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CLIMATE CHANGE

BELGIAN ANSWER TO THE QUESTIONNAIRE

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A. THE LOCAL CONTEXT IN BELGIUM

1. *Degree of awareness of climate change and its consequences*

1.1. *Awareness in the general public*

Belgium is a small country (30.500 km²) with a short (62 km) North Sea Coast benefitting from the moderate climate of the middle of Western Europe and the moderating effects of the Gulf Stream in the Atlantic Ocean.

Densely populated (especially in the Northern part) and situated at the crossroads between sea-harbours and the continental “Hinterland”, Belgium suffers more from intense traffic congestion than from any threats of its natural environment, which is generally speaking, mild and generally (and so far) rather free from extreme situations.

It is safe to say that in Belgium public awareness of climate change and its potential consequences has received a real boost with the success of the Al Gore movie and the surrounding media attention.

The next step forward in the awareness of the Belgian general public was linked to the Copenhagen summit, but since then the media have grown fairly quiet over the issue.

The seemingly slight increase both in frequency and strength of such phenomena as rain, floods and stormy winds are in the general common opinion interpreted as climate change related.

However changes are as yet generally not perceived as being dramatic. Concerns were more with the system of coverage of damages caused by such catastrophic events. Since March 2005, the previous system of relief by a state-owned and state-run National Disasters Fund was largely privatized in favor of a system of private

insurance (see *infra*, C). In our perception such a move can hardly be explained as a reaction of intense worry, let alone fear of panic, vis-à-vis climate change.

What is unmistakably true is that there is a growing awareness of the need to protect the environment. As far as we can see, there appears to exist in the common approach of the general public a certain mixing up, if not confusion, of the two issues: environmental protection and climate change¹.

1.2. Awareness in the business sector

One cannot say that in Belgian business awareness or worry is much more explicit or pronounced or emotional than in the surrounding countries, except that at the last two-yearly “Salon de Auto” all of the major brands appeared to have metamorphosed into the staunch protectors of the environment, selling low CO2 emissions as their principal item of pride.

Nevertheless the awareness is growing. The Evan Mills study cites an interesting observation taken from the UK ‘*Stern Review on the Economics of Climate Change*’, saying that whereas conventional wisdom held that taking action on climate change will harm the economy, the view of companies and investors is rapidly changing into the view that it is the lack of action to combat climate change, that is the true threat to the economy².

According to an article in the Business review *Trends* it would appear from a survey conducted by the European market leader in credit assurance, that 27% of the (European) enterprises would declare to suffer from climate changes. 40% of them takes measures of protection against extreme weather circumstances, such as moving away the tangible assets, or by buying insurance³.

1.3. Awareness in the insurance industry

In his answer to our inquiry about the reaction and attitude of the Belgian insurance industry, a befriended insurer made the following (in our view highly significant and symptomatic) comment:

„Climate change is not really considered as having an immediate impact on our products. (Direct) insurers have the tendency to handle such things „re-actively“. We live by virtue of statistics and start acting when the losses begin to transcend what is bearable. Our confrontation with climate change is indirect, namely when we negotiate with our reinsurers. They use models like EQECAT and RMS to simulate the impact of natural phenomena upon the portfolio of direct insurers. In these models assumptions about the frequency and gravity of events are calculated. Reinsurers are adept at proactively predicting catastrophic tendencies, because they have a commercial interest”.

¹ See e.g. Royal decree of 7 December 2008 on the introduction of a subsidy for the information and education campaigns on the theme of climate change, *Belgian Official Journal (Moniteur belge)* of 24 December 2008.

² E. MILLS, “A global review of Insurance industry responses to climate change”, *The Geneva Papers on risks and Insurance issues and practice* 2009, 325.

³ C. DE COSTER, “Doomsday is nog niet voor morgen”, *Trends* 13 november 2008, 32.

A similar thought was voiced by a representative of the Belgian professional association of insurers, Assuralia⁴.

According to another respondent, the feeling is that (Belgian) insurers are at this moment of time not asking for a change of policy conditions. The sector is waiting for more data and clarity about the frequency and extent of the increases in losses (due to climate change), which, so adds the respondent, we do have not the slightest idea about at this moment.

The feeling appears to be that “Doomsday” is not for tomorrow. The attitude appears to be one of ‘wait and see’. Incentives for using cleaner energy sources, for isolating homes, for building more safely are given by an area of governmental measures (e.g. of fiscal nature), but are not actively supported⁵ (with the exception of the incentives that are given not to build houses in risk zones that are subject to flooding risks, see *infra*, C, 2).

Clear signs or indications of a ‘greening’ of the insurance industry, or of ‘green brokerage’ are not observed.

To a large extent, this attitude may be due to *the structure of the insurance industry* in a small country like Belgium. Indeed, the centers of decision of almost all the major insurance companies have been moved to the headquarters of a number of large insurance companies established in the surrounding countries.

Strategic thinking/decision making is done in those headquarters abroad and this appears to be especially valid with respect to the strategic thinking and decision making with respect to climate change.

In other words ‘to take the temperature of the insurance industry’, one has to measure this on a broader or higher level than that of the Belgian insurance industry and examine the policy orientation on the European level (at the least).

We think that on that level and on the level of world wide reinsurance industry, a rapid evolution from sepsis to concern to action (mitigation/adaptation) can be noticed. Whereas Evan Mills can still report that some insurers “prefer to dismiss the science and take remaining uncertainties as a reason to wait on the sidelines“, a number of signs point to another direction. The point is that the scientific debate is over. Definitive consensus over the facts and causes appears to have been reached, for example at the level of the IRCC (Intergovernmental Panel on Climate Change which received the Nobel Peace Prize in 2007)⁶.

A Price Waterhouse Coopers 2007 survey of the opinions of 100 insurance industry representatives, ranks the climate change issue as a number 4 issue out of a total of 33 (natural disasters being n° 2). One year later an Ernst & Young study considers climate change as the number one in the top 10 risk (note: here again we notice a certain mixing up between climate change and other phenomena like natural catastrophes). Insurers increasingly come to see climate change as a material risk to their business⁷.

⁴ C. DE COSTER, *l.c.*, 32.

⁵ C. DE COSTER, *l.c.*, 32.

⁶ E. MILLS, “A global review of Insurance industry responses to climate change”, o.c., 324-325.

⁷ E. MILLS, “A global review of Insurance industry responses to climate change”, o.c., 324-325.

1.4. Awareness in the public authorities

a) In general

Notwithstanding the difficulties that arise from the federal structure of Belgium and the complicated spreading and allocation of competences over the federation and the (three) federated entities (regions), it may be said that Belgian authorities have reacted rather promptly to the challenge to develop a master plan about the general climate change policy and the measures to be taken.

Even in that context, the federal structure of the Belgian State leaves its traces. Indeed not one, but at least four “climate actions or policy plans” were developed (one federal and one for each of the three Regions).

Without going into a detailed overview of those different climate plans, a brief overview is given of the federal so-called “National Master Plan”, with the objective to illustrate the degree of awareness of the authorities.

b) National Climate Plan 2009-2012⁸

Reference is here made to the so-called “National Climate Plan 2009-2012” (hereafter National Plan). This National Plan contains, as explained hereafter, an inventory of a number of policies and concrete measures, which have been elaborated in view of satisfying the Kyoto Protocol objectives. One will keep in mind that this National Plan is not a static document, but one in which the plan is regularly adjusted to the results achieved in the mean time achieved.

Some commentators have indeed criticized the way in which the redaction of the Plan has been conceived, stating that this Plan is rather an inventory than a plan.

The National Plan, as it stands now, describes 11 strategic axes that must be followed to reduce the GES (gaz à effet de serre) emissions, and to encounter and fulfill the obligations of Belgium under the Kyoto Protocol.

The first six of them are the so-called “sectorial axes”, while the last five are “horizontal axes”:

1e axis: Optimize the production of energy („politique énergétique“).

The measures are bundled in two clusters.

a) Production of energy through renewable sources and cogeneration (production of warmth and electricity). To do so one of the mechanisms that is (among many other ones) set in place to that end, is the introduction of the „green certificates“ and „cogeneration certificates“. The basic principle of the green certificates consists in delivering certificates to the *producers* (producteurs) of green electricity (or cogenerated electricity), while obliging the distributors of electricity (fournisseurs) to acquire a minimum quota of certificates, calculated on the basis of their total turnover of electricity. This mechanism leads to establishing a market of certificates, and induces producers to produce green (and cogenerated) electricity that

⁸ Commission Nationale Climat, *Plan National Climat de la Belgique 2009-2012*, 142p., www.klimaat.be; www.climatechange.be.

is competitive with non-renewable resources. The system operates inside the confines of the three regions (Flanders, Brussels, Wallonia).

b) Maximizing the energetic efficiency. Quota of emission rights are allocated to electricity producers at the level of the regions and can be exchanged. There is a national allocation plan which is in fact the compilation of three regional plans.

2nd axis: Promote rational use of energy in buildings:

horizontal measures, measures for residential buildings, measures for buildings in the tertiary and industrial sector (one of the measures is the setting up network of „energy experts“; tax incentives for energy saving investments; specific measures for central heating boilers, etc.).

3rd axis: Action in the industrial sector:

inter alia through voluntary agreements („benchmarking covenant“) and promotion of sustainable activities.

4th axis: Development of sustainable methods of transportation.

5th axis: Promoting sustainable formula's of management of ecosystems in agricultural and forestry.

6th axis: Continuation of efforts with respect to waste treatment.

7th axis: Amplifying the research efforts with respect to climate change.

8th axis: Enhancing the awareness of all „actors“, at all levels: private persons, public entities like schools (e.g. „eco campus“), enterprises.

9th axis: Reinforce the direct implication of public authorities in the reduction of emissions of „GES“ (gaz à effet de serre).

10th axis: Promoting mechanisms of flexibility.

11th axis: Integration of the climate dimension in the policy toward developing countries.

2. The main expected consequences of climate change in Belgium

(summarizing the answers to questions A2 and A3 of the questionnaire)

2.1. Generally and globally

In July 2009, the Geneva Association published an extensive and in-depth study on “The Insurance industry and climate change – contribution to the global debate”⁹. Chapter 3 of this study gives an overview of the impact of climate change on the world economy in a “business as usual scenario”, i.e. in case of an unmitigated further

⁹ “The Insurance industry and climate change – contribution to the global debate”, *Geneva Reports Risk and Insurance Research* July 2009, 124p. (so-called Geneva Report N° 2).

evolution. Evidence was taken from the so-called Stern Review and from the Fourth Assessment Report of the Governmental Panel on Climate Change (IPCC 4).

The prudent but important conclusion is that „unmitigated climate change is likely to have significant adverse effects on the long term development of the world economy”¹⁰.

The economic impact of unmitigated climate change will be different from region to region, because of the differences in speed and extent of climate change, but also because of differences in the factual circumstances, in the different vulnerability and in the ability to adapt.

It is generally accepted that developed countries are better equipped than less developed countries, and that temperate climate zones are better off than e.g. subtropical zones.

Higher latitude regions could even draw some initial benefits, e.g. from milder temperatures, particularly in the health and food sectors, while other regions could see negative impacts for even small increases in temperature. But globally and on a longer term the impacts of climate change are expected to become increasingly negative.

2.2. *Impact in Belgium*¹¹

The source for this assessment was found in the aforementioned National Climate Plan 2009-2012, as well as in a study which was carried out by Greenpeace in collaboration with the Université Catholique de Louvain on the change of climate in Belgium. Our country being very small, expectations and projections must be made at the level of much larger area's and even climate zones. A number of trends can nevertheless be observed.

a) Projections for Belgium: generally

Temperatures are expected to rise, both in winter and summer. Expected rise of temperature by the end of the 21st century would mount up to 1,7 to 4,9°C in winter, and 2,4 to 6,6°C in summer (dependant on the scenario's used), in comparison with the end of the 20th century. This would mean that Belgium would have then a climate that is comparable to the climate in the South of Spain at the present time.

The expected precipitation by the end of the 21st century would show an increase of 6 to 23% in winter and status quo to decrease of 50% in summer, in comparison with the end of the 20th century. Less or cold winters, more clouds, more heat waves, more periods of intense rainfall, increasing frequency and intensity of thunder storms.

The Gulfstream-circulation is not expected to change or stop in the course of the 21st century. If such evolution would occur, it could contribute to lessening the warming up of the Western European region, but it would cause a substantial rise of the level of the North Sea.

¹⁰ B. RAUCH and M. MENHART, Geneva Report N° 2, *ibidem*, 46.

¹¹ Ph. MARBAIX, J.P. VAN YPERSELE and E. VANVYVE, “De klimaatverandering”, in Greenpeace and UCL (ed.), *Impact van de klimaatverandering in België*, July 2004, 15-20, www.greenpeace.be.

According to the Geneva Reports (p. 34) Europe will likely face reduced rainfall, more heat waves, draughts and wildfires in southern parts. In Northern Europe winter precipitation and floods will increase along with summer flash floods and hot spells. More intense winter storms will push up loss amounts and, compounded with storm surges, will challenge low-lying coastal areas. North of the Mediterranean, prolonged thermal vegetation period, milder winters and warmer summers will also open up chances in agriculture and tourism.

b) Water supply and risk of flooding

Because of increased precipitation, the groundwater-level will rise and so will the flow-rate of rivers, with increased danger of flooding. Summer draughts may lead to an insufficiency of water (like for cooling of electrical production plants), and to a deterioration of quality of surface water. Belgium has known several floods in several years. Whereas none of them, considered individually, was due to climate change, the risk for such floods will rise with the change of climate.

c) Coastal area¹²

Three kinds of impacts are to be feared here: floods in case of storms, erosion of the coast, and disappearance of „wet areas“. A sea level rise of one meter would mean that 63.000 hectares come beneath sea level (rise 8 meters → 3.700 km²). The Belgian coast is 65 km long, and more than half is protected by dikes. In the other areas of the seacoast erosion of the sand dunes is threatening. In 1976 a dike improvement program (SIGMA-plan) was launched for the estuary of the river De Schelde (L'Escaut). The plan is currently under revision taking into account a sea level rise of 60 cm. Erosion differs from one place to another. The 'Zwin' natural park is threatened.

d) Biodiversity¹³

According to the IPCC document on "Climate Change and Biodiversity", 2002¹⁴, some effects on climate change can already be observed in Europe, and thus in Belgium. The document cites the moving northward of some species of insects and flora and warns that in the course of the 21st century more is to come, like the disappearance or the relative importance of certain species. It is especially the combination of climate change with the other threats to the environment (like pollution, destruction of habitats) that is threatening bio-diversity. The ongoing regression of the Hautes Fagnes is cited as an example¹⁵ of the combined effect of climate change with more general environmental deterioration.

¹² Ph. MARBAIX, J.P. VAN YPERSELE and E. VANVYVE, "De klimaatverandering", o.c., 33.

¹³ A. HAMBUCKERS, "Biodiversiteit", in Greenpeace and UCL (ed.), *Impact van de klimaatverandering in België*, July 2004, 21 – 27.

¹⁴ Technical Paper V of the Intergovernmental Panel on Climate Change, www.ipcc.ch.

¹⁵ A. HAMBUCKERS, "Biodiversiteit", o.c., 26.

e) Agriculture¹⁶

Whereas a rise of temperature mostly leads to reduced productivity of most crops, a rise of CO₂ concentration appears to have a favourable impact on the yield. So far it is considered that Belgium agriculture is capable to adapt to a 3°C rise of temperature. An important aspect relates to the increasing use of the farmland for purposes of agriculture, due to the increasing use for the raising of bio-combustibles, which implies a decrease of the portion of land that is used for food production.

f) Health¹⁷

Consequences will be less dramatic than, say, in countries with a lower standard of living, and less easy access to health care. However during hot summers there are significantly more deaths as was demonstrated by the 2003 heat wave in France. There is evidence that rising minimum temperature increases the number of ticks and thus of cases of the Lymph disease.

g) Tourism¹⁸

An increase of temperature in the Mediterranean area might have a positive effect on tourism in areas situated at higher degrees of latitude among which the rise of sea level and storms may however have negative effects.

h) Interdependence with the rest of the world

Even if a mitigated climate change may have an impact that can be kept under control in a developed and wealthy society, the interdependence between different parts of the world in a globalized world will have indirect negative effects. E.g. food prices depend on the well being of worldwide agricultural systems. Viruses will not remain imprisoned in their original habitats. Draughts, famine and the ensuing economic and political effects will augment the currents of fugitives; rising temperatures of ocean water will cause an increased number and spreading of tropical storms.

¹⁶ M. ROUNSEVELL, I. REGINSTER and N. DENDONCKER, "Landbouw en grondgebruik", in Greenpeace and UCL (ed.), *Impact van de klimaatverandering in België*, July 2004, 30-32, www.greenpeace.be.

¹⁷ J.F. VAN YPERSELE, "Impact op de gezondheid", in Greenpeace and UCL (ed.), *Impact van de klimaatverandering in België*, July 2004, 35.

¹⁸ J.F. VAN YPERSELE, "Toerisme", in Greenpeace and UCL (ed.), *Impact van de klimaatverandering in België*, July 2004, 38.

3. *Climate change policy in Belgium: legal aspects*¹⁹

(summarizing the answers to questions A4 and A5)

Due to the particular federal structure of Belgium, the policy of Belgium with respect to climate is fairly complicated: both the Federal State as well as the federated entities (the so-called Regions) have part of the competence in this matter. Consequently, the decision making bodies are many and the decision making procedures are diverse.

Environmental policy belongs essentially to the competence of the Regions, but climate policy also involves other matters, like energy policy and transportation, which belong to the competence of the Federal State, and so do international relations (which invests the federal authorities with competence for the acquisition of emission rights by foreign investments)²⁰.

The making of the Belgian policy with respect to climate change issues had started already in 1994, when a „National Program for the reduction of CO2 emissions“ was launched (5% less than the 1990, by the horizon 2000).

On 26 November 2001 the Federal Government approved the Kyoto Protocol on behalf of the three regions (Flanders, Wallonia and the Brussels Region). As is usually done in situations in which the Federal State and the Regions are involved because of their respective competences a cooperation agreement (“Accord de coopération”) was concluded between the Federal State, and the three Regions with respect to the drafting and the carrying out of the National and Regional Climate Plan, and with respect to the reporting duties under the UN Climate Convention and under the Kyoto Protocol²¹.

In accordance with this Protocol, and with the so-called spreading of the burdens (répartition des charges), Belgium was imposed a national (CO2 emissions) reduction goal at the level of the assigned amount of 7,5%, in comparison with 1990, to be realized by the end of 2012.

By virtue of the Cooperation Accord, the reduction efforts were spread over the Regions (7,5% Flanders, 5,2% for Wallonia, 3,475% Brussels). Since the total of

¹⁹ See www.climate.be.

²⁰ To have a slightly better idea of how dispersed and complicated the distribution of competence is, have a look at the following.

Environment:	basically competence of the regions, especially quality of the air: the federal state remains competent for the coordination of the international policy.
Energy:	is federal insofar as large infrastructure and planning of gas and electricity are concerned, and also with respect to tariff, to nuclear energy and offshore “éoliennes”. However transport and local distribution, rational and efficient use, and renewable energies belong to the competence of the region.
Transport:	national airport and rail transport are federal, and so are traffic taxes and technical norms of vehicles. Highways, waterways, ports, regional airports are regional and so is public transportation and school transportation.

²¹ Accord de coopération entre l’Etat fédéral, la Région flamande, la Région wallonne et la Région de Bruxelles-Capitale relatif à l’établissement, l’exécution et le suivi d’un Plan national Climat, ainsi que l’établissement de rapports, dans le cadre de la Convention-cadre des Nations Unies sur le Changements climatiques et du Protocole de Kyoto, 14 November 2002, *Belgian Official Journal (Moniteur belge)* of 27 June 2003.

those efforts was not sufficient to reach the Belgian Assigned Amount (of 7,5%), the Federal Government acquired additional emission rights by making use of the so-called flexible mechanisms under the Kyoto Protocol (Joint Implementation and Clean Development Mechanisms).

The additional emission rights were allotted to the regions, so as to bring their efforts in accordance with the internationally agreed standards.

To enlist the cooperation of the industrial undertakings, the regional authorities made use of contractual techniques like “covenants”, or sectorial agreements. Large industrial complexes have been allotted emission quota under a national allocation plan (Plan national d’Allocation).

A National Climate Commission was established, composed of representatives of the federal and regional governments, and entrusted with the double task of coordinating the regional plans and where possible harmonizing synergy between the policies of the Federal Government and of the three Regions.

The National Climate Plan stands next to the plans of the Regions: the Flemish Climate Plan 2006-2012, the Brussels Plan for the structural improvement of air quality, and the fight against the warming up of the climate (2002-2010) and the Wallony Plan “Air-Climat”²².

In a study done by two consulting bodies of the Flemish regional government (SERV and MINA council)²³, the National Climate Plan is heavily criticized, as being more a summary of what has been decided and as a state of affairs, than as a plan or strategy document for the future. Also the policies of the three Regions should be such as to create a level playing field. So far, apparently as a consequence of the regionalization of the country, an integrated national policy is lacking.

B. CLIMATE CHANGE AND INSURANCE

Important preliminary remarks

1. The answers of the present (Belgian) country report are not country-specific for the reasons that are explained here above and that relate to the specific small size of the country and its insurance industry.

We even wonder whether it would be wise to try to give such country specific answers in matters that relate to an insurance industry which is highly internationalized, especially when it comes to determining its long term and strategic orientations.

It follows that in a small European country, like Belgium, with an economy very open to the foreign markets, the approach to be taken must be situated at a level and scale

²² www.climatechange.be; see also for *The 2006-2012 Flemish Climate Policy Plan, Progress Report* (May 2009), 30 p., www.lne.be.

²³ SERV: Social and Economic Council of Flanders;
MINA: Milieu en Natuur - Environment and Nature Council.

which is a resolutely European. Sources and inspiration for the answers to the questionnaire are therefore sought in:

- c) the already often mentioned and quoted study Geneva Report N°2, of the Geneva Association²⁴;
- d) the Special Issue on *Climate Change and Insurance* of the Geneva Papers on Risk and Insurance²⁵;
- e) the paper of the CEA (Comité Européen des Assurances), *Reducing the Social and Economic Impact of Climate Change and Natural Catastrophes; Insurance Solutions and Public-private partnerships*²⁶.
- f) the practice and legislative framework as existing in Belgium.

2. It appears to us to be useful and even imperative to make the following conceptual distinctions, they being the background against which the answers to the questionnaire must be seen.

A very basic and important distinction is the distinction between mitigation measures and adaptation measures.

In the Wording of the *Key Messages of the Geneva Report N°2* it is rightly underlined that “adaptation and mitigation are the key actions available to contain the impact of climate change. They must be used in parallel and carefully designed to not conflict”²⁷.

In the *UN Framework Convention on Climate Change* the goal is described as “to achieve (...) stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous interference with the climate system”. What is thus described is the so-called mitigation measures aim at drastically limiting the elevation of CO2 concentration.

But next to these, equally important are the so-called adaptation measures which aim at reducing society’s vulnerability to the impacts of climate change. The IPCC’s Fourth Assessment Report (AR4) defines adaptation as “any adjustment in natural or human systems in response to actual or expected climate stimuli or their effects, which moderates harm or exploits beneficial opportunities”.

In the CEA paper, the distinction is illustrated by a ABI (Association of British Insurers-study of 2005) stating that investing in mitigation is particularly important to reduce the impact of urban floods, while investing in adaptation measures is particularly important to reduce the impact of river and coastal floods²⁸.

²⁴ “The Insurance industry and climate change – contribution to the global debate”, *Geneva Reports Risk and Insurance Research* July 2009, 124p. (so-called Geneva Report N° 2).

²⁵ *Geneva Papers on Risk and Insurance. Issues and Practice Change and Insurance*, Special Issue July 2009, Vol. 34, 319-439.

²⁶ CEA (Comité européen des Assurances), *Reducing the Social and Economic Impact of Climate Change and Natural Catastrophes; Insurance Solutions and Public-private partnerships*, Brussels, June 2007, 46p., www.cea.eu.

²⁷ T. MAYARD, R. TOLL, C. HERWEIJER, B. RAUCH and M. MENHART, “An overview of the response to climate change: mitigation and adaptation”, *Geneva Report N° 2*, 47.

²⁸ CEA (Comité Européen des Assurances), *Reducing the Social and Economic Impact of Climate Change and Natural Catastrophes; Insurance Solutions and Public-private partnerships*, Brussels, June 2007, 16-17.

In the Geneva Report N° 2, reference is made to a UNFCCC Bali Action Plan in which one adaptation from a societal risk perspective is the consideration of “Risk management and risk reduction strategies, *including risk sharing and transfer mechanisms such as insurance*”²⁹.

To be effective, adaptation measures should be taken in a proactive manner. This brings us to our third and last basic conceptual distinction, which is drawn from Chapter 5 of the much quoted Geneva Report N° 2.

3. Insurance and climate change: from reaction to pro-action³⁰.

A central idea that the authors would like to stress here is that the challenge for the insurance industry consists in avoiding the “wait and see” attitude, which in its extreme would come down to waiting for the results of, or for a failure of the mitigation efforts and to react by raising premium levels or by adapting coverage accordingly (through withdrawals, use of exclusions, etc.).

It would rather appear to us that the joint insurance and reinsurance industry, as important members of the world’s league of experts on risk management and strategy, are obliged toward themselves and to the world to proactively contribute. Such attitude implies participation in the efforts of research and discovery at an early stage and creativity in stimulating preventive measures. At the same time, insurance should – equally proactively – develop solutions that are apt to minimize climate change impacts, “by designing insurance products that incentivize actions to raise resilience, by creating innovative insurance products, adapting existing insurance policies to climate change, and as underwriters of, and investors in, future technology”³¹.

1. *Which are the product lines that may be affected?*

We refer to data of Munich Re³².

- Lines
- Property (personal): high negative long term effects from severe weather/floods
- Property (commercial): high negative long term effects from severe weather/floods
- Property (industrial): high negative long term effects from severe weather/floods
- Engineering (CAR): high negative long term effects from flood, storm and severe weather
- Engineering (EAR): high negative long term effects from severe weather/floods

²⁹ T. MAYARD, R. TOLL, C. HERWEIJER, B. RAUCH and M. MENHART, “An overview of the response to climate change: mitigation and adaptation”, *Geneva Report N° 2*, 55-56.

Other well known “adaptation themes” are measures to reduce the impact of storms and flooding, agricultural issues, water availability, heat issues, and health issues.

³⁰ W. STAHEL, R. NAKAI, M. CHAUX and R. MUIR-WOOD, “Insurance and climate change – from reaction to pro-action”, *Geneva Report N° 2*, 61 et seq.

³¹ *Ibidem*, 70.

³² Munich Re, *Weather catastrophes and climate change: is there still hope for us?*, 2005, 220, cited in extenso in CEA (Comité Européen des Assurances), *Reducing the Social and Economic Impact of Climate Change and Natural Catastrophes; Insurance Solutions and Public-private partnerships*, Brussels, June 2007, 19.

- Marine: high negative long term effects from severe weather/floods
- Agricultural: high negative long term effects from severe weather/floods and from heat/drought
- Motor own damage: high negative long term effects from severe weather
- Aviation Space: medium negative effects from severe weather/floods
- Contingency risk (cancellation): high negative effects from flood, storm and severe weather
- Health: medium negative effects from heat/drought
- Life: medium negative effects from heat/drought

2. *How are the risks linked to climate change to be defined?*

An important distinction must be made between the insurance lines that are directly affected by climate related factors, like flooding, storms, failing harvests, heat waves, etc. on the one hand, and those lines that are undergoing the impact of climate circumstances in an indirect way on the other hand.

An indirect impact is i.e. taking place when insurers invest their assets (matching assets) in enterprises that make less profit and yield a lower return on investment, because of their being affected by climate evolution.

3. *Insurer's initiatives to develop "new products"*

3.1. The so-called "green insurance products" are well known and some of them are effectively offered and underwritten in Belgium. Examples are a discount for hybrid cars, insuring on the basis of the number of kilometers driven, or the speed controlling black box.

The British climate change and insurance expert Andrew Dlugolecki, these new formulas are not without problems. Hybrid cars are technically complicated and reparations cost a lot. The black box is hurting the sensitive issue of privacy. Another example cited by the said expert are incitements that insurers can give (by cheaper rates e.g.) to make new homes less vulnerable to the consequences of flooding.

As to the question whether people will be found ready to step in those new products and insurances, premium incentives may not be sufficient. That is where the public authorities are supposed to step in by giving additional (e.g. tax) incentives, or by obligatorily imposing certain solutions.

3.2. The catastrophe insurance is a good and so far successful example of this last approach.

Because of its utter importance in the Belgian approach, special attention is given hereafter to the recent Belgian legislation and practice on the catastrophe insurance (see, *infra* C).

C. ANY ADDITIONAL INFORMATION OR COMMENTS:

Insurance of natural disasters in Belgium

1. Brief historic overview³³

In what follows, a rather extensive description is given of the main antecedents of the present legislation. The utter complexity of this preparation phase demonstrates the difficulty of striking the right balance between the various interests involved.

1.1. Situation before 2005

Before 2005 Belgium law provided that damage to goods caused directly³⁴ by natural disasters, such as floods, earthquakes or landslides, could be compensated by the National Disasters Fund by application of the Act of 12 July 1976³⁵. The compensation was granted to the owner of the goods upon the condition of the enactment of an official acknowledgement of the Belgian government that the disaster that occurred can be classified as a natural disaster. This declaration had to be based on the evidence that a natural phenomenon of an exceptional nature or of a severity that cannot be anticipated had occurred, causing serious damage³⁶. However, this compensation system was to be considered as a form of state aid and could not be qualified as an insurance regime³⁷. Under that regulation, private insurance of natural disasters was not compulsory in Belgium.

For insurance of privately owned buildings and household goods, of which the insured value is less than 1.070.900,03 Euro (index 109,67 November 2001) and small commercial goods, like small restaurants, or goods used in the non-profit sector, such as schools, hospitals, churches and museums, of which the insured value is less than 34.447.284,20 Euro (index 109,67 November 2001), classified as so-called “ordinary risks”, a special regulation existed, and still exists³⁸. In the event that the

³³ This description is based on C. VAN SCHOU BROECK, “The quest for private insurance for damage caused by natural disasters: A Belgian Case”, *Journal of Business Law* November 2003, 558-571.

³⁴ Court of Cassation (High Court) 5 October 2000, *Algemeen Juridisch Tijdschrift*. 2000-2001, 807; High Court 7 June 2002, C000630; Liège 4 April 1996, *Jurisprudence de Liège, Mons et Bruxelles* 1996, 1529, note DAL, A.

³⁵ Act of 12 July 1976 concerning the reparation of damage caused to private goods by natural disasters, *Belgian Official Gazette*, 13 August 1976, as amended several times.

³⁶ Article 2 of the Act of 12 July 1976; e.g. Court of Cassation (High Court) 24 October 1991, n°9078.

³⁷ See e.g. E. VAN NUFFEL, “Financiële tegemoetkoming van de Staat bij natuurrampen (algemene rampen in België)”, in H. COUSY and H. CLAASSENS (eds.), *Natuurrampen en verzekering. Verslagboek Negende Leuvense Verzekeringsdagen*, Antwerp, Maklu Publishers, 1995, 45-58 (résumé en français); P. ROUSELLE, “Verzekering tegen aanslagen en natuurrampen. België”, AIDA Colloquium, Ghent, 1986, *Bulletin des Assurances* 1986, 262-271; A. DAL, “Quelques cas d’application de la loi du 12 juillet 1976 relative aux calamités naturelles”, *Jurisprudence de Liège, Mons et Bruxelles* 1996, 1521-1524; M. FAURE and T. HARTLIEF, “Vergoeding van rampschade”, in *Ramp en recht. Beschouwingen over rampen, verantwoordelijkheid en aansprakelijkheid*, Boom, Juridische Uitgevers, 2001, 149; High Court 19 January 1995, *Pasinomie* 1995, I, 49.

³⁸ Article 1 §1 and §3 Royal Decree of 24 December 1992 concerning fire (and other perils) insurance for so-called ordinary risks, *Belgian Official Gazette* 31 December 1992. The term “ordinary risks” is defined in Article 67 of the Insurance Act of 25 June 1992 and Article 5 of the Royal Decree of 24 December 1992 concerning the implementation of Articles 30, 31, 44, 52, 67 and 70 of the Insurance Contract Act of 25 June 1992, *Belgian Official Gazette* 31 December 1992. The term “ordinary risks” accords, for the most part, with the listing of private property in the above-cited Article 3.A. of the Act of 12 July 1976.

aforementioned ordinary risks are covered for damage caused by fire, either in a multi-risk insurance contract or in a fire insurance contract, the coverage compulsorily extended to damage caused by storm, with up to 100% compensation³⁹.

1.2. Underlying reasons for change, political problems and objectives of a new compensation system

In the beginning of the 1990's the first consultations between the Belgian government and the (re)insurance sector on the features of a system of (compulsory) private insurance for the compensation of damages caused by natural disasters were initiated. The aim was to privatize, at least partially, the National Disasters Fund. The underlying reasons for such a major regulatory shift were threefold: (i) (partial) relief of the government's budget, (ii) the inefficiency of the current compensation system as a result of the slow procedures of damage assessment and settlement of claims and (iii) the small amount of compensation victims could obtain. As from the initial proceedings on, one focused solely on a compensation regime limited to the aforementioned "ordinary risks", in particular privately owned buildings and their content, household goods and small commercial goods or goods used in the non-profit sector of which the insured value does not exceed a defined amount (indexed). Private insurance for damage caused by natural disasters to industrial and commercial goods has until today not been envisaged.

The quest for an adequate and coherent regulation started in 1991 when the Belgian government consulted the Commission of Insurance⁴⁰ on the feasibility of compulsory fire insurance covering earthquakes⁴¹. In 1993, the majority of Belgian private insurance undertakings made a draft proposal concerning a partial insurance of damage caused by earthquakes. In the beginning of 1995, a new draft proposal on insurance of damage caused to goods by floods, earthquakes and landslides was launched⁴² inspired by the French regulation, on the insurance of a package of natural disasters. Meanwhile, representatives in Parliament also made efforts to initiate the debate⁴³. New hope of a breakthrough emerged when, in October 1998, the Belgian government approved a draft proposal on the private insurance of natural disasters⁴⁴. The draft's key features were largely inspired by the French model. It provided a

³⁹ Royal Decree of 16 January 1995, *Belgian Official Gazette* 11 April 1995, amending Royal Decree of 24 December 1992.

⁴⁰ Official advisory board to the competent minister, in which representatives of all parties involved in insurance (insurance undertakings, intermediaries, consumers and experts) are seated.

⁴¹ Commission of Insurance, *Advice Doc. C/91/14*, 17 July 1991 and *Advice Doc. C/93/8*, 23 February 1993.

⁴² See e.g. J. BOON, "Propositions des assureurs pour l'assurance des catastrophes naturelles en Belgique", in H. COUSY and H. CLAASSENS, (eds.), *o.c.*, 159-169 and comments by J. VANDEVELDE, A. DE BONDT, M. DEQUAE and J.P. COTEUR, *ibidem*, 169-197.

⁴³ Proposal for an Act by Mr. DE LOOR, *Documents of Parliament Senat* 1992-1993, n° 675/1, 9 March 1993; Proposal to amend the Act of 12 July 1976 by Mr. MICHEL, *Documents of Parliament Chamber* 1994-1995, n° 1583/1, 27 October 1994; Proposal on insurance for floods and earthquakes by Mr. DE RICHTER, *Documents of Parliament Chamber* 1996-1997, n° 1057/1, 2 June 1997; Proposal by Mr. PINOIE, *Documents of Parliament Chamber* 1994-1995, n° 30/1, 27 June 1995.

⁴⁴ See B. LETON, "Quelles sont les conséquences de la loi sur l'assurance obligatoire des catastrophes pour le monde de l'assurance?", in *proceedings of Workshop Réassurer de manière plus sûre et à coût réduit dans un marché en constante évolution*, Institute for International Research, Brussels, 28 April 1999; H. COUSY, "Rampenschade in België: nieuwe ontwikkelingen", in *Kring van aansprakelijken bij massaschade*, Letselschadereeks, 13, Den Haag, Koninklijke Vermande, 2002, 119-120.

“solidarity” at three basic levels. First, a solidarity among all insured who bought a fire insurance policy due to the compulsory extension of the fire coverage to an ex ante premium and certain specific standard policy conditions. The second layer consisted of solidarity among all fire insurers providing fire insurance activities in Belgium, by means of a mandatory membership of the reinsurance pool CANARA. The third and final layer consisted of a solidarity among all citizens via an unlimited State guarantee⁴⁵. Undeterred by this set back, on December 11, 2000, the Belgian government submitted a new proposal to Parliament⁴⁶. The flooding in the summer of 2002 had put the compensation as well as the prevention of natural disasters very high on the Belgian and European agenda⁴⁷. The Belgian Act introducing a system of private insurance for natural disasters was enacted on 21 May 2003 and inserted the new Articles 68-1 to 68-9 in the Insurance Contract Act of 25 June 1992⁴⁸. This regulation provided that fire coverage in insurance policies covering the aforementioned “ordinary risks” located in the risk zones should include compensation of damage caused by floods. This regulation could well be described as “political magic”, being the result of a deal closed between the majority in Parliament, to present whatever regulation on insurance of natural disasters before the national elections of May 2003. For several reasons, the Royal Decree to enforce this regulation was never enacted.

Finally, a substantially revised system of private insurance for natural damages was imposed by the Act of 17 September 2005, modifying the Articles 68-1 to 68-9 of the Insurance Contract Act of 25 June 1992.

1.3. Initiatives of the Belgian insurance market

It is interesting to note that the Belgian insurance market had not waited for the outcome of the legislative proceedings to take initiatives. Since the end of the 1990’s, some fire insurers started to grant a limited coverage for earthquake damage in fire insurance policies, regarding the so-called ordinary risks. Some years later, they provided, according to certain conditions, private insurance coverage for damage caused by landslides as well as floods, to goods geographically located in Belgium⁴⁹.

⁴⁵ The State guarantee could be already called upon at the level of the insurer if the event were of such a catastrophic nature that the loans issued by the reinsurance pool called for a State guarantee and full compensation of the insured damage would be guaranteed by the State. While no official advice was ever sought, informal contacts with the European Commission suggested that this proposal could infringe European Law. In the light of this information, the Belgian Conseil d’Etat refused to offer advice and the draft was withdrawn.

⁴⁶ Projet de loi du 25 juin 1992 sur le contrat d’assurance terrestre et la loi du 12 juillet 1976 relative à la réparation de certains dommages causés à des biens privés par des catastrophes naturelles, *Documents of Parliament Chamber* 2000-2001, n° 1007/1, www.dekamer.be – www.lachambre.be.

⁴⁷ See Communication from the Commission to the European Parliament and the Council, *The European Community response to the flooding in Austria, Germany and several applicant countries. A solidarity-based initiative*, COM (2002) 481, Brussels 28 August 2002; Commission, *Proposal for a council regulation establishing the European Union Solidarity Fund*, COM (2002) 514 final, Brussels, 18 September 2002.

⁴⁸ Loi modifiant la loi du 25 juin 1992 sur le contrat d’assurance terrestre et la loi du 12 juillet 1976 relative à la réparation de certains dommages causés à des biens privés par des catastrophes naturelles, *Belgian Official Journal (Moniteur belge)* 15 July 2003.

⁴⁹ A study calculated that floods could be considered as an insurable risk with regard to 97% of those insured in Belgium. For the remaining small group of the 3% insured, damage caused by floods was and that time excluded from coverage and considered to be the target group for a compulsory insurance

2. *Current regulation of private insurance of natural disasters*

2.1. Legal framework

a) The current Belgian regulation on private insurance for natural disasters, has been introduced by the Act of 17 September 2005⁵⁰, modifying the Articles 68-1 to 68-9 of the Insurance Contract Act of 25 June 1992.

b) This Act adds to the existing regulation of the aforementioned Royal Decree of 24 December 1992 on the insurance for fire and other perils covering “ordinary risks”, providing a compulsorily coverage up to 100% for damage caused by storm, snow and ice and hail.

c) Damages caused by natural disasters not falling under the scope of one of these Acts, remain under the scope of the above described compensation regime of the National Fund for Natural Disasters, as provide in the Act of 12 July 1976, such as damage to crop and agricultural damage.

With respect to crop and agricultural damage, private insurance coverage is partially given, in particularly by one Belgian insurance company which is specialized in this matter. The same company announces that it is presently preparing a so-called “broad weather insurance” in the field of agriculture. This insurance product is intended to fit in the new orientations of the EU agricultural policy, in which the technique of direct subsidizing will be gradually left behind, and where agricultural risks should be covered by insurance, the premium load of which would then be subsidized or sponsored.

The minister-president of the (regional) Flemish government has created a task force. Climate change might enhance the pressure on the proceedings of this task force, also because a transfer might enhance availability of insurance coverage and lead to alleviate the charges of the National Disasters Fund which is now covering the consequences of climate change on agriculture.

2.2. Compulsory coverage in a non-compulsory fire insurance

The Belgian system of private insurance for natural disasters as currently stated in the Insurance Contract Act of 25 June 1992, provides that insurance policies covering “ordinary risks”, as defined above (with a maximum insured value), for damage caused by fire shall extend the coverage to the compensation of damage caused by a “package” of well described natural disasters. Important to note is that the conclusion of a fire insurance policy is not compulsory. On the other hand, if the insurer refuses to cover the natural disasters, he can not offer a fire insurance policy.

of natural disasters, D. VERBEECK, “KBC en Fidea Natuurrampendeckking in woonverzekering”, *De Verzekeringswereld* 5 March 2002, 45-46.

⁵⁰ *Belgian Official Journal (Moniteur belge)* 11 Oktober 2005 and the interpretative Act of 1 March 2007, *Belgian Official Journal (Moniteur belge)* 14 March 2007.

See P. COLLE, “De wet van 17 september 2005 betreffende de verzekering van natuurrampen”, *Rechtskundig Weekblad* 2005-06, 881-885; K. BERNAUW, “De verzekering van natuurrampen”, *Bulletin des Assurances*, 2006, 153-168.

The enlisted insured natural disasters, defined on the one hand by the nature of the risk and on the other by the magnitude of the damage, are: (i) floods⁵¹, (ii) earthquakes with a minimum of four on the Richter scale and including the overflows or impoundments of public sewers, (iii) overflows or impoundments of public sewers as a consequence of rising water or atmospheric precipitation exceeding, of storm, of melting of ice and of snow or flood, and (iv) landslides or subsidence caused by a natural phenomenon, other than flood or earthquake⁵².

There is no requirement for compensation to be granted of any official acknowledgement that the event that took place was a natural disaster.

However, the insurer has the right to refuse coverage for flood, in case the building to be insured (and/or the content of it) was built in so-called “risk zones” more than 18 months after the publication of the Royal Decree defining these risk zones. Risk zones are territories subject to the risk of recurring and serious inundation which were defined by Royal Decree, after advice of the Regions on those place in accordance with the criteria set out by another Royal Decree⁵³. The demarcation of these risk zones in Belgium has proven to be a rather complex task⁵⁴. The country, traversed by numerous rivers and streams, is small, densely populated, and heavily built up (often, even on riverbeds that, while dry in the summer months, can flood during other periods of the year).

2.3. Three layers of solidarity

The law organises a system of “solidarity” between the insured persons and even wider, at three levels.

First, the compulsory extension of the fire coverage to the mentioned natural disasters imposes a solidarity among all insured who bought a fire insurance policy. Each private fire insurer compensates his own insured, in accordance with the policy conditions to which both parties as agreed upon. The insurer has the right to impose its insurance conditions, with the exception of the application of certain specific mandatory insurance requirements. One such major insurance condition is that the insurance must cover damage which is directly caused to the goods or indirectly caused, such as damage caused by a fire following an earthquake as well as damage caused by safety measures ordered by competent public authorities.

In addition, buildings and contents must be covered up to 100 % of the insured value. Concerning the insured goods, the insurer has the right to exclude certain goods or damages from coverage, such as damage that took place outside the building or damage caused to buildings under construction, motor vehicles, airplanes or transported goods. In particular with regard to floods, some specific exclusions are allowed.

⁵¹ Flood is defined as “where lakes, ponds, watercourses or seas burst their banks as a result of atmospheric precipitation, melting of ice or snow, breaking of dykes or tidal wave”.

⁵² This list can be enlarged by Royal Decree.

⁵³ The risk zones were set out by Royal Decree of 28 February 2007, *Belgian Official Journal (Moniteur belge)* 23 March 2007; www.gisvlaanderen.be; the Royal Decree of 12 October 2005 defines the criteria, *Belgian Official Journal (Moniteur belge)* 21 November 2005.

⁵⁴ See for private studies mapping out the vulnerable flood areas in Flanders and in Belgium, *Proceedings Symposium Ruimte voor water, de beste verzekering tegen wateroverlast*, Brussels, 15 May 2001, in particular J. VAN ORSHOVEN, “Van nature overstroombare en recent overstroomde gebieden in Vlaanderen” and J. BOGAERT, “De realisatie van overstromingsgebieden in Vlaanderen: een case study”.

The insured pays the premium for the fire insurance coverage together with the additional premium for the natural disasters coverage directly to the fire insurer. The premium is set by the insurer. In addition, the insurer is allowed to define an excess for natural disasters of up to a legally defined maximum of 610 euro per sinister.

The second and third layers form together a so-called “public private cooperation. The second layer consists of solidarity among all fire insurers providing fire insurance activities in Belgium. Each individual private insurer has the right to limit the total amount of loss to be covered on an event basis, within statutory defined minima⁵⁵. If the damage exceeds this ceiling, there shall be a proportional reduction of the insurer’s payment for each individual insured. The insured has nonetheless a right of full compensation for the insured damage according to the conditions of his contract.

To attain this full compensation of damage, the Act provides that in the event the insurer asserted his right to limit his financial contribution, the excess of the damage shall be paid by the Natural Disasters Fund⁵⁶. Here the National Disasters Fund plays a role which is comparable to the one of an “excess of loss” reinsurer. However, the National Disasters Fund has an equal right to limit the total amount of its contribution to 700.000.000 euro in the event of an earth quake, or to 280 000.000 should one of the other insured events occur. If the National Disasters Fund ceiling is exceeded, the Fund shall compensate each insured individual on a pro rata basis. Notwithstanding the National Disasters Fund’s financial role, exceptional circumstances left aside, the private insurer must make the payment to the insured. In those cases where the insurer, by doing so, makes an advance payment for what is finally due by the National Disasters Fund, he must be paid back within a given period of time. The National Disasters Fund plays also the role of a guarantee fund in certain exceptional circumstances, such as in the event of bankruptcy or withdrawal of the license from the fire insurer. In such case, the compensation that the National Disasters Fund must pay to the victims shall be equivalent to the compensation that would have been paid by the fire insurer⁵⁷.

⁵⁵ The insurer can limit the total amount of compensation for damage caused by a natural disaster, except earth quake, to a sum which corresponds to the lowest sum to be obtained by application of one of the two following formulas:

a) $(0,45 \times P + 0,05 \times S)$ with a minimum of 2.000.000 euro (index), or b) $(1,05 \times 0,45 \times P)$ with a minimum of 2.000.000 euro (index).

where:

P stands for the sum collected by the insurer (acquisition costs excluded) with regard to his portfolio of fire insurance concerning ordinary risks during the financial year prior to the insured event; and S stands for the amount of compensation the insurer has to pay for a natural disaster, other than earth quake exceeding $0,45 \times P$.

With regard to earth quake, the insurer can limit the total amount of compensation for damage caused by a earth quake, to a sum which corresponds to the lowest sum to be obtained by application of one of the two following formulas:

a) $(1,20 \times P + 0,05 \times S)$ with a minimum of 2.000.000 euro (index), or b) $(1,05 \times 1,20 \times P)$ with a minimum of 2.000.000 euro (index).

where:

P stands for the sum collected by the insurer (acquisition costs excluded) with regard to his portfolio of fire insurance concerning ordinary risks during the financial year prior to the insured event; and S stands for the amount of compensation the insurer has to pay for an earth quake exceeding $1,20 \times P$.

⁵⁶ Article 68-8 of the Insurance Contract Act and Articles 34-1 to 34-6 of the Act of 12 July 1976.

⁵⁷ Article 34-2, 2° of the Act of 12 July 1976.

Since damage caused to the aforementioned insured goods are considered as insurable by private insurance undertakings, victims can no longer file a claim against the National Disasters Fund to receive solidarity compensation on the basis of the Act of 1976, not even if they were not insured. As a result, victims (with certain limited exceptions) can no longer file a claim against the National Disasters Fund to receive a solidarity compensation on the basis of the Act of 1976.

2.4. Tarification Bureau

Since there is no obligation to take-out fire insurance, nor an obligation on behalf of the insurer to accept the risk, there is a considerable risk of uninsurability of aggravated or highly exposed risks (even those not situated in a risk zone).

To prevent this, the individual applicant can submit an application to a Tarification Bureau⁵⁸. The risk is considered to be aggravated, and consequently considered to be not insurable on the market, when the insurer refuses coverage or demands a premium or an excess which is higher than the tariff conditions of the Tarification Bureau.

Under these circumstances, an individual could submit an application to the Tarification Bureau, composed of representatives from insurance undertakings as well as consumers and managed on a day to day basis by the National Disasters Fund.

The task of this Bureau is to find adequate insurance coverage and define the insurance conditions, in particular, the premium. The individual insurance contract shall be concluded, under the conditions and premium defined by the Bureau, by the fire insurer active on the Belgian market and freely chosen by the candidate policyholder. The damage and costs related to these aggravated risks are pooled on a *pro rata* basis among all fire insurers underwriting fire insurance coverage for the aforementioned so-called ordinary risks in Belgium (in proportion to the insurance undertakings portfolio in fire insurance)⁵⁹.

2.5. Prevention

One of major drawbacks of the Belgian regulation of insurance of natural disasters is the lack of preventive measures. With the exception of the regulation on risk zones and the possibility of excluding certain defined goods from coverage, the Act does not in any way deal with the linkage of prevention to insurance by means of, for example,

⁵⁸ Royal Decree of 25 February 2006 on the installation and conditions of the operation of a Tarification Bureau concerning natural disasters, the obligations of the insurers and procedures before the National for damage of natural disasters, *Belgian Official Journal (Moniteur belge)* of 1 March 2006; Tariff and general conditions 2006 Tarification Bureau natural disasters, *Belgian Official Journal (Moniteur belge)* 6 March 2006; Ministerial Decision of 6 March 2006 on the procedural regulation of the Tarification Bureau, *Belgian Official Journal (Moniteur belge)* 24 March 2006, www.ejustice.just.fgov.be.

⁵⁹ Article 68-9, §5 of the Insurance contract Act; Article 68-10 of the Insurance Contract Act with regard to the Compensation Body; Royal Decree of 8 December 2006 on the application conditions and control of the Compensation Body, *Belgian Official Journal (Moniteur belge)* 22 December 2006; Royal Decree of 27 February 2008 on Statutes and procedures of the Compensation Body, *Belgian Official Journal (Moniteur belge)* 6 March 2008.

reducing or excluding compensation according to the fulfilment of specific construction requirements⁶⁰.

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⁶⁰ Under Belgian law, one can lodge a liability claim against local authorities or the State in case of damage caused by natural disasters, see e.g. M. BOES, “Natuurrampen en aansprakelijkheid van de overheid in België”, in H. COUSY and H. CLAASSENS (ed.), *o.c.*, 59-73. On the prevention against flood risks in Belgium, e.g. KINT, *Hoogwaterstanden en overstromingen in België. Een evaluatie van de niet-tastbare kosten*, Brussels, April 2001, 47p.; P. MEIRE, “Overstromingen: bedreigingen maar ook kansen voor een integraal waterbeheer”, in *Proceedings Symposium Ruimte voor water, de beste verzekering tegen wateroverlast*, Brussels, 15 May 2001, 10p.