

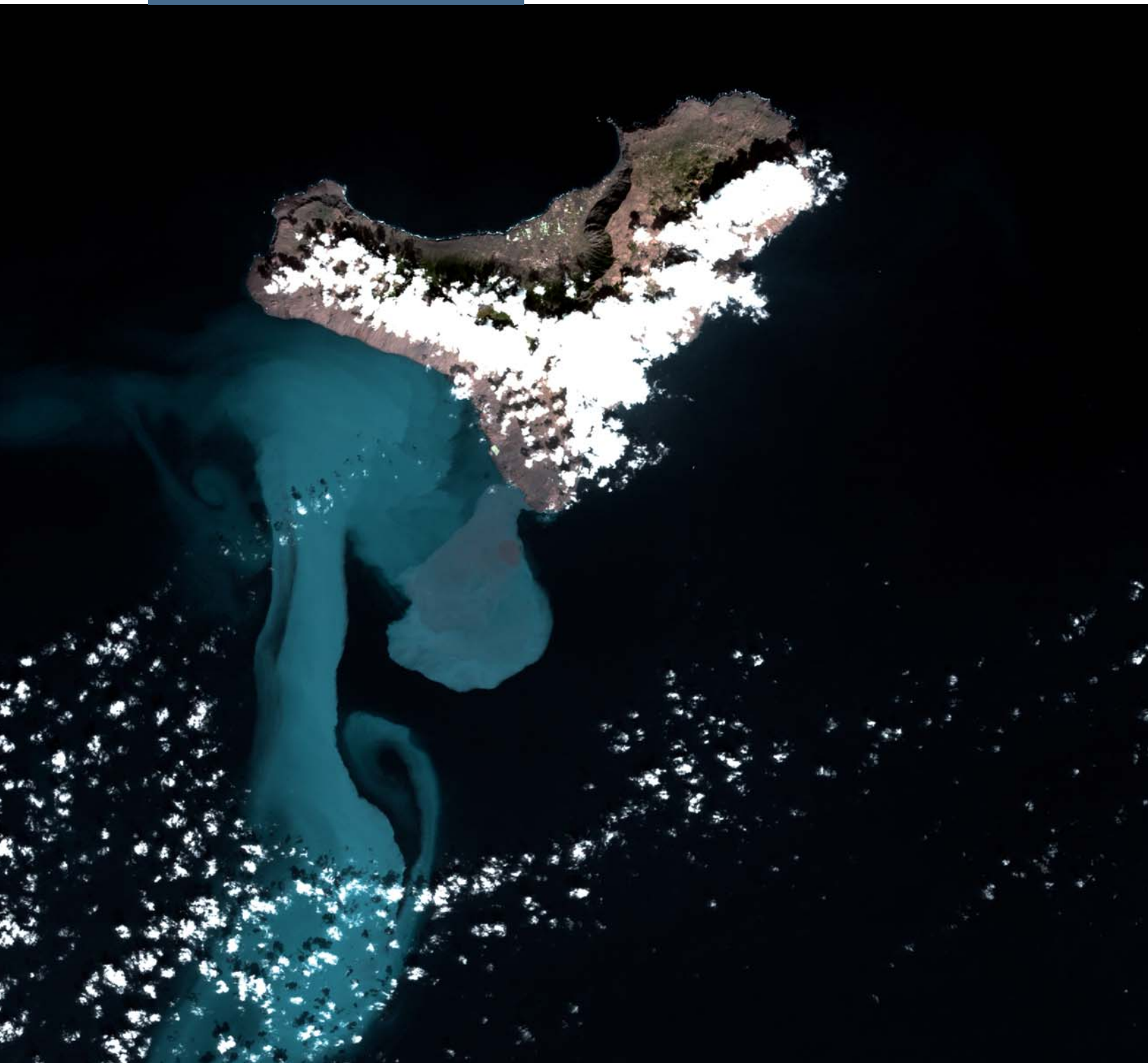
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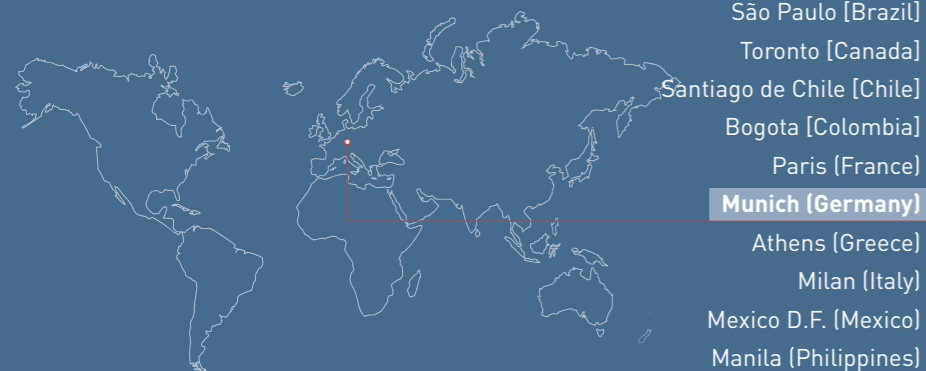
Variability in Atlantic hurricanes (Richard J. Murnane).

Dolo in the risk declaration for Life and Health insurance? (Ana Luisa Villanueva).

Miguel Belló-Mora: "A wise look from the space".

Nieves Concostrina and José Vicente Aparicio: "Innovation at farewell ceremonies".





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 Underwater volcanic eruption in *Hierro* Island (Canary Islands, Spain) taken by the satellite DEIMOS 1 on 23 October 2011



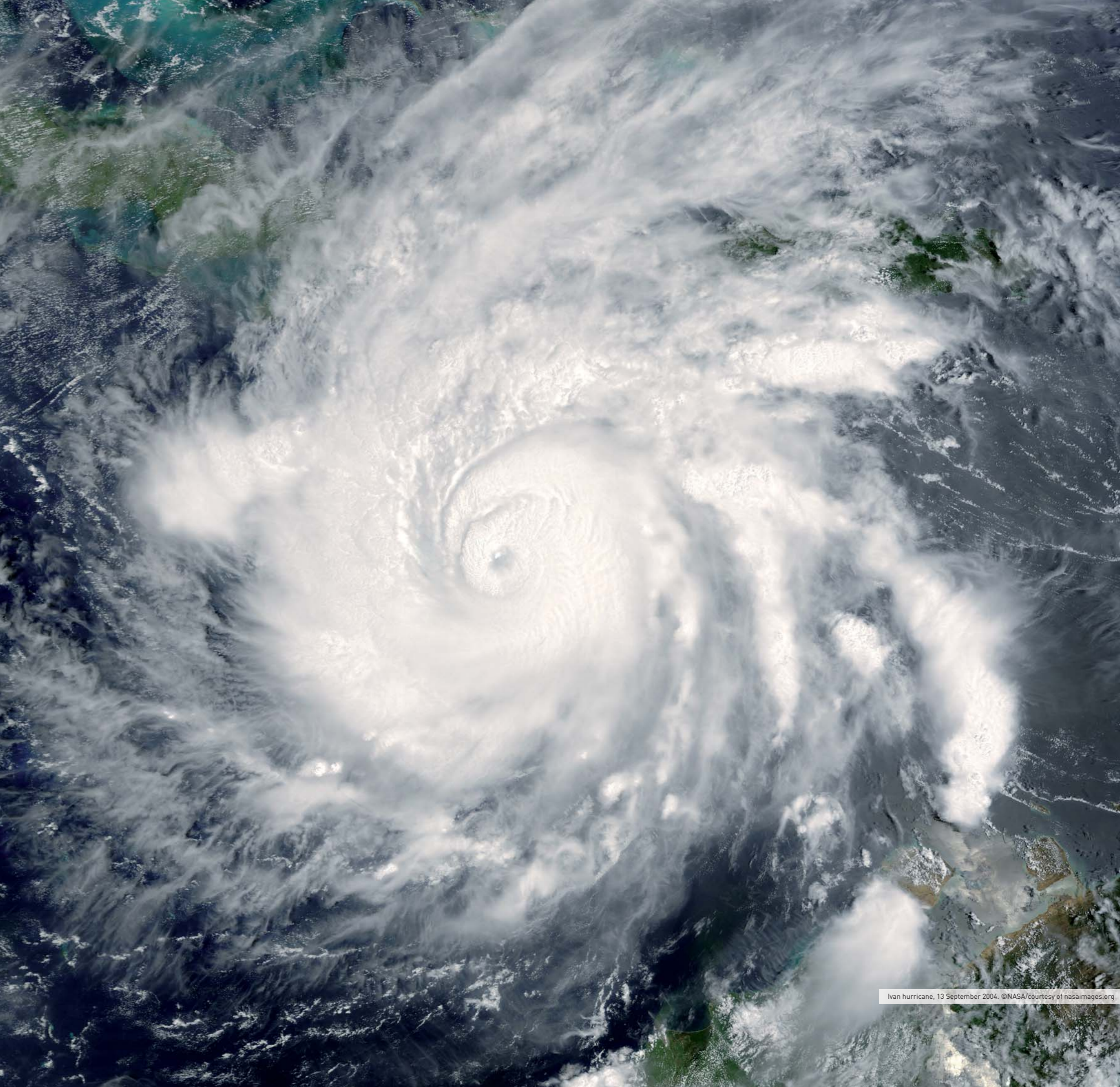
editorial

When the cyclone season ends in the Atlantic and Caribbean basins, the parameters of the hurricanes formed are examined, and then entered into the long historical available series. This fully developed database is exactly what makes renowned scientists like Richard J. Murnane, from the Bermuda Institute of Ocean Sciences, question its completeness and accuracy. Trébol is the first to publish his analysis, with obvious implications for risk managers and catastrophe models.

Asking the suitable questions is the best way to obtain the right answers, especially when combined with a certain degree of psychology. This is how Dr. Ana Villanueva, Chief Medical Officer at MAPFRE RE, explains the formula to draw the thin line that separates intentional misrepresentation from non-disclosure of information in risk questionnaire of Life and Health insurance. Distinguishing between good faith and fraud is a skill that any underwriter in this area has to master, in order to sort out any doubts in advance and deliver the best possible service to the insured in case of loss.

The secret of an objective approach is keep things perspective, and the best way is monitoring the world from a satellite to study most of what is happening to the Earth. Aeronautical engineer Miguel Belló-Mora was farsighted when he founded DEIMOS SPACE and launched the first Spanish privately held satellite, Deimos 1, capable of sending 4 million kilometers of high resolution images every day. With a business plan with products for the study of agriculture, environment, climate change and insurance, he is already planning on launching Deimos 2 in 2013.

Death, though unknown, apparently distant, and inevitably painful, is a subject that needs to be discussed. Trébol reviews with journalist Nieves Concostrina, editor of *Adiós* magazine, many of the traditions and historical anecdotes related to the ways of saying goodbye to those beloved. The professional view on funerals is completed by José Vicente Aparicio, Deputy Director General of FUNESPAÑA, who describes the range of services available for the insured and relatives of any belief, always seeking to assist with the formalities and relieve the grief.



Variability in Atlantic hurricanes

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Reinsurers often prefer hurricane catastrophe risk models based on the assumption that current basin-wide tropical cyclone activity and landfall rates are greater than the long-term average. In contrast to the view that we are in an era of relatively elevated hurricane activity, most forecasts of 2012 Atlantic basin hurricane activity predict a near-normal season with hurricane numbers and landfalls close to the long-term average. For many people this contrast and the importance of defining the “correct” landfall rate might prompt a number of questions such as: how do we define “normal activity”, what time scale(s) are used to define normal, what controls normal or anomalous activity, and will the definition of normal change? To answer these questions one must understand the historical record’s idiosyncrasies and how climate influences hurricanes. The answers are important for science, our society and the economy; they also are of great relevance to users of catastrophe risk models. For example, ceteris paribus, modeled losses based on elevated landfall rates are greater than those based on long-term climatology.

