

Risk Management and Insurance

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José Manuel Inchausti Pérez

“In Spain and Portugal we share a common objective:
profitable growth”

CEO of the MAPFRE Iberia Territorial Area



Juan Jesús García Chaparro

“Risk management has been key to reaching each of
our milestones”

Chief Financial Officer at HISPASAT



Innovation culture as a competitive advantage

Josep Celaya



Advanced tools for the design, operation and safe management of industrial Installations

Gabriela Reyes Delgado, Pastora Fernández Zamora, Antonio Díaz Pérez,
Alfredo Ramos Rodríguez y Juan Santos Remesal



Campofrío Nueva Bureba: from crisis to opportunity



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Resilience, a term which is very much in use these days in the business world, is a person's, or a company's, capacity to confront situations of adversity and to adapt quickly to changes.

It is important to emphasize that it is not just a question of survival or resistance, it is about taking positive advantage of the adverse experience, to obtain a profit where none was expected, to convert it into an opportunity for creating solutions which will bring benefit either to the individual or the company, and which will subsequently be replicated to become standard practice in collective performance.

Some of the contents in our new publication are key factors in being able to confront these changing moments and convert them into favorable opportunities: digital transformation, innovation...


As pointed out by José Manuel Inchausti, CEO of the MAPFRE IBERIA Territorial Area in his interview, digital transformation and increased profitability are two of the major factors which will contribute to the company's growth in the coming years. Inchausti emphasizes that MAPFRE IBERIA is meeting its objectives and has initiated certain big data projects, with the aim of flying the flag for the future of insurance in current and future automobile and mobility models. And all this while promoting internal digital transformation in the company's teams of human resources, to better support all the developments going on around us.

In a very interesting article, Josep Celaya, Corporate Innovation Manager presents us with the model implemented by MAPFRE in this regard, and gives us his views on the need to promote innovation culture in the companies as a key factor in generating a clear competitive advantage in the current business world.

Following this line, we would like to present the case which we quote in our Claims Observatory. It concerns a compendium drawn up by the Campofrío company, which explains how the crisis arising with their facilities burning down in November 2014 opened the way for a great opportunity, thanks to the support of their employees, partners and clients.

We also include a very instructive article prepared by specialists in INERCO, which enlightens us on such an important issue as advanced tools for the secure management of industrial facilities. The article explains the key factors, methodologies and tools which asset managers may apply to meet business objectives but always from the SECURITY standpoint.

In this edition, we also interview Juan Jesús García Chaparro, Chief Financial Officer at HISPASAT, a leading Spanish communication satellite operator responsible for the distribution of content in Spanish and Portuguese, who explains how his company has managed to reach this position and what risks and challenges have been overcome on the way.



Additionally, we provide a detailed analysis of the IBERIA Regional Area which you'll find in the "MAPFRE in the World" section, along with current news on MAPFRE GLOBAL RISKS, AGERS, IGREA, FERMA and INADE, as well as the latest reports and rankings from MAPFRE Economic Research on the Spanish, European and Latin American insurance market.

It is clear to us that today's challenge, both as individuals and organizations, is the need to face a world undergoing constant change, eager for new ideas, information and knowledge, and this is what we are also working for in this Review. ■



Risk
Management
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José Manuel Inchausti Pérez

CEO OF THE MAPFRE IBERIA TERRITORIAL AREA

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In Spain and Portugal we share a common objective: profitable growth

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In the following interview, José Manuel Inchausti Pérez explains that the MAPFRE IBERIA Territorial Area is meeting its objectives, while at the same time trying to increase internal digital control and the speed at which some innovations and operations are implemented. He also points out that the new model for the Global Risk business to be implemented in the market for the IBERIA regional area is similar to that which is being successfully applied in those countries where MAPFRE has a direct insurance company.

Risk Management and Insurance (hereinafter ‘GRyS’): As the CEO for the MAPFRE IBERIA Territorial Area since 2015, what developments have you seen in the company over the last two financial years?

Jose Manuel Inchausti Pérez (hereinafter ‘JMI’):

In the light of our results I would say that the developments have been very positive, with progress being made in projects defined by the previous management as well as in other new ones; all the result of the current management team’s commitment and hard work and thanks to the support and involvement of all the areas and personnel which make up this company, including of course our sales network. When I took on the management of MAPFRE IBERIA we redefined an ambitious strategic plan very much in line with the Group and which we have been modifying and simplifying according to requirements. We also counted on everyone’s participation and we are seeing the results of applying it meticulously.

In September 2017, MAPFRE IBERIA reported a 3.7 percent growth in premiums to a figure of 5.26 billion euros, and a ROE of 13.5 percent. We have made major efforts to adjust and connect up areas to become less isolated and more collaborative in our work, and although we are very satisfied, we are aware there is much more to be done. It’s a difficult market and our challenges and growth objectives for 2017 are once again very ambitious.

‘GRyS’: Your previous responsibilities also included those of General Manager of the Business Support Area, General Manager of Technologies and Procedures and Regional General Manager in Catalonia. What general and specific goals did you set and did you meet each and every one of them?

‘JMI’: These experiences were both very different and enriching at the same time because of the professional and personal experience provided by each of them. My experience in Catalonia taught me a great deal about the essence of the business together with sales strategy and the problems involved in running a territory. The perspective and knowledge acquired then have since been of great help in undertaking my current responsibility. Both experiences have made me aware that there should be a high level of proximity and understanding between the head office and the territory so that everything is more fluid and the company reaches its global objectives working from local targets being met.

“It’s a difficult market and our challenges and growth objectives for 2017 are once again very ambitious”

In the business world, it’s extremely important to have a thorough knowledge of the activity itself and of the region; a competitive offering and adequate management tools; to make the teams properly aware of the company’s strategic objectives; and to put together sales teams that are technical, professional and committed to encouraging the growth of the business and solving problems. A business manager should constantly have these variables in mind.

In the Business Support Area, I discovered a completely different world. It was like being on the other side, seeing things from the perspective of a MAPFRE customer service provider. Not only that, I also arrived at a moment when everything needed to be restructured and we were working very hard on many fronts. Many aspects

were redefined, IT guidelines were set down and strategies were established throughout the world and global initiatives were encouraged that had special significance for the company.

“In September 2017 MAPFRE IBERIA reported premium growth of 3.7 percent, a combined ratio of 94 percent and a ROE of 13.5 percent”

An added value IT proposition was what was required on the part of MAPFRE, one that provided service and solutions for the different needs of its companies. This was not an easy task, and I believe that the DCTP took a great step forward, focusing more on the client and trying to satisfy business demands much more quickly. I really was very satisfied with the work we did there, and I would like to thank all those who worked so hard with me during those years.

‘GRyS’: You also have broad international experience, since you have been President of MAPFRE COLOMBIA, General Manager of MAPFRE SEGUROS GENERALES COLOMBIA and Operations Manager of VERA CRUZ VIDA E PREVIDENCIA BRAZIL. What importance have these two countries had, and the whole of Latin America in general, on the company’s strategy?

‘JMI’: Our company has had a presence in Latin America since the eighties and our growth in this market has been progressive and in general very productive, in spite of the ups and downs that come with any investment due to the political, social and financial fluctuations that occur, maybe here more so than elsewhere. Natural disasters in these

countries also cause very substantial damages and have a high impact on results. The latest regional reorganization undertaken by MAPFRE has been very positive and changes in management and agreements signed with benchmark finance and insurance companies in some countries are starting to bear fruit.

In Brazil, for example, in spite of the country’s current economic slowdown, the effects of which are of course being felt in the company, the agreement with Banco do Brasil which has been in place since 2009 is working very well, and this region continues to post the second best results for the Group.

“Latin America, with a contribution of 6.2 billion euros in premiums at the close of September, continues to be a priority region where MAPFRE can still go much further”

Latin America in general, with a contribution of 6.2 billion euros in premiums at the close of September 2017 (+14 percent), remains a priority region where MAPFRE can still go much further, and where we continue working to narrow the enormous social gap in many of these countries and to promote an insurance culture, while providing the public with better protection against real risks.

I would also like to highlight the splendid work being done by Fundación MAPFRE in Latin America, the region where social activity and corporate volunteering within the Group is most developed at this time.

‘GRyS’: What challenges and general objectives have you now set for yourself in charge of the IBERIA Territorial Area?

‘JMI’: Spain and Portugal are two countries which are very different in terms of business weight and require specific attention, and management and commercial strategies. Nevertheless, although the challenges are different, we share the same common objective with the whole company: profitable growth. In Portugal we have just made an important management replacement which will help us to promote new and better dynamics within the country. Recently, we have also signed a strategic agreement with Bankinter Portugal for the distribution of Non Life insurance to the bank’s clients by means of exclusive products. All this will provide us with more visibility and business in the country.

In Spain the main challenge is to “beat the market” and we are on the right track here, although we are also aware that this is a very mature and competitive market that’s still recovering from the most serious crisis of recent decades. In spite of everything, we are proud of the results reported in September, because they show very solid growth in both premiums (+3.7 percent) and profits (+9.2 percent), and very favorable business performance in the main lines –particularly the Automobile business with premium volume of 1.65 billion euros (+3.3 percent). All this is the result of strict compliance with our strategy, hard work by all the teams, and Spain’s general economic recovery.

Overall, I would say that the IBERIA region is progressing generally in accordance with the objectives, while at the same time trying to increase internal digital transformation and the speed with which we implement some of the innovations and operating systems which we would like to be more evident for the client. There are still important challenges to be faced, many relating to digitalization, operational efficiency and the management of talent and people, including a generational change.

‘GRyS’: It is a fact that digital transformation and increased profitability are among MAPFRE’s greatest challenges for growth in the coming years. How are these objectives currently being developed in Spain and Portugal?

‘JMI’: We’re making a lot of progress on both these fronts, but we still need to be more agile in project implementation for the results of the improvements to arrive faster. Where profitability is concerned, the selection of risks we are making in unprofitable portfolios is very positive.



We have already digitalized and connected many of the main operating systems for communication, information and customer service, and we have the sales management tools which will facilitate mobility in our sales network. What’s more, in a client portfolio as broad as ours, in which we

address an enormous volume of services, just the projects implemented for the management of service providers imply important savings in costs and therefore a significant increase in profitability. If we were to transfer this search for efficiency in processes (we are applying the LEAN method) to any other area within the company, the savings would be very significant. We are still working on this: digitalization and the improvement of processes.

“MAPFRE is company capable of providing expert attention and service for the traditional client and at the same time a company which is increasingly accessible and available to the digital client”

We also have big data projects underway and we would like to be the flag bearers of the future for insurance in the automobile and mobility models that are arriving and that are still to come. We are also promoting the internal digital transformation of our human resources to give better support to all this transformation which surrounds us. As far as I'm concerned, MAPFRE is a dual company, one capable of providing expert attention and service for the traditional client and at the same time a company which is increasingly accessible and available to the digital client.

‘GRyS’: With regard to global risk insurance companies, MAPFRE is the leader in the Spanish market. Could you provide us with more details on the new business model for these risks for Spain and Portugal and what impact this will have on the markets in which it is introduced?

‘JMI’: The new model for the Global Risks business to be implemented in the market for the IBERIA

Regional Area is similar to the model which is being successfully applied in those countries where MAPFRE has a direct insurance company.

From January 1, 2018, we are going to launch this model in Spain and Portugal: MAPFRE Spain will market and manage this business from an integral client standpoint and MAPFRE GLOBAL RISKS will contribute its technical capacity and experience in the implementation of International Programs. In the end it's all about taking maximum advantage in the Spanish market of the model defined in MAPFRE for the management of major risks so as to provide our clients with the best possible service and to be able to develop other lines of business in its insurance programs.

“The new model for the Global Risk business to be implemented in the market for the IBERIA regional area is similar to the model which is being successfully applied in those countries where MAPFRE has a direct insurance company”

‘GRyS’: The internationalization of major Spanish companies is an established fact; medium and small companies have also started to be implemented in other countries as a result of diversification and growth requirements. Is this company profile also the objective for this new focus?

‘JMI’: That's right, it is not only the major multinationals which are experiencing significant successful international development but also small and medium-sized companies. As a leader in this sector, MAPFRE should also accompany small and medium-sized companies in this exciting phase by offering them a first-class insurance solution.

‘GRyS’: The company’s Risk Manager is essential in this field. What is your opinion of this role and MAPFRE Spain’s relationship with the major Spanish risk manager associations AGERS and IGREA?

‘JMI’: For us the position of Risk Manager is absolutely essential to be able to collaborate with the company in the protection of its assets and in the transfer of its risks to the insurance market. Risk Managers are those who enable us to understand the reality of their companies, their risk levels and protection and together with them and the brokers we are finally able to design the insurance protections for their balance.

MAPFRE has always had a strong belief in risk management and in protection, with ongoing improvements in insurance against fire and the other dangers which threaten the activity of our Clients. Since the establishment of these two management associations in Spain (AGERS e IGREA) we have collaborated closely with them, with two clear objectives: to make the position of risk manager visible and to publish the maximum number of best practices possible in this field.

‘GRyS’: Other essential players in the field of company insurance are the brokers. How do you rate their role and how does MAPFRE approach its relationship with them?

‘JMI’: Quite right. The broker is also another key figure in the design of the insurance programs and in guaranteeing service quality in this business segment. Almost all insurance for major companies is brokered, particularly by the so-called megabrokers, who could well have a market share exceeding 60 percent.

‘GRyS’: The complexity of this segment requires profound knowledge of the inherent technical risks. What role does MAPFRE’s engineering department play in the process

of insuring against them?

‘JMI’: ITSEMAP, as MAPFRE’s Risk Engineering Department, plays an essential role in the evaluation, assessment and improvement of our clients’ risks as well as their prevention, together with the risk managers and the brokers.

At a time like this, with a soft market, it’s even more important for a professional insurance concern like MAPFRE to make a suitable assessment of the risk present in our current and future portfolios, so as to optimize our exposure and achieve healthy development of our insurance activities.

“We will continue to make a suitable selection of risks and present our clients with proposals which are tailored to their current and future requirements”

‘GRyS’: What elements will be prioritized in the profitable growth strategy to make MAPFRE’s competitive position even stronger in the companies sector?

‘JMI’: MAPFRE is essentially a benchmark in this sector but we mustn’t drop our guard. We will continue to make a suitable selection of risks, always monitoring significant deviations in the portfolio, diversifying our offer and presenting our clients with proposals which are tailored to their current and future requirements.

We will also continue to promote the exploitation of the management tools and CRM company information at our disposal, offering value propositions to both small and medium-sized companies and to multinationals, using tools like our Empresas 360° model for example, which provides the entrepreneur with a fantastic risk map. We are a benchmark in integral assessment for the

company and we will continue to strengthen our relationship with brokers so that we will always be their first point of reference in insurance.

‘GRyS’: What characteristics and risks are similar in the Portuguese and the Spanish markets and which are different? Do these peculiarities require specific strategies for each country?

‘JMI’: The insurance requirements for Spanish and Portuguese society and clients are similar and both markets present similarities as regards maturity, development, finance culture, etc. However, our positioning in each market is logically somewhat different. Spain accounts for 98 percent of MAPFRE IBERIA’s total premiums.

The strategic plan defined for Spain and Portugal is the same overall, but there are specific objectives, initiatives and projects which respond to the realities and the requirements of each country at a given time. Spain and Portugal share guidelines, management models, knowledge, a large part of our product and services catalog and the good practices which are applicable and generate synergies, but we also personalize, for example, distribution models for intermediaries, finance companies, etc. To replicate the sales network we have in Spain would be difficult but our aim is to increase our network of collaborators in Portugal and this is exactly what we’re doing.

MAPFRE’s challenge in all the markets where we operate is to maintain profitable growth and either be leaders in the sector or hold a significant position in the country’s insurance industry. This is the objective we are working toward.

