consorseguros
REVISTA DIGITAL

www.consorsegurosdigital.com

Number 21 | Autumn 2024

Growing risks: the role of insurance

"This twenty first issue of Consorseguros Digital coincides with two outstanding events for Consorcio de Compensación de Seguros (CCS): one, the 70th anniversary of the company, that took place on December 16th 2024, and the other, far less festive, the management of the most important loss event that Spain and this entity has had, at least in these 70 years: the floods caused by the cut-off low (dana, for the Spanish) affecting multiple areas of the south and east of mainland Spain and the Balearic Islands, much particularly on October 29th around Valencia.

Summary

Editors Board

The Consorcio de Compensación de Seguros digital magazine "Consorseguros" (CCS) is published every six months,
its content particularly addressing matters related to the Consorcio's activities in
various fields of insurance, reflecting on and analysing them.

NIPO: 221-24-044-4

Summary

Editorial

This twenty first issue of Consorseguros Digital coincides with two outstanding events for Consorcio de Compensación de Seguros (CCS): one, the 70th anniversary of the company, that took place on December 16th 2024, and the other, far less festive, the management of the most important loss event that Spain and this entity has had, at least in these 70 years: the floods caused by the cut-off low (dana, for the Spanish) affecting multiple areas of the south and east of mainland Spain and the Balearic Islands, much particularly on October 29th around Valencia.

This twenty first issue of Consorseguros Digital coincides with two outstanding events for Consorcio de Compensación de Seguros (CCS): one, the 70th anniversary of the company, that took place on December 16th 2024, and the other, far less festive, the management of the most important loss event that Spain and this entity has had, at least in these 70 years: the floods caused by the cut-off low (dana, for the Spanish) affecting multiple areas of the south and east of mainland Spain and the Balearic Islands, much particularly on October 29th around Valencia.

The original idea of the Editorial Board of Consorseguros Digital, adopted in summer 2024, was even reinforced by these circumstances: we wanted to articulate this issue around the management of risks to ensure their future insurability. In the framework of growing loss, insurance must be increasingly integrated into the risk management chain, so that it can keep providing an economic response to losses and also can help keep risks at bay in other to maintain its insurability. These ideas shape the analysis article of this issue.

Around the world, the insurance industry is being increasingly proactive to allow the insurability of the growing risks. In this issue we have the privilege to count with first-hand information about the experiences of the catastrophe risk insurance schemes from Australia, New Zealand and Türkiye, respectively written by Alexander Drake, Tina Mitchell and Musa Alphan Bahar. They explain in their contributions how these schemes are being adapted to cover new hazards and how their institutional and operational frameworks are being modified to allow for more protection and better prevention.

We also count with contributions about examples of measures that can allow for the reduction of the ever growing risks: Fernando Pulido, from the University of Extremadura presents an innovative and effective preventive measure to control the intensity and extension of wildfires through forest and land management.

In another contribution Fernando Aranda, Technical Director of the Guadiana River Basin Authority, explains the risk reduction measures taken in the Badajoz province after the serious and tragic floods of November 1997.

The issue is round up with the contributions of Javier Bonhome, Assistant Director for the Economic Regime of the Winding-up Activity of CCS, about the conference of the International Forum of Insurance Guarantee Schemes (IFIGS) organised by CCS last October 2024 in Madrid, as well as with a case-law contribution from José Antonio Badillo.

Growing risks: the role of insurance

Francisco Espejo Gil
Assistant Director, Research and International Relations
Consorcio de Compensación de Seguros

We are living through a time of records. Never have there been so many humans alive on this planet. It is estimated that the 8 billion people populating the Earth represent about 7% of all the human beings who have ever lived. Also, the value of our economic output has never been so high. In 2023, the global GDP was US$ 105.4 trillion. Not so long ago, in year 2000, this value was of US$ 33.84 trillion, inflation adjusted. That means that in less than a quarter of the 21st century, and according to the World Bank accountings, the economic value of the human output has more than tripled. The yearly mean of the GDP growth rate in the decade elapsed between 2014 and 2023 has been of 2.76%, including even in that period the largest global pandemic of the past 100 years that meant an important recession in 2020. In summary, there has never been in the world so much exposure in terms of both human lives and economic value.

Given this increasingly complex environment, insurance can keep being a tool adding resilience and sustainability, providing the own insurance schemes are so and are designed in such a way that the economic resilience they provide is added to the effort of other bodies, in a coordinated manner, to add physical resilience.

This demographic and economic growth has not been homogeneous across regions. Some of them have had a way larger growth rate than others, but what keeps being common is that this growth is still based on a consumer economy that still generates the most part of their also growing energy demands by burning fossil fuels. Thus, we are also at record levels of energy generation, energy demand and greenhouse gas emissions. In 2022, these emissions reached 58.85 billion tonnes $CO_{2\ eq}$[1]. Though the rise of emissions has been proportionally smaller (in 2000 global emissions rose to 44.77 billion tonnes $CO_{2\ eq}$, implying that per capita emissions *only* rose globally from 4.1 to 4.7 tonnes/year), in the course of this century an additional 1.92 billion people has been added to world population, which is the main cause of the emissions' rise.

There is no shade of scientific doubt about the attribution of global warming to this change in atmospheric composition induced by human activity, through the radiative forcing that greenhouse gases create in the Earth's Climate System. This global temperature rise, currently of practically 1.5 °C above preindustrial levels, is besides more than likely the cause of changes in weather patterns and of a greater irregularity and more intensity of rainfall, when precipitations finally occur. All this evidence implies that hazard levels are also being aggravated by global warming.

[1] CO2 eq or CO2 equivalent is a measure in tonnes of the carbon footprint, where greenhouse gases other than carbon dioxide are converted into their equivalent greenhouse effect capacity.

Explained with a simple analogy, more and more of us are locked in a room with a boxer punching in all directions and we feed the boxer to make him or her stronger and stronger. By both rising exposure (the number of people in the room) and hazard (the strength and stamina of the boxer), it is increasingly difficult not to get hit. Long term solutions would include trying to weaken the boxer, but for the time being we keep feeding him or her more and better (in large part because the producers of sport supplements control the economy of the room and influence the decisions taken by their dwellers); by learning the paths where the boxer moves more frequently and trying to avoid those areas; and by wearing helmets and other protections so that we can be less vulnerable to the blows.

Coming back to reality, global warming is aggravating the hazards impacting an ever-increasing human and economic exposure, and both are the causes of the growing loss that societies have to face. Another consequence of this rise in population and economic activity is the urban and industrial development of large areas that, in preindustrial times when humans had the innate ability to read and interpret the landscape, were devoted to, at most, agricultural uses. The massive occupation of these alluvial plains, areas where it is relatively easy to build and set all kind of infrastructure, inevitably leads to a rise of exposure in, for instance, flood prone areas. Given that risk is the result of the multiplication of hazard (that in most cases is rising due to global warming), exposure (that as we have just seen has grown almost exponentially) and vulnerability, the most feasible way to keep risk under check is to try controlling the latter.

Vulnerability has two components: susceptibility – the greater or lesser capacity of an exposed asset to be damaged by a hazard – and response capacity – a social concept that has to do with the greater or lesser velocity with which a society impacted by the materialization of a risk goes back to normality –. Insurance is a mechanism to which society, individually or collectively, transfers those risks when they materialize.

By means of loss indemnification, insurance allows for a better capacity response and, thus, social vulnerability reduction. Therefore it is important that catastrophe insurance works appropriately, as it is a contract-binding way to compensate loss to the insured affected and it is also a useful way for public budget protection, allowing that this can be devoted to other purposes, such as risk reduction. The proportion between total loss and insured loss is called protection gap. It is deemed that, globally, two thirds of catastrophic losses are not covered by insurance, causing a financial burden on individuals, societies and governmental and multilateral bodies that can help compensate, at least, part of those losses.

The rising levels of hazard and exposure are putting pressure on insurance in some cases and jurisdictions, showing obvious evidence of adverse selection: as a consequence of the growing number of losses and loss events, premiums rise, less people has the financial capacity or willingness to pay them and consequently the insurance protection gap widens. In the case of reinsurance, requirements for cedents harden and the final result is that there have already been concrete cases, especially in the US market, of insurers and reinsurers limiting *their* exposure. This is obviously bad news, as insurance business is made viable by ceasing to be relevant where it is most needed.

That is the reason why other complementary ways for insurance to keep being relevant are being sought after. These ways include a better definition of covers and conditions in insurance and reinsurance contracts, the search of new products such as parametric insurance or insurance linked securities. Other options involve the inclusion of the public sector somehow, be it from the regulation, opening ways for insurance, like the engagement of public insurers covering loss caused by certain hazards. In fact, this is not about substituting the markets and their traditional functioning model of insurance and reinsurance, it is rather about complementing and reinforcing the market so as to it can keep working correctly and providing its fundamental protection mission. In no jurisdiction where any of these solutions is being applied they are substituting the market, on the contrary, they are incorporated in certain sections, cases or hazards to the previous basic model.

Spain is one of those examples. In order to insure property and persons, business interruption included, the policies sold by insurance companies are complemented by the inclusion of a list of hazards, called 'extraordinary risks' that have to be compulsorily included into those policies. Among these hazards are floods, windstorms, earthquakes or terrorist attacks, whose cover is provided automatically by a public insurer, *Consorcio de Compensación de Seguros* (CCS). In order to finance that cover, a surcharge is applied to those policies (140 million of them in 2023) depending on the kind of asset insured and the sum insured. All other perils, included some weather-related, such as snow or hail, are directly covered by private insurers, which reinsure their portfolio in the market. This legal arrangement making the extension of the cover compulsory is the reason why insurance protection gap for catastrophic hazards is significantly smaller in Spain than in other similar countries. If, globally, the protection gap is of about 66%, in the EMEA region is of 70%. In Spain, according to the most recent estimates, this gap is of about 45%, which makes our situation comparatively better than that of other surrounding countries. For instance, in Spain the insured residential properties average at 74% and, by definition, the complete car stock is. This implies that all vehicles and three out of four homes are automatically insured against the most frequent catastrophic hazards, and this is a rather singular feature.

Spain is not, of course, the only country with such an arrangement, involving public-private partnership to insure a list of catastrophic perils. Among the examples we may list the French Cat Nat model, involving the public reinsurer *Caisse Centrale de Réassurance*; New Zealand's Natural Hazards Commission or the Natural Catastrophe Insurance of Iceland. All of them share the same philosophy of CCS, with a universal extension of the cover to a list of several hazards, applying flat rates for all their jurisdictions. Others provide insurance or reinsurance covers for a given hazard, such as earthquake in California, Türkiye or Taiwan or flood in the United Kingdom. Some of these entities, such as the Turkish Catastrophe Insurance Pool are currently evolving into covering more hazards, thus becoming a multi-peril scheme, just as the Australian Terrorism Reinsurance Pool did a few years ago, including now tropical cyclone into their original cover. Other countries, such as Italy, are at the moment designing and implementing schemes based on public-private partnerships for some hazards and kinds of exposed properties. Nevertheless, the Spanish Extraordinary Risk Scheme is the model that, in a very cost-effective way, covers more hazards in more insurance classes by an entity, *Consorcio de Compensación de Seguros* that, apart from the Extraordinary Risk insurance performs many other functions intended to make the Spanish insurance market work better.

Spain has another application of public-private partnership for insuring potentially catastrophic risks in the agricultural sector. In this case, partnership is articulated by means of a coinsurance pool in which about 20 private insurers and the CCS participate, managed by a private company, Agroseguro, of which CCS is the reinsurer. Premiums for agricultural producers are subsidised by the National Entity of Agricultural Insurance (ENESA, by its Spanish denomination) and regional governments. It is a model with more than 40 years of experience, a high degree of take up rate and comprehensive covers for practically the whole agricultural output.

It is increasingly obvious, as unfortunately we experienced in Spain last October 29th 2024 that, as a result of the reasons previously explained, we face another dimension of catastrophes. Spain has entered the era of multi-billion insurance losses, as no doubts will be those of the flood event to the west and south of the metropolitan area of Valencia. In addition to the pain for the loss of human life and for the impact to the lives of tens of thousands, this event has created huge physical devastation. For CCS this has been the largest loss event of its 70 years of history. At the time of writing, CCS has filed more than 237,000 claims, an amount practically quadrupling the previous record for a flood loss event, the floods of September 2019 affecting especially Murcia and Alicante. This is also the opportunity to show that the Spanish Extraordinary Risk Scheme can provide a response to this kind of huge events, with an original solution allowing universal cover for all insureds at a much lower cost than in other countries and with which, in spite of the enormous dimension and complexities to be faced, insureds can recover the economic loss up to the limit of the sums insured in their respective policies in a reasonable time.

