



Association Internationale de Droit des Assurances
International Insurance Law Association
Asociacion Internacional de Derecho de Seguros
Internationale Vereinigung für Versicherungsrecht
Associazione Internazionale di Diritto delle Assicurazioni

**18th MEETING OF THE
AIDA CLIMATE & CATASTROPHIC EVENTS WORKING PARTY**

15:15HRS AND 17:15HRS - SATURDAY 13 OCTOBER 2018

XV AIDA WORLD CONGRESS

WINDSOR CONVENTION & EXPO CENTER, RIO DE JANEIRO, BRAZIL

MINUTES OF MEETING

THEME: "TOUCHING THE VOID? THE ROLE OF RESILIENCE, REINSURANCE, TECHNOLOGY AND SURVIVAL STRATEGIES IN THE FACE OF CLIMATE CHANGE AND CATASTROPHE"

1. Welcome and Introduction by Chairman - TIM HARDY (UK)

1.1 Thanks were extended by Tim Hardy to the organisers and sponsors alike of the XV World Congress for providing the excellent facilities for the meeting, as already enjoyed for the rest of the Congress. It was a credit to the AIDA Brazilian Section. It was particularly pleasing to be able to address these thanks in person to two of the CCEWP's stalwarts from Brazil, Pery Saraiva Neto and Gloria Faria, each of whom were again to be making presentations to the day's meeting. Also, in welcoming so many attending the meeting to see so many from Brazil.

1.2 As always, as it was hoped that those attending for the first time will wish to continue to be engaged in the activities of the CCEWP, a list is circulated upon which all attending were encouraged not just to identify themselves for registration purposes, but also provide their email address to allow us to circulate future mailings about our meetings and activities.

- 1.3** Before introducing the day's speakers it is always important to recognise and pay tribute to those who make a valuable contribution to the success of the CCEWP and its meetings, even when not able to attend a meeting in person, which naturally is not always possible. Contributed reports, presentations or materials of some kind or even simply ideas for sessions or discussion are always highly welcomed. In this vein, acknowledgments were owed to Maria Kavanagh (Argentina) and her Mercosur Group, who had, as ever, produced for the meeting a written report upon issues pertinent to the session, this time upon "Pollution in the Mercosur Region". A version of this Report in both English and Spanish would be posted, along with all other materials presented or discussed today, upon the CCEWP page of the AIDA website.
- 1.4** Acknowledgement was also due to Rosanna Bril (Argentina) who had volunteered to speak to us upon new techniques being used in her country for resolving environmental claims, but she had in fact made this presentation earlier in the Congress in the "Pollution Insurance" and her presentation there would again be available via the website. Rich Traub (US) had not only volunteered to speak, but he had also delivered his presentation in both Powerpoint and script format, only to be thwarted by last-minute visa difficulties which denied him making the trip from the US to Brazil. We nonetheless had a full two hours of material to be presented and discuss.
- 1.5** To afford time for all of that to be given due consideration, preliminaries were to be confined to just one more observation of particular poignancy given today's theme and the issues that have been of concern to the CCEWP from the outset. The CCEWP owed its formation in large part to the work done by AIDA Honorary President, Marcel Fontaine (Belgium). It was therefore particularly sad to register our regret that Marcel could not attend this session and Congress this week. This in part arose from a personal tragedy which had befallen members of his family visiting Arizona in the US this summer. His son-in-law had tragically lost his life while visiting a geological area of great interest on account of extreme temperatures and a breakdown in communication. The CCEWP wished to record its most sincere commiserations.
- 1.6** The news had arrived at the same time as preparations for this meeting were being made. Coincidentally, another story which had gripped the world's attention in the past – and previously been made the subject of a best-selling book and feature film – was being dramatized on the London stage. This was the story of "Touching the Void": the story of a UK climber, Joe Simpson, who suffered a fall, could not be rescued and was left for dead by his climbing partner cutting the rope to save them both from perishing. The twist in the real-life was that they both survived and remained good friends.
- 1.7** While the world was appalled at the apparent callousness of a climber ever cutting the rope to abandon another, the climbers reasoned it was the only course and that they were equally to blame for getting themselves into that position by poor advance planning and taking too little heed of changing weather conditions. The analogy need not be laboured, but the parallels with the short-term dilemmas presented to many confronted by evidence of the phenomenon of Climate Change were too obvious to ignore. So, too, the reminder that tragedies arising from death from catastrophic weather events can be both highly personal and widespread in effect.