‘GRyS’: You have expert knowledge of the insurance industry, since in addition to your responsibilities in MAPFRE, you are a member of the Governing Council of ICEA (Cooperative Research among Insurance Companies), Vice Chairman of UNESPA (Spanish Union

of Insurance and Reinsurance Entities) and Chairman of the Automobile Insurance Committee. What are the main challenges facing Spanish and Portuguese insurance companies at this moment in time?

‘JMI’: I find it very satisfying to collaborate and be involved with the benchmark insurance institutions in our country, as well as our managers in Portugal who are involved with those in their country. I also have a very good relationship with the managers and the teams with which we work, both in UNESPA and in ICEA. We are all well aware of the great challenges we are facing and we are working together to transmit some of the demands we feel are necessary to the political institutions, and at the same time to send messages regarding insurance culture to society at large.

The General Insurance and Pension Fund Division (DGSFP in Spanish) recently mentioned specific new challenges for the sector in Spain which I wholeheartedly endorse: to consolidate what the sector has achieved by remaining strong during the crisis, at levels exceeding 5 percent of GDP; to manage the low interest rate environment which has had such an impact on investment profitability and mainly on insurance portfolios with a high guaranteed interest rate (risk mitigated in insurance via matching adjustments); to manage population aging and longevity; to continue with the implementation of Solvency II and the regulations being approved in the sphere of insurance distribution and the protection of the insured parties; to take advantage of the benefits of technological innovation and to manage its risks; to improve client satisfaction; to develop the teams required for good business management in the current market; to search for new markets and alliances and to take correct decisions in the digital age.

When I put it like that it sounds easy to address everything, but each of these factors involve significant demands, requirements, decisions, administration and hard work. requerimientos, decisiones, gestiones y trabajo duro.

PROFOUND KNOWLEDGE OF THE SECTOR AND BROAD INTERNATIONAL EXPERIENCE



His profound knowledge of the Spanish insurance industry and his broad international experience are two of José Manuel Inchausti's best calling cards. A Graduate in Law at the Universidad San Pablo CEU and in Insurance Sciences at the Centro Universitario MAPFRE (CUMES) and PADE from the IESE Business School, he is a MAPFRE Manager with profound knowledge of the Spanish insurance industry and has broad international experience. He joined the company in 1988 at the age of 24, and his professional development has been outstanding, occupying management positions in different companies and corporate areas within the Group.

From 1996 to 2002 he managed the MAPFRE companies in Brazil and in Colombia, before returning to Spain as Regional General Manager for Catalonia. "I have special memories of the time I spent in Colombia because of the vital moment in which it occurred, and from my experience in Catalonia I would like, above all, to highlight the learning process involved in understanding the business linked with the sales activity and the local reality of a territory", explains Inchausti.

From 2007 to 2014 he played a key role in the company managing the DCTP (Corporate Technology and Processes Division), "quite a different activity which enabled me to understand MAPFRE as a client, from the perspective of a provider of technological services". In acknowledgment of his work in this field, José Manuel Inchausti was named 2012 European CIO of the Year by the international community of CIOs, CIONET, and the INSEAD Business School. In 2014, under his stewardship, this general management was transformed into the Corporate Business Support Area, which combines the areas of Technology and Processes, Operations and Digital Business. In January 2015, José Manuel Inchausti was appointed Territorial CEO for IBERIA, with maximum responsibility for the regional area which includes Spain and Portugal. He combines his current position with that of Trustee of Fundación MAPFRE, along with other responsibilities within the company.

Also worth mentioning are his positions as Vice Chairman of UNESPA and member of the Governing Council of ICEA; he highlights his continuing "excellent relationship" with the management and teams of both organizations, noting that "they, like us, see major challenges in the road ahead, and we are joining forces to drive the insurance industry in Spain."

Inchausti says his main hobbies are his family, his friends and "the occasional game of paddle tennis" with his colleagues in MAPFRE when time permits. But his favorite hobby is singing in a choir, "because it's probably one of the best examples of teamwork there is". ■

Juan Jesús García Chaparro

CHIEF FINANCIAL OFFICER
AT HISPASAT

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Risk management has
been key to reaching
each of our milestones

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Juan Jesús García Chaparro, Chief Financial Officer at HISPASAT, asserts that risk management has been a key tool in reaching each of the company's milestones over the years. In this interview, the director explains how the company has demonstrated over the years that it is highly resilient to adverse circumstances, which it has satisfactorily overcome thanks to risks having been identified and analyzed in advance, contingency plans having been defined and given the insurance coverage being adequate and sufficient.

Risk Management and Insurance (hereinafter ‘GRyS’): HISPASAT is the Spanish communications satellite operator, leader in the distribution of content in Spanish and Portuguese. How has it assumed this position and what risks or threats has the company had to overcome on its journey?

Juan Jesús García Chaparro (hereinafter ‘JGC’): The leadership position assumed by HISPASAT in Spanish and Portuguese-speaking markets is attributable to a long transformation and internationalization process. When it was founded in 1989, HISPASAT was a public company that was created by the Cabinet to provide a response to Spanish satellite communication needs. It is worth remembering that, at the time, telecommunications were still a public service. HISPASAT was created in order to serve as a driving force and catalyze Spanish industry in the field of aerospace.

Following the liberalization of telecom industries during the 1990s, HISPASAT gradually became a commercial organization that had to compete on the market with other operators and earn the trust of clients. This transformation represented a huge challenge to the organization, which had to learn to understand market laws against an initial backdrop in which, to some extent, our clients were “cautious” and the capacity of our first satellites had been sold in advance. In truth, the company passed this challenge with flying colors, having confronted the market and come out on top: as a result, in 1997 and 1998, the two HISPASAT satellites, Hispasat 1A and 1B (which have now been taken out of geostationary orbit) were completely occupied.

However, this situation of complete occupancy represented a threat to HISPASAT, given that it couldn’t either respond to the growing needs of existing clients or serve or capture new commercial opportunities. The company therefore committed

to growth and internationalization. The fleet expanded with the Hispasat 1C and 1D satellites for traditional markets, and we took a huge step forwards in terms of quality and capacity, expanding into Latin America; this was the key, highly successful venture to which the company’s position in the sector today can be attributed.

“The leadership in Spanish and Portuguese-speaking markets is attributable to a long transformation and internationalization process”

‘GRyS’: Could you provide us with more details on this expansion?

‘JGC’: In 2000, we won a contract with the Brazilian regulator for a wholly American orbital position. In 2002, we opened our office in Río de Janeiro and founded our subsidiary, HISPAMAR, and in 2004, launched our first Amazonas satellite, targeting the Latin American market, which during its first year of commercial operation, captured more than 75% of the growth in the region’s satellite market.

To reach each of these milestones that have proved to be key in the company’s history, which represented a huge challenge for the organization, risk management associated with this type of transformation process has been a key management tool.

To date, HISPASAT has launched 11 satellites and will soon launch the H30W-6, operating a fleet of seven own satellites and three shared with other operators from six different orbital positions. In addition to Spain, we are also present in Brazil, Mexico, Argentina and Colombia and provide services to clients in more than twenty countries.

‘GRyS’: What financial-economic model has been established by the company and what are the main objectives it has set in this regard?

‘JGC’: In summary, the economic-financial management model is based on a basic principle, structured around strict financial discipline and prudence criteria; it is reflected in three lines of action, which in themselves represent continuous management objectives.

Firstly, offer our shareholders high returns in all investment projects in new satellites proposed to the Board. Secondly, establish strict control on the costs of our operations to ensure a high level of efficiency that is reflected in a high EBITDA or operating income. Today, HISPASAT is one of the most efficient operators with one of the largest EBITDA’s in the sector. And finally, retain a balanced structure of capital based on an appropriate level of leverage.

“To date, HISPASAT has launched 11 satellites and will soon launch the H30W-6”

‘GRyS’: What role does risk management play at the company and what model has been implemented to develop it?

‘JGC’: Risk management at HISPASAT plays a key role. Although risk management is, or at least should be, a key aspect for all decision-making at companies, both in terms of the day-to-day operations of the business and strategy (reputational, regulatory, market), risk management takes on an even more important role at HISPASAT. This is because of the specific nature of our business,



as our operating assets, satellites, are located in an inaccessible location and, therefore, it is impossible to perform repairs in situ for any incidents that may arise.

“Our economic-financial management model is based on a basic principle, based on strict financial discipline and prudence criteria”

This entails adopting a model based on the three basic aspects of all risk management models: analysis and identification, prevention and transfer, both to the manufacturer of the satellite and the insurance market, ultimately retaining the portion of the risk considered assumable.

As part of the process of selecting a manufacturer for a new satellite, one of the most important aspects of the technical assessment between the different alternatives is the level of internal redundancies in the satellite for the most critical equipment, such as the testing plan, both on land and in orbit, which ensure that the prevention plan is appropriate in terms of all possible operating contingencies. Furthermore, in terms of the HISPASAT land segment, we have different control centers from which the fleet can be operated, thus guaranteeing the continuity of operations. These centers boast sophisticated prevention, protection and security systems.

Furthermore, in our contracts with manufacturers, we tend to establish the requirement that they assume a significant part of risks, both in terms of the program's execution deadline and compliance with technical requirements and the satellite's functionality in orbit throughout its useful life.

Finally, one year before the expected launch date and having completed the satellite's technical design, activities are planned to take out insurance that covers both launch risks and operations in orbit, starting with a technical presentation of risks to the space insurance market.

'GRyS': At the moment, what are the main internal and external risks to which a group like yours is exposed? How are the different managers and departments involved in tackling these risks?

'JGC': The main internal risks we face correspond, on the one hand, to operating risks, such as failing to comply with the schedule established for manufacturing new satellites or circumstances that may affect satellites whilst in orbit, which have a greater potential impact and for which specific contingency procedures have been drawn up; and on the other, risks associated to commercial credit management. In this regard, it is worth noting

that, although approximately 70% to 80% of our production is allocated to large-scale operators and other broadcasting groups, the rest is very fragmented and geographically dispersed; this requires significant control and monitoring efforts within the parameters established in the group's internal policies.

In this regard, HISPASAT has demonstrated over the years that it is highly resilient to adverse circumstances, which it has satisfactorily overcome thanks to risks having been identified and analyzed in advance, the contingency plans defined and the insurance coverage being adequate and sufficient.

“HISPASAT has overcome adverse circumstances thanks to risks having been identified and analyzed in advance”

'GRyS': And in terms of external risks?

'JGC': In essence, we face two external risks: regulatory and compliance risks, which may affect the legal conditions relating to the provision of services in the different countries in which we operate and other regulatory changes; for example, in terms of tax, which has a direct impact on the profitability of operations. And financial risks associated to the macroeconomic environment of the different countries in which HISPASAT provides its services, in essence, exchange rate developments.

In terms of internal coordination and risk monitoring, a specific team has been set up in the Internal Audit department, which is responsible for continuously assessing the risk map and coordinating the managers of each department directly involved in the management of each risk. Furthermore,

every six months, the Board's Audit Committee is provided with a report on the evolution of the risk map, identifying both new risks and those that have evolved significantly since the last assessment, having been partially or completely mitigated or having disappeared.

‘GRyS’: What external support is available as part of this risk management?

‘JGC’: To design the insurance program and take out the range of policies, we actively work with brokers, depending on their specialization in specific types of risk: space risk, damage to property, third-party liability, life and accident, transport, etc. Naturally, the most complex insurance program that requires most efforts and resources is the policy to cover risks associated with the launch and orbit operations of satellites, in addition to the successive annual renewals once in orbit.

To design the risk map and implement the software tools that make it possible to manage the monitoring of defined risks or incorporate new ones, we receive consultancy services from a major international consultancy firm. Our risk map has been developed by the Internal Audit Department and we use it to clearly identify the risks that, both given the probability of them occurring and the impact that they could have on the income statement, are considered most critical and whose management requires most attention from senior management.

Furthermore, we receive continuous consultancy and support from an expert with a wide range of experience in the sector, who has collaborated with us for a number of years now and who, rather than providing external support, really forms part of the HISPASAT family.

‘GRyS’: Through its large-scale fleet, HISPASAT distributes more than 1,250

television and radio channels. What measures do you take to make sure everything works correctly?

‘JGC’: As I have already mentioned, our satellites are designed and set up with a high number of technical redundancies built-in on-board to preserve a high level of quality and availability of the payload that serve as the basis for offering services to our clients. We also have several locations both to control the satellites and to manage the telecommunications signals that they broadcast.

And finally, our operating procedures are very solid thanks to our 25 consecutive years of experience operating satellites in orbit and, of course and most importantly, a team of first-rate professionals and technicians, whose expertise and unrivalled professional worth make everything seem so simple and who ensure that everything goes like clockwork.

‘GRyS’: What risks do satellites recently commissioned by the company face and what security measures are in place?

‘JGC’: In reality, the same risks as other satellites we have launched previously. We have a standard policy in terms of quality control throughout the manufacturing process and in terms of the exhaustive testing plan we demand from the manufacturer to ensure compliance with technical specifications. New satellites also feature equipment that makes it possible to encrypt telecommunications signals to provide more secure communications services. And we have adequate insurance coverage and defined contingency plans to resolve any incidents that may occur.

‘GRyS’: The company is also a key catalyst of the Spanish aerospace industry. What role does it play and what added risks does it face in this regard?

'JGC': Since its foundation, HISPASAT has sought to collaborate with the Spanish aerospace industry and serve as a catalyst in a leading industry, in which our country has achieved a very noteworthy position in terms of the generation and development of cutting-edge technology.

To this end, the company has developed an industrial development plan that has generated more than one million euros for Spanish companies in the industry over the past 25 years thanks, on the one hand, to the components and equipment we fit into our satellites and, on the other, the commitments we demand from the large international manufacturers we work with, who are obliged to purchase equipment from Spanish companies for a value equivalent to our investment in each satellite in the ten years after construction. As a result, we have contributed significantly to the internationalization of the Spanish space industry and increasing its revenue.

Furthermore, we provide an additional service to innovative companies who develop new systems or elements for satellites, offering them the opportunity to test them in orbit in our missions. By doing so, they can test their efficiency and proper operation in flight, which is essential in order to subsequently market this equipment.

“We have contributed significantly to the internationalization of the Spanish space industry and increasing its revenue”

'GRyS': HISPASAT has consolidated its position in high-growth markets. What are the characteristics of these markets in terms of financing and risks?

'JGC': Many countries in Latin America, where HISPASAT has focused its international strategy since the turn of the century, are considered emerging markets, which are characterized by the fact that they have embarked upon the industrialization process and offer quick economic growth with figures in the first decade of the new millennium that surpass those of industrialized countries. This development went hand-in-hand with an increase in the spending power of consumers, the expansion of the middle class and, as a result, the growth in internal demand, increasing their growth potential.

As part of this process of regional transformation and modernization, satellites have played an essential role, facilitating the quick deployment of telecommunications networks, both for the corporate and residential segments.

However, and despite the significant efforts made by most Latin American countries to apply orthodox macroeconomic management, which has made it possible to reduce many of the imbalances in their economies, the economic and political bases on which their economic and social development is structured are still vulnerable to both external factors, such as the downturn in the price of raw materials, and internal factors, primarily, the risk of political instability. As a result, we must analyze and monitor economic and political events to remain aware of possible and real impacts that could affect the business models and strategies in the region.

'GRyS': HISPASAT has a stable base of strategic clients. How are they affected by the solid financial management of the company and optimal risk management, and how are these factors important to them?

