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

10th AIDA CLIMATE CHANGE WORKING PARTY MEETING
Vth AIDA EUROPE CONFERENCE 2015

15:15hrs-17:45hrs THURSDAY 11 JUNE 2015
SCANDIC COPENHAGEN HOTEL, VESTER SØGADE, DK-1601 COPENHAGEN

MINUTES OF MEETING

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

1.1 The Chairman welcomed everyone to the tenth meeting of the Climate Change Working Party (CCWP). He thanked the AIDA Europe Conference organisers and the host Danish Chapter for their kind help in providing facilities for the meeting and to *Forsikring & Pension* of Denmark for their specific kind sponsorship of the CCWP meeting.

1.2 Apologies of absence had been relayed from many CCWP members. These included Chris Rodd (Australia), Hilda Zornosa (Colombia) and Maria Kavanagh (Argentina). Particular thanks were due to all three: to Chris and Maria for again relaying materials for the benefit of the CCWP meeting even though neither was attending; Chris and Hilda for co-chairing the 9th CCWP meeting in Havana in the Chairman's enforced absence. By all accounts, the Havana meeting had been both well-attended and highly informative. Full Minutes and materials from it were to be posted on the CCWP page of the AIDA website soon.

1.3 As the CCWP was now already in its fifth year of activities, had a mailing list exceeding 120 members (and rising) and for the first time this year was due to be holding three meetings within the same calendar year, it was timely to strengthen its organisational function. The Chairman was delighted to announce that to supplement the roles of the existing CCWP officers, each of whom remained keen to continue, Chris Rodd, Hilda Zornosa and Maria Kavanagh had each enthusiastically accepted invitations to serve with immediate effect as additional members of an enhanced CCWP Organising Committee.

1.4 That Committee would be charged with the task of not only helping to conceive the content and to prepare for regular CCWP meetings, but also to help with a number of ancillary tasks, including the upgrading and maintenance of the CCWP website page on the AIDA website and the development of a better-organised and more readily accessible archive of materials by way of past presentations and links to other sites and sources. Progress with this has been hampered by problems experienced by AIDA with their website hosts and content managers. The intention is that as soon as these have been overcome, the CCWP should be in a position rapidly to load a revised, improved format of website content. The website was an invaluable tool and resource to which all CCWP members should have regular recourse to keep abreast of developments, especially when obliged to miss a CCWP meeting.

1.5 Those attending for the first time were, as always, invited to register their email contact details to assist with any regular circulation of updates. Everyone was also reminded of the fact that responses to the previously circulated CCWP Questionnaires – on Motor Vehicles, Agricultural Insurances/Food Security and on Fracking - were still awaited from some countries. Particular thanks were expressed in this regard to Paula Rios (Portugal) for her recent delivery of responses upon Agricultural Insurances and to Birgit Kuschke (South Africa) and Hilda Zornosa (Colombia) for their respective responses which were promised.

2. <u>Flood - What gives when neither tide nor time will wait? Flooding and the insurance challenges</u>

<u>FIRST PRESENTATION</u>:
Introduction and overview: Update upon responses of insurers and governments to flood risk in the wake of major losses of recent times. (**Tim Hardy, UK**)

2.1 Flood remains one of the most wide-ranging and commonly-occurring of natural hazards. 70m people on average directly affected with annual losses in Europe alone estimated at €4bn. Expectations that this figure could rise to €24bn by 2020.

2.2 Exacerbation of flood risk expected not just from Climate Change, but allied with population growth/movement/increased economic activity/concentration of risk. Essential to integrate intelligently CC adaptation programmes and financial arrangements for compensation for nat cat losses. Aim: to reduce economic impact *and* personal/physical hardship of those directly impacted. Most challengingly: how to increase global capacity for insurance cover v flood when already hard to find affordable cover. Bail-outs reduce incentive to cover. Unless made more affordable, reluctance to purchase. Solutions found in mix of public investment to reduce risk, use of insurance to improve resilience and extending public/private partnerships.

2.3 From an international perspective plain to see how in different jurisdictions different paths are found to tackle common challenges: affordability, adverse selection, ambiguity of risk, need to increase penetration (of sales of policies), moral hazard and the problem of correlated risks (many losses stemming from a single event).

