started, with the mission of commercializing and providing assistance to the counterbalanced forklifts of Toyota, at a national level. This initially only took place in Vila Nova de Gaia (DEIN), but in 1991 this business expanded, and the company created an autonomous directory of industrial equipment for the southern region in Carregado (DEIS).

Shortly after the beginning of Toyota's commercialisation in Portugal, and with the purpose of meeting the market's growth, in 1971, the first plant of the brand in Europe was built in Ovar. The models manufactured in the Ovar Plant have changed a lot throughout the years, adding up to a total of more than 309 000 units produced. Firstly, the factory's activity started with the production of three models, Corolla, Corona and Dyna. Later, in 1979 and 1981, the plant initiated the manufacture of the historic Hiace van and the Hilux pick-up truck, respectively. Only in 2015 the Ovar Plant stopped producing the Dyna truck for commercial use, since the vehicle did not meet the Euro 6 emissions standards and would not be commercialized within the European Union. In the same year, a petrol version of the Land Cruiser (LC70) started to be assembled, exclusively for export to the South African market. In addition to this production line, which is still active, in the Ovar Plant, components are incorporated into Toyota commercial vehicles.

3.2 Grupo Salvador Caetano on a national and international level

The deal made with Toyota was only the start of the expansion of GSC across not only Portugal, but also around the globe. GSC employs over 7.000 people across its several companies and the whole group works tirelessly to create value for its businesses, always looking to the future and reaffirming the commitment to maintain the solid relationships built over the years with its employees, partners, and clients.

The vision of GSC is “We help people moving”, which translates its intentions and aspirations for the future, which is aligned with the organization’s strategic focus on international expansion and investment in services within mobility and digital areas.

The mission statement that aims to spread the spirit of GSC and congregate the efforts for the pursuit of the general objectives of the organisation is "We pledge to be demanding with innovation, continuous improvement and sustainability in our actions, caring for relationships of trust, which sustain fair value proposals for the Client (internal and external), because we are committed to People".

The “Ser Caetano” Values (“Being Caetano” Values) are the result of GSC’s past and continuous evolution, that also reflect the organization’s purpose, a group of committed people that aims to re-write the group’s history and project its future. GSC shares five important values: ambition, responsibility, cooperation, trust, and commitment. For the organization it is key to be demanding and ambitious, to be socially responsible, to be cooperative and work as a team, to be approachable and trustworthy, and to be committed to the client.

Currently, GSC’s activities can be divided into three different holdings: Salvador Caetano Indústria, Salvador Caetano Auto, and Salvador Caetano Capital, as shown in Table 2.

Table 2 - Grupo Salvador Caetano's activities

Salvador Caetano Indústria	Salvador Caetano Auto	Salvador Caetano Capital
Industry (buses)	**Automotive distribution and retail in:** Portugal Spain Africa Latin America	**Communication and advertising services**
Aeronautic components	**Mobility services** Rent-a-car Taxi-hailing | Transfers | Children transportation Fleet Management	**Other financial investments**
	Toyota Caetano Portugal – Ovar Plant	
	Industrial equipment	

3.2.1 Salvador Caetano Indústria

Inside the industry sector (Salvador Caetano Indústria), there are two different companies, CaetanoBus and Caetano Aeronautics.

CaetanoBus' business dates to the founding of "Martins, Caetano & Irmão", when wood was still used as the basic raw material in buses' bodywork construction. Over several decades, innovation has always been in its DNA, having won several awards in the area, and currently, CaetanoBus is the most important manufacturer of buses and coaches in Portugal. The company produces for multiple segments and its products are mostly intended for exportation, such as, minibuses, city buses, airport buses, coaches, electric buses, special vehicles, and chassis.

On the other hand, Caetano Aeronautics is a more recent enterprise, dating back to August 2012, and it is the result of a 50:50 joint venture between GSC and Aciturri, one of the main aeronautical Tier 1 suppliers in Europe. This company is specialised in the manufacturing of metallic and composite components and in the assembly of small and medium size aerostructures, being its main clients, Airbus Defence & Space, Ogma and Aciturri.

3.2.2 Salvador Caetano Auto

Salvador Caetano Auto aggregates the core of GSC's business and some of its main companies.

Caetano Retail is the umbrella organization that gathers the group's companies which develop the activity of distribution and automobile repair of several brands in Portugal. It currently covers seven different business areas, from new and used cars, to assistance, collision, repair and glass replacement, but also parts and financing. Caetano Retail represents one brand in the used car business, CarPlus, and seventeen car brands, Audi, BMW, Chevrolet, Dacia, Hyundai, Lexus, Mercedes-Benz, MINI, Peugeot, Opel, Nissan, Renault, Seat, Skoda, Smart, Toyota, and Volkswagen.

Similarly, in Spain, Caetano Retail España is a group of official dealers of fourteen car brands and CarPlus, developing its activity through fifty-five facilities distributed across five cities, Barcelona, Cádiz, Pontevedra, Lugo, Madrid, and Malaga.

In the early 90s, GSC expanded to the African market, more specifically to Cape Verde, firstly with only Toyota vehicles, and later with multiple other brands. This was the first step towards GSC's expansion in this continent's market. Nowadays, Salvador Caetano Africa is responsible for automobile distribution and retail but, also, after-sales and parts distribution in thirty-two African countries, including Guinea Bissau, Angola, Mozambique, and Sao Tome and Principe.

Caetano Go is the brand that aggregates all the mobility services provided by GSC. This includes Guerin, the second biggest rent-a-car company operating in Portugal, which has a successful partnership with Enterprise, the main international player in this sector. Finlog, which was created almost thirty years ago, dedicates its business to the management of vehicle fleets and operational leasing of vehicles. With a total fleet of over fifteen thousand vehicles, Finlog is the fleet manager that grows the most in terms of park, and has been strengthening its position of sustained growth market share since 2015. Caetano Go also includes Choice Car which operates in the field of mobility of people in different business areas, under two different brands, Bedriven and Rodinhas. Bedriven is directed to customers with specific needs, such as business trips, travels, elderly transport, valet services, among others, while Rodinhas is a personalized door-to-door transportation services for children.

Toyota Caetano Portugal, S.A. (called Salvador Caetano IMVT – SA until the end of 2006) is part of Salvador Caetano Auto and one of the biggest companies within GSC. NMSC, DEIN and DEIS are all part of TCAP which is composed by three other departments/sectors, the Administrative and Financial Department (DAF), the Corporate Department of People, Brand and Communication (DPC), and the Ovar Plant.

The underlying project for this dissertation was developed in DPC, and more specifically in the Kaizen, Quality, Environment, Safety, Health and Wellness (KQAS) team, Figure 4, which operates at a corporate level for various companies of GSC, similarly to other teams inside this sector.

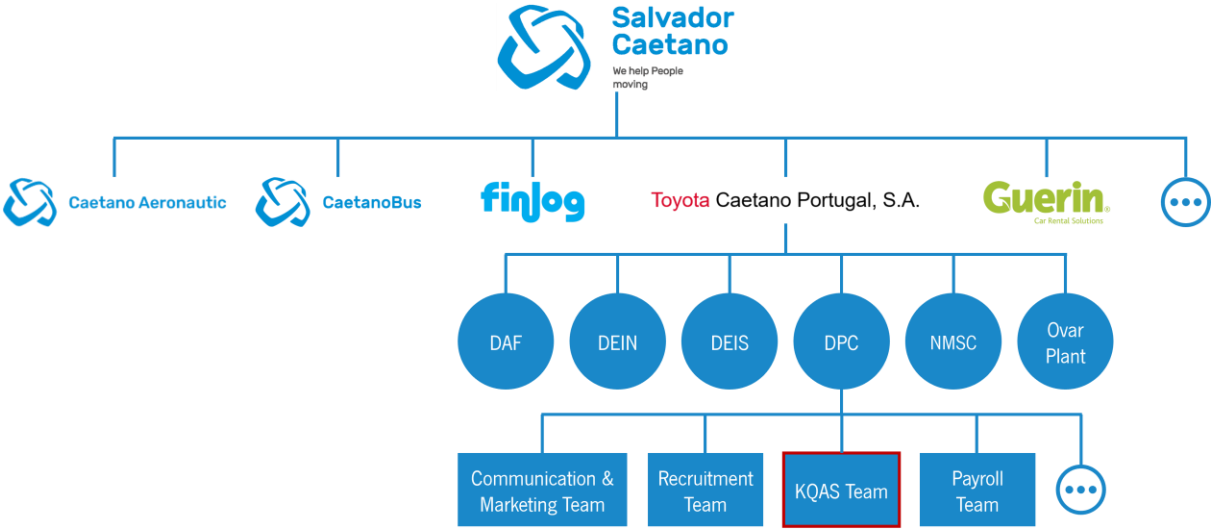

Figure 4 - Positioning of KQAS team inside GSC's organisation chart

The KQAS team inside DPC is responsible for Quality, Environment and Safety (QES) of NMSC, whereas DEIN and DEIS have teams dedicated to these areas inside their internal structures.

3.2.3 Salvador Caetano Capital

Apart from other financial investments, Salvador Caetano Capital has a company called CAETSU TWO, which is an independent agency of advertising with head office in Portugal and offices in Spain, Angola, and Mozambique. The company provides services that can range from brand strategy to global media strategy, and brand activation and experiences.

3.3 The business of NMSC, DEIN and DEIS

Although NMSC is part of the same company as DEIN and DEIS, the entity has an entirely different purpose and range of activity compared to the other two.

Regarding vehicles, Toyota's European activities include 9 factories, 14 parts storage centres, 7 vehicle logistics centres, and 29 national marketing and sales companies, including the Portuguese one. NMSCs are "legal entities which have been entrusted by Toyota Motor Europe (TME) with the wholesale distribution and marketing of Toyota and Lexus-branded vehicles, parts and accessories put on the market by TME through the establishment and management of a network of authorised retailers and authorised repairers, brand enhancement activities and customer management responsibilities in

relation to a specific territory in the European Economic Area". Through the NMSCs, Toyota can ensure that the brand is reflecting the different tastes and preference of its European clients, since the service that is provided in each country is adapted to its culture, language, and way of doing business. Therefore, NMSC works directly with a network of authorised car dealerships and repairers of Toyota and Lexus vehicles by supporting them with customer relations, corporate social responsibility (CSR) activities, technical support, among others. The network is responsible for the direct interaction with the everyday customer. Besides individual customers, Toyota also provides products and services to companies that request a fleet of vehicles, which represents an important part of its business.

In terms of load handling machines, Toyota Material Handling Europe (TMHE) is part of Toyota Industries Corporation, which is active in 5 regions worldwide under the brands Toyota, Raymond and Cesab. In Portugal, DEIN acts as both an importer and a dealer, since it is responsible for importing all Toyota and BT machines for the cargo handling activity, namely from Japan, France, Italy, and Sweden, and it distributes them to the entire Portuguese territory. It is also a dealer/branch, since it carries out sales and after-sales services in the whole northern area of the country. As for DEIS, its only functions are those of a dealer/branch since its activities are solely dedicated to the sales and after-sales of cargo handling machines for the southern area of Portugal. The area of action of each sector is divided by an imaginary line from Figueira da Foz. Since both DEIN and DEIS are dealers, they have a more direct contact with the end costumer. Business wise, the most important customers are the European Key Accounts, which are managed centrally at a European level by TMHE and are multinational companies with activity in Portugal, and the National Key Accounts, which are large Portuguese companies. Apart from these, DEIN and DEIS also do business with smaller local firms, which represent a significant part of their activity. According to the clients' needs, the load handling machines that are being commercialized can be new or used, and the customer can also opt for short- or long-term rental.

4. Before a Corporate Management System

In this chapter, TCAP's position regarding the certification of its MSs is contextualised, and the reason for the creation of this CMS is explained in more detail.

4.1 Management systems in TCAP

TCAP has been investing in continuous improvement processes in all its fields of activity for a long time. It is certified in the QMS standard (DEIN – 1997; Ovar Plant – 1999; DEIS – 2019; NMSC – 2009) and in the EMS standard (Ovar Plant – 2004; NMSC – 2006; DEIN – 2010; DEIS - 2012). Additionally, DEIN is the only sector inside TCAP certified in the OHSMS and EnMS standards, since 2010 and 2020, respectively.

The IMS certification has provided TCAP a constant improvement of its internal processes and procedures, which has shown positive impacts in its overall performance and, consequently, in its results. This certification guarantees that, in TCAP, the whole organization values and prioritizes every single stakeholder, its employees, partners and clients.

As it was possible to see from the analysis of Figure 4, TCAP has three other sectors besides NMSC, DEIN and DEIS, but only these are directly included in the corporate certification. On the one hand, the main aim of DPC and DAF is to support the activity of TCAP and/or GSC as a whole. Therefore, these sectors do not have certification in any MSS, but the service they provide is contemplated in the processes of NMSC, DEIN and DEIS. On the other hand, although the Ovar plant is also certified in QMS and EMS standards, this is an industry sector, unlike NMSC, DEIN and DEIS, which provides products/services. Consequently, it was decided not to include the Ovar plant in the design of the new CMS, since, at least, NMSC, DEIN and DEIS share, to some extent, a more similar scope of action. However, TCAP management hopes that in the future it will be possible for the Ovar plant to integrate this certification in order to have a complete synergy within the organisation and to maximise cost savings

4.2 The case for implementing a corporate management system

Considering that the market is in constant change and the competition is working tirelessly to improve its processes, it is vital to improve the sharing culture of best practices inside GSC.

The design and implementation of a CMS in TCAP, through NMSC, DEIN and DEIS, is an enormous step in this direction. By combining the forces of the three teams responsible for the QES areas, sharing tools and procedures, and merging diverse opinions on how an IMS can be improved, it is possible to achieve greater results than when each one of these three different sectors works by itself.

As it was previously stated, from a financial point of view, having a multi-site certification allows the company to save monetary resources, not only from the direct decrease of auditing costs from the external certification body, but also from a reduction in the time spent in internal audits, which can instead be allocated to other relevant activities.

This can seem a hard challenge to overcome due to the different nature of these sectors not only business-wise, but also in terms of their internal culture, the dynamics that are already part of everyday life and the processes that are intrinsic. However, each sector must adapt in various ways and be flexible in order to build a CMS that can bring diverse benefits as well as set an example for the organisation.

5. Design and implementation of a corporate management system

Designing an IMS from scratch can be difficult, since the organisation might not be fully open to its implementation, have the right tools or knowledge to do it, among many other reasons. However, trying to merge three different IMSs that can be considered solid, with which each sector is already familiar and comfortable with and, also, attached to, can be even more complicated.

Therefore, to simplify the possible decisions that needed to be made and ensure that a multi-site rather than an individual IMS was being built, TCAP decided to hire an external consulting firm. The consultants would be the intermediary to find best practices among what was already being done by each sector and suggest aspects that could be improved in the system. By having an external entity involved in this process, it was possible to avoid reluctance in changing already established practices and even to experiment with new tools and techniques that were not yet used in NMSC, DEIN or DEIS.

Since there were already certified and well-functioning IMSs in place, the efforts that have been made were aimed to adapt all the actions and behaviours of the organisation to a CMS while still complying with the requirements of the four ISO standards. Even though only DEIN is certified in OHSMS and EnMS standards, the documentation of the multi-site system had to include all the necessary aspects of these two norms.

When the term organization is used, it refers to the three sectors, NMSC, DEIN and DEIS.

With the objective of having a multi-site certification, all the existing documents, processes, procedures, and other tools were adapted, following strategies for the implementation of all the normative requirements. In the following sub-chapters, it is intended to make known the actions carried out for this project, as well as critically evaluating the decisions made for the achievement of the objectives.

5.1 Organisational context

5.1.1 Understanding the organisation and its context

According to all the four standards in question, organisations must determine the specific business context in which they operate to ensure that the MSs are adapted to it. These aspects can be of either an internal or external nature, and positively or negatively impact the organisation. In order to identify internal issues, it is crucial to consider all the relevant matters related to the organization's values, culture, knowledge, performance, and decision-making processes. On the other hand, by getting to

know the environment in which the company is inserted and operates in, it will be possible to identify important external issues that may influence its performance.

By identifying its internal strengths and weaknesses, management will be able to take full advantage of what is being done properly and it is considered an asset, by even turning it into a business opportunity, and take action to minimize the effects of the negative internal aspects, respectively. Although the organisation can hardly influence the external related issues, it is fundamental that these are recognized, because the way the company will operate to achieve its own objectives will heavily depend on them.

The most adequate tool and the one that is going to be used by TCAP is the SWOT Analysis (Strengths, Weaknesses, Opportunities and Threats). Although this analysis is still being developed, through the assessment of the CMS's processes it was already possible to identify some aspects that impact the whole organization. For example, the fact that the Toyota brand has a very good world-wide reputation (strength) effects not only sales, but the way the public interacts with the brand and the feedback that is collected from customers is more positive; the Covid-19 pandemic and climate change (threats) impact TCAP in all of its areas. Even though the organisation does not have the power to fully tackle these threats, it can minimize their impact by adapting the way it does businesses by, respectively, favouring online channels, and offering its customers product ranges with environmentally friendly technology and promoting a culture of sustainability.

5.1.2 Understanding the needs and expectations of interested parties

According to ISO (2021), an interested party (IP) (or stakeholder) is considered to be any "person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity". Therefore, the organisation needs to identify the IPs that are considered relevant in the context of the each of its MSs, and determine their relevant needs and expectations, i.e., their requirements. It should also be determined which of these requirements have to be met (legal or regulatory requirements), and the ones that, even if not mandatory, the organization decides to comply with. These requirements constitute the organization's compliance obligations.

By determining the extent to which the organization affects, and is affected by IPs, it will be possible to the define the most relevant stakeholders.

This is closely linked to the last section, and, since it is difficult to understand the context of an organisation without understanding the needs and expectations of IPs, and how they may affect the organisation (the contrary is also valid), it was decided to first define NMSC, DEIN and DEIS's IPs.