'JGC': In essence, the main telecommunications operators with a presence in Latin America and in the

Iberian market, provide most of their communications services by satellite via our fleet and represent a significant part of our turnover. Furthermore, our relationship with them dates back many years, and we have been and continue to be capable of offering solutions to their needs in terms of growth and the roll-out of new applications and services. Therefore, our relationship goes far beyond just a one-off contract to cover a specific need; rather, we are prepared to serve them and respond to them each and every day with the agility and solvency that our clients need, both in the short term and in the long term.

“I don’t think there are any differences in terms of risk management between European and American companies, or at least there shouldn’t be”

This quick response time, which can entail new satellite programs being rolled out in a short space of time, is only possible thanks to a solid business model, constrained, well-controlled and managed risks, a strong and healthy balance sheet, a balanced financial structure and the support of both our shareholders and the financial market.

‘GRyS’: HISPASAT has a strong presence on the Iberian Peninsula and in Latin America, where it is now the fourth largest satellite operator. Do you believe there are differences when it comes to risk management between European and American companies?

‘JGC’: I don’t think there are any differences in terms of risk management between European and American companies, or at least there shouldn’t be. The risk management model implemented at most companies is based on commonly developed international methodologies and standards.



The specific risks to which different companies are exposed depending on the country in which they are located and how they have to manage them depending on their own specific circumstances are another thing.

‘GRyS’: What national and international risks do you constantly have to be alert to?

‘JGC’: This is a very broad question and can be approached from a range of different perspectives. I would focus mainly on political risks given the instability they entail, they are of great significance to the environment in which companies’ operations are undertaken and as they can trigger other risks: financial, regulatory, etc. The case of Venezuela is a clear example of what I’m trying to illustrate.

Attention must also be paid to regulatory and compliance risks, which in recent years have occupied the top places

in the Top 10 of international risks for companies, both given the implications on business development and the strengthening of sanctions at both national and international levels.

To this end, HISPASAT has, just like other multinational companies, an international insurance program to protect its installations and interests in all the territories in which we have an operational presence. Furthermore, it has implemented a system for managing and preventing legal risks and has a Chief Compliance Officer, who oversees regulatory compliance and risk control relating to civil, administrative and criminal legislation.

‘GRyS’: In your opinion, how have risks in the telecommunications sector and the satellite market evolved? What are the major concerns of sector leaders and what new threats might emerge?

‘JGC’: The satellite sector is currently immersed in a process of technological transition. Furthermore, the telecommunications industry is experiencing a dizzying process of change resulting from the digital transformation and defined by an exponential increase in connectivity capacities. The evolution of technology in fixed telecommunications (both copper and fibre), mobile (from 1G to 5G, which will be a reality in the not too distant future) and satellite networks via new VHTS satellites is allowing for new business models to appear, offering users an innovative experience, which seems to be satisfying society’s demands, based solely on quick penetration figures.

This new generation of satellites is capable of offering new data transfer speeds (Gbps) that are 100 times faster than those achieved with traditional satellites and at a cost per Gbps that is much lower than the current cost, comparable to the cost of fiber.

On the one hand, this could be understood as a latent threat to the industry, insofar as it will introduce greater competitive pressure on the prices of space capacity. However, at the same time, we are convinced that satellites

will play an essential role in this new digital environment, making it possible to offer additional opportunities and new business models based on the development of new services and applications to provide connectivity everywhere. Domestic broadband, the development of mobility services, mobile backhaul which, with new 5G technology, will be even more important to provide support to mobile networks, etc. will be the new market segments developed in this new technological cycle that will, in short, ensure greater integration between all telecoms networks: fixed, mobile and satellite. ■

A CAREER LINKED TO HISPASAT



‘GRyS’: Could you describe your professional history and the challenges and objectives that you have faced in each of the roles you have occupied during your career?

‘JGC’: My professional career has been linked almost in its entirety to HISPASAT, where I have now been for 27 years. After a short 2-year period as Finance Director at an industrial certification company, I joined Hispasat in November 1990, shortly after its creation, just after it has reached the milestone of completing the design of the first satellites: the 1A (we celebrated 25 years since its launch, on September 11) and the 1B.

When I joined HISPASAT, I was originally responsible for financial planning. I had to create a business plan for the company and the tariff model applicable to each of the missions upon which the first satellites embarked. A few months later, the first kick-off was held to prepare the insurance program and the coverage of the program’s different risks, as part of which we assessed a different group of international brokers and also received support from a work group that was created specifically for this purpose and included the main insurance managers at our principal shareholders: POSTAL SEGUROS GENERALES (through Caja Postal), MUSINI (through INI) and the insurance and risks department at Telefónica, whose involvement was essential in organizing the insurance program, considering that there was no precedent for a program of this nature in Spain.

Gradually, I assumed new responsibilities in the Finance Department: Financing, Budgets, Treasury... and in 2002, coinciding with our deployment in Brazil, I assumed the role of Chief Financial Officer at the company, the position I have served ever since.

‘GRyS’: On a personal note, could you tell us a little about your hobbies and how you manage to balance your professional and personal life?

‘JGC’: I love travelling with my family. We always try to organize a long-haul trip and we really enjoy that time together. I am also a sports fanatic. I really like football and attend matches fairly frequently. I also really like other sports like basketball, tennis, Formula 1, cycling and tend to exercise an hour a day and play golf when I can.

I am gradually trying harder to strike a work-life balance and am more aware of the need to be better organized and more productive in terms of time management; however, I am very fortunate in that I have a family that is very patient and supports me in everything I do, despite the frequency with which I work beyond reasonable working hours (more than is recommendable and than I would like). So I set weekends aside and dedicate them completely to my family. ■

Events of the sector, january - june 2018

| EVENT | DATE | VENUE | ORGANISER |
|--|-------------------------|-----------------------------|---------------------|
| XIX Windstorm Insurance Conference | 15 january - 19 january | Orlando, FL (USA) | WIND |
| Pharmacovigilance & Risk Management Strategies | 22 - 24 january | Washington, DC (USA) | DIA |
| XVII Annual Global | 23 - 25 january | Dublin (Ireland) | EUROMONEY SEMMINARS |
| World Captive Forum | 31 january - 2 february | Harbor Beach, Orlando (USA) | BUSINESS INSURANCE |
| 5th Insurance Claims & Underwriting Management | 6 - 9 february | Singapur (Asia) | EQUIP GLOBAL |
| Rencontres | 7 - 9 february | Marseille (France) | AMRAE |
| Insurance week | 13 - 15 february | Madrid (Spain) | INESE |
| Annual Conference | 14 - 16 february | Monterey, CA (USA) | PARMA |
| Insurance Risks Management Annual Forum | 21 - 24 february | Austin, TX (USA) | ABA |
| MARSH | March | Wiesbaden (Germany) | MARSH |
| Annual Risks Management Convention | 6 - 7 march | New York, NY (USA) | GARP |
| CICA International Conference | 11 - 13 march | Scottsdale (USA) | CICA |
| AGERS Catalonia Conference | March | Barcelona (Spain) | AGERS |
| Risk Forum | 15 march | Stockholm (Sweden) | SWERMA |
| Life Insurance Conference | 9 - 11 april | Chicago (USA) | LIMRA |
| Annual Conference & Exhibition | 15 - 18 april | San Antonio, TX (USA) | RIMS |

Events of the sector, january - june 2018

| EVENT | DATE | VENUE | ORGANISER |
|---|------------------|-----------------------------|------------------|
| Governance, Compliance & Operational Risk | 18 - 19 april | Cambridge, MA (USA) | RMA |
| Congreso Regional de Seguros | 18 - 20 april | Costa Rica | COPAPROSE |
| Aviation Insurance Annual Conference | 28 april - 1 may | Austin, TX (USA) | AIA |
| X International Insurance Conference | 24 may | Madrid (Spain) | INSURANCE EUROPE |
| Congreso Anual | June | Madrid (Spain) | AGERS |
| Annual Conference | 3 - 6 june | Indianápolis, IN (USA) | PRIMA |
| AIRMIC | 11 - 13 june | Birmingham (United Kingdom) | AIRMIC |
| XLIII Annual Convention | 13 - 15 june | Bath (United Kingdom) | BISA |

MAPFRE GLOBAL RISKS takes part in the FERMA Forum 2017

MAPFRE GLOBAL RISKS ORGANIZED THE LAST OCTOBER 16TH TWO RECEPTIONS, ONE FOR AGERS MEMBERS AND ANOTHER ONE FOR INTERNATIONAL CLIENTS AND PARTNERS.



On behalf of MAPFRE GLOBAL RISKS participated in these events Bosco Francoy (COO), Chris Smith (CRMO), Jean Marie Haquette, director of MGR in France, Manfred Alsdorf, director for Germany, Greg Harris, UK director, Alejandro López Aliaga, head of Business Development of MGR, Cristina de la Lastra Haro, head of Communication and Marketing of MGR, as well as Carlos Vasquez, Manager of International Underwriting and Peter Clark, Senior Underwriter.

In the first Reception were present representatives of Spanish large corporations as well as members of the Board of AGERS, while the International Reception brought together partners and clients from all over Europe, especially from the countries where MAPFRE GLOBAL RISKS has presence: UK, France, Germany, and Italy.

FERMA European Risk Management Forum 2017 is the largest pan-European event for large risks management, its edition is biannual, and it brings together the main players in the sector. ■

MAJOR RISKS SEMINAR IN MEXICO



On October the 13th, the Major Risks Seminar was held in Mexico by MAPFRE.

In this event, they talked about the current tendencies about the Insurance Industry in cyber risks, transports and civil works in Latin America.

The session had the participation of Bosco Franco, Chief Operating Officer of MAPFRE GLOBAL RISKS, who made a presentation analyzing the exceptional situation that catastrophic events are generating this year and the impact they are having on the direct insurance and reinsurance market.

During the sessions, some discussions took place about the difficulty to predict what is going to happen in 2018. However, the extension of a soft market environment combined with the impact of recent natural disasters on (re) insurers will lead to a rise in premiums. On the other hand, not only some market players will suffer, but also alternative capital that has offered their solutions during these years. ■



MAPFRE SHARES THE VISION OF ITS EXPERTS ABOUT THE MANAGEMENT OF NATURAL DISASTERS TO RESPOND TO THE LARGE COMPANY CUSTOMER

In view of the recent hurricanes Harvey, Irma and María, and the earthquakes in Mexico, the MAPFRE units that subscribe to catastrophe risks are especially concerned with the control of this type of event



This was explained by Juan Satrústegi, Manager of the Natural Perils Department at [MAPFRE RE](#), and Josefina Rodríguez, Head of the Catastrophic Risks Department at [MAPFRE GLOBAL RISKS](#), two specialized departments that the company has in the above mentioned Units.

During the interview we offer, Juan Satrústegi explain that some of the sources consulted, in addition to news provided by the mainstream media, are the warnings issued by national and international organizations in the face of this type of event, as well as various mobile applications specifically created for this purpose.

For its part, Josefina Rodríguez from MAPFRE GLOBAL RISKS, highlights the importance that technology has acquired in the management and explains how her department works to achieve MAPFRE's ultimate objective of always being close to the client in order to offer the best response. ■

THE SECOND MEETING OF BROKERS WAS HELD ON SEPTEMBER 21ST



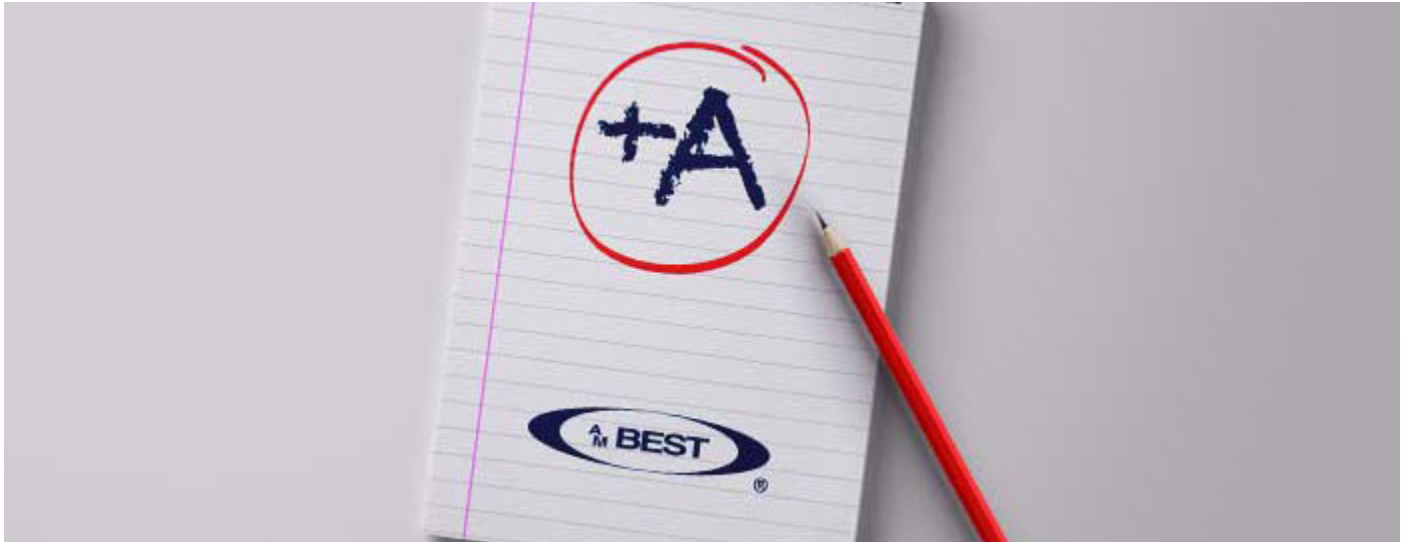
MAPFRE GLOBAL RISKS German Branch hosted its second get-together for brokers and in-house brokers, on Thursday 21st September at “Al-Andalus”, a Spanish Tapas bar in the vicinity of the office in Cologne.

At the beginning of the renewal season MAPFRE GLOBAL RISKS offered its guests an opportunity to share a relaxing meeting in which specialists coming from the region of Cologne were invited.

Manfred Alsdorf, Head of the German Branch, and the whole German team welcomed some 30 guests from AON, Carl Jaspers, deas, DeTeAssekuranz, General Reinsurance, Ecclesia, Marsh, Pallas and Willis Towers Watson.

Everyone had the opportunity to exchange ideas and intensify relations in a friendly atmosphere while enjoying Spanish food and drinks after work. ■

ONCE AGAIN REAFFIRMED THE FINANCIAL STRENGTH OF MAPFRE BY CREDIT RATING AGENCIES



A.M. Best has confirmed the ‘A’ (Excellent) rating of MAPFRE GLOBAL RISKS ‘financial strength, with a’ stable ‘outlook. The agency notes that the MAPFRE GLOBAL RISKS rating reflects the strategic importance of the company to the MAPFRE group, together with its strong risk-adjusted capitalization and solid operating

*A.M. Best: MAPFRE GLOBAL RISKS’ rating unchanged
despite the intensity of recent claims*

performance, adding that, despite the increased number of claims of intensity in the last quarters – highlighting the inherent volatility of the underwrite business – the company will maintain in the medium term a “strong” risk-adjusted capitalization.

*“Standard and Poor’s: MAPFRE Rating remains unchanged despite
the impacts of recent natural disasters”.*

Credit rating agency Standard and Poor’s has confirmed that the rating of MAPFRE (currently “A”, stable outlook) remains unchanged despite the Group’s announcement of the impact that recent natural disasters will have on its net result in 2017. This non-recurring loss caused by catastrophes occurs in a context of improvement in the financial performance of the MAPFRE Group, which in the first half of 2017 has registered net income growth of 9%. ■

S&P Global



MAPFRE GLOBAL RISKS ANNUAL LONDON MARKET RECEPTION, 14TH SEPTEMBER

Mr Ignacio Baeza, CEO meets and presents to top producing brokers.



MAPFRE GLOBAL RISKS (MGR) hosted its annual reception for London Market brokers, on Thursday 14 Sept., to say thank you for their continued support, in the fabulous surroundings of one of London's top Spanish restaurants, Hispania, in the heart of the City of London.

The event was organized by senior executives of MAPFRE GLOBAL RISKS. On behalf of the Central Services Unit, Mr. Baeza, CEO and President of MGR, Bosco Franco, COO, Jose Maria del Pozo, CFO, Jose Carlos Nájera, CUO, Fernando Gil, Director of Industry and Services, Cristina Criado, Head of Aviation and General Transports-Aviation and Jose Luis Garrido, Head of Energy and Construction – Oil and Gas.

MAPFRE GLOBAL RISKS' offices in the UK were attended by Chris Smith, Director of Regions and Markets – International, Greg Harris, Director of the United Kingdom. Also attended Jair Marrugo, MAPFRE Assist and Javier San Basilio, MAPFRE Re.

120 of the London Market's leading producing brokers, from Marsh, Willis Towers Watson, AON, JLT, RHK, Price Forbes, Lockton and AJG attended the event, where they enjoyed some fine Spanish hospitality.

The Hispania provided the perfect venue for the MAPFRE senior team to mix and mingle with the senior brokers and get to understand more about the current issues and opportunities in the world's leading insurance market.

During the evening speeches were led by Mr Baeza, supported by Greg Harris, who opened proceedings, and Chris Smith, who reaffirmed MGR's commitment to providing an outstanding and responsive service to London brokers and their clients, which MAPFRE is renowned for in Spain, LatAm and elsewhere worldwide.

In his speech Mr Baeza took the opportunity to thank the brokers for their business, whilst commenting on the difficulties for all parties, including clients, with the current soft market. He also reinforced MAPFRE's commitment to London as platform for international growth, with the forthcoming opening of the magnificent new MAPFRE London office, to open in early 2018, on Lloyd's Avenue in the City.

MGR's London underwriting team also attended, to thank the brokers, including specialists in underwriting aviation, construction, energy, international programs and property risks. ■

MAPFRE AND WILLIS TOWERS WATSON HAVE RECENTLY MET IN SAO PAULO TO HOLD A WORKING SESSION



MAPFRE and Willis Towers Watson have recently met in Sao Paulo to hold a working session in which professionals from Lima, London, Madrid and Brazil attended to identify opportunities for joint business development in Brazil.

Both teams analyzed the joint success stories and the process improvement opportunities with the purpose of offering Brazilian customers a value added service that differentiates us from the competition and allows us to increase our business portfolio in the large Brazilian business risks.

The day turned out to be very productive and closed with a dinner at the offices of BB MAPFRE chaired by Luis Gutierrez (CEO BB MAPFRE) and Luis Maurette (regional CEO of Willis Towers Watson in Latin America). ■

GVNW SYMPOSIUM, THE MOST INDUSTRIAL INSURANCE CONGRESS IN GERMANY, 6-8 SEPTEMBER

*The **GVNW Symposium** is the most recognized Industrial Insurance Congress in Germany, and was celebrated at The Westin Grand Munich Arabellapark between 6th and 8th September 2017.*



The symposium provides all actors in the German industrial insurance market with a platform to meet and discuss tendencies, novelties, and solutions related to the global insurance sector. The congress offers a unique chance to renew business relations and to follow the dialogue between the major players in the industrial insurance market in Germany.

To name just a few, there were panel discussions or workshops with focus on countries like Japan or the Arabian Peninsula, on Supply Chain Risk Management, Block Chain, InsurTech, and naturally also on Brexit issues.

Around 750 persons of the German insurance sector were present: Brokers, Insurance and Reinsurance Companies, Claims Handling Companies, Risk Management Companies, and Engineering Consultants. From the clients' side, there were also numerous in-house brokers, who are members of the Entrepreneurial Federation GVNW, among them representatives of large industrial companies, companies of the service sector, aviation, transport, and energy. In many of their insurance programmes MAPFRE GLOBAL RISKS already holds participations.

As every year, the German Branch of MAPFRE GLOBAL RISKS attended this important congress with a stand, which was professionally designed by Marketing in Spain, and once again we attracted many visitors to share new ideas and experiences with our experts. ■

GLOBAL RISKS UNIT PARTICIPATES IN EXPO RISCOS 2017 OF BRASIL



The International Seminar of Risks an Insurance Management promoted by the ABGR (Asociación Brasileña de Gerentes de Riesgos) was held in Sao Paulo the las August 22nd and 23rd.

This event is consider the largest in the Latin America speciality and in its XII edition attended more than 3000 participants.

Banco do Brasil – MAPFRE Group, as leader of industrial risks Brazilian market and main associate of the ABGR was one of the main playerwith a huge stand in a strategic emplacement where the local team met the clients, brokers and the public in general.

Bosco Francoy (COO) and José Antonio Ruibal (Business Global Risks Unit Director of Latam) attended to this event. This unit also support the local team sharing the experience of the Marketing area managing similar events.

Bosco Francoy talked about the Unit Global Risks experience in the implementation and design of global insurance programs focusing on the solutions proposed by MAPFRE for multinational companies.

Luis Gutierrez, CEO of BB-MAPFRE and Wady Cury, General Manager of BB-MAPFRE, participated throughout the conference with presentations about the Social Role of Insurance and the current situation of agricultural insurance in Brazil respectively. ■



MAPFRE GLOBAL RISKS WINNER IN THE MARSH GOLF TOURNAMENT IN PARIS



Our colleagues from the Paris branch won the 20th edition of the MARSH Golf Tournament held on June 19th at the Saint Germain in Laye course, France.

Veronique Carroy, Head of Back Office, and Denis Collot, Senior Underwriter of MAPFRE GLOBAL RISKS in France, were winners in the scramble mode, in a competition that attracted the participation of 94 attendees of the leading companies of the insurance sector, among them Presidents, General and Finance Managers, as well as MARSH risk managers.

Also, other competitors in the tournament were Jean-Marie Haquette, Director at MAPFRE GLOBAL RISKS France, Alain Picard, Underwriter, Eric Bentz, Senior Underwriter and Dylan Mader, his Underwriting Assistant. ■

**Congratulations on this success to the colleagues
of the MAPFRE GLOBAL RISKS team in Paris!**

MAPFRE TAKE PART IN THE XVI MEETING OF THE ELECTRICAL SECTOR IN BRAZIL



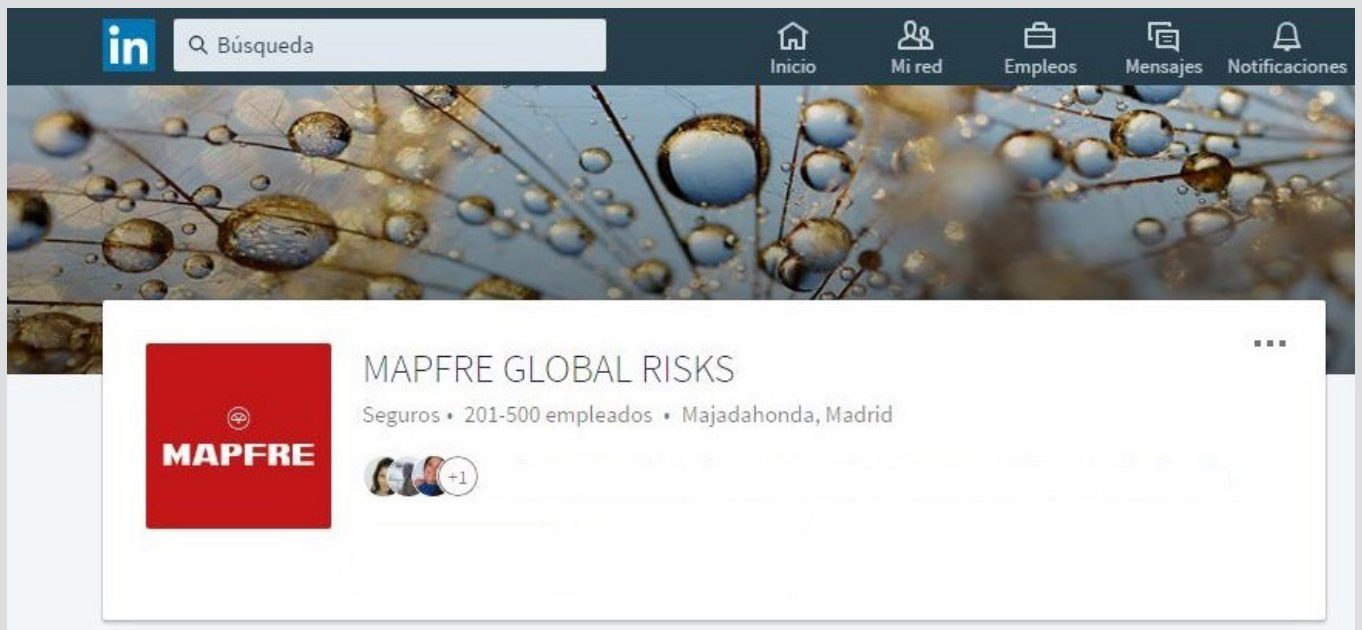
Colleagues from MAPFRE participated in the XVI Meeting of the Electricity Sector held in Brasilia on June 22 and 23, attended by more than 80 risk managers of the main companies of the electricity sector in the country.

Franciline Freitas, Executive Manager of GlobalRisks of GrupoSegurador Banco de Brasil e MAPFRE (BB E MAPFRE), and Alberto Mengotti, Head of the Energy Area of MAPFRE GLOBAL RISKS, who talked about the Operational Risk in the sector.

It is an annual event, promoted by ABGR (Brazilian Association of Risk Managers), in which MAPFRE has been a sponsor for 12 editions.

he ABGR has among its missions to bring together companies and professionals interested in the study and development of Risk Management to share knowledge in order to minimize the impact of risks on organizations. ■

WE ARE ALREADY ON LINKEDIN



We are already on LinkedIn. Furthermore of our strength values culture or experience we want to share all the information of our main business sectors and position as an insurance reference.

The platform allows the segmentation of specific content for each country which will help us on adapting to the needs of the different markets.

We also want to give a place to the people that takes part of this company. So we invite you joining to our [MAPFRE GLOBAL RISKS profile](#) y aportar todas las ideas que puedan ayudarnos a seguir creciendo. ■

Events in the second half of 2017

NOTICIAS **agers**

Asociación Española
de Gerencia de
Riesgos y Seguros

FERMA FORUM (OCTOBER 15 – 18, 2017)



FERMA continues to host its forums biannually and this year's edition was held in Monte Carlo (Monaco) between October 15 and 18. AGERS actively participated in this year's forum, as in previous editions, with two work sessions:

- We participated in Workshop Sessions 3 on October 7 from 14:00 to 15:15: How to be resilient in an unstable political environment.
- We also participated in Workshop Sessions 5 on October 18 from 9:30 to 10:30: How to face a brand reputation attack, Serious game on crisis management communication and The underestimated challenge of a risk manager: be a good communicator.

Figures from this edition:

- 1,580 professionals of the Risks and Insurance sector.
- 358 risk managers from around the globe.
- 45 countries represented, including Brazil, China, India or Korea.
- 46 sponsors.

[Further information](#)

INTERNATIONAL INSURANCE PROGRAMS FORUM (OCTOBER 30, 2017)



The Spanish Risk and Insurance Management Association (AGERS) and the Asturias Federation of Entrepreneurs (FADE40) held an event on October 30 titled “INTERNATIONAL INSURANCE PROGRAMS FORUM” at the offices of FADE in Oviedo.

Some of the objectives of the event were:

- To outline the challenges that companies are facing when taking their activity abroad, with the implementation of an International Insurance Program.
- To discuss the different technical and legal aspects that must be resolved before the most adequate structure can be adopted, with the views of the insured, insurance company and legal advice services, trying to use practical examples with the presentation to help explain the concepts better.
- All participants received a copy of AGERS’ “International Insurance Programs” manual.

[Check the program here](#)

UPCOMING EVENTS AGERS 2017

**PERSONAL RISKS FORUM: RISK MEASUREMENT AND MANAGEMENT ETHICS**

Organized by AGERS and the Spanish Institute of Actuaries

November 23, 2017

[See the full program and forum documentation](#)

**FORUM: AT THE JUNCTION OF CORPORATE GOVERNANCE AND CYBERSECURITY**

Organized by AGERS and Internal Auditors

November 29, 2017

[Access the full program and cybersecurity report from FERMA and ECIIA](#)

V PREMI 
JULIO SÁEZ

PRIZE-GIVING CEREMONY FOR THE 5TH JULIO SÁEZ RISK MANAGEMENT RESEARCH MONOGRAPH AWARDS

In partnership with El Corte Inglés

December 14, 2017

[The panel of judges will meet and announce the winner on November 15](#)

NOTICIAS

IGREA**Iniciativa Gerentes de Riesgos
Españoles Asociados****ANNUAL IGREA CONGRESS “OVERCOMING MODELS”**

On 26 October Igrea held its Annual Forum in Pamplona under the “Overcoming Models” motto. It brought together professionals in the sector from different parts of the country.

During the meeting, they tried to address the following points of interest:

- Presentation of the IGREA book entitled Risks in International Development, written by Javier Navas Olóriz.
- A practical example of Risk Management – Belén Medina (Risk Manager de Globalvía).
- Presentation of IGREA’s Position on the claims management process – Daniel San Millán (Risk Manager for Ferrovial) and Manuel Garrote (Risk Manager for OHL).
- Insurance Compensation Consortium: Procedures and experience in claims on goods in large companies – Alfonso Manrique Ruiz (Assistant Manager for Appraisals in CCS). ■

NOTICIAS

Fundación  INADE
instituto atlántico del seguro

ALUMNI, OF THE FUNDACIÓN INADE – UNIVERSITY OF CORUÑA CHAIR



“ALUMNI of the Fundación Inade – UDC Chair” was officially presented on Monday, September 18, which is made up of former students. The event was chaired by Professor Fernando Peña López, Director of the Chair and Honorary President, who was accompanied by Antón Cobián Varela, President of the Board of Trustees of Fundación Inade; Antón Cobián Muñoz, ALUMNI President; and Nava Pérez-Salgado Eyre, Vice-President.

Antón Cobián, ALUMNI President, stated during the official presentation that “we want to demonstrate to society that there is a new way of addressing risks and insurance”.

ALUMNI Vice-President expressed that “the risk manager must explain his roles and benefits to society”. ■

AULA INADE WORKSHOP: BUSINESS CONTINUITY AFTER AN INCIDENT



A new session of the 2020 Dialogs was held on July 10, organized by the Fundación INADE-UDC Chair, in which participants discussed about matters related to business continuity after an incident with Jesús Bueres García-Junceda, Global Head of Forensics Accounting of ÁBACO INTERNATIONAL LOSS ADJUSTERS, considered the country's leading expert on this subject. In addition, Bueres participated in AULA INADE's course-workshop on this subject, in which 50 professionals of the insurance sector (agents, brokers, appraisers, companies, etc.) and risk managers of companies from Galicia participated.

During the 2020 Dialogs session, Jesús Bueres stated that “the risk that most concerns Spanish companies is business interruption”. ■



FERMA EUROPEAN RISK MANAGEMENT FORUM 2017

FERMA European Risk Management Forum 2017 is the largest pan-European event for large risks management, its edition is biannual, and it brings together the main players in the sector.

The celebration took place from 15-18 October at the Grimaldi Forum in Monte Carlo and it was attended by 1249 delegates, 245 risk managers, 42 sponsors, 89 speakers and 15 workshops, in which 40 countries were represented.

FERMA has revamped the programme to offer new formats and contributions from a wide range of experts.