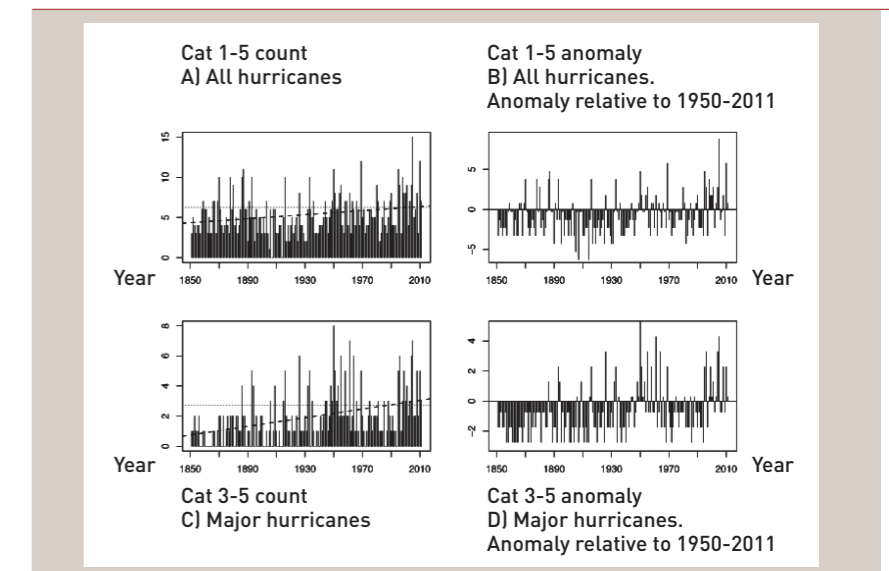
Here I hope to provide succinct answers to these questions. I focus on the Atlantic basin and US landfalls for two reasons: 1) of all regions subject to tropical cyclones, the Atlantic offers a combination of the highest quality data and longest “complete” record, and 2) the size of US insurance market and

How do we define “normal activity”, what time scale is used to define normal, what controls normal or anomalous activity, and will the definition of normal change?

Ivan hurricane, 13 September 2004. ©NASA/courtesy of nasaimages.org



Figure 1: Time series of annual hurricane (Saffir-Simpson Categories 1-5) and major hurricane (Saffir-Simpson Categories 3-5) counts in the Atlantic basin. A) All hurricanes, dotted line is average count over the 1950-2011 period, the heavy dashed line is the linear trend over the whole record. B) Annual anomalies in hurricane counts relative to the 1950-2011 mean. C) Major hurricanes, dashed line is average count over the 1950-2011 period, the heavy dashed line is the linear trend over the whole record. D) Annual anomalies in major hurricane counts relative to the 1950-2011 mean. As elaborated on in the text, the linear trend in A and C is thought to be due, in part or whole, to changes in observational technology and missing storms over the period of record.



How much might the missing storms contribute to the upwards trend?

its importance to the reinsurance industry. I consider the Atlantic basin in the broadest sense and thus include the Gulf of Mexico and the Caribbean in the Atlantic numbers.

The hurricane data

Explanations regarding the uncertainties in how hurricane activity might change are more understandable if one is familiar with the quality of hurricane data. The best-track data for tropical cyclones form the foundation of the hurricane catalogs used by catastrophe risk models. Among the parameters recorded in the best-track data are a tropical cyclone's latitude and longitude, central pressure, and maximum 1-minute sustained wind speed at 10 meters rounded to the nearest 5 knots. All data are provided at 6-hour intervals.

The 6-hourly record of best-track hurricane data for the North Atlantic, known as HURDAT, starts in 1851. The original HURDAT compilation [Hope and Neumann, 1968] was developed in the 1960s for NASA to estimate hurricane wind risk near Cape Canaveral. Current uses of the HURDAT data are far beyond what was originally envisioned, and as a result, there is an ongoing effort to reanalyze and improve the data [Landsea et al., 2004].

Not surprisingly, the quality of the data and completeness of the observations used to develop HURDAT decrease as one goes back in time. A number of factors contribute to this decay in quality. For example, prior to 1931 wind speeds were recorded once daily at 12:00 GMT, and between 1931 and 1956 data were recorded twice daily at 00:00 and 12:00 GMT. Before the satellite era began in

the mid-1960s there was no complete global view of storm activity so it is easy to imagine that storms could remain unobserved if they remained far from land. Routine aircraft observations of tropical cyclones in the Atlantic began in 1944. Prior to 1944, many storms would be detected or recorded only if they crossed land or encountered a ship. A brief history of the best-track data can be found in [Murnane, 2004].

Basin-wide hurricane counts

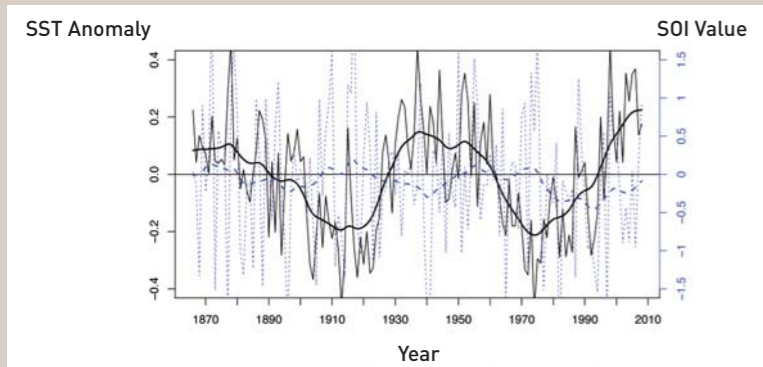
With this understanding of how data quality has evolved through time we can better assess the history of tropical cyclone activity in the Atlantic. As shown in Figure 1, the count of hurricanes and major hurricanes in the earlier part of the record appears lower

than the average of the 1950-2011 period. In addition, there appears to be a positive trend in hurricane and major hurricane counts. Considering the changes in observational technology noted above, it seems reasonable to expect that some storms are missing from the early record and that the positive trends in counts are likely due, at least in part, to the missing storms. But, how much might the missing storms contribute to the trend?

Numerous papers assess the trend in hurricane count to determine whether the trend is real, an artifact of the data, or some combination of both. A simple summary of these papers suggests two main factors that should be considered when analyzing trends and variability in the historical record. The first is that in the earliest records up to four or more storms could be missing each year purely due to fewer ships and therefore less

¹ I use SST data from the NOAA ERSST V2 SST, interpolated to a 5x5 grid, available at: <http://www.esrl.noaa.gov/psd/data/correlation/amon.us.long.mean.data>. For the Southern Oscillation Index [SOI] I use data from the Climatic Research Unit at the University of East Anglia, available at: <http://www.cru.uea.ac.uk/cru/data/soi/>

Figure 2: Time series of the SOI (blue) and detrended North Atlantic SST anomalies (black). The thick solid and dashed lines are generated by applying a 10-year Butterworth filter to the annual June through November averages. The unfiltered SST anomalies (thin black line) are detrended using a linear least squares fit to the average of June through November monthly averages of SST. The unfiltered SOI values (thin dashed blue line) are also June through November averages.



frequent storm encounters in the early record [Vecchi and Knutson, 2008]. The second is that observational technologies, mainly associated with satellites, allow us to more efficiently identify short-lived storms with lifespans of one to two days [Landsea et al., 2010]. Almost all of these short-lived storms tend to be tropical storms and very unlikely to be major hurricanes. After making corrections for these factors, which are also subject to uncertainty, the long-term trends seen in Figure 1 become significantly smaller. However, there remains the possibility that a portion of the increase in short-lived storms and/or in the long-term trend is real. The upward trends in hurricane and major hurricane counts are no doubt smaller than that shown in Figure 1. Unfortunately, data uncertainty makes it impossible to define precisely the long-term trend in basin-wide Atlantic hurricane activity. However, as shown below, there is more certainty regarding variability on decadal and interannual time scales.

Climate and hurricane activity

Among the many factors affecting hurricane activity in the Atlantic, perhaps the most important two are the Atlantic Multi-decadal Oscillation (AMO) and the *El Niño*-Southern Oscillation (ENSO). The AMO characterizes a decadal scale variation in North Atlantic sea surface temperature (SST). The ENSO represents a coupled ocean-atmosphere oscillation whose period ranges from ~3 to ~7 years. The oceanic component (*El Niño*) is characterized by equatorial Pacific SSTs; the atmospheric component (the Southern Oscillation) involves differences in atmospheric pressure at sea level between Tahiti and Darwin, Australia. The methods used to calculate the AMO and the Southern Oscillation Index (SOI) can vary¹ but in general any differences in methodology do not have a strong impact on the following discussion.

The SOI is derived from atmospheric pressure so it is not surprising that it varies on a shorter time scale than the AMO that is based on SST (Figure 2). A 10-year filter can be used to highlight longer-term variability in the SST anomalies and the SOI. The SOI component of

ENSO represents the atmospheric portion of a coupled pattern of equatorial Pacific Ocean and atmosphere variability. Positive SOI values are associated with *La Niña*, negative SOI with *El Niño*. ENSO has a global influence and thus changes in the Pacific can influence Atlantic hurricane activity. Wind shear in the tropical Atlantic tends to be higher with *El Niño* than with *La Niña*. As tropical cyclone genesis and intensification are favoured in environments with low wind shear, one would expect enhanced hurricane activity during *La Niña* periods and diminished activity during *El Niño* periods (Figure 3).

The relationship between the AMO and Atlantic hurricane activity can be understood using the theory of maximum potential intensity for a tropical cyclone. A key theoretical point is that the larger the temperature gradient between the sea surface and the top of the troposphere, the more energy is available to a tropical cyclone (assuming SSTs are sufficiently warm, ~26°C). While SST is a convenient marker, the heat content of the ocean below the tropical cyclone better quantifies the energy available to a tropical cyclone. Warmer waters with deeper thermoclines have greater heat content than cooler waters and shallow thermoclines, and therefore can provide more energy to a tropical cyclone. Thus, one would expect that higher SSTs and a positive AMO should be correlated with more hurricane activity. The relationship between the AMO as characterized by North Atlantic SSTs, and hurricane activity characterized by anomalies from the long-term average, is not perfect, but it tends to be consistent with expectations that during positive AMO phases hurricanes tend to be more intense and there are more major hurricanes (Figure 3). There is debate in the scientific community regarding whether the AMO, like ENSO, is a pattern of natural variability or whether it is instead a result of anthropogenic aerosol emissions and large-scale warming.

Hurricane landfall

While basin-wide statistics are scientifically useful because that is where most tropical cyclones occur, (re)insurers are more

Figure 3: Time series of the AMO (black line), as characterized by Atlantic SST anomalies, and the SOI (black dashed line), both of which are derived from monthly averages over the June through November period, and Atlantic basin-wide annual counts of hurricanes (solid blue) and major hurricanes (dashed blue). Annual counts are the same as shown in Figure 1. Lines are generated by applying a 10-year Butterworth filter to the annual June through November averages.

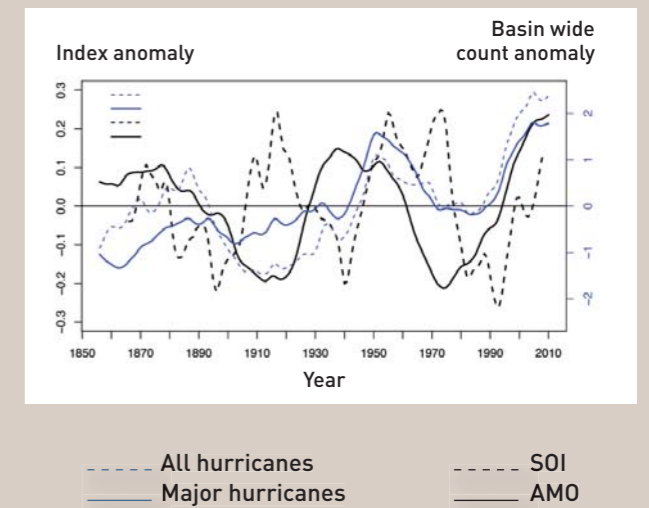


Figure 4: Annual count of US landfalls for all hurricanes (thin bars) and major hurricanes (thick bars) for US hurricane landfall. The thin dashed horizontal line is the average hurricane count over the 1851-2011 period. The heavy dashed line is the average for the count of major hurricanes.