In sight of this context of very high exposure and growing hazards, insurance, in order to provide more effective answers or even to keep being relevant in certain locations, must be adapted and must be made more resilient. Some possible ways to do so are:

- Maximising mutualisation so that it keeps being economically reasonable to underwrite an insurance policy, keeping adverse selection at bay. For that purpose, options implying some kind of binding degree of insurance take up or binding cover extension should not be ignored. With a larger insurance mass, both in number of policies and sum insured, the protection gap can be reduced and the capital needed to face potential loss can be raised.

- Establishing partnerships between private insurance and the public sector. The latter can be involved through regulatory measures and/or by facilitating that public insurers, or licensed private insurers, deal with the cover of certain hazards the private market could find less appetizing. Nevertheless, it is important that the market retains a part of the risk so that it can perform its function of risk selection, providing incentives for the adoption of risk control and risk reduction measures at insured property level.

- Facilitating the cooperation of the insurance industry as a whole with all the bodies dealing with emergency and risk management: administrations at all levels, scientific and technical bodies and the academia. The insurance expertise in risk knowledge, as well as loss data and assessment records can be used for better mapping of risk zones, better legislation on land uses and building codes considering the hazards that exposure must face in each area, and also in risk management and risk reduction, lowering the susceptibility of the existing exposure. The goal of creating a more resilient society must be shared. Otherwise, the cost of not taking into account the risks at the time of urban planning and developing a given place relies exclusively on some tiers, such as individuals, insurance and public budgets, potentially compromising their future viability.

- Communicating clearly what risks communities face and the importance of being insured as one of the better protection options against them.

In summary, given this increasingly complex environment, insurance can keep being a tool adding resilience and sustainability, providing the own insurance schemes are so and are designed in such a way that the economic resilience they provide is added to the effort of other bodies, in a coordinated manner, to add physical resilience.

Australia's cyclone pool: the journey so far, and what its data is telling us

Alexander Drake
Head of Public Affairs and Communications
Australian Reinsurance Pool Corporation

Since 2003, the Australian Reinsurance Pool Corporation (ARPC) has been the Australian Government's provider of catastrophic reinsurance cover – first, for terrorism risk, and since 2022, for cyclone and cyclone related flooding risk. This paper focuses on the cyclone pool – from the creation of ARPC over two decades ago, the nature of cyclone risk in Australia, the commencement of the cyclone pool in 2022, its accepting risk from customers for the first time in January 2023, and official and community responses to its operations since then.

Since 2003, the Australian Reinsurance Pool Corporation (ARPC) has been the Australian Government's provider of catastrophic reinsurance cover – first, for terrorism risk, and since 2022, for cyclone and cyclone related flooding risk. This paper focuses on the cyclone pool – from the creation of ARPC over two decades ago, the nature of cyclone risk in Australia, the commencement of the cyclone pool in 2022, its accepting risk from customers for the first time in January 2023, and official and community responses to its operations since then.

ARPC's creation - the terrorism pool

The need for ARPC arose from the terrorist attacks in New York on 11th September 2001. These attacks led to the withdrawal of terrorism cover by insurance and reinsurance companies and motivated the Australian Government at the time to intervene in the market to make eligible commercial properties insurable for terrorism losses again. The attacks also came just a few months after the collapse of what was then Australia's second largest insurer – the largest corporate failure in Australian history at that time.

To make commercial property insurance for terrorism viable again, as part of a broader policy commitment to make general insurance more affordable and accessible, the Australian Government secured the passage through parliament what later became known as the *Terrorism and Cyclone Insurance Act 2003* (the Act).

The Act created ARPC as the government entity to provide reinsurance cover to insurers for eligible terrorism losses via its terrorism reinsurance pool, providing reinsurance for commercial property and associated business interruption losses, in the event of a declared terrorist incident. The terrorism pool continues to successfully operate to this day.

Cyclone risk in Australia

As the frequency and severity of natural disasters continues to rise, a growing number of individuals and businesses are finding it increasingly difficult to access affordable insurance. Cyclone risk is a heavy cost burden for both insurers and consumers in Australia, especially the high cyclone-prone regions, which can be broadly defined as those parts of Australia north of the Tropic of Capricorn - particularly coastal areas.

Since the first insurers joined the cyclone pool in January 2023, there have been several declared cyclone events across Australian territory. Below is a table of those cyclone events since the commencement of the cyclone pool.

Season	Cyclone	Event Detail			
		Event Start	Event End	Claim Period End Date	Hours ARPC on Risk
2024 Cyclone Season	Jasper	10/12/2023 4:00PM	13/12/2023 11:59PM	15/12/2023 11:59PM	128
	Anggrek	15/01/2024 10:00PM	31/01/2024 4:00PM	2/02/2024 4:00PM	426
	Kirrily	24/01/2024 4:00PM	26/01/2024 4:00AM	28/01/2024 4:00AM	84
	Lincoln	16/02/2024 10:00AM	16/02/2024 10:00PM	18/02/2024 10:00PM	60
	Megan	16/03/2024 4:00PM	19/03/2024 7:00AM	21/03/2024 07:00AM	111
2023 Cyclone Season	Darian	18/12/2022 5:00PM	30/12/2022 10:00PM	01/01/2023 10:00PM	341
	Ellie	22/12/2022 7:00PM	23/12/2022 10:00AM	25/12/2022 10:00AM	63
	Gabrielle	9/02/2023 11:00AM	12/02/2023 3:00AM	14/02/2023 3:00AM	112
	Ilsa	11/04/2023 4:00PM	14/04/2023 9:00PM	16/04/2023 9:00PM	125

Additionally, this map illustrates their trajectories across Queensland, the Northern Territory and Western Australia, and shows the cyclone pool to be of most importance in the north.

These areas are at much greater risk of suffering cyclone damage than the rest of Australia. Cyclone events can cause significant damage to homes and businesses, with a major effect on the lives of many. The most significant cyclone event in recent years was Tropical Cyclone Yasi in 2011, which was one of the most powerful storms to hit the region on record.

Because of this elevated cyclone risk, and the potential damage that can occur, insurance premiums can be significantly more expensive in northern Australia, compared to lower premiums paid in the remaining half of the country. In addition, some insurers showed a greater reluctance to accept risk in areas of greater cyclone risk. Fewer market participants also meant fewer options for consumers to choose from.

With insurers reluctant to accept risks in high cyclone areas, this led to cover becoming less affordable and accessible for consumers in the region. The Australian Competition and Consumer Commission (ACCC) in 2018-19 found that the average combined home and contents insurance premium was about AUD 2,500 in northern Australia, compared to about AUD 1,400 for the rest of Australia.

The creation of the cyclone pool

On 4 May 2021, the Australian Government announced its intention to establish a reinsurance pool to cover cyclone and related flood damage. The cyclone pool would deliver reinsurance at a lower cost than the private market by leveraging a AUD 10 billion annually reinstated Commonwealth guarantee which enables the cyclone pool premium rates to exclude margins for profit and return on capital.

The announcement came after a decade of government inquiries and parliamentary committees. All noted insurance premium increases in northern Australia due to cyclone risk, and all considered how to address this gap.

Consultation on the proposed cyclone pool, legislation and commencement

A government taskforce consulted with industry and community representatives, as well as other interested parties, on the cyclone pool.

The taskforce recommendations were considered by the government and resulted in the current pool being created by legislation amending the Act. The legislation was passed unanimously by the Australian parliament, with the cyclone pool coming into effect on 1st July 2022.

The pool is the latest policy initiative pursued by successive Australian governments since 2001 to achieve its wider goals on improving accessibility and affordability.

Design features of the cyclone pool

The cyclone pool is a reinsurance arrangement between insurers and ARPC. The cyclone pool covers household, strata, and small business property insurance policies. It operates Australia wide, but targets support to cyclone-prone areas and provides reinsurance for insurers operating in those areas.

The cyclone pool covers 100% of cyclone and related flood damage. This includes wind, rain, rainwater, rainwater run-off, storm surge, and riverine flood damage caused by a cyclone.

Like the terrorism pool, the cyclone pool is backed by a AUD10 billion government guarantee. If the guarantee is likely to be exceeded in a single year, the Australian Government will increase the guarantee to support the cyclone pool to meet all its obligations.

Australia's weather agency, the Bureau of Meteorology (BoM), observes the date and time when a cyclone begins and ends, and in some cases re-intensifies. Based on the BoM notification, the ARPC must then declare the start or end of a cyclone event.

The cyclone pool covers claims for cyclone and related flood damage arising during a cyclone event, which lasts from the time a cyclone begins until 48 hours after the cyclone ends – this is known as the cyclone event period.

The cyclone pool covers home, strata, and small business policies. This includes:

- residential home and contents, including landlord insurance and farm residential cover;
- residential strata, including mixed-use strata schemes (where 50 per cent or more of floor space is used mainly for residential purposes); and
- commercial property policies with AUD 5 million or less total sum insured across risks covered by the pool (property, contents, and business interruption).

Participation is mandatory for general insurers with eligible policies. Policyholders have complete freedom to choose their insurer, and insurers will continue to manage all claims, in accordance with their underlying policy document.

This chart shows the coverage of the market by the cyclone pool, as at 1 July 2024:

How the cyclone pool prices risk

The pricing formula uses property-level data such as geography, building characteristics, and mitigation. It has been developed in line with the principles that the cyclone pool will:

- be cost-neutral to government over the longer term;
- lower the reinsurance cost for most policies with medium-to-high exposure to cyclone risk;
- have minimal impact on policy premiums for lower cyclone-risk properties; and
- maintain incentives for risk reduction and offer discounts for properties that undertake mitigation.

The original pricing rates came into effect from 1st October 2022, three months before the first insurers joined the cyclone pool on the 1st January, 2023.

During June-July 2024, ARPC conducted a pricing review of the cyclone pool premium rates to ensure the premium rates remain in line with the principles above, and to create premium discounts for strata properties that have undertaken risk mitigation activities. The conclusion was that the legislative objectives of the cyclone pool continue to be met. ARPC subsequently released revised premium rates for the cyclone pool that come into effect from 1st April 2025.

The role of the ACCC in analysing the cyclone pool's performance

Ultimately, the purpose of the cyclone pool is to put downward pressure on insurance premiums paid by policyholders in cyclone-prone regions, and the agency tasked with the responsibility of monitoring its effect is the ACCC.

The ACCC collects data from insurers, consumers and other interested parties to assess the impact of the cyclone pool and determine whether the savings from the cyclone pool are being passed through to policyholders. It then publishes an annual insurance monitoring report.

The third report, which was released on 19th September 2024, utilising data up to 30 September 2023, found the cyclone pool has begun delivering lower premiums in regions facing higher risk of cyclones.

The September report recognised that the cyclone pool has resulted in some cost savings for insurers writing policies in higher cyclone risk regions and that insurers are making changes to allow savings they have received from the cyclone pool to flow through to consumers.

It also noted that economic and environmental factors beyond the control or remit of the cyclone pool are adversely influencing overall premiums facing consumers and offsetting savings from the pool. These costs include the broader hardening of global reinsurance markets, extreme global weather events, and price increases of building materials and labour.

In its report, the ACCC compared how premiums changed following insurers' entry into the cyclone pool. It also assessed insurers' approaches to implementing the cyclone pool, including recognition of cyclone mitigation measures.

Of those policies that had renewed after their insurer joined the cyclone pool, the ACCC found that 27% of combined home and contents policies in areas of medium to high cyclone risk experienced decreases to their premiums. For comparison, for those home and contents policies in medium to high risk areas that renewed before their insurer joined the pool, only 12% experienced a decrease.

Similarly, the ACCC found that 16% of strata policies in medium to high cyclone risk areas experienced a premium decrease upon renewal after their insurer had joined the cyclone pool, compared to 10% that renewed before their insurer had joined the pool.

ARPC evidence of improving affordability and accessibility

In May 2024, ARPC released its own analysis of home insurance premiums in cyclone-prone regions of Australia, which also suggested that general insurance affordability is improving. The report was based on online quote data from before insurers joined the cyclone pool and compared to more recent data (January 2024). Key findings from the report included:

- parts of northern regional centres such as Broome, Townsville, Proserpine, and Mackay were generating quotes for home insurance cover up to 38 per cent lower than they were prior to the cyclone pool's creation in 2022;
- small business insurance quotes for those same areas were reporting average premium reductions of 38 per cent; and
- various parts of Cairns, Ingham, and Cape York in Far North Queensland (FNQ) were also reporting average reductions up to 22 per cent for home insurance and 24 per cent for small business cover.