To build a better understanding of all interested parties, a matrix was created. Each one of these stakeholders was classified according to the impact it has on TCAP and vice versa. In addition, symbols have been used to identify them as critical, key, and non-key IP. In that way it is possible to quickly identify those that are irreplaceable/of very high importance for the organisation (critical IP), those that may be replaceable but are not of such high importance (key IP) and those that, despite having an impact on TCAP, are not of great relevance for the activity. This matrix is shown in Figure 5.

MATRIX FOR IDENTIFICATION AND ANALYSIS OF INTERESTED PARTIES' IMPACT

Scale: 1 - No impact/influence; **2 -** Weak indirect impact/influence; **3 -** Moderate direct impact/influence; **4 -** Significant direct impact/influence; **5 -** Very significant or direct impact/influence

Legend: ● Critical interested parties ▲ Key interested parties ■ Non-key interested parties

INTERESTED PARTY IMPACT ON TCAP

TCAP IMPACT ON THE INTERESTED PARTY – Level	2	3	4	5
5				● Shareholders, GSC Board and Top Management ● Represented companies: TMHE/TME/TMC ● DEI-N and DEI-S branches ● Toyota and Lexus dealers and repairers network ● Employees and their representatives
4		▲ Resident or occasional subcontracted suppliers, qualified technicians	● Society / general public and the environment ▲ National suppliers of products and/or services ● Approved suppliers of essential goods and services ▲ Strategic partner companies ● GSC partner companies	● Industrial machines clients (Field & Fleets) ● Vehicles clients (Individuals & Fleets)
3	▲ Neighbours of the premises and surroundings		▲ Professional organisations in the automotive and industrial equipment areas and market analysts ▲ Waste/Scrap management companies ▲ Regional and local public administration	▲ Banking and financial entities and insurance companies ● Ministry of Labour & Affiliated Entities ● Ministry of Environment & Affiliated Entities
2	■ NGOs	■ European Institutes and Bodies	■ Media ■ Certification and auditing companies	

Figure 5 - Matrix for identification and analysis of interested parties' impact

Although level 1 of impact (no impact/influence) was contemplated for the scale, no interested party with this classification was included in the matrix, since the organisation considered that it would not make sense to analyse stakeholders that had no impact on TCAP.

It is important to note that some of the IPs identified do not influence all sectors, or at least not to the same extent, however, this distinction was not made, as the organisation should act together in complying with the requirements imposed by them and in the development of relevant actions.

However, the three sectors have several common/similar IPs, with the biggest difference lying with the customers of each entity.

After obtaining a macro view of the IPs through this matrix, a more detailed one was created. All the IPs were categorised into five groups: internal stakeholders, suppliers, partners, customers & civil society, and official authorities & independent entities. Then, the impact/influence that TCAP has on the IP and vice-versa was clarified. In addition, the needs and expectations were identified, as well as some risks and opportunities related to each IP. Finally, some actions already implemented in relation to the stakeholders in question were pointed out, as well as others that should be considered by the organisation. This detailed table can be found in Appendix 1 – Interested parties influence/dependence matrix.

5.1.3 Determining the scope of the corporate management system

To determine the scope is to define the products, services, activities, and locations that the organisation will manage in its CMS, which implies defining physical and organisational boundaries.

In this case, the CMS applies to: "Importation, Distribution, Rental and Marketing of Vehicles and Load Handling Equipment, Parts and Accessories and Merchandising, Provision of After-Sales Assistance Services on Own Facilities or at the Customer, and Management and Development of the Authorised Dealers and Repairers Network.".

All the organization's products and services offered, the activities performed to provide them, and the places where they operate are contemplated in the scope. Since the after sales service provided by DEIN and DEIS can be performed both at their own and their customers' facilities, it is important to mention this aspect in the scope. In this way, this off-site activity is covered by the MS certification, which will allow, for example, the use of the logo that will demonstrate it in their service vans. Therefore, these are all managed in the CMS, and all requirements of the standard are applicable, i.e., there are no requirements that may not apply.

The scope is available for consulting, as it is through this that the organisation communicates to IPs what it manages in its CMS. TCAP makes its scope available through its Management and Continuous Improvement Manual, which is recommended to be published on the company's website, since it reflects what the organization's MS contemplates. However, its availability should be consistent with the organisation's communication process, which may be proactive, such as public information about it, or reactive, acting in accordance with a specific request.

5.1.4 Corporate management system and its processes

The organisation should determine and manage the processes needed to achieve its intended results, using a systemic management approach. When activities are understood and managed as interrelated processes that function as a coherent system, consistent and predictable results are achieved most effectively and efficiently, allowing for an easier continuous improvement of the MS.

For the definition of a single process map, it was necessary to first analyse the processes that each of the sectors already had. The NMSC had fourteen processes and DEIS had six, while DEIN had eight macroprocesses, but for each one of these the organization had defined processes and some even had microprocesses. Table 3 shows the process definition that each sector used to have, in the case of DEIN the ones shown are the macroprocesses.

Table 3 - Process definition for each sector before the CMS

NMSC	DEIN	DEIS
Strategic Management	DEI Global Management	Strategic Management
Human Resources	Management Control	Management Control
Management and Development of the Network's Sales	Commercial	Commercial Management and After Sales
Quality, Environment and OHS	Management and Review of the QES Management System/ Continuous Improvement	Quality, Environment and Safety
Fleets	After Sales	After Sales Management
Management and Development of the Network's After-Sales	Customer Relations	Sale and Rental of Equipment
Vehicle Logistics	Supplier Relations	
Importation and Marketing of Parts and Accessories	Importer	
Parts Logistics and Pre-Delivery Inspection (PDI)		
Technical Support, Warranties, Training and Printing		
Communication, Brand and Clients		
Homologation		
Product Planning and Management		

Infrastructures and Purchasing		

After analysing the processes that each sector had defined, it was possible to immediately identify those that were coincident. Then, a more careful analysis had to be performed in order to understand which ones had a process dimension or that could be considered procedures, since they were mere activities belonging to a broader field. After some iterations, it was possible to obtain the process map shown in Figure 6.

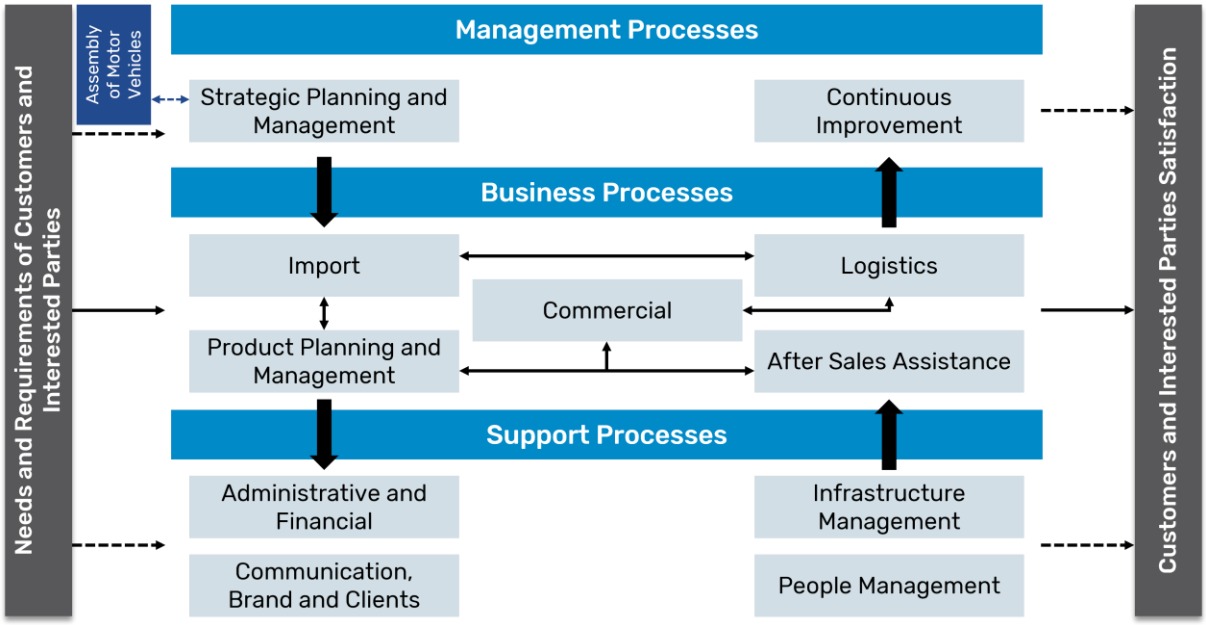

Figure 6 - CMS's process map

As shown in the figure, the processes have been divided into three types, management, business, and support processes.

The business processes include import, commercial, after-sales assistance, logistics and product planning and management. The processes of import, product planning, and management are not applicable to DEIS since the entity responsible for those activities in Portugal is DEIN. Additionally, DEIS also has no responsibility in the logistics process, since the sector considers the dimension of the activity insufficiently relevant to be considered a process. However, even though only DEIN and NMSC have responsibilities for these processes, all three are included in the map, as they interact with the remaining activities. All these business processes, which may also be called core processes, contemplate the activities that directly deliver value to clients or other IPs and allow the organisation to achieve its goals and objectives. The interconnection of these processes is called the value chain, since the combination of the activities will add value to the product or service provided. It is crucial that these processes are performed well, as their outcomes will impact the success of the organisation. However,

if these are ineffective, inefficient, or not properly managed, it can be considered a major strategic weakness of the organisation and even dictate its downfall.

Regarding the support processes, these include administrative and financial, communication, brand and clients, infrastructure management, and people management. These processes are designed to assist the value-delivering business processes by providing the resources and infrastructures needed. The main difference between support and business processes is that those in the first category add value to internal customers but do not directly deliver value to external clients, as core processes do. Therefore, support processes are not less important, but rather critical since they directly affect the ability of an organisation to execute core processes effectively.

Lastly, there are two management processes, strategical planning and management and continuous improvement, which are designed to plan, measure, monitor and control business activities. As was mentioned before, since TCAP owns the Ovar Plant, where motor vehicles are assembled, the top management decisions will be highly impacted by this activity. The management processes ensure that all the others are meeting the applicable requirements, operational, financial, regulatory and/or legal ones. As it is the case for support processes, these ones also do not directly add value to the products and services provided to customers, but they are of extreme importance as they ensure the success of the organisation.

All eleven processes of the organisation are interconnected to enable the best performance of the various activities in place. These processes have as input the needs and requirements of clients and other interested parties and as output the satisfaction of those needs and requirements.

All these processes were described in the SIPOC diagram (Suppliers, Inputs, Process, Outputs and Customers) format, which includes the indication of the inputs and who provides them, the activities carried out, the outputs and who receives them (customer). Additionally, in each process description (PR) the people responsible for its management are indicated, as well as the management procedures associated to it, as is shown in Figure 7.

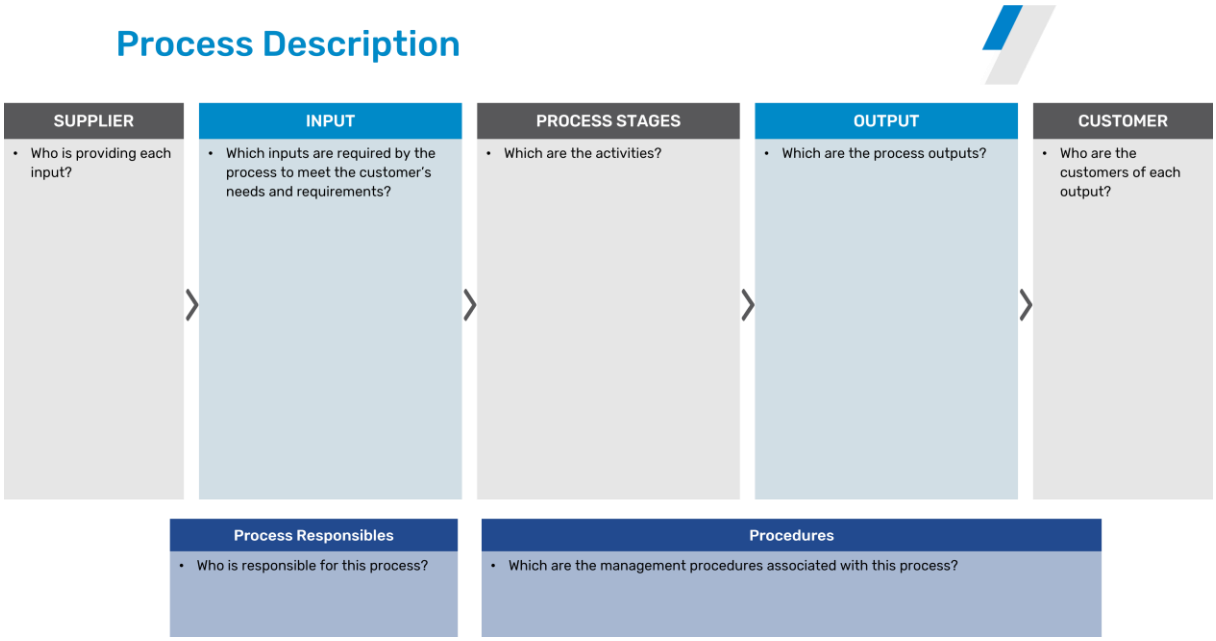

Figure 7 - Process description template

The development of the process descriptions was carried out gradually and followed a strategy to ensure that the whole map could be defined as soon as possible.

Firstly, the continuous improvement process was defined, since those responsible for the project were also the ones accountable for this process.

For the remaining ones, the old process descriptions were analysed and adapted to the SIPOC diagram format and integrated into the equivalent "new" process. Afterwards, the project team had meetings to present the new process descriptions to the people responsible for managing each one of them. These meetings made it possible to understand whether the new process description was clear and correct according to what is practised, after combining the inputs, activities, and outputs of the three sectors,

The second process description to be elaborated was the other management process, planning and strategic management, since its activities were relatively coincident in the three sectors. This was followed by the development of all four support processes, for the same reason as in the previous case, as only small issues differed between the sectors.

Finally, the business processes were defined, which proved to be more difficult, since the NMSC business differs from that of DEIN and DEIS in multiple ways. Although in some respects there are only differences in the product (vehicles vs. industrial machines), in others there is a total discrepancy, since, for example, NMSC generally does not interact with the end customer, but rather with the network of dealers and repairers, unlike DEIN and DEIS.

Descriptions of each of the CMS processes can be found in Appendixes 2 to 12.

5.2 Leadership

To have an effective CMS that works in the best possible way, it is essential to have a top management layer that establishes the direction to be followed by the organisation and leads it towards the achievement of the intended results. It must also ensure that everyone walks in the same direction, with commitment and responsibility.

In this way, the strategic planning and management process (Appendix 2 – Strategical planning and management process definition) mirrors the activity of the top management that coordinates the CMS. The leadership is aligned with the entire MS and its needs, ensuring a culture of continuous improvement within the organisation in terms of quality, environmental, safety and energy performance.

5.2.1 Management and continuous improvement policy and its communication

Top management shall define and communicate a policy for the CMS. This should include guidelines and commitments about the quality of its services, customer satisfaction, improvement, and others related to environmental, safety and energy performance. The policy should be understood and applied across the whole organisation.

The definition of a single corporate policy, based on the guidelines and commitments mentioned above, was one of the first steps in uniting the three IMSs. This junction was relatively simple, since the three sectors are part of the same company, which leads them to have similar visions for their management system, which instead put the emphasis on review of the existing policies. The policy should be considered a dynamic and constructive instrument, that should be reviewed periodically.

The defined policy can be found in Appendix 13 – Management and continuous improvement policy and it has been communicated to all TCAP NMSC, DEIN and DEIS employees through the institutional email and posters have been placed in strategic locations. Besides this, the policy is also available in the Management and Continuous Improvement Manual.

5.2.2 Organizational roles, responsibilities, and authorities

A key aspect of an effective CMS is that the various people in the organisation contribute to its processes. Therefore, it is essential to assign the appropriate responsibilities and authorities, which must be clearly defined and known by everyone in the organisation. This is the only way to ensure the

smooth functioning between the different areas and their people. This aspect becomes even more critical when different sectors are involved in the same management system.

All employees have their roles and responsibilities defined in accordance with the documents defined by DPC, the department responsible for the human resources area.

Ideally, for each of the CMS's processes, there would be a single responsible person, who would then establish the link with all the others involved in it. However, in this transition phase, it was decided that each sector, NMSC, DEIN and DEIS, would have at least one responsible person for each one of the processes. Initially, it will be necessary to create synergies between the various people from the different sectors involved in each process, who until now have never worked together.

In the case of NMSC, there is more than one person responsible in several of the processes, due to the inherent complexity of this sector, stemming from the fact that it represents two brands, Toyota and Lexus, each with responsibilities distributed among various people.

Furthermore, the management procedures outline the respective responsibilities of those concerned.

5.3 Planning

5.3.1 Risks and opportunities of the organization's processes

As mentioned earlier, it is essential that the risks and opportunities faced by the organisation are identified. This is the only way to avoid or minimise the negative consequences that certain aspects may lead to, as well as to take advantage of a favourable circumstance, conjecture, or situation for the company's success. Therefore, risk-based thinking should be the basis for management decisions, as it provides confidence in the organisation's ability to meet objectives, product and service requirements, projects, or simple process activities.

In addition to the aforementioned global SWOT analysis of TCAP, it was suggested to those responsible for each one of the CMS's processes to reflect over their activity and prepare the same kind of analysis for it.

Each one of these SWOT analyses would only be used as a support tool since it is a simple way to identify the risks and opportunities of each area of the organisation.

After completing this analysis, the strengths and opportunities would be transposed into a matrix (Opportunity Matrix), Figure 8, as well as the weaknesses and threats (Risk Matrix), Figure 9.

Opportunity Matrix							
Risk-Based Thinking				Opportunity Analysis			Relevance Level
Aspect	Applicability	Effect	Expected Result	Resources	Benefit	RLO = R x B	
Strength		Positive				0	Low
Opportunity						0	Low

Figure 8 - Opportunity matrix

Risk Matrix							
Risk-Based Thinking				Análise do Risco			Risk Level
Aspect	Applicability	Effect	Expected Result	Severity	Frequency	RL = S x F	
Weakness		Negative				0	Minor
Threat						0	Minor

Figure 9 - Risk matrix

For each of the identified aspects it is necessary to specify its applicability, i.e., whether all sectors are affected or not. Furthermore, the expected result must be described, the concrete effect of the aspect in question on the organisation's activity, which can be overall positive or negative.