Here are some highlights:

Opening Speech

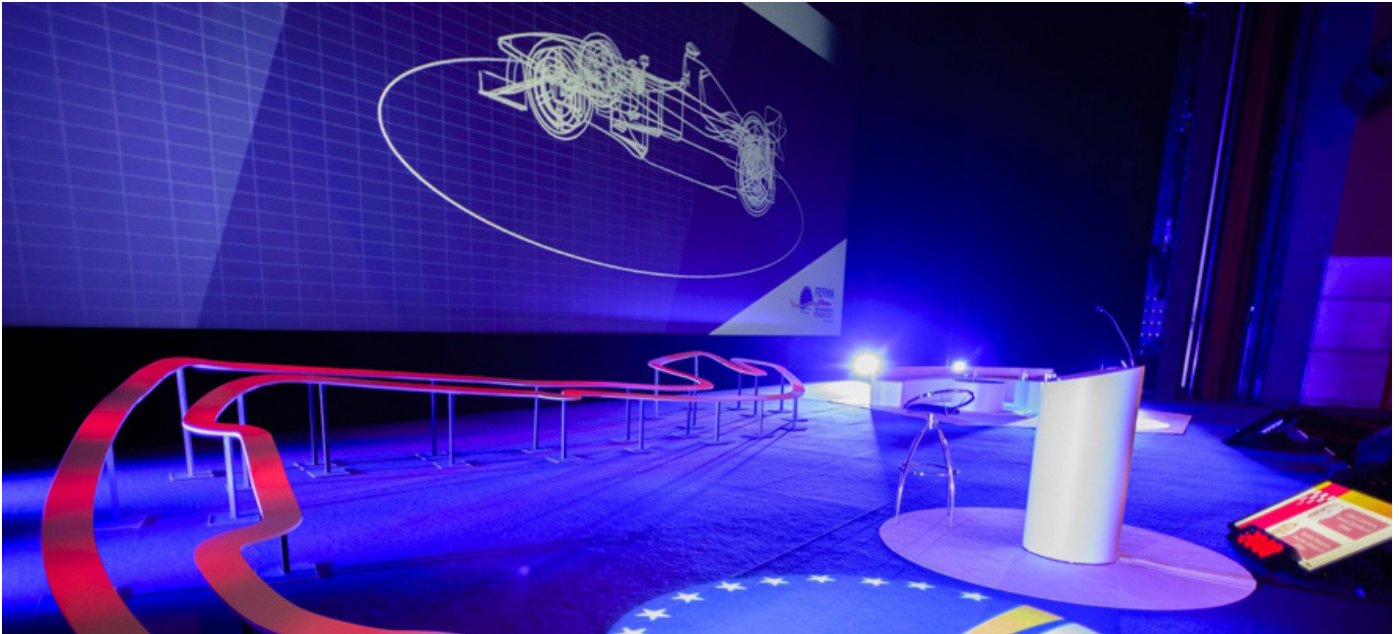


Europe, risk management and insurance are at a cross-roads, says FERMA President

Risk management and the insurance industry are today at crossroads as they face a changing European environment and the Fourth Industrial Revolution, stated the President of FERMA Jo Willaert as he opened the 2017 FERMA Forum in Monaco.

Jo Willaert emphasised the positive nature of managed risk-taking and said that risk managers and the insurance industry should play an essential role in helping European businesses to embrace opportunities.

Leadership day



Leadership in a world of interconnected and complex risks

Risk management can co-ordinate all the skills required to understand and make sure that governance creates healthy leadership in an organisation, said Brigitte Bouquot, President of AMRAE and Director of Insurance and Risk Management for Thales. She commended FERMA for taking the initiative in publishing its recommendations for cyber risk governance.

Education Day



Europe at the crossroads

In an uncertain world, companies need to look at risk from a 360 degree perspective and not focus on the typical risk committee perceptions of risk. This was the advice from Sir Jeremy Greenstock, Chairman of Gatehouse Advisory Partners and former high level British diplomat.

Communication Day



The risk manager's challenge: how to communicate effectively?

Risk and insurance managers are at the crossroad of major information flows within the organisation, and they have a crucial role in communicating and consulting with both internal and external stakeholders as the message from day three of the FERMA Forum 2017. It was devoted to the third theme of Jo Willaert's presidency: communication.

The day's sessions, workshops and a keynote address from Jamie Shea, Deputy Assistant Secretary General for the Emerging Security Challenges Division of NATO, highlighted the dual aspect of communications for the risk manager. First the risk manager has to communicate effectively on risk and insurance within the organisation. Second, the company needs a structure and strategy for communicating effectively with all its stakeholders, and this comes under the heading of enterprise risk management. ■

MUTUAL RECOGNITION OF WORLDWIDE RISK MANAGEMENT EVENTS



Five of the world's largest risk management associations have agreed to work together towards a recognition of their respective risk management designations/certification programmes. The organisations, ALARYS (Latin America), FERMA (Europe), IRMSA (South Africa), PARIMA (Asia) and RIMS (North America), signed a letter of intent when they met today during the FERMA Risk Management Forum.

The letter indicates that they will jointly draft a Memorandum of Understanding within the next months to establish the conditions under which a risk professional certified by one of the five associations will receive continuous professional development (CPD) points for attending any of the five association's events.

Jo Willaert, President of FERMA indicated that "Although our various certification programmes take into account local specificities which should remain, it is fundamental for the profession that we ensure a gradual convergence of our respective certification programmes over the coming years. It should start with a mutual recognition of our respective main events in terms of CPD points, and that is the important step we are now taking." ■

FERMA WINS EUROPEAN CAPTIVE AWARD 2017



The Federation of European Risk Management Associations (FERMA) is honoured and proud to have received the BEPS Initiative Award of the year at the European and UK Captive Awards 2017 for its information paper Guidelines for BEPS on captive (re) insurance arrangements.

The winners were announced at a dinner in London on 10 October organised by the publication Captive Review. ■

Innovation Culture as a Competitive Advantage

JOSEP CELAYA

Innovation Corporate Director at MAPFRE



© Photo by Riccardo Annonda on Unsplash

Ongoing innovation is the only way to remain competitive, because no advantage is sustainable in the long term”, said Albert Einstein

WHY INNOVATION IS INVADING MAJOR COMPANIES TO SUCH A GREAT EXTENT?

In the current insurance market innovation is not an option, it is a necessity to face the great changes which our society is experiencing. New business models mean that innovation has become a key element in all organizations.

Current strategic risks in companies make it necessary to come up with innovative value propositions to confront the same. As examples of risks where Innovation has become the cornerstone in the search for alternatives to resolve and overcome them, we should mention the following:

- Technological change.
- Sector overlaps.
- Emergence of new players who are more agile.
- Changes in client priorities and necessities.
- Acceleration of demands with regard to time to market.



INSURANCE SOLUTIONS ON THE MARKET. THE ROLE OF START-UPS

We could analyze two different stages in the emergence of new models for Start-Ups in recent years. The first wave of Start-Ups began about 5 years ago with the so-called FINTECH, and which essentially involved a revolution in payment methods, alternative banking, cryptocurrency, and banking platforms. At this stage, as a point of reference, the world of data took on special significance and what is most sought after is immediacy. Following this, a second wave of Start-Ups can be identified, with a noticeably technological slant and which is searching for applicability in the Insurance Industry, INSURTECHs.

The difference between the two lies in that, while Fintech is a more disruptive wave, with examples like peer to peer lending (loans between private individuals), Insurtech is a more collaborative wave, contributing cooperative models and a greater symbiosis with the insurance industry, with examples like initiatives focusing on risk analysis, visualization and exposure of environmental risks, parametric forecasts, etc.

The result of these developments is that Insurtech's value proposition is an improvement with regard to Fintech because it is essentially collaborative rather than competitive.

Insurtechs are a growing phenomenon. Insurtech presupposes a new ecosystem made up of insurance companies, technological giants and disruptive Start-Ups which is transforming the insurance industry.

MAPFRE recently decided to invest, for example, in the Alma Mundi Invierte Fund, FCRE, specializing in investing in Start-Ups in Spain, Latin America and the United States, some of which are developing technological projects relating to the insurance industry.

This investment represents MAPFRE's great commitment to Start-Ups. Projects being developed by emerging companies in which this fund is investing include those focusing on remote medical consultation, the Internet of things in Health and Home and behavior forecasting.

Alma Mundi for example is actively promoting Spain 3.0, supporting Spanish and foreign Start-Ups that locate their engineering resources and value-added processes in Spain.

CHALLENGES TO APPLICATION IN MAJOR COMPANY'S, MAPFRE'S STRATEGY

Our company has always been known for anticipating its clients' requirements with original solutions. MAPFRE has been a pioneer since its very beginnings in most business lines both with the launching of new products and with coverages.



Experts in the sector appear to agree that the key to innovation in our market resides in the capacity to integrate innovation into the insurance company's business model. This capacity may be acquired, for example, by applying artificial intelligence, blockchain and big data, with the aim of achieving more efficient processes, and to create new payment systems and models based on the sharing economy. The challenge in this field is ongoing. If the incumbents, as traditional companies are called, do not adapt to their clients' life cycle, offer them a unique product and a differentiated experience, others will do so in their place.

If we consider the contrast between the Start-Ups' ecosystem compared with that of the major organizations, we find that the great challenge is how to make them compatible. The essence of the former is based on flexibility and on taking decisions quickly to resolve their clients' requirements. However, a major corporation is generally based on stricter procedures, solvency principles, strict policies, security, and stricter procedures and mechanisms for taking decisions.

In this regard, the MAPFRE Corporate Innovation Division focuses on two main actions:

- External Action: based on promoting the convergence of both ecosystems via the strategy of building bridges and providing links for learning, synergies and win-win business.
- Internal Action: undertaken within the MAPFRE organization and which could be called a global Intraundertaking, promoting the creative potential of the organization's internal talent, creating multidisciplinary work teams made up of so-called Innoagents, creating suitable spaces for generating ideas, and above all preparing the members of the organization with a common methodology (Design Thinking y Lean Start-Up) and equipping them with collaborative tools for sharing knowledge in all the geographical areas where there are MAPFRE companies.

MAPFRE is aware of this situation which is why for some years now it has been developing an Innovation model focusing on the development of value propositions directed toward the client. The MAPFRE Innovation Community is a structure in the form of a network whose threads are interconnected bidirectionally, and which acts by identifying the strategic business challenges which need to be addressed from the innovation standpoint, offering methodological support and tools for the development of projects in this field.



In this model a key role is played by the “innoagent”, a term which designates those who act as ambassadors for Innovation in MAPFRE from the different countries and Business Units, in other words, transmitters of the innovation culture.

Their task is effectively that of identifying innovation ideas and projects within the organization, taking an active part in them, and supporting all the departments on a technical and sales level, always with the aim of achieving the strategic plan's objectives.

An essential role is also played in the MAPFRE Innovation Community by the Innovation and Development Offices (OID) who work at a local level as catalysts for innovation, managing projects which have arisen in the different countries and Business Units. MAPFRE currently has 19 OIDs with a network of over 300 Innoagents at global level.

There are numerous trends linked with innovation and technology which have radically changed the way in which the insurance industry used to work. The risks for which we are prepared today are not necessarily those we will face tomorrow and this presents a challenge for which we need to be ready.

Furthermore, MAPFRE RE has recently become a member of the Blockchain Insurance Industry Initiative, better known as B3i, an initiative launched in October 2016 to explore the use of distributed ledger technology and to develop common standards for the insurance industry. The B3i seeks to promote Blockchain with the objective of penetrating the insurance industry on a global scale with the use of Distributed Ledger Technology (DLT). The companies belonging to this consortium will share their experiences with the tool, contributing in this way to the development of a feasible business platform for insurance and reinsurance in the second half of 2018.

In the following video, Josep Celaya, MAPFRE Corporate Innovation Manager, explains what Blockchain is and along what lines MAPFRE is working in this new technological macro trend:



But in MAPFRE the innovation model is much more than technology, it is how we understand processes, finances, people management, the client experience, etc. to be prepared for the changes which the future implies. We are working on this adaptation with strategic initiatives which will give us competitive advantages which respond to the real needs of our clients.

As of July 2017 there were 84 active Innovation Projects in MAPFRE. These projects are classified according to their potential impact on the organization, and may be Local, Global or Corporate.

Innovation in MAPFRE is considered to be one of the main levers for promoting organic growth and the company's progress in its strategic objective. Innovation in MAPFRE means developing differential value propositions aimed at strategic client segments with a transversal vision for meeting the different business challenges.

When we speak about innovation, we are not talking about innovation in a strict product/service sense, but innovation in a much wider sense which addresses all entrepreneurial concepts: strategy, processes, services... in other words, the concept of innovation goes way beyond “developing new products” or “technology”.

Soren Kaplan, in his book “The invisible advantage. How to create a culture of innovation” gives a series of recommendations for creating an innovation culture throughout the whole organization. It is based on three current realities:

- Competitive advantages are temporary. For products, services and even business models not to fall into obsolescence they need to be continually invented and reinvented.
- Culture is the only sustainable competitive advantage. It is the invisible ingredient which mobilizes the commitment of the professionals, innovation, reinvention and the growth of the organization.
- Each organization should be a leader of its innovation culture in a unique way and should adapt to the personality of the same. What is successful in one will not necessarily triumph in another.

Kaplan confirms that to have an innovation culture it is essential to promote and support a work environment in which all the professionals understand their role with regard to “changing the game” for the better, independently of their role or function within the organization.

This is why everyone who is a part of our organization is represented in one way or another in the MAPFRE Innovation Community. To innovate is to use the knowledge we have to generate new ideas, that is why it is not an isolated quality destined to the few. Josep Celaya, the Corporate Innovation Manager for the company puts it like this: “The innovation teams are just the catalyst. The responsibility for innovation lies with all of us wishing to contribute to MAPFRE continuing to be a leader in the markets where we operate.” ■



Advanced tools for the design, operation and safe management of industrial installations

GABRIELA REYES DELGADO
Head of Process Safety Area

ALFREDO RAMOS RODRÍGUEZ
Head of Industrial Safety Department

PASTORA FERNÁNDEZ ZAMORA
Head of Risk Analysis Area

JUAN SANTOS REMESAL
Director of Industrial Safety Division

ANTONIO DÍAZ PÉREZ
Head of Industrial Safety
and Reliability Area



INTRODUCTION AND BACKGROUND

Industrial regulation, technical standards, design standards and accumulated experience are important guarantees for attaining **high levels of safety** in the design and engineering of large industrial installations and thereby ensuring **operational and business continuity**.

Nonetheless, despite complying with regulation and design codes, there is no such thing as zero risk. Industrial installations design and implement safety measures for managing their assets with the twin goals of both reducing the probability of an incident occurring as much as possible and minimizing the associated consequences of any such incident, always seeking to do so in accordance with people safety, the environment and the production and profitability requirements of their investments.

Nowadays, most organizations involved in managing industrial assets put in place rules, standards and procedures which go further than strict legal requirements. They have left behind the early days when accidents were seen as inevitable or to be dealt with after the event. These days it is standard practice to take a proactive approach aimed at preventing and avoiding accidents; industrial asset managers must ensure business continuity throughout the life cycle using tools designed to achieve **INTEGRITY** across the following three vectors:

- **Design integrity**, applying risk analysis tools which make it possible to produce a design in which the risks are as low as reasonably practical.
- **Operational integrity**, implementing process safety management systems which guarantee the safe operation of assets and safety barriers.
- **Asset integrity**, adopting optimized maintenance and reliability strategies for equipment, infrastructures and safety barriers.

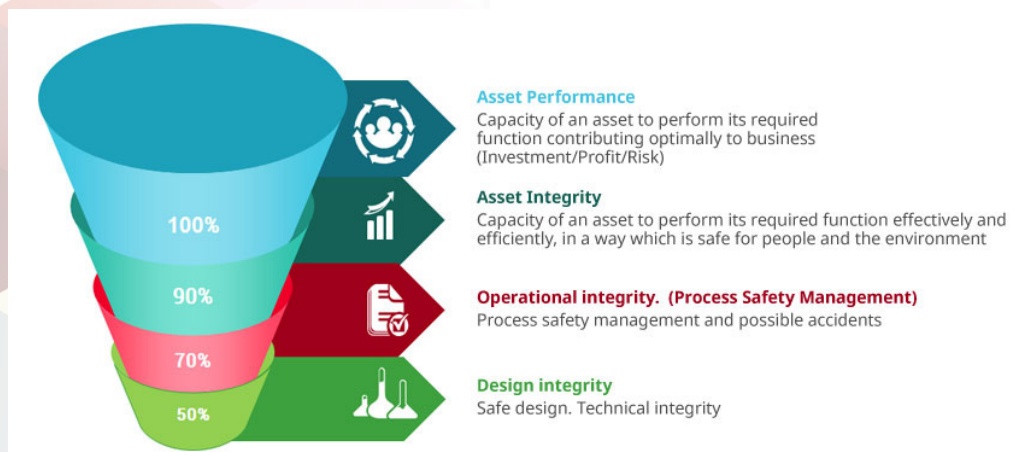
Asset Integrity – Process Safety



This article aims to reflect on each of the previous points, bringing together the key elements, methodologies and tools available to asset managers to apply in order to deliver each organization’s business objectives, as well as the relationship between these tools as illustrated in the appendices. All of this revolves around the concept of **SAFETY** – in capital letters – as the basis for management and decision making.

Asset Integrity – Process Safety

DESIGN



INTEGRITY. RISK ANALYSIS AND MANAGEMENT

Designing and engineering industrial processes on the basis of industrial regulation, technical standards, design standards and accumulated experience is crucial for attaining high levels of safety.

Installations must be designed in a way that minimizes risks both on their interior and exterior. The key to this is to undertake an exhaustive analysis and to apply appropriate **risk analysis tools** to all projects phases where there are possible risk-generating situations.

Each sector makes use of advanced safety criteria, as well as applicable international standards and regulations. The set of tools applied in projects ranges from HAZID/HAZOP studies to SIL Analysis (Assignment of SIL Index, Safety Requirement Specifications or SRS and SIL Verification), LOPA Analysis, Design of Fire & Gas systems, Quantitative Risk Analysis and ALARP, BOW-TIE, Determination of Critical Safety Elements and design standards for these Elements. These risk analysis tools are focused on increasing safety levels and achieving objectives such as:

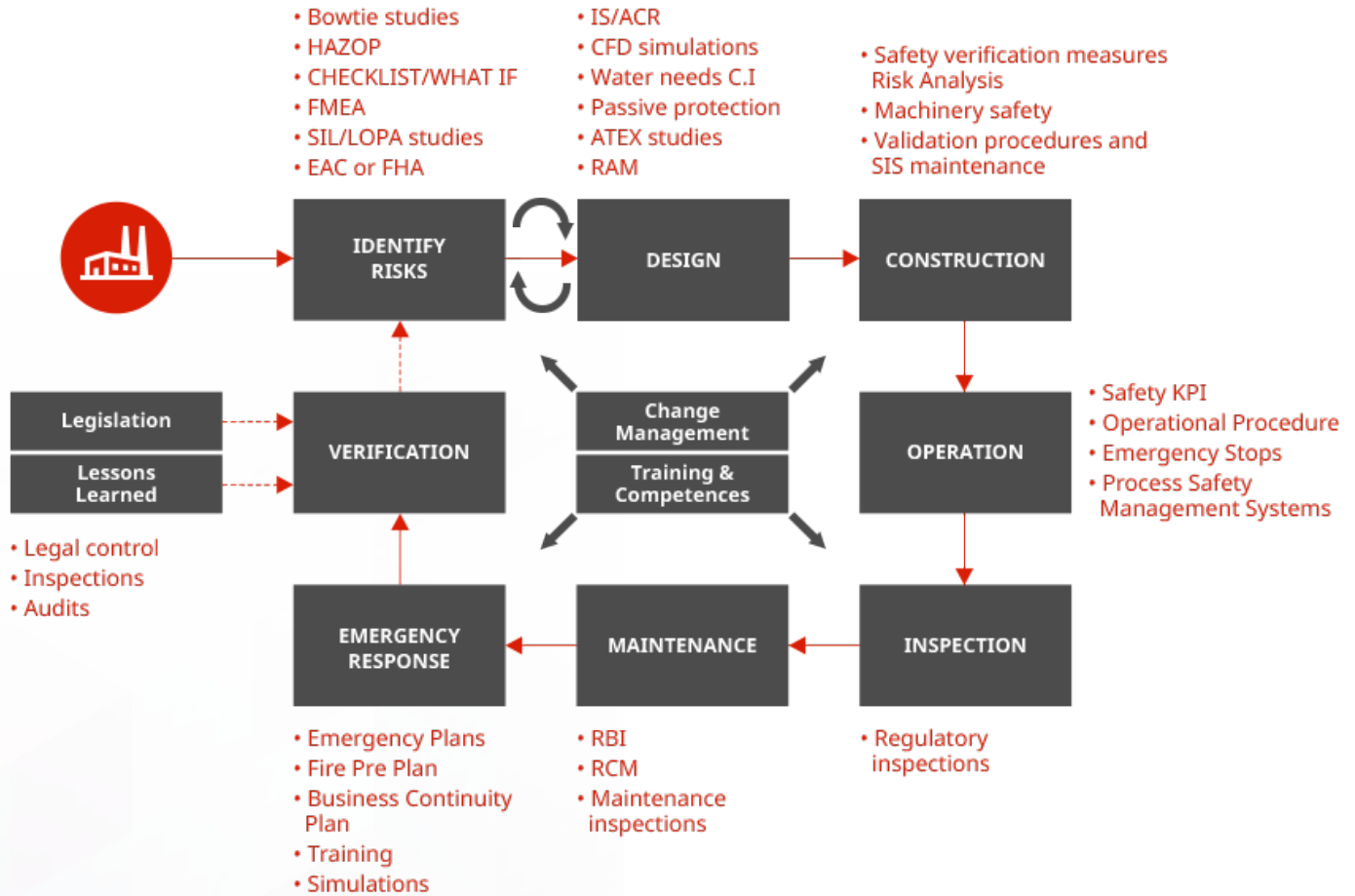
- **Identifying external hazards** which could affect the interior of the installation.
- **Identifying internal hazards** which could lead to an accident, both due to the hazards associated with the substances present, as well as due to operations in the construction or use of the installation.
- **Estimating consequences.** Quantifying effects and consequences in accordance with the characteristics of the substance capable of generating a risk situation.
- **Estimating the probabilities** of the identified hazard occurring, which allows for an approximation of the overall risk of the installations, once these consequences have been assessed.
- **Identifying** points in the installations which may require **design improvements, inspections and maintenance** to make the operation safer.
- **Identifying the zones, installations, equipment and processes which contribute most to risk**, with the goal of establishing appropriate **mitigation or protection measures to ensure that at all times the risk associated with the establishment is acceptable.**
- **Defining the emergency action strategy** and preparing emergency and contingency plans.

Various different tools can be used depending on the particular engineering phase, the project being developed, the end objective and the risk management policy which the project developer and engineering have defined as being appropriate for attaining these objectives. Applying these tools facilitates the attainment of significant safety benefits throughout the life cycle of an industrial installation.

By way of reference, the following table aims to identify the most suitable risk analysis tools for the different project phases depending on the expected results. The attached chart sets out the main applications within the safety life cycle stage of an activity.

| PROJECT PHASE | RISK ANALYSIS METHOD | EXPECTED RESULTS |
|----------------------------|---|--|
| CONCEPTUAL ENGINEERING | HAZID CHECKLIST WHAT IF | Guidance for process selection. Identification of unacceptable process hazards. Support for process design. Identification of fundamental process modifications which reduce risk level. Support for geographic localization of the project. |
| BASIC ENGINEERING | HAZID CHECKLIST WHAT IF FMEA HAZOP | Identification of hazards in greater detail in selected process and proposed design; risks associated with geographic location; risks relating to special or critical equipment in the process. |
| DETAILED ENGINEERING | CHECKLIST WHAT IF FMEA HAZOP SIL/VERIFICATION AND SRS QRA FHA o EAC RAMS EERA SVA | Identification of all hazards in the process, assessing associated risks. Identification of operational aspects not initially considered. Supports establishing operational, commissioning and implementation procedures. |
| INSTALLATIONS IN OPERATION | CHECKLIST HAZOP SIL/VERIFICATION AND SRS FHA o EAC QRA RAMS EERA SVA | Guarantees that the operation and the information relating to quality, legal requirements, process safety and operational procedures is complete and up to date. Incorporation of lessons learned in recent accidents or incidents and evaluation of possible incorporation of new equipment, systems and technology which improve safety levels. |

Safe design and technical integrity
Safety Line Cycle – Tools and solutions



OPERATIONAL INTEGRITY. PROCESS SAFETY MANAGEMENT (PSM) SYSTEM

The main **objective** of a Process Safety Management (PSM) System is to avoid accidents occurring in installations where hazardous substances are used, stored, produced and/or manipulated. This is achieved on the basis of two essential pillars: Organizational **Commitment** to safety and **Knowledge and Management of the risks** associated with the processes.

Most management systems are based on the concept of continual improvement, in accordance with the PDCA principles (Plan, Do, Check, Act). PSM systems are not exempt from these principles. For example, the Energy Institute defines a PSM system as being formed of four pillars, which in turn are made up of twenty basic elements (see attached table).

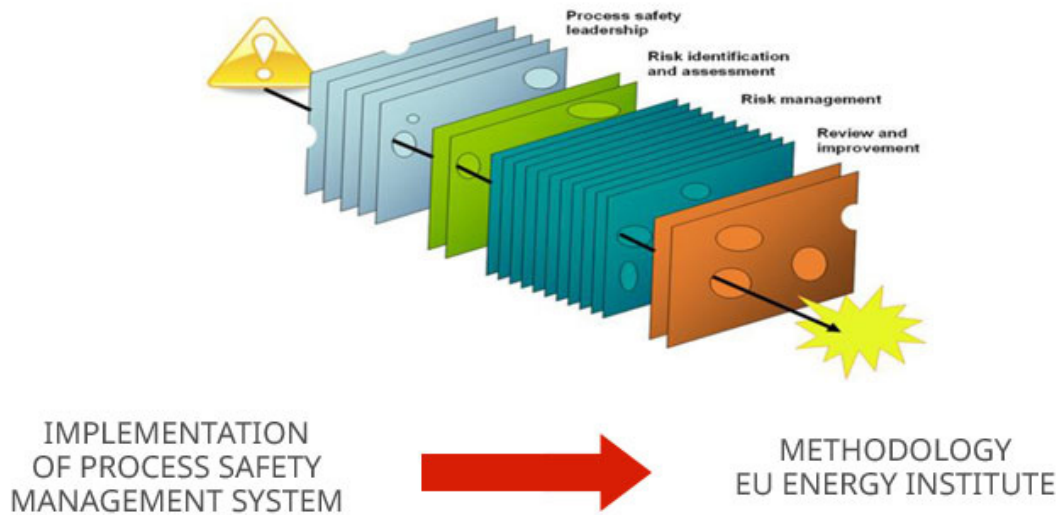


- Industries comprise **heterogenous** activity types and a high degree of **technological complexity**
- **Designs** must be **intrinsically safe**
- **High standards** are required and demanded in the management of **industrial safety, work place health and the environment**
- **Country objectives:** Guarantee the protection of workers, the population and environment
- **HSE in the industry requires:**
 - Risk-based safety processes
 - Effective risk management systems
 - Operational and deployed contingency plans
 - Qualified and trained staff

PSM: ENERGY INSTITUTE

| BLOCK | ELEMENTS |
|------------------------------------|--|
| Process Safety Leadership | <ol style="list-style-type: none"> 1. Leadership, commitment and responsibility. 2. Identification and compliance with legislation and industry standards. 3. Employee selection, placement and competency, and health assurance. 4. Workforce involvement. 5. Communication with stakeholders. |
| Risk Identification and Assessment | <ol style="list-style-type: none"> 6. Hazard identification and risk assessment. 7. Documentation, records and knowledge management. |
| Risk Management | <ol style="list-style-type: none"> 8. Operating manuals and procedures. 9. Process and operational status monitoring, and handover. 10. Management of operational interface. 11. Standards and practices. 12. Management of change and project management. 13. Operational readiness and process start-up. 14. Emergency preparedness. 15. Inspection and maintenance. 16. Management of safety critical devices. 17. Work control, permit to work and task risk management. 18. Contractor and provider, selection and management. |
| Review and Improvement | <ol style="list-style-type: none"> 19. Incident reporting and investigation. 20. Audit, assurance, management review and intervention. |

*PSM – PROCESS SAFETY
GOOD PRACTICE GUIDELINES: ENERGY INSTITUTE*



THE FOUR PILLARS OF PROCESS SAFETY



Within the life cycle of installations, the PSM addresses aspects and issues related to:

- **Safedesign**, engineering and construction.
- **Hazardassessment**.
- Efficient **alarms**.
- **Effective** process **control**.
- **Appropriate procedures** for **putting in place** and **operating installations**.
- **Management** of **modifications**.
- **Inspection**, testing and maintenance of equipment.
- Staff **training**.
- Relationships with **providers** and **suppliers**.
- **Communications** in the organization and between its managers.



Process Safety Management (PSM) is focused on:

- Safe design and engineering
- Hazard assessment
- Efficient alarms
- Effective process control
- Appropriate operating procedures
- Management of modifications
- Inspection, testing and maintenance of equipment
- Staff training
- Consideration of human factors

Thus, an appropriately designed and implemented PSM – comprehensively covering the above aspects, adapted to each organization's reality and formulated under the safety prism – helps:

- Foster a safety culture.
- Identify, assess and appropriately manage the installation's risks.
- Identify and manage critical safety elements in installations.
- Establish procedures and necessary measures for process control.
- Guarantee the maintenance and inspection of installations.
- Ensure professionals are appropriately trained and congruent with process safety at all levels and in all areas of the organization.
- Analyze and manage the impact on safety of technical and organizational change processes.
- Investigate the causes of accidents and incidents and put in place the measures to avoid them repeating in the future.
- Manage systematically and in a standardized way all aspects contributing to the safety level among installations or businesses in the same Group.

Attaining some of the following benefits:

- **Improving Asset Management** and the safety levels of installations.
- **Increasing** installations' readiness and production levels.
- **Reducing** repair, loss of earnings and insurance costs.
- **Aligning** the organization with the **achievement of business objectives**.
- **Ensuring** compliance with legislative requirements.
- **Reducing** the exposure to large scale financial losses, lawsuits, sanctions and public liability.
- **Improving insurance premiums**.
- **Enhancing the company's corporate image** both internally and externally, **plus other intangible benefits**.

ASSET INTEGRITY. ASSET INTEGRITY

The internationally applied concept of **ASSET INTEGRITY** relates to practices, methodologies and management techniques in relation to asset integrity aimed at optimizing the combined use/risk/value of assets.



WHAT is our main responsibility?

Managing **assets**. Something which has a current or potential value for an organization (Factory, Installations, Machinery, Building, etc.)

WHAT is meant by managing assets?

Managing people, installations and economic resources against business risks

HOW do we do it or deal with it?

- Are we proactive or reactive?
- Do we manage on the basis of the legal minimum?
- Do we manage until failure or breakdown?
- Until an incident or accident?
- Until obsolescence or useful life?
- With a defined strategy?

The use of any machinery, equipment or, ultimately, any industrial asset involves a degree of wear and tear, but at the same time it is the (direct or indirect) source of value creation (income). Use results in a degree of depreciation, with the remaining working life of the asset reducing with each use; but asset degradation does not only have economic effects, it also has safety implications and accordingly operational risks and the integrity of the asset itself will also be affected over time.

One of the most common mechanisms for managing asset integrity at the industrial level is industrial maintenance of various forms (preventative, predictive, corrective, etc.) but in addition to these “static” techniques a series of advanced techniques have been developed in recent years to optimize combined **Use/Risk/Value**.

Asset Integrity – Process Safety



All of these techniques can be encompassed under a global strategy for Asset Management Integrity developed under the ISO 55,000 standard, which sets out techniques for optimizing: the reliability/readiness/care of industrial installations (RAM); the reliability of machines and dynamic equipment (RCM); and the physical integrity of equipment (RBI).

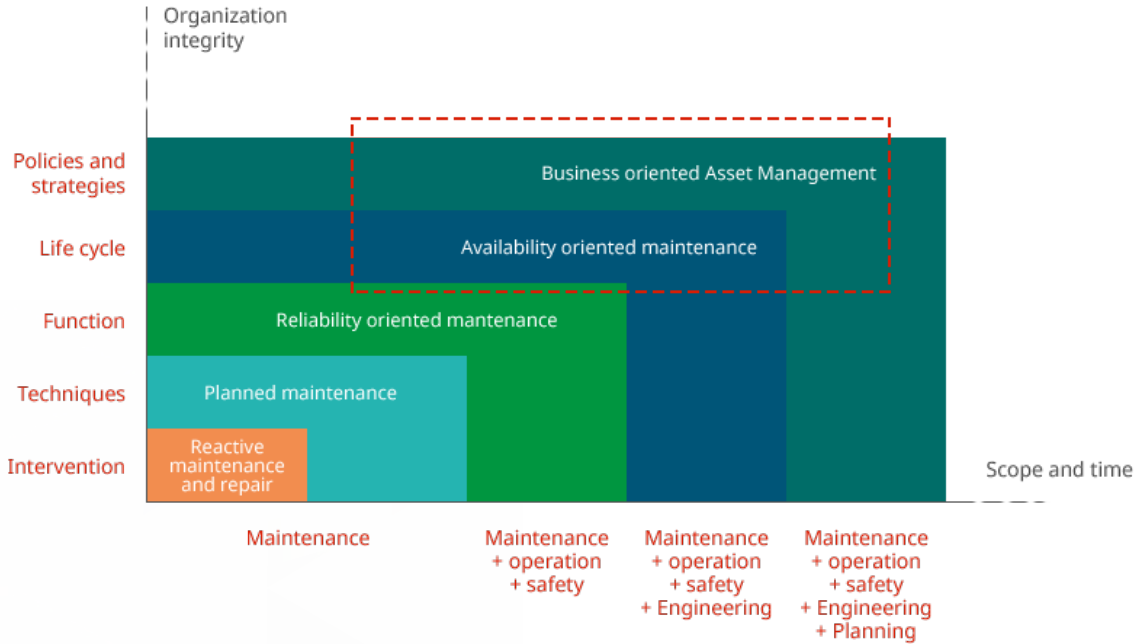
Asset Management ISO 55,000



The requirements set out in the ISO 5500X standards provide a structured approach to developing an asset management system which facilitates the achievement of the organization's objectives and provides necessary controls to ensure delivery.

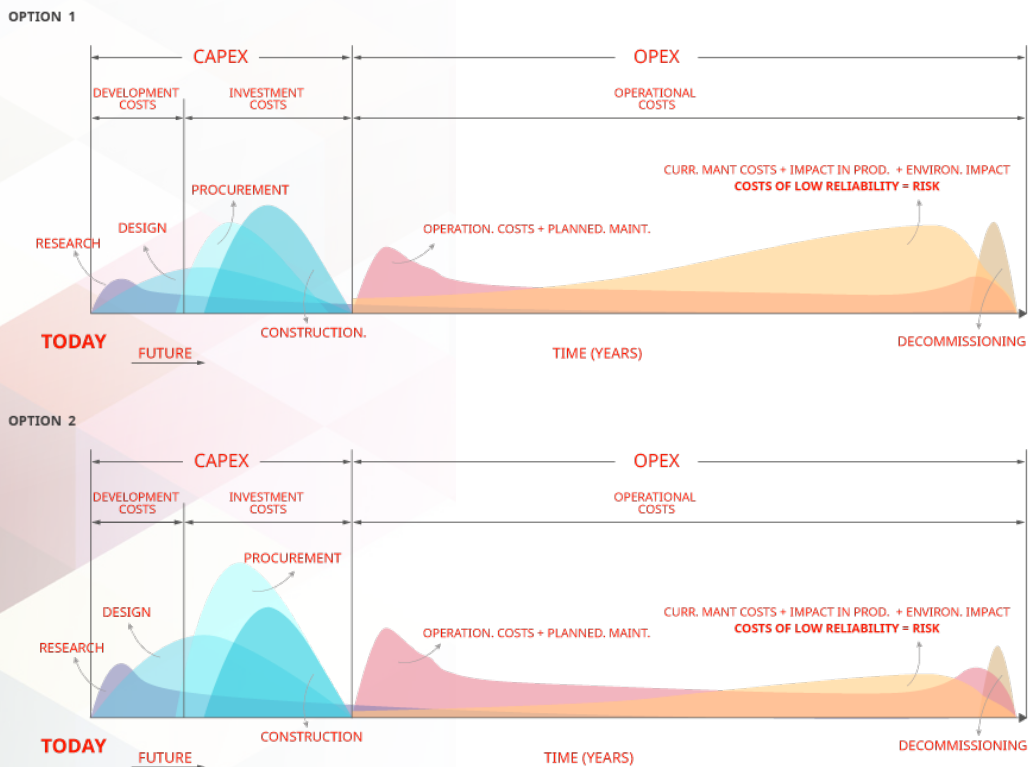
This standard has helped provide a structure in response to an industry need spurred by developments in the maturity of organizations and complex external environments and situations in which the business can find itself impugned by accidents such as the Mexican Gulf (Macondo, BP). This is illustrated in the following chart:

Asset Management ISO 55,000 Asset Management Evolution



Investment management is performed using a Life Cycle concept in which the relationship between operating costs and risk or reliability taken on vital importance. The ongoing comparison between competing investment scenarios has become a daily exercise and is fundamental for business decision making.

Asset Integrity – Process Safety



CONCLUSIONS

Various different tools are available to industrial companies according to the particular activity phase, the project being developed, the end objective and the risk management policy which the company has established for attaining its safety objectives.

A proactive approach aimed at preventing and avoiding accidents is standard practice. Managers of industrial assets must ensure business continuity throughout the life cycle using tools aimed at achieving **design** and operational INTEGRITY, as well as integrity in terms of asset **readiness** and **reliability**.

A coordinated and integrated application of the set of tools described in this article allows for significant safety benefits to be obtained throughout the life cycle of an industrial installation. Selecting the right tools requires experience in order to identify those which are the best fit for the installation being assessed and the desired objectives.

In this regard, INERCO has over 30 years of experience advising on risk management and enhancing integral safety levels in the industrial sector (oil & gas, chemical, energy, mining, metals, industrial engineering, etc.), employing the most cost effective approaches to reducing risk. ■

Economic Research improves the forecast for the world economy



In the latest update of the Panorama Economic and Sector report for 2017: Forecasts for the fourth quarter, [Economic Research](#) improved the data for global growth, with expectations for global growth of around 3.5 percent in 2017, noticeably higher than that expected at the beginning of the year.

Improved economic rhythm is expected in aspects including acceleration and growing cyclical synchrony in developed markets, acceleration of growth in emerging markets and greater resilience for the activity in Mexico, Turkey and China.

The forecast for inflation is low, while with regard to monetary policy, the Federal Reserve and the European Central Bank (ECB) confirm that decisions will be taken gradually.

At a global level the report points toward risks deriving from the performance of USA economic policies, vulnerability in emerging markets associated with the levering of corporate private bonds, and in some cases in Dollars, and the dangerous geopolitical outlook in North Korea.

Lastly, it addresses the improved outlook for insurance markets, linked to the positive impact of expected global growth, the positive outlook for activity and employment in the USA and other aspects like the rise in the GDP forecasts in the Euro Area.

[Download report](#)

The Spanish Insurance Market in 2016



**Only available in Spanish*

This report looks at the Spanish insurance market in 2016 and the underlying economic environment. It confirms the turning point marked by the nascent pick-up in global economic growth, led by emerging economies, amid the shift from an easy monetary policy to a looser fiscal policy stance. The year featured uncertainties surrounding geopolitics and regional governance in the EU, reaching a crunch point with Brexit in the UK. Spanish GDP grew by 3.2 percent in 2016, extending the positive momentum seen the year before. Improved household and business consumption drove growth in all business lines in the insurance market, with aggregate premium volume up 12.4 percent. Life insurance stood out, supported by negligible or zero returns on bank deposits. The Spanish insurance sector showed gains in profitability and, in general, high solvency levels under the new Solvency II metric.



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The Latin American insurance market in 2016



**Only available in Spanish*

Includes an analysis of the insurance market in Latin America and the Caribbean, and the economic context. In 2016, the region's economy contracted close to -1.2 percent (-2.9 percent in Venezuela), especially influenced by the recession in Brazil and Argentina. Regional activity is expected to gain momentum in 2017. Premiums in the insurance market showed light growth of 1.2 percent, thanks to the improved behavior of Life insurance. Non-Life business, which is strongly linked to economic growth, suffered a 3.1 percent contraction measured in US dollars. The report delves deeper into the key strengths of 2016 and the structural trends in the last decade, regionally and by country, including a ranking of key competitors and an overview of the relevant regulatory changes in each of the markets.



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Ranking of Insurance Groups in Latin America 2016



Report prepared by MAPFRE Economic Research on the 25 largest insurance groups in Latin America by growth, size and concentration of premium volume, in three categories: Total, Life and Non-Life. This ranking is based on statistical and financial information released by the region's insurance supervisory bodies. The premium volume of each group is the sum of the written premiums in each country.

Access the full report:

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Ranking of the largest European Insurance Groups in 2016



The first section of the report presents rankings of Europe's largest insurance groups in terms of total business, and in the life- and non-life segments, with the classification based on overall premium volume. This classification is followed by an analysis of the trends in the past decade that led to the current ranking, and the outlook for convergence among market players. It also includes information on each group's solvency obtained from their Solvency and Financial Condition Reports (SFCR).

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REGION IBERIA



The IBERIA Regional Area comprises the activities of MAPFRE ESPAÑA and its subsidiary in Portugal, Verti, as the insurance company for Directo Digital and the Life insurance activities managed by MAPFRE VIDA and its bancassurance subsidiaries.

The countries that comprise this Regional Area have a total combined population of 55.9 million, GDP of 1.4 trillion (USD) and an insurance market worth 76 billion.

MAPFRE IBERIA IN NUMBERS



9.543
employees



6.259
offices



7 MILL
clients

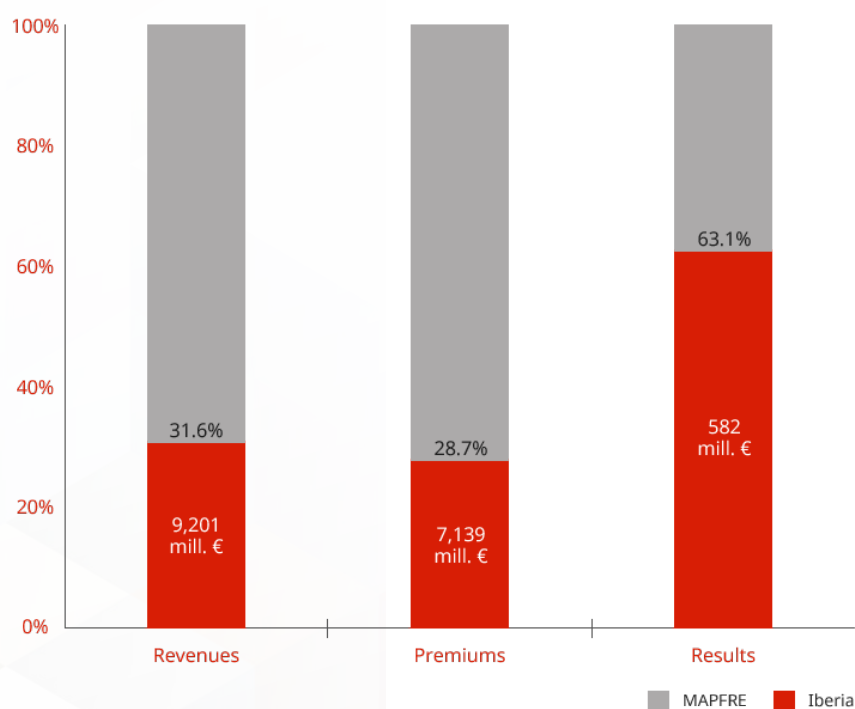


12.842
agents
and delegates



10.5%
market share

Data for December 2016



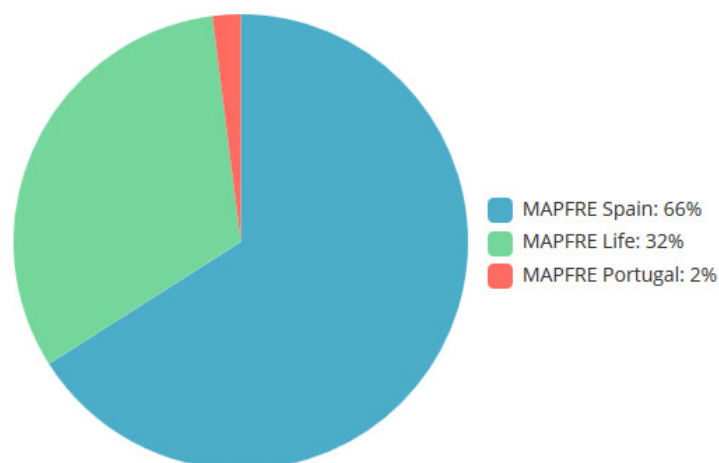
To December 2016, IBERIA contributed 31.6% of the Group's total revenue, 28.7% of issued and accepted premiums and 63.1% of its results (after taxes and non-controlling interests).

As per the data to September 2017*, Iberia generates 26.4% of MAPFRE's premiums and 70.1% of results.

MAPFRE has over 9,000 employees in Spain and 400 in Portugal, approximately 26% of the total workforce of the MAPFRE Group.

It is well-known that MAPFRE is committed to multichannel distribution, and IBERIA of course participates fully in this strategy, and has the largest proprietary sales network* in the insurance market, with **3,078 direct and delegate offices and 10,176 agents, in addition to 3,181 bancassurance branches and 5,365 brokers.**

Distribution Premiums 2016



(*) Percentage values in euros (Issued and accepted premiums)

MAPFRE Spain: € 4.71 bn; MAPFRE Life: € 2.29 bn; MAPFRE Portugal: € 142 m

It also has collaboration and intermediation agreements with leading car manufacturers, department stores and distribution chains, and commercialization strategies through online channels (both for capturing clients through their own channel and generating contacts for all the other channels).

All this distribution work has led to a business relationship with 6,600,000 private clients (19% of the total in this segment) and almost 400,000 corporate clients (22% of the total in this segment), in addition to almost 40,000 service providers.

The performance of the Iberia Regional Area's figures to September of 2017 gives us reason to look ahead with optimism toward the close of the year. We should see **solid growth** compared to the previous year, with a **3.7% increase in premiums** (€5,258 million) **and a rise of 8.2% in the attributable result** (€389.3 million).

| MAPFRE Iberia (Written premiums* by business line to September 2017) | | |
|---|---------|---------------------|
| | €m | % Δ from Sept. 2016 |
| Life | 1,565.8 | 5.4% |
| Automobiles | 1,651.8 | 3.3% |
| P&C | 1,272.7 | 2.4% |
| Health and accidents | 606.1 | 3.6% |

(*) Figures in millions of euros.

The increase in premiums in the first nine months of 2017 compared to the same period last year was achieved through a 3.0% **rise in Non-Life**, due to the significant growth in Private Automobiles (+3.8 %), Health and Accidents (+3.6), **and a 5.4% growth in Life**.

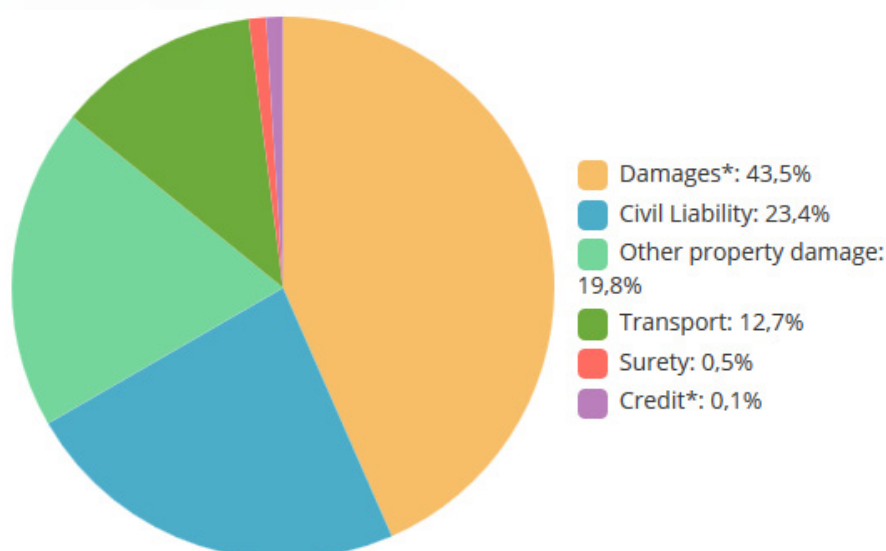
MAPFRE is the benchmark insurance company in Spain, a leader in the Non-Life segment and recognized as the insurance company with the best reputation according to the Merco Report 2017, one of the top five most responsible companies and number eight in terms of reputation (Merco Report on Responsibility and Corporate Governance). It leads digital investment in Spain according to the report by EAFI Feelcapital, and has been considered for the fifth year running as the most attractive company to work for in the insurance sector, among other recognitions.

THE COMPANY CLIENT, ESSENTIAL IN MAPFRE IBERIA'S STRATEGY

The insurance market for this client segment is highly concentrated, so that the top ten companies account for 59% of the business.

The COMPANIES business is distributed as follows:

Total MAPFRE-Company Line 2016



(*) Includes businesses, industrial and fire.

(**) To its market share in Credit insurance we should add its 50% holding in SOLUNION (a joint venture with the Euler Hermes group), which at the end of 2016 had a 17% market share in Spain.

MAPFRE, through MAPFRE ESPAÑA and GLOBAL RISKS, is **leader in this segment with 17.1%**.

| MAPFRE España's Market Share – Company Sector | | | |
|---|----------------|--------------|----------|
| Lines | Premiums* | %Share | Ranking |
| Business | 65,168 | 11.3% | 2 |
| Industrial | 271,078 | 22.4% | 1 |
| Fire | 74,947 | 34.6% | 1 |
| Total Damage Sector | 411,193 | 20.5% | 1 |
| Surety | 5,194 | 8.3% | 5 |
| Other Damage | 186,910 | 17.9% | 1 |
| Third-Party Liability | 221,058 | 15.9% | 1 |
| Transport | 120,020 | 27.7% | 1 |
| TOTAL MAPFRE | 945,351 | 17.1% | 1 |

(*) Figures in thousands of euros

In the corporate world, we are not only leaders of the purely industrial insurance business, but we also lead or have a significant presence in Corporate Provision, Life and Health groups and programs for vehicle fleets. In addition, through Solunion, MAPFRE's joint venture for credit insurance, we are positioned as one of the leading and fastest-growing companies in this segment.

MAPFRE's presence within the Large Company sector is highlighted by the fact that **it heads or takes part in the international programs of 24 of the 35 companies in the IBEX 35** (the group of the largest Spanish companies listed on the Stock Exchange).

It is also worth noting the **collaboration** it has maintained from its earliest beginnings with the most important **risk management** associations, AGERS and IGREA, both in terms of sponsorship and collaborating in conferences and preparing reports and manuals. This collaboration is also a source of enrichment for MAPFRE in providing a knowledge of companies' insurance needs.

The **Fundación MAPFRE** and its departments such as **ITSEMAP** (engineering and security consultancy), among others, further enhance the action of the MAPFRE Group in this strategic segment.

Sources

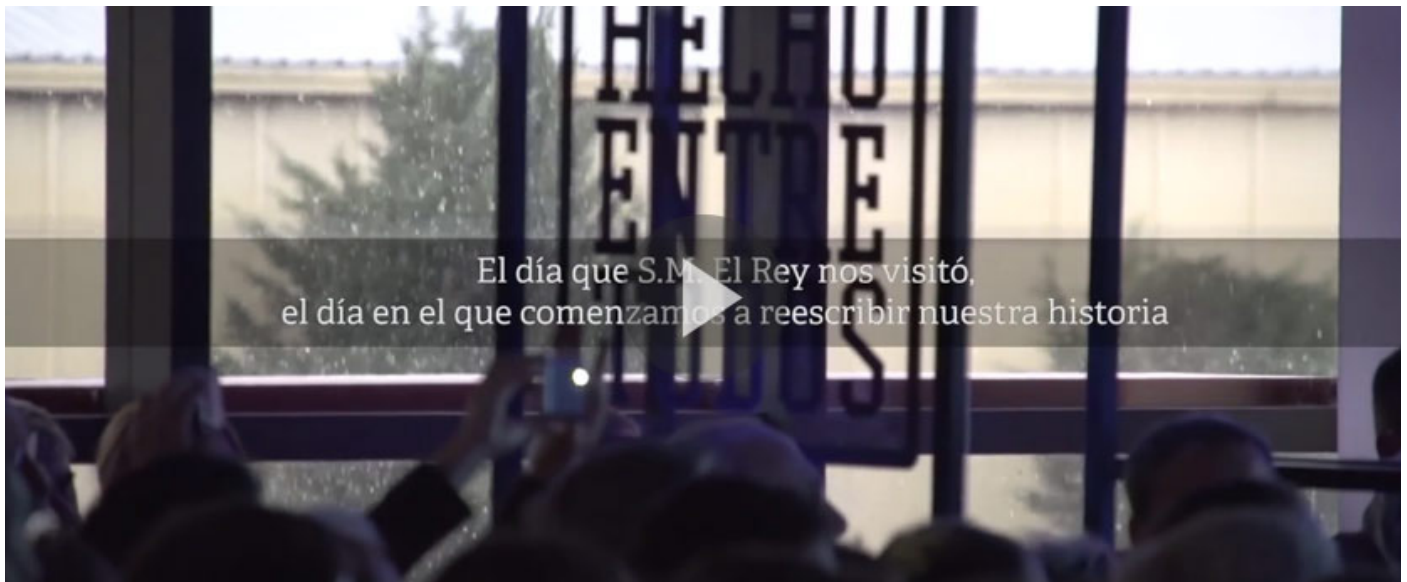
Informe Integrado 2016

Informe Resultados a septiembre de 2017

Información Financiera 3T 2017

ICEA: "Empresas. MAPFRE vs MERCADO junio 2017"

Campofrío Nueva Bureba: from crisis to opportunity



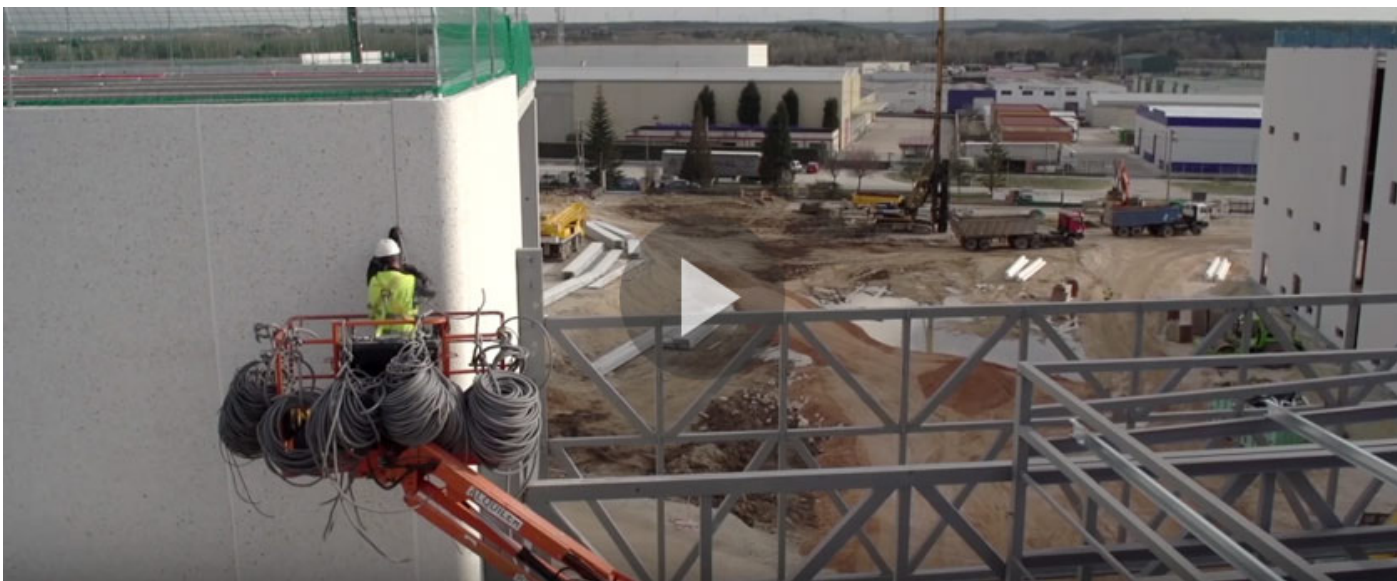
**Only available in Spanish*

November 16, 2014 is seared on the memory of all those who work at Sigma Alimentos as the day we faced the greatest challenge of our history. The fire that destroyed the facilities of our flagship, the Campofrío factory in Burgos (La Bureba), put to the test the philosophy that we have been preaching for years, our famous slogan “Nothing and no one can take away our way of enjoying life”. Seen in hindsight, the course we took that day led us from the horror of the crisis to be able to transform it into opportunity with the support of our employees, partners, clients, consumers and others. The result, rechristened as Nueva Bureba, or New Bureba, is not only the most state-of-the-art and modern meat processing plant in Europe, but above all, a commitment fulfilled.

The first concern when the fire initially broke out was without a doubt to prevent any type of human casualty. Fortunately, the 25 people who were inside the plant at that time were able to make it to safety immediately. The leadership team immediately activated the crisis management protocols, and established a global crisis committee to assess, analyze and manage the impact

of the fire and take the necessary damage mitigation measures: everything from personal injury through to possible environmental repercussions, material damage, the loss of production, possible impact on third parties and more. We did everything in our power to re-establish normality as soon as possible. The whole team bent over backward from the very first moment of this crisis. And key throughout this process was the support of our employees, the authorities, our business partners, our shareholders and our insurance company.

At a time of maximum uncertainty after the fire, our commitment –which also became our greatest challenge– was to guarantee and ensure employment and rebuild the factory in record time: two years. It seemed almost impossible, but when the agreed date arrived, that promise was delivered. Today, we feel enormously proud that all our employees have returned to Nueva Bureba to continue working and making our group more competitive and innovative than ever.



**Apenas disponível em espanhol*

Looking back, another of the challenges we were facing was the steep decline in our productive capacity. The functional crisis committee activated after the disaster made the supply chain one of the core elements in its strategy. The Bureba factory was at that time in full production mode for the Christmas campaign, one of the highest demand peaks for products on retail shelves. The difficulty was twofold: on the one hand, offsetting the loss of product (60,000 tons of product were lost) and, on the other, looking for alternatives for the drop in productive capacity. The impact was devastating. In total we lost 30% of volume in Spain, 37% of our sales and 50% of our gross profit. Of the 16 kilometers of retail shelf we occupied in Spain, we were left with barely 1.5 just a few weeks later. This made it essential to channel the production to other plants in the group and to third parties, while simultaneously increasing investment in promotional campaigns, which could have had a clear impact on the company's liquidity. However, and thanks to the support of our insurance companies and the collaboration of MAPFRE throughout the whole process, we were able to make the necessary investment to continue competing on the shelf.

Following our business continuity plan, we defined a clear target to re-establish our activity: to recover the same share of the retail shelf as before the fire by

June 2015. This was a very aggressive but necessary commercial plan to ensure we continued to be present in supermarkets and so the clients would not forget us. In a very short period of time, we reinvented our strategies and aligned our sales force under the same goal. If we didn't find a way to replace the 60,000 tons of product on the shelves, that would be the end of us. It wasn't easy. And that's something that could never have happened if we hadn't had solid and reputable partners like MAPFRE who fulfilled their commitments and were at our side at all times.

The material damages and loss of profits policy was critical, and thanks to that, we were able to rebuild the factory, take on the expense of mitigating the losses produced by the fire, and guaranteed the expected profit level for which the company was structured. In all the chaos, we could find some small oasis of calm thanks to MAPFRE's support.

As well as the actions aimed at the employees, the recovery of our productive capacity and our ability to compete in the market, and the collaboration with our insurance companies, the communications plan –both external and internal– was fundamental. Guaranteeing a transparent communication with the employees who had lost their job due to the fire was our main concern and undertaking. We received

Claims observatory

substantial outside support from the authorities and the Spanish public as a whole. The optimism that has always been our hallmark came back to us and our

factory in the form of messages of encouragement and offers of support. This helped us reinforce our brand image, even without a product on the shelves.



**Only available in Spanish*



View of Nueva Bureba



Interior of the new factory



© House of H.M. the King. Group photo at the entrance to Nueva Bureba



2.

© House of H.M. the King. H.M. the King during the speech at the opening of Nueva Bureba along with Pedro Ballvé (CEO of the Campofrío Food Group), Mr-Alvaro Fernandez (General Manager of Grupo Alfa), Ms Soraya Sáenz de Santamaría (Deputy Prime Minister of Spain), Mr. Juan Vicente Herrera (President of the Castile-León Regional Government)



© House of H.M. the King. Benito Tapiador (CFG Engineering Manager) shows H.M. the King some of the production processes in the new factory.



1.

© House of H.M. the King. H.M. the King unveils the commemorative plaque on his visit to the new factory.



Together with our workers –who became the company’s most fervent defenders–, we ran our own communications strategy: CreamosVitae –an intranet with all the information about the factory, the daily tasks of the operators who worked to rebuild it, and the progress of the negotiations to recover 100% of the employment. Thanks to this collective effort, to the whole team’s talent and capacity for hard work, we have managed to emerge stronger from a tremendously unfortunate event, and to keep our promise.

And finally, this enormous challenge for the business ultimately became an opportunity for resurgence like the phoenix. Thanks to the effectiveness and speed of the action protocols and the support of our insurance policies, we were able to guarantee the continuity of the employment and recover our production levels.

But above all, thanks to the lessons learned in these two years, the Nueva Bureba, built in record time on the same site as its forerunner, has become a symbol of how our way of understanding and enjoying life can overcome any obstacle, however daunting it may seem. ■

alfa *Sigma*

Further information