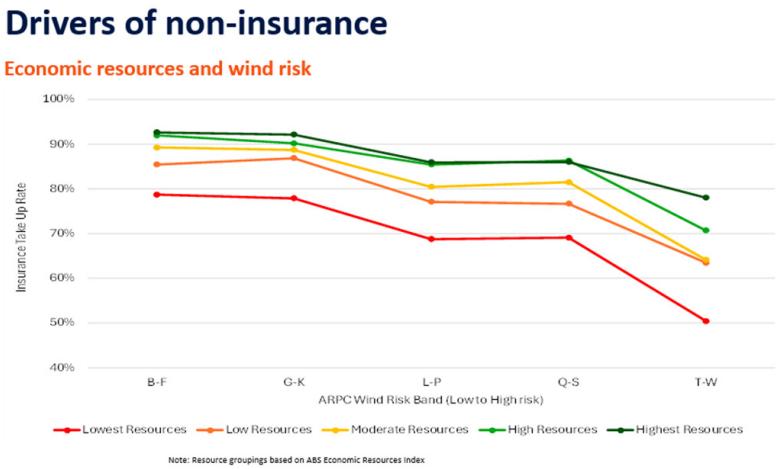
This followed earlier research suggesting accessibility is also improving for people living in cyclone-prone regions, in ARPC's first financial outlook report (FOR), which was released in December 2023.

These reports have shown that the cyclone pool is working as intended – greater premium savings are being felt in those areas with the greatest cyclone risk, as those regions have a heavier burden needing relief. For example, Table 1.2 of the FOR shows how much cyclone pool premium can vary between Australia's third largest city, Brisbane (AUD146 for home insurance cyclone cover) and Townsville (AUD709), which is a city of almost a quarter-million people, about 1,350 km north of Brisbane by road.

Early signs of significant underinsurance

With participation in the cyclone pool being mandatory for insurers, ARPC is able to review the number of properties with cover in cyclone-prone regions under the cyclone pool, against other data sources that identify the number of homes (either freestanding, or a strata development), or small businesses, such as the census.

The early signs of this comparison suggest that northern Australia is significantly more under-insured than previously expected, and that this pattern occurs regardless of the economic resources of a region. This diagram (divided by ARPC Wind Risk Band, as defined on an alphabetical scale that correlates with the level of cyclone risk), shows the pattern.



Note: Insurance take-up analysis is preliminary and early insights are shared for general information only

Looking ahead: the future of the cyclone pool beyond 2024

Throughout 2024, the lack of affordable and accessible insurance in Australians have been the subject of three parallel parliamentary inquiries: the inquiry into insurers responses to 2022 major flood claims, the impact of climate risk on insurance premiums and availability, and the report on the operation and implementation of the Cyclone Reinsurance Pool. All the three inquiries have examined the cyclone pool, its effectiveness, and whether its remit should be changed.

The most common options for discussion have included whether the current 48-hour cyclone coverage period should be changed, or whether other natural perils should be added to the cyclone pool's remit. Two of the three reports have suggested consideration for the government to add flood risk to the remit of the cyclone pool, possibly on a limited and temporary basis. The other report has yet to be finalised.

While these inquiries are not binding on the government of the day, they do reflect the thinking of key policymakers and care likely to be influential on those of their colleagues who serve as ministers in the government (and actually set policy).

Further, the Act requires a review of the cyclone pool in 2025. This work will be informed by a taskforce announced by the minister responsible for ARPC, the Hon. Stephen Jones MP, as part of the 2024 Australian Budget. The Insurance Affordability and Natural Hazards Risk Reduction Taskforce seeks to help address insurance costs driven by more frequent and intense weather events, by improving affordability. The timeline for its recommendations to be released is not known at this time.

With the cyclone pool fully operational, more datapoints will become available for ARPC to share with the public. This will become an important tool for policymakers to assess the pools effectiveness. The provision of data and insights will also assist the work of other government agencies, such as the National Emergency Management Authority (NEMA) and their work on natural hazard management. Early assessments alluded to in this paper about the true scale of underinsurance in northern Australia are an early sign of how data gathered by ARPC can be utilised. With several reports to be released over the course of 2025, the effect of the cyclone pool will sharpen its focus and this clarity will help shape policy.

Conclusion

By pooling resources and risks at a national level, the cyclone pool is a mechanism that offers a buffer against significant cyclone events, ensuring that insurance remains a reliable tool for recovery and risk management even in the face of escalating climate impacts.

Like other parts of the world, Australia is experiencing elevated cost-of-living pressures at a time of relatively modest economic growth. Community expectations in northern Australia are high that the cyclone pool will deliver consumers tangible, significant relief to insurance premiums.

For some communities, cyclone risk can be the largest single component to calculate a home insurance premium, making this relief particularly important. Following an extended period of reporting on the pool's performance, we will be able to gauge whether the pool is a sustainable solution that satisfies communities' long-term expectations and strengthens our collective ability to respond to future cyclone risks.

New Zealand's natural hazards insurance scheme is based on lessons of the past

Tina Mitchell
Chief Executive | Te Tumu Whakarae
Natural Hazards Commission Toka Tū Ake

New Zealand's natural hazards insurance scheme is our unique response to our unsettled geographical environment.

Like Spain, the forces that shape our beautiful country mean we live alongside a range of natural hazards. Building our resilience to volcanic eruptions, earthquakes, tsunamis, geothermal activity, storms, floods and landslides and strengthening our homes and communities to reduce their impact is an important part of living in New Zealand.

As a former prime minister once said "sometimes it does us a power of good to remind ourselves that we live on two volcanic rocks where two tectonic plates meet, in a somewhat lonely stretch of windswept ocean, just above the roaring forties . If you want drama, you've come to the right place".

The new legislation changed the name of the scheme from the Earthquake Commission (EQC) to the Natural Hazards Commission. The new name is an important signal to homeowners that cover is available for a range of natural hazards, not just earthquakes. There is no additional hazards covered – the new name is just to make it clear that the cover available is for a range of hazards.

New Zealand created the first natural hazards insurance risk pool scheme in the world in 1945, following a decade of damaging earthquakes.

The scheme, managed by Natural Hazards Commission Toka Tū Ake, sees all insured homeowners pay a set levy that is based on extensive research and modelling of possible risks and costs. The levies are then 'pooled' in a fund which is used to pay out on claims for residential damage, up to a cap determined by legislation.

By absorbing the first layer of risk for initial losses, the scheme helps distribute the financial burden around the country and helps New Zealand support the availability and uptake of private insurance to top up the cover. As a result, New Zealand has very high levels of insurance penetration.

For NZ$480 (€268) a year, insured homeowners receive up to NZ$300,000 (approximately ££168,000) of cover for their homes for damage from natural hazards. The scheme also provides limited cover for the land immediately around and under their home, along with retaining walls, bridges and culverts.

The Canterbury earthquakes and the Natural Hazards Insurance Act 2023

New Zealand's scheme was originally set up to cover damage from earthquakes and any damage from WWII. Over time, other hazards have been added, and the scheme now covers volcanic eruptions, earthquakes, tsunamis, geothermal activity, storms, floods and landslides.

The most significant natural disaster to occur in New Zealand was the Canterbury earthquakes in 2010 and 2011. In total, six significant earthquakes occurred between September 2010 and June 2011, as well as over 11,000 aftershocks. A total of 500,000 claims were made to the scheme and some of the impacts to structural elements and drains continue to be seen even now, 14 years later.

The financial response to the earthquakes for the scheme was very strong but the scale of the disaster meant the claims experience was often drawn out and stressful. This prompted a series of government reviews in the years that followed, culminating in a new operating model and a review of the legislation.

The operating model changed in 2021. Previously the Commission managed all claims for damage itself. Under the new model, all insurance claims are managed by private insurers, including claims made to the scheme. This provides a 'one stop shop' for homeowners and ensures we have scalable claims management resources if a major disaster occurs.

The aim of the legislative review was to consolidate the lessons learnt after the significant earthquakes in Christchurch in 2010-11 and to future-proof the scheme for the years ahead. The Natural Hazards Insurance Act was passed in 2023 and came into effect on 1 July 2024.

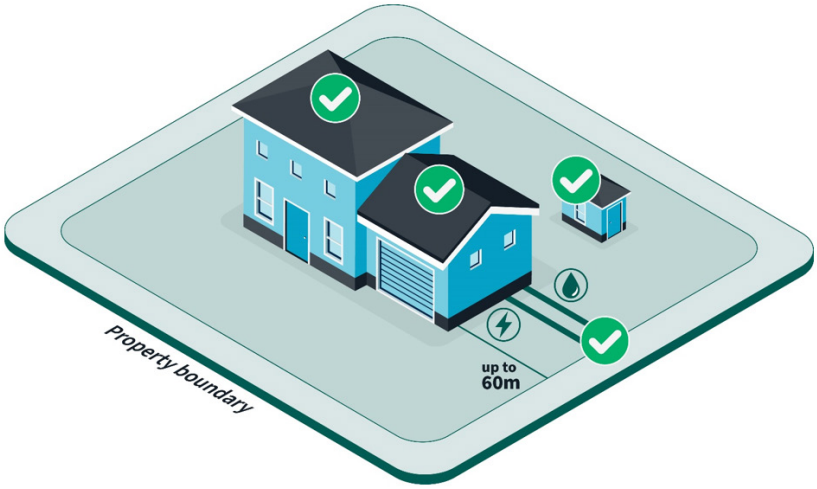
A new name – it's not just earthquakes

The new legislation changed the name of the scheme from the Earthquake Commission (EQC) to the Natural Hazards Commission. The new name is an important signal to homeowners that cover is available for a range of natural hazards, not just earthquakes. There is no additional hazards covered – the new name is just to make it clear that the cover available is for a range of hazards.

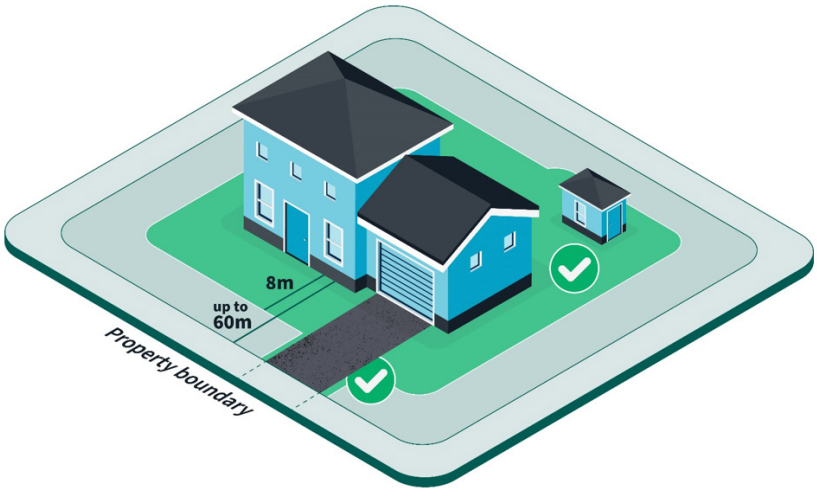
Our Māori name, Toka Tū Ake, means 'the foundation from which we stand strong, together'. It expresses an age-old truth that the best way to be prepared for adversity is for communities to come together to share their knowledge and resources as support for one another.

Many of the key features of the scheme have been retained

The cover provided is NZ$300,000 plus tax per dwelling in most cases. This is for damage to residential homes and essential services to the home, such as electricity and water supply.



The scheme also provides cover for damage to land which is a unique feature globally. However, the cover is limited to 8 metres around a home and up to 60 metres of a driveway, plus some limited cover for retaining walls, bridges and culverts. The entitlement is capped at the value of the insured, damaged land.



A renewed focus on resilience

Another unique aspect of New Zealand's scheme is the role of the Commission in facilitating research and education on natural hazards.

The Natural Hazards Insurance Act 2023 further strengthens that role and requires the Commission to actively share so information and knowledge about natural hazards and how damage might be prevented or reduced. By raising awareness across government, industry and homeowners, and advocating for 'stronger homes on better land', the Commission is contributing to the long-term resilience of communities.

Clearer definitions to keep pace with the way people live

Although most New Zealanders live in stand-alone houses, apartment living is on the rise. Under the new Act, building owners have increased cover in buildings containing a mix of uses, such as commercial buildings containing apartments.

Protecting the right to complain

In the aftermath of the Canterbury earthquakes, many of the legal boundaries of the scheme were tested in the courts and the importance of learning from complaints was highlighted.

The new Act applies those lessons by introducing a new complaints process and independent review system that is free for homeowners to access. This avoids the costs and delays of using the courts.

It also introduces a Code of Insured Persons' Rights, which sets out the standard of service a homeowner can expect to receive from the Commission. This is an additional avenue for complaint that focuses on fairness and conduct, over and above the specifics of claim decisions, and also includes the ability to have situations independently reviewed.

These new complaints processes are a vital part of our commitment to getting it right for homeowners by putting them at the heart of our work.

Ensuring the long-term financial sustainability of the Natural Hazards Insurance scheme

Another new requirement of the new Act is the publication of a Ministerial Funding and Risk Management Statement (FRMS) at least every five years which sets out how the financial risks of the scheme will be shared between the Government and insured homeowners. This covers aspects such as the mandatory levy paid by homeowners (currently NZD$480), the cap for cover (currently NZD$300,000) and any excesses.

By regularly reviewing the financial settings, the Government can ensure that the scheme remains financially sustainable for the long term and that a good balance is struck between the costs of the scheme now and the impacts for future generations.

Looking forward to the next 80 years

With a new Act, a new operating model, a new name, and a renewed focus on sharing knowledge, the scheme is well placed to deliver on its role of reducing the impact of natural hazards on people, property and the community in the years to come.

In a country with a high natural hazard risk profile, but a small population, it is important that we use our resources as efficiently as possible and that we constantly adapt for the future – not just in the way we provide insurance cover but in the way we build houses and choose where to place communities.

Some of the most insightful information comes from sharing lessons with other schemes around the world that are facing similar challenges. We very much appreciate the strong relationship we have with Consorcio de Compensación de Seguros.

We express our compassion for those in Spain affected by the recent catastrophic flooding in Valencia and the surrounding region. Know that we stand with you as you recover. As we say in te reo Māori: He waka eke noa: We are all in this together.

As of 1 July 2024, our name changed from the Earthquake Commission to the Natural Hazards Commission Toka Tū Ake.

Find out more about our organisation and insurance scheme on this link.

Transition of compulsory earthquake insurance policy to compulsory disaster insurance policy in Türkiye

Musa Alphan Bahar
Senior Manager, Project Coordination & Field Management
Turkish Catastrophe Insurance Pool

Turkish Catastrophe Insurance Pool, TCIP (& DASK in Turkish) was established in 2000 following the devastating earthquake at Marmara region on 18 August 1999. Although Catastrophe Insurance Law allows TCIP to provide insurance and/or reinsurance cover against Nat-Cat perils, TCIP provides only earthquake insurance coverage for residential dwellings in Türkiye since its establishment.

TCIP became one of the best practices of its kind even with increasing penetration rate which is about 56% for the time being and with the claims handling practices that have been put in to service during the last decade proving its effectiveness in the Kahramanmaraş earthquake on 6 February 2023. The Kahramanmaraş earthquakes affected 11 cities directly where over 13 million citizens lived, being the area of these cities larger than that of many European countries. Some 600,000 claims were submitted to TCIP and almost 95% of them are completed within 8 months' time.

TCIP is now advancing toward a more comprehensive disaster insurance framework to address the evolving risk landscape and enhance community resilience. This shift aims to establish a compulsory multi-hazard disaster insurance program. The proposed framework extends coverage beyond earthquakes to include risks such as floods, landslides, hurricanes, hailstorms, wildfires, and avalanches. This initiative is a pivotal response to the diverse hazards associated with Türkiye's geographical and climatic characteristics.

2021, the year that COVİD-19 pandemic was still in force with all its negative effects, it was also a year that natural disasters were experienced intensely all around the world as well as in Türkiye due to climate change and global warming. Floods and forest fires that occurred throughout Türkiye on summer 2021 brought forward the topic of the scope extension of the Compulsory Earthquake Insurance, which TCIP offers as financial assurance against earthquake, with Nat-Cat perils. TCIP privileged the study on integrating natural perils, following the information letter of the Insurance and Private Pension Regulation and Supervision Agency (SEDDK) shared with the public.

TCIP is now advancing toward a more comprehensive disaster insurance framework to address the evolving risk landscape and enhance community resilience. This shift aims to establish a compulsory multi-hazard disaster insurance program. The proposed framework extends coverage beyond earthquakes to include risks such as floods, landslides, hurricanes, hailstorms, wildfires, and avalanches. This initiative is a pivotal response to the diverse hazards associated with Türkiye's geographical and climatic characteristics.

Following the technical visits in the affected areas of flood damage in the Black Sea region in August 2021, studies for flood tariff and landslide tariff started with a project team of academicians, actuaries, insurance professionals and specialists working on these subjects, and loss adjusters. It is considered that the experiences gained from field visits would be directive and highly beneficial for TCIP's works on the subject.

For the flood tariff studies and the creation of a Flood Hazard Model; the existing Flood Water Depth Maps, Flood Hazard Maps, and Flood Risk Maps which are prepared within the scope of Flood Management Plans of Türkiye were provided by the General Directorate of Water Management under the Ministry of Agriculture and Forestry. Using these maps, combined with vulnerability curves, average annual loss rates are calculated at neighbourhood level. This localized approach ensures that risk assessments are accurate and reflect regional conditions, supporting fair and precise premium calculations.

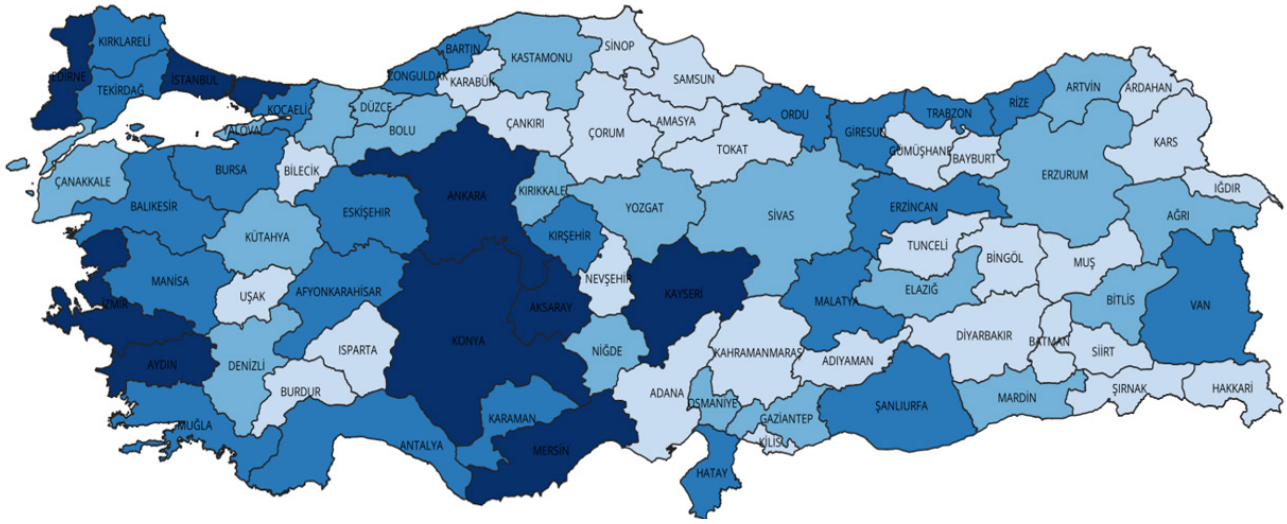


Figure 1. Financial Loss Ratio levels for flood.
Source: TCIP.

For landslides, a similar methodology was applied, utilizing susceptibility maps and detailed inventory data from the Directorate of Disaster and Emergency Management (AFAD). These datasets facilitated neighbourhood-level loss rate estimations, creating a robust foundation for pricing the associated risks.

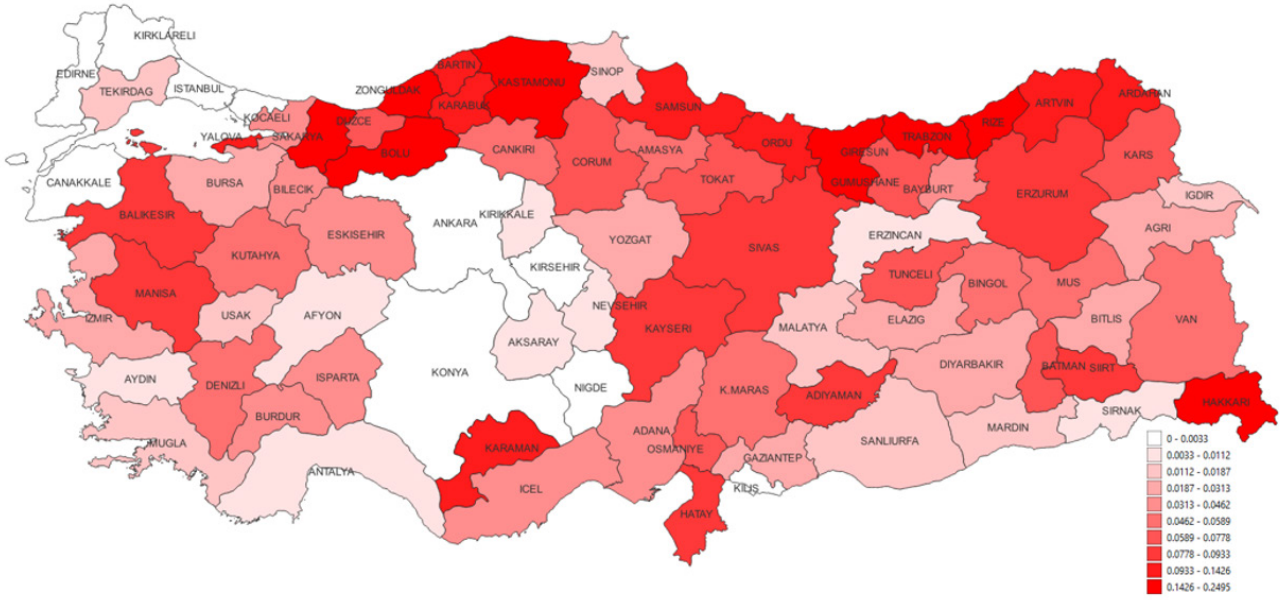


Figure 2. Financial Loss Ratio levels for Landslide.
Source: TCIP.

Actuarial studies followed the tariff calculations to finalize premium rates for floods and landslides. A risk-based model with five risk categories for each district was adopted, mirroring the structure used for compulsory earthquake insurance. This tiered approach aligns premiums with risk levels, promoting equity and incentivizing localized risk mitigation.

For other hazards, including storms, wildfires, avalanches, and hailstorms, fixed-premium structure is introduced. Although less detailed than the risk-based model, this approach simplifies implementation while expanding coverage accessibility. It is planned to study the tariffs for storms, wildfires, avalanches, and hailstorms after going on live especially by integrating the claims data that TCIP will be facing then. Last but not least, it is also planned that our new policy will include sinkhole and meteorite falls in the coming years, following coverage studies.

In spite of the fact that there is no known active volcano in Türkiye, the general conditions for facultative earthquake insurance cover provides volcanic eruption risk, which TCIP's existing compulsory earthquake cover does not include. The new policy will also act as first loss type, but with quite extended perils. For this reason and in order to leverage the coverage for residential dwellings, it is decided to add volcanic eruption peril into the earthquake cover provided by Compulsory Earthquake Insurance.

The compulsory disaster insurance program will also cover structural damage to buildings. Although at the beginning of the project, the aim was to include content especially for the newly introduced perils (except volcanic eruption as it is attached to earthquake), the studies with the insurance companies providing facultative cover showed that there are several technical complexities which cannot be solved easily. It is thus decided not to include "content" at inception, its inclusion being postponed for future studies.

Instead, the new policy will introduce a new cover that we have named 'Immediate Needs Coverage', designed to meet the urgent financial needs of the beneficiaries of insured dwellings who will be directly affected by natural catastrophes. This supplementary coverage is designed as financial support, and it will be capped at 10% of the sum insured value, and a maximum that will be defined some time before it comes into effect, providing timely and practical assistance.

