

2012



# ICELAND CATASTROPHE INSURANCE RENEWAL INFORMATION 2012

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Cover photo: Fimmvörðuháls Volcanic Eruption 2010  
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## INTRODUCTION

Iceland Catastrophe Insurance (ICI) was founded in 1975 as a public undertaking by a special Act of the Althing (parliament) of Iceland. Iceland Catastrophe Insurance functions as an insurance company. The purchase of catastrophe insurance for earthquake, volcanic eruption, snow avalanches, landslides and floods is compulsory for all buildings; as well as for contents insured against fire. Buildings are insured according to their valuation for fire as assessed by the State Land Registry. Since fire insurance of buildings is compulsory in Iceland, all buildings are likewise insured against natural perils covered by the programme.

The catastrophe cover is a stand-alone policy; the fire insurance companies collect the premiums alongside fire premiums in exchange for a collection fee. There is a single premium of 0.25 %. Infrastructure lifelines - waterworks, geothermal heating systems, sewage systems, electric installations, bridges and harbour installations - not normally insured against fire, are separately insured with the Corporation. The premium is 0.2 % for lifelines. The policy only insures against direct losses resulting from the above mentioned catastrophes. There is a deductible of 5% for each loss as well as a minimum deductible indexed according to the building costs index.

In the early 2011 a committee was established by the Prime Minister's Office in order to review the ICI Act. The aim of the review is to clarify the ICI underwriting and responsibility to the policyholders and to reinforce the frame around the operation. The potential new legislation is in general not supposed to affect the reinsurance cover. However any changes will be appropriately introduced to the reinsurers in the future.

### Extent of cover

Based on information from the private insurance companies, as at October 2011, Iceland Catastrophe Insurance covers assets of ISK 8,747 billion situated all over the country as opposed to ISK 8,377 billion 12 months ago. This represents an increase of 4.4 % which is due to price increases as reflected by the Index of Building Costs. Because of the compulsory nature of the insurance, assets from relatively low risk areas such as the Capital region (60%) make up most of the portfolio. There are also notable exclusions from cover, such as the hydroelectric power plants in the central region which are reinsured separately on a facultative basis. Aluminium smelting plants (the largest industrial concerns in Iceland) are exempt from cover. Contents of government buildings (such as hospitals, schools, government offices and telecommunication installations) are as a matter of public policy generally not insured against fire and hence not against the catastrophes covered by ICI.

Although ICI offers and buys protection for a wide spectrum of natural perils including seismic and volcanic perils, the reinsurance protection has generally been geared around the seismic hazard.

Windstorm is not covered. Other perils such as floods and avalanches may cause isolated damage but it is unlikely that an event could exhaust the Fund's own retention.

## EARTHQUAKE HAZARD

Iceland is a large country but sparsely populated with human habitation scattered around the coastline. The main concentration of aggregates is in the Capital Area of Reykjavík which taken as a whole comprises 60% of the total aggregate values covered by the Programme. It is therefore not surprising that reinsurers have expressed an interest in the probability of a major earthquake in the Reykjavík area. A PML survey conducted in 1991 thus concentrated on a medium sized event centred in the vicinity of Reykjavík. There is nothing in the historical record (which dates back to the founding of a monastery in Reykjavík in 1225) of such an event. Icelandic seismologists are of the opinion that the probability of such an event taking place is far lower than the BEQE estimate (1/1000 for a magnitude 5 event) but lack of specific study makes any assessment difficult. Such an event is believed to principally affect the easternmost suburbs of Reykjavík. The probability of a larger event in the Reykjavík area was assessed at 1/10,000 years in the PML survey, which places Reykjavík on par with cities like St. Louis in the US.

There are two main earthquake hazard areas in Iceland: The South Iceland Seismic Zone (SISZ) and the North East Seismic Zone (NISZ). Areas in both SISZ and NISZ with insured assets likely to be affected by major earthquakes share about 10% of the total asset values in Iceland. Both are largely rural areas. In terms of percentages about 9% of the total asset values are located in the Southern Region. About 25% of these are located in areas not likely to be affected by a major earthquake. South Iceland covers the largest agricultural region in Iceland, i.e. the South Iceland lowland (SIL). Several small towns or villages, schools, medical centres, industrial plants, geothermal and hydropower plants, and several major bridges are within this area. The North East region, with about 29,000 inhabitants, has similar structure as the Southern Region and a share of 9% of the total asset values. The principal town of Akureyri and surrounding rural area account for 65% of these values and is not in the seismic area. There was a sizable earthquake in the North East in 1976 after the Fund came into being but damage was negligible. It is therefore mainly the Southern region, which the Catastrophe Fund takes into account in structuring its reinsurance cover.

In June 17<sup>th</sup> and 21<sup>st</sup> the year 2000, two earthquakes of magnitude 6.6 and 6.5 ( $M_w$ ) happened in South Iceland. The highest recorded peak ground acceleration in these earthquakes was 0.84g. The surrounding area of both the earthquakes is rural with the small village Hella in about 12 km distance from the June 17<sup>th</sup> event epicentre and the small town Selfoss in about 15 km distance from the June 21<sup>st</sup> event epicentre. Despite the significant earthquake intensity, no residential buildings collapsed, and only a very few (less than 5) farm buildings, but a considerable number of houses were damaged. However, claims following the two earthquakes in 2000 did not exhaust the Fund's own retention.

### 2008 Earthquake

In May 29<sup>th</sup> 2008 a 6.3 ( $M_w$ ) earthquake shook the western part of the South Iceland Seismic Zone (SISZ). The population in the affected area is about 18,500 inhabitants and there are approximately 6000 residential houses, mostly low-rise buildings.

The 2008 earthquake caused serious damage to buildings in the rural area close to the epicentre and also in the two small towns Hveragerði and Selfoss, in about 4 km and 7 km distance from the epicentre, respectively. Significantly less damage was observed in the small villages Eyrabakki and Stokkseyri and in the rural area at further distance from the epicentre.