1.8 In the original remit of this WP we set ourselves the task of : “... *going beyond a mere description of initiatives taken by the insurance sector, to concentrate on their legal expression in clauses, general conditions or new types of policies, and on the new legal issues that have come up, or probably will in the foreseeable future, and how these evolve over time along with other catastrophic event responses.*” Before turning today to look critically at some responses of governments and others in authority to recent instances involving hardship and the role of and impact upon insurers, it’s worth reflecting on what may be seen as the “void” in this context: the so-called “protection gap”. What it is. What’s being done – and how effectively – to bridge it.

2. PRESENTATION: Legal Issues for Protection Gap Entities and Catastrophic Risk

- TIM HARDY (UK)

2.1 In short, the “protection gap” is the scale of economic losses from natural catastrophes which to date are remaining uninsured. The statistics are familiar. About 70% of such losses globally are estimated to remain uninsured. That figure rises to 90% in low/middle income nations. Over 97% in Haiti when devastated by its earthquake in 2010. But it’s not only in such countries that the “gap” creates a major impact. Were an earthquake to strike California uninsured losses could be in the range of 50%-90%. The 2017 US hurricanes, like Superstorm Sandy and other major hits in developed countries show surprisingly high levels of uninsured losses.

2.2 In past meetings we’ve previously considered initiatives such as the international frameworks established to help address it: the 2015 Paris Climate Change Agreement (COP 2015), the Sendai Framework of Disaster Risk Reduction and the UN 2030 Agenda for Sustainable Development. Each recognises the role insurers can play in closing the gap. In turn, the creation of The Insurance Development Forum (IDF) in early 2016 - an insurance industry initiative with backing from the UN and the World Bank. A bold aim to extend insurance and risk management principles to strengthen resilience against disasters with a target to ensure insurance protection against climate-related risks is extended to 400m more people by 2020.

2.3 But perhaps more interestingly and critically, how effectively is it being bridged? Or indeed can it be bridged? Is it in fact widening more quickly despite these bridging efforts? Are there unwitting consequences of such initiatives or disaster responses? Do these provide any lessons for when there is need for more immediate and localised responses to crises?

2.4 Some research conducted in recent times by the Cass Business School in London provides some insights from their study. A copy of their full Report will be linked on our website. Purpose now is to highlight just a few aspects of particular interest. They note that all “Protection Gap Entities” (PGEs) are formed with a broad common

purpose - to help transform uninsured risk into insurance-based products which provide capital for disaster recovery. They are often themselves the product of an uneasy truce between those expected, but also under serious pressure, to provide adequate responses, most usually, governments and the private insurance market. This often leads to demands to fill specific/localised protection gaps – by removing or redistributing risk (or a combination of the two) - at minimum cost, rather than finding sustainable long-term solutions.

2.5 In terms of the resulting impact of PGEs two particularly interesting questions are posed. I) Do they actually improve resilience against future economic losses occurring? II) Do they actually reduce or bridge the Protection Gap or simply provide a temporary stopgap or even exacerbate a widening gap in the longer term?

2.6 As for the first, they conclude that although the theory is that the creation of PGEs can help risk identification, risk reduction, resilient reconstruction, financial preparedness and thus, preparedness, the results in truth are mixed. Among their findings they conclude that PGEs can rarely directly influence resilience measures. It is governments which hold the legislative power (in the form of environmental policies, land planning/use, defences/disaster relief etc). Improved risk identification via insurance/technical input etc by PGEs in theory incentivises risk reduction and more resilient reconstruction, but in practice such benefits are not always realised, e.g. in the case both of post-flood reconstruction grants (UK) and retrofit packages post-earthquake losses in California have seen low take-up levels. Reasons are various. Some potentially remediable, but the case for PGEs directly improving preparedness are arguably the weakest. This is on account of PGEs being furthest from controlling early warning systems and contingency planning and the like. The Cass Report makes recommendations about how PGEs might be afforded formal power in assuring resilience by enhancing links with government agencies and evolve their remit over time without permitting “mission creep”.

2.7 Reduction or increase in the Protection Gap? A paradox is identified. The activities of PGEs improve our understanding of the Protection Gap. Their set-up can however constrain changing the underlying reasons for the gap or changing circumstances. Regular mismatches occur between the remit/delivery of the PGE and expectations of it from different quarters. The Cass Report proposes how creating closer ties between financial and physical resilience measures and giving fresh thought to how the PGEs role should evolve over time would be among ways that longer term cures could be found and delivered. Among these is the need to identify how laws, liabilities and traditional insurance market products themselves need to evolve, beyond simply the creation and funding of further PGEs each time a short-term emergency needs resolution.