However, it is only through a quantitative analysis based on defined criteria that it is possible to specify priorities and establish the treatment that allows risk mitigation, as well as identifying the opportunities to be followed according to the necessary resources and expected benefits.

To obtain the relevance level of opportunity (RLO) and the risk level (RL), it would be necessary to first classify the required resources quantity (R), the benefit level (B), the severity (S) and the frequency (F). For this purpose, the scales presented in Figures Figure *10* and Figure *11* were defined and it was ensured that the criteria used covered the four standards.

RLO (Relevance Level of Opportunity) = R x B
Resources (R): associated with the use of resources/means of the opportunity
Benefit (B): associated with the level of the benefit of the opportunity

Resources Quantity (R)	Description
Very High	Need for very large investments with very high/intensive use of human/material/monetary/natural/energy resources/means.
1	
High	Need for large investments with high use of human/material/monetary/natural/energy resources/means.
2	
Medium	Medium investment needs with moderate/balanced use of human/material/monetary/natural/energy resources/means.
3	
Low	Low investment needs with low use of human/material/monetary/natural/energy resources/means.
4	
Insignificant	Need for residual investments with insignificant use of human/materials/monetary/natural/energy resources/means.
5	

Benefit Level (B)	Description
Very High	Restoration of environmental balance, generating no impacts / Very high strategic impact and highly favoured image of the organisation / Very significant increase in safety and energy performance
5	
High	Restoration of environmental balance, with some impacts / High strategic impact and favoured organisation image / Significant increase in safety and energy performance
4	
Moderate	Does not affect environmental balance / Moderate strategic impact and moderately favoured organisation image / Moderate improvement in safety and energy performance
3	
Low	Generates environmental impacts / Low strategic impact and little favoured organisation image / Residual improvement in safety and energy performance
2	
Very Low	Generates significant environmental impacts / Very low strategic impact and no impact on the organisation's image / No improvement in safety and energy performance
1	

Figure 10 - Scale used to classify resources quantity (R) and benefit level (B)

RL (Risk Level) = S x F
Severity (S): associated with the consequence of the risk
Frequency (F): associated with the duration of the risk

Severity (S)	Description
Very Serious	Very serious damage to organisational performance / loss of customer / total destruction of infrastructure / death / total stoppage of activity / irreversible environmental or energy damage
5	
Serious	Serious damage to organisational performance / high degree of customer dissatisfaction / irreversible physical damage / partial destruction of infrastructures / partial stoppage of activity / serious environmental or energy damage with very high costs of restoring the balance
4	
Moderate	Moderate damage to organisational performance / customer dissatisfaction / injuries with transient incapacity for work / momentary interruption of activity / significant but reversible environmental or energy damage, although associated with a high cost of restoring balance
3	
Low	Little damage to organisational performance / The customer may notice faults, but their degree of satisfaction will be little affected / Minor environmental or energy damage with easy to restore balance / Repair of infrastructure/equipment without the need for downtime
2	
Insignificant	No damage to organisational performance / Customer does not detect faults / No environmental or energy damage / There are small material losses with no personal injury
1	

Frequency (F)	Description
Very High	Practically unavoidable, very frequent, continuous
5	
High	It occurs regularly, several times a day, and is very likely to happen
4	
Moderate	There is record, but it can be controlled
3	
Low	Very rare event, unlikely to happen
2	
Very Low	No probability of occurrence
1	

Figure 11 - Scale used to classify severity (S) and frequency (F)

After the quantification of each item according to the mentioned criteria, the relevance levels of opportunity and the risk levels of each aspect were calculated. These can be classified as low, moderate, or high, and minor, moderate, or intolerable, respectively, as shown in Figures Figure *12* and Figure *13*. Intervention is mandatory if the relevance level of opportunity is high, or the risk level is intolerable. For cases of moderate levels, the organisation should conduct a more careful analysis to understand if it is necessary to act upon the identified aspect.

		Benefit Level				
		Very Low 1	Low 2	Moderate 3	High 4	Very High 5
Resourses Quantity	Very High 1	1	2	3	4	5
	High 2	2	4	6	8	10
	Moderate 3	3	6	9	12	15
	Low 4	4	8	12	16	20
	Insignificant 5	5	10	15	20	25

Relevance Level of Opportunity		Nature of the measures to be developed
0<RLO≤6	Low	No intervention
8<RLO≤12	Moderate	Timed intervention
15<RLO≤25	High	Immediate intervention

Figure 12 - Relevance level of opportunity (RLO)

		Frequency				
		Very Low 1	Low 2	Moderate 3	High 4	Very High 5
Severity	Insignificant 1	1	2	3	4	5
	Low 2	2	4	6	8	10
	Moderate 3	3	6	9	12	15
	Serious 4	4	8	12	16	20
	Very Serious 5	5	10	15	20	25

Risk Level		Nature of the measures to be developed
0<RL≤6	Minor	No additional control actions required
8<RL≤12	Moderate	Recommended to develop and implement actions that reduce the risk level, not mandatory.
15<RL≤25	Intolerable	Analyse the activity in question and urgently develop and implement actions that minimise the value of the risk.

Figure 13 - Risk level (RL)

If actions are taken, in addition to identification, after full implementation and in accordance with the deadlines set, a reassessment must be made to check the effectiveness.

For now, it was only possible to conduct this complete analysis for the continuous improvement process, and the opportunity and risk matrices are in Appendixes Appendix 14 – Opportunity matrix for the continuous improvement process and Appendix 15 – Risk matrix for the continuous improvement process, respectively.

In terms of the aspects identified in the opportunity matrix, it was decided to only develop actions for those with a high level of relevance. Among these, the external training in ISO 9001, 14001, 45001 and 19001 standards, to keep the organisation up to date in relation to QESE and continuous improvement areas. Additionally, to ensure compliance with all legal and other applicable QESE

requirements, the organisation will continue to use the services of SIAWISE, an external company that performs conformity assessments, as well as continuing to conduct internal and external audits.

In relation to the aspects identified in the risk matrix, four with an intolerable level were detected. However, the organisation has only defined actions to be taken for two of these aspects. Regarding the dispersion of responsibilities, as mentioned before, this will be a difficult issue to solve in the short term. In two years, it may be possible to have the process responsibilities centred around fewer employees. Regarding the fact that there are difficulties in individual compliance with standards and rules, it is first necessary to perform a deeper analysis of this aspect, in order to define a concrete action that can potentially solve the problem effectively.

5.3.2 Environmental aspects

According to ISO (2015a), an EA is an "element of an organisation's activities, products or services that interacts or can interact with the environment". By identifying these aspects, the organization should understand if such activity, product or service causes air emissions, waste, land contamination, use of resources (e.g., water, fuel and natural resources and materials), among others.

After this analysis is completed, the next step is to identify the potential environmental impacts associated with the aspects. An environmental impact is described as a "change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's environmental aspects" (ISO, 2015a).

It is important to note that an organization's single process can typically have many aspects and each aspect can have more than one impact, which can be positive or negative.

Therefore, a management procedure was established with the objective of defining the methodology for the identification of the EAs of the CMS' activities as well as the ones from its service/products suppliers. This procedure includes the evaluation of the aspects that the organization can control and those that it can influence (direct and indirect), in order to know which ones have or might have significant impacts on the environment so that minimisation, control and monitoring needs can be determined.

It is mandatory to use this procedure in multiple occasions. This includes any situation when: a new legal or other compliance obligation arises and it implies the revision of EAs; there is a new operation or expansion/modification of an operation, product or service that results in new EAs; before the implementation of a new preventive or corrective action since they can change the significance of the

associated EAs, or even generate new ones; there is a complaint from an interested party, which may highlight EAs that are not considered significant.

The full management procedure is described in Annex 1 – Environmental aspects evaluation management procedure.

5.3.3 Hazard identification and OHS risk assessment

Apart from the environmental and process risks, it is crucial that the organization identifies those related to OHS. In order to assess these risks, it is critical to firstly perform a hazard identification, that should aim to determine all sources, situations or acts (or a combination of these), arising from the organization's activities, with a potential for harm in terms of injury or ill health.

Therefore, it can be considered that there are three main questions when talking about OHS risk, which are: What can go wrong? (Hazard); How bad could it be? (Consequence); How often might it happen? (Likelihood). When answering these questions, the goal is to perform only the level of analysis necessary to reach a decision.

A management procedure has also been defined to mirror how hazards are identified and how OSH risks are assessed. This also includes how the risks are controlled, to meet the QESE policy and the established strategy. Overall, this procedure aims to explain the path to the implementation of preventive measures to control risks and to systematically monitor them.

It is important to mention that the use of this management procedure can be triggered by multiple situations, such as, existence of new facilities and equipment, changes in the applicable legal requirements, implementation of new activities, when unidentified hazardous situations are detected in audits, or if a dangerous situation is identified by any employee.

The full management procedure is described in Annex 2 – Hazard identification and OSH risk assessment.

5.4 Support

5.4.1 Communication

In order to organise all the relevant content/information, which is communicated by the organisation, both internally and externally, a matrix is being developed. This communication matrix will include what is communicated (e.g., information about the organization's products and services, activities, CMS,

results), when it is communicated (e.g., periodically (newsletters or periodic meetings), when necessary, on the intranet or website, when there is a delivery), where it is communicated, which means are used (e.g., in person, in a meeting, by newsletter, on the website or social networks, as advertising, an email, in catalogues, brochures), who communicates it (which role(s) have the responsibility to communicate the content in question), and who it is communicated to (e.g., the general public, employees, clients, their suppliers and partners (external destination) or other departments and employees of the organization (internal destination))

Since the construction of such complex matrix requires a lot of information from multiple areas, it is still under development.

5.4.2 Documented information

As the process descriptions were created, management procedures and operational norms to support each one had to be developed.

Since much of the existing documented information had to be revised and adapted, it was decided that the ones that were being created for the new CMS should be in a Power Point format, which allows for more visual, appealing, and easier to read content.

A management procedure has also been developed to establish the methodology to be followed for the management and control of the CMS documents and data, which can be found in Appendix 16 – Documents and data management management procedure.

From the information contemplated in the abovementioned procedure, it is relevant to mention the documentation hierarchy that has been defined, process (PR), management procedure (PG), corporate operational norm (NO) and division operational norm (ND). The existence of the latter arose from the need for the sectors, due to their differences, create standards that for them are relevant, but which for the others are not.

The management procedures for the continuous improvement process have been fully elaborated, as well as all the procedures and operational norms belonging to the people management process. However, most of the remaining documentation has not yet been normalised.

5.5 Operation

5.5.1 Control of externally provided processes, products and services

According to ISO (2015c), “the organization shall determine and apply criteria for the evaluation, selection, monitoring of performance, and re-evaluation of external providers”. Therefore, and since the three sectors had very different procedures to comply with this requirement, a new methodology was implemented.

This new management procedure for supplier selection and evaluation took into consideration what was already being done by each sector and adapted it, but some best practices from TCAP clients and suggestions from the consultants were also included. The end goal was to have a solid, but agile procedure that constantly assures that TCAP’s works with qualified external providers. The full management procedure is described in Appendix 17 – Purchasing and supplier management management procedure.

Before analysing the supplier’s proposal, it is important to verify if this potential partner is already included in the “List of Qualified Suppliers”. If not, there first needs to be an initial qualification of the supplier, through filling in and later analysing the “Supplier Qualification Survey”, present in Appendix 18 – Supplier qualification survey. The purpose of this survey is for TCAP to have a deeper knowledge of the supplier, in order to understand its practices in the areas of Quality, Environment, Safety and Energy. Through the analysis of the answers, the organisation understands whether the supplier in question has good practices in these areas and whether it is aligned with TCAP's principles.

In addition to this survey, suppliers are sent the management and continuous improvement policy, the criteria that will be used in supplier evaluation and the good conduct code for their validation and signing.

By sending its policy, TCAP intends that the supplier learns more about how the organisation is managed.

The creation of the good conduct code was consensual, since it is a document that intends to ensure that, as a partner and supplier of products and/or services of TCAP, they know and put into practice the recommendations that the organisation considers essential to comply with. This good conduct code is based on four major pillars, social responsibility, health and safety at work, environment and energy, and management systems. The document can be found in Appendix 19 – Good conduct code of Toyota Caetano Portugal, S.A..

Regarding the supplier evaluation criteria, five different ones were defined, as follows: Evaluation of the Management System, Evaluation of Delivery Deadlines, Commercial Conditions (Price/Payment Conditions), Evaluation of the Quality of Supplies, and Evaluation of After-Sales.

All criteria have the same weight in the evaluation and, for each one of them, the supplier can be assessed between zero and three, according to the description present in Table 4.

Table 4 - Criteria for supplier evaluation

Criteria	Score
Evaluation of the Management System	
Company certified by various Standards (ISO 9001, 14001, 45001, 50001, others)	3
Company with Normative Referential	2
Company organised with a management system, but not certified	1
Company without a management system	0
Evaluation of Delivery Deadlines	
No occurrences to report	3
With justified and recorded delays	2
With unrecorded justified delays	1
With unjustified delays	0
Commercial Conditions (Price/Payment Conditions)	
Excellent commercial conditions (price below market and/or extended payment terms)	3
Good commercial conditions (averages prices and/or medium payment terms)	2
Acceptable commercial conditions (prices above market and/or short payment terms)	1
Poor commercial conditions (price a lot above market and/or prompt payment)	0
Evaluation of the Quality of Supplies	
No occurrences to report	3
Minor occurrences, with no record of non-conformities	2
Occurrences of critical non-conformities, recorded and treated	1
Repeated occurrences of critical non-conformities without treatment	0
Evaluation of After-Sales	
Fully Available	3
Available	2
Slightly Available	1
Not Available	0

After the evaluation is done according to the criteria mentioned above, the supplier will be assigned with a final classification (Supplier Quality Level – SQL), Very Good (SQL≥75%), Good (50%≤SQL<75%) or

Unacceptable (SQL<50%), that should be communicated to them, having in mind a continuous improvement mindset.

5.6 Performance evaluation

5.6.1 Monitoring, measurement, analysis and evaluation

It is fundamental that the organisation defines strategic objectives in accordance with its internal and external environment and that are aligned with the policy defined by the company. However, in order to achieve these objectives, it is crucial to have a close monitoring over the organization's performance in all of its areas.

Therefore, a KPI dashboard was created to standardise the way the CMS objectives are monitored and controlled, as it is shown in Figure 14.

				History								2021														
Strategic Objective	Process	Operational Objective	Indicator	2019		2020		Target 2021		Metric	Responsible for control	Measuring frequency	1	2	3	4	5	6	7	8	9	10	11	12	Actions to implement	Necessary Resources	Deadline	Monotoring and Control
												Monthly																
				Obj.		Obj.		Obj.				Homologous period																
				Real		Real		Real				-																
								Δ				-																

Figure 14 - KPI dashboard layout

The strategic objectives are broad statements of direction, and they should support the organization's overall vision of success. These are break down into manageable and actionable focus areas in the form of a short-term objectives, which are called operational objectives (or tactical objectives). Therefore, it is important to define the indicator that is going to reflect the operational objective, as well as clear targets to achieve for the year. Additionally, it is vital that each one of the KPIs has some responsible for its control, in order to always have updated data and to act upon it. In case there are deviations, it is important to define actions and allocate the necessary resources.

Before the CMS implementation, each sector had a different approach to monitor the system's KPIs, however some of these methods were lacking the definition of clear strategic and operational objectives behind the indicators and the comparison to the previous years' homologous periods. This dashboard layout is a clear improvement for the organization.

Due to the project delay, each sector is still monitoring their individual KPIs since it has not been possible to define the new CMS objectives through this new approach, yet.

5.6.2 Management system audits

Auditing is a fundamental process for the good functioning of any management system, being an instrument used to determine to what extent the normative criteria are being complied with.

In this way, in addition to the external audit conducted by a certifying entity, it is mandatory that the organisation defines a programme of internal audits, in order to verify not only compliance with the requirements, as already mentioned, but also to identify opportunities for improvement, being an important instrument and a key factor in the PDCA cycle.

The management procedure establishing the principles governing the conduct of the CMS audits is described in Appendix 20 – Management system audits management procedure.

In order to build a strong team of internal auditors with all the necessary skills for this activity and have, in the near future, an even better management system, as it was mentioned before, TCAP decided to provide training on the quality, environment and safety standards and internal audits to twelve of its employees.

5.6.3 Management review

The purpose of management review is for top management to critically analyse the results of the performance evaluation of the system, its effectiveness, suitability and alignment with organisational strategy and to decide on the need for any changes, improvement actions and resources (APCER, 2015).

Thus, since the data to be analysed comes from last year when there were three different systems, it was decided that, for the current year, three management reviews would be conducted in order to "close" the old systems. It is intended that with the CMS there will be a single management review that will assess the whole system.

It was decided that it would not be necessary to create a written document describing what should be done for the management review, as what is required to be included is already well defined in the normative references.

5.7 Improvement

Non-conformities or improvement opportunities may be detected internally or externally, and may originate from customer complaints, verified in the control of non-conforming outputs of processes, products, or services, during internal or external audits.

Thus, it is crucial that measures are defined to correct and control non-conformities, and to deal with their consequences, to the applicable extent.

A corrective action is an action directed at eliminating the causes of the non-conformity, so that it does not happen again under the same circumstances or elsewhere in the management system. Corrective actions shall be proportional to the potential effects of the non-conformities in question and may be subject to planning by clearly defining such actions, the timeframe and assigning responsibilities to ensure that they are implemented.

On the other hand, improvement opportunities are ideas or suggestions that should be carefully analysed since they are intended to increase the effectiveness of a process/activity. They should also be followed up by the organisation.

Therefore, the organisation has defined a management procedure that aims to establish the methodology to be followed to ensure that the non-conforming product/service is detected, controlled, and prevented from being used or installed. Furthermore, this same document defines how to identify and investigate the causes of non-conformities in TCAP. Lastly, it describes how the corrective actions and opportunities for improvement are defined and controlled, thereby enabling the CMS performance to be improved. This management procedure is described in Appendix 21 – Continuous improvement management procedure.

6. IMPACT OF CMS IMPLEMENTATION

This chapter presents the noticeable improvements in the TCAP services after the partial implementation of the CMS.

Although the CMS is not yet 100% implemented, since it is still necessary to standardize several procedures and working methods, the positive impact of this system is already perceptible.

After several years of existence of these three sectors, the implementation of a single management system brought synergies and knowledge sharing that were not usual in the past. This simple fact allows professionals with immense experience to share their good practices and makes TCAP work in a much more cohesive, uniform, and robust way.

With this project it has already been possible to significantly reduce documentation, since there is now a single management manual that is much more summarised and with very relevant information to share with clients and other interested parties. It was also possible to create a single process map with eleven processes derived from the thirty that used to exist in the three sectors. In addition, some of the procedures and work instructions connected to these processes and which are common to the three sectors are now in a single document. In general, since all these documents are now in a Power Point format, as opposed to Word like in the past, they have a more appealing and cleaner look, which makes them easier to read and understand.

In terms of the procedures that constitute the CMS, as a lot of good practices of what was already being done in each sector were shared and there was a close supervision of the experienced consultants, in general, it was possible to make some procedures much more precise and robust. This is the case of supplier selection and evaluation procedure, since, in the past, some of the sectors were using methods that had some flaws, i.e. the qualification survey was incomplete, the evaluation itself did not have very significant criteria and, in some situations, the classification obtained was not even communicated to the suppliers for potential improvement. Additionally, it was possible to create a method for risk assessment that is complete, but, at the same time, simple enough for each process manager to make a meaningful analysis and define actions to tackle the identified risks and seize the best opportunities. This was an aspect that was not yet solid in all sectors, as there was some resistance from the people involved and difficulty in understanding what risk is and how they should assess it. It would not have been possible to achieve the procedure presented without everyone's contributions and sharing of experiences from past attempts to carry out this risk assessment exercise with company employees.

In addition, it is expected that with the new dashboard of the system's KPIs it will be possible to monitor them in a complete and meaningful way while acting in a more immediate and sustained manner on perceived deviations. Furthermore, a more attentive and regular analysis is expected from top management through the implementation of monthly meetings in order to examine the CMS's KPIs with the help of those responsible for the processes.

Finally, as expected, there will be a significant reduction in costs not only in terms of external certification, but also in internal aspects, since there will be a reduction in the hours spent on internal audits, but also on the supervision of external audits.

7. CONCLUSION

This chapter presents the main conclusions drawn with the elaboration of this dissertation, as well as the limitations encountered and future activities that may be developed.

7.1 Final considerations

This dissertation had as its main objective the design and implementation of a CMS at Toyota Caetano Portugal, S.A., more specifically aggregating the IMSs of NMSC, DEIN and DEIS.

Firstly, a diagnosis of the initial state was conducted, i.e. an analysis was performed on the existing processes of each of the sectors, in order to build a single map that would illustrate the interactions between all of CMS's processes. In addition, a review of all the work instructions and management procedures existent in each of the sectors was made.

This last aspect was extremely important for the following planning phase, where the necessary actions to harmonise all existing documents and methods were planned. In this phase, the consultancy company's support was very important, since it helped to define all the necessary actions and those that were the most urgent to be implemented since they interfered with the flow of the whole project.

Next, the implementation of the defined actions took place, which was undoubtedly the most complex phase since it required communicating with many employees and preparing several documents simultaneously. It was necessary to analyse the methodologies in place and taking the best out of each sector, in order to create the a single method used in the CMS.

The evaluation phase is not yet fully completed as it culminates, in a first stage, with the internal audits and, subsequently, with the external one performed by the certifying body. These audits might generate non-conformities or opportunities for improvement that will reveal the maturity of the CMS. There will most likely be quite a few details that will not be 100% correct at the time of the audits, since the construction of a single and uniform corporate system requires a lot of time and dedication as well as the involvement of various interested parties. Nevertheless, it is expected that by analysing the issues raised by the auditors, improvements can be made and the ambition to have a fully functioning corporate system can be achieved. However, it is possible to qualitatively assess the impact that the actions that have already been taken are having on the organizational culture. As it was mentioned in the previous chapter, the changes that have been already made have had a very positive effect in the organization, highlighting the following:

- Consolidating a culture of good practice sharing between the different sectors;
- Reduction of costs with regard to various aspects of the management systems;
- Improvement in the quality perceived by the customer, as well as in the approach to environmental, safety and energy aspects by the sectors through the implementation of better methodologies;
- Decrease in TCAP documentation, through a single policy, management manual, procedures, and work instructions for the three sectors.

Although the implementation of the CMS is not yet complete, these results indicate that the impact of the project was positive, with its main objective having been partially met. Although the CMS is already on a good path, key actions are still missing for the objective to be fully achieved.

From the author's point of view, this work was a source of continuous learning and gains at a personal and professional levels. A deep knowledge about management systems and their implementation based on the various ISO standards was acquired.

7.2 Work limitations

As in all organisations, there were some limitations in the development of this work. The main limitation was the knowledge of the reality of all sectors. The fact that there was no one from the NMSC sector who was actively working in the project for the implementation of the CMS made it more difficult to understand certain details of their working methods, and to know who needed to be contacted in the various project stages. This fact was aggravated when the person responsible for the management of the old system of this sector left the company during the course of the CMS design and implementation. Furthermore, as there was no one with an overall view of what was done in the three sectors, all decisions required the presence of all QESE managers, which made the whole process of unifying the systems more time consuming.

In addition, not all top management members were equally aligned in relation to the implementation of this project, which also hindered its progress at certain stages.

The implementation of a management system, in this case, a corporate one, requires the involvement of all departments of an organisation, not only the one responsible for the QESE areas. Although this project is being managed by the people responsible for these fields, the intervention of the various managers is necessary, as they are the ones who experience the multiple processes of the management system. This led to multiple delays, not only in the filling of the various documents, but as it was mentioned earlier in the definition of the system's KPIs, the risk and opportunity analysis,

among others, which is aggravated by the fact that there are many responsible people in each of the management processes.

One of the aspects that made the whole project difficult was the lack of face-to-face meetings due to remote working practices due to the covid-19 pandemic.

Finally, the fact that the activity developed by NMSC is quite different from DEIN and DEIS has led to some obstacles, namely in the definition of processes.

7.3 Future work

As future work, there is the need to continue the project that was started, which includes the integration of the remaining documentation from the "old" systems, the analysis of the risks and opportunities of most processes, the definition of objectives and respective KPIs for monitoring the corporate activity, among others. To eventually have a CMS without discrepancies in the methods used by each of the sectors everything will need to be aligned and it is important to carefully evaluate the legal and normative compliance of this new management system before performing the audits.

It is also suggested the creation of a single, integrated platform where it would be possible to monitor non-conformities and opportunities for improvement, which could facilitate the system management.

Finally, it is also suggested that the analysis of complaints by sectors becomes standardised, since there is currently great disparity in this important quality related aspect.

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APPENDIX 1 – INTERESTED PARTIES INFLUENCE/DEPENDENCE MATRIX

INTERESTED PARTIES' NEEDS AND EXPECTATIONS

INTERESTED PARTIES' INFLUENCE/DEPENDENCE MATRIX: the themes of this plan were selected by their materiality, in view of the needs and expectations of the Interested Parties and the Internal and External Context of TCAP.

The rating is defined as to the **extent of impact/influence on the action/level of decision of one entity on the other. The assessment level is as follows: 1 -** No impact/influence; **2 -** Indirect and weak impact/influence; **3 -** Moderate direct impact/influence; **4 -** Significant direct impact/influence; **5 -** Very significant or direct impact/influence

Orange filling: These needs and expectations become obligations to fulfil".

Category	Interested Party	TCAP impact on the Interested Party (1-5)	Analysis	Interested Party impact on TCAP (1-5)	Analysis	Identified needs and expectations, risks and opportunities	Implemented actions or to be implemented
Internal Interested Parites	**Shareholders, GSC Board and Top Management**	**5**	- Influence on the performance of the organisation through the MS - Strategy and communication	**5**	- Leadership and strategic decision centre - Sets the direction of the Management System	- Achieving ROI - Regulatory and legal compliance - Management through excellence in TCAP	- Positive activity exploitation results. - Improvement in internal communication, by the implementation of Daily Kaizen and Kaizen Leaders
	Employees and their representatives	**5**	- Daily communication - Increased skills and motivation of employees - Employee consultation on the MS matters - Code of ethics and values "Ser Caetano" - Work contract	**5**	- Foundation of the organisational culture - Specific skills and knowledge appropriate to the tasks to be performed - Participation in Kaizen Activity - Involvement in the MS	- Identification and prevention of environmental and safety risks. - Strengthening the skills and knowledge necessary to perform the tasks - Stability at work and favourable environment for the performance of duties	- Implement actions following the Organisational Climate Study
Suppliers	**National suppliers of products and/or services (ex.: transportation, parts, acessories, marketing agency, etc.)**	**4**	- Contractual relations and negotiation - Daily communication - Definition of non-conformities	**4**	- Problems of quality of products/services - Failure to meet delivery deadlines - Proposals sent (budget/content) - Environmental, OHS or Energy impacts (monitoring)	- Establish a medium-to-long term commitment - Environmental, safety and energy co-responsibility - Payments as defined	- Payments defined at 60 days, after invoice reception. TCAP makes payments as defined - Qualification and evaluation of suppliers
	Approved suppliers of essential goods and services (ex.: Internet, electricity, fuel, natural gas, etc.)	**4**	- Contractual relations and negotiation - Daily communication - Definition of non-conformities	**4**	- Problems with supply cuts of quality of products/services - Proposals sent (budget/content) - Environmental, OHS or Energy impacts (monitoring)	- Establish a medium-to-long term commitment - Environmental, safety and energy co-responsibility - Payments as defined	- Payments defined at 60 days, after invoice reception. TCAP makes payments as defined - Qualification and evaluation of suppliers
	Resident or occasional subcontracted suppliers, qualified technicians	**3**	- Contractual relations - Daily or on duty communication - Awareness training + Prevention plan.	**4**	- Impacts on the quality of services and products - Environmental and occupational health and safety impacts (monitoring).	- Information on the quality of services provided - Environmental, OHS and energy saving information - Timely payments	- Monitoring the service of subcontracted suppliers
Partners	**Represented companies: TMHE/TME/TMC**	**5**	- Requests to influence business - Provision of necessary information - Planning of actions - Commercialisation of Toyota, BT and Lexus products	**5**	- European decision-maker/contractual relationship - Achievement of proposed objectives - Supplier of Toyota machines, vehicles and parts for national sale.	- Compliance with requirements and guidelines - Information and reporting - Legal compliance - High volume of sales	- Planning considering the requirements that must be met (3YBP)
	Strategic partner companies (ex.: Bolzoni, Cascade,Trelleborg, Exide, Hawker, Hopecke, Tudor, Lidera, Dekra, etc.)	**4**	- Contractual relations - Frequent communication	**4**	- Supporting retail operations - Contributing to legal compliance	- Frequent follow-up meetings - Fulfilment of contracts and payments	- Communication and awareness-raising about possible non-conformities of systems/services
	Branches DEIN and DEIS	**5**	- Contractual relations - Product supplied - Daily communication -Standards/ Requirements - Customer data	**5**	- Business plan, - Budget performance, - Daily communication, - Commercial relationship, - Voice of the customers	- Technical support - Contract fulfilment - Client follow-up - Results of technical audits - Good commercial policies	- Comply with the Business Plans - Technical support and warranties
	Toyota and Lexus dealers and repairers network	**5**	- Awareness-raising and visits to the Network - Contractual relations - Product supplied - Daily communication -Standards/ Requirements - Customer data	**5**	- Business plan, - Budget performance, - Daily communication, - Commercial relationship, - Voice of the customers	- Technical support - Contract fulfilment - Client follow-up - Results of technical audits - Good commercial policies	- Network Development - Conducting follow-up audits - Comply with the Business Plans - Technical support and warranties

Category	Interested Party	TCAP impact on the Interested Party (1-5)	Analysis	Interested Party impact on TCAP (1-5)	Analysis	Identified needs and expectations, risks and opportunities	Implemented actions or to be implemented
Partners	GSC partner companies (ex.: Ovar Plant, Rigor, CaetanoBus, CAER, TLSPT, etc.)	4	- Group Synergies, sharing good practices - Regular contacts - Trade relations (information, services, products)	4	- Shared training and consultancy - Equipment parts/accessories supplied - Pricing policies - Shared internal audits	- Medium to long term commitment - Co-responsibility	- Comply with contractual/business relationships with GSC partners
	Professional organisations in the automotive and industrial equipment areas and market analysts (ex.: ACAP, APLOG, APVE, APQ, etc.) and market analysts	3	- Regular communication - Participation in meetings with peers - Information	4	- Provide information and support decision making processes - Lobby	- Support to projects - Participation in working groups - Development of activities according to schedule	- Maintain good communication with partners in order to get the Information in time.
	European Institutes and Bodies (ex.: ISO, OHSAS, etc.)	2	- Compliance with standards and regulations	3	- Definition of standards and regulations	- Compliance with normative requirements	- MS Certification
	Banking and financial entities and insurance companies	3	- Availability of credit - Contractual relations - Independent processes	5	- Supporting daily operations	- Partnerships in the use of various forms of credit for rentals - Do not exceed the established budget	- Plan spending timely, assigning deadlines and responsibilities so that the budget is not overrun.
Customers & Civil Society	Media	2	- Press release - Social Media - Events	4	- Contribute to the strengthening of TCAP as a leading company in its sectors - Foster loyalty	- Miscellaneous Information	- Continue to promote good communication with the media.
	Vehicles clients (Individuals & Fleets)	4	- Providing products and services - Receiving advertisements and other information through various channels	5	- Business operating results - Sustainability of the business - Good VOC (Voice of Customer) results	- Respond assertively to customer expectations, aspirations and needs	- Develop projects that increase the sale of vehicles to private customers, companies and freelancers
	Industrial machines clients (Field & Fleets)	4	- Providing products and services - Follow-up on EKA/NKA clients - Receiving advertisements and other information through various channels	5	- Business operating results - Sustainability of the business - Good VOC (Voice of Customer) results	- Respond assertively to customer expectations, aspirations and needs	- Develop projects that increase the sale of Industrial Equipment to Companies of all sizes
	Neighbours of the premises and surroundings	3	- Local environmental aspects	2	- Consideration for local residents listed in the environmental analysis	- Information when requested - Prevention of environmental incidents.	- Good relations with the local community
	Society / general public and the environment	4	- Disseminate good corporate social responsibility practices	4	- Contributing to the sustainability of the Business	- Transparent information and trust - Sustainable development - Compliance with good environmental practices	- BRIT - Best Retailer in Town - Ecovadis - Environmental Certification
	NGOs (ex.: Food bank, Quercus, etc.)	2	- Support through necessary means	2	- Improvement of the society of which TCAP is a part - Information requests - Support in the event of environmental incidents/accidents	- Information when requested - Effective corrective actions if an environmental accident/incident happens	- Good relations with NGOs e.g. through the Toyota Environmental Challenge
Official Authorities & Independent Bodies	Regional and local public administration (ex.: City council, parish council, firefighters, ANPC, etc.)	3	- Good neighbourly relations/collaboration with town and parish councils - Boosting the local and regional economy - Employment opportunities for local residents	4	- Municipal regulations and other municipal decisions - Visits/inspections (water, environment, OHS, energy, etc)	- Preservation of the living conditions of local residents - Prevention of environmental or OHS accidents/incidents - Disseminating good corporate social responsibility practices	- Meetings with regional and local public administration services. - Compliance with regional legal requirements
	Ministério do Ambiente & Entidades Afiliadas (ex.: APA, IGAMAOT, etc.)	3	- Occurrences: top management requirements, inspections, Ministry or APA requirements - Compliance with legal requirements	5	- Legislation, inspections, fines	- Various information - Annual statements	- Planning activities to comply with the legal requirements applicable to the organisation
	Ministry of Labour & Affiliated Entities (ex.: ACT, Work Inspectors, Medicine at Work, etc.)	3	- Occurrences: requirements to senior management, inspections, Ministry or ACT requirements	5	- Legislation, inspections, fines	- Identification and prevention of environmental, safety and energy risks, related to the safety conditions of workplaces. - Information when requested	- Comply with applicable legal requirements on environment, safety and energy - Compliance with other legal requirements

Category	Interested Party	TCAP impact on the Interested Party (1-5)	Analysis	Interested Party impact on TCAP (1-5)	Analysis	Identified needs and expectations, risks and opportunities	Implemented actions or to be implemented
Official Authorities & Independent Bodies	**Waste/Scrap management companies (ex.: Valorcar, Ecopilhas, Valorpneu, Correia & Correia, etc.)**	**3**	- Compliance with legislation	**4**	- Mandatory declarations and payment of fees	- Various information - Annual statements (payment)	- Planning ahead to avoid mandatory declarations not being sent on time
	Certification and auditing companies (ex.: SIAWISE, SGS, etc.)	**2**	- Share of good practices	**4**	- Conducting audits - Deciding whether certifications are maintained	- Compliance with ISO standards - Communication ISO 9001, 14001, 45001 and 50001". - Compliance with legal requirements	- To have as excellence references the VDA, IATF16949 and Toyota Environmental Management System (EMS) and ASEC standards

APPENDIX 2 – STRATEGICAL PLANNING AND MANAGEMENT PROCESS DEFINITION

PR.01 – Strategical Planning and Management

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Shareholders; • Top management; • Internal/external clients; • Suppliers of products/services; • Process managers; • Represented companies (TME, TMC and TMHE); • Other interested parties.	• Strategical axes (Matrix X); • Market needs; • Shareholders and top management requirements; • Requirements of the represented brands; • Legal requirements; • Regulatory requirements; • Requirements of other stakeholders; • Budget; • Financial information support; • Customer/stakeholder feedback; • Process performance and service compliance; • Audit results and recommendations for improvement; • Performance reporting (e.g., Management review, others).	• Identification of the context, analysis of risks and opportunities; • Definition of management policy, objectives and plans; • Preparation of the strategic/business plan/objectives with the represented companies; • Provision of resources/budget; • Definition of organisation and approval of responsibilities/authorities; • Monitoring of indicators/data; • Support to CMS coordination; • Analysis and follow-up of the Management Review; • Handling of non-conformities; • Innovation projects; • Continuous improvement and implementation of measures.	• Management policy, goals/objectives and strategic plans (Matrix X); • Approved and monitored budget; • Business Plan and Management Programs; • Results of Management Review; • Continuous Improvement of CMS and customer/stakeholder related services; • Approval of CMS Processes/Management Procedures; • Definition of the Internal and External Context of the organisation; • Operational guidelines on the application of the requirements of all stakeholders.	• Shareholders; • Internal/external clients; • Top management; • Process managers; • Represented companies (TME, TMC and TMHE); • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** David Reis • **DEI-N**: Vítor Monteiro • **DEI-S:** Luís Cunha	• This process is not supported by any management procedures.

