



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

**8th AIDA CLIMATE CHANGE WORKING PARTY MEETING  
XIVth AIDA WORLD CONGRESS 2014**

**16:00hrs-18:00hrs  
MONDAY 29 SEPTEMBER 2014  
Universita Europea di Roma  
ROME □ ITALY**

**MINUTES OF MEETING**

**1. Welcome, introduction, apologies for absence, matters arising from last meeting**

- 1.1 The Chairman welcomed everyone to what was already the eighth meeting of the Climate Change Working Party (CCWP) since its formation just under four years previously. He thanked the host Italian Chapter and the World Congress sponsors, not least the European University, for their kind help in providing facilities for the meeting.
- 1.2 Given that there was just under two hours for the meeting and a lot of material had been prepared for presentation on the topics of Fracking and Agricultural Insurances/Food Security, it had been decided to devote the whole of the session to those two areas only, with apologies to those eager to listen to issues concerning Flooding, which would now be addressed again at one of the CCWP meetings in 2015.
- 1.3 Again, in view of time constraints efforts would be made to address all items of immediate business quickly first to afford as much time as possible for substantive issues to be aired. Those attending for the first time were alerted to the role of the CCWP email list and CCWP page on the AIDA website to keep members informed of activities between and after meetings. All were encouraged to provide email addresses for inclusion on future mailings and to visit the webpage as regularly as possible. The CCWP questionnaires which had been produced for both Fracking and Agricultural Insurances/Food Security, as well as an earlier questionnaire on Climate Change and the Motor Vehicle, which had been the subject of discussions at the CCWP's last two meetings, were all to be posted there, along with all materials provided in connection with today's meeting.
- 1.4 Finally, attention was drawn to the dates set for the next *two* CCWP meetings in the first half of 2015: Havana (during the next CILA meeting) on 8 April and Copenhagen (during the AIDA Europe conference) on 11 June. Also, in connection with the AIDA Europe conference there was a call for papers – to be found on the AIDA Europe section of the AIDA website - addressed to young academics/practitioners/students affording the chance to submit a paper which for successful candidates would allow them to have expenses paid to attend the event and to deliver their paper. The closing date for the submission of a one-page abstract/summary was 31 October 2014. The list of topics which might be addressed included three concerned with Climate Change and Insurance,

which we had supplied. It was very much hoped that anyone attending or those known to them who would be eligible would be encouraged to respond. There was no doubt that the challenges presented by Climate Change were ones with which younger people should feel particularly engaged.

2. **First Topic: Fracking – Particular legal and coverage problems presented by the extraction of shale gas and oil**

2.1 **Global snapshot of present status – rationale behind CCWP Questionnaire – introduction to issues identified by answers supplied from US, Australia and the UK (Tim Hardy, UK)**

By way of introduction to a more detailed analysis of contested coverage and other issues to follow, it was important to be aware in general terms of both the above ground and below ground risks of greatest concern where fracking is (to be ) conducted. Also, to note that while some countries apparently have no shale gas or oil reserves at all, there have been 137 shale formations identified to date across 42 countries, if actual extraction or extraction in the near future remains confined to a mere handful. Some countries with sizeable deposits have introduced bans or moratoria, some to parts of the country only, others since lifted. It is still too early to know how economically viable many formations may prove to be.

2.2 Risks or potential risks took many forms and far from confined to the risks of a blowout at the well due to a gas explosion. Methane/air pollution, contamination of groundwater, exposure to toxic chemicals, fracking-induced earthquakes and waste/transport/infrastructure degradation risks had all raised concerns. Amid scare-mongering of some environmental activists and possibly over-confident reassurances from extractors, there was some reason and evidence to suppose that future damage levels might lie somewhere in between.

