Introduction

Insurance Europe welcomes the opportunity to comment on the European Commission’s Green Paper on the insurance of natural and man-made disasters. Insurance Europe strongly supports the Commission’s aim in promoting (re)insurance as one tool of disaster management and the Commission’s recent contributions toward fostering a general culture of disaster risk prevention and mitigation across the EU. The latter is principally reflected by the EU Adaptation Strategy launched in April this year as well as by the Commission’s efforts in recognising the value of risk awareness through various seminars, working groups and conferences.

We welcome the fact that the Commission Green Paper recognises some of the needs of the EU-wide (re)insurance market, including:

- **free and ready access** to more sophisticated risk data;
- cooperation from **all stakeholders** in order to minimise the growing impact of disasters (eg government, private business sector, public);
- and minimisation of state intervention in those markets where the risk is already insurable via cover through the private insurance and/or reinsurance market.

Insurance Europe reminds the Commission that the insurance sector **cannot cover all** natural and man-made disaster risks and that there may therefore remain limits to what insurance can do despite best efforts to maximise capacity in the market. However, improvements in the above-listed areas can greatly aid in accomplishing the Commission’s goal of facilitating and supporting increased disaster coverage across Europe.

There exist clear differences between natural and man-made disasters

Insurance Europe wishes to highlight that there is a **large difference** between natural and man-made disasters and that these two risks should be dealt with separately. Firstly, risk insurability of natural and man-made disasters is impacted by entirely dissimilar factors. The predictability of a natural catastrophe depends on highly scientific information obtained from risk models that evaluate and compare meteorological

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geographical data, whereas the occurrence of an environmental pollution incident is more dependent on industrial company risk management and/or regional safety cultures (ie human behaviour).

Secondly, insurer ability to quantify the damage posed by each risk varies. Property damage following a flood or storm can be calculated quite easily on a short-tail basis (ie during the policy period); however, environmental risks are more long-tail, meaning it could take years or even decades to observe and calculate the full extent of the damage.

Finally, each risk category is covered by entirely different insurance markets. For example, the property insurance market covers building damage caused by flood or storm, whereas the liability insurance market covers river pollution arising from a chemical plant spill. These markets can come into contact with one another in cases where man-made decisions may affect a natural catastrophe risk (eg land-use planning that increases the damage of floods or an earthquake that triggers toxic spills from a chemical plant). Additionally, a liability claim can often come in the form of a subrogation claim from a property insurer (eg a claim for damage to one’s property that arose from the industrial operation of another). Nonetheless, cover for liability (third-party loss) and cover for property damage (first-party loss) is managed under separate insurance products and their relative claims are thus handled by different kinds of insurance experts.

Considering the vast differences between natural and man-made disasters, particularly in relation to individual and sectorial insurance needs, Insurance Europe highly recommends that the Commission appraise these disasters separately. Insurance Europe remains involved at the EU level in every aspect of both types of disasters and thus welcomes the chance to advise the Commission where appropriate, not only with respect to natural catastrophes but also within the context of the EU Environmental Liability Directive, the proposed Directive on Offshore Oil Safety and the recent EU discussions concerning nuclear liability and insurance.

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(1) What is your view on the penetration rate of disaster insurance in the European Union? Please provide details and data to support your arguments. Is more research needed to understand any possible gaps in insurance supply and demand, insurance availability and coverage?

Complete and accurate data on insurance penetration rates is not available for all Member States or, in cases where it is available, the data itself may still be imprecise. Thus, this type of data does not serve as a reliable indicator of a successful or effective insurance market.
Considering the varying levels of insurance penetration data across Europe, Insurance Europe did not support the conclusions made in the 2012 report produced by the Joint Research Centre, Risk Relevance and Insurance Coverage in the EU, which appeared to suggest possible benefits of the insurance systems in Member States where such data was readily available. This report also made the conclusion that “there are cases where NatCat insurance markets do not seem to fully cope with existing risks”, again basing this conclusion on publicly available data. Insurance Europe finds these conclusions to be highly misleading, as lack of data in some markets does not factually represent low market penetration and different perils and levels of severity can often lead to different types and amounts of available data.

It is also important to consider that “disaster insurance” can have different meanings in different countries or regions (eg the types of disasters covered). There can be multiple rationales behind a perceived “gap” existing between actual loss and insured loss, such as:

- low demand for cover, despite awareness about its availability;
- cover already provided by state/national pool;
- low availability of cover; and
- underinsurance;
- uninsurable risks.

While Insurance Europe understands that the Commission has been studying the possible pros and cons that might be evidenced by a Member State’s insurance penetration rate for natural catastrophes, it should be noted that no factual evidence has been put forward to concretely show any gaps existing between insurance supply and demand. Insurance Europe thus maintains that the Commission’s focus would be best placed on the enhancement of insurability (prevention, preparedness, promotion of ex ante financing) and on measures to promote awareness about both risk and insurance. Any further course of action at the EU level must be proportionate to a clearly identified problem.

(2) What further action could be envisaged in this area? Would mandatory product bundling be an appropriate way to increase insurance cover against disaster risks? Are there any less restrictive ways, other than mandatory product bundling, which could constitute an appropriate way to increase insurance coverage against disaster risks?

With respect to natural catastrophes, the combination of cover for different perils (eg fire, theft, flood, storm) is quite common for several Member States. Combining risks under one insurance contract can help to spread the risk among all insured persons, however, this practice should remain a free market option at EU level (ie not mandatory) and the design of cover itself should be left up to insurers. In other words, the combination of perils is more likely to be effective when developed in response to consumer demand at national level rather than legislation, particularly as not all insurance markets are prepared to offer this type of product.

Insurance Europe would also caution against the use of “bundling”, a term that is not always used appropriately and can have a distribution and competition aspect that is currently being reviewed in the EU Insurance Mediation recast directive (IMD2). As the IMD2 debate is on-going, Insurance Europe would suggest the EC to refer to the possible “combination” of perils rather than precisely state it as “bundling”.

Mandatory combination of cover for different perils can also stifle innovation in those markets where it is not already in place, thus preventing insurers from offering diverse insurance products that reflect consumers’ individual insurance needs. This simply comes down to the fact that risks across the various Member States are not homogenous (eg some countries pose earthquake risks while others pose flood or storm risks). It should moreover be considered that some Member States allow consumers to “opt-out” of the cover for natural catastrophes, but that this may be prohibited in other Member States by national law.

(3) Which compulsory disaster insurance, if any, exists in Member States? Are these insurance products generally combined with compulsory product bundling or obligation for insurers to provide cover? Is
Combination of perils into one insurance policy

Compulsory insurance measures are generally not desirable due to their interference with insurer ability to tailor-design cover to customer needs. This would include, for example, insurer negotiation with customers on policy terms and conditions in exchange for improved risk management, thereby leading to more risk-mitigating behaviour by the policyholder.

While some Member State markets may have a compulsory element regarding disasters, natural catastrophe insurance alone (eg a policy covering a building solely against the risk of flood) does not appear compulsory in any Member State. Measures concerning disaster insurance vary and there is no one policy that can offer an EU-wide solution. Some markets, for example, may mandate that insurers include natural catastrophe in any fire insurance products they distribute, yet permit consumers to purchase fire insurance itself on a voluntary basis as well as to voluntarily purchase their natural catastrophe insurance separately from their fire insurance. In other markets, fire insurance itself is compulsory and may include cover for natural catastrophes, either with or without the possibility to “opt-out” of the catastrophe cover. Again, these measures represent various market examples and do not suggest any single solution for the EU as a whole.

As mentioned above, in some Member States there may be the possibility to “opt-out” of the natural catastrophe cover that is part of a “combined peril” form of insurance. However, this would naturally not be possible for consumers purchasing fire insurance in those markets where cover of natural catastrophes is legally required to be included in the same contract (even if the fire insurance itself is available for purchase under a voluntary basis). Thus, any requirement to mandate natural catastrophe insurance alone would have additional implications for those national laws – and consequently insurance markets operating under those laws – that do not compel fire insurance.

Potential negative impacts of compulsory insurance legislation

Compulsory insurance is generally not contemplated by politicians in Member States where insurability conditions are met. However, if compulsory insurance is introduced, policymakers should be aware that such a measure does not guarantee insurance supply. Insurers are not “obligated” to provide any cover under a free market society; they conduct a commercial activity that must consider the administrative and cost implications of covering a risk, including with respect to their solvency requirements under EU and national law as well as obligations to investors that help support their financial capacity. Insurers must moreover be properly licensed and sufficiently experienced to cover the subject peril (whether natural or man-made).

There is moreover the effect of moral hazard – ie a lack of risk-mitigating behaviour – that can be associated with compulsory insurance. A consumer’s incentive to exercise due diligence and minimise risk may be diminished in cases where he/she is compelled by law to have a specific type and scope of insurance policy. This could include, for instance, the take-up of adaptation measures (eg adhering to building codes, preparing flood defences for one’s home). The result may be a potential decrease in overall safety and an increase in more severe losses as the result of a natural catastrophe.

Moral hazard may not be an issue in all compulsory insurance markets, though this again suggests that there is no one size fits all solution across Europe. A compulsory insurance system implemented in line with a public-private partnership can at times even lead to diminished moral hazard. In France, for example, which mandates an extension of natural catastrophe cover to property insurance, the economic losses caused by a disaster are only partly covered by insurance (50-60%). Public authorities must thus deal with the remaining uninsured damage to infrastructure. As a result, the private and public sectors work together to try and minimise risk, regardless of the existing compulsory insurance legislation.

Finally, it should be noted that compulsory natural catastrophe insurance can, in fact, be contrary to the laws of some Member States. In Germany, for example, compulsory insurance measures may only be imposed upon the public for third-party liability risks (eg motor).
(4) How can state or state-mandated disaster (re-)insurance programmes be designed and financed to prevent the problem of moral hazard?

- Moral hazard can be minimised without state/state-mandated programmes
  Moral hazard is inherently difficult to avoid in cases where a state (re)insurance programme is mandated, as members of society may be less incentivised to take on risk-mitigating behaviour due to the promise of protection offered by the state in the event of a catastrophe. Rather than impose a state or state-mandated (re)insurance scheme, Member States can take steps to enhance insurability through the promotion of risk awareness as well as the economic benefits of both insurance and reinsurance. Insurers can as well minimise moral hazard through the continuing practice of deductibles and exclusions, which further encourage risk-mitigating behaviour on behalf of the policyholder.

- Ex-ante financing of insurance is often more efficient than state-run programmes
  Unlike cases where a state or state-mandated programme is based on tax revenue, thus offering aid following a disaster, the financial capacity of insurance is supported through premiums calculated in advance on the basis of the potential future risk. Insurers can adjust their premiums where necessary to reflect future economic changes on insured values, whereas Member States are more limited in changing their tax revenue systems in the event that more capital is required for addressing future risks.