APPENDIX 3 – CONTINUOUS IMPROVEMENT PROCESS DEFINITION

PR.02 – Continuous Improvement

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Certifying companies; • Legal bodies; • SGI platform; • Top management; • Process managers; • Environment; • Auditors; • Facilities; • Internal/external clients; • GSC companies; • External companies; • Other interested parties.	• Annual budget; • Legal and Normative Requirements; • Business, OHS, Environmental and Energy Risks/Opportunities; • Continuous Improvement Philosophy (Kaizen and Shingo); • Environmental, OHS and Energy Efficiency Aspects; • Performance Indicators; • Results of external and internal audits; • Non-conformities/occurrences, complaints and recommendations from customers (CR and VoC); • Stakeholder requests; • Information resulting from the Management Review.	• Identification of the context, analysis of risks and opportunities; • Support to Strategic Management; • Monitoring of legal requirements; • Conducting and monitoring internal and external audits; • Evaluation of the significance of environmental aspects and identification of dangers and evaluation of OHS risks; • Monitoring and measuring significant environmental, OHS and energy efficiency aspects • Monitoring of operational control and environmental, OHS and energy awareness; • Treatment of non-conformities/occurrences; • Continuous improvement and implementation of measures.	• Approved and monitored budget; • Compliance with legal requirements; • Management programme actions; • Compliance with the regulatory QASE requirements; • Continuous Improvement (Kaizen) of internal processes; • Monitoring of non-conformities and complaints; • Results monitoring and measurement; • Follow-up reports (e.g., audits); • Significant environmental, OHS and energy efficiency aspects controlled; • Risks controlled; • Provision of information for Management Review.	• Certifying companies; • Legal bodies; • Top management; • Process managers; • Auditors; • Environment • Shareholders • Employees; • Internal/external clients; • Other interested parties.

Process Responsibles	Procedures	
• **NMSC:** Susana Alves • **DEI-N**: Joaquim Moura • **DEI-S:** Carlos Ramos	• Management System Audits • Document and Data Management • Identification and Evaluation of Environmental Aspects	• Hazard Identification and Evaluation of OSH Risks • Continuous Improvement • Energy Management

APPENDIX 4 – IMPORT PROCESS DEFINITION

PR.03 – Import

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Represented companies (TME, TMC and TMHE); • Administration; • Dealers network and branches; • Other interested parties.	• Annual budget; • Guidelines from the Board of Directors and the Administrative-Financial Management; • External market data (WITS/FEM, ACAP, etc.); • Market analysis and need for improvement; • Represented Companies' recommendations regarding objectives and business; • Meetings with the represented companies; • Information on technical problems, campaigns and guarantees; • Legislation and legal requirements. • Requests from the dealer network and documentation agencies; • Need for parts, accessories and merchandising; • MTBP (Mid Term Business Plan).	• Identification of the context, analysis of risks and opportunities; • Monitoring: objectives defined with the dealerships; business and orders with the represented companies; the EKA activity; the BS&LS; • Negotiation/definition and approval of objectives with the represented companies; • Orders and management of parts, accessories and merchandising; • Supplier orders; • Management of campaigns, guarantees and complaints with the represented companies; • Technical training from the represented companies; • I-SITE control and monitoring; • National and international homologations; • Certification of vehicles purchased abroad.	• Approved and monitored budget; • Report of service and parts to the Represented; • Report on monitoring audits and supervison Toyota standards (ASEC); • Technical training plan (STEP's); • Dissemination of information to the concessions; • Sending I-SITE costs to Dealerships and DAF; • Payment to the dealership of approved guarantees • Ordering of machine parts and storage; • Dispatch and transfer of machine parts to the concessions; • Declarations issued; • Homologated vehicles.	• Internal/external clients; • Dealers network and branches; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Magalhães Pinto, Miguel Finisterra, Ricardo Campos and Carlos Valentim • **DEI-N**: Vítor Monteiro	• The procedures for this process have not yet been defined.

APPENDIX 5 – PRODUCT PLANNING AND MANAGEMENT PROCESS DEFINITION

PR.04 – Product Planning and Management

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Represented companies (TMC, TME and TMHE); • Commercial Service; • Dealers network and branches; • Local suppliers; • Other interested parties.	• Annual budget; • Represented companies' recommendations regarding objectives and business; • Commercial statistical information and competitor analysis; • Existing stocks of vehicles and machines; • Monthly monitoring of sales and factory orders; • Orders from the dealer network; • Order books; • Factory information on models and list of equipment and options; • New product launches; • Price policy (MLB) of the represented companies; • Information on delivery times by the represented companies.	• Identification of the context, analysis of risks and opportunities; • Sales and order planning; • Vehicle and machines stock analysis and management; • Ordering vehicles and machines to represented companies; • Adjusting orders based on commercial information; • Ordering components to the factory/local suppliers and monitoring delivery times; • Reception of orders and storage of machines; • Preparation and revision of price lists (including definition of margins); • Preparation and execution of the commercial and machine training plan based on the represented company's training actions.	• Approved and monitored budget; • Information on available options and selection of machines/components; • Informing the dealer network of new models and prices; • Transfer of the machines/components to the commercial sector or delivery to the dealerships; • Qualified machine sales staff; • Feedback on the launch of new products; • Carrying out and monitoring the KPIs of the activity.	• Represented companies (TMC, TME and TMHE); • Commercial Service; • Dealers network and branches; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Miguel Finisterra and Ricardo Amaral • **DEI-N**: Vítor Monteiro and Helena Gonçalves	• The procedures for this process have not yet been defined.

APPENDIX 6 – COMMERCIAL PROCESS DEFINITION

PR.05 – Commercial

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Represented companies (TME, TMC and TMHE); • Top management, GSC; • Dealer network; • External Customers (Fleet Owners, EKA, NKA, ENI, End Customers, etc.); • Internal Customers; • Local suppliers; • Other interested parties.	• Annual budget; • Guidelines and standards of the represented companies; • Sales objectives and results; • Objectives and evolution of market share; • External data (WITS, ACAP, FEM); • Concessions performance and mystery customer data; • New product launch plan; • Customer needs; • Need for improvement projects; • Stock of new vehicles and machines available. • Used vehicles and machines available; • Transport information.	• Identification of the context, analysis of risks and opportunities; • Analysis of the guidelines and standards of the represented companies; • Monitoring of sales performance and commercial activity; • Client management; • Management of improvement projects; • Presentation to customers of the available range and existing stock; • Business prospecting, promotion, survey and analysis; • Negotiation with customers; • Sale or rental of new or used vehicles or equipment; • Business approval, placement in the portfolio and ordering; • Preparation for delivery; • Verification of compliance with the customer's request.	• Approved and monitored budget; • Business plan and commercial plans; • Sales management report; • Results of improvement projects and implementation of measures; • Analysis of the performance of concessions and mystery customers; • Delivery of vehicles or equipment to the client; • Issue of invoice or contract (sales regime) and invoicing of rents (rental regime).	• Represented companies (TME, TMC and TMHE); • Top management, GSC; • Dealer network; • External Customers (Fleet Owners, EKA, NKA, ENI, End Customers, etc.); • Internal Customers; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Mário Fonseca, Nuno Domingues and Nuno Soares • **DEI-N**: Vítor Monteiro • **DEI-S:** Luís Cunha	• The procedures for this process have not yet been defined.

APPENDIX 7 – AFTER SALES ASSISTANCE PROCESS DEFINITION

PR.06 – After Sales Assistance

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Represented companies (TME, TMC and TMHE); • Top management, GSC; • Repair shops network; • External customers (Fleet Owners, EKA, NKA, ENI, Finals, etc.); • Internal customers; • Local suppliers; • Other interested parties.	• Annual budget; • Guidelines and standards of the represented companies; • Business plan; • Concession performance and mystery customer data; • Price lists for parts, accessories and merchandising; • Context analysis and needs for improvement projects; • Information on technical problems, campaigns and warranties; • Identification of customer needs (service and parts); • After-sales training needs; • Customer information for the preparation of graphic works.	• Identification of the context, analysis of risks and opportunities; • Monitoring after sales performance and activity; • Monitoring of stock and ordering of parts, accessories and merchandising from the network; • Handling after-sales certifications; • Managing improvement projects; • Technical support and dynamization of after-sales training; • Technical analysis and expertise; • Warranty management; • PAT-OR management and service planning; • Inventory lists, stock and parts management; • Maintenance contract management; • Planning and preparation of graphic works.	• Approved and monitored budget; • Targets and sales of parts, accessories and merchandising for the dealer network; • After-sales management report; • Results of improvement projects and implementation of measures; • Information on technical solutions and their application (monitoring problem solving); • Specialised after-sales staff; • Sale of services and parts; • Warranty requests to represented companies; • Technical reports; • Final artwork and invoicing.	• Represented companies (TME, TMC and TMHE); • Top management, GSC; • Repair shops network; • External customers (Fleet Owners, EKA, NKA, ENI, Finals, etc.); • Internal customers; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Rita Dória, Carlos Valentim and Nuno Domingues • **DEI-N**: António Pintado • **DEI-S:** Ricardo Seara	• The procedures for this process have not yet been defined.

APPENDIX 8 – LOGISTICS PROCESS DEFINITION

PR.07 – Logistics

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Represented companies (TME, TMHE and TMC); • Carriers; • Dealers network and branches; • National suppliers; • Other interested parties.	• Annual budget; • Order book / Business plans; • Vehicles, industrial machines, parts, accessories and merchandising; • Inventory list and stock management; • Homologation information; • Customs Clearance; • Insurance appraisals; • Delivery preparation (Accessory Assembly or Transformations); • Owner's manuals (PDF-TME).	• Identification of the context, analysis of risks and opportunities; • Reception, registration and processing of orders (vehicles, car parts and accessories, merchandising and machinery); • Expedition of orders; • Preparation of vehicles for delivery; • Transport planning, organisation and notification; • Checking and final inspection and management of damages and shortages; • Stock management and permanent inventory monitoring; • Customs clearance of vehicles and registration requests; • Movement of vehicles between parks; • Translation and graphic treatment of Owner's Manuals.	• Approved and monitored budget; • Storage and delivery of orders; • Corrective and preventive actions; • Issuing invoices (vehicles and parts); • Insurance claims; • Delivery of new/used vehicles to the haulier; • Delivery of service vehicles to employees; • Transport document; • Supply of preparation materials for delivery to the client; • Passports (technical literature).	• Carriers; • Dealers network and branches; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Laurentino António and Peixoto Ferreira • **DEI-N**: Helena Gonçalves and Raquel Silvão	• The procedures for this process have not yet been defined.

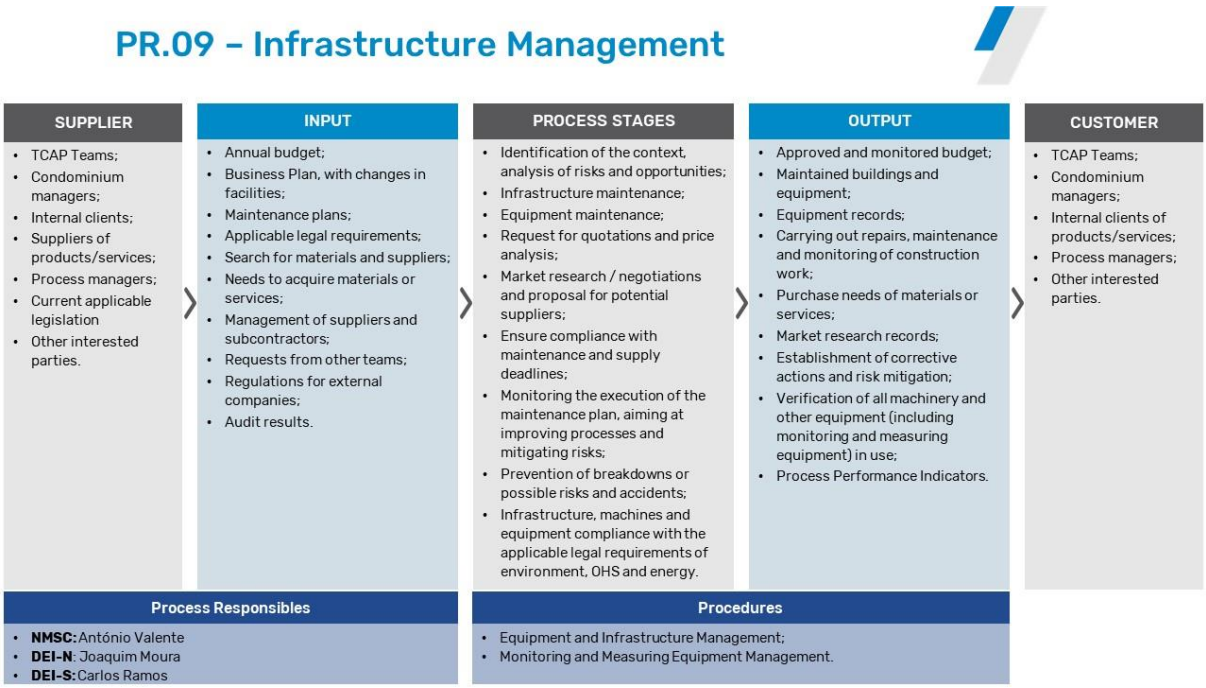
APPENDIX 9 – ADMINISTRATIVE AND FINANCIAL PROCESS DEFINITION

PR.08 – Administrative and Financial

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Represented companies (TME, TMHE and TMC); • Administration; • Administrative-financial department; • Top management; • Process managers; • Other interested parties.	• Strategic guidelines and orientations of the represented company and the administration; • Strategic Guidelines/Matrix X; • Budget (Global and Sectorial); • Financial information of the activity; • Accumulated results at the date of preparation of the budget; • Internal reports on operational activity; • Statistical information (e.g., ACAP, WITS, FEM, etc.); • Need identification of financial, human and material resources, etc; • Purchasing needs and investments.	• Identification of the context, analysis of risks and opportunities; • Proposing, negotiating and approving the budget in coordination with the Administrative-financial department (Top Management); • Management of financial and material resources; • Analysis and Monthly Control of Results (Operational and Financial) and Performance Indicators; • Alternative Action Plan with Corrective Measures to increase revenue/cost reduction; • Management of purchases and suppliers.	• Transmitting guidelines and main lines of action to the Departments; • Analysis of global results and countermeasures; • Analysis and selection of relevant information for meetings with the represented companies and management; • Budget Control and Management; • Monitoring of Expenditure; • Evaluation of opportunities for improvement; • Contacts with potential suppliers; • Negotiation/Protocols/Contracts; • Budgets and Orders; • Communication of supplier evaluation; • Qualification of suppliers.	• Shareholders; • Represented companies (TME, TMHE and TMC); • Management; • FAD; • External suppliers; • Top management; • Process managers; • Internal/external clients; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Nuno Lage • **DEI-N**: Carla Fernandes • **DEI-S:** Ana Oliveira	• Administrative and Financial Management; • Budgetary Control and Management; • Purchasing and Supplier Management; • Functional Structure Management.

APPENDIX 10 – INFRASTRUCTURE MANAGEMENT PROCESS DEFINITION



APPENDIX 11 – COMMUNICATION, BRAND AND CLIENTS PROCESS DEFINITION

PR.10 – Communication, Brand and Clients

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Top management; • Represented companies (TME, TMHE and TMC); • Dealer network/ authorised repairers; • Brand websites; • Brand social media spaces; • Advertising companies; • Internal and external customers; • Other interested parties.	• Annual budget; • Actions plan of the represented companies and Brand Management; • Social responsibility/sustainability guidelines of the represented companies; • National product/service and technology launches; • Institutional communications; • Competitor information; • Requests for sponsorship, support and partnerships; • Participation in events; • Digital information; • Market and product studies; • Customer database; • Commercial and pricing policy; • WITS/ FEM sales statistics.	• Identification of the context, analysis of risks and opportunities; • Strategy, conception and planning of communication and marketing actions; • Management of advertising campaigns, relational marketing actions, partnerships and sponsorships; • Public relations and press park management; • Communication and advertisement in digital spaces; • Marketing intelligence: brand image evaluation and monitoring of institutional and commercial actions; • Customer relationship management; • Management of point-of-sale materials and equipment; • Customer Satisfaction Surveys.	• Approved and monitored budget; • Strategy and annual brand management plan; • Implementation and evaluation of the communication and marketing strategies and plans results; • Presentation of market research and benchmarking data; • Social responsibility guidelines and actions for the divisions; • Dynamisation of the company's communication and brands in digital spaces; • Institutional communications; • Relations with official entities; • Recommendation and customer satisfaction; • Non-conformities/occurrences, complaints and recommendations from customers (RC and VoC).	• Top management; • Represented companies (TME, TMHE and TMC); • Dealer network / Authorised repairers; • Brand websites; • Brand social media spaces; • Advertising companies; • Internal and external customers; • Other interested parties.

Process Responsibles	Procedures
• **NMSC:** Ricardo Amaral, Nuno Domingues, Ricardo Dinis and Rita Dória • **DEI-N**: Ana Paula Soares (Comunicação e Marca), Carla Fernandes (Clientes) • **DEI-S:** Ana Oliveira	• The procedures for this process have not yet been defined.

APPENDIX 12 – PEOPLE MANAGEMENT PROCESS DEFINITION

PR.11 – People Management

SUPPLIER	INPUT	PROCESS STAGES	OUTPUT	CUSTOMER
• Top management; • Managers; • Employees; • Auditing companies; • Official entities; • Internal Customers; • Internal/External Suppliers; • Legislation in force; • Other interested parties.	• Annual Budget; • Strategic Plan; • Human Resources Policy; • Organizational studies and structure; • Training Needs; • Performance Evaluation; • Internal and International Mobility Policy; • Functional descriptions; • Recruitment and Internship Manual; • Admission and dismissal of employees; • Salary remuneration requirements; • Employee data in computer programs; • Interaction with employees.	• Identification of the context, analysis of risks and opportunities; • Integration of new or current employees in new functions; • Training Planning; • Operationalization/implementation and evaluation of training; • Assessment, analysis and qualification of functions; • Recruitment of employees (internal/external) • Evaluation and performance management; • Elaboration of the employee admission and dismissal process (e.g. Social Security, SAP, closing of accounts, etc.); • Employee contract management; • Salary processing; • Analysis and treatment of absenteeism.	• Approved and monitored budget; • Employee integration records; • Training plan and results of its effectiveness; • Performance evaluation report; • Recruitment/hiring process satisfaction report; • Report on the study of the organizational climate and employee satisfaction; • Career Progression Plans; • Employees admitted/dismissed; • Individual employee dossier; • Payment of salaries and bonuses; • Impact of absenteeism on employees' salaries. • Motivational Communication and Team Building Activities.	• Top management; • Managers; • Employees; • Auditing companies; • Official entities; • Internal customers; • External/internal suppliers; • Other interested parties.

Process Responsibles	Procedures
• **GSC:** Fernando Macedo e Luís Caseiro • **DEI-N:** Carla Fernandes • **DEI-S:** Ana Oliveira	• Training and Development • Performance and Development

APPENDIX 13 – MANAGEMENT AND CONTINUOUS IMPROVEMENT POLICY

Toyota Caetano Portugal aims to be

a leading organisation in the different sectors in which it operates, offering innovative, quality products and services that represent added value for its businesses.

In **Toyota Caetano Portugal**,

our commitment is to help people and loads move.

Establishing the company as a **leading organisation in sustainable mobility and cargo handling**.

Anticipating and shaping the future of **clean fuels** in the different sectors where we operate in order to ensure a greener planet.

Promoting the **internalisation of the culture and values** of the organisation, encouraging improvement in all areas of activity.

Being Toyota Caetano Portugal is

Promoting **process efficiency**, enhancing knowledge and a culture of innovation and creativity.

Complying with the applicable conformity obligations of its activities, products and services or to which the organisation subscribes.

Valuing and acknowledging employees by making them feel an integral part of the organisation's success.

› Pillars

Sustainable Development
Being socially responsible, committed with the sustainability and balance of society and the environment, meeting all compliance obligations.

Commitment
Promoting environmental protection, preventing pollution; healthy and safe work, acting proactively to eliminate hazards and reduce risks.

Relationships
Fostering respect among all employees in the organisation, valuing training and information, teamwork and their active participation.

Trust
Guiding our actions based on trust and transparency.

Solidity
Building solid relationships with all stakeholders, seeking to achieve the objectives and goals proposed for the organisation.

Evolution
Permanently seeking organisational excellence, continuous improvement (Kaizen) and energy efficiency.

APPENDIX 14 – OPPORTUNITY MATRIX FOR THE CONTINUOUS IMPROVEMENT PROCESS

Opportunity Matrix								Action		
Risk-Based Thinking				Opportunity Analysis			Relevance Level	Actions to take	Responsible	Deadline
Aspect	Applicability	Effect	Expected Result	Resources	Benefit	RLO = R x B				
Exchange of information and best practices, based on the different experiences of stakeholders in the QASE areas	All	Positive	Corporate alignment and standardisation of QASE practices	4	3	12	Moderate			
Monitoring the State of the Art in the QASE and Continuous Improvement areas	All		Constant updating of the practices to be adopted	3	5	15	High	Training regarding ISO 9001, 14001, 45001 and 19001	CI Process' Managers	September-21
Monitoring of Legal Compliance related to the QASE areas	All		Compliance with legal and other applicable requirements	3	5	15	High	Keeping the SIAWISE service and conducting internal and external audits	CI Process' Managers	Anually
Culture and values of the organisation in the mobilisation regarding Continuous Improvement (Kaizen)	All		Optimisation of organisational processes	3	4	12	Moderate			
Manufacturers' improvement requirements (TMC;TMHE)	All		Improvements to the organisation's internal practices	3	4	12	Moderate			
Management and monitoring of resource consumption, waste production and work accidents	All		Establishment of corrective actions, if necessary	2	5	10	Moderate			
Internal and External Recognition regarding Sustainable Development (CDP, EcoVadis) and goal orientation by the UN Sustainable Development Goals	All		Participation in the decarbonised society and evidencing social responsibility for stakeholder recognition	4	3	12	Moderate			
Development of actions for carbon neutrality	All		Achieve Net-Zero Carbon, meet legal requirements and stay in the market	3	4	12	Moderate			
More sustainable product/service life cycle	All		Reduced consumption of resources and pollutants, increased customer demand and improved brand reputation	5	3	15	High	Green Retailer Program Extending machine life	Susana A. and Joana F. Luís C. and Vítor M,	Anually
Internal/external consultancy in the QASE and Continuous Improvement areas by qualified internal experts	All		Knowledge sharing and organisation of excellence	5	5	25	High	Maintain ongoing knowledge sharing	CI Process' Managers	Monthly
Need to meet customers' QASE requirements and learning of good practices	All		Excellence in customer service and incorporation of good practices at TCAP	5	4	20	High	Conducting benchmarking actions/visits to customers	CI Process' Managers	Biannually
Reduction of Natural Resource Consumption (e.g. Raw Materials, Products, Energy, etc.)	All		Reduction in consumption of resources, pollutants and costs	4	5	20	High	Consumption monitoring	CI Process' Managers	Monthly

APPENDIX 15 – RISK MATRIX FOR THE CONTINUOUS IMPROVEMENT PROCESS

Risk Matrix								Action		
Risk-Based Thinking				Análise do Risco			Risk Level	Actions to take	Responsible	Deadline
Aspect	Applicability	Effect	Expected Result	Severity	Frequency	RL = S x F				
Different visions, businesses, needs, structures and organisational cultures	All	Negative	Loss of focus	4	4	16	Intolerable	Implementation and Certification of the Corporate Multi-site	Top Management Processes' Managers	November-21
Few records of Occurrences or Non-conformances and poor resolution of these in a timely manner	All		Loss of opportunity for improvement and delay in resolution	3	3	9	Moderate			
Shared responsibility for management processes	All		Dispersion of responsibility	3	5	15	Intolerable			
Integration in a perimeter/industrial park whose management is shared with interaction in important QASE aspects	All		Safety or environmental risks with external origins in relation to TCAP, making it impossible to make decisions at certain times	3	4	12	Moderate			
Monitoring of many activities simultaneously	All		Loss of focus	4	5	20	Intolerable	Reinforcement of human and material resources for the management of this process	Top Management	2022
Limitation in the definition of the vehicle fleet	DEIN & DEIS		Frequent vehicle changes and consequent cost increase	3	4	12	Moderate			
Compromised energy efficiency (poor thermal insulation of the building; poor air conditioning, age of the equipment and machinery)	DEIN		Energy losses, increased costs and lack of thermal comfort	3	4	12	Moderate			
Difficulty in individual compliance with environment, SST and energy standards and rules	All		Environmental and/or work accidents and higher energy consumption, with possible non-compliance with requirements	5	4	20	Intolerable			
Increased inspection activity and more expensive fines	All		Increased payment of penalties and damage to the brands' reputation	5	2	10	Moderate			

APPENDIX 16 – DOCUMENTS AND DATA MANAGEMENT MANAGEMENT PROCEDURE

Salvador Caetano

Toyota Caetano Portugal, S.A.

Management Procedure

Documents and Data Management

Continuous Improvement
PG.001
04/02/2021
Edition 1

1 Objective

Establish the methodology to be followed for the management and control of the documents and data of the Integrated Management System.

2 Scope

This procedure applies to all documents of the Integrated Management System of internal or external origin. A document is understood as "information and its support medium".

3 Annexs

- Documents List

4 Procedure

In the Preparation/Amendment and Control of Documents, the following steps should be followed:

1 Standardised forms

Use the standard forms (available in the Document and Data Management IT System) whenever possible.

2 Preparation or Amendment of Documents

Any employee may request the preparation or modification of a document. To do so, they must submit the proposal to their supervisor for approval. If the decision is positive, the new document is prepared or the existing one is amended.

3 Identification of Documents

All documents must be identified with at least: company logo, name of the document, date, edition number and corresponding management process.

4 Coding of Documents

The following table defines the codification procedure for the Management System documents:

Hierarchy	Codification	Identification
Process	PR.##	PR. Sequential number that identifies the process
Management Procedure	PG.XXX	PG. Sequential number that identifies the management procedure
Corporate Operational Norm	NO.XXX	NO. Sequential number that identifies the corporate operational norm
Division Operational Norm	ND.XXX	ND. Sequential number that identifies the division operational norm

5 Identification of Amendments

Every amendment shall result in a new Edition.

When necessary, produce a list of issued documents.

6 External Documentation

External Communications are controlled by date, subject and receiving sector, being the responsibility of the receiving sector.

7 Archive

The original documents of the Integrated Management System, in place, are stored in duly identified folders and/or on computer support.

The original documents of the system that become obsolete are destroyed by the emitting sector, leaving a copy in "pdf" in the computer system, in a specific folder, and only accessible to the emitting sector.

The minimum retention time of the documents is defined based on the following principles:

- **Documents/Records that preserve the history of the Company** – Unlimited Time
- **Documents/Record of the employees' records** – Unlimited Time
- **Technical Documents/Records** – 10 years
- **Other Documents/Records** – 5 years

8 Distribution

The distribution of the management system documentation is carried out through the computer system (given the company's policy, digital means are preferred for system management. However, some documents may exist in paper format).

It is the responsibility of the heads of each sector to ensure that the latest edition of the appropriate documents is available at all workstations, with particular attention to all locations where activities essential to the effective operation of the Management System are performed.

For the correct distribution of copies, it is necessary to identify: the sector distributing the copy, the date of distribution and the sector to whom the copy is destined. The extent of the control of document copies and their distribution depends on the type of document and its importance to the Management System. Use the table below, where applicable:

Control Type	Methodology	Distribution
Controlled Copies	Distribution List	Delivery through the computer system
Uncontrolled Copies	Informal Record	E-mail

9 Records and Data Control

The Management System records aim to document and keep under control all its relevant functions, showing compliance with the defined requirements.

The company maintains a control system that ensures the identification, access, filing, storage, maintenance and destruction of records. The records, when applicable, are named after the respective forms.

APPENDIX 17 – PURCHASING AND SUPPLIER MANAGEMENT MANAGEMENT PROCEDURE

Salvador Caetano

Toyota Caetano Portugal, S.A.

Management Procedure

Purchasing and Supplier Management

Administrative and Financial
PG.002
04/02/2021
Edition 1

1 Objective

Defining Purchasing and Supplier Management, while ensuring that suppliers are properly selected and qualified and that they are evaluated on the basis of their performance and negotiating capacity.

2 Scope

All the company's purchase orders and suppliers.

3 Associated documents

- Decree-laws, Directives, Regulations and other legal requirements
- Management and Continuous Improvement Manual
- NP EN ISO 9001
- NP EN ISO 22000
- NP EN ISO 14001
- NP EN ISO 45001
- NP EN ISO 50001

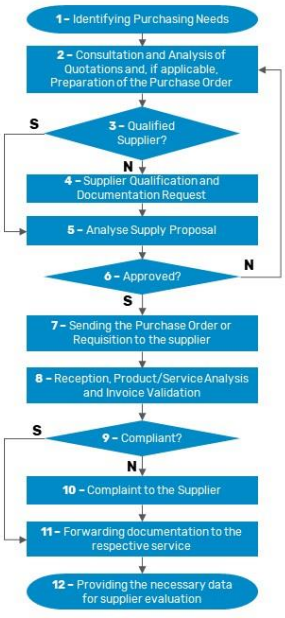
4 Definitions and Abbreviations

- **PCC** – Pedagogical Competences Certificate.
- **Conformitè Europëenne (CE)** – The CE (European Conformity) marking reassures national authorities and consumers that products meet essential safety and health protection requirements.
- **SQL** – Supplier Quality Level.

5 Annexs

- Purchase Order
- Requisition
- List of Qualified Suppliers
- Initial Qualification Survey
- Good Conduct Code
- Management and Continuous Improvement Policy

6 Procedure



Description	Associated Documents	Reponsibilities	
		Executes	Decides
1 and 2– The purchase need for a certain product/service can be identified by any employee, as well as by the department manager. The department manager consults and analyses the quotations and, if applicable, prepares the "Purchase Order".	Purchase Order	Employees authorised by management	Head of department
3, 4 and 5 - The department manager checks if the selected supplier is included in the "List of Qualified Suppliers": • If yes, the department analyses the supply proposal; • If not, the department will proceed firstly with the initial qualification of the supplier, through filling in and later analysing the qualification survey; • Request to the supplier, when applicable, the declaration of performance of the product/service (e.g., technical sheets, safety data sheets, CE conformity declaration, calibration certificates, samples, evidence of certified technicians, etc); • Subsequently, proceed to the analysis of the supply proposal.	List of Qualified Suppliers Initial Qualification Survey Suppliers Documents	Requesting department	Quality department and requesting department
6 – The department will then proceed according to the approval of the supply proposal. • If the proposal is not approved, the department consults and analyses new quotations and, if applicable, prepares a new "Purchase Order".			
7 – If the supply proposal is approved, each employee must complete the "Purchase Order"/"Requisition": • Request authorization of the purchase order from the Manager or Administration; • Hand in to the department head, with the appropriate signatures and dates.	Purchase Order Requisition	Employees authorised by management	Head of department
8, 9, 10 e 11 – The conformity assessment of all products/services purchased is carried out by analysing the product/service delivered and validating the invoice. • If a non-conformity is found, the department manager makes a complaint to the supplier. The entire purchasing process and documentation attached to the process, namely, invoice, documents delivered by the supplier and/or service provider, are forwarded to the respective services.	Invoice Product/service checklist (if applicable)	Employee who requested the product/ service	Head of department
12 – Those responsible for the procurement of products/services must provide the necessary data and indicators to make it possible to evaluate suppliers.	List of Qualified Suppliers	Head of department	Quality department

6.1 Suppliers

1 *Selection and Initial Qualification*

The selection of suppliers should be carried out whenever an employee responsible for a purchase considers it pertinent. The purchase of materials, equipment or services is made from qualified suppliers, that is, from suppliers on the "List of Qualified Suppliers", except for occasional and immediate purchases outside the company.

If a supplier is needed for a product or service which is not yet included in the "List of Qualified Suppliers", the person responsible for making the purchase order must make that a minimum of three of the following approval criteria are met:

- Presented prices;
- Delivery deadlines;
- Delivery of legally imposed documentation (e.g., CCP, CE Declaration of Conformity of an equipment, safety data sheets, among others);
- Payment conditions;
- Information obtained on the market;
- After-sales assistance.

The qualification of suppliers is carried out on the "Initial Qualification Survey" form.

The department must keep the "List of Qualified Suppliers" up to date by adding new suppliers and removing those who lose their qualification. All suppliers bonded by a contract are directly included in this list.

When the qualification survey is sent out, suppliers will be informed of the Management and Continuous Improvement Policy, the supplier evaluation criteria and the Good Conduct Code for validation and signing.

2 *Evaluation*

Supplier evaluation will be conducted every two years, although there may be mid-term re-evaluations whenever pertinent. The head of the department, together with the quality department, will assess all suppliers who have had commercial activity during the assessment period, for purchases equal to or greater than 10000€/year. Suppliers with a potential significant impact on the Management System will also be evaluated, for example, suppliers of equipment calibration, maintenance, waste management, among others that imply compliance with legal requirements.

However, suppliers of used Industrial Equipment are exempt from this evaluation, since the equipment may come from trade-ins, within the scope of the negotiation of new units.

Companies represented by Toyota Caetano Portugal will be monitored through periodic meetings.

This evaluation is made through the criteria defined in the "List of Qualified Suppliers", in order to continuously improve the services provided to the organization, consulting each year' s supply history.

Through the average established for each of the criteria, the **SQL - Supplier Quality Level** is calculated, which determines the Supplier Status and updates the suppliers' information on the "List of Qualified Suppliers".

The Supplier can be classified according to the following table:

SQL	Classification	Status	Supplier Type
≥ 75	Very Good	A	Preferred
50 ≤ SQL < 75	Good	B	Under Observation
< 50	Unacceptable	C	Not Recommended

- **Preferred Supplier** – Status A suppliers are included in the "List of Qualified Suppliers" and it is from them that the organisation will request the supply of products/services.

- **Under Observation Supplier** – Status B suppliers are also included in the "List of Qualified Suppliers", but in case the supplier is continuously in this status, it will be disqualified, moving immediately to Status C. However, and if it is the decision of those responsible, the supplier is informed of their assessment suggesting that they take corrective action.

- **Not Recommended Supplier** – Status C Suppliers will be disqualified until they prove the improvement of the parameters that led to their exclusion, being removed from the "List of Qualified Suppliers". The supplier is made aware of the reasons for such declassification and, if applicable, suggesting that it takes corrective actions in order to improve the supply of its products/services.

Suppliers with representation agreements are not included in this evaluation.

However, for single or strategic suppliers with Status C, purchasing will be the responsibility of Senior Management. A disqualified supplier may be requalified, following the normal process, as if it were a new supplier.

The organisation reserves the right to exclude suppliers from the "List of Qualified Suppliers" without prior notice.

Every 2 years, the Management and Continuous Improvement Policy, the supplier evaluation criteria and the Good Conduct Code will be communicated to the suppliers for validation and signing.

After the evaluation, the organisation communicates to its suppliers the results they obtained according to the defined criteria.

APPENDIX 18 – SUPPLIER QUALIFICATION SURVEY

Toyota Caetano Portugal, S.A.