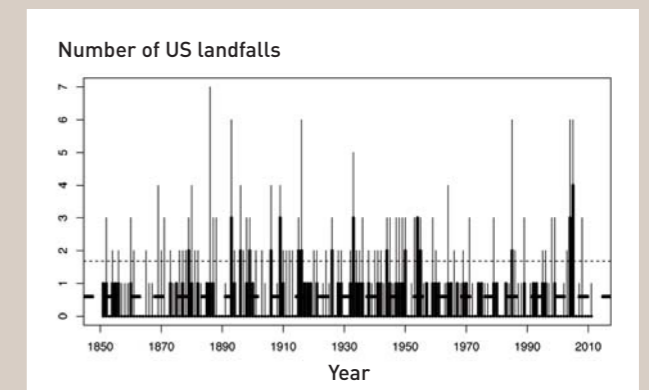
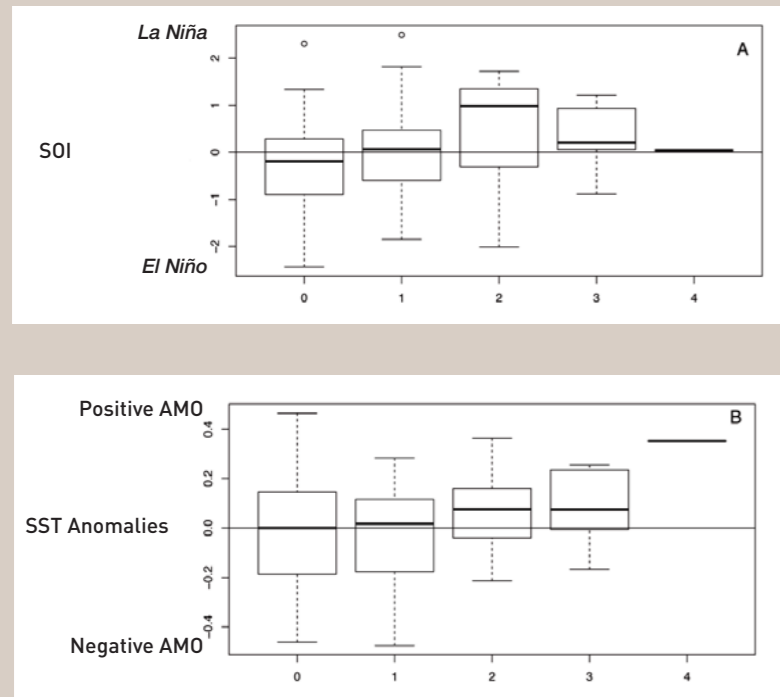


Figure 5: Box plots of the annual count of major hurricane landfalls as a function of SOI anomaly (A) and SST anomaly (B). The heavy black line is the median value, the bottom and top of the box represents the interquartile range, and the whiskers extend to the extremes of the values.



The ongoing HURDAT reanalysis effort has changed the landfall numbers for some years and altered the intensity at landfall of a significant fraction of events

interested in landfall rates, and in particular, the rate for major hurricane landfall. The data challenges related to missing and sparse observations discussed above are not as severe when it comes to counts of hurricane landfall. In fact, data for the count of US landfalls after 1900 are thought to be fairly robust. However, the ongoing HURDAT reanalysis effort has changed the landfall numbers for some years and altered the intensity at landfall of a significant fraction of events. With these caveats in mind, one can consider the annual count of hurricane and major hurricane landfalls (Figure 4) to be fairly robust. It is apparent that while there is variability, there is no long-term trend in hurricane landfalls.

Relatively warm SSTs and positive SOI values are both correlated with more basin-wide tropical cyclones. A reasonable guess would be that a similar correlation would exist for numbers of US landfalls. To a first

order this turns out to be correct (Figure 5), but the correlation of SOI and the AMO with major hurricane landfall provides little information regarding seasonal activity for a specific year. Hodges and Elsner [2010] show that the relationship between SOI and major hurricane landfalls is stronger than that for the AMO. In addition they highlight the importance of two other factors that are beyond the scope of this paper but should be mentioned: the North Atlantic Oscillation (NAO) and sunspots. Negative values of the NAO and elevated sunspot numbers are associated with more US hurricane landfalls.

What is “normal”?

From this discussion of data quality and of the factors that influence hurricane activity, it should be clear that it is not easy to define

“normal” conditions. Normal conditions could most easily be described as an average over a period of time long enough to sample variability on time scales of interest. Typically, more is better when it comes to data, but this must be balanced by data quality considerations. For US hurricane landfall, the period used to define normal should be sufficiently long to adequately sample multi-decadal variability. Unfortunately, the landfall data are too limited to determine if there is significant centennial-scale variability. However, studies of hurricane variability using geological proxies such as overwash deposits in coastal lakes and isotopic signatures in cave deposits suggest that there is significant millennial-scale variability. Fortunately, millennial time scales are of little relevance to (re)insurers so this additional complexity can be omitted from hurricane cat models. Given all that is known about US landfalls it is somewhat ironic that even if it was possible to know the exact state

of the AMO, ENSO, NAO, and sunspots for the upcoming season, seasonal forecasts of the number of US landfalls would remain imprecise given the randomness of the ocean and atmosphere.

How does this discussion relate to the medium-term view used in hurricane cat models? As shown in Figure 2, we are in an era of positive SST anomalies and thus reasonably expect that hurricane landfall rates should be higher than the long-term average. But, Atlantic SSTs are not the only important factor. The influence of ENSO/SOI, the NAO, and sunspots should also be considered. For example, years with a strong *El Niño* would be expected to have lower hurricane landfall rates than years with *La Niña*. Given the range of possibilities, users of cat models would be well served by managing their business in a manner that is resilient to a variety of different landfall scenarios.

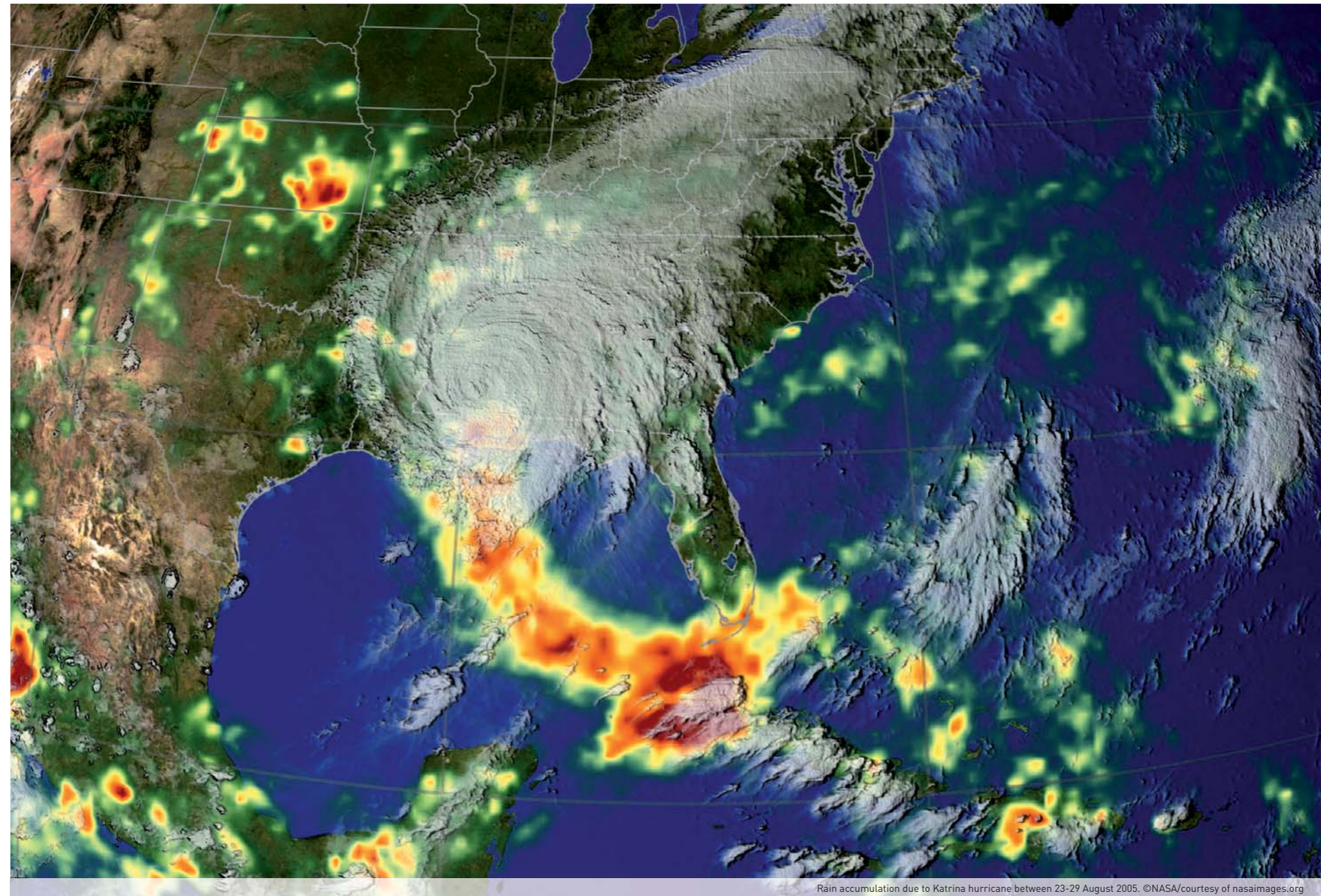
It is somewhat ironic that even if it was possible to know the exact state of the AMO, ENSO, NAO, and sunspots for the upcoming season, seasonal forecasts of the number of US landfalls would remain imprecise given the randomness of the ocean and atmosphere

Currently, most studies of how tropical cyclones will respond to anthropogenic warming suggest a small increase in intensity and precipitation and a small decrease in frequency

Concluding remarks

In the future, anthropogenic climate change will likely alter many aspects of the ocean and atmosphere. For example, it is likely that Atlantic SSTs will increase, but the response of ENSO is more uncertain. Currently, most studies of how tropical cyclones will respond to anthropogenic warming suggest a small increase in intensity and precipitation and a small decrease in frequency. In fact, there are indications that the strongest storms are getting stronger [Elsner et al., 2008].

Although this paper is focused on hurricane activity in the Atlantic, a few general comments regarding current and future tropical cyclone activity in other regions seem warranted. First, data limitations in other regions are worse than those in the Atlantic. Luckily, the growing arsenal of satellite-derived data ameliorates the paucity of *in-situ* aircraft measurements outside of the Atlantic. Nonetheless, *in-situ* measurements of tropical cyclones in other basins would be welcome. Second, the influence of SST, ENSO, and NAO are also important in other basins although the impact may be opposite in sign to what applies in the Atlantic. Finally, most model studies of future climate suggest with some confidence an increase in tropical cyclone intensity and precipitation. Estimates of how other factors such as tropical cyclone frequency and tracks might change are highly uncertain. Confidently predicting how tropical cyclones will change in the future is challenging for a number of reasons including: 1) the limited resolution of climate models make it difficult to generate realistic tropical cyclones (though this is becoming less of a problem), 2) model simplifications often do not realistically simulate the atmosphere and ocean on scales relevant to tropical cyclone behaviour, and 3) it is impossible to know future greenhouse gas emissions. Storm surge is an additional hazard that is generally not considered in studies of future changes in tropical cyclone activity. However, regardless of future changes in tropical cyclone activity, the threat from storm surge will increase as sea level rises due to thermal expansion of the ocean and melting of continental ice.



Rain accumulation due to Katrina hurricane between 23-29 August 2005. ©NASA/courtesy of nasaimages.org

However, regardless of future changes in tropical cyclone activity, the threat from storm surge will increase as sea level rises due to thermal expansion of the ocean and melting of continental ice

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Non-disclosure and misrepresentation in the Health declaration for Life and Health insurance

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The insurance contract is a private agreement between two parties, the insurance company and the insured, which represents for the insurer the legal obligation to cover the consequences of an uncertain event, or claim, and for the insured the payment of a premium to compensate this warrant.

A law, the Insurance Contract Act, very similar in scope and legal technique in all European Union countries, governs these contracts.

In Spain, the topic we are discussing is present in the LCS (Insurance Contract Act), article 10.

Article 10 addresses the obligation of the insurer to submit a questionnaire to the policyholder, who is required to answer the questions truthfully. If the questionnaire does not have the necessary questions to know the health state of the applicant, the latter is exonerated of the obligation.

If the insurer finds out that the policyholder has not given truthful answers to questions asked in the questionnaire, there is a period of a month to inform the insured and avoid the policy.

This fraudulent or misleading attitude usually refers to the failure to reveal a relevant fact when applying for an insurance contract

If claim takes place before the insurer notifies any irregularity to the insured, the insurer can cover the benefit applying proportionality between the agreed premium and the premium that should have been paid. However if there is fraud from the insured side, that is, clear intention to mislead on his or her health state, the insurers is entitled to avoid the policy.

Three main conclusions up to now:

- ▶ The importance of a clear and direct questionnaire to avoid non-disclosure.
- ▶ The need of a sharp risk management process to avoid declining benefits due to incomplete questionnaires.
- ▶ To understand, know and identify fraud or non-disclosure.

If we look for the definition of “*Dolo*” (Latin word for malice, wilful misconduct or fraud, commonly known in English as non-disclosure or misrepresentation) in the insurance dictionary we find the following definitions:

- ▶ **Dolo:** Fraudulent or misleading attitude from one party to the insurance contract with the intention of causing harm the other contracting party.
- ▶ Artifice or simulation used by someone to act deliberately against another one. It is a synonymous with bad faith.

This situation of fraud, within the insurance contract, can affect both the insured (non-disclosure or claims) and the insurer (terms of the contract).

This fraudulent or misleading attitude usually refers to the failure to reveal a relevant fact when applying for an insurance contract, which is also an essential condition for the contract to be legally binding.

The insurance contract is a contract of utmost “good faith”, which means that both parties are under a strict duty to deal fully and frankly with each other. Thus, applicants must disclose all facts that are material (or relevant) to the risk for which we seek cover.

A material (relevant) fact is one that would influence underwriting when deciding whether to accept the risk and the terms and conditions that should apply. If the applicant fails to disclose or misrepresents a material fact and this induces the insurer to accept the proposed risk, the legal remedy is to avoid the policy.

Following the approach of the British “Financial Ombudsman Service” and taking into account both the law and good industry practice, the disputes concerning non-disclosure and misrepresentation can be caused by three situations:

1. The way the insurer asks the question about the risks that need to be known.
2. The way an answer can induce (or influence) the acceptance of a risk. If the answer had been made in a different way, the risk would have not been accepted or accepted under different terms.
3. Only if the two above situations take place, then we can consider whether the applicant’s misrepresentation was an honest mistake, a dishonest attempt to mislead or it was due to some degree of negligence.

Clear questions

The insurer must provide evidence that it asks the applicant clear questions. There are

different ways to ask these questions:

In a **traditional paper questionnaire**. The applicant has to write down the answers to a series of questions. If the answer is positive, he or she should provide an accurate definition as well as date of diagnosis. This format has the disadvantage of space limitation. We cannot name all disease or ask everything we would like. Sometimes the length of the question or the terms used in the wording may lead to non-disclosure or misinterpretation.

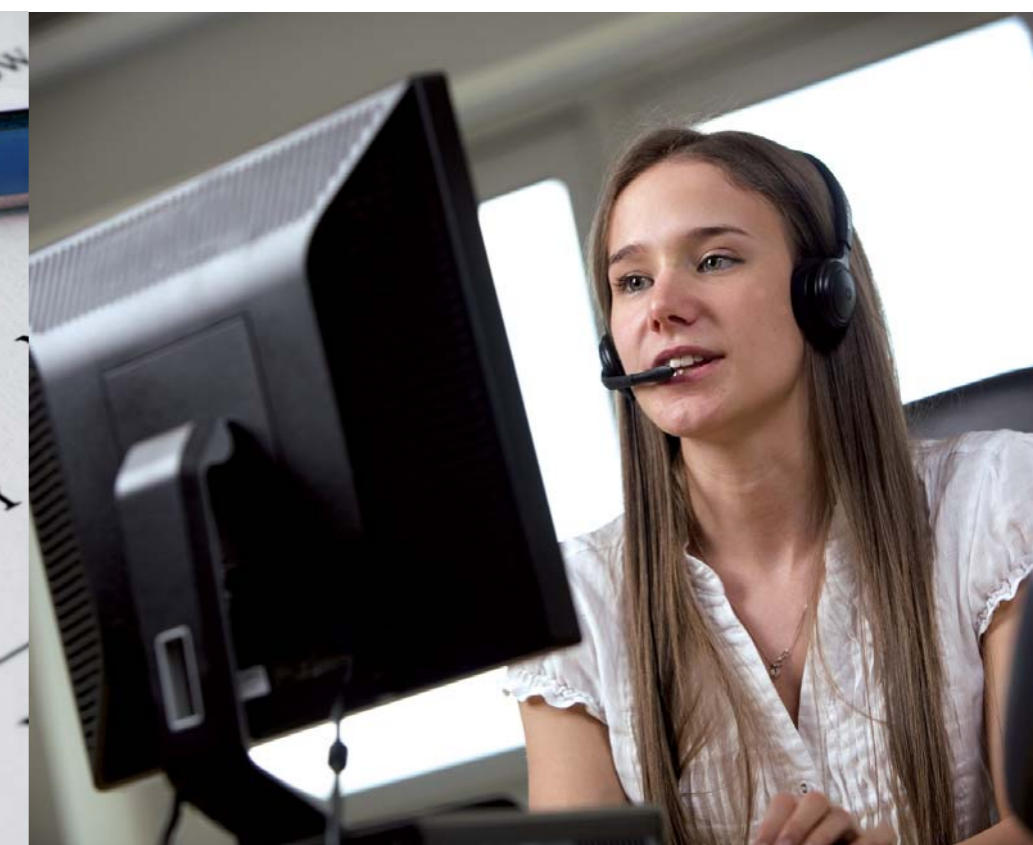
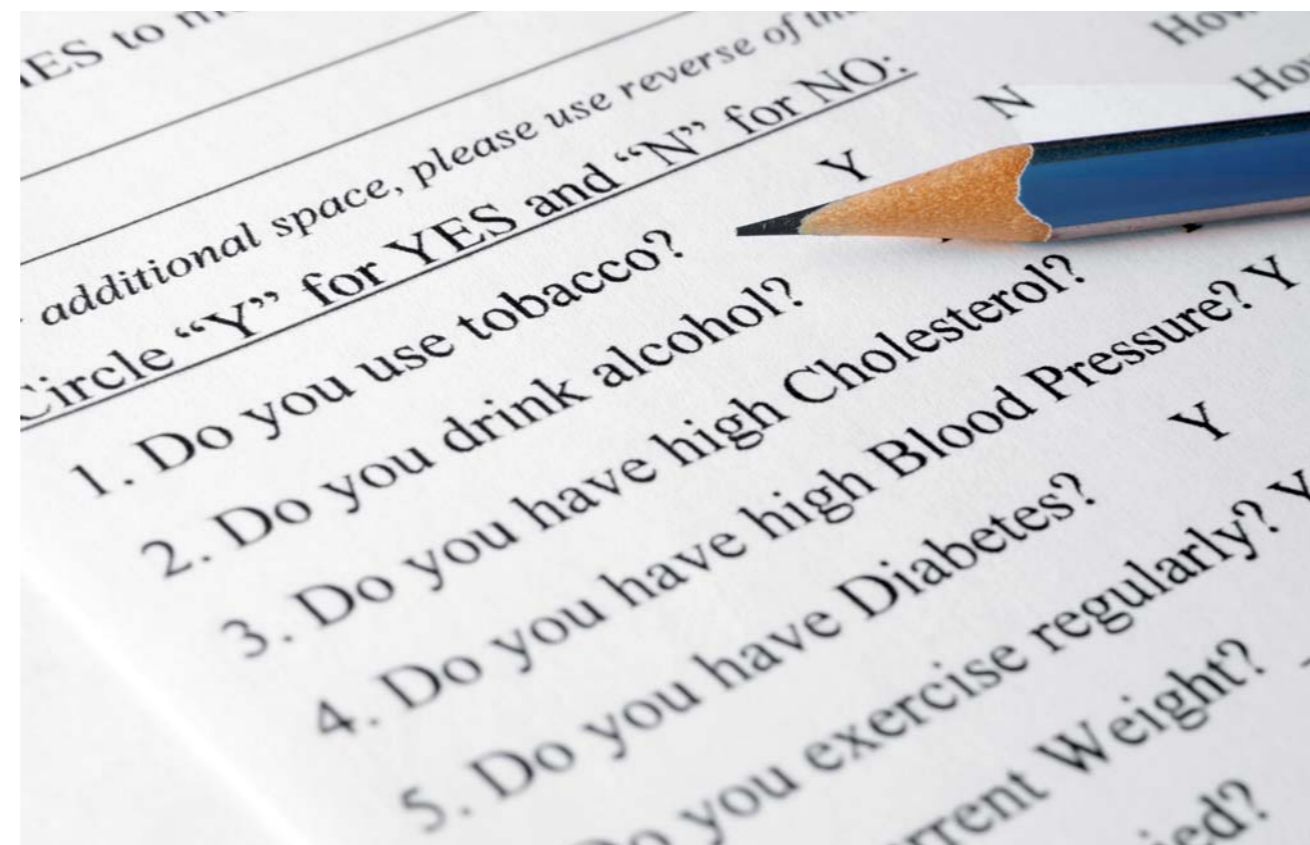
In a **tele-interview or telephone questionnaire**, recorded by the computer system. Depending on the insurer, the recorded call can be transcribed, printed and sent to insurer for signature.

This questionnaire has precise questions that open into new ones according to the answer provided, making misinterpretation very difficult. In most cases, this process allows the direct identification of the impairment/disorder or condition that may generate a request for a medical report.

Health questionnaires can be in three formats: physical or in paper, phone call and digital via internet

The **FSA (Financial Services Authority)** is the regulator body for the financial services industry in the UK. Since January 2005, it also regulates insurance activities. It is an independent non-governmental body, given statutory powers by the Financial Services and Markets Act 2000. They are accountable to Treasury Ministers and through them, Parliament.

This public body published the **Insurance Code of Business (ICOB)** on 14 January 2005 to safeguard the good industry practice. They count on an official independent expert in settling complaints called the **FOS (Financial Ombudsman Service)**.



Online questionnaire, through internet. This format is similar to the one used in tele-interviews. The process has security systems not to let the applicant change or experiment with the answers. There is no space limitation as in the previous format. Time is the main constrain. Questions are easy and specific for the applicant to decide quickly on the purchase of insurance.

Inducement

Legally, the insurer must establish that the non-disclosure or misrepresentation may lead to avoid the policy. In the UK, questionnaires commonly include a paragraph, at the very beginning, warning the applicant of the possibility of avoiding the contract in case of non-disclosure or misrepresentation.

The way the applicant provides the answer induces the acceptance of a risk that should not be accepted. For example, the preventive use of certain drugs may hide other impairments, not disclosed somewhere else.

This is difficult for the insurer, as the underwriter should request the applicant for further information to evidence the provided answer.

The applicant's state of mind

We must note that not all instances of non-disclosure or misrepresentation breach the duty of utmost good faith.

The FOS (Financial Ombudsman Service) has identified four types of non-disclosure: deliberate, reckless, innocent and inadvertent.

It is possible to deliberately non-disclose without being fraudulent. While dishonesty is one of the essential criteria for fraud as mentioned earlier, there must also be deception, designed to obtain something to which you are not entitled to be considered a fraud. For example, insureds might

deliberately withhold information they are embarrassed about. Although, by doing so, they are acting dishonestly and deliberately, they are not acting fraudulently because there is no deceitful intention to obtain an advantage. An example of this situation could be the non-disclosure of the real alcohol, tobacco or substances consumption.

Deliberate non-disclosure

Applicants deliberately mislead the insurer if they dishonestly provide information they know to be untrue or incomplete. If the dishonesty is intended to deceive the insurer into giving them an advantage to which they are not entitled, then this is also a fraud and, strictly speaking, the premium does not have to be

returned. An example of this situation is the non-disclosure of a well-known impairment, such as diabetes type I, which requires a daily shot of insulin for treatment.

Reckless non-disclosure

Applicants breach their duty of good faith if they mislead the insurer by recklessly giving answers without caring whether those answers are true or false. An example might be when the applicant signs a blank health questionnaire and leaves it to be filled out by someone else. The applicant has signed a health declaration that "the above answers are true to best knowledge and belief", but does not know what those answers will be.

Innocent non-disclosure

Applicants act in good faith if their non-disclosure is made innocently. This may happen when the question is unclear or ambiguous, or because the relevant information is not something that they should know. In these cases, the insurer will not be able to avoid the contract and, subject to the policy terms and conditions, should pay the claim in full. We find an example in the non-disclosure of hepatitis when the infection took place in adolescence and there were no symptoms since then, so the applicant has forgotten all about it.

Inadvertent non-disclosure

The applicant may also have acted in good faith if the non-disclosures are made inadvertently. These are the most difficult cases to determine and involve distinguishing between today behaviour that is merely careless and that which amounts to recklessness. Both are forms of negligence.

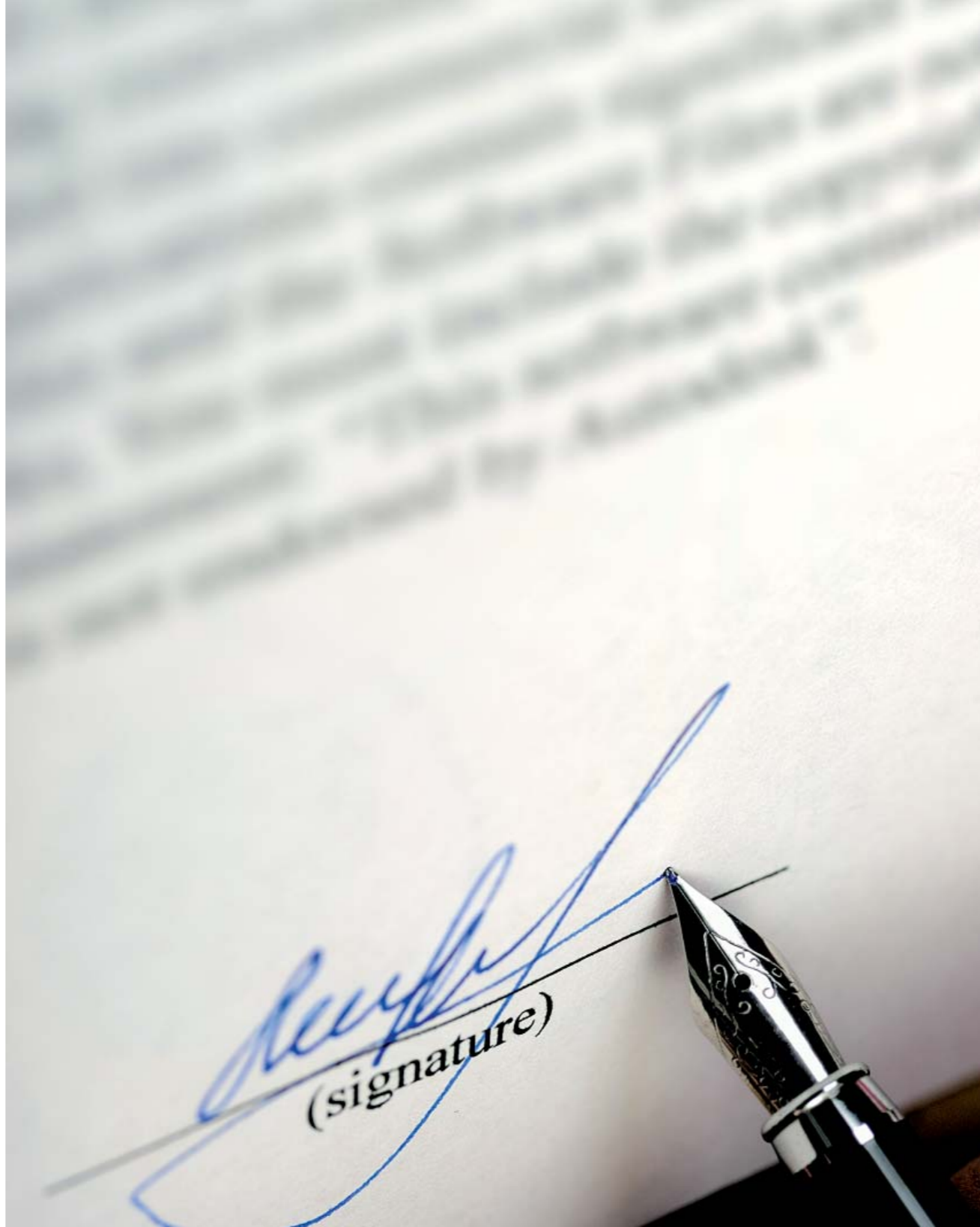
Inadvertence occurs when the customer unintentionally misleads the insurer. This can frequently occur by failing to read the questions and check the answers. When this happens, there is no breach of duty of utmost

Deliberate non-disclosure. The applicant deliberately provides information they know to be untrue or incomplete

Reckless non-disclosure: Applicants recklessly give answers without caring whether those answers are true or false

Innocent non-disclosure: The non-disclosed information is not considered as relevant material

Inadvertent non-disclosure: Unintentional mislead of information



Source: ABI Code of Practice, January 2009.

Non-Disclosure	Description	Outcome
Inadvertent Innocent	<ul style="list-style-type: none"> ▶ The applicant has acted honestly and reasonably in all of the circumstances, including individual circumstances but only when these were known to the insurer. ▶ In the circumstances, a reasonable person would have considered that the information was not relevant to the insurer. ▶ The non-disclosure would have resulted in a different underwriting outcome. 	Pay the claim in full.
Reckless	<ul style="list-style-type: none"> ▶ It applies when the non-disclosure resulted from insufficient care (the failure to exercise reasonable care). This includes anything from an understandable oversight or an inadvertent mistake to serious negligence. ▶ In the circumstances, a reasonable person would have known that the information given was incorrect and relevant to the insurer. ▶ The non-disclosure would have resulted in a different underwriting outcome. 	Apply a proportionate remedy.
Deliberate or without any care	<ul style="list-style-type: none"> ▶ It only applies where the non-disclosure was deliberate or without any care. ▶ In the circumstances, on the balance of probabilities, the applicant knew, or must have known, that the information given was both incorrect and relevant to the insurer, or the applicant acted without any care as to whether it was either correct or relevant to the insurer. ▶ The non-disclosure would have resulted in a different underwriting outcome. 	Avoid the policy. Decline the claim and cancel the policy from inception.



good faith. The non-disclosure of a hearing impairment caused by an infection and treated with hearing aid is a good example.

Legislation in countries such as Spain, France and United Kingdom *LCS, art 10, Code d'Assurances, L-113-3 and 9* and Consumer Insurance (Disclosure and Representations) Act 2012, Schedule 1, section 4(3), part 1, express the duty of the applicant to disclose all material facts and provide true and complete information.

In any of the above situations, the resolution of a claim may fall into any of the following:

1. Decline the claim since if material risk had been disclosed, the policy would have not been accepted, which could also involve returning the premiums paid.
2. Avoid the policy: decline the claim and cancel the policy.
3. Pay the claim applying a proportionate remedy according to the underwriting if complete information were available.
4. Pay the claim if non-disclosure was not relevant for underwriting.

Despite the clear distinction of the different situations that may take place at time of disclosure, the difficult technical argument grants the courts discretion to determine non-disclosure from the insured side.

Conclusion

We still have a long way to go to draw a clear line between fraudulent and inadvertent non-disclosure. Therefore, the insurance industry should improve the way to obtain relevant information through:

- ▶ Questionnaires with good, clear and defined questions.
- ▶ Aware the applicant of the relevant information to provide. This implies not taking for granted that they understand the meaning of severe condition or

impairment, know the complications from their disease and recognize an incurable disease.

- ▶ Provide explanations on limiting / delimiting clauses.
- ▶ Clear management process to improve performance of participants and direct transmission of the information for risk assessment.

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The insurance industry should improve the way to obtain relevant information



El sistema consta de un amplio banco de resolución espacial, lo grabará a bordo los instalados en el Parque (Noruega). Deimos los Surrey Satellite Tech La vida espacial de con distintos niveles al europea como mundial, servicios para usuarios, uso de suelo, medio ambiente y inundaciones.

Uno de los objetivos más imaging, he desarrollado estimación de cosechas, acuíferos, seguimiento y informes sobre el estado biomasa, índice de área

interview with Miguel Belló-Mora

General Manager of Elecnor Deimos
Madrid - Spain



River Yarlung Zangbo canyon, Tibet

“The relationship between technology and insurance is very close”

Elecnor Deimos is the technological division of The Elecnor Group. Having embarked on an ambitious internationalization programme, the company is involved in important projects in the space sector, the field of communications or mobility. In 2009, Deimos 1, the first European satellite, with entirely private capital, was launched for Earth observation and they hope to repeat this success in 2013 with the launch of Deimos 2. Until then, they will continue to fight against the asteroids or to achieve a satellite navigation system in Europe.

Miguel Belló-Mora was born in Puertollano (Ciudad Real) in 1961 and graduated as an Aeronautical Engineer at the Polytechnic University of Madrid. He obtained a doctorate in Aerospace Engineering at the Braunschweig University in Germany, whilst he was working with the European Space Agency from 1985 to 1992.

On his return to Spain, he continued to work on matters related to the space sector, an area in which shortly, he will have been involved for three decades. He also studied business management through the General Management programme of IESE, which enabled him to add business management studies to his professional technical profile.

In 2001, in a fairly “untypical” fashion, as he points out himself, “a group of friends that were working in the aerospace sector decided to found Deimos Space, thinking, above all, in the company in which they would like to work”.

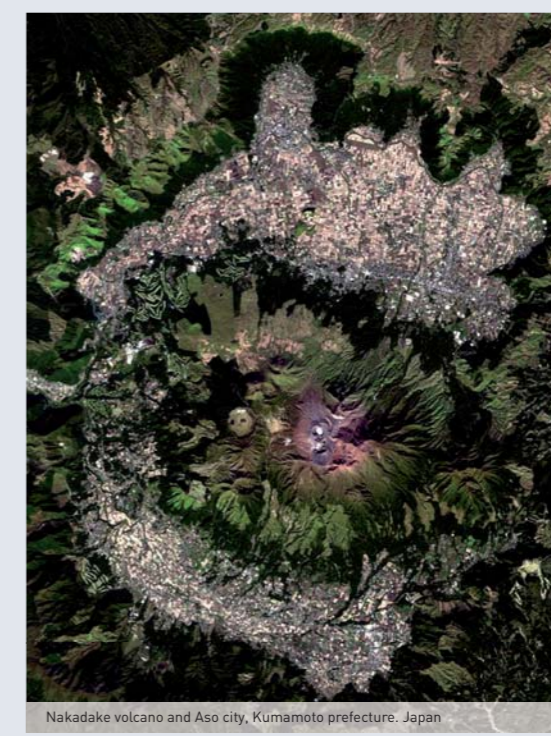
Very soon after, Elecnor acquired a share of the equity; first of all, with a 50.5% participation and later, taking over 100% and creating Elecnor Deimos. They are now completely integrated within the Group and maintain some of the original ideas, such as the value of the individual: “we want the people who work here to enjoy what they do. We are delighted to be a part of Elecnor”.

Last October 19th, Belló-Mora was elected as a member of the International Academy of Astronautics at the 62nd International Astronautical Congress held in Cape Town (South Africa), an appointment of which he is very proud since “you are elected by your colleagues”. “The world of space is not very large - he adds- perhaps it is one of the institutions of which I am most proud to be a member when I see who has been and who is in their ranks since it was founded in 1960”.

What companies do form part of Elecnor Deimos and what does each one do?

Elecnor is a longstanding company which has existed for over 50 years. Basically, it embraces four business lines. The first one covers the area of Infrastructures; the second pillar covers everything related to Concessions; the third is the business based on Renewables; and the fourth is the Technological one, grouped within Elecnor Deimos, which embraces the businesses of space, aeronautics, networks and technological infrastructures. We are, therefore, one of the four pillars within the group and specifically, we are their technological area. There are also numerous companies and subsidiaries that revolve around this structure.

Elecnor Deimos has set itself the goal of continuous and sustained growth and becoming a large multinational corporation



Nakadake volcano and Aso city, Kumamoto prefecture, Japan

An innovative sector

"The insurance sector is tremendously innovative and it has always been a driving force for new technologies", Belló declares and, by way of example, says "when insuring satellites, insurers need to have an in-depth knowledge of the business, almost more than the technicians, in order to evaluate the risks".

At Elecnor Deimos, various lines for cooperation and services for Insurance have been identified. "We are already working on one of them: *Agroseguro*, since the best and quickest way of carrying out loss adjustments in rural areas is by satellite. The same occurs when an indemnity has to be calculated and one has to be sure of the damage". Its application is also essential in the process of risk analysis. "That is to say, it is not just, after the event, when a claim occurs, that an insurer can obtain great help from these tools but also, before the event, to obtain information on the risks that are going to be insured".

For Elecnor Deimos, the insurance sector is a fundamental client "with which we have been cooperating for several years and we are sure that this cooperation will be even greater in the future. The Earth observation sector is emerging and will be increasingly applicable in insurance. The relationship between technology and insurance is very close".



Farming area placed at the frontier between the United States and Mexico



Affected area by the fire in Benicólet, Valencia, 2011



Tornado footprint near Sturbridge, Massachusetts, USA

There is nothing more global or universal than work in space

before 2015. Where do you currently find yourselves in respect of this objective?

Internationalization is fundamental for us and especially now that the Spanish market is shrinking. That is why we have backed this model, and even more so in a profession such as ours: there is nothing more global or universal than work in space.

We have various milestones in our plan and by 2015 we aim to reach a significant level of internationalization. At the moment, we are on schedule with our initial programme. Although the economic environment is not the most favourable, we continue to grow and this year we expect 20% growth.

Innovation, corporate excellence and both environmental and social commitment are the principles that govern the activities of Elecnor Deimos. Can you give us some examples of how these values are applied?

Innovation in a technological company is a *sine*

qua non condition. For example, we have the first Spanish satellite for Earth observation and, next year, we are going to launch a new one metre satellite solution from a small platform; something that has not been done up until now. At the same time, we have a commitment as a company that goes further than maintaining ourselves or making a profit, and that is to destine 5% of our production to aid in the event of natural disasters anywhere in the world.

Projects and initiatives

Elecnor Deimos is the most visible company within PERIGEO which was one of the seven projects selected by the CDTI¹ (Center for the Industrial Technological Development) at the end of last year. What will the contribution of your group be to this project?

Indeed, we are one of the leaders of PERIGEO,

although there are other companies and universities, in the Consortium. As experts in planetary landings, in Elecnor Deimos, we are working hard on methods for landing on the moon or on planets such as Mars. We are going to carry out tests on Earth, with an unmanned aerial vehicle, the algorithms that detect the planetary surface, whether there are risks and what decision to take. It is a question of simulating a planetary landing on a perfect platform, developing GNC algorithms, which is an important system since it is the brain of satellites or launchers. In short, PERIGEO is a project to develop advanced GNC techniques where Spain has an important technological niche.

You also play a key role in Galileo, the EU satellite navigation system. What does this project mean to you? What are you working on at the moment?

Galileo is fundamental for us. It is the European

investment for the future for navigation by satellite, because we cannot depend on a system such as GPS which is a great system; it works incredibly well, but is owned by the U.S. Ministry of Defence. For this reason, we have no guarantee that tomorrow it might not be switched off. Europe cannot be dependant technologically for something so important and Galileo has been proposed as a means of acquiring independence. However, there have been delays for political, not technical reasons. Fortunately, there is a budgetary framework for Galileo to be operative and the initial demonstration satellites are already in orbit and they could even be available for certain services by 2014. At last, the project is underway and it will guarantee the availability of a system which controls the key, because there is a commitment that it will not be switched off. In this project, Elecnor Deimos is involved fundamentally with Ground systems where we have won three important tenders. The

Innovation in a technological company is a *sine qua non* condition

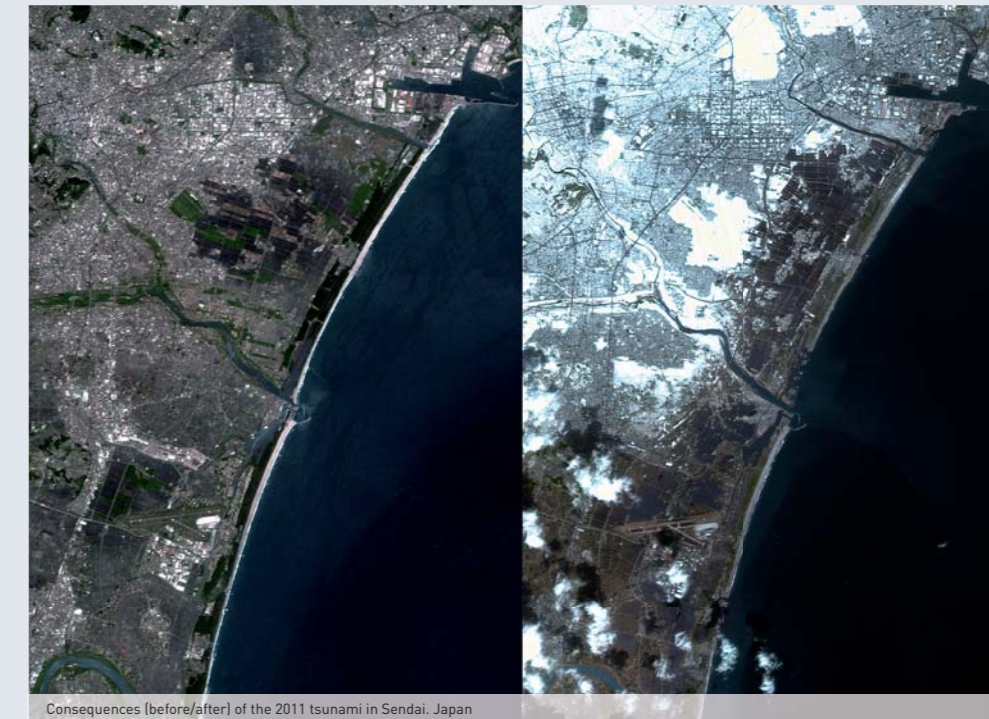
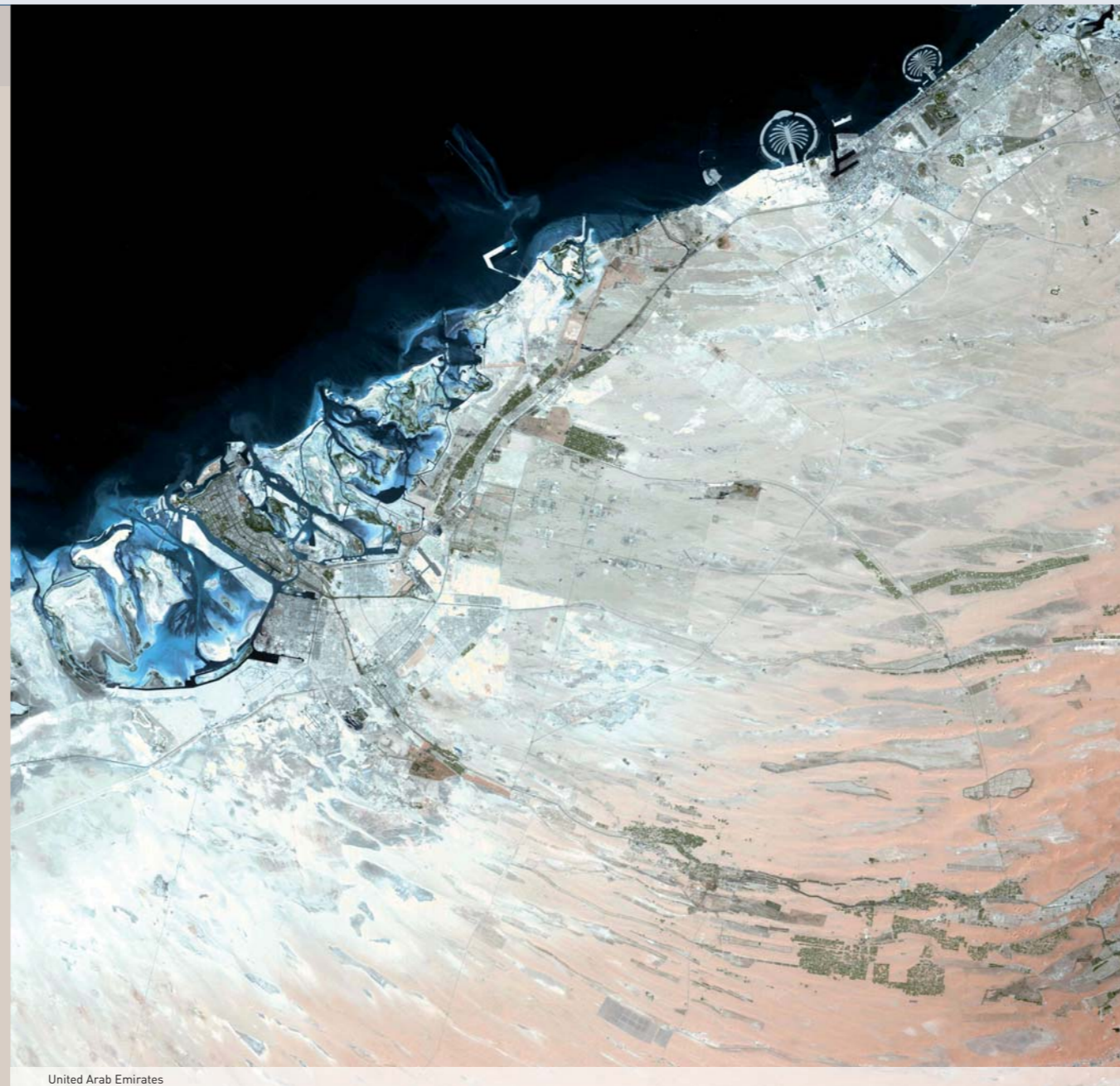
¹ CDTI: *Centro para el Desarrollo Tecnológico Industrial* (Center for the Industrial Technological Development). It is a public company under the authority of the Ministry of Economy and Competitiveness <http://www.cdti.es/>

The first private European satellite

In July of 2009, Elexnor Deimos launched Deimos 1, the first European satellite for observation of the Earth with entirely private capital. It was a big gamble, according to Belló, "there were a lot of people watching us because Earth observation satellites have been fundamentally institutional, without a profit and loss account to respond for". Only in the USA had two companies taken this step but that was with a large client backing them: The Pentagon. "For that reason, there were a lot of people wondering whether Deimos 1 would work or not and the truth is that it has been a triumph. We have provided a profit and so far, everything is working out very well".

Belló emphasizes that technically, the project has been a success. "Such a small satellite -it weighs less than 100 kilos and is hardly a metre in length- provides us every day with almost 4 million kilometres of images in high resolution". But not only that, "putting a satellite into orbit, at 28,000 kilometres per hour, that we can communicate with it every day and that it has been functioning for two years without any problems, is a considerable achievement but moreover, applications have been added that work very well for agriculture, the environment, climatic change and insurance. What we give our end client is not a more or less pretty picture but rather a product".

A new satellite is scheduled to be launched in 2013: Deimos 2, with higher resolution (400 times more), greater output and size than its predecessor. It is a very important "leap" for Belló, "nobody before had put a metre of resolution into 300 kilos and we think that it is feasible and that it will work well". In addition, there is another revealing aspect: the satellite has been integrated within their installations in Puertollano, "taking a new step in the value chain for the Earth's observation".



Consequences (before/after) of the 2011 tsunami in Sendai, Japan



first, and perhaps the most important is called "MGF" (Message Generation Facility), and we are going to develop the unit on software which calculates the navigation messages to be sent to the satellite in real time, and it can never fail. We have also been awarded another project called 'RDG' (Raw Data Generator), to create a constellation simulator; and the third large project is the 'MSF' (Mission Support Facility), which provides extremely precise orbit and clock calculations. Moreover, apart from these systems, we are also making Galileo receivers, amongst which we already have a simulator called "Granada".

In general, what plans or projects do you have for the other sectors in which you have a presence?

There are many. For example, in Systems and Networks we have locating systems and curious projects such as one we are offering for locating 1,200,000 camels in Mauritania. We are also working with ADIF² in developing systems for controlling the handling of trains, information for passengers at stations. At the same time, we have a large team for Mobility and, in fact, we are leading a project called "España Virtual" to define the future of Internet: with increased virtual reality projects. We

have been very creative in transferring the technology of space to all sectors.

We also have a very important Control division with SCADA³ systems for the control of energy and water through which we are working a lot for AENA⁴. At the same time, we have technology infrastructures which are very linked to building control, that is to say, IP network systems on which we set up access control, video and communications. We have also carried out several Security projects such as for the America Cup, where we had to install sonar to protect the Port of Valencia.

Space debris

Last September, the world was waiting to see what would happen with the UARS⁵ satellite. Can space debris be avoided?

The subject of space debris is very complex. We need to create awareness so that space is not contaminated. There are many projects for direct clean-up but the cost is very high and they would only be effective for eliminating one, two or three "pieces of junk" at the most and there are 16,000 registered!

There are especially complicated zones: geostationary, where we can find around 5,000

³SCADA: Supervisory Control And Data Acquisition

⁴AENA: Aeropuertos Españoles y Navegación Aérea (Spanish airports and aerial navigation)

⁵UARS: Upper Atmosphere Research Satellite

²ADIF: Administrador de Infraestructuras Ferroviarias (Railway infrastructures administrator)

objects and only 200-300 useful satellites; and the low Earth orbit where there are around 12,000. In this case, the solution involves burning them in the atmosphere; to design the satellites, so that after a certain time they burn, but being very careful: at 200 kilometres they burn in three days; at 400, in 4 months, but at 600-800 kilometres they take decades and those that are 1,000 kilometres, millenniums. In geostationary, on the other hand, you cannot burn in the atmosphere because it is so far away that it is very expensive. An "orbit cemetery" has been created where satellites can stay for some 3,000-4,000 years without bothering and we hope that by then, the problem will be solved.

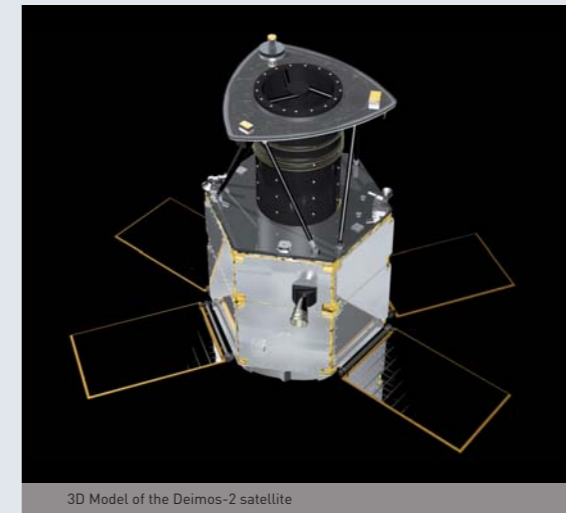
We need to create awareness so that space is not contaminated

The idea is that at the end of their useful life the satellites will have enough fuel to allow them to manoeuvre and bury them there. However, it is very expensive and there are many third world countries that are not doing it.

By participating in the international consortium, Booster⁶, Elecnor Deimos has decided to participate in the space tourism race. Why did you decide to take this step?