2.3 The 10-question CCWP questionnaire had been drafted in such a way as to accommodate even those countries where there was *no* shale gas or oil, merely insurers willing to assume such risks elsewhere. Of relevance to the insurance risks were questions such as who in law owned and/or controlled access to the property in the mineral deposits themselves; what stance the government and/or the public had taken; and what insurance/regulatory/environmental liability regimes were in place. Against this background one might identify the “business end” of the questionnaire: the most important actual/anticipated legal/coverage problems and what major disputes or rulings had emerged.

2.4 The responses from US/Australia/UK highlighted a few common issues and contrasts of immediate interest. First, the oil/gas in the US invariably belonged to the owner of the land beneath which it sits; in Australia and the UK the State or Crown are deemed to own hydrocarbons, but compensation is due to those whose land is affected by any need to seek access. All three countries had regulatory regimes in place, some varying greatly from region to region, sometimes as an extension of rules in place for other hydrocarbon extraction. None (yet) has insurance pools or State-supported compensatory schemes in operation.

2.5 The range of private market policies which might be impacted by claims in any of the three countries was extensive across first and third party risks, as were the challenges posed to insurers trying to underwrite such business while underwriting data remained limited, regions and risks varied and uncertain long-tail exposures were to be anticipated. The legal and coverage issues likely to be most problematic (multiple occurrences, trigger/allocation issues, impact of exclusions) were perhaps universal in nature (which Birgit Kuschke would be addressing). Where the US contrasted most with the others was in the number of disputes which had already arisen, including litigation between operator insureds and insurers over coverage (upon which Rich Traub would be speaking specifically).

2.6 **Fracking: Universal key issues in pollution damage insurance coverage (Birgit Kuschke, South Africa)**

South Africa was typical of many countries where extraction for shale gas and oil is to advance in the next two to three years despite fierce opposition. Now familiar arguments turned on it being said to be cheaper and cleaner than coal, but a threat to the environment and water supplies, with many adverse impacts upon property valuations, interference with businesses, the quiet safe enjoyment of residents and a range of other, as yet unmeasured, methane/water/other toxic exposures of various kinds.

- 2.7 The protracted fashion in which any loss or damage might arise from fracking creates obvious problems in terms of establishing the timing/identification of, and potentially shared responsibility for, any loss and any insurance policy trigger. Also, concerns regarding the effect of any exclusion of coverage.
- 2.8 Compensation for any loss or damage arising from fracking could come at the end of a long chain of events (fracking, permeation, manifestation, claim against insurer). Policy responsiveness can easily be affected by how coverage is expressed to apply (or be excluded). Especially so where there is slow seepage or slow migration and/or dependent upon whether coverage is based upon an act-committed/occurrence-based event, loss occurrence or manifestation, claims made or multiple/continuous trigger bases.
- 2.9 The advantages and difficulties of different types of cover can vary from the perspectives of insureds and insurers. For an insured the apparent benefit of long-tail prospective cover may seem less attractive if an insurer may by the time of any recovery no longer be trading, solvent or with available records and/or responding to a loss upon terms or limits of cover no longer so apposite. Past long-tail loss challenges have given rise to different forms and practices evolving in different classes of business depending on whether coverage is of a first or third party nature. Also, in response to some past interpretations made by the courts of different countries, practices have emerged of additional write-back cover being made available and/or claims made policies being favoured, but which in turn impose strict obligations to make claims within specified policy periods and any loss manifesting within the coverage period, which can provide practical headaches for insureds and insurers alike.
- 2.10 Other questions are raised such as in liability covers exactly how and when any legal liability is determined. On settlement, judgment, payment? In instances which may proliferate in fracking cases, where many parties may be said to have contributed to any cause of loss, what principles will apply à propos joint and/or several liability, proportionate allocation or other means, such as any based upon market share of activity (akin to that used in asbestos liability losses)?
- 2.11 Pro forma pollution exclusion clauses have been in operation in CGL policies since the 1950s. During the 1970s and 1980s most liability and property policies saw the evolution of exclusions moving from covered losses confined to those where the cause of pollution was “sudden and accidental” towards either an absolute pollution exclusion or a comprehensive exclusion. These in turn have been subject to the attention of both statutory regulation and/or interpretation by the courts.
- 2.12 Fracking: The case of *Warren Drilling v ACE American Insurance (2012)* - lessons from US experience to date (Rich Traub, USA)**
- The significance of the *Warren Drilling* case is that it is one of the first cases to involve coverage issues arising from a fracking incident, providing particular insight into the operation of the Energy Pollution Liability Extension (EPL) endorsement, which conditionally reinstated coverage otherwise excluded by a general pollution exclusion.
- 2.13 Warren contracted to perform drilling operations for natural gas producer Equitable with CGL cover provided by ACE containing an EPLE endorsement. In October 2008 Equitable was informed of allegations from a nearby homeowner that his well water had been contaminated by hazardous fracking fluid used by Equitable. Only when the homeowner sued both Equitable and Warren in late 2010 did Warren get notice, promptly relayed to their insurers ACE, who denied coverage on the grounds that Warren were in breach of five conditions of the EPLE.
- 2.14 ACE asserted that the discharge of the pollutants was: i) neither unexpected nor unintended; ii) did not commence abruptly and instantaneously; iii) did not commence at or from a site owned or occupied by the insured or at which the insured was performing operations; nor iv) was known to the insured within 30 days after the commencement of the discharge; nor v) reported to the insurer within 60 days after the discharge commenced. Warren and ACE settled their dispute, but a number of issues were helpfully illustrated by the case.
- 2.15 As Warren had already settled the claim with the homeowner on the basis that the fluid had contaminated his well it was not open to them to raise the threshold question with ACE which might be raised in other such cases, namely whether the fluid might not be considered a “pollutant” at all and so neither excluded by the general

pollution exclusion in the first place, nor making any successful claim dependent upon full compliance with the EPLE.

- 2.16 In cases where the first two EPLE conditions do need to be satisfied, how might the Courts apply the test in the case of fracking fluid? Courts have in the past held that it is the discharge rather than any harm resulting which must be *“unexpected and unintended”*. When fracking fluid is used, it is intentionally injected, but unsettled questions remain over whether insureds and insurers in future may argue whether EPLE coverage is prima facie available in some circumstances only, e.g. if any injection occurs, say, at an unintended angle such as to cause it to escape into groundwater. Whether interpretation of *“abrupt and instantaneous”* commencement will be equated with satisfaction of *“sudden and accidental”* tests applied in cases involving other industrial practices also remains to be seen.
- 2.17 As for satisfying any strict reporting provisions, a critical issue will be when in any case any *“commencement of discharge”* is deemed to have occurred. Arguments may well turn upon whether any relevant discharge is not the date of injection but the date of any escape from its intended location or to such a degree that it constituted a *“pollutant”*.
- 2.18 The Chairman concluded discussion of the Fracking topic by encouraging others to consider the CCWP Questionnaire (and answers supplied to date), together with materials presented, all to be posted on the website so as to help allow a fuller report on the topic to be delivered by the CCWP in due course.

### 3. **Second topic: Agricultural Insurances – Coping with the threats to food production?**

#### 3.1 **Managing climate risk to feed humanity without degrading the planet – a South American perspective (Maria Kavanagh, Argentina)**

The onset of Climate Change, persistent chronic hunger for many, a growing population and contentious agricultural and crop production policies all combine to present the world with one of its greatest challenges. Refined assessment and management of climate risk appears essential if preventive measures are to be effective. This is likely to require more sensitive regional agroecology, based upon sophisticated geodatabases created from synchronised data-gathering sources.

- 3.2 Climatic phenomena affecting the MERCOSUR region include the ENSO (El Niño Southern Oscillation) phenomenon. Rises in ocean temperatures (El Niño) and falls (La Niña) typically occur every 3-5 years (potentially lasting for 9-12 months) and every 15 years causing major events/losses from extreme rainfall/flooding, landslides, coastal surges/erosion (to equatorial coasts of Colombia, Ecuador, Peru) or conversely, (Western Pacific) droughts/fires/frosts and storms and hurricanes more centrally.
- 3.3 Drought is a widespread phenomenon across much of South America as measured by the semi-official Palmer Drought Severity Index to measure long-term soil moisture from temperature/precipitation records. Climatic diversity, seasonal variations and local effects all contribute to extreme fluctuations in temperature across South America, making extreme heat and severe frosts very common. Volcanic activity principally in the Andes is linked to seismic activity across the region and in neighbouring Central America and the Caribbean, with additional resulting tsunamis.
- 3.4 Tools to help decide what agricultural practices or choices will best withstand such climatic impact in the region, to sustain not only food production levels but also longer-term social and economic viability for farmers, now include a variety of large-scale, satellite-served monitoring, tracking and imaging systems. One company in Argentina, solapa4 (s4), has developed a product specifically designed to enable a *“green index”* to be developed for any given area to help predict/measure crop yield development.
- 3.5 Such tools and the role played by agricultural insurances of different kinds on a country to country basis are more fully considered in the 80-page report prepared by the MERCOSUR group ahead of the meeting and posted on the AIDA CCWP website page. In outline these were identified. Argentina has a number of insurers providing

cover (risks of hail, fire and theft predominate) with no state subsidies (save for wine and fruit areas) and no parametric insurance yet implemented, but lack of awareness of risk means education and investment needed. Brazil, the most biodiverse country in the world, has insurers offering products, but a major overhaul of the existing regime for rural credit, subsidy, production and insurance seems necessary to avoid recurring defaults. Similar experiences are reported in Chile and Peru while in Uruguay some climate change initiatives are reported in the form of a national food policy pilot programme of new parametric products, but some way to go if large-scale threats are to be managed and much-needed diversification of products is to be realised.

3.6 Long-term solutions across the region (and indeed the world) are likely to need to address much wider issues than simply the provision of more efficient insurance. Protecting ecosystems, rationalising food production and exporting practices and huge investment in advancing scientific knowledge and education must all be given priority.

3.7 **Agricultural Insurances and coping with threats to food production from Australian perspective (Chris Rodd, Australia)**

Chris Rodd summarised some major conclusions to be drawn from an Australian perspective from the answers supplied to the CCWP questionnaire. The major problem was that with the impact of Climate Change already being felt there was no willingness at either federal or state government levels to subsidise agricultural insurance premiums. The result was to have prohibitive prices for high risks and a lack of appetite for low risks. Instead the government provides hardship relief following droughts and natural disasters. Only in the case of flood have there been attempts to cross-subsidise related insurance, but less controversial in rural areas, not impacting upon crop or livestock exposures so much as urban domestic and business risks.

3.8 Australia is to expect increased average temperatures, reduced rainfall and more frequent and severe cyclonic activity: a serious threat to crop and general agricultural production. Exporting 76% of its agricultural products it is a major global supplier of 10% of the world's dairy exports and third highest beef exporter in the world (behind the "vulnerable" territories of India and Brazil). Its climate, farming systems and soils will have a direct impact on many other countries, not least Africa, South and SE Asia, where geopolitical stability is also affected. Accordingly, even were Australia itself to find the resources and will to adapt to and mitigate climate change threats, it may additionally be exposed to the disturbances and displacement which may accompany yields and ecosystems in parts of the Asia-Pacific region less equipped to respond.

3.9 Research initiatives have been launched in Australia to help establish appropriate adaptation and mitigation strategies. These embrace sustainable agriculture, climate adaptation, water resource management securing greater long-term food production levels. Studies suggest that if temperatures rise by more than 2°C then wheat production could fall in tropical climates by as much as 8% per degree per decade. Among initiatives identified as ones likely to improve food yields/security in longer term are enhanced fertiliser/soil/supplement, crop and livestock management and more sophisticated selection of location for different products according to revised climate projections. A combination of conflicting data about such projections and the regulatory uncertainty this creates inhibits investment and the adoption of revised practices. Some initiatives, such as the Murray—Darling Basin Project, instigated to help protect the country's largest food production region against water shortages has already been seen to bring benefit during the Millennial Drought. The threat of new pests, damage and disease highlights the potential need for some change from traditional crops to occur.

3.10 Progress in such research is under threat following the announcement of a tenfold reduction in funding (in contrast to other countries, e.g. USA, which is increasing theirs). Similarly, increased dependency upon coal-fired power generation and the abandonment of a carbon tax to help fund renewable energy products runs counter to policies adopted in many other countries. An irony is to see heavy investment in flood mitigation strategies, water conserving food production and drought resistant crops, while doing less than before to help arrest the causes of Climate Change which is imperilling the food supply.

### 3.11 Agricultural insurance and current Colombian government policy (Hilda Zornosa, Colombia)

(Hilda had reported to the 5<sup>th</sup> AIDA CCWP upon Colombian government initiatives. Much had arisen since early 2013.)

Increasing world demands for food from a rising population and greater prosperity in some parts (China, India) were making an obvious impact upon a food-producing country such as Colombia, faced also with Climate Change challenges.

- 3.12 Government policy had been obliged to develop quickly in recent times to help stabilise and develop potential for farming resources. With little availability of protection for farmers from private insurers, little diversity of crops and mandatory rates imposed, government policy has moved to try and learn from the Spanish experience (of ENESA) to encourage the support of insurers and credit mechanism providers to provide flexible terms, but imposing beneficial risk management obligations as conditions of financial support.
- 3.13 The establishment of the Commission of Agricultural Credit has seen many advantageous developments: a coherent annual budgeted plan based on the Spanish model is established encouraging significant increases in insurance provision, to include a significant proportion of those with no prior experience of cover. Incentives for policyholders are both protection and the obtaining of financial development credit for both the exporting of many commodities and for agricultural and livestock operations. At the same time there has been streamlining of resources management criteria, transparency in pricing and delivery and integrated agricultural insurance technical studies, designed to help combat the problems of easy standardisation where properties are so diverse and any one may involve a multitude of different risk factors, depending on the crops grown and precise location.
- 3.14 The goal of synchronising the respective efforts of the agricultural and financial departments of state is ultimately to provide a productive and secure food chain. In 2014 a restructuring of the agricultural department was expressly designed more specifically to serve the needs of rural development and agricultural affairs with improved risk management being encouraged by improved inter-agency co-ordination alongside rural investment to provide wider areas the subject of improved cultivation all to assist strengthened long-term productivity across a range of agricultural products.
- 3.15 Challenges are to disseminate and educate about insurance still further so as to encourage preventive rather than simply reactive measures. Also, to develop workable and affordable catastrophe insurance programmes, insurance indices for essential commodities such as coffee. Threats come in the form of fluctuating international commodity pricing, especially drops in supply values leading to lower revenues and unpaid debts. Tentatively, steps are being taken by the government designed to provide a more reasoned and stable system of subsidy, insurance and risk management, allied with improved risk management education and incentives to underpin the essential value to the country of a productive rural community faced with many more challenges than that simply of Climate Change.
- 3.16 With no time remaining for any further formal presentations or discussions, the final word on agricultural insurances was given to **Rossana Bril (Argentina)**, who intervened with a few further comments upon the latest developments in Argentina. The lack of public policies promoting the development of risk management tools and agricultural insurances more generally continued to be a problem, despite there being a law of agricultural insurance already agreed in principle by both the agricultural producing community and insurers. There was still inadequate investment in research and educational programmes, the result of insufficient or inadequate dialogue between the public and private sectors, which sees the latter still heavily burdened by high tax levels.

The Chairman closed the meeting expressing grateful thanks to all contributors and the record number of attendees, encouraging all to keep informed of and to contribute in the continuing CCWP activities to be conducted between now and the next meetings in the early part of 2015.

Meeting closed at 18:00hrs.