2.4 EU Green Paper on Natural Disaster Insurance (Summer 2013) had highlighted variations in approach across the EU in how best to utilise flood insurance to improve flood prevention and damage mitigation. Approaches are as diverse as distinct natural hazard profiles of individual Member States. Stark contrasts exist between countries where State provides unlimited guarantees or indemnities against claims and those where no formal State involvement at all. Variations exist even within same MS for different natural peril. Changes in regime in many territories are in flux as onset of financial burden of CC emerges. No uniform solution or centrally-orchestrated initiative expected. *Ad hoc* solutions still proliferate. No fewer than 34 between 2007 and 2014 involving pay-outs totalling €1,700m.

2.5 Four EU national regimes compared with US for illustration: UK/Netherlands/Germany/France. US/UK disparity certainly for household flood risk could not be more marked. Netherlands has no flood insurance coverage at all, but changes afoot in all three jurisdictions. UK changes to be considered in next presentation. Position in Germany and France is to be addressed in the one following that. Meanwhile, striking that comparative table measuring global economies most at risk from flooding, US, PR China, India, Germany, Japan and UK all feature in top 7. Important, too, to take account of the fact that exposure of economies to flooding is not confined to physical losses occurring in own country, but economic impact of damage to supply chain elsewhere.

<u>SUBMITTED REPORTS:</u>

Global picture was further illustrated by two reports submitted to CCWP meeting and introduced which may be reviewed on the CCWP page of the AIDA website once loaded:

- **<u>Australia</u>**: Recent developments re flood risk – **Chris Rodd**
- **<u>MERCOSUR countries</u>**: Urban Flooding Issues considered across whole region – **Maria Kavanagh & Ors**

<u>SECOND PRESENTATION</u>
Flood Re – the UK response (**Tim Hardy, UK**)

2.6 Short history of UK flood cover is illustrative of traditional dependence upon private insurance market to meet UK's flood insurance needs. Since 1961 when fears that creation of a Govt National Disaster Fund might decimate private market, deals have successively been struck between Governments and private insurance market to help ensure private insurance market could meet demands with strategic help from the Govt by way of investment in infrastructure by way of coastal defence/flood relief works etc. Tensions in forms of mutual engagement have seen concerns escalate in recent years about affordability of cover being provided in future to households in highest flood risk areas.

2.7 To address concerns of affordability and availability of cover a Consultation Paper was issued in 2013 proposing the formation of a new Govt-backed reinsurance provider for flood insurance. Hard-fought negotiation saw legislation establishing Flood Re – and recently approved by the European Commission - coming into effect on 1 Jan 2015. In April 2015 UK draft regulations tabled in Parliament with proposed coming into operation deferred from July 2015 to 1 April 2016.

2.8 Major floods in UK (2007.2008, 2012 and 2013/4) have heightened tensions. 2007 flooding caused claims of c£3bn. Over two-thirds involved surface flooding causing major call for improved mapping of this vulnerability. Despite reluctance of Govt to commit to infrastructure investment, within I month of 2014 winter flooding £20m extra flood defence and long-postponed dredging readily undertaken.

2.9 The major objective of the Scheme: to ensure affordable domestic property insurance remains available without unsustainable costs to policyholders or taxpayers. Intention is to make cover available to between 300k-500k UK households otherwise at risk. Theory is that Scheme designed to operate for 20-25 years. Within that time gradual transition envisaged to risk-reflective pricing.

2.10 A not-for–profit scheme. Public function served by industry-owned and operated Scheme. Insurance industry injection of c.£10m up front. Claims to be funded by premium income derived from mix of premiums for high-risk properties and industry-wide levy ("tax") reviewable every 5 years. All UK residential properties eligible save homes built since 1 Jan 2009. Commercial/commercially-let/small business properties excluded. Premium rates charged to original insureds set by carriers themselves.

2.11 Number of more specific features. Perhaps most important that Scheme ***not*** designed to address major 1-in-200 year flood losses for which excess vulnerability Govt to retain responsibility. Govt meanwhile has pledged no "free-riders", commitment to continued flood defence work and delivery of surface water maps.

2.12 Criticisms include limits on properties covered (some complain SMEs unfairly exposed), failure to factor in Climate Change impact more directly and detail re how transition to be achieved. Concerns exist, too, about reliability of long-term Govt pledges. Further, some suggest initial public risk management aims compromised by concentration on how financial burden of flooding to be borne rather than how losses may be reduced.

2.13 Flood Re Scheme Regulations now under debate before final approval and operation of Scheme attracting debate about a number of issues of detail: these include whether definition of "*flood*", "*substantial and abnormal*" in nature, will satisfactorily cater for all loss events intended? Over longer term, if need to curb ever growing expense on flood defence by more sustainable flood risk management, what part will flood insurance play in Climate Change adaptation? Fear that some properties will simply remain economically uninsurable and how blighting of properties/regions may be avoided appears unresolved.