Our future is in space and we are convinced that sooner or later, we are going to end up on Mars or the moon. Anyone is going to be able to go into space and what we want is that it should be sooner rather than later. The Booster project is

very attractive. A Belgian company presented us with the idea and we loved it. We form part of a consortium of companies: Germans, French, amongst others. Elecnor Deimos and Aernova are the Spanish companies. Nevertheless, we are faced with a difficult challenge: legislation. There is no regulatory framework for these flights and this is a serious problem: who certifies the vehicle? What licences do you need to travel into space? None of these things are regulated and this is a problem that is more serious than the technical problems that are already resolved. The economic crisis is another barrier because now it is more difficult to find finance.



3D Model of the Deimos-2 satellite

The Earth observation sector is emerging and will be increasingly applicable in insurance

Don Quixote fights against the asteroids

The European Space Agency (ESA) has chosen the Elecnor Deimos "Don Quixote" space mission to defend Earth against possible impacts from asteroids. According to Belló, "for many years nobody was concerned about them but the Hollywood script writers have helped a lot. It is a problem that does exist. There can be no doubt that a large asteroid can crash into Earth. It has happened and it will happen again; it is pure mathematics and the question is when, tomorrow or in 30 million years time".

One thing is in our favour, says the General Manager of Elecnor Deimos, "4/5ths of the world is ocean, so the probability of it falling there is very high". Currently, an asteroid of around 300 metres called Apofis has been identified which will pass close to Earth in 2029. "We know that it is not going to crash into our planet but as it has orbital resonance, it will visit us again in 2036 when the probability is 1 in 50,000 and therefore, it has to be monitored".

"What should be done about the asteroids?" Belló asks. "First of all, there has to be an important surveillance programme, which is already in operation and a data base has been created where small, medium and of course, large asteroids are registered. The large or, so-called, "Killer asteroids" are those that can destroy a continent or the whole world. Although this is not going to happen tomorrow, why not have the technology ready now?"

In *Don Quixote*, "we intend to launch two probes, one to observe the asteroid, its mutation, what the surface is like and its field of gravity; and a second probe which will reach a high speed and crash into it, moving it with the impact. We presented this idea in a European open tender, which we were awarded against all predictions and hence, it has become the ESA mission to fight against the asteroids".



Barringer crater in Arizona, USA

⁶<http://boosterindustries.eu/>



interview with **Nieves Concostrina**

Journalist and writer
Madrid - Spain



Tabarca island cemetery, Alicante, Spain

A journalist by profession, although she has also written five books, Nieves Concostrina was born in Madrid in 1961. She learnt her craft on the now-defunct *Diario 16* newspaper and worked in television. Since 1997 she has been Editor-in-Chief of the *Adiós* magazine, a weekly publication currently published by the Spanish funeral services company FUNESPAÑA, which meant a career move into the world of death, a subject on which she speaks and writes with confidence, but also with delicacy.

She directed and presented the *Polvo Eres* slot on *Radio 5 Todo Noticias* and was involved in the weekend programme *No es un día cualquiera*. Likewise, she contributed to the *En días como hoy* programme with the anniversary of the major event of the day.

In April 2010 she won the King of Spain International Journalism Prize in the Radio category for one episode of a series of 24 entitled *Acércate al Quijote*. That same year, she was also awarded the Golden Microphone prize. In November 2005 she was awarded the 20th Andalusia Journalism Prize, in the Radio category. She has also received the *Villa de Madrid Journalism Award* and the *Paradores de España International Story Award*.

As a writer, she has published five books. Her work *Polvo Eres*, with the subtitle *Peripecias y extravagancias de algunos cadáveres inquietos*, which went on sale on 15 January 2008, was already into its second edition only a fortnight later and is now into its twelfth edition. Her second book, *Menudas historias de la Historia*, came out in April 2009 and is now into its nineteenth edition. April 2010 saw the publication of *Y en polvo te convertirás*, which by September had already gone into its second edition. One year later, the sequel *Polvo Eres II* arrived, with illustrations by the cartoonist Antonio Fraguas "Forges". The book was republished in paperback under the title *Muertes ilustradas de la Humanidad*. Her latest publication, on sale since April 2012, is *Se armó la de San Quintín* which, like the others, is having great success and has already gone into its second edition.

"I would have liked to ask Cervantes about that place at La Mancha"

Death makes Nieves Concostrina feel sad, so she does not waste a single minute of her time thinking about it, except professionally, because, from the *Adiós* magazine or her radio programmes, this journalist has spent around fifteen years telling lots of stories about dead people, cemeteries and epitaphs. Now she also confesses that she would have liked to have a good talk with Cervantes to ask, amongst other things, about that place at La Mancha.

Journalist, writer or both?

Journalist. I do not really care whether people think of me as a writer because I have published five books. My profession is journalism and what I say in the books is in fact written in a journalistic style.

Press, radio, the Internet - which is your favourite format?

It is a good thing that television does not appear on the list, because I would have dismissed it immediately. I prefer the press, because that is where I learnt my craft as a journalist. After 25 years in the profession, I discovered radio - or rather radio discovered me, and I love it. I do not really write for the Internet, although what I do in other media may ultimately turn up there. But I prefer the press or radio, because they respect my authorship.

Interest in death

Where does your interest in death come from?
From nowhere. From my profession. I worked for the *Diario 16* newspaper, where we lived through our particular crisis, back in 1997, and then I had to look for work. Jesús Pozo was offered the job of running the *Adiós* magazine and said to me: "I need an editor-in-chief". I was flabbergasted, as

There are loads of funeral information every day, although you have to know where to look and be able to read between the lines



We all have a sell-by-date, like yogurts

anyone would have been. All my life working in newspaper journalism, and then suddenly having to produce a magazine about the dead! We gradually became focused, because the first thing we wondered was what we were going to write about, and the Pharaohs popped into our heads and it seemed that there would not be anything else. But the truth is very different. There is a lot of information. A journalist has to know a little about everything and if you have to write about dead people, you write about dead people, working rigorously as with any other subject. There is a flow of funeral information every day, although you have to know where to look and be able to read between the lines.

What phrase do you most identify with: "die living" or "live dying"?

Neither of them. I only identify my self with living. Apart from my job, I have no interest in death. Just like anyone else, I am saddened by death. I want to enjoy and work and when the time comes, that will be all. We have a sell-by-date, like yogurts.

The other main subject of your work is history, told in an entertaining way and without subterfuge. Who do you think has more fun, the public listening to or reading your stories, or you when you are working on them?

I hope we both have fun in equal measure. The truth is that I enjoy my work a lot, and I hope that the public does too.

What is the source of your inspiration?

Purely work. Reading, reading and more reading. Everything is in books and in the daily press as well, because journalism makes history.

For every audience

And who should not miss your latest book, "Se armó la de San Quintín y otras menudas historias de la historia"?

Nobody should. The elderly, adults or teenagers. I know that children like these

stories. I do not actually write for them, but I am thrilled that they want to read and listen to my stories. My style is journalistic and to the point, and I suppose that history goes in better that way because I do not pretend to be something I am not - that is to say, a historian. The stories are very short, only to arouse curiosity, and if someone is interested then what they need to do is go to more scholarly sources. I am not trying to take anyone's place, but I do complain that we were not taught history properly. I was deprived of it. I find it a hilarious subject, especially when they tell you the truth.

Have you had any calls from some angry history teacher?

No, on the contrary, many have congratulated me and have asked my permission to use my "stories" in class and, for example, to introduce that day's subject, in order to gain their students' attention. It may be that some do not like them but they have never told me so.



I am not trying to take anyone's place, but I do complain that we were not taught history properly



José Vicente Aparicio

Deputy General Manager of FUNESPAÑA
Madrid - Spain

"We want to turn funerals into farewell tributes in which new technologies will play a significant role"

He was an insurance agent during the late 1970s but in the following decade José Vicente Aparicio became Head of General Insurance at FINISTERRE Insurance Company where in the 1990s he reached Marketing Director position. At the same time he was studying a Master degree in Business Management and Marketing (BMM) at ESIC Business & Marketing School. In 2001, he was appointed Technical Director of Burial Insurance at MAPFRE FINISTERRE as well as Development Manager for this burial insurance business at MAPFRE SEGUROS GENERALES and Deputy Manager of GESMAP. He currently holds the post of Deputy General Manager at FUNESPAÑA.

Burial insurance in Spain is no doubt a deeply-rooted commercial success, capable to face any crisis. Policies have become true multi-risk policies providing family assistance with wide-ranging benefits and other covers. But in José Vicente Aparicio's opinion, one challenge still remains: "to turn funerals into farewell ceremonies," a role for the funeral sector which according to the Deputy General Manager of FUNESPAÑA also needs to act as "an R&D&I department" for the market.

For Aparicio, "any professional change is enriching and broadens your view of the business. The change to the burial sector in particular demands knowledge and ongoing analysis of the different reactions of people to extreme situations. We can focus the business and new services with considerable delicacy to be able to help them, being effective without offending sensibilities. The surrounding mixture of emotions together with the objectivity required in a social atmosphere continuously changing, make the funeral business exciting and a challenge that hooks."

Besides opening new funeral centers, FUNESPAÑA has recently acquired various-sized funeral services companies with different corporate cultures. "The increase in activity, employees, geographical locations, the heterogeneity of coexisting cultures and social developments mean that we have to redesign the business model to respond both the market and the internal organisation," Aparicio stated.

"During the current year, we have drawn up the Strategic and Business Plan for 2012-

The surrounding mixture of emotions and the business objectivity required, together with the continuous changes in social habits, make the funeral business exciting

Please tell us which story you find most entertaining.

There are lots. But, perhaps, what I find very funny is the story of the Pope who after convening the Council of Trent and imposing celibacy he finally had four children. If you take a look at the history of celibacy, it is extremely funny.

Inconvenient corpse

There are always stories regarding the dead. And related to the living?

There are even more. But what happens is that some people have more things happen to them when they are dead than when they were alive. For example, Eva Perón spent 26 years on the move after her death, unburied, and under a false name. Her corpse went from Buenos Aires to Milan, crossed Spanish border to France at La Jonquera in a van transporting

Spain's history is buried in its cemeteries



Cemeteries as places of history and art

"We Spaniards have been taught to leave our dead in the cemetery and not to go and see them again until the 1st of November. We do not have a cemetery culture. But people are starting to discover that cemeteries are places full of history and art which have to be visited and looked after," says Concostrina. In our country, we already have about twenty of them included in the European Cemeteries Route. "It is proving very hard, and Jesús Pozo and I have been involved in this, from the radio and the magazine, always emphasizing that people should visit these places other than for funerals, where everybody weeps and looks at the ground".

For the journalist, "the cemetery is art: it tells you the history of the place and of the distinguished people who are buried there. If you visit La Almudena cemetery in Madrid, you will find [Nobel Prize winner] Ramón y Cajal; and not far away, the murderer "Jarabo", or the mausoleums of

the heroes of Cuba and the Philippines. Spain's history is buried in its cemeteries. You can learn from them and this has been happening in various European countries. But in Spain it is proving difficult because people only tend to go to cemeteries to weep or to pray."

Concostrina demands that local councils "make cemeteries for everyone, and if anyone wants something special, they can go to a private cemetery, as Jews do. But in some towns they only have parish cemeteries, and even today in this country a person who commits suicide can be denied burial, something unthinkable in 2012, but it has happened."

Cremations -which up until 1964 were a mortal sin, adds Concostrina- are gaining ground, but it does not look as if they will pose any threat to cemeteries. "Many people scatter the ashes, but there are also lots who take them to cemeteries."



Napoleon tomb at the National Palace of the Disabled, Paris, France

2015 creating new structures at both central and territorial level with the new operational organisation chart. Deputy General Management key functions have been defined as follows: to comply with the Strategic Plan; consolidate the structures; drive management by objectives and coordinate the functions between the different units and areas of the company." In addition, "the area of Business Development and R&D&I (Research and Development and Innovation), is in charge of implementing the culture of innovation, carrying out market studies, new products analysis and/or services, campaigns, branding, corporate image and quality control, amongst other things, is also directly dependent on the Deputy General Management."

Death is undoubtedly the worst of the dramas that, sooner or later, we all have to face. In every country, culture and period of time, there are customs, rites and traditions related to death: burials and funerals, wakes at home or in funeral

parlours, the cremation of the deceased and mourning. But if there is something truly Spanish, barely known elsewhere, it is burial insurance. This most traditional and popular insurance product has been sold in Spain for more than a century and it is a commercial success, as well as being deeply-rooted socially.

According to José Vicente Aparicio, burial insurance arose out as a pure economic necessity. "At the beginning of 19th century, families did not have the money to pay funerals expenses so they had to make a collection among friends, neighbours and relatives, or pay a not legally regulated agreed fee weekly, the "igualada", to the local undertakers. From socioeconomic necessity, and with a view to guaranteeing these 'contributions', this insurance was created whereby, through the payment of small instalments, the insurance company undertook to pay for the burial with a total guarantee." But they only took care of the interment and a bit more.

chocolate, with Franco's permission, and arrived in Madrid, where it spent two years in a detached house at *Puerta de Hierro* where Perón lived. Later, it returned to Argentina, where it was placed in a crypt, before being moved again after the *coup d'état*. It was a political corpse, a very inconvenient one .

Are there more "stories from History" to be told?

We only need to go back 2,000 years so as not to leave our era, and we will find that in every corner of the world, in every minute, something has happened.

Bearing in mind that you have published a book per year, have you already thought about the next one?

No, I am still promoting the last one. And certainly, in the five books that I have brought out so far, I have had the advantage of my work on the radio, which meant that the prior research and documentation work was already done; starting from scratch would have been impossible.



Celtic cemetery in Cashel, Ireland

Dealing badly with grief may result in serious physical and mental consequences and that these services give guidance to families on how to put this process on the right track

Evolution of the insurance

Burial policies are currently giving way to burial insurance, as true multi-risk policies providing family assistance with wide-ranging benefits and other covers. The advance is unavoidable, as these policies must be adapted to families' new habits. "Today we live very differently from the way we lived fifty years ago. People do not want to worry or rather they want to free themselves from worrying at those difficult and delicate times. In those emotional circumstances, the family is in no state, nor has any desire, to argue about prices," adds the Deputy General Manager of FUNESPAÑA.

In his opinion, the prime advantage of such insurance "is that support from an insurance company is taken for granted. Policies prices are adjusted with the providers throughout the years so that the customer pays the right price – that is the commitment. In a way, the company defends the customer so that they get the right deal, because the service for

a private individual may cost up to two or three times what it costs an insurer."

New benefits

But it is not only about the funeral but about everything that comes 'the day after'. "Once they have gone through the initial loss and the funeral, the relatives have to deal with lots of things; the reason for these companies to operate in this class of business. Just to mention one related to documentation processing services: changing the name on the electricity bill to channelling pensions, which is a relief," Aparicio details.

Other benefits which have revolutionised these policies are counselling services, "because it depends on how the death occurred, who the deceased was, or how we were connected, that death might become a trauma. Dealing badly with grief may result in serious physical and mental consequences,

and that these services provide guidance to families on how to put this process on the right track."

Other covers and assistance

Along with the above features for "the day after", new funeral expenses policies are also endorsing other covers for situations previous to the fateful moment. "Here it is a case of Health and Personal Accident products which the Insured can use during life, or for relatives to be able to receive money if the Insured dies." These covers started to be included in the late 1970s. "Some insurers realised that it was possible to sell other types of cover, at reduce cost but on a large scale, by including other risks in burial policies."

For Aparicio, "cash is not always available, but nowadays everyone has a credit card to pay two or three thousand euros that a funeral costs, but other issues also have to

be considered, for example if the death occurs somewhere other than the place of residence. These policies also include national and international assistance or to take care of everything, regardless where the death occurs."



Huachipa cemetery, Peru

There is nothing funny about death, but there are people who die with humour



Muslim cemetery in Sarajevo, Bosnia-Herzegovina

Breaking the taboo

Talking about death continues to be taboo for many people. What do you recommend for us to lose this fear?

Not to think about it. I do not think about death, even though I write about it and work on these subjects. If I stop and think about it, tears come into my eyes - I do not want to die. Besides, as I am convinced that there is nothing afterwards, I have no comfort; you die and that is it.

Do you think that sense of humour is necessary even to die?

It is advisable to have humour for everything, but every death is individual. Where is the humour when a father is told that his son has died or when you are told that you have only six months to live? There is nothing funny about death, but in spite of everything, there are people who die with great humour.

If death is something natural and we all have a sell-by date, why are we not brought up -or

why do we not bring up our own children- to face it in this way?

Religion has monopolised this subject and cares to fill our lives with fears. It has placed a heavy cultural burden on us which we are still dragging around. And when I speak of religion, I speak of religion in general, of any religion which compels us to live in fear of death and does not teach us to live happily. Until only 200 years ago, the Inquisition was executing people in our country. The last execution took place in Valencia, in 1827.

Which of the distinguished deceased you talk about would you have chosen to have a chat with?

Maybe with Lope de Vega, who was a real troublemaker. He was another one who had five women and became a priest. Apart from his wit and the works he left us, I would have liked to ask him how he organised himself to have girlfriends all over the place and how he ended up being exiled and stole everybody's women, while at other times he wore a habit and celebrated mass. He was a restless guy.

Religion has placed a slab of culture on top of us which is still being dragged

“In times of crisis, burial insurance has always emerged stronger”

The level of burial insurance in Spain stands at 51%. Another piece of information: 63% of those dying had taken out insurance of this kind. It is therefore a very mature market.

In Spain, the custom of paying funeral costs during one's lifetime, as a monthly or annual policy, is passed down from generation to generation, although at times parents are those who pay the premium for their sons and daughters, which is normally quite small. And what happens in times of crisis? "Well, as things are very tight, in the end your parents ask you to pay the premium and you have the choice of having your own policy or not. And finally you take it over, because how can you cancel the policy when your parents have been paying for it for all those years? Burial insurance is the one that does best in times of crisis. It is strange. There are some services that people can do without, but not this one. In times of crisis, burial insurance has always emerged stronger."

For some time now, immigrants have become an important niche market within this line of business. According to Aparicio, the cover offered to this group follows two different approaches: "for those who consider their stay to be temporary and intend to return to their home country after a period of 'x' years, the covers offered are for repatriation to their place of origin and the premium is a risk premium (which is cheaper). On the other hand, those who have already put down roots in Spain and do not intend to return arrange traditional burial insurance."

This is one more example of how this insurance is evolving. "In the past it was difficult to sell these things. Because people scarcely travelled or moved, there was no need. Nor did anyone understand about psychological support, because people were generally more protected - the family was near and helped to cope with the trauma. But now, everything has changed. We are frequently far from our families because of work. People constantly travel for pleasure and also for work. This means that insurance has to evolve and adapt."

Although being contradictory, the service provided at the moment of death is what has not actually changed much. "And that is a pending matter. The service today is the same as in the 19th century, apart from the quality of its components, but society does not think the same. This is the challenge for funeral directors. We want to turn funerals into farewell tributes in which the new technologies will play a major role."

Distribution of the insurance

When it comes to distributing these insurances, "door-to-door" selling continues to work, notes Aparicio, highlighting the role of the premium collecting agent who visits the client each month. "His role was clear and very important. Portfolios were always updated; the agent knew who was getting married, whether they had had a child. Nowadays we have to search other alternatives because it is very difficult to find people at home at usual times. "Collection via banks," he adds, "has led the supply systems to evolve. But there are some companies that still hire premium collectors".

However, other highly diversified companies "are developing synergies with other products, looking for the 'one-stop' customer. People come to their premises to buy insurance." Finally, for Aparicio, online distribution is also becoming important, "although it is not tailored for burial insurance, the evolution of new technologies will boost a change in

Some insurers realised that there was the possibility of selling other types of cover, at little cost but on a large scale, by including other risks in burial policies

The epitaph is just a way of drawing passers-by's attention



I would also go back to the Golden Age and talk to Cervantes to find out how he managed to die penniless and had to become a priest in order to get a free burial, given the works that he left. He was a genius. And above all, I would have liked to ask him about that place at La Mancha. Worst of all is that we do not know where it is. Spain has not taken care of its dead. We have lost Lope de Vega, Cervantes and Tirso de Molina, amongst others. What a shame!

Witty epitaphs

Where does the tradition of writing on tombstones come from?

It has always been done. The epitaph is just a way of drawing the attention of passers-by. Romans buried their dead at the side of the Appian Way and placed epitaphs there so that travellers could continue remembering them. Some are very witty.

funeral services and insurance companies of this sector.”

Funeral sector

The funeral market in Spain is very fragmented. According to Aparicio, “we are talking about more than two thousand companies, the majority of which are local family businesses. There are other few operating at national level, which makes it difficult for the same service to be offered everywhere.”

In his view, the big development in this sector will be “to be offered some alternatives so that everyone can celebrate that moment as they wish, because not everyone wants the same thing. At FUNESPAÑA we are already preparing catalogues so that people may select what they want from the outset: religious or secular ceremony, cremation or burial, and other options. Through a series of questions, you are provided with an alternative and personalised service.”

Nevertheless, his view is that this sector must evolve. “We funeral directors need to become the R&D&I department of insurance companies. That must be our target, offering the customers everything that we have found they are demanding by means of market studies. It is a complete change of mentality.”

Future of this line of business

Another question is the future of this line of business and whether or not, these policies will continue to be at their peak in the coming years. “I always say that there will be people who want to be insured and others that do not. What can we do to get this 51% penetration to grow and thereby make the product more attractive? That is the obligation and the challenge for insurers; we have to reinvent ourselves. But this percentage has not changed; it is the very same as it was twenty years ago. It is our responsibility to identify the services that clients want.”

Insurance and funeral services

How would you rate funeral services in Spain?

Spanish funeral services are among the best in the world in terms of quality, professional treatment and embalming and body preparation techniques. The sector has made great strides in modernisation, but there are still things that need to be changed, such as offering more choice. When I go to the supermarket I have a wide choice, so why not when I go to the undertaker's? This is a country with no official religion and we have to stop placing a cross on every coffin, because some families have a really bad time when they want a secular burial. Funeral directors need to start asking how people want the burial to be and not take it for granted.

What role does burial insurance currently play and what does it contribute to the final farewell to the loved one?

I would say the same thing, that every person should choose whether or not they want to have this kind of insurance. Yes, some burial insurances have certainly evolved considerably. They already form part of packages that include Life, Health and Personal Accident covers. They have modernised and now include other kinds of services besides the funeral. But there are still some insurance companies that are stuck in the past and ought to evolve to meet the needs and demands of their customers, because I cannot imagine making payments all my life just for a funeral.

For Aparicio, “being a mature market, these insurance products have kept on developing, although without a great innovative approach. Evolution will come along with new rating formulas that will allow the growth of different products, so that the customer can choose the one that best suits his finances and situation. As far as the benefits under burial insurance are concerned, these will have to come from new services focusing less on burials and more on tributes and farewells, and incorporating

new technologies and less standard services that are more personalised and in line with new social criteria.

Aparicio thinks that the sector is ready to respond to Solvency II requirements, “and the companies too, although there may be minimal exceptions. UNESPA (Business Association for the Insurance Sector), through its Funeral Expenses Committee, holds regular meetings with the companies in order to take care of that.”

Funeral directors and burial insurance get lumped together and today they are still seen as stagnant sectors



Boston cemetery, USA

In which Spanish cemeteries can we find the most amusing epitaphs?

You can find great epitaphs in any cemetery, even in the humblest. At Cistierna, in León, there is one that says: "I am dead, I will be back right away". In a very small cemetery at Riopar, in Albacete, this famous inscription can be found: "On the day I was born, everyone laughed and I cried. I lived in such a way that when I died everyone cried and I laughed. It was the effect of marijuana." This epitaph tells a story, because the deceased died of cancer and marijuana was a palliative treatment. He evidently died with a sense of humour. But there are many like that. In Valencia, there is one that reads: "Lie down here. That is your option. You can rest, and I can, too. Román". All of the East coast, especially Catalonia and Valencia, has generally more wit.

Is death being sweetened by funeral parlours?

It is not being sweetened. It has more to do with likes and dislikes. The funeral parlour is a

necessary place and a way of taking death out of the home. I am one of those people who defend these places, but everyone has to be allowed to experience death as they wish. Let there be funeral parlours for those who want them, and a wake at home for those who do not.



Ome cemetery, Tokyo, Japan

Change of image

"Funeral directors and burial insurance get lumped together and today they are still seen as stagnant sectors, and that is what gave rise to the change of image," declares Aparicio. In his opinion, the funeral sector needs to "change what it does and adapt its services to a society that is demanding new things; we are also talking about funeral directors offering the standard product, because when you analyse the service it is the same in all cases."

The big innovation in all of this process is the funeral parlour, which did not exist 20 years ago, but which, for Aparicio, is not being used to full advantage, "because it is a place that people come to for the comfort it represents, besides avoiding the hard image of the funeral chapel in a place that has been their lifelong home. But are we using all the possibilities that this facilities offer? No, definitely

not." In his view, the big development here will come from new technologies. "Terminals could be set up in the rooms to enable the family to receive and reply to messages of sympathy. And why not show images from the deceased's life and remind people what he was like, the people he had around him, and the things he enjoyed? At FUNESPAÑA we have one aim: to convert funerals into farewell exercises that we can offer to our customers."

Communication between FUNESPAÑA and the insurers is fluid, says Aparicio, "at least once a year, being daily with some. We are a source of information for them on the trends in and degree of acceptance of covers, making recommendations for adjusting the service and thereby obtaining a greater level of customer satisfaction. That communication always has to exist."

agenda

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