2.8 Three major themes are identified as needing further consideration by all concerned. I) Is liquidity enough to tackle disasters in emerging economies? II) What is it that is

to be solved – provision of mandatory or voluntary insurance? III) Identifying new protection gaps as important as filling past ones.

2.9 A second interesting commentary on this topic simply to be brought to everyone's notice is an article written by Rhys Llewelyn Jenkins of Cardiff University about the UK PGE, Flood Re, which won last year's BILA Journal Article Prize – *BILA Journal Number 130, October 2017*. Addressing the eligibility criteria arrived at by Flood Re the author observes that the purposes of insurance law in the context of consumer and commercial insurance could be defined as: a) promoting equitable relations; b) economic efficiency; and c) a fair distribution of risk. The question posed is whether the eligibility criteria established for Flood Re permit the principal purposes of insurance law to be met? More particularly, are they enforceable and certain enough to be free from dispute/unfairness?

2.10 The purpose of identifying these items and the questions they pose is that they offer serious food for thought for the CCWEP. What role is insurance law playing in the construction, implementation of these intervening schemes? Is insurance law being considered enough – by insurers and lawyers – when business/policy-driven responses are being found to meet these fundamental and urgent concerns? It is likely to be important for us and for the wider issues at stake to pursue the CCEWP's original remit by examining PGEs in many jurisdictions more closely and to identify and consider examples where insurance law (or its purpose) is being bypassed or in need of reform or better enforcement.

3. PRESENTATION: The aftermath of the Fundao Dam disaster in Mariana and Future Mandatory Environment Insurance in Brazil – GLORIA FARIA (BRAZIL)

3.1 The failure of the Fundao tailings dam in Brazil on 5 November 2015 and the biggest environmental disaster ever created in the country in its wake has been reported upon more than once in the CCEWP meeting and elsewhere in the present Congress.

3.2 More than forty cities and thousands of people have been affected by the iron waste discharged in the river. The number of fatalities caused directly or indirectly has still to be settled. The economy of the entire region has continued to be damaged. On 18 November 2016, Samarco, its controllers and 22 other defendants faced a criminal lawsuit treating 19 deaths as homicides. The environmental lawsuit cited a value for the resulting damage at R\$155bn. A public civil action pursued by regional and federal governments and agencies resulted in R\$1.5bn being paid as the first part of a R\$20bn claimed owing to compensate for damage caused. 50,000 lawsuits have been commenced in the regional court to redress river contamination. Civil lawsuits involve claims across all people and businesses affected. Samarco have been bound to observe Labor Agreements to safeguard the well-being of employees who might otherwise be laid off work. The ramifications have spread further. Only last month, the Anglo-Australian mining company, BHP Billiton, announced that it had been sued

in Australia by over 3000 investors for failure to inform them of problems it faced in respect of the dam during the period between October 2013 and November 2015 in which time over 20% of its share value dropped in three stock exchanges.

3.3 Immediately after the disaster a Bill was presented to the Brazilian Senate which would make taking out compulsory environmental insurance cover a pre-condition for any entity successfully to obtain an environmental licence to undertake any operation involving environmental resources of any kind. The Bill has since been approved by the Senate and has been forwarded to the House of Representatives and awaits further advancement.

3.4 With effect from 26 June 2018 the Senate approved the amendment of existing provisions to the effect that the environmental licensing authority must be consulted whenever it is necessary as part of the preparation of an Environmental Impact Study (EIS) and an Environmental Impact Report (EIR) to consider the need to present evidence on the taking up of environmental insurance as a condition for the granting of an Environmental License for the starting of the operation of an enterprise or activities that use environmental resources, effectively or potentially capable of pollution, in any way or form, or of causing any environmental degradation. The amount insured in the environmental insurance shall be set during the licensing initial phase by the licensing environmental agency, following objective criteria established in the regulation itself.

4. PRESENTATION: Individual Damage and its Mass Projection: First Party Mandatory Environmental Insurance as a Tool for Resilience – PERY SARAIVA NETO (BRAZIL)

4.1 In looking at the proposition that mandatory environmental first party insurance would be a tool for resilience in the face of environmental disasters it is necessary to consider first the concepts in issue and how one can delimit the problems presented. Then, to outline and describe the proposal which is being presented for debate.

4.2 Hazard involves uncertainty and unpredictability. Insurance uses tools and techniques to identify and measure risk. To calculate maximum exposures and the predictability of loss. The degree of predictability and accuracy achievable depends on several factors. In assessing risk an insurer depends upon access to information from the time of underwriting through to the end of the policy period or even longer. Problematic is the informational asymmetry between what the insured knows and what the insurer is informed. Two elements arising out of informational asymmetry - adverse selection and moral hazard - are particularly relevant. They impact upon not just contractual relations, but in how insurance operates and in respect of which hazards an insurer is willing to be active.