For example, insurers can adjust their premiums in order to reflect the changing values of properties affected by:
- growing population, especially in concentrated urban areas;
- economic growth; and
- increase of property asset values in Member States.

- State/state-mandated programmes can impact the take-up of insurance
  State/state-mandated programmes moreover often discourage the take-up of private insurance, as consumers tend to rely on the protection offered by the state rather than to purchase cover on the private market. Demand for cover depends on the level of risk awareness and risk perception of consumers, thus this demand can be greatly impacted by state intervention in the form of political promises for post-disaster funding (ie ex post financing, in contrary to ex ante financing provided by insurance). This has particularly negative implications for areas where the private insurance market is well-positioned to cover the potential risk, but faces low demand as a result of government promises of post-disaster protection.

- EU can raise awareness as to the benefits of (re)insurance
  The EU can highlight the benefits – and thus promote the uptake – of insurance by taking a clear stance that national governments and public-backed reinsurers should only intervene with the private market when there is a market gap to fill, ie in cases where cover is not already being provided by a private insurer or reinsurer for the cover of extreme events. Public-private partnerships can indeed be successful where insurers, private reinsurers and the public authorities all participate in order to offer extensive coverage to consumers at economically viable prices.

Yet, the EU should take care not to create an environment where public-backed reinsurers are placed in a monopolistic position at the expense of fair competition for private (re)insurers. While it is important to recall that the insurance industry still has its limits and thus cannot cover all natural catastrophe risks or offer cover up to unlimited amounts, governments should avoid introducing state-mandated programmes that may disrupt markets where (re)insurers stand ready and capable of offering the necessary cover.

(5) Do you see any difficulties, barriers or limitations in using information to generate parametric insurance? Which factors could scale-up the promotion and uptake of such innovative insurance solutions?
Parametric insurance is often considered suitable for developing countries lacking any private insurance infrastructure (unlike the private market systems existing throughout Europe). Societies lacking this infrastructure will similarly lack a sufficient means for predicting risk and adequately calculating risk-based premiums to build financial capacity for covering that risk. Parametric methods may also work from a reinsurance perspective for the purpose of backing insurance companies, as the reinsurer can apply numerous individual risks to its risk portfolio.

Parametric insurance is less suitable for the cover of individual business and/or individual persons, where a variety of single risks is presented and cannot be standardised within such a diversified portfolio. Reinsurers cover a wide range of areas and, as a result, maintain a risk portfolio of a far larger range of risks than individual insurers. As a result, parametric insurance can be effective on the reinsurer level but should not be considered as a solution for the insurance industry as a whole.

The infrastructure intended to be insured is also important for considering whether parametric insurance is appropriate or not. Dense property – such as agricultural crops – can enable insurers to more accurately assess the right amount and quality of hydro-meteorological data for the prediction of potential claims. Even in the agricultural context, however, the ability to configure an appropriate “trigger” for parametric insurance (i.e., the index-based pay-out) will still depend on the homogenous versus heterogeneous character of the crops. For example, some countries may typically have a great variety of crops on smaller pieces of land, indicating a more diverse set of risks, while other, larger countries may maintain larger pieces of land with the same vegetation (e.g., grain), i.e., a more “standardised” risk. Considering that index-based pay-outs are intended to cover the average risk, homogenous risk characteristics constitute a prerequisite for parametric insurance.

Dwellings and other buildings also have far more variation in terms of weather resistance, regardless of their location. This variation includes building materials/construction standards used and adaptation measures applied, thus leading to more complex and diverse risks.

In addition to the above, inherent problems with parametric insurance include the following:
- little correlation between perils and losses;
- gap between the predetermined pay-out and actual damage; and
- the possibility for an insurance claim to either exceed or undershoot the actual loss.

It should further be noted that parametric insurance can lead to products that are not truly reflective of a Member State’s risk exposure needs. Thus, parametric insurance should not be implemented for the purpose of alleviating state governments from the burden of paying for post-disaster damage, as the insured’s pay-outs under the parametric system could be significantly less than the actual loss. Rather, parametric instruments should be reserved as a free market solution for those larger risks that may be deemed uninsurable or otherwise too difficult to calculate individually, rather than as an EU-wide alternative to risk-based pricing.

(6) Could risk-based pricing motivate consumers and insurers to take risk reduction and management measures? Would the impact of risk-based pricing be different if disaster insurance was mandatory? Do insurers in general adequately adjust premiums following the implementation of risk prevention measures?

(7) Are there specific disasters for which flat-rate premiums should be suggested? Should flat-rate premiums be accompanied by caps on pay-outs?

(8) What other solutions could be offered to low-income consumers who might otherwise be excluded from disaster insurance products?

- Benefits of risk-based pricing and the possible impact of adaptation
Risk-based pricing is at the core of the insurance business model. It enables insurers to design products that match the risk needs of their customers and is an industry-wide practice employed across the globe. It moreover encourages risk-reducing behaviour by inducing the policyholder to take on prevention measures in exchange for negotiation on the terms and conditions of the insurance policy.

Overall – risk-based pricing is a key factor for appropriate risk management. There is no one size fits all when it comes to insurance offerings, thus markets need to find what works best under their set of circumstances and, perhaps most importantly, how those circumstances affect the cost of insurance:

- risk exposure;
- risk perception by the public (understanding of the risk);
- level of adaptation measures taken up;
- cultural attitude toward insurance; and
- political environment.

In light of the above, it is possible for insurers to consider adjusting their premiums following implementation of risk prevention measures. However, insurers still need time to evaluate the effectiveness of these measures alongside the increasing severity and frequency of future catastrophes before they negotiate on insurance premiums with policyholders. Only once insurers have this data can they assess to what extent insurance cover may be adjusted for the cover of future risks. In this respect, annual contracts (as opposed to long-term contracts) may be more attractive for consumers, as there is more flexibility for a future annual policy renewal to reflect the risk-mitigating impact of a newly implemented prevention measure.

- Regional application of risk-based pricing
As discussed above, risk-based pricing can moreover be applied to a single yet large geographical region or else to groups of households through the combination of different perils (eg flood, hail, storm) into one policy, as is the case in Switzerland. This system may entail a flat-rate premium cover with no exclusions for a particular region, thus spreading the risk throughout that one region and potentially increasing the chances of high market penetration. This example represents merely one market practice that may not work for all Member States – particularly where income levels and notions of solidarity may vary – and is thus better left for consideration at regional or national level.

- Flat-rate premiums can still carry implications for consumers
While flat-rate premiums may prove to be useful in the above market scenario, in some Member States they may be viewed as a tax that offers only “partial” protection and which can lead to prices considered very unattractive by consumers. Flat-rate premiums are generally not as accurate in building up financial capacity for the payment of potential claims as risk-based premiums, since they often will not reflect potential risk increase. As explained above, even a market such as Switzerland, which utilises flat-rate premiums, will still apply them under a “risk-based” configuration according to the risk exposure of entire regions.

Flat-rate premiums can lead to diminished insurance capacity, which may force insurers to consider introducing caps on insurance pay-outs simply to ensure that they maintain their ability to pay claims. The introduction of a flat-rate also leaves insurers with little else to compete on other than price, as the insurance scope is legally set despite individual risk exposures. While this may sound ideal, this practice is often insufficient for building adequate financial capacity that accurately reflects the potential risk, with the lack of capacity ultimately acting to the detriment of the consumer.

Flat-rate premiums can also present a moral hazard problem, as there may be little motivation for both consumers and the public authorities to exhibit risk-mitigating behaviour – ie adaptation measures – in order to reduce their risk exposure. These persons may see little value in implementing these measures in light of the fact that the scope of their insurance is already established by law.

- Potential solutions for low-income consumers
Public-private partnerships can help foster an environment for insurance development in those cases where the potential cost of covering the risk supersedes the financial capacity of the private insurance market. The
financial capacity covering low-income regions is inherently limited due to the limited amount consumers can afford to spend on insurance overall. Thus, these partnerships may offer one solution by making premiums more economically viable for these consumers.

In order to help facilitate insurance take-up and capacity while minimising reliance on state budgets, public-private partnerships should only be used to complement private insurance solutions in order to make risks more insurable and not act as a substitute to existing insurance solutions. Policymakers should thus place priority on what the insurance market can achieve on its own before assessing the need for public assistance. Insurance works most effectively when developed in response to actual customer demand which, in turn, helps to lessen the financial reliance on state budgets.

Additionally, it should be considered that solutions moving away from risk-based pricing and factoring in public subsidies raise questions of solidarity and social systems. Such solutions are best identified and then applied at Member State level, as individual countries are in the best position to assess the effectiveness of solidarity programmes and/or the future success of public-private partnerships covering their regions.

(9) Is there a case for promoting long-term disaster contracts? What would be the advantages/drawbacks for insurers and the insured persons respectively?

A large drawback from the use of long-term contracts is the lack of a flexible, adaptable policy that can suit a policyholder’s current needs and risk exposure. Long-term contracts can also be rather difficult to manage, as they require significant and often difficult changes in insurance risk management models.

Insurers offering long-term contracts must, for example, take into account the following:
- the long-term impact of climate change;
- investment and/or negligence in development of infrastructure; and
- future land development plans.

The difficulty in assessing the above factors is the need for substantial data that is not easily attainable due to the limited knowledge scientists have about the future impact of climate change. As discussed at length at the EU level with respect to the EU Adaptation Strategy, the long-term impact of climate change is expected to increase in the coming decades; however the precise details about this increase (ie expected costs) remain virtually unpredictable. Future investment or negligence in the development of infrastructure is often not envisioned at the inception of the insurance contract, thus making it increasingly difficult for insurers to accurately estimate whether their premiums will be sufficient for future insured values. Finally, forthcoming land-development plans may be similarly unpredictable, as they highly depend on the changing economic and political situation of a Member State, including future land-use planning and investment decisions made by national public authorities.

Insurance Europe also wishes to highlight that there are a number of factors that can also make the practice of long-term contracts counterproductive.

- Firstly, higher capital requirements will be imposed upon those insurers that would start offering long-term contracts (and currently offer policies on an annual basis), as they will be obligated to ensure a specific level of cover for a far lengthier period of time. This will inevitably lead to higher premiums, as insurers will need to build up additional financial capacity in order to comply with solvency legislation that is ultimately designed to protect the consumer.

- Secondly, conflicts will arise with insurance products that combine different perils but that are only offered on an annual basis, sometimes under national law. For example, fire insurance that includes cover for natural catastrophe perils (eg flood) are very rarely offered long-term. In these cases, any requirement to offer long-term contracts for natural catastrophes will need to consider the implications for consumers holding fire insurance as well.
Thirdly, long-term contracts are not as frequently adjusted to reflect changing levels of risk. This can lead to underinsurance in cases where the insured values of properties are, over time, not accurately updated or the insurance premium not adjusted to reflect increasing risk exposure.

Fourthly, the use of long-term contracts can present competition concerns for consumers. Policyholders of long-term contracts face more restriction in switching insurers, thus, this restricted ability has the potential to dilute competitiveness in the market. The diminished competition can further act as a barrier to new market entrants, thereby further minimising insurance choices for consumers.

Finally, moral hazard can increase in markets that take up the practice of long-term contracts. With a long-term insurance contract in place, consumers are faced with little incentive to take risk-mitigation steps that may impact the cost of their premiums.

Regarding moral hazard, most insurers consider an adjustment in premiums following a demonstration of risk-mitigating behaviour, including the adoption of adaptation measures or other prevention practices. Insurers do not generally adjust a premium to reflect potential adaptation/prevention methods that may be taken in the future.

Insurance Europe is aware that long-term contracts are in place in some Member State markets, but maintains that this practice should not be regulated at EU level due to the potential for the aforementioned consequences.

Do you think there is a need to harmonise pre-contractual and contractual information requirement at EU level? If so, should the approach be full or minimum harmonisation? What requirements concerning the commitment should be included, for instance:

- the nature of the insured risks,
- adaptation and prevention measures to minimise the insured risks,
- features and benefits (such as compensation of full replacement costs, or depreciated, time value of assets),
- exclusions or limitations,
- details for notifying a claim, for instance, if both the loss and its notification must fall within the contract period,
- who and to what extent bears the costs of investigating and establishing the loss,
- contractual effects of a failure to provide relevant information by the insurer,
- the remedies, costs and procedures of exercising the right of withdrawal,
- contract renewals,
- complaints handling?

Harmonising pre-contractual and contractual information requirements at EU level is difficult for a variety of reasons, including but not limited to:

- diversity in legislative frameworks;
- capacity of the various insurance markets;
- policy wordings;
- languages;
- variety of cultures;
- competition regimes;
- levels of cover;
- existing customer requirements; and
- regulatory practices.
The above categories demonstrate that insurance customers have very different information needs and would benefit most from discussing these needs directly with their insurers. Therefore, there is no need for harmonisation. With respect to guidance about such information requirements, this guidance would be more appropriately dealt with at national level due to the fact that the above areas highly depend on the local practices and needs of insurance itself. Insurance requirements are also closely tied to the civil law of the Member States and harmonisation of these requirements alone is unlikely to resolve the concern over insurance take-up.

Another disadvantage of introducing requirements would be that these “rules” would be harder to change in the future. A flexible framework allows insurers to adapt to the changing cultural and political environments, as well as to their possible changes in financial capacity. Therefore, this flexibility must be maintained so as to ensure that insurers can adapt to changes in consumer demand and in the market.

(11) Do deductibles, excesses co-insurance and other exclusions effectively prevent moral hazard? What alternative terms and conditions could be appropriate for disaster insurance, given that the insured party may be unable to take effective risk reduction measures against a disaster?

While moral hazard cannot be fully prevented due to human behaviour outside of insurer and government control, steps should be taken to mitigate it where possible. Insurers attempt this through the utilisation of deductibles, which in turn help to save on disproportionate handling costs for small damages. The aim is valuable preservation of insurance capacity for paying out claims to policyholders that suffer significant losses after a large and severe disaster.

Deductibles are an industry standard and should not be prohibited; in cases where the insured party cannot take the risk reduction measures (eg renovation of old sewage facilities falls under municipality responsibility), government cooperation should be encouraged. It can also be said that everyone can do something to protect their property, regardless of the level of municipal action.

Possible alternatives could include premium adjustment in response to risk prevention methods taken by the policyholder (ie adaptation measures). However, these should remain as part of the freedom to contract between insurer and policyholder so as to target the policyholder’s particular risks and coverage needs.

(12) How could data on the impacts of past disasters be improved (e.g., by using standard formats; improved access to and comparability of data from insurers and other organisations)?

(13) How could the mapping of current and projected/future disaster risks be improved (e.g., through current EU approaches in flood risk mapping under the Floods Directive 2007/60/EC, 29 civil protection cooperation 30 and promotion of EU risk guidelines 31)?

(14) How could better sharing of data, risk analysis and risk modelling methods be encouraged? Should the available data be made public? Should the EU take action in this area? How can further dialogue between insurance industry and policymakers be encouraged in this area?

Improving access to data
For improved access to data, the EU needs to place emphasis on the collection and sharing of risk data, particularly between national governments and insurers.

- Data protection law is currently hindering access to individualised risk data by insurers and public authorities, meaning that single risks cannot be identified due to censorship of the applicable data (eg property location, precise investment in property, etc).

- As a result, published datasets are not accurate and can produce misleading predictions about a policyholder's future risks and, consequently, the true needs for insurance capacity.
It should be also noted that insurance companies are adapting to Solvency II by improving the quality of data in their IT systems.

The management of current and projected/future risks could moreover be improved by authorising local insurance associations to compile data collection formats and encouraging Member State governments to create a database covering all buildings in the region to determine the penetration of insurance and property values.

More responsible land-use planning
Local governments can improve their management of floodplains, namely areas that lie adjacent to rivers and streams and which are exposed to significant flooding and subsidence (ie the shifting of land toward sea-level) by virtue of their geographic location. A responsible land-use planning policy, for example, should prohibit the construction of new properties in these high-risk areas. For some Member States these areas pose such high risks that they become uninsurable due to the inability to raise sufficient financial capital for the cover of potential claims.

Within the context of natural catastrophes, data on past disasters could be improved by the following:
- ensuring that data protection is flexible enough to foster an environment which allows scientific data to be used in natural catastrophe risk modelling;
- promoting the free transfer of information and data by the national governments to the insurance sector for the purpose of assessing regional NatCat risk (climate data, hydrological, geological);
- allowing national insurance associations to collect and aggregate data on insurance policies covering NatCat risks, particularly on:
  - various regions;
  - number of insured properties/objects;
  - number of reported damages; and
  - amount of paid indemnities.

Mapping and risk modelling
Institutions responsible for mapping should consult with insurers, as the insurance industry is the end-user of these tools. Such maps should take into account:
- infrastructure designed to prevent natural catastrophe damage (ie adaptation measures); and
- information necessary for management of insurance risks in line with Solvency II requirements (eg information about flood probability once per 200 years);

In addition to the above, the sharing of data, risk analysis and risk modelling would greatly benefit from the following:
- government cooperation in improving prevention measures (adaptation) at municipal level and moreover enforcing them at residential level, as these measures can help limit the “incalculable” potential of a catastrophic risk and lead to more predictable risk parameters;
- government incentives for the take-up of prevention measures by the private business sector (eg taxation incentives for improved risk management); and
- government cooperation with insurance associations at national level to assess insurer data needs and how to accommodate them.

(15) How can the Union most effectively help developing countries to create solutions for financial protection against disasters and shocks and what should be the priority actions? What types of partnerships with the private sector and the international institutions that should be pursued for this purpose?

Insurance acts as a potential solution for risk transfer. However, emphasis on prevention methods, such as adaptation measures, and preparedness, such as organised crisis response by local governments, can
minimise the economic impact that natural catastrophes (and in another context, man-made disasters) have on society.

Insurance Europe believes that governments play a significant role in constructing solutions for developing countries, but effective solutions may also be found in:

- educational activities at the local level;
- improved training of municipal management staff and representatives of the developing country governments; and
- transfer of insurance risk management knowledge.

In addition, Insurance Europe maintains that each developing country also has different risk characteristics as well as different socio-economic factors (eg population density, property asset values). Therefore, while the above-listed “solutions” could enhance financial protection against disasters, they may not work for all developing countries depending on their individual cover needs, risk exposure, cultures and political climates.

(16) What are the most important aspects to look at when designing financial security and insurance under the Environmental Liability Directive 2004/35/EC?

(17) Are there sufficient data and tools available to perform an integrated analysis of relevant and emerging industrial risks? How can data availability, sharing and tool transparency be ensured? How can co-operation between insurers, business and competent authorities be strengthened to improve the knowledge base of liabilities and losses from industrial accidents?

EU Environmental Liability Directive

Insurance specialists use various risk modelling tools (either market-specific based and/or their own developed tools) to identify and assess relevant environmental risks as well as rely upon clear statistical data (where available) to estimate the potential future loss based on the likelihood and severity of environmental damage. Insurers further develop and quantify loss scenarios for relevant perils that consider the relative severity and likelihood of a potential accident in every identified scenario respectively.

The design of any such “ELD insurance product” thus requires information collection on the following specific items:

- the activity of the industrial operator, including the operational procedures as well as substances used, manufactured and/or stored;
- the installations maintained by the industrial operator (eg type, size, order, condition, maintenance), as well as any loss prevention and/or risk mitigation measures taken;
- the nature of the surrounding area;
- the industrial operator's loss history;
- history of the environmental location;
- the extent to which pollution/contamination existed prior to the industrial accident; and
- the costs and expenses for loss prevention, mitigation and environmental remediation measures.

A risk-specific individual assessment that considers the above-listed elements can enable an insurer to conduct an in-depth analysis of the environmental risk and set the basis for tailor-made risk transfer solutions. However, as reports of ELD cases currently remain low, some insurers may have difficulty in obtaining this data. This can present challenges in calculating a risk-appropriate premium that accurately reflects a policyholder’s liability exposure.

Data and tools for emerging risks; cooperation between insurers and competent authorities

Insurance Europe maintains that the aspects of developing financial security/insurance products – and thus the tools needed by those designing these products – should be discussed between persons with sufficient familiarity about the ELD and holding expertise in the area of environmental risk. Ideally, these persons should also be familiar with the existing insurance solutions (including the basic principles of insurability) and
related debates held at EU level. Insurance Europe strongly recommends not mixing discussions on environmental disasters with discussions about natural catastrophes so as to avoid potential misunderstanding by those persons not familiar with the technical details about either one of these subjects.

Policymakers should also take into account that insurance covering the liability for the prevention and remediation of environmental damage is still developing in many EU Member States. While the availability of this insurance has increased since adoption of the ELD in 2004, financial capacity in the market remains small compared to other, more advanced insurance markets (eg motor or general third-party liability insurance). There also remains a currently low demand by industrial operators due to financial budget restrictions (as exemplified by the economic crisis currently affecting many EU Member States) or simply conscious business decisions made by industrial operators that choose not to purchase environmental liability insurance.

- **Development of cover for environmental liability**
  Environmental impairment liability (EIL) cover and stand-alone ELD cover have become the standard component of commercial and industrial liability policies in some markets, the most well-known example being Germany, which maintains a voluntary financial security scheme for the ELD. High penetration rates of environmental cover in Germany demonstrate that flexible insurance solutions can be well designed to address environmental liability needs and that environmental risk awareness can be increased without compulsory insurance legislation.

Insurance Europe maintains that a one size fits all solution is not suitable for the financial security of environmental risks. For example, government compulsory measures requiring a wide scope of cover with high limits can hinder the development of the present environmental liability insurance market. A voluntary EU-wide ELD market (ie one that allows flexibility for various financial security solutions) is best suited for the diversity of risk exposures existing across Member States and the varying levels of development for private insurance offerings for environmental risks.

Additionally, it should be noted that environmental liability insurance **does not cover:**
- wilful damages; or
- damages caused by voluntary increase of risk (eg avoidance of mandatory safety procedures in order to reduce operational costs).

Insurance Europe believes that the Commission could positively impact the ELD insurance market by facilitating awareness and cooperation about the ELD (eg awareness raising conferences, ELD training materials) rather than harmonising financial security at the EU level.

(18) Considering the specificities of the offshore oil and gas industry, what kind of innovative insurance mechanisms could be appropriate? Are there ways for the insurance industry to reduce the uncertainty regarding the assessment of risks and calculation of premiums? What type of information should be publicly available to promote the development of insurance market products to cover major accidents?

- **Uncertainty about oil spills**
  The insurance market for offshore oil and gas is a **global** market, thus, regulation at EU level is not appropriate in this area. Offshore oil activities present high risks that may not be fully understood, such as the new pioneering technology involved with offshore marine drilling and exploration. The risk assessment of these technologies is not yet established, leaving insurers with rather limited information about the potential risks.

- **Development of insurance products**
  At this time there appears to be no evidence suggesting that there is a lack of financial solutions for the cover of environmental damage resulting from oil and gas operation accidents in offshore marine regions. As various financial tools exist for offshore oil accidents and no evidence has been cited to show future risks may not be covered, it remains unclear why “innovative” insurance mechanisms are being considered in the Green Paper.
There appears to be a variety of solutions available for addressing offshore oil pollution, ranging from self-insurance (which is most commonly employed by offshore oil companies), insurance, reinsurance, bonds, warranties and guarantees. The use of self-insurance is particularly increasing in consideration of the limited insurance capacity available and there is no evidence to suggest that the development of self-insurance (at least in Europe) is unsatisfactory for covering the damage of future offshore oil spills.

There is also a need to clarify what the Green Paper means by “major multi-billion euro accidents”, as offshore oil and gas accidents can give rise to various risks, such as:
- physical damage to offshore platform/other infrastructure;
- liability for injury to operator employees;
- liability arising from consequences of oil spill to tourism, fishing industry;
- expenses of leak and re-drilling;
- clean-up costs; and
- business interruption.

In view of the above, different insurance markets cover different risks posed by the offshore oil sector. In other words, environmental risks, personal injury, business interruption and property damage are all covered by different insurers. The different risks are even often handled by different underwriters operating within the same insurance company and who maintain completely different sets of skills and expertise.

Additionally, insurance is not able to cover all potential incidents and thus should not be viewed as the sole solution to large offshore oil spills. For example, it would not be feasible for the insurance industry - even at a global level – to cover the loss demonstrated by the 2010 Gulf of Mexico oil spill in its entirety, known as the *Deepwater Horizon* incident. In this respect, Insurance Europe would point out that the coverage of USD 10B (page 18, footnote 40), is too high and not currently available within the global insurance market. *Deepwater Horizon* should moreover not be used as “benchmark” for what needs to be insured, as the volume of oil released (4.9m barrels) represents an unprecedented amount of damage.

Possible areas for improving risk prevention
Insurance Europe asserts that the EU’s focus would be better placed on *prevention methods, ensuring an effective licensing regime and appropriate emergency equipment and response* (eg regulation and/or enforcement of safety devices for capping an oil spill). These actions can help minimise the occurrence of an oil spill and thus the potential for further damage caused.

Should contractual conditions of third-party liability insurance policies be disclosed to third parties in case of man-made disasters? If so, how?

The purpose of disclosure does not appear relevant to the issue of man-made disasters, as the Green Paper does not illustrate what problem might be resolved by this proposal or else how it may improve the cover of environmental liability risks. Rather than address the specifics of insurance and how it may be divulged to third parties, the cover of man-made disasters would be better improved through increased awareness about environmental risks and the benefits of insurance as well as stronger operator licensing requirements and safety standards that may help minimise disasters resulting from industrial operations.

In the context of man-made disasters, it would be difficult to say when a “right” of information disclosure would be triggered (ie liability must first be established, but there remains the question of when information disclosure may be appropriate). The questions about information disclosure also distract from the ELD and “polluter pays” principle, which places focus on personal legal actions and transfers responsibility for the pollution to the insurer. A focus on insurance policy disclosure may lead third parties to simply seek the “biggest financial pockets” rather than to ascertain or pursue the actual polluter.

Additionally, problems with information disclosure can include:
- data protection barriers;
revelation of trade secrets, material non-disclosure; and
potential for legal arguments, which lead to increased costs for consumers.

Insurance Europe thus maintains that, within the context of man-made disasters, it is primarily necessary to identify the following:

- cause of accident;
- industrial operator at fault; and then
- applicable liability cover of the industrial operator.

It should be acknowledged that an insurance contract is an agreement between the parties involved (insurer and policyholder), which is based on a variety of risk-specific and subjective factors involving quality of risk, loss history, risk management processes in place, scope of the insurance policy, etc. With respect to environmental liability, this requires tailor-made terms and conditions to suit the risk exposure of the particular industrial operation involved, as well as the safety practices, standards and legislations present in the respective Member State. The information needs surrounding environmental liability should not be compared to that of the motor insurance market, which often contains standardised insurance terms and conditions for a homogenous group of risks (eg motor vehicle accidents and the personal injury or property risks arising from them).

Considering the above, a general disclosure information requirement would not be appropriate and, to the contrary, can be misleading in cases where third parties (ie to the insurance contract) would lack the rationale and knowledge which led to the set-up of the tailor-made terms and conditions of the subject insurance policy.

(20) Are there specific aspects of loss adjusting which would benefit from more harmonisation? If so, which? Are there practical difficulties for loss adjusters to operate cross-border?

Harmonisation unlikely to be a solution
Loss adjusting is not likely to benefit from more harmonisation. There are practical differences between loss adjusters in the various Member States, including:

- language (customer and insurer);
- policy wording construction;
- how disasters are defined (eg subsidence, storm);
- variety of market practices and understanding about them;
- complexity of business models;
- taxation laws; and
- legal environment and interpretation.

Legal procedures and authorities have their own competences under national law, thus loss adjusters are experienced in the procedures and laws of their own jurisdictions. The loss adjuster's localised expertise, however, is naturally of utmost benefit to the consumer that lives in the adjuster's jurisdiction. Therefore, Insurance Europe sees no justification for harmonisation in this area.

Cross-border practices
Though not all loss adjusters have the necessary cross-border expertise, there are specialist loss adjusters operating cross-border and offering services for those consumers with cross-border needs. Networks of loss adjusters also exist to allow better response in widespread disaster situations. For example, cooperation between a local loss adjuster, whom is familiar with the local market practices, and a more "international" loss adjuster, whom has the expertise for large complex cases, can be achieved with these industry-driven networks and prove beneficial to consumers.

Insurance Europe advises that focus would be better placed on improving crisis management services and enhancing cooperation between local and national governments in terms of mitigating damage.
This paper addresses specific aspects related to the prevention and insurance of natural and man-made disasters. Have any important issues been omitted or underrepresented? If so, which?

- Highlight the basic principles of insurability for a sufficient understanding about cover

Insurance Europe finds that the Green Paper misses explanation about the basic principles of insurability which require different market solutions. The insurance industry has been handling losses caused by both natural and man-made disasters for generations (property insurance dating back approximately 300 years and liability insurance dating back to the 19th century) and maintains significant collective expertise for the transfer of risk in various areas. This means the industry is well-positioned to assess the separate insurability needs for both liability and property insurance.

In principle, insurance requires the following to function most efficiently:

- **Randomness** – The time and location of an insured event must be unpredictable and the occurrence must be independent of the will of the insured (this does not, however, negate the reality that not all risks are insurable and some losses may be too large for the industry to cover alone).

- **Quantifiable** – The frequency and severity of the event must be estimated and quantified within reasonable risk parameters.

- **Mutuality** – It must be possible to build a risk pool in which the risk can be shared and diversified at economically fair terms to insurance customers (this is due to a specific need to prevent disproportionate risk scenarios that may lead to adverse selection and/or moral hazard).

- **Economic viability** – To ensure the financial capability of insurers in offering adequate cover, premiums must not only be appropriate to pay out claims but to also acquire and administer the insurance business, as well as provide sufficient returns on capital to investors.

An analysis of the above principles would help to establish that there is no one size fits all solution for insurance across the EU Member States.

- Minimise the focus on misleading comparisons of Member State insurance penetration rates

Insurance Europe finds that the Green Paper fails to more pointedly identify the clear gaps in data about market penetration for natural catastrophe insurance, particularly with respect to the Joint Research Centre study/report concluded in 2012, *Risk Relevance and Insurance Coverage in the EU*. The lack of available market penetration information indicates that Member State penetration rates cannot present accurate comparisons and thus should not be relied upon to determine the effectiveness of a Member State insurance scheme for natural catastrophes.

- Acknowledge the environmental liability insurance products developed in response to the ELD

Insurance Europe finds that the Green Paper fails to acknowledge the on-going efforts by environmental liability insurers in developing products, or otherwise enhancing their existing products, to cover the risks of industrial operators that fall within the scope of the ELD. Insurance Europe would like to point out that the ELD currently maintains a voluntary EU-wide financial security system and that this has led to increasing development of such insurance products and initiatives taken by insurers at their national levels.

Environmental liability products and initiatives include solutions provided by environmental liability pools (eg ES, FR, IT), non-binding policy wording models (eg AT, CH, DE), endorsements to existing general liability policies (eg DE) or stand-alone environmental liability products (eg UK). The increase in this development shows that compulsory insurance at the EU level is clearly not necessary to stimulate the insurance market. Should policymakers be concerned about insurance uptake, focus would be best placed on awareness-raising campaigns about the ELD and enforcement of the ELD at national level.
Insurance Europe is the European insurance and reinsurance federation. Through its 34 member bodies — the national insurance associations — Insurance Europe represents all types of insurance and reinsurance undertakings, eg pan-European companies, monoliners, mutuals and SMEs. Insurance Europe, which is based in Brussels, represents undertakings that account for around 95% of total European premium income. Insurance makes a major contribution to Europe’s economic growth and development. European insurers generate premium income of more than €1 100bn, employ almost one million people and invest around €8 500bn in the economy.

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