Supplier Qualification Survey

Dados Gerais/*General Data*

Nome/*Name*:	**Tel.**:	
Morada/*Address*:	**Email**:	
Localidade/*Locality*:	**Código de Postal/***Postal Code*:	**Contribuinte/***VAT*:

Responsabilidades na Empresa/*Responsibilities in the Company*

Responsável da Qualidade/*Quality Responsible*:
Responsável do Ambiente/*Environment Responsible*:
Responsável da Segurança/*Safety Responsible*:
Nº de colaboradores/*Staff Number*:
Nº de colaboradores na Qualidade, Ambiente e Segurança/*Staff Number in Quality, Environment and Safety*:

Certificação/*Certification*

A empresa é certificada? Se sim, indique a(s) normas?/*Is the company certified? If yes, indicate the standard(s)*	✓	✗	
[1]**Qualidade/***Quality*:	**Ambiente/***Environment*:		
Segurança/*Safety*:	**Energia/***Energy*:		

Se sim, envie, em anexo, uma cópia dos certificados/*If yes, please send, as an attachment, a copy of the certificates*

Caraterização da Empresa/*Company's Characterization*

Questão/*Question*	✓	✗	Obs.
1. **Tem Manual da Qualidade ou Integrado?/***Do you have a Quality or Integrated Manual?*			
2. **Identificam e avaliam os riscos da atividade e tomam ações para os evitar ou atenuar?/** *Do you identify and assess the activity risks and take actions to avoid or attenuate them?*			
3. **Fazem classificação de fornecedores?/***Do you usually make a suppliers' classification?*			
4. **Tem procedimentos receção – expedição?/***Do you have reception - expedition procedures?*			
5. **Fazem calibração de dispositivos de medição e monitorização?/** *Do you calibrate the measurement and monitor equipments?*			
6. **Existe um procedimento formalizado para o tratamento das reclamações e avaliação da satisfação dos clientes?/***Is there a formalized procedure for handling complaints and evaluating customer satisfaction?*			
7. **Procede à segregação do produto não conforme, de modo a evitar a sua utilização indevida?/***Do you segregate the non-compliant product, in order to avoid its misuse?*			
8. **Tem colaboradores com as competências e treino adequados, de modo a desempenharem com eficácia as suas funções?/***Do you have employees with the appropriate skills and training, in order to effectively perform their duties?*			
9. **Fazem separação/identificação e encaminhamento de resíduos?/** *Do you separate/identify and forward waste?*			
10. [2]**Tem uma lista de todos os produtos químicos utilizados com as respetivas FDS válidas e atualizadas?/***Do you have a list of all chemicals used with their valid and updated MSDS?*			
11. **Tem instruções para manusear os produtos químicos?/** *Do you have instructions for the handling of chemical products?*			
12. **Cumprem e procuram exceder os requisitos legais Ambientais e de Segurança aplicáveis à atividade? /***Do you meet and seek to exceed the Environmental and Safety legal requirements applicable to your activity?*			
13. **Foi realizada avaliação de riscos dos postos de trabalho que previna os acidentes?/** *Was risk assessment done in the work stations to prevent accidents?*			
14. **Tem um sistema de resposta a emergências?/***Do you have an emergency response system?*			
15. **Providenciam formação a colaboradores (Qualidade, Ambiente e Segurança)?/** *Do you provide training for the staff (Quality, Environment and Safety)?*			
16. [2]**Possuem um plano para redução dos consumos energéticos e de água?/** *Do you have a plan to reduce energy and water consumption?*			

Nome/*Name*: **Rubrica/***Signature*: **Data/***Date*:

Função na Empresa/*Position in the company*:

[1] **Empresas certificadas na Qualidade não respondem às questões 1 a 8/***Companies certified in Quality do not answer questions 1 to 8*

[2] **Se sim, enviar, por favor/***If yes, send, please*

APPENDIX 19 – GOOD CONDUCT CODE OF TOYOTA CAETANO PORTUGAL, S.A.

1 Introduction

Dear Partner,

It is Toyota Caetano Portugal, S.A.'s objective to improve its performance and to influence its partners so that they do the same, whether in terms of products supplied or services provided.

The purpose of this document is to ensure that you, as our partner and supplier of products and/or services, are aware of and put into practice the recommendations below, which our company considers essential.

2 Pillars of the Good Conduct Code

3 Social Responsibility

Combating Child and Forced Labour
Must not engage directly or indirectly in child labour or forced labour in accordance with ILO (International Labour Organization) core standards.

Discrimination
Shall not discriminate on grounds of gender, race, religion, sexual orientation or any other basis. Shall treat all employees with social equity.

Employee Consultation and Freedom of Association
Employees must be provided with forms of participation and consultation. Must not interfere with their freedom of association and their right to join unions.

Working Hours, Remuneration and Benefits
Must comply with all applicable laws and regulations, including those concerning minimum wages, work overtime and legally mandated benefits.

2

4 Health and Safety at Work

Work Environment
To Provide its Employees with a healthy and safe working environment.

Emergency Response Capacity
Be prepared for emergency situations, including employee warning and evacuation procedures, training and drills, first aid equipment, fire detection and fire fighting equipment.

Occupational Health and Safety
Have adequate workplace safety procedures, preventive maintenance and protective measures in place to eliminate and mitigate health and safety risks in the workplace.

Training
Ensure that staff members have OSH training on the activity they carry out and are aware of the risks associated with it.

5 Environment and Energy

Resource Conservation and Environmental Protection
Natural resources should be used efficiently. Waste production and emissions into the air, soil and water must also be reduced.

Waste Management
Manage the waste produced in an environment-friendly way, from collection to final destination. Use practices such as recycling and reuse of materials and products.

Chemicals and Hazardous Substances
Inform about the chemicals used by providing safety data sheets. Do not use hazardous substances whose placing on the market is restricted, prohibited or regulated according to legislation.

Sustainability and Energy Efficiency
Must adopt the best practices of environmental management and energy efficiency, aiming at sustainability.

3

6 Management Systems

Suppliers are expected to implement management systems to facilitate compliance with applicable laws and continuous improvement. This includes the following aspects:

Legal Requirements and Others
Comply with applicable laws, regulations, contractually defined agreements and generally recognised standards.

Purchasing of Products and Services
Encourage the purchase of products and services from companies with responsible management and which contribute to a better use of materials and a reduction in energy consumption.

Documentation
Create adequate documentation to demonstrate that share the principles and values expressed in this Code of Conduct.

Risk Management
Implement mechanisms to identify, determine and manage risks.

7 Responsibility

Toyota Caetano Portugal S.A. reserves the right to verify compliance with the aforementioned requirements, by means of visits or audits, expecting from the Supplier access for such actions.

The Supplier assumes and subscribes to this Code and shall return it signed by its legal representative.

Organization Name: _____

Stamp: _____

Responsible Name: _____

Position/Function: _____

APPENDIX 20 – MANAGEMENT SYSTEM AUDITS MANAGEMENT PROCEDURE

Salvador Caetano

Toyota Caetano Portugal, S.A.

Management Procedure

Management System Audits

Continuous Improvement
PG.005
07/04/2021
Edition 1

1 Objective

Establish the principles that govern the conduction of the QESE Internal Audits, in order to verify if the activities related to Quality, Environment, Safety, Energy, risk analysis and evaluation and the associated results are in conformity with the foreseen provisions, as well as to determine the efficiency of the QESE Integrated Management and Continuous Improvement System.

2 Scope

All TCAP services and sectors with responsibilities in the implementation of the Integrated Management System and Continuous Improvement are covered, according to the Portuguese standards by which they are respectively certified.

3 Associated documents

- NP EN ISO 9001
- NP EN ISO 14001
- NP EN ISO 45001
- NP EN ISO 50001
- NP EN ISO 19011

4 Definitions and Abbreviations

- **GSC** – Grupo Salvador Caetano
- **Non-Conformity (NC)** – Dissatisfaction, deviation or absence of a specified requirement. Non-conformity may result from problems with a higher rate of occurrence evidenced through statistical treatment.
- **Improvement Opportunity (IO)** – Ideas or suggestions aimed at increasing the effectiveness of a process/activity.
- **QESE** – Quality, Environment, Safety and Energy
- **TCAP** – Toyota Caetano Portugal.

5 Annexs

- Internal Audit Programme
- Internal Audit Plan
- Internal Audit Report
- Follow-up of Non-Conformities and Opportunities for Improvement

6 Procedure

N.	Phase	Description	Associated Docs	Responsibilities	
				Executes	Approves
1	Annual Audit Plan Programming	In order to determine the effectiveness of the Integrated Management System, an Annual Audit Programme is prepared at the beginning of each year. This audit programme should be prepared according to the nature and importance of the activity to be audited and should provide for at least one annual audit of each sector of the organization: • Audit date; • Date of the audit report; • Date of response to the report. This is distributed to the Auditors and to those responsible for the various processes to be audited.	Audit Programme	QESE Responsible	Head of each division
2	Group and Audit Team Constitution	Whereas internal audits must, obligatorily, be performed by independent employees from those who have direct responsibility in the area to be audited, and by trained and qualified personnel for the purpose. The auditing group shall be formed by internal employees and/or other external auditors who are invited.		QESE Responsible	QESE Responsible
3	Preparation of the Audit Plan	Audits are performed to compare the practices used with the processes, procedures and operating norms in force, whether or not described in the QESE manuals, objectively identifying any deviations. For this purpose, an audit plan should be prepared by the audit coordinator and, if possible, a checklist based on the requirements of the QESE system should be used, in accordance with the Management processes and manuals.	Audit Plan	Audit Coordinator	QESE Responsible
4	Opening Meeting	Before the start of the internal audit itself, a meeting is held with the aim of: • Define who, besides the person responsible for the audited process, will accompany the audit team; • Confirm the audit plan and clarify any doubts.	Audit Plan	Audit Team	Audit Team

N.	Phase	Description	Associated Docs	Responsibilities	
				Executes	Approves
5	Internal Audit	The adopted methodology is the following: • Verify, where applicable, the availability of processes, procedures or written operating norms. • Confirm, concretely, the conformity of what is done with what is established in them or propose changes when necessary. • Assess the knowledge of the respective employees regarding the processes, procedures or operational norms they use. • Identify non-conformities or opportunities for improvement in accordance with the applicable requirements. Information obtained during interviews and document verification shall be confirmed through other sources, such as factual observation of activities, measurements, photos and records - objective evidence. The audit team should ensure that the non-conformities are: • Documented and supported by objective evidence; • Identified and presented structurally in the same terms of the standard and/or other documents that have served as reference. During the course of the audit, to the extent that non-conformities, opportunities for improvement or other relevant observations come to light, these will be clarified with those responsible for the audited areas.	Audit Plan Management System Documents	Audit Team	Audit Team
6	Preparation of the Internal Audit Report	After the audit, the audit team members should meet, if possible, on the same day, to jointly prepare the audit report. The purpose of this meeting is to report on the findings in order to: • Point out specific aspects; • Locate areas in need of corrective actions; • Propose corrective actions and risk and opportunity assessment and analysis; • Discuss, individually, the findings made; • Agree on a consensus for each audited item. The audit report is delivered by the Audit Team to the QSEAS Manager, who will ensure its distribution to the respective Head of Division and the managers of the areas involved. Whenever internal audits are conducted by externals, they may not use the models referred to in this procedure. The audit report shall be issued and distributed to the person responsible for the audited process as soon as possible and no later than 5 working days after the end of the audit.	Internal Audit Report	Audit Team	QESE Responsible
7	Response to the Internal Audit Report	The person responsible for the audited process analyses the audit report, identifies the causes of the NCs/IOs and defines the corrective and/or preventive actions deemed necessary. This response should be given within a maximum of 15 calendar days after the reception of the audit report, and for each action recommended, a person responsible and an implementation deadline must be established.	NCs and IOs monitoring	Audited Process Responsible	Audited Process Responsible
8	Corrective Actions Control and Closure	The implementation of corrective actions (deadlines and effectiveness) is monitored through the register "Follow-up of Non-Conformities and Opportunities for Improvement". Periodically, the QESE Department will do this follow-up.	NCs and IOs monitoring	Audited Process Responsible	QESE Responsible

1 Qualification of the Audit Team

1 *Internal Auditors*

The selection of internal auditors is made by the QESE Responsible, and the criteria used for internal employees are:

- **Audits to some processes/services:**
  - Education: High School Diploma (minimum);
  - Specific Training: Participation as an observer in at least one audit;
  - Professional Experience: More than 2 years at the GSC.
- **Audits to the Integrated Management System:**
  - Education: High School Diploma (minimum);
  - Specific Training: Training in Quality, Environment and Safety and Audits, of at least 6 hours;
  - Professional Experience: More than 3 years in GSC.

2 *External Auditors*

Whenever there are no internal auditors who meet the defined criteria, or whenever the independent evaluation of the system so requires, external auditors will be selected, by assessing their Curriculum Vitae, and whose criteria are:

- Education: Higher Education degree in an area relevant to the activity being audited (minimum);
- Specific Training:
  - Minimum: Training for internal audit (ISO 19011) in Quality, Environmental, Safety and Energy Management Systems, certified under ISO 9001, ISO 14001, ISO 45001 and ISO 50001, respectively, at practical and theoretical level, with a minimum duration of 40 hours.
  - Desirable: Specialized training in quality, environment, safety and energy complementary to the internal audit qualification.
- Professional Experience:
  - Minimum: Conducted 3 internal audits (desirable: 6 internal audits) of Quality, Environmental, Safety and Energy Management Systems, certified under ISO 9001, ISO 14001, ISO 45001 and ISO 50001 , respectively.

APPENDIX 21 – CONTINUOUS IMPROVEMENT MANAGEMENT PROCEDURE

Salvador Caetano

Toyota Caetano Portugal, S.A.

Management Procedure

Continuous Improvement

Continuous Improvement
PG.007
07/04/2021
Edition 1

1 Objective

Establish the methodology to be followed to ensure that non-conforming product/service is detected, controlled and prevented from being used or installed, to identify and investigate the causes of non-conformities, to define and control corrective actions and improvement opportunities, thus providing the improvement of the System performance.

2 Scope

It applies to all potential problems and non-conformities detected within the scope of the Integrated Management System.

3 Associated documents

- Legislative Decrees, Orders, Regulations and other legal requirements
- NP EN ISO 9001, NP EN ISO 14001, NP EN ISO 45001, NP EN ISO 50001
- Audit Plan
- Non-conformities register / Occurrences register / Improvement sheet
- NC and OM follow-up map

4 Definitions and Abbreviations

- **Problem** – Everything that causes an undesired effect but which, although not serious, does not justify individual treatment through the opening of a non-conformity or Complaint.
- **Non-conformity (NC)** – Dissatisfaction, deviation or absence of a specified requirement. Non-conformity may result from problems with a higher rate of occurrence evidenced through statistical treatment.
- **Corrective Action (CA)** – Action taken to eliminate the causes of a non-conformity, defect or other undesirable situation so as to prevent its recurrence.
- **Preventive Action (PA)** – Action taken to eliminate the causes of potential non-conformities, defects or other undesirable situations in order to prevent their occurrence.
- **Improvement Opportunity (IO)** – Ideas or suggestions aimed at increasing the effectiveness of a process/activity.

5 Procedure

1 Detection of non-conformities

Whenever a non-conformity situation is detected, a new row is added to the NC and IO Follow-up Map. When non-conformities come from audits of the system, an audit report is produced. Subsequently, it is communicated to the person in charge of the process or service in question or who is responsible for the area where the non-conformity was identified, as well as to the QSEAS Coordinator.

Customer complaints are registered in the respective applications and communicated to the Service in question for subsequent follow-up.

2 Non-conformity handling

A computer file called "NC and IM Follow-up Map" is kept, the root causes that originated the situation are determined, an immediate correction is defined, as well as the definition of adequate corrective actions that prevent new occurrences. Deadlines and those responsible for the implementation of the corrective actions are set and, when it is finished, the actions effectiveness is checked.

1 *Cause Analysis*

Each sector is responsible for analysing in detail the causes for the appearance of non-conformities. To do so, all available data (documents, testimonials, photos, etc.) must be used to assess the real cause. With this data, corrective actions should be foreseen with the aim of minimising/eliminating the causes.

2 *Corrective Actions Implementation*

In the definition of corrective actions, all identified potential causes must be taken into consideration. The corrective actions that imply changes in the Management System processes/procedures must be, in the first place, discussed and analysed by the QESE Responsible, and then proposed and approved.

3 *Evaluating the Effectiveness of Corrective Actions*

The QESE Responsible/Process Manager verifies the effectiveness of the corrective actions and risk assessment in accordance with the defined deadlines and, in cases where changes are being made to the Management System processes/procedures. If it is verified that the implemented actions do not prevent the recurrence of the NC, new or additional actions are defined and implemented and the implementation deadline is extended.

3 Improvement Opportunities

After the identification of improvement opportunities, actions to be implemented are defined.

These opportunities are registered, their relevance assessed, and if necessary, the respective actions, deadline and person(s) responsible are documented in the computer file "NC and IO Follow-up Map".

ANNEX 1 – ENVIRONMENTAL ASPECTS EVALUATION MANAGEMENT PROCEDURE

Salvador Caetano

Toyota Caetano Portugal, S.A.

Management Procedure

Environmental Aspects Evaluation

Continuous Improvement
PG.004
31/03/2021
Edition 1

1 Objective

Establish the methodology for the identification of Toyota Caetano Portugal's activities and services' environmental aspects, and those from its service providers. Having into consideration those that the organization can control and those that it can influence and conducting their evaluation. This way it will be possible to know those that have, or can have significant impact on the environment, to establish the needs for minimisation, control and monitoring.

2 Scope

It applies to all activities, products and/or services of Toyota Caetano Portugal – DEIN, DEIS and NMSC, and its service providers, with impacts or potential impacts on the environment.

3 Associated documents

The following documents are referred to in the text in such a way that part or all of their contents constitute a requirement of this document:

- EN ISO 14001:2015

4 Definitions and Abbreviations

- **Environmental Aspect (EA)** – Element of the organisation's activities, products and services that can interact with the environment.
- **Direct Environmental Aspect** – Environmental aspect directly consequent or present in the organisation's activities, which can be controlled.
- **Indirect Environmental Aspect** – Environmental aspect that the organisation cannot control but only influence. It may be associated with the activities of external stakeholders (suppliers, neighbours, customers, others), and which may interact with the direct environmental aspects.
- **Significant Environmental Aspect (SEA)** – Environmental aspect that may generate at least one significant environmental risk, it is associated with an emergency or for which there are complaints.
- **Life Cycle (LC)** – Consecutive and interconnected stages of a product or service system, from the procurement of raw materials, or their production using natural resources, to their final destination.
- **Environmental Impact (EI)** – Any change in the environment, adverse or beneficial, resulting wholly or partially from the environmental aspects of the organisation.
- **NMSC** – National Marketing and Sales Company.
- **TCAP** – Toyota Caetano Portugal.

5 Annexs

- Excel Sheet – Environmental Aspects Evaluation from TCAP

6 Procedure

1 Applicability

The use of this procedure is compulsory whenever:

- New legal or other compliance obligations arise which require the revision of EAs;
- A new operation or extension/modification of an operation, product or service that originate new EAs;
- Prior to the implementation of new preventive or corrective actions, as it may change the significance of the associated EAs or create new;
- There is a complaint from an interested party, that may reveal EAs that are not considered significant.

2 Identification

The identification and determination of the significance of EAs is performed in relation to the set of activities developed, based on the life cycle of the products and/or services supplied.

1 *Life Cycle*

The life cycle of the products and services provided is divided as follows:

1. **Manufacturing and processing -** Includes the sourcing of raw materials, design and manufacture of equipment, for which the responsibility lies with manufacturers or suppliers, as well as the use of facilities and the resulting interactions.
2. **Promotion and negotiation of products and/or services -** Includes administrative processing operations, commercial promotion, negotiation and sale of products and services.
3. **Supply of products and services -** Includes the preparation of equipment, its transportation and delivery and the provision of complementary services.
4. **Use and maintenance -** Includes customer use of the equipment, maintenance and the sale of parts and consumables.
5. **End of life -** Includes the potential reuse/resale of used equipment and scrapping for final disposal.

2 *Environmental Aspects and Impacts*

The **Environmental Aspects** to be analysed, for each stage of the life cycle, will be those related to:Produção de resíduos

- Use of natural resources
- Use of raw and subsidiary materials
- Gaseous emissions to the atmosphere
- Effluent discharges into the aquatic environment
- Energy emissions

Each EA may have one or several **potential impacts** on the environment, which will be classified according to the type of effect, and may be **adverse (threats)**, with a **severity level**, such as:

- Soil, atmospheric, water and/or noise pollution
- Consumption of natural resources (renewable or non-renewable)
- Related to the final destination
- Valorisation-related
- Production-related

or **beneficial (opportunities)**, with a **benefit level**, such as:

- Reduction in the use of natural resources.
- Reduction in the use of other resources, raw and other materials.
- Reduction in waste production.

3 *Type of Interaction, Operating Conditions and Time Factor*

Type of Interaction

For each environmental impact, its applicability to the LC stage where the assessment is carried out is determined.

If applicable, the type of interaction with the organization should be identified:

- **Direct:** Aspects over which the organization has direct control over the impacts, the assessment is carried out according to 4.3.1 - Direct Environmental Aspects.
- **Indirect:** Aspects over which the division has no direct control, only influence on the impacts caused. The evaluation is made according to 4.3.2- Indirect Environmental Aspects.

If **not applicable** it should be identified as **NA**.

Operating Conditions

EAs should be identified under normal, abnormal and emergency operating conditions. They are considered as:

- **Normal**, the routine actions of the activity and planned interventions;
- **Anomalous**, unplanned interventions and small anomalies;
- **Emergency**, situations with potential to cause environmental accidents.

Time Factor

EAs are classified according to a time factor in the:

- **Past**, outdated aspects of the company's activities and products;
- **Present**, current aspects of the company's activities and products;
- **Predictable**, aspects that may result from the company's activities and products.

4 *Legal Compliance and Interested Parties*

The existence of legislation or opinions of interested parties that may lead to the need for revision or establishment of new ways of managing EAs must be verified.

For each EA, the existence of applicable legislation should be verified. It should be identified with "Y", if it exists and with "N", when it does not exist.

The evaluation of interested parties is carried out through the existence of complaints, being identified with "Y", if it exists, and with "N", when there are no complaints. An EA is classified with the maximum severity in case there is a complaint from any external interested party.

3 Significance Evaluation

The methodology for assessing the significance of EAs and their EIs is based on the determination of Environmental Risk, and varies according to the type of impacts' interaction (direct or indirect).

1 *Direct Environmental Aspects*

The level of Environmental Risk of the Direct EAs and their Eis is based on the relationship between two variants:

- Severity (negative impacts) or Benefit (positive impacts)
- Frequency (normal or abnormal conditions) or Probability (emergency conditions) of occurrences.

The calculation is carried out as follows:

Environmental Risk (ER) = 2 x Benefit or Severity (B or S) + Frequency or Probability (F or P)

Severity or Benefit (S or B)

Quantifies the magnitude of the damage or benefits caused to the environment, considering the potential impacts of the aspect, as presented in the following tables:

		SEVERITY			
		LEVEL			
		1 – Very low damages	2 – Reduced damages	3 – Medium damages	4 – High damages
ENVIRONMENTAL ASPECTS	**Waste**	Recycled non-hazardous waste	Recycled hazardous waste	Destroyed non-hazardous waste	Destroyed hazardous waste
	Natural Resources Raw and other materials whose production, capture, distribution or use...	... does not cause environmental damage.	... can cause minor environmental damage, with an easy restoration of the environmental balance.	... can cause serious but reversible environmental damage, associated with a high cost of restoring the environmental balance.	... can cause very serious and irreversible environmental damage and very high costs in restoring the environmental balance.
	Effluent, Noise and/or Gas Emissions	Below limit values	10% above limit values	20% above limit values	Without measured values
	Emergencies	Small spill, leak, no possibility of infiltration into the soil. No or negligible damage.	Small scale occurrence controlled in a short time and with own means. May cause minor environmental damage.	Medium-sized occurrence, controlled with own means. Can cause serious but reversible environmental damage.	Large scale occurrence, controlled with external means. Can cause very serious and irreversible environmental damage
	Occasional activities	No damage or negligible	Minor environmental damage, only in internal systems of the organization, with easy restoration of the environmental balance.	Severe environmental damage to systems outside the organization, but reversible. With a high environmental replacement cost.	Very serious environmental damage, in systems outside the organization and irreversible. With very high replacement costs

BENEFIT		
LEVEL	**POTENTIAL BENEFIT OF THE IMPACT**	**SCORE**
High	It can lead to high environmental benefits. No resources consumption or pollution generation. It has the potential to restore the environmental balance.	4
Medium	It can cause medium-sized environmental benefits. No resource consumption or pollution generation.	3
Low	With few environmental benefits. Reduction in resource consumption or pollution generated.	2
Very Low	With very low environmental benefits.	1

Frequency or Probability (F or P)

Quantifies the frequency with which an environmental impact occurs under normal or abnormal conditions, or the probability of occurrence under emergency conditions.

FREQUENCY OR PROBABILITY	SCORE
Very High Impact resulting from intense or permanent use. Daily. Happens very often, very likely to happen.	4
High Impact resulting from regular use. Once a week or more. It has happened, it is likely to happen.	3
Moderated Impact resulting from occasional use. Once a month or more. Very rare event, unlikely to happen.	2
Reduced Impact resulting from sporadic or occasional use. Once a year or more. Never happened.	1

2 *Significative Direct Environmental Aspects*

Direct EAs are classified as **Significant (S)**, if at least one of the following conditions is met:

- If they present **environmental risk (ER) ≥ 10**;
- If they are associated with **emergency situations**;
- If there are **complaints** from interested parties.

3 *Indirect Environmental Aspects*

The significance of the Indirect EA and its EIs is determined according to the level of Environmental Risk, which is based on the relationship between two variants, the Severity (negative impacts) or Benefit (positive impacts) and the Interaction with the Management System.

Environmental Risk (EA) = 2 x Severity or Benefit (S or B) + Interaction (I)

LEVEL	SEVERITY OF THE POTENTIAL IMPACT	BENEFIT OF THE POTENTIAL IMPACT	SCORE
High	It can cause very serious and irreversible environmental damage to external systems, with very high replacement costs.	It can lead to high environmental benefits. Reduction in resources consumption and generated pollution, with the potential to restore the environmental balance.	4
Medium	It can cause serious environmental damage to external systems, but reversible, with high environmental replacement costs.	It can lead to medium-sized environmental benefits. Reduction in resources and energy consumption and waste production.	3
Reduced	It can cause minor environmental damage, only in local internal systems, with easy restoration of the environmental balance.	It may lead to reduced environmental benefits. Reduction of pollution associated with waste disposal, energy production or other.	2
Very Low	Very low or zero environmental damage.	Very low environmental benefits.	1

Impact (I) – Quantifies the level of interaction that the impacts of the indirect EA have with the direct EAs, or the interaction that TCAP can have on the indirect EA.

LEVEL	INTERACTION	SCORE
High	Aspect that interacts at a high level with the Direct EAs of TCAP and it may influence their significance. High capacity of TCAP to interact in the Indirect EA.	4
Medium	Aspect that interacts in a concrete way with the direct EAs of TCAP, however without influence on the significance of any direct EA. Median interaction capacity of TCAP in the Indirect EA.	3
Reduced	Aspect that is present in the activities of interested parties and that slightly interacts with the direct EAs of TCAP. Low interaction of TCAP in the Indirect EA.	2
Very Low	Aspect with residual interaction in the direct aspects of TCAP. Residual interaction of TCAP in the Indirect EA.	1

4 Significant Environmental Aspects

Significant direct EAs must be taken into consideration in the establishment, implementation and maintenance of the Management System. The management of these EAs is carried out through:

- **Objectives and goals -** Definition of objectives and goals considered strategic for the organisation.
- **Operational control -** Aspects that can be controlled by the definition of procedures or work instructions, complemented with monitoring and measurement actions.
- **Emergency Control -** By implementing measures of Prevention and Response to Emergencies.

These EAs may not have any objectives or targets associated to them; however, Operational Control mechanisms must exist to ensure the management of their environmental impact.

For each aspect or impact resulting from an **emergency situation**, prevention and action measures must be defined.

The **significant indirect EAs** should be the object of establishing influence forms that contribute towards the improvement of environmental performance upstream and downstream of the company's activities.

If the **environmental risk is less than 10**, the EA and its Eis are classified as **not significant (NS)**, thereby ending the process. If the associated potential EI can be minimised by good practices, these should be developed.

5 Environmental Aspects from Occasional Activities

Whenever there are occasional activities with the potential to create direct environmental aspects, these should be assessed on the Direct Environmental Aspects Assessment form - occasional activities, using the methodology described there.

6 Revision

The identification of environmental aspects as well as the evaluation of their impact is reviewed, at least, annually, when the Management System is revised.

ANNEX 2 – HAZARD IDENTIFICATION AND OSH RISK ASSESSMENT

Salvador Caetano

Toyota Caetano Portugal, S.A.

Management Procedure

Hazard Identification and OSH Risk Assessment

Continuous Improvement
PG.010
16/04/2021
Edition 1

1 Objective

Defining the methodology for hazard identification, risk assessment and prioritization, as well as the definition of controls, associated to the activities of Toyota Caetano Portugal, meeting the QESE policy and the established strategy. Aiming to implement preventive measures to control risks and to systematically monitor them.

2 Scope

All routine or sporadic activities carried out by TCAP, whether on its own premises or on clients' ones, where services are provided, as well as those of all subcontractors who might be providing services in TCAP's premises.

3 Associated documents

- Legal requirements and applicable standards;
- Internal Security Plan (ISP).

4 Definitions and Abbreviations

- **Hazard Identification** – Process of recognising the existence of a hazard and defining its characteristics.
- **Hazard** – Source, situation or act with the potential for human harm in terms of injury or illness, or a combination of these.
- **Risk Level** – Combination of the probability of the hazardous event occurrence or exposure to it, and the severity of the injury or illness that can be caused by such event or exposure.
- **Acceptable Risk** – Risk that has been reduced to a level that can be tolerated by the organisation, taking into account its legal obligations and its own OSH Policy.
- **Damage** – Adverse physical or mental condition, identifiable as arising from and/or aggravated by work activities and/or work-related situations.
- **Risk Assessment** – Risk management process resulting from identified hazards, taking into account the adequacy of existing controls, which results in a decision on whether or not the risk is acceptable.
- **TCAP** – Toyota Caetano Portugal.

5 Annexs

- Table of Hazard Identification, Risk Assessment and Definition of Preventive/Corrective Measures.

6 Procedure

N.	Phase	Description	Responsibilities
			Execute
1	Hazard identification (or update)	The hazards resulting from any professional activity carried out at TCAP and/or clients' premises, which may constitute possible sources of harm to the safety and health of employees, are identified.	OHS Technician
2	Risk estimation	Defining the magnitude of each risk through its characterisation in terms of probability or frequency of occurrence and the severity of the consequences.	OHS Technician
3	Risk evaluation	Cross-referencing information on the "probability of occurrence" and the "severity of the consequences", in order to compare the magnitude of the risk with reference standards.	OHS Technician
4	Risk control	Proposal of prevention measures considering risk minimisation according to priority.	OHS Technician
5	Action Plan and Monitoring of Measure Implementation	Implementation of approved control measures according to the Intervention Level	OHS Technician

1 Hazard Identification

The hazard identification/update process will be carried out whenever there is:

- New facilities and equipment;
- Changes in the applicable legal requirements;
- Implementation of new activities;
- After internal audits, where unidentified hazardous situations are detected;
- Dangerous situations identified by any employee.

2 Risk Estimation

Risk estimation involves assigning levels to the Probability (PL) and Severity (SL) parameters.

The **Probability Level (PL)** is estimated based on the:

- **Deficiency Level (DL):** Consists in the extent of the expected articulation between the set of risk factors considered and, their direct causal relationship with the possible accident.
- **Exposure Level (EL):** Measurement for the frequency with which exposure to risk occurs.

Deficiency Level	DL	Meaning
Very Deficient (VD)	10	Existence of significant risk factors. The existing set of preventive measures is ineffective.
Deficient (D)	6	Existence of some risk factors that need to be corrected. There is little effectiveness in the existing risk prevention and management measures.
Improvable (I)	2	Risk factors of minor importance. There is some effectiveness of the set of preventive measures in relation to the risk.
Acceptable (A)	-	No anomalies detected. The risk is under control.

Exposure Level	EL	Meaning
Continuous (C)	4	Continuously.
Frequent (F)	3	Several times on its journey, for short periods of time.
Occasional (O)	2	Sometimes on their journey, for short periods of time.
Sporadic (S)	1	Irregularly.

Whenever situations of **legal non-compliance are detected**, they should be considered with **DL = 10.**

The **Probability Level (PL)** is equal to the product of the Deficiency Level (DL) and the Exposure Level (EL):

PL = DL x EL		Exposure Level (EL)			
		4	3	2	1
Deficiency Level (DL)	10	40	30	20	10
	6	24	18	12	6
	2	8	6	4	2

Probability Level	PL	Meaning
Very High (VH)	40-24	Deficient situation with continued exposure or very deficient with frequent exposure. Normally the materialisation of the risk occurs frequently.
High (H)	20-10	A deficient situation with frequent or occasional exposure. The materialisation of the risk may occur several times a day.
Medium (M)	8-6	Poor situation with sporadic exposure. Damage may occur at some point.
Low (L)	4-2	Improvable situation with occasional or sporadic exposure. Risk is not expected to materialise.

In the Consequence Level (CL), four levels are considered, each associated with injuries of different severity.

Consequence Level	CL	Personal Damage
Mortal Catastrophic (M)	100	Fatal injuries - 1 or more dead people.
Very Serious (VS)	60	Serious injuries (e.g. amputations; major fractures; poisoning, multiple injuries)
Serious (S)	25	Injuries with transient incapacity for work (e.g., lacerations, burns, concussions, major sprains, minor fractures, muscular and osteoarticular injuries and illnesses leading to minor incapacity).
Light (L)	10	Minor injuries without hospitalisation (e.g., superficial injuries, minor cuts or blows, bruising, eye irritation, headache, discomfort).

3 Risk Evaluation

The Risk Level (RL) is the result of the product between two parameters, the Probability Level (PL) and the Consequence Level (CL).

RL = PL x CL		Probability Level (PL)			
		40-24	20-10	8-6	4-2
Consequence Level (CL)	100	I 4000-2400	I 2000-1200	I 800-600	II 400-200
	60	I 2400-1440	I 1200-600	II 480-360	II 240 III 120
	25	I 1000-600	II 500-250	II 200-150	III 100-50
	10	II 400-240	II 200 III 100	III 80-60	III 40 IV 20

Risks are classified as acceptable or not acceptable according to the Intervention Level (IL) obtained.

Intervention Level	RL	Meaning
I	4000-600	Critical situation; urgent correction (Not acceptable risk)
II	500-150	Correct and adopt control measures (Not acceptable risk)
III	120-40	If possible, it can be improved (Tolerable/Acceptable Risk)
IV	20	No need to intervene unless justified by a more demanding analysis (Acceptable Risk)

4 Risk Control

In this phase, preventive measures are proposed for each identified risk in order to reduce it to an acceptable level. These are followed in accordance with the risk assessment results.

Proposal of prevention measures considering the minimisation of risks follows this hierarchy:

- Elimination;
- Replacement;
- Technical / engineering control;
- Signalling/warning/administrative controls;
- Personal protective equipment.

5 Action Plan and Monitoring of Measure Implementation

Description of the measures to be implemented, allocation of responsible people and dates for implementation and verification of the effectiveness of these measures through the organization's programs.

6 Activities of Subcontracted Companies

Subcontracted companies must comply with the requirements set out in the "External Company Regulations - Environmental and Occupational Health and Safety Requirements" in force at the Perimeter. All information sent will be analyzed, including the respective risk assessments and subject to validation by the QESE Departments of TCAP.