4.3 Adverse selection impairs the insurer's ability to distinguish between good and bad risks. Those which should not be accepted at all. Those which require special exclusions or conditions to apply if the risks are to be covered and at what price. For a certain insurance product to be viable (and adequately resourced), those insured – and their risks to which they are exposed - need to be correctly assessed and

distributed in a sustainable way. Some activities or exposures are inherently more hazardous than others. Those paying insurance premiums for less hazardous risks in part contribute to the cost to insurers of carrying the risk of those involving greater hazard. The prudence displayed about risk by those insuring less hazardous risks also reduces to the benefit of insurers the likely occurrence of loss. In the case of both low and high hazard risks, insureds can also be encouraged to employ best technologies and practices further to mitigate the likelihood and severity of losses materialising.

- 4.4** Insurers are thus able to bear higher levels of losses if mixed levels of risk are spread and premiums assessed across the book of business are accurately calculated. If the selection of risk is adversely affected, so, too, is this affordability and sustainability compromised.
- 4.5** The moral hazard problem arises where an insured behaves with less caution and diligence in respect of any hazard on account of the financial comfort provided by the insurance taken out, which in turn increases the probability of losses materialising. This can include a failure to invest or reduce investments made to prevent loss. Where it is environmental hazards in issue, the problem takes a more complex shape, because it involves multiple factors. Taking the case of a certain industrial plant, it will be necessary for the insurer to know the method of production, the technology used, the training and engagement of the employees, the accident and contamination history, the regularity, sufficiency and compliance of environmental licensing and its requirements and restrictions, among other elements.
- 4.6** Once the risk is underwritten, the need for information will continue. Throughout the contract period the insurer needs to be satisfied that the insured's compliance with regulation and safeguards remains at a constantly high level and at least as high as at the acceptance of the risk. Any failure on the part of the insured is akin to a moral hazard, aggravating both the level of the assumed risk and the likelihood and scale of any resulting loss.
- 4.7** The challenge is how to achieve a greater level of informative symmetry, collaboration and prudence being shown by the insured, to maintain parity between the insured and insurer and at the same time help to reduce the likelihood of loss. Compensation and minimisation mechanisms customarily exist in insurance products in various forms: risk classifications, premium reductions or penalties, exclusions or provisions triggering loss of contract and indemnity rights for breaches. The effectiveness of these mechanisms varies dramatically between those cases where there is first party coverage and where it is third party. Control over levels of knowledge and compliance is much harder or even impossible in many third party instances, where the party whose knowledge or conduct is most critical to the environmental hazard is someone other than the insured. Even where an insurer may undertake an analysis at the time of underwriting the risk of what range of people may be affected by the hazards of an industry activity, it is very hard to maintain any monitoring of the size and nature of that population of potentially affected parties, their vulnerability and/or resilience or capacity to be resilient.
- 4.8** Taking the above factors into account, this is why first party mandatory environmental insurance is the right tool to meet the needs of mass tort claims resulting from environmental disasters and so also help to improve resilience. Unlike where damage is sustained to the environment, damage suffered by individuals has long been

provided for by insurance. There is a wealth of experience of how best to manage this. When one then starts to combine these policies and practices with exposure stemming from environmental hazards one confronts the challenges of mass damage and torts, characterised not only by the large number of people affected by any one incident, but by their proximity and particular vulnerability to industrial enterprises or environmental hazards. For such risks and groupings of those at risk, it is necessary to instigate mandatory insurance, to provide an immediate response for the wellbeing and reconstruction of all the lives and properties of those directly impacted by a disaster. It's here, precisely, that insurance can realise its potential to help develop more resilient construction.