2.14 Solutions may lie in smarter planning regulation in turn needing to take into account significant changes in the nature of particularly pluvial flooding risk. Active risk reduction remains high on agenda. Assumption that improvements to availability of market-priced insurance alone will sufficiently incentivise risk management and reduction is likely to be over-optimistic. More can be reported once Scheme is finalised and operating.

THIRD PRESENTATION:

German response to Flood risk (**Prof Dr Oliver Brand, Germany**)

2.15 For Germany the phenomenon of flooding is a familiar one and one which has been experienced many times on a major scale. Between 1993 and 2013 there have been no fewer than eight major events. The floods affecting the Elbe & Danube regions in 2002 (and again in 2013) accounted alone for €11,600m (2013- €8,000m) gross damage, on both occasions involving insured losses of €1,800m, as the percentage of losses insured was a mere 16% (2013 - 22%). By contrast, smaller scale losses in the Rhine and Saxony in other years have seen insured losses being as high as 40% of the whole.

2.16 In international terms each of the two Elbe & Danube floodings represents something less than 10% of the gross damage sustained by an event such as Hurricane Katrina (2005 –US - €125,000m). Yet, almost 50% of Katrina losses were insured, making the insured loss impact some sixty times greater. In contrast, despite the Queensland floods in Australia of 2008 involving gross damage of (only) €2,000m, the fact that more than 80% of these losses were insured, meant that the insured losses sustained were directly comparable with each of the Elbe & Danube floods.

2.17 Within Germany the greatest loss potential in terms of total insured values is in the Rhine Valley region. There is a rising trend in the amount of enterprises insured. Public property (bridges, dykes, roads etc) represents the highest proportion of property remaining uninsured.

2.18 Over the past 40 years Germany has experienced a small rise in both insured events and losses, if a little below international trends. This is partly explained by the fact that river floods (a major peril) are largely defensible. Also, preventive and precautionary measures (e.g. use/protection of buildings and dissemination of public information) have drastically reduced the size of losses suffered by repeat events. Owing to the onset of Climate Change, however, forecasts are that over the next 60 years insured losses could rise by as much as 50%.

2.19 Public precautions have taken many forms. Inter alia, States now have obligations about the removal/reduction of dangerous goods from affected areas, plus the development of early warning systems, public awareness campaigns and relocation away from flood-affect areas where possible. Previous low insurance take-up for buildings and home contents (historically as low as 5% and 10% respectively at the time of the 2002 floods) being corrected.

2.20 Challenges to insurers providing flood cover affordably similar to those previously discussed: large loss/concentration of risk potential; cost/ineffectiveness of flood control in extreme cases; adverse selection etc. Assisted by better risk-mapping; bundling of perils to improve pricing; limits/deductibles adjustments; and premium/risk-reducing incentives etc. Resistance so far to calls post-2002 for mandatory cover (cf.Switzerland/France).

2.21 ZŰRS (Zonal System for Flooding, Backwater & Heavy Rains) distinguishes by reference to claims data and satellite pictures the chance of flooding much more accurately and premium-sensitively. Flood coverage is now obtainable in c.94% of areas. No Govt-directed premium rates imposed, nor deductible rules. Policy terms now common obliging insureds to manage waste water, imposing restrictions on storage etc. All helping to reduce risk and to raise coverage levels affordably.

3. <u>FOURTH PRESENTATION:</u>

Catastrophe Bonds and Climate Risk (**Paolo Rainelli, Italy**)

3.1 Catastrophe and natural disaster risks continue to be capable of transfer from an issue or sponsor to investors by way of risk-linked securities in the form of catastrophe bonds. A reimbursement of a principal amount is commonly triggered by a condition precedent. The legal structure of such a bond may appear complex, usually involving an SPV (special purpose vehicle), with an alternative payment obligation to sponsor or investors also provided for.

3.2 Originating in the mid-1990s following the major losses sustained by Hurricane Andrew and the Northridge Earthquake, the ten years between 1997-2007 saw a surge in volumes issued rising from US$1bn to over US$7bn. An inevitable slow-down in the wake of the financial downturn has been followed by 2015 issuances reaching US$4.9bn. Outstanding cat bonds stand at approx US$24bn.

3.3 Cat bonds can be designed to involve different trigger events: most commonly, actual issuer losses to be indemnified; alternatively, a cumulative industry loss trigger or a parametric index trigger (based upon specified weather, disaster or longevity index measurement).

3.4 Indemnity-based bonds can in turn be triggered by different types of trigger: per occurrence, aggregate (multiple events per annum) or on a multi-loss approach (where second or subsequent events serve as the trigger).

3.5 A review of the leading players among sponsors of outstanding cat bonds identifies a strong US presence. Citizens Property Insurance, USAA, Allstate are the top three sponsors, accounting for some US$5bn between them, closely followed by Swiss Re and AIG. The top 20 sponsors contain many leading international insurance groups. The equivalent list of leading banks, brokers and intermediaries features Aon Benfield Securities as a clear leader, with Swiss Re Capital Markets, GC Securities, Goldman Sachs and Deutsche Bank Securities all high in the listings.

3.6 There has been a radical change in the investors' base. In 1999, primary insurers and reinsurers accounted for 55% of total cat bond issued volume with money managers accounting for 30% of the rest. By 2010 (re)insurers could account for a mere 8%. Dedicated funds (46%), money managers (23%) and hedge funds (14%) now dominate the scene.

3.7 There are pros and cons involved with the investment drivers of cat bonds. Having no direct correlation with traditional asset classes they offer diversification. Also, attractive returns, the benefit of knowledge to assist with further bond activity more attractively than the traditional reinsurance market and in some cases, liquidity. Conversely, there are regulatory constraints, gaps in know-how and they may prove an awkward fit with wider asset and liability management.

3.8 Role of cat bonds is extending from use with familiar securitised risks such as hurricanes, typhoons and other natural phenomena to life risks such as longevity, health insurance exposures. Some current key areas of interest and concern relate to: regulatory constraints, treatment of tax, choice of law; unenforceability if wholly speculative (akin to gambling); pricing models (combination of market and actuarial data); impact of Climate Change and controls. More is still to be seen in this particular story.

4. **FIFTH PRESENTATION**:
Governments being held to account for Climate Change - The Climate Case: action by the Urgenda Foundation against the Dutch Government – the first case in Europe where citizens hold a state legally responsible for inaction over Climate Change – the first of many? (**Stijn Franken, Netherlands**)

4.1 It was common to think if one grew up in a generation where each of one's parents and grandparents had had their lives fundamentally altered by World Wars, that one might live one's span in the comfort of less tumultuous times. Perhaps the issues aroused by the Urgenda case suggest otherwise…

4.2 The period between 20 November 2013 when the Writ of Summons in the case was first issued and 24 June 2015 when judgment is to be delivered might prove highly significant in the tale of how Climate Change is to impact on everyone's lives and that, too, of governments.

4.3 Urgenda, the claimant, also representing 886 individuals, is a Dutch foundation created to provide a citizens' platform to develop measures for Climate Change. By their action they have sought to hold the Dutch government to account for their failure to implement measures better to avert the imminent danger caused by Climate Change.

4.4 The background to the action lay in the scientific facts about Climate Change that have gained acceptance internationally in recent years, the response of Governments at international treaty levels and the subsequent action (or inaction) of the Dutch government to act upon previous pledges made. In short, if a rise in global temperature of 2 degrees Celsius was to be experienced than there was a greater than 90% certainty that all societies would suffer adversely with a "point of no return" being passed. The link between man-made CO2 emissions levels and the rise in the Earth's temperature were such that critical points could be avoided were industrialised countries to reduce their 1990 level emissions by between 25-40% with targets for reduction set by 2020. By 2012, Germany and Denmark were working to reductions of -21%. The Netherlands were working to a reduction of -5.2%. 2020 targets differed, also: EU (-20%); Netherlands (-16%).

4.5 The declaratory relief sought by the action is that the Dutch Govt is required to commit to a reduction of Dutch CO2 emissions by 2020 within the minimum 25-40% margin. The claim is founded in terms of a breach of duty of care owed by the Govt and the protection of the human rights of its citizens. The duty of care is dependent on the Hoge Raad 1965 "trapdoor ruling", taking into account factors such as the foreseeability/amount/severity of risk and the possibility of taking preventive measures. The Human Rights are deemed to derive from the European Ct of HR imposition of obligations on MS in cases of threatened infringement where general risks are in issue and individuals have no alternative courses of action.

4.6 In support of the case that causation of Dutch Govt (in)action may be proven, the claimants cite the 2009 World Bank world rankings showing that out of 217 countries, the Dutch have appeared as the 5th worst per capita polluters after Australia, Saudi Arabia, USA and Canada and 25th in the list of aggregate polluters: a table led by PR China, followed by the USA.

4.7 One of the principal defences of the Dutch Govt has been reliance upon the margin of appreciation to be allowed in policy-making between the Courts and the political law-makers, citing the US authority of ***USSC American Electric Power v Connecticut (2011)*** where the Court declined to intervene with the carbon emissions policy of the US State, recognising the difficult dividing line to be drawn between Court and political power:

> "*… the political implications of any decision involving possible limits on carbon emissions are important in the context of global warming, but not every case with political overtones is non-justifiable. It is error to equate a political question with a political case (…) Given the checks and balances among the three branches of our government, the judiciary can no more usurp executive and legislated prerogatives than it can decline to decide on matters within its jurisdiction simply because such matters may have political ramifications*"

4.8 This is a question being decided upon by the Rechtbank Den Haag (the District Court in The Hague) whose judgment is to be delivered on 24 June 2015.

NB The Court ruled that the State had to take more action to reduce the Dutch emissions and to ensure that by the year 2020 they were at least 25% lower than in 1990. The court held that the Dutch Govt owed this duty of care to protect and improve the living environment and that the costs of the measures ordered by the Court were not unacceptably high. It was not possible for the Dutch Government to claim that the solution did not depend solely on Dutch action as any reduction efforts made contributed to the prevention and as a developed country the Netherlands had a duty to take a lead. This Order did not involve the court in entering the domain of politics. Instead, it was fulfilling its duty to afford legal protection while respecting the govt's scope for policymaking. This explained the Court's reluctance to impose any duty higher than the minimum target of a 25% reduction.

Any news of whether the Dutch Govt will seek to appeal and further consideration of the implications of the ruling will follow.

5. **SIXTH PRESENTATION**:
Brazilian law upon solid waste and the application of reverse-logistics for definition of liability (**Gloria Faria, Brazil**)

5.1 In Brazil mandatory salvage waste management techniques in the insurance sector are serving to provide improved sustainability practices to good effect. In Brazil the National Traffic Dept reported that of 81m vehicles registered, in 2014 no fewer than 416k were stolen, with only 50% ever recovered. 2m were apprehended with some State debt owing or other irregularity. Most stolen vehicles were destined for clandestine disassembling yards, said to involve up to 1.3m vehicles in total. The effect of this activity was to lead to replacement parts being misappropriated, affecting new car production and other components, such as tyres, batteries and oil all natural contaminants, falling into the wrong hands.

5.2 Implications for the motor insurance sector are serious, also. While only 5% of vehicles more than 7yrs old are insured, 80% of new vehicles are. The cost of insurance for new vehicles is on average only 4% of its value. For vehicles of over 7yrs it is more like 20%. If legitimate recycling of replacement parts could be instigated that would plainly reduce costs, including premiums, and environmental damage.

5.3 2010 legislation was not the first Brazilian law on waste, but has laid down a coherent system and legal framework for implementation across all public and private sectors within the country. At its heart is the desire to enable recycling, reverse logistics and management of the final destination of products to minimise environmental damage. In 2014 specific state and federal laws have been passed in its wake to provide how motor vehicles are to be disposed of and governance of the disassembling of vehicles.

5.4 Challenges for the Insurance Market are ensuring law enforcement occurs, that responsibility is shared and that the waste management regime applies equally effectively at all stages in the cycle. Manufacturers, importers, distributors, consumers and public service officials all have an interest and responsibility. Advantages will be the resulting reduction in vehicle thefts, violence levels (esp. in urban centres) and reduced crime as illicit activities are disincentivised. The proper disposal of fluids and dangerous components should bring environmental benefits, less air and water and soil pollution and reduced usage of water, power, raw materials. Benefits will also be seen in terms of vehicle safety, job creation and revenue collection.

6./7. **Future CCWP work and activities and next meeting**

Time at the end of the meeting only permitted the Chairman to reiterate what had been said at the outset by way of continued work on the Questionnaires, website development and preparation for the next CCWP meeting in Paris on 2 December 2015.

Meanwhile, grateful thanks were extended to all the presenters and contributors and to those attending the meeting for their active participation and interesting questions.

The meeting closed at 18:00hrs, a little after schedule, reflecting the fullness of the programme and the interest engendered.

Tim Hardy
July 2015