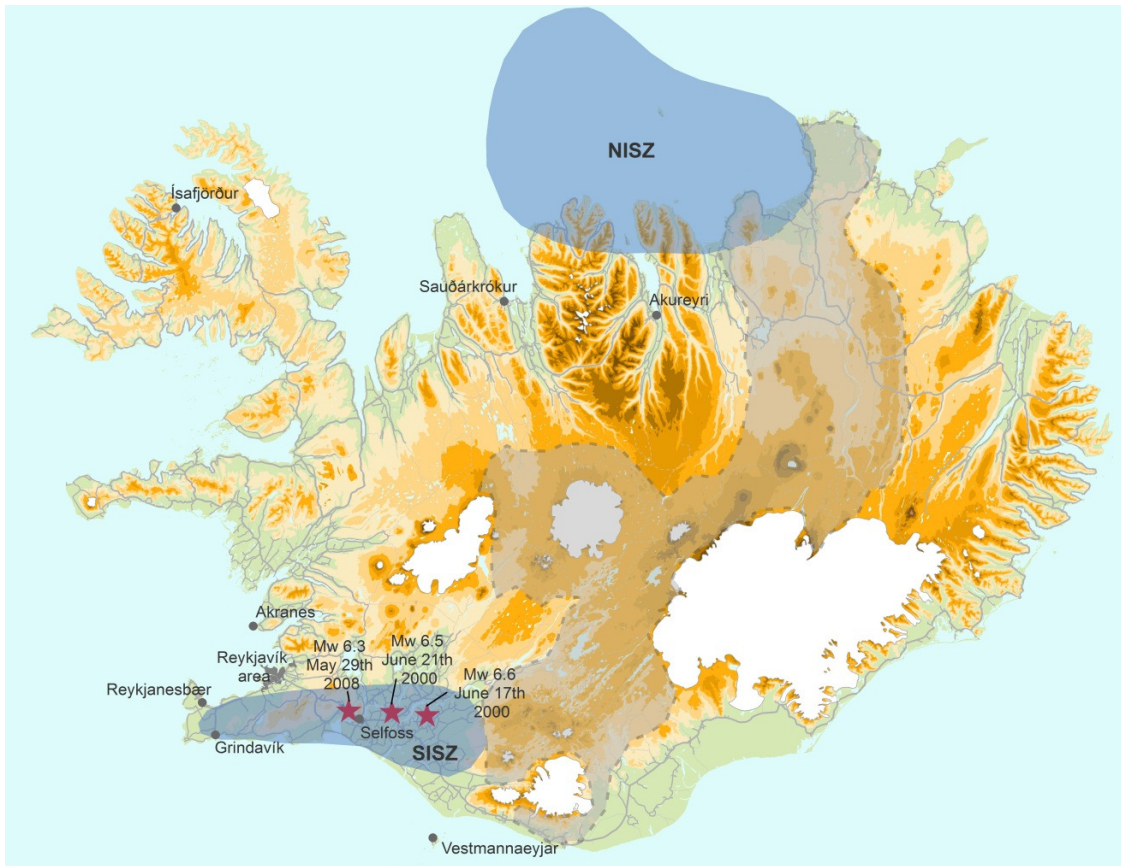


Figure 1 The two main earthquake zones in Iceland, NISZ and SISZ and the three major earthquakes in 2000 and 2008

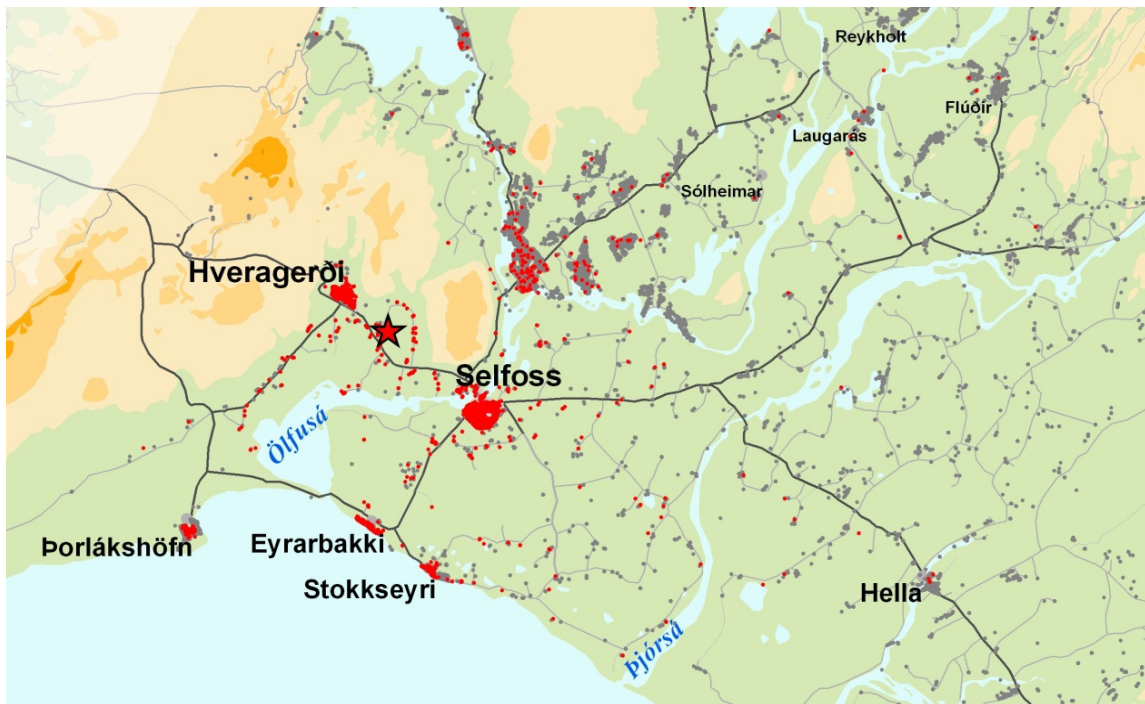


Figure 2 Damaged buildings in the 2008 earthquake, where red dots indicate damage

The total paid out loss in the 2008 earthquake is at October 2011 ISK 9,398,697,434 in 4464 claims. There of adjustment costs is ISK 1,260,409,584. The ICI deductible in 2008 was 6,500 million ISK; hence the reinsurance loss is ISK 2,898,697,434.