During all these studies the regulator, the Insurance and Private Pension Regulation and Supervision Agency (SEDDK), joined forces with TCIP and the insurance companies via association to revise and align the general conditions of fire insurance policies and related perils including earthquake and volcanic eruption. This will also provide smooth transactions between TCIP and insurance companies during claims operations.

Compulsory disaster insurance is aimed to play a vital role in strengthening community resilience and facilitating post-disaster recovery. Providing financial support will help affected individuals rebuild their lives and mitigate the economic burdens of disasters. This framework ensures a structured, equitable, and sustainable approach to managing the growing risks posed by natural hazards. Following its launch, TCIP aims to make further efforts to increase penetration in order to provide insurance cover with affordable premiums.

Wildfires of the future: new participatory approaches based on territorial planning

Fernando Pulido
Professor, Universidad de Extremadura
Director, MOSAICO Initiative

Several recent scientific reviews dealing with the issue of wildfires have called attention to the fact that the problem is growing more severe, as discussed in the latest UN report (2022)[1]. Weather conditions associated with wildfires are becoming more frequent in most regions around the globe as a consequence of climate change. Even by the most conservative forecasts, wildfires are expected to increase significantly worldwide, with a concomitant rise in the frequency of extreme fires. These conditions have already had an impact on certain fires on the Iberian Peninsula, where the decline in rural communities over the years has turned long-standing accumulation of vegetation that acts as fuel into a particularly salient factor.

Agroforestry landscapes are less affected by large and severe wildfire events than forests, shrublands, or grasslands, evidencing their large-scale potential to reduce fire hazard and increase fire suppression capabilities. Large, severe fires have been closely linked to rural abandonment since the mid-twentieth century, a trend that has brought about extremely rapid transition of traditional farmlands to forested landscapes. The loss of agroforestry mosaics ends up causing forest patches to merge, thereby increasing fuel continuity, which can drive many wildfires to levels that exceed suppression capabilities.

Wildfires are commonplace in the countries of the Mediterranean region, and the 2022 fire season in southwest Europe (Portugal, Spain, and France) was extreme. The burned area was 52 times greater than the 2001-2021 median in some regions, and large wildfires (more than 500 ha, abbreviated LWFs) began breaking out in June, ahead of the habitual wildfire season. A few large wildfires accounted for 82% of the burned area. Situations of this kind arise only under extreme weather conditions in areas that have not been managed for decades (**Figure 1**).

Figure 1. View of agricultural land in the Sierra de Gata, Cáceres being overgrown by forest. Source: F. Pulido.

[1] United Nations Environment Programme (2022). Spreading like Wildfire – The Rising Threat of Extraordinary Landscape Fires. A UNEP Rapid Response Assessment. Nairobi.

Paradoxically, the number of wildfires and the total burned area have been declining in southern Europe in recent decades. In Spain both the number of LWFs and their numerical share of fires as a whole have also undergone a clear decrease (**Figure 2**). However, the proportion of burned area produced by LWFs has tended to rise, meaning that just a few fires are capable of accounting for a large part of the burned area. These fires have devastating economic and environmental effects and in most cases represent humanitarian catastrophes. That is, wildfires often outstrip the capacity of professional fire-fighting services to suppress them and overwhelm costly conventional fire prevention infrastructure.

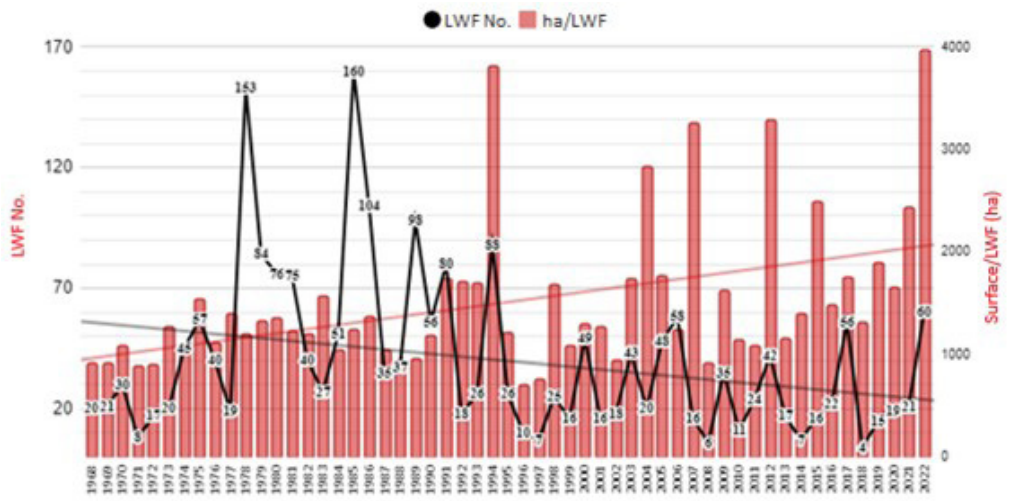


Figure 2. Number of large wildfires (over 500 ha) and burned area in Spain {data source: Ministry for Ecological Transition and the Demographic Challenge (MITECO)}.

Paradigm shift: towards adapted landscapes

In this scheme of things, more and more international scientific voices are being raised to call for a new approach based on greater expenditures on fire prevention measures, not necessarily at the expense of spending on the means of suppression but rather coordinated policies to regulate land use so as to promote preventive action by livestock raising, crop farming, and forest management in high-risk areas. The aim is thus gradually to create adapted landscapes where wildfires may occur but will not grow to catastrophic size.

The concept of Fire-Smart Territories (*FSTs*) has recently been put forward as *territories that use a shared management model in which empowered communities with high levels of knowledge and skills are able to take decisions and manage wildfire risk to keep the risk at very low levels through social and economic activities capable not only of containing (and ultimately eliminating) wildfire hazards but also of promoting the beneficial use of fire* (Tedim *et al*. 2016[2]). The linchpins of this concept are: (1) the social basis of the solution; 2) interaction between institutions and local communities; (3) overlap of multiple coexisting land uses to bring about fuel reduction; and (4) communication among agents, including regulatory changes and incentives as a basis for adaptive management of the solution. A more operational definition of an FST that has been put into practice by the Mosaico Initiative in Extremadura (https://mosaico-land.com) would be a territory where *a combination of indirect fire prevention measures based on forestry, agricultural, and livestock-farming practices carried out by local stakeholders together with direct prevention measures (fuel management by government services) is jointly implemented.*

[2] Tedim, F., Leone, V., & Xanthopoulos, G. (2016). A wildfire risk management concept based on a social-ecological approach in the European Union: Fire Smart Territory. International Journal of Disaster Risk Reduction, 18, 138-153.

Fuel in adapted landscapes can be reduced both through strategic direct interventions funded by government agencies and through non-strategic indirect interventions (e.g., grazing, crop farming, and wood harvesting) whose expected economic benefits justify expenditures by local land managers, with or without public support. The main advantages of direct intervention are related to their strategic location in respect of prospective fire behaviour and their mostly immediate implementation once they have been officially formulated. However, the high cost and short usefulness (about three years in Mediterranean vegetation) of these fuel management actions usually prevent them from being applied over large tracts. By contrast, indirect interventions implemented by local land managers are long-lasting and can cover large areas at no or reduced cost. They also generate economic returns and promote stakeholder engagement in the territory. Unlike targeted measures, indirect interventions may have a diffuse effect spread over larger areas, which can be effective in reducing wildfire size and severity.

Resilient landscapes in historic wildfires

Agroforestry landscapes are less affected by large and severe wildfire events than forests, shrublands, or grasslands, evidencing their large-scale potential to reduce fire hazard and increase fire suppression capabilities. Large, severe fires have been closely linked to rural abandonment since the mid-twentieth century, a trend that has brought about extremely rapid transition of traditional farmlands to forested landscapes. The loss of agroforestry mosaics ends up causing forest patches to merge, thereby increasing fuel continuity, which can drive many wildfires to levels that exceed suppression capabilities.

The effect of mosaic or variegated rural landscapes on wildfires has been implicitly documented on a number of occasions. Simulations projecting different rates of abandonment of rural areas evidence the resulting shift towards larger wildfires. One long-term project based on clearing shrubland followed by cattle grazing resulted in an 83% decrease in average wildfire size (**Figure 3**, Lasanta et al. 2022[3]).

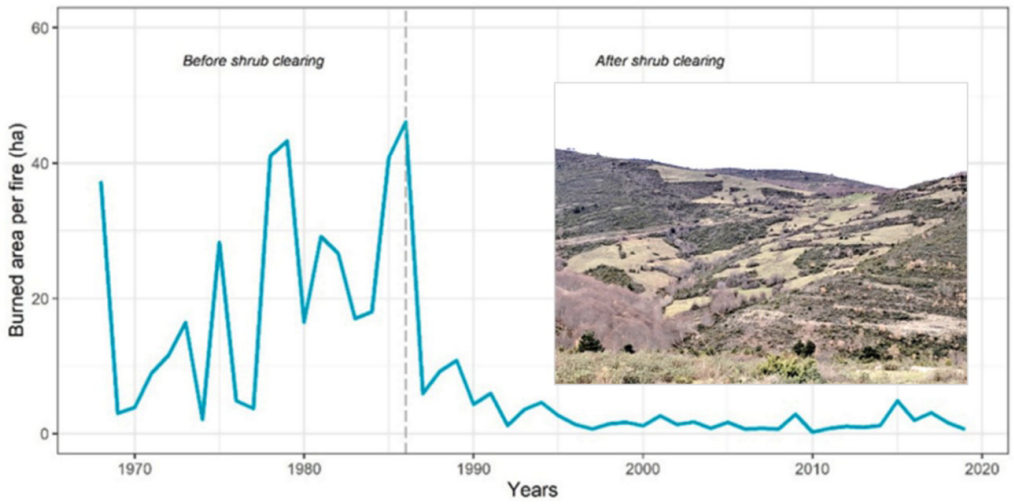


Figure 3. Decrease in the mean fire surface area achieved by shrubland clearing followed by grazing in La Rioja (Spain).
Source: Lasanta *et al*. 2022.

[3] Lasanta, T., Cortijos-López, M., Errea, M. P., Khorchani, M., & Nadal-Romero, E. (2022). An environmental management experience to control wildfires in the mid-mountain Mediterranean area: Shrub clearing to generate mosaic landscapes. Land Use Policy, 118, 106147.

Optimising wildfire-adapted landscape design

The need to design agroforestry mosaics capable of preventing fires has recently been advocated in Spain (Madrigal et al. 2019[4]). The authors of that article proposed the following definition of "agroforestry mosaic": *a heterogeneous restructuring of a mainly forested landscape achieved by using it for farming, livestock-raising, or forestry purposes, thereby significantly altering fuelscapes to keep fires from spreading and/or to make it easier for operations by fire-fighting services*. Placing structures with little or no combustibility (e.g., tree crops, ploughed fields, or rangeland) in the path of a fire slows its spread, keeps areas with substantial amounts of fuel (unreached forests and shrubland) from burning, and can even make the work of fire-fighting services easier.

In this context the term "productive firebreaks" (PFs) has recently been coined to designate territories that are in permanent use and hence have low fuel loads, enabling them both to act as passive firebreaks and to provide access for fire-fighting services. PFs can be created through the agency of forest harvesting, farming, grazing, or combinations of mixed agroforestry use (Pulido 2021[5]). However, planning that takes prospective fire behaviour into account is needed to maximise the deterrent effects of PFs and enable them to be regarded as fire-prevention infrastructure.

While the approach itself would appear to be simple, putting it into practice comes up against constraints rooted in the disconnect between forest, livestock, and farming policies that are designed without regard to any territorial planning strategies or fire-prevention requirements. Therefore, actual implementation depends on the amenability of local landscape managers (farmers, ranchers, forestry engineers), who, furthermore, play a key role in lowering future maintenance costs by putting PFs to profitable use. As a result, building PF infrastructures requires a prior understanding of the underlying social networks involved and the public and private cost-benefit balance derived from implementation. The experience in La Rioja showed the approach to be viable and paves the way for other forms of preventive productive activities.

One major advantage is that PFs can be created by many different types of productive activity capable of reducing the fuel load, such as growing both herbaceous and woody crops, grazing different animals, and harvesting timber or biomass through forest clearing or resin tapping activities. What is more, since by maintaining the PFs local participants can obtain extra income from public and/or private sources, they can also serve as permanent caretakers for infrastructure they do not want to see destroyed by fire. Lastly, the surface area that can be given over to PFs is clearly both much greater than conventional infrastructure and less costly to maintain, which makes them a prospective tool that holds out great socioeconomic and environmental interest.

The current state of knowledge of fire burn patterns over different types of vegetation formations and terrain enables us to predict the strategic areas where wildfires can be stopped either actively (through fire suppression) or passively (through insufficient fuel). Representative of the former type of area are Strategic Management Points or Zones (SMPs or SMZs; Figure 4) (Madrigal *et al*. 2019), which can be used to aid in fire suppression and to that end must be readily accessible and clear of vegetation. The latter type of area only needs to have a low fuel load, achievable through the preventive use of farming, grazing, or forest clearing or PFs.

[4] Madrigal, J., Romero-Vivó, M., and Rodríguez y Silva, F. (eds.) (2019). Definición y recomendaciones técnicas en el diseño de Puntos Estratégicos de Gestión [Specifications and technical recommendations for Strategic Management Point design]. «Decálogo de Valencia» para la defensa integrada frente a los incendios en la gestión del mosaico agroforestal [The Valencia "Ten-point Scheme" for agroforestry mosaic management for integrated wildfire protection]. Sociedad Española de Ciencias Forestales. Valencia.

[5] Pulido, F. 2021. Towards smart territories tackling forest fires Ciudades 24, 65-78.

SMPs can help with suppression, but for a variety of reasons an adapted landscape also needs to include PFs. The first reason is that wildfire size, the cost of suppression, and subsequent impacts all decrease in proportion to the amount of land that is clear of fuel. Furthermore, the greater the share of strategic landscapes used for production, the lower the maintenance costs for the system as a whole. On top of this, productive landscapes serve as a deterrent, and landscape managers look after them against miscreants. Lastly, recognising the preventive benefits of PFs inherently fosters public-private partnerships and shared responsibility. Keeping all the above considerations in mind, for implementation designing adapted/smart landscapes to protect against wildfires has to seek a balance between PFs and SMPs suitable for the territory concerned and the resources available. PFs are low in cost and long-lasting, whereas SMPs entail high implementation and maintenance costs but offer less uncertainty as to their outcomes. **Figure 4** portrays most types of public-private measures that can be used in rural areas in the Mediterranean region.

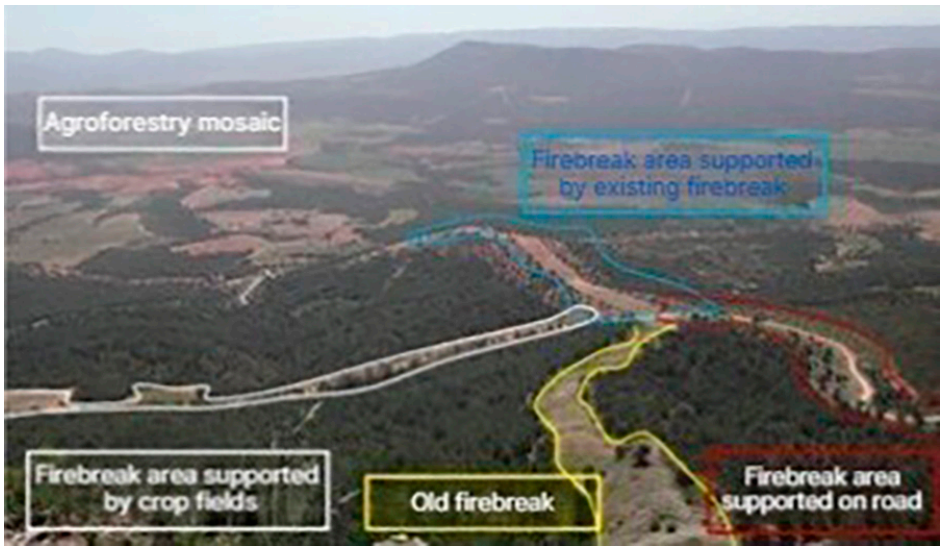


Figure 4. Types of public-private measures that can be employed in rural areas in the Mediterranean region. Source: Generalitat Valenciana [Regional Government of Valencia] 2012. Instrucciones para el diseño de áreas cortafuegos [Instructions for firebreak design]. Valencia.

Public policies and adapted landscape planning

Implementation of PFs as a basic operational unit for landscapes adapted to the new pattern of wildfires could be fomented by support policies expressly designed to promote their preventive side that make use of mechanisms provided in the Common Agricultural Policy (CAP). Unfortunately, for the time being territorial policies do not recognise the cost avoidance achieved by agroforestry activities, so as a rule there are no public means of paying for those benefits. Furthermore, current legislation restricts changing over from forestry use to other, less hazardous uses. In addition to the preceding limitations, there are others attaching to the appropriateness of exploiting protected areas, which further restricts options for using territories preventively and ultimately contributes to the continued presence of forestry mass subject to little management. The evident geographical mismatch between the allocation of EU funds for rural development and wildfire incidence has already been studied for Italy. At the same time, in view of the severity of the wildfire problem in 2017 and subsequent years, Portugal has begun setting up a national system of Integrated Landscape Management Areas aimed at protecting against wildfires (ILMAs). The scheme makes provision for allocating funds to specific areas where a public-private partnership has been set up for preventive territorial use.

In Spain the mountainous lands management legislation encourages the autonomous regions to designate High Wildfire Risk Areas (ZAR for the Spanish *Zonas de Alto Riesgo de Incendio*), but implementation and subsequent follow-up has been patchy, and in any case that scheme has not been designed to foment participation and commitment by local participants. And unlike the Portuguese ILMAs, it does not envisage any specific allocation of funds. To conclude, national, regional, and local governance programmes all have insufficiencies that prevent them from embarking on a new wildfire management scenario.

The 1997 floods in the province of Badajoz and subsequent measures taken by the water management authorities

Fernando Aranda Gutiérrez
Technical Director
Confederación Hidrográfica del Guadiana [Guadiana River Basin Authority]

A huge storm in November 1997 caused severe floods in the cities of Badajoz and Mérida and the town of Valverde de Leganés, and in the lowland region of Vegas Bajas del Guadiana. This article describes the damage caused by the floods and the steps taken by the water management authorities to repair the damage and to try to prevent this situation from repeating while at the same time taking the opportunity this presented to improve the urban areas surrounding the channels of the streams that had overflowed.

The november 1997 floods

The month of November 1997 in southwest Spain kicked off with heavy rainfall. The rainfall saturated the ground, greatly increasing the runoff coefficient[1]. Then, on 4-6 November a small subtropical storm that had begun south of the Azores underwent explosive cyclogenesis[2] as it was poised to pass over the Iberian Peninsula, making landfall at Cape San Vicente.

The basis for action was to resize the channels so that they would be able to contain the maximum discharge volumes in the historical record, namely, the November 1997 flooding, so that if a similar flood situation recurred, it would cause no damage.

In the case of Mérida and Badajoz, the opportunity provided by the works was also used to transform the environmentally neglected margins of the streams in question into green areas (parks and walking paths), land uses that were apt for areas potentially subject to flooding. This would help integrate the river channels into the urban setting while at the same time creating recreational areas for public use.

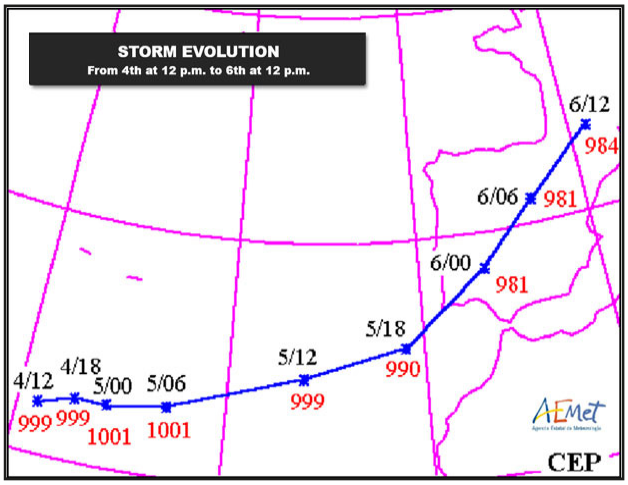


Figure 1.

[1] The runoff coefficient is the ratio of rainfall to the amount of water that ends up flowing down the river channels. The higher the level of ground saturation, the closer the value of the coefficient approaches one.

[2] Cyclogenesis is a weather phenomenon that occurs when a storm grows in size while deepening the low pressure area as it moves along. When this happens very rapidly, it is termed "explosive".

The storm produced very high levels of precipitation along its track, with 100 to 150 mm of rain falling in just a few hours, more than double the precipitation rate for an average month of November (usually the wettest month in the watershed area concerned). The return period[3] for an event of this type is somewhere between 500 and 1,000 years. The upshot was that the rivers in the area overflowed their banks, resulting in numerous personal losses and substantial property damage. The storm also had heavy winds that gusted at speeds of up to 130 km/h, augmenting the destruction it wreaked.

Those river channels that were regulated by dams obviously benefited from the dams' significant flood abatement[4] potential, but the many river channels that were not experienced enormous freshets, resulting in discharge volumes much higher than was normal for those channels.

The flooding caused property damage over a wide area, but the impact was particularly severe in the cities of Badajoz and Mérida, the town of Valverde de Leganés, and the irrigated agricultural lands in the lowland region of Vegas Bajas del Guadiana between Mérida and Badajoz on both sides of the Guadiana River.

Damage in Badajoz

Most of the damage in the city of Badajoz was produced by the Rivillas Stream, a left-bank tributary of the Guadiana River, and by its tributary the Calamón Stream, which joins the Rivillas Stream within the city limits of Badajoz. It is estimated that the discharge volume in the final section of the Rivillas Stream after the junction of the two streams rose to around 700 m^3/s (a level with a return period of roughly 500 years), while the capacity of the river channel is just 180 m^3/s. The river flow peaked at around 2:30 AM on the night of 6 November.

The result was 22 dead and massive material damage, with a large number of buildings heavily damaged or completely destroyed. An important factor that contributed to the amount of damage was that the properties concerned were in many cases poorly built traditional dwellings. Most of the damage occurred along the banks of the Calamón Stream and where the two streams converged, an area called "El Cerro de Reyes".

In the following days very high peak discharge volumes of around 4,000 m^3/s were recorded for the Guadiana River in Badajoz, but the damage this caused was limited, first because the waters did not rise as suddenly as they had in the tributaries, and second because the area in the immediate vicinity of the river was much less built-up.

[3] The Return Period (commonly abbreviated "T") is the inverse of the average probability of occurrence, in this case for rainfall. In point of fact, it is a dimensionless variable, but for reasons outside the scope of this article it is usually expressed in years, which can give rise to misunderstandings.

[4] Flood abatement is an effect produced by dams that consists of reducing and delaying spikes in discharge volumes by temporarily holding the water back in reservoirs beyond maximum capacity until the water is released. This is clearly a very beneficial effect.

Figure 2.

Damage in Valverde de Leganés

The La Nave Stream runs through the village of Valverde de Leganés through an underground culvert with a discharge capacity rated at no more than 20 m^3/s. However, on the night of 5-6 November, the peak discharge volume was estimated at about 80 m^3/s, an event with a return period of around 1,000 years. The result was flooded streets and homes, leaving 3 dead and severe property damage in the flood's wake.

Figure 3.

Damage in Mérida

In Mérida, the Region's capital city, the damage was caused by the Albarregas Stream, a right-bank tributary of the Guadiana River whose last 3 km run through the city centre. The discharge capacity of the river's channel was 75 m^3/s, and according to estimates the rate of flow reached around 200 m^3/s, an event with a return period of 500 years.

There was serious flood damage, though not as bad as in Badajoz, and fortunately there was no loss of human life. This outcome was largely ascribable to the fact that the buildings affected were of better quality than in Badajoz.

The peak discharge volume of the Guadiana River freshet as it passed Mérida was subsequently recorded at some 2,000 m^3/s, but the damage caused was minor, for the same reasons as in Badajoz.

Damage in the irrigated lands in the lowland region of Vegas Bajas del Guadiana

As already mentioned above, the Vegas Bajas del Guadiana lowland region was also hard hit. Besides substantial damage to the region's towns (again, fortunately, with no loss of life), damage to the irrigation infrastructure in the irrigated farmlands around Montijo and Lobón was extremely heavy.

These irrigated lands, covering a surface area of some 42,000 ha, have an extensive network of irrigation infrastructure, canals (the Montijo canal along the right bank of the Guadiana River and the Lobón canal along the left bank), irrigation ditches, pumping stations, pipelines, drainage channels, and service roads.

To mention just a few figures that give some idea of the size of these infrastructure networks, the main canals total 110 km in length, and there are 430 km of irrigation ditches, 45 km of pipelines, 265 km of drainage channels, and 524 km of service roads.

The entire system suffered heavy flood damage, and the enormous socioeconomic impact of the irrigated farmlands in the region made it essential to repair the network before the next irrigation season (usually starting in April of each year).

Measures taken by the water management authorities in the aftermath

This event posed an enormous challenge for all the authorities, which had to respond quickly (something that tends not to be easy for administrative bodies) in view of the enormity of the damage. A little more than a month after the floods, Spain's national government issued the Spanish Royal Decree 24/1997, of 12 December, on urgent measures to repair the damage caused by the flood and wind event on 5-6 November 1997, enacting a wide range of measures to help the victims.

The river basin authority for the region, the Confederación Hidrográfica del Guadiana, an independent agency of the then Ministry of the Environment (now the Ministry for the Ecological Transition and the Demographic Challenge) was directly involved.

The Guadiana River Basin Authority's most urgent initial priority was to repair the irrigation infrastructure in the Montijo and Lobón districts in the Vegas Bajas region. This was critical, because, as already mentioned, irrigated agriculture is of basic socioeconomic importance to the region, and given the condition in which the infrastructure had been left irrigation would have been impossible.

After that, less urgently, further measures were taken to overhaul the river channels in Badajoz, Valverde de Leganés, and Mérida, where most of the damage had occurred. The Hydrographic Studies Centre of *CEDEX*[5] , provided invaluable support for the first stage of this process in the form of comprehensive studies on the flooding. The second stage was drawing up and finalising project proposals, and the third and last stage was executing the work.

The basis for action was to resize the channels so that they would be able to contain the maximum discharge volumes in the historical record, namely, the November 1997 flooding, so that if a similar flood situation recurred, it would cause no damage.

In the case of Mérida and Badajoz, the opportunity provided by the works was also used to transform the environmentally neglected margins of the streams in question into green areas (parks and walking paths), land uses that were apt for areas potentially subject to flooding. This would help integrate the river channels into the urban setting while at the same time creating recreational areas for public use.

Irrigation infrastructure repair in the Vegas Bajas region

The aforementioned *Spanish Royal Decree 24/1997* provided a management framework for urgent repair of the damage to basic infrastructure, including the irrigation systems in the Vegas Bajas region (the irrigated farmlands around Montijo and Lobón).

The emergency work was divided into three parts, one for each of the two irrigation areas and a smaller, third section involving repairs to nearby dams, which had made a critical contribution to flood abatement but had been damaged in the process. The total cost came to 1,165 million pesetas, around 7 million euros (12.7 million today adjusted for inflation).

The three parts of the work were parcelled out under 30 different contracts awarded to 24 participating companies with a view to expediting execution of the repairs as much as possible. The work was mostly done in the first four months of 1998, with a total workforce of around 300 workers at any one time.

Figure 4.

[5] CEDEX stands for Centro de Estudios y Experimentación de Obras Públicas [Public Works Research Centre], an independent agency attached to what was formerly the Ministry of Development, now the Ministries for Transport, Mobility, and Urban Agenda, and for the Ecological Transition and the Demographic Challenge.

All the work was in a suitable stage of completion in time for the start of the 1998 irrigation season, which got under way in mid-April with everything working smoothly.

Flood defences along the Rivillas and Calamón Streams in Badajoz

The work on the Rivillas and Calamón Streams in Badajoz was carried out in two stages, a first stage consisting of civil construction work to increase river channel discharge capacity to 700 m^3/s (T = 500 years), the estimated volume of the flood. And a second stage of appropriately remodelling the urban and environmental features of the river margins.

The civil works were not restricted to river channel enlargement to increase the channel cross-section. The unavoidable increase in channel size, both in plan and elevation, had serious implications for all sorts of urban infrastructure, especially structures like bridges and walkways spanning the rivers, many of which had to be replaced by others that were longer in length or raised up to higher elevations, and sewage systems, which were often located right next to the river channels and had to be moved away from the modified channels.

As already mentioned, work to integrate the margins into the urban and environmental setting consisted mainly of transforming the margins into parks and walking paths equipped with playgrounds for children and facilities for engaging in sporting activities.

The total cost of both stages of the work came to around 28.5 million euros, and the work was carried out from 2002 to 2009 (the civil work in 2002-2007 and the urban and environmental remodelling work in 2006-2009). The main features of the combined work appear below:

- Modifying 4.19 km of the river channels in urban areas (2.45 km for the Rivillas Stream and 1.74 for the Calamón Stream) to have a discharge capacity of 700 m^3/s (T = 500 years).
- 9 new bridges.
- 4 new walkways.
- Relocation of 1.7 km of sewers.
- 25 ha of green areas.
- 9 facilities for recreational and sporting activities.

Figure 5.

Flood defences along the La Nave Stream in Valverde de Leganés

For urban development reasons the channel of the La Nave Stream in Valverde de Leganés could not be enlarged within the limits of the town, where, it will be recalled, the stream passes through an underground culvert, so the solution chosen was to divert the stream upstream of the town. The stream was diverted to the Piedra Aguda reservoir on the Olivenza River (the original stream discharges into that same river but downstream from the dam).

The work took place between 2000 and 2002 and cost 2.44 million euros (3.66 million in adjusted for inflation), and the main features included:

- A 2.5 km-long diversion of the stream upstream of the urban area limits.
- Diversion discharge capacity: 80 m^3/s (T = 1,000 years).
- A flow divider to allow a small volume of water (8 m^3/s, subsequently reduced to 2 m^3/s) to flow through the original course through the underground culvert.

Figure 6.

Flood defences along the Albarregas Stream in Mérida

Work on the flood defences along the Albarregas Stream in Mérida consisted of a combination of enlarging the river channel discharge capacity and remodelling the urban and environmental setting of the margins. The same observations made concerning the civil works in Badajoz also apply here: it was necessary to renovate a series of service elements that were affected, namely, structures spanning the river and sewage systems.

Mérida had an added problem, namely, the presence of monuments of great artistic and historic value (and hence subject to statutory protection measures that prevented them from being altered), such as the San Lázaro and Los Milagros aqueducts and the Roman bridge across the Albarregas Stream. Some of these imposed constraints on channel discharge capacity. All these aspects had to be addressed without affecting those monuments. Indeed, the works needed to be particularly respectful of their surroundings to accentuate their monumental nature and enhance them as places of interest for sightseeing.

Instead of establishing a single standard cross-section for the length of the channel, different cross-sections were selected in an effort to remodel the channel as naturally as possible, restricting concrete walls and channel bottoms to areas where they were absolutely necessary having in mind the closeness of buildings, streets, and other urban structures.

These works cost 22.9 million euros at the time (35.7 million adjusted for inflation). They were carried out between 2001 and 2004. The main features of the works include:

- A 3.5 km-long section of channel with a capacity of 200 m3/s (T = 500 years).
- 6 new bridges.
- 5 new walkways.
- Relocation of 5 km of sewers.
- 22 ha of green areas.
- 6 facilities for recreational and sporting activities.

Figura 7.

It should be emphasised that there have been some freshets of a certain size (though not as strong as in November 1997) since these works were completed and that the remodelled channels have given no further trouble. At the same time, the green areas next to the rivers (in Mérida and Badajoz) have become very popular parks and urban walking paths in these cities.

In summary, the river basin authority made a suitable response to the problems that were faced after the 1997 floods within a reasonable time period and further took the opportunity to integrate the channels of the Rivillas and Calamón Streams in Badajoz and the Albarregas Stream in Mérida into the urban setting.

Brief overview of the 11th International Conference and Annual General Meeting of IFIGS

Luis Javier Bonhome González
Assistant Director, Subdirectorate for the Economic Regime of the Winding-up Activity
Consorcio de Compensación de Seguros

The International Forum of Insurance Guarantee Schemes (IFIGS) held its eleventh annual meeting in Madrid from 16 to 18 October, hosted by the Consorcio de Compensación de Seguros, the IFIGS chair this year, which marks the 40th anniversary of its winding-up activity of insurance companies. The international conference took place at the Hotel Meliá Madrid Serrano and the annual general meeting at the headquarters of the Consorcio de Compensación de Seguros. At the general meeting the members appointed Olzhas Ashkeyev, Vice-Chairman of the Kazakhstan Insurance Payments Guarantee Fund, to be Chair in 2025 and Inho Kim, Team Leader at the Korea Deposit Insurance Corporation (KDIC), to be Vice Chair. This year's speakers and guests included representatives of the International Association of Insurance Supervisors (IAIS), European Insurance and Occupational Pensions Authority (EIOPA), Spain's Dirección General de Seguros y Fondos de Pensiones [General Directorate of Insurance and Pension Funds], Spain's Insurers Association (UNESPA), and representatives of Insurance Guarantee Schemes (IGS) from 25 countries attending either in person or via streaming.

International Forum of Insurance Guarantee Schemes
IFIGS

IFIGS was established on 15 May 2013 by a group of IGS from around the world and is a not-for-profit international network of both life and non-life IGS. IFIGS's main mission is to enable the exchange of experiences relating to policyholder protection and to foster and provide a channel for international cooperation among IGS and other organisations interested in developing guarantee schemes of this kind to improve the functional structure and operation of IGS and to strengthen policyholder protection against potential insurer insolvency.

IFIGS was established on 15 May 2013 by a group of IGS from around the world and is a not-for-profit international network of both life and non-life IGS. IFIGS's main mission is to enable the exchange of experiences relating to policyholder protection and to foster and provide a channel for international cooperation among IGS and other organisations interested in developing guarantee schemes of this kind to improve the functional structure and operation of IGS and to strengthen policyholder protection against potential insurer insolvency.

IFIGS has grown since that time and now has 28 full members and 3 associate members from 26 countries in North America, Europe, Asia, and Africa. Apart from the Annual General Meeting, IFIGS holds regular regional meetings to discuss region-specific issues. This year's meeting dealt with such topics as adjusting to the Insurance Recovery and Resolution European directive and the impact of artificial intelligence and climate change on insurance activity.

Next year's IFIGS Annual General Meeting will be held in Almaty (Kazakhstan).

IFIGS is an outstanding platform for discussing common issues, networking with colleagues and international counterparts, and considering developments in policyholder protection and IGS.

IFIGS meetings afford a unique opportunity to link up with IGS leaders from all over the world. Participants can discuss recent experiences, current topics, and best practice and can learn about how other organisations operate. Its aim is to serve as a forum for strengthening relationships by exchanging ideas and practices connected with policyholder protection.

For more information:
www.IFIGS.org or Information@IFIGS.org

Vehicle driver vs passenger

José A. Badillo Arias
Adviser
Dirección General de Seguros y Fondos de Pensiones (General Directorate of Insurance and Pension Funds)

This study is intended as an in-depth consideration of what is meant by vehicle driver. It is based chiefly on a judgment delivered by the Provincial Court of Appeal of Cartagena and a question referred by a Dutch court to the Court of Justice of the European Union (CJEU) for a preliminary ruling.

This question might initially seem relatively inconsequential, in that the driver is the person who operates a vehicle and who in the relevant circumstances is liable for harm suffered by third parties, including the passengers riding in the vehicle. Harm to the driver that causes a traffic accident is excluded from coverage pursuant to section 5(1) of the Spanish Motor Vehicle Civil Liability and Insurance Act [LRCSCVM, for its initials in Spanish], and hence the driver responsible for causing a traffic accident is not covered by the compulsory vehicle insurance (CVI) all motor vehicles in Spain must carry, because in the driver's case the requirement of causing harm to another is not fulfilled.

The judgment of 9 May 2023 by the Provincial Court of Appeal of Cartagena, Fifth Section, ruled that the passenger of a vehicle who had at a given point in time jerked on the steering wheel should be regarded as the driver and that the driver of the vehicle, who had been severely injured, should therefore be regarded as the passenger and hence covered by the compulsory vehicle insurance for the vehicle he was driving.

However, the aspect of the matter considered in the above-mentioned judgment and in the question referred to the CJEU for a preliminary ruling that interests us here is that both these cases concern serious personal injuries sustained by the driver – who is excluded from coverage – as a result of reckless conduct by certain passengers (not the driver) of the vehicle. That is, the intent in these cases is for the passenger to be considered to be the driver responsible for causing the accident and for the injured driver to be considered to be a passenger and thus to be covered under the compulsory motor vehicle third-party liability insurance.

Judgment by the Provincial Court of Appeal of Cartagena dated 9 May 2023

The judgment of 9 May 2023 by the Provincial Court of Appeal of Cartagena, Fifth Section, ruled that the passenger of a vehicle who had at a given point in time jerked on the steering wheel should be regarded as the driver and that the driver of the vehicle, who had been severely injured, should therefore be regarded as the passenger and hence covered by the compulsory vehicle insurance for the vehicle he was driving.

The judgement found that the passenger had jerked on the steering wheel of the vehicle in order to take an exit. This caused the vehicle to swerve out of control and ultimately to suffer the accident that seriously injured the driver. The police accident report stated that the accident had happened because "the vehicle's direction of travel had changed when the rider in the right front seat had grabbed the steering wheel". The driver of the vehicle sued the insurer of the vehicle he was driving, claiming that at the time of the accident he was to be considered to be a third party (passenger) in the vehicle, since he did not cause the accident.

The court agreed that when the vehicle went out of control, the claimant was indeed not the driver but rather a third party injured in the accident caused by the insured vehicle and hence was covered by the CVI. The court therefore ordered the insurance company to pay the driver an indemnity for his injuries.

Referral to the CJEU for a preliminary ruling, case C-490/24

In a similar matter, last 12 July the Supreme Court of the Netherlands referred a question to the CJEU for a preliminary ruling (case C-490/24), and the referral is pending decision by the CJEU.

As in the matter considered by the Provincial Court of Appeal of Cartagena, the claimant, the driver of the vehicle, had submitted a claim to the insurer, Nationale Nederlanden, under the compulsory motor vehicle third-party liability insurance. The claim had been denied because under Dutch third-party liability legislation, the policy taken out did not cover harm to the driver of the vehicle, who was excluded under the terms of the third-party liability insurance.

In view of the uncertainty surrounding the issue, the Dutch courts asked the CJEU to rule on whether compulsory third-party liability insurance should cover harm suffered by the (initial) driver of the vehicle where a passenger interferes with the steering of the vehicle and an accident occurs as a result of that interference.

Facts underlying the matter referred for a preliminary ruling

In late 2016 a traffic accident occurred involving a passenger van owned by a football club. The club had taken out a third-party liability policy on the vehicle with Reaal Schadeverzekering N.V., which subsequently merged with Nationale Nederlanden, as prescribed by the Dutch Motor Vehicle Third-Party Liability Insurance Act (WAM).

The vehicle was used to take the club's players to and from its facilities. The claimant and some teammates had been allowed use of the vehicle on the date of the accident.

The claimant and his teammates were driving in the vehicle to another football club's facilities after playing a match as the visiting team. There they had met a former coach of theirs who had climbed aboard the vehicle to go to a party being thrown by another football club. The claimant had taken the steering wheel of the vehicle, with his teammates sitting by his side and behind him and the coach sitting in the right-hand rear section of the vehicle.

While the vehicle driven by the claimant was driving along a conventional highway, the coach had suddenly pulled on the vehicle's handbrake. The vehicle was going around 70 km/h at the time.

Pulling on the handbrake while the vehicle was in motion caused the vehicle's rear wheels to seize up, and the vehicle had skidded sideways out of control and had crashed into a concrete stanchion of a railway viaduct on the right-hand side of the highway. The vehicle had then spun around in the right-hand lane and had come to a stop in the left-hand lane when the rear of the vehicle crashed into another stanchion. The claimant and the teammate sitting next to him had been thrown out of the vehicle and had both suffered severe injuries.

The teammate sitting next to the claimant had died of his injuries in hospital the day after the accident, and the claimant was hospitalised with life-threatening injuries.

The claim filed by the claimant (the vehicle driver)

The claimant, the driver of the vehicle, had submitted a claim to the insurer, Nationale Nederlanden, under the compulsory motor vehicle third-party liability insurance. The claim was denied because the policy taken out under the WAM did not cover harm to the driver of the vehicle, who was excluded under the terms of the third-party liability insurance.

In partial proceedings dealing with the accident, the claimant had petitioned for Nationale Nederlanden to be held liable for the harm the claimant had suffered and would subsequently suffer in future. One of the arguments he put forward was that the exclusion of liability for harm suffered by the driver of the vehicle that had caused the accident envisaged in section 4(1) WAM was not applicable to the case at hand. Although the claimant had been at the wheel of the vehicle at the time of the accident, he could no longer be considered to be the driver within the meaning of the WAM, because by pulling on the handbrake the coach had acted as the vehicle's driver.

Judgments delivered by the Dutch courts

The Dutch Court of First Instance had accepted the claimant's claim and ruled that he could no longer be considered to be the driver within the meaning of section 4(1) WAM and that Nationale Nederlanden was in principle bound to indemnify him for the injuries he had sustained.

On appeal by Nationale Nederlanden, the court of appeal had overturned the judgment in the partial proceedings and dismissed the claimant's claim based on the coverage envisaged in the WAM. In that court's view, even though the person who had pulled on the handbrake had done so in the capacity of driver, this did not mean that the person sitting behind the steering wheel was no longer the driver. Accordingly, the court had held that the claimant did not lose his status as the driver when the handbrake was pulled, the event that could have triggered his no longer being considered to be the driver at the time of the accident, since in the final analysis the claimant was still the person sitting in the driver's seat who was at the steering wheel, who had set the vehicle in motion, and who had decided on its speed and direction of travel. He was at the vehicle's controls, and that circumstance was not altered by the fact that the coach had suddenly pulled on the handbrake and therefore also performed an act of driving.

The question referred for a preliminary ruling

Having in mind that neither the case law handed down by the Benelux Court of Justice nor the case law handed down by the Court of Justice of the EU provides any guidance as to how the *rechtbank*[1] should interpret the meaning of driver, in the corresponding appeal the Supreme Court of the Netherlands referred the following questions for a preliminary ruling:

1. Is Article 12(1) of codified Directive 2009/103 to be interpreted as requiring compulsory insurance to cover liability for the (initial) driver's damage in a case where a passenger interferes with the steering of the motor vehicle and an accident occurs as a result of that intervention?

2. If the first question is answered in the affirmative, do certain requirements arise from EU law that the national court must take into account when determining whether a driver, within the meaning of Article 12(1) of codified Directive 2009/103, has lost the capacity of driver in the circumstances of the case and is entitled to claim passenger protection under the general rule?

Remarks and conclusions

The issue raised both in the judgment delivered by the Provincial Court of Appeal of Cartagena and in the matter referred for a preliminary ruling is clear: at a certain point in time, a passenger in a vehicle acts rashly and causes a traffic accident. The driver of the vehicle is injured and claims an indemnity from the vehicle's third-party liability insurer.

As explained above, the ultimate aim in these cases is to have the driver considered to be a passenger in the vehicle and the passenger considered to be the driver, so that the initial driver can be compensated for the harm suffered.

In our opinion this interpretation would be in breach of section 5(1) of the Spanish Motor Vehicle Civil Liability and Insurance Act, which excludes harm arising from injury or death of the driver of a vehicle that has caused an accident from coverage under the compulsory third-party liability insurance.

To hold otherwise would mean that any circumstance involving an event that could have been a causal factor outside the control of the driver of a vehicle that has caused an accident would turn the driver into a passenger, in breach of the aforesaid section 5(1) of the Spanish Motor Vehicle Civil Liability and Insurance Act. This would mean leaving the decision as to when the exclusion laid down in that section had effect up to the interpretation of each individual court, thereby giving rise to a high degree of legal uncertainty in matters pertaining to motor vehicle third-party liability.

We think the above-mentioned section 5(1) of the Spanish Motor Vehicle Civil Liability and Insurance Act is clear, in that it is the person who is operating the vehicle that causes an accident who is excluded from receiving compensation for harm he may suffer, and that person's status cannot be changed simply because an outside event may have occurred in the course of the accident. Consider, for instance, accidents caused by a pedestrian, by an animal suddenly crossing the road, by a wasp flying into a vehicle's passenger compartment, or even by the glare of the sun, all cases in which, as in the case that concerns us here, the driver may be momentarily affected by a factor other than his own actions.

[1] Court, law court.

That is the interpretation of section 5(1) of the Spanish Motor Vehicle Civil Liability and Insurance Act handed down by the First Section of the Civil Division of the Spanish Supreme Court in its judgment no. 1023/2008 of 3 November 2008: *Compulsory insurance covers third-party liability that may be incurred by the driver of a motor vehicle for harm caused to people or property in the course of driving, within the established limits (sections 1 and 2 of the Spanish Motor Vehicle Civil Liability and Insurance Act. The insured party is the driver, the object of the insurance is the harm he causes, and section 5(1) provides that coverage of the compulsory insurance will not include harm caused to the person of the driver of the insured vehicle. What it does cover, and what is binding on the insurer, within the established limits, is the risk that the insurer will be forced to meet an obligation to indemnify a third party for harm arising as a result of the action of driving for which the insured party bears civil liability under the law (section 73 of the Spanish Insurance Contract Act). In case there was any doubt about this, this conclusion is made abundantly clear by section 10(1) of the Implementing Regulations to the Spanish Motor Vehicle Civil Liability and Insurance Act enacted by Spanish Royal Decree 7/2001 of 12 January 2001, which excludes "all harm arising from injury or death of the driver of a vehicle that has caused the accident" from coverage by the compulsory insurance. These Implementing Regulations do not interpret the underlying Act in force from the date of publication and do not add any exclusions that do not arise from the wording of the provisions of the Act itself. In point of fact, they merely set out more clearly what the Act already envisages (judgment of 15 April 2002, Supreme Court, Chamber 3, Contentious-Administrative Review Division). Furthermore, the wording of section 5 of the Spanish Motor Vehicle Civil Liability and Insurance Act as amended by the Spanish Act 21/2007 of 11 July 2007 has dispelled existing uncertainties. Under the new wording, "harm arising from injury or death of the driver of the vehicle that has caused an accident does not fall within the scope of coverage under the compulsory insurance".*

The cases considered here involve acts by third parties that fall within the risks associated with driving. They are generally understood to be a type of internal *force majeure* attaching to those risks, also referred to as fortuitous events, which does not relieve the driver of the vehicle and the third-party liability insurer from civil liability and in no case alters the status of the driver of the vehicle.

In addition, item 1 in Annex I to the Spanish Royal Legislative Decree 6/2015 approving the Traffic, Motor Vehicle Operation, and Road Safety Act defines a driver as that *Person who, subject to the exceptions set out in item 4, paragraph two, operates the steering mechanism or is at the controls of a vehicle or is in charge of an animal or animals. For vehicles operated for driver training purposes, the driver is understood to be the person who is in charge of the dual controls.*

In the accidents considered here, there is no question as to who was operating the steering mechanism and was at the controls of the vehicles. It was the claimants, who were sitting in the left front seat, the driver's seat, and further they were the ones who were able to operate all the vehicle's driving mechanisms, e.g., pedals, brakes, gear shift, lights, and more generally all the equipment used to make the vehicle go forward or back up.

In short, the driver is the person who has control of a vehicle at all times. In other words, a passenger who suddenly activates the handbrake or grabs the steering wheel is not in control of the vehicle or its steering mechanism, nor does that person change the status of the initial driver of the vehicle. To assert otherwise not only takes away from legal certainty, it means altering what is envisaged in law and gives rise to myriad interpretations in which any interference by a passenger in a vehicle other than the driver could switch the original status of those parties inside the vehicle and in so doing manipulate the contents of the law and hence the effects of the protection afforded by the compulsory motor vehicle third-party liability insurance.

Still, while in our view the status of driver cannot be changed simply because an outside event may have occurred in the course of an accident, this issue is undeniably controversial, and we will therefore be looking forward with great interest to the final decisions taken by the courts. This matter remains relevant, because the judgment of the Provincial Court of Appeal of Cartagena has been appealed to Spain's Supreme Court, and at the same time the CJEU has yet to render its preliminary ruling on the question referred to it by the Dutch Supreme Court.

It is interesting to consider what could transpire if the Spanish Supreme Court were to deliver its decision on this issue before the CJEU's ruling and the two interpretations were to differ. In this regard it should be noted that it is mandatory for our country's courts to apply CJEU case law, which serves as a source of law for all EU member states. If the Supreme Court is aware of this matter that is pending a ruling, and we assume it will be, it might be best for it to wait for the CJEU's ruling and then act in consonance.

consorseguros
REVISTA DIGITAL

www.consorsegurosdigital.com