- 4.9** Mandatory insurance affords the right to bring direct action by a third party against an insurer, using levels of damages to be awarded determined by those investigating the disaster to finance immediate relief to those directly affected. (By way of example, in Colombia Law 491/1999 obligatory insurance enables the quantifiable economic losses of people to be calculated as part of, or as a consequence of, damage to the environment and natural resources.) Recognising the need for immediate attendance relief being provided for victims, it is essential to construct a mandatory insurance regime, based not upon personal or civil liability insurance, but upon property and personal damages (for example: personal accidents). That is, a form of miscellaneous damage insurance (patrimonial) together with personal insurance. Those insured will be each person exposed within a certain hazard radius.
- 4.10** In this case, the polluter-operator-entrepreneur will feature not as an insured - as presently in civil liability insurances - but as a stipulated party, responsible for payment of an award, i.e. of monies by way of recompense . It would be possible, in this scenario, for any ultimate apportionment to be settled between the stipulated party, the Government and, eventually, between those exposed people themselves. (Additionally, if relevant, to resolve any outstanding insured payment or recovery issues). Thus, it would take the form of obligatory environmental insurance to protect those people who live in risky regions and vulnerable to significant loss or damage.
- 4.11** This proposal would help address the challenges of both adverse selection and moral hazard matter and adverse selection with potential victims featuring in the role of insured, on a first party basis, so facilitating the pricing, with the added benefit of eventual victims being identified in advance.
- 4.12** Many questions from the floor (and answers by Gloria and Pery) were generated by the two presentations from Brazil. Among these was why a scheme of mandatory insurance was being favoured over the creation of a Superfund of some description. One problem identified with any fund being made part of Government assets for such a purpose, however suitable that might be for environmental losses, was how much (or little) confidence many might have that such funds were safely held and would be deployed for this purpose rather than being redeployed or at risk of appropriation for other causes particularly if there was a change of government. A criticism expressed was that the proposed scheme involved passing responsibility for amounts to be paid to victims to someone else, a third party agency, rather than being subject to review or scrutiny of a third party. In response to the question of how likely it was that such proposals might become accepted it remained anyone's guess' particularly with elections taking place and the make-up and attitude of any new government, as yet unknown. It was at least a positive step that it seemed there had been some

willingness expressed to learn more about them. Discussion of these issues and further developments was sure to continue and would be revisited at further meetings.

5. PRESENTATION: What's Happening in the World's Second Driest Continent? - CHRIS RODD (AUSTRALIA)

5.1 Australia is, of course, the world's second driest continent... after Antarctica.

5.2 The seriousness of one of the most severe and prolonged droughts in Australia's history is well and frighteningly illustrated by Australian Bureau of Meteorology data. Any number of exceptional statistics, such as the country's driest Autumn since 1902 and 99% of New South Wales and 58% of Queensland affected by drought. Early and unseasonal bushfires heightening fears of a higher than ever bushfire risk with an El Nino Summer expected and political pressures seeing a new Prime Minister now in office less sympathetic towards renewable energy and other measures aimed at curbing adverse effects of Climate Change. All the while, the issue of the affordability of insurance in flood and cyclone affected areas remains unresolved.

5.3 The politics of Climate Change has largely accounted for the country having 7 Prime Ministers in the last 10 years. The strong influence of the coal lobby has seen the Government fail to agree on the National Energy Guarantee. Also, the setting of carbon emissions targets at a lower level than even China. All the while, the take up of renewable energy for domestic use is one of the highest in the world, accounting for one in four homes nationally and as many as 3.5m solar panels installed last year alone.

5.4 Away from the political landscape the public is acutely aware of Australia's vulnerability to the ravages of Climate Change and the need at the same time to ensure that energy costs are reduced, insurance premiums made affordable and for water to be conserved. Much of the Australian public strongly opposes the country's continued dependence on coal. 9 out of 10 brown or black coal power generation plants have been closed and opposition is mounting against investment and licensing of new coal dependent projects. All in all, what was once considered the "lucky" country is looking less lucky than it was.

6. Other Contributions and Conclusion

6.1 The references made to how governments are (or are not) building on progress seemingly made upon the signing of the 2016 Paris Agreement makes the relevance of what is happening in the United States as important as ever, particularly since the announced withdrawal of the US from that Agreement last year. For that reason, it was very helpful for Rich Traub (US) to agree to prepare and make a presentation at this meeting upon Climate Change Litigation Insurance Implications from a US perspective. In turn, doubly frustrating for him and us that he was prevented at short notice from attending in person. More happily, his interesting full Powerpoint presentation, together with a more abbreviated text of issues for discussion at this meeting have been supplied and will be posted on the CCEWP page of the AIDA website for all to consider. This presentation and text were described briefly in outline.

6.2 Similarly, the Mercosur Group report upon “Pollution in the Mercosur Region”, previously mentioned, will similarly be posted. An email will be circulated to all who have attended and contributed to the meeting and left their email addresses for this purpose, along with a large number of others who continue to follow and contribute to CCEWP meetings and exchanges, whether physically attending or following remotely. With final thanks expressed to all presenters and reporters, as well as those contributing from the floor, as well as our hosts and sponsors, the meeting was closed by the Chairman. More details of the 19th CCEWP meeting scheduled for Marrakech in April 2019 would be communicated once established.

Tim Hardy
CCEWP Chair
November 2018