It should be emphasised that the 2008 earthquake is the Icelandic Catastrophe Insurance only reinsurance claim since 1976

<b>Losses in the 2008 Earthquake as at October 2011</b>	
	<b>ISK*</b>
<b>Buildings</b>	7,105,263,350
<b>Contents</b>	1,027,528,786
<b>Assessment Cost</b>	1,260,409,584
<b>Total Loss</b>	<b>9,398,697,434</b>

\*Interests included

A principal feature of the loss is the accumulation of minor losses to finishing items: (flooring, painting and surface treatment, fitment, bathroom appliances and interior doors) accounting for 39% of the paid out claims amount in Selfoss and 54% of the claims amount in Hveragerði. The only building classes where structural damage was more costly than non-structural damage are pumice, garage pumice and older farm buildings. As a lesson in loss estimation, the 2008 event has shown that interior finishing deserve as much attention as serious structural losses, as finishing touches have become more important

## New Earthquake Risk Model for Iceland

In the aftermath of the 2008 earthquake, which caused serious damage in the western part of the Southern Region, it was obvious that a major revision of the inherent earthquake risk and loss probabilities was required. It should be mentioned that after the 2008 quake as well as after the two destructive earthquakes in 2000 in the Southern Region, all damaged houses and facilities were inspected and the loss evaluated by technical experts (engineers and surveyors). This has resulted in a unique database where detailed information about the buildings, year of construction, size, materials etc., and the damage incurred by the earthquakes, has been compiled with over 4000 entries. This database is made more useful when combined with the Land Registry Database, which is unique in the sense that all buildings in the country are registered in a common unified database with detailed description, GPS coordinates replacement value, which is used (with depreciation factors for age and upkeep) as a basis for the obligatory fire insurance for the whole country. Furthermore, since the 1980's an important series of PGA measurements has been collated upon which a great deal of work on the specific attenuation of earthquakes in Iceland has been based leading to the special attenuation formulae used in hazard maps for building codes and in the modelling of earthquakes.

After the 2008 event it was clear that the next step would have to be to construct a fully probabilistic model and this was made possible with the co-operation and contribution of Guy Carpenter, the reinsurance intermediary of the Iceland Catastrophe Insurance.

## Methodology

1. An extensive scientific data including bibliography with list of published papers and reports regarding seismicity, geology and geophysics in Iceland and a comprehensive catalogue of historical earthquakes was collected by experts at the University of Iceland.
2. The hazard module was built by state-of-the-art techniques by Cat Risk Solutions which has a strong track record in the field of earthquake modelling for the insurance market. All outputs were peer reviewed by local experts.
3. The Land Registry (Iceland Registers) supplied the building database including detailed information of all buildings in Iceland. All building types were classified into 19 descriptive classes.
4. Vulnerability functions (damage functions) were derived for the 19 building classes by working with the collected data from the comprehensive damage surveys following the 2008 earthquake.
5. Finally, a fully probabilistic model for Iceland based on the components above and the widely used Guy Carpenter's G-CAT® modelling platform was introduced in September 2011.

In addition to the probabilistic modelling exercise, the consulting firm Verkis has developed a quick response deterministic model that can model specific events such as all major historical earthquakes and can also be used to verify by sampling the results of the probabilistic model. Furthermore the quick response model is useful for claim management of the ICI.

## VOLCANIC HAZARD

In general the volcanic hazard can be categorized as follows:

1. Glacial floods, generally affecting the rural farm lands on the south coast of Iceland. From the three glaciers, Vatnajökull, Eyjafjallajökull and in particular Katla, could be the most threatening in this respect.
2. Downpour of tephra and fluorine poisoning of crops and livestock which is not insured by the Fund. Again the south Iceland farmlands could be the most affected.
3. Rural installations such as power stations, telecommunication lines and equipment, roads and bridges could be affected. The very fine tephra from Eyjafjallajökull 2010 and Grímsvötn 2011 was noticed in Reykjavík, more as an annoyance rather than calamity.
4. Major basaltic flood eruptions (similar to the Laki eruption in 1783, which had widespread effects all over Europe) would mainly be hazardous to power stations and communication lines. Business interruption is not covered by the Fund
5. Lava flows from future effusive eruptions. This is especially true for the entire Reykjanes Peninsula with several small towns and the Keflavík international Airport at risk. Lava flows in Reykjavík and surrounding towns last occurred in Post glacial times.
6. Very large explosive eruptions ( $VEI \geq 6$ ) in central volcanoes close to inhabited areas (for instance Öraefajökull 1362) might have serious effect on farms and villages. But no known active volcanoes are close to large urban centres in 2011.

## Eyjafjallajökull and Grímsvötn Eruption

### Eyjafjallajökull Eruption 2010

On 21<sup>st</sup> March 2010 a volcanic fissure opened up in Fimmvörðuháls, a desolated ice-free mountain-range lodged between two glaciers, Eyjafjallajökull (an active volcano that last erupted in 1822) and Mýrdalsjökull, containing the active volcano Katla (last eruption 1918).

There was no damage to insured buildings or contents. This proved to be a short and scenic prelude to a more serious eruption of Eyjafjallajökull which began on April 14<sup>th</sup>, the day after the Fimmvörðuháls eruption ended abruptly. Although a middling sized eruption by Icelandic standards the Eyjafjallajökull eruption soon became a global event and caused the cancellation of over 100,000 flights. The eruption lasted for just over a month with very little activity after May 22<sup>nd</sup>.

The glacial flood or Jökulhlaup (an international Icelandic technical term as this type of event is common in Iceland) followed quickly in its wake. Flood barriers, held, and by cutting through the main highway, the local river bridge was not damaged.

Ash fall, however, caused minor losses to nearby farms which were inundated with ash and tephra.

### Grímsvötn Eruption 2011

On May 21<sup>st</sup> 2011 the largest eruption in Iceland for the last decades began in Grímsvötn (sub-glacial lakes) in the north western side of the Vatnajökull icecap. Grímsvötn is the most active volcano in Iceland, with its last eruption in 2004.

Most of the economic losses were suffered by farmers and were uninsured. Such losses as there were only minor, such as damage to only metal cladding, window panes, external walls and floor finishings.



Figure 3 The tourist attractive lava flow of the 2010 eruption in Fimmvörðuháls

## CATASTROPHE INSURANCE COVERAGE

All property and contents insured against fire are automatically insured against natural perils (earthquake, volcanic eruptions, snow avalanches, landslides, floods) at the Iceland Catastrophe Insurance for the same insured value as per fire policy with premiums collected by insurance companies. Certain infrastructures not normally insured against fire are insured as per assessed value (replacement costs) with premiums collected directly by Iceland Catastrophe Fund. Business Interruption is not covered by the Fund or by this reinsurance. Government owned equipment is not insured as a rule against fire and hence natural perils. As per Icelandic Law May 1992 see Appendix I.

### Rates

1. 0.25 ‰ in respect of personal and commercial property.
2. 0.20 ‰ in respect of bridges, geothermic hot water installations, sewer installations, including distributors, publicly owned infrastructures (providing that the institutions concerned have subscribed to the Catastrophe Insurance Protection).

### Deductibles

1. Personal property, 5% retained subject to a minimum retention of IKR 85,000 indexed in accordance with the Building Index.
2. Bridges, hot water installations, sewer installations, harbour installations, electrical installations, including distributors and dams, telegraphic installations including radio, T.V. and aircraft communications, 5% retained subject to a minimum retention of IKR 850,000 indexed in accordance with the Building Index.

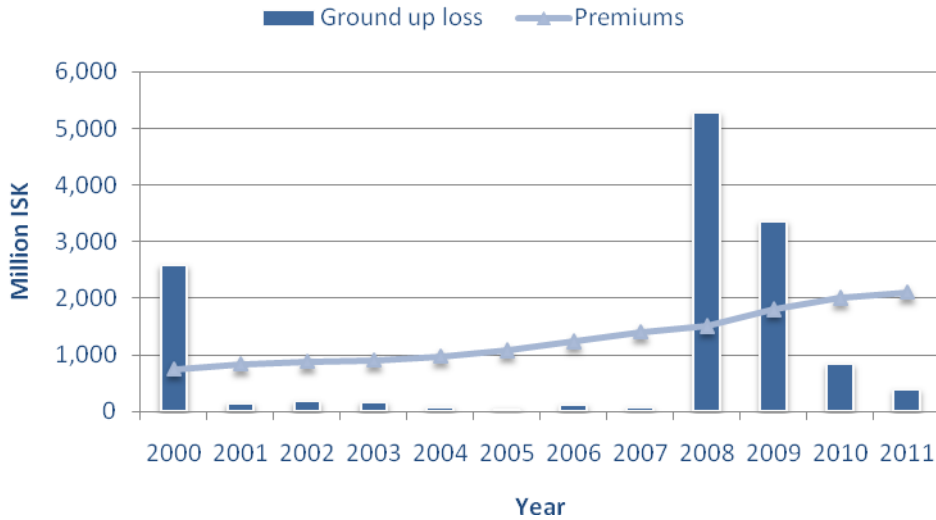
## ICI Premium Income and Ground up Losses

For 2011 the Net Premium Income is estimated at 2,100 million ISK and 2,300 million ISK for the year 2012. The ground up loss is mainly due to the 2000 and 2008 earthquakes.

Premium vs. Losses million ISK		
Year	Paid Losses	Issued Premiums
2000	2,045	747
2001	578	830
2002	172	867
2003	137	977
2004	125	985
2005	62	1,133
2006	46	1,235
2007	65	1,402
2008	5,345* <sup>1</sup>	1,611
2009	3,442* <sup>1</sup>	1,900
2010	857	2,031
2011	390* <sup>2</sup>	2,100* <sup>2</sup>
<b>Total</b>	<b>13,264</b>	<b>15,818</b>

\*<sup>1</sup>The ground up loss in 2008 and 2009 is caused by the 2008 earthquake but in the Funds books the loss is split between the two years.

\*<sup>2</sup>Estimated as at October 2011.



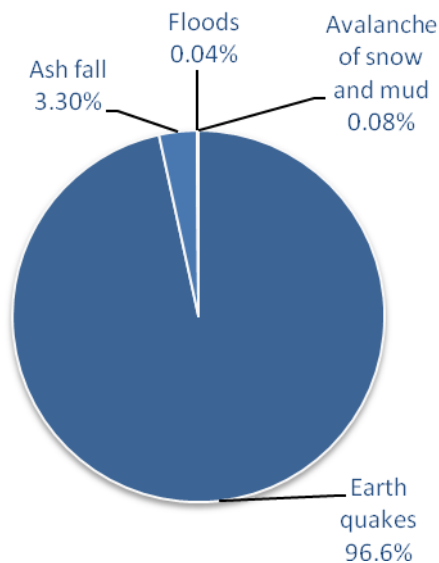
### Recent Events and insured Losses

The table below shows losses from ten events, insured by ICI for the last four years. Vast majority of the loss is caused by the 2008 Ölfus earthquake or about 96%. Loss due to ash fall (tephra) in the two eruptions in Eyjafjallajökull 2010 and in Grímsvötn 2011 is 280 million ISK. Six minor events are related to floods and avalanches.

2008-2011 Perils and Losses as at October 2011 ISK

	2008	2009	2010	2011	Total
<b>Earthquakes</b>	5,275,534,260	3,314,011,965	794,317,871	132,658,959	<b>9,516,523,055</b>
<b>Ash fall</b>	0	0	38,244,397	242,139,602	<b>325,023,123</b>
<b>Floods</b>	2,891,863	44,639,124	0	787,238	<b>3,679,101</b>
<b>Avalanche snow/mud</b>	0	0	0	7,997,590	<b>7,997,590</b>

2008-2011 Losses by Perils



## REINSURANCE COVER

Iceland Catastrophe Insurance has since 1975 purchased Excess of Loss reinsurance cover on the global catastrophe reinsurance market. It was loss free until the 29<sup>th</sup> of May 2008 event. The Icelandic reinsurance program is a non-accumulative exposure as an event in Iceland will not in all likelihood generate losses elsewhere. All losses on covered perils will emanate from the Iceland Catastrophe program since there are no other catastrophe insurance programs in Iceland. The laws and regulations governing the program are clear and precise. Losses in property and contents will be paid up to a certain limit, but no indirect losses, such as business interruption or economic losses resulting from an event. Adjustment of losses is dealt with by engineers and other qualified assessors appointed directly by ICI or in some instances by the fire insurance companies. For the full text of the law and regulations governing Iceland Catastrophe Insurance, see App. I-II.

## Icelandic Catastrophe Insurance Program

### Perils Covered

- Earthquake
- Volcanic Eruption
- Snow Avalanches
- Landslides
- Floods
- Perils as closer defined in Regulations, Article 1
- Direct Losses Only

### Compulsory Coverage for

- Homes and Commercial Buildings
- Contents if Insured
- Lifelines Including:
  - Waterworks and Sewage
  - Geothermal Heating Systems
  - Electric Installations
  - Bridges and Harbours
  - Ski lifts

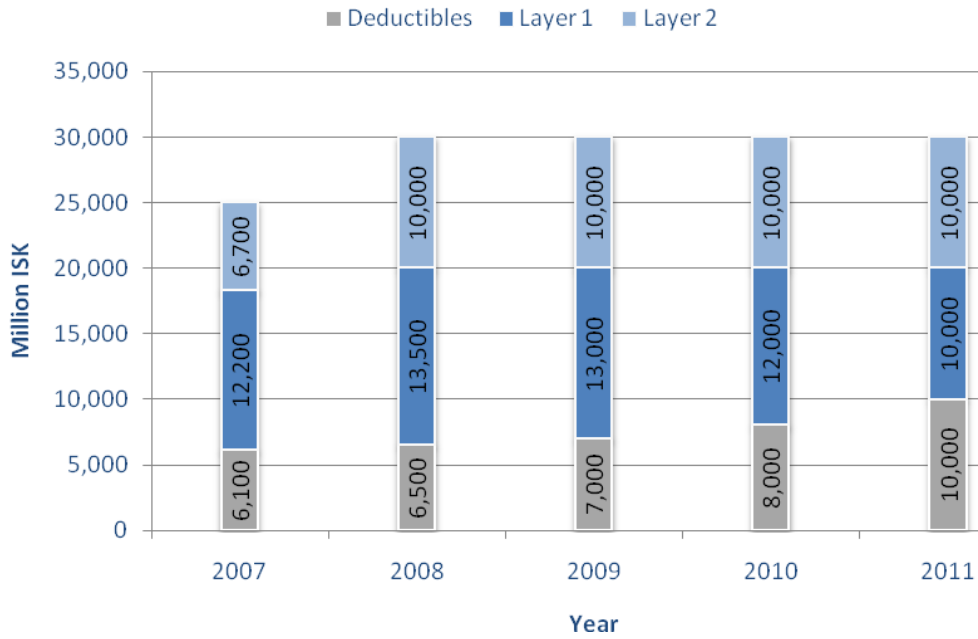
### Premiums and Deductibles

- 0.25 ‰ for buildings and contents
- Collected by Fire Insurance Companies
- 0.20 ‰ for lifelines
- Collected by Iceland Catastrophe Insurance
- Deductible of 5% for each loss
- Minimum Deductible
- Universal Premiums Set by Law

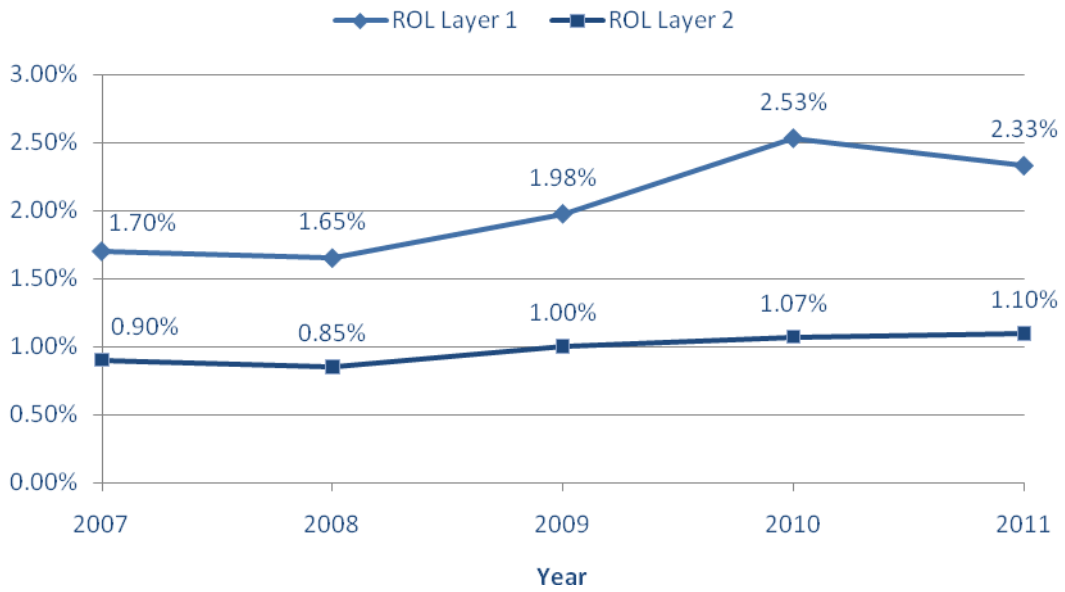
### Insurance Values

- Buildings According to Fire Valuation
- Contents as Insured
- Lifelines at Replacement Costs

Reinsurance Layers and deductibles 2007-2011

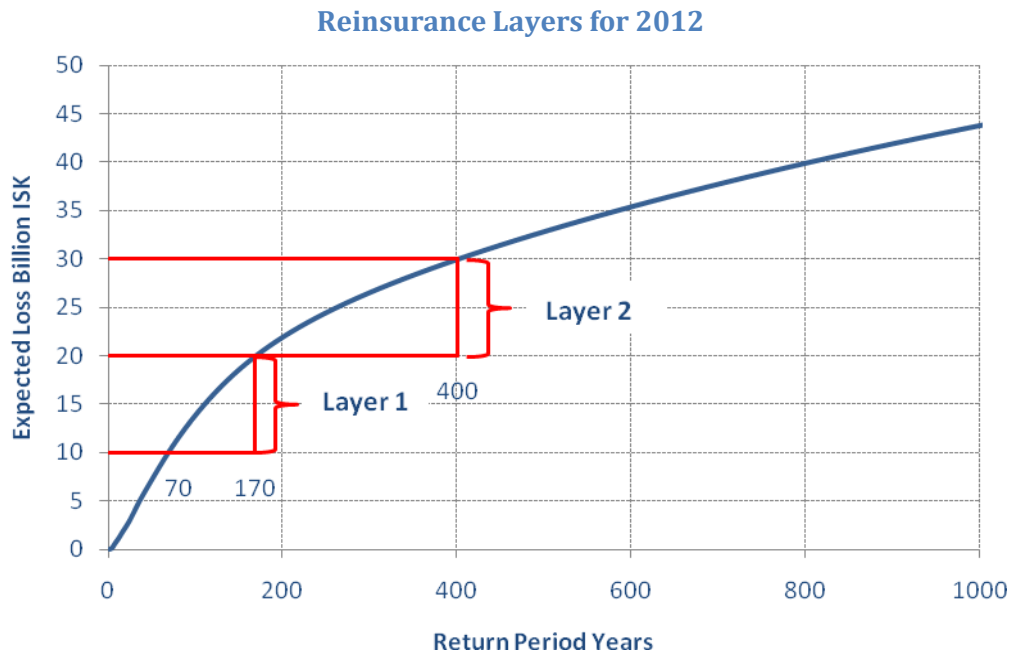


Rate on Line 2007-2011



### Reinsurance Layers for 2012

The two reinsurance layers for 2012 are shown on the figure below. Layer 1 is 10,000 million over 10,000 million ISK with estimated return period from 70 to 170 years. Layer 2 is 10,000 million over 20,000 million ISK with estimated return period from 170 to 400 years.



### Additional relevant points

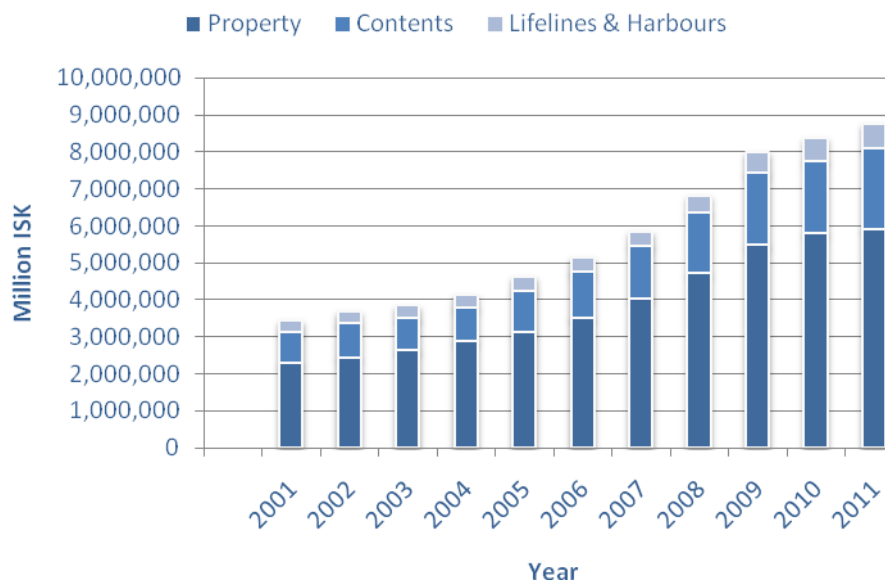
1. Loss adjustment costs shall be included in the calculation of the ultimate net loss.
2. Power Stations including dams owned by National Power Company are presently reinsured separately on a facultative basis.
3. Management: The Fund retains a 15% Management costs.
4. Average will apply to Under Insured Property.

## EXPOSURE INFORMATION

Sum Insured Aggregates in million ISK

Year	Properties	Contents	Harbours & Lifelines	Total
2001	2,275,215	853,251	303,513	3,431,979
2002	2,429,001	917,597	333,700	3,680,298
2003	2,625,742	866,959	342,418	3,835,120
2004	2,881,653	907,447	346,569	4,135,669
2005	3,134,645	1,110,048	381,993	4,626,686
2006	3,502,554	1,249,798	384,473	5,136,824
2007	4,019,317	1,438,240	388,634	5,846,191
2008	4,711,354	1,649,376	447,924	6,808,653
2009	5,473,365	1,965,453	556,405	7,995,223
2010	5,791,699	1,953,446	632,219	8,377,364
2011	5,907,877	2,190,872	647,776	8,746,525

Sum Insured Aggregates in million ISK

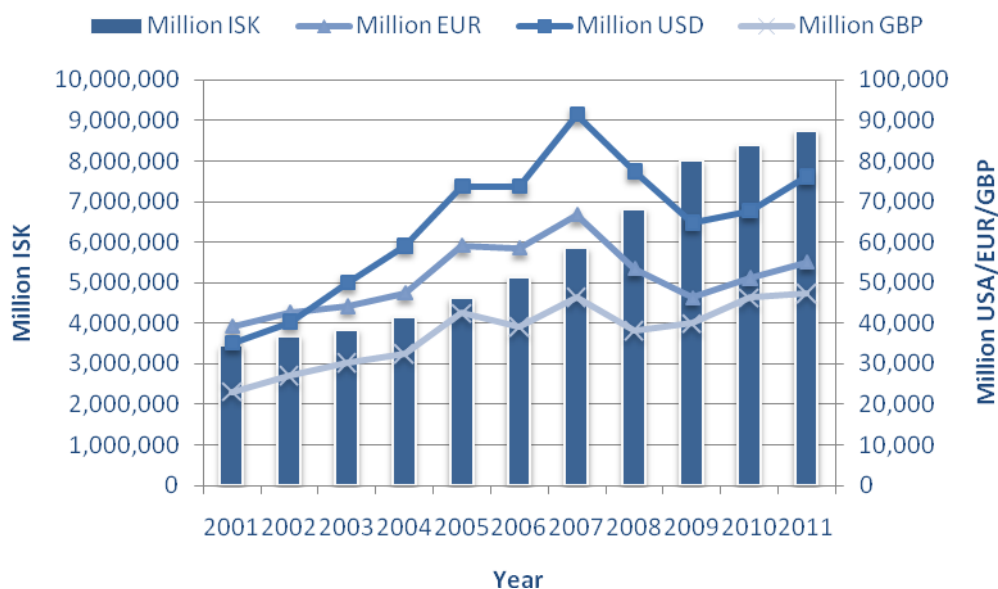


## Total Aggregates ISK, USD, EUR, GBP

Year	Million ISK	Million USD	Million EUR	Million GBP
2001	3,431,979	35,105	39,225	23,127
2002	3,680,298	40,241	42,693	27,147
2003	3,835,120	49,965	44,224	30,401
2004	4,135,669	58,979	47,457	32,498
2005	4,626,686	73,606	5,921	42,478
2006	5,136,824	73,618	5,856	39,191
2007	5,846,191	91,324	66,736	46,524
2008	6,808,653	77,306	53,420	38,270
2009	7,995,223	64,689	46,304	39,966
2010	8,377,364	67,642	51,153	46,363
2011	8,746,525	76,057*	55,010*	47,497*

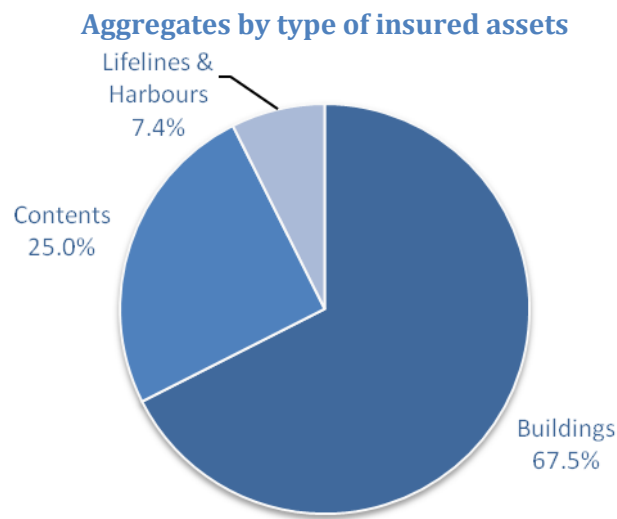
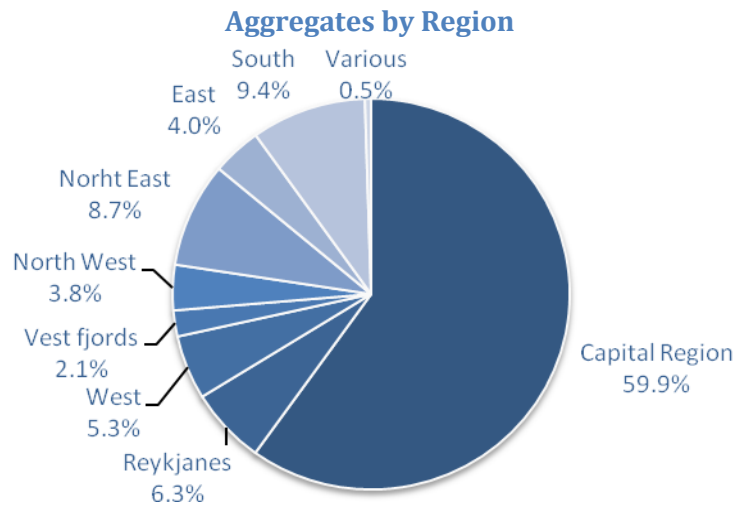
\*Exchange rate in October 2011

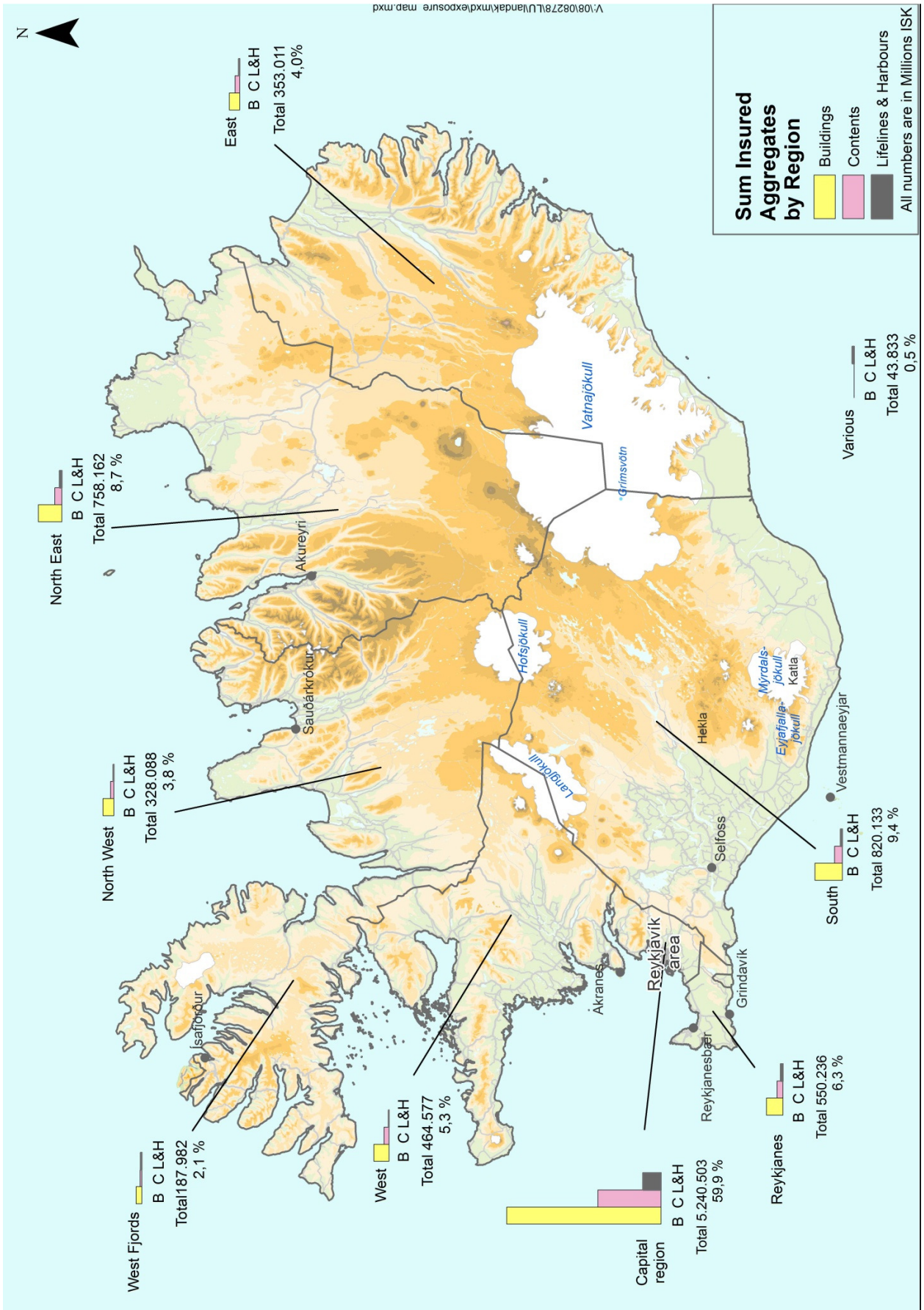
## Total Aggregates ISK, USD, EUR, GBP



## Aggregates by Region Million ISK

	Buildings	Contents	Lifelines / Harbours	Total
Reykjavik Region	3,435,708	1,404,555	400,240	5,240,503
Reykjanes	368,458	130,952	50,826	550,236
West	339,633	113,551	11,393	464,577
West fjords	128,141	35,410	24,432	187,982
North West	243,853	72,072	12,163	328,088
North East	552,240	156,267	49,656	758,162
East	229,938	103,803	19,270	353,011
South	609,884	172,377	37,872	820,133
Various	23	1,885	41,925	43,833





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## APPENDIX I ACT 55/1992

### On Iceland Catastrophe Insurance

**Entered into force on January 1<sup>st</sup> 1993.** Subsequently amended by Act 10/1995 (entered into force on 1 March 1995), Act 35/1995 (entered into force on 9 March 1995), Act 36/1995 (entered into force on 9 March 1995), Act 84/1998 (entered into force on 1 January 1999), Act 44/2003 (entered into force on 3 April 2003), Act 129/2004 (entered into force on 31 December 2005), Temporary Act 62/2008 (entered into force on 11 June 2008) and Act 119/2008 (entered into force on 1 October 2008).

[Amendments are noted [in brackets] below with reference to the amending act]

### Purpose and board of directors

#### Article 1

The purpose of Iceland Catastrophe Insurance is to insure against loss caused by the natural disasters listed in Article 4 of this act.

Its domicile is in Reykjavík.

#### Article 2

The board of directors of the agency shall be comprised of five persons. Three directors shall be elected by the Parliament of Iceland, one shall be nominated by those insurance companies which collect premiums, cf. Article [10]<sup>1)</sup>(3), and one, the chairman, shall be nominated by the [minister]<sup>2)</sup>. Alternate directors shall be appointed in the same manner. Directors shall be appointed for a term of four years.

1) Act 35/1995, Article 1.

2) Act 10/1995, Article 2.

### The investment of assets and annual accounts

#### Article 3

The board of directors shall keep and invest the funds or the books of the agency or enter into an agreement with a party in the field of insurance for the keeping and investing of the agency's funds and/or books. When investing, the board of directors shall seek to maintain the real value of the funds and to maintain a diverse risk portfolio at each time.

The annual accounts shall be audited by two auditors. One of those shall be nominated by the minister, while the other one is chosen by the agency's board of directors. The latter shall be a legally certified accountant. The agency's fiscal year shall be the calendar year and its accounts shall be published each year in the Legal Gazette.

### Insured risk

#### Article 4

Iceland Catastrophe Insurance shall insure against direct losses incurred on account of the following natural disasters: volcanic eruptions, earthquakes, rock slides, avalanches and floods. A regulation shall further outline what shall be considered to fall within the purview of the previous sentence.

## Mandatory insurance

### Article 5

It is mandatory to insure all real estate and all movables at an insurance undertaking which is licensed to operate in Iceland. It is also mandatory to insure any movables covered by general comprehensive policies which include fire insurance, as such insurance is considered to fall within the category of property insurance, cf. [Article 22 of Act 60/1994 on Insurance Activities]<sup>1)</sup>. Should fire insurance be included in an all risk insurance policy or a special insurance policy, e.g. fish farming insurance, the movables shall not be covered by natural disaster insurance, unless specifically approved by the board of directors of the agency.

It is further mandatory to insure the following against natural disasters, regardless of whether they are covered by fire insurance:

1. Geothermal heating systems, waterworks and sewage systems owned by municipalities or the government of Iceland.
2. Harbour installations owned by municipalities or the government of Iceland.
3. Bridges which are 50 m or longer.
4. Electric installations, including distributions systems, dams and transformer facilities which are publicly owned.
5. Telephone and communication installations which are publicly owned.
6. [6. Ski lifts.]<sup>2)</sup>

The properties listed in paragraph 2 above may be insured elsewhere than at the Iceland Catastrophe Insurance.

The minister shall issue a regulation further outlining what falls under mandatory insurance according to paragraph 2 above, including further specifying what categories of valuables are considered integral parts of the structure in question.

1) Act 84/1998, Article 6.

2) Act 35/1995, Article 2.

## Optional insurance

### Article 6

[...]<sup>1)</sup>

1) Act 35/1995, Article 3.

### Article 7

Upon an insurance undertaking receiving a request for a fire insurance policy for a building or movables which customarily are not subject to fire insurance or risk of fire damage is insignificant, the insurance undertaking shall seek approval from the agency prior to calculating a natural disaster insurance premium from the insurance. Should the provisions of the article not be adhered to, the insured item shall not be considered insured against natural disasters.

### Article 8

Regardless of whether it is covered by fire insurance, it is prohibited to insure structures which are erected in violation of a ban set by public authorities or contrary to law in such a way that it is likely that the building is therefore more susceptible to incurring damage from natural disasters than it otherwise would be.

## Amount insured

### Article 9

The amounts insured shall be determined as follows:

1. All valuables covered by a fire insurance policy shall be insured against natural disasters for the same amount covered by the fire insurance policy at each time.
2. After having received recommendations from the board of directors of the agency, the minister shall publish rules on the determination of insurance amounts for other valuables; cf. Article 5(2)...<sup>1)</sup>

1) Act 35/1995, Article 4.

## [Own risk of the insured]<sup>1)</sup>

### Act 119/2008, Article 1

### Article 10

[The own risk of the insured shall be 5% of each loss, although never of a lower amount than as follows:

1. On account of movables, in accordance with under Article 5(1), ISK 20,000,-.
2. On account of buildings, in accordance with under Article 5(1), ISK 85,000,-.
3. On account of structures, in accordance with under Article 5(2), ISK 850,000,-.]<sup>1)</sup>

1) Act 119/2008, Article 1. The provisions apply to losses incurred from 25 May 2008, cf. Article 2 of the same act.

## Insurance premiums

### Article 11

Annual insurance premiums shall be calculated as follows:

1. For valuables insured in accordance with Article 5(1), 0.025%
2. [For valuables insured in accordance with Article 5(2), items 1-5, 0.02%]<sup>1)</sup>
3. [For valuables insured in accordance with Article 5(2), item 6, the premium shall be calculated in accordance with rules published by the board of directors of the agency.]<sup>1)</sup>

Should the net surplus assets go below 0.1% of estimated amounts insured at the end of the calendar year, the board of directors of the agency may collect premiums in accordance with Article 5(1) and (2) at with a 50% surcharge until the 0.2% requirement is reached.

Insurance undertakings which provide fire insurance for valuables insured at the agency, cf. Article 5(1) shall collect premiums for the agency in addition to premiums for the fire insurance, with both premiums falling due at the same time. A regulation shall provide for the bookkeeping and the collection of premiums from insurance undertakings. The agency's access to data held by insurance undertakings shall be governed by Article 24.

Insurance premiums from other valuables, cf. Article 5(2), shall be calculated and collected by the agency.

Assets may be attached on account of claim for insurance premiums. The insurance premiums are also secured by a lien mandatorily preferred by law on the insured property. In order to enforce payment of an unpaid insurance premium a distress sale of the property may be requested without a prior judgment, settlement or attachment.

1) Act 35/1995, Article 6.

## Notification of loss

### Article 12

Upon the occurrence of an insurance event, the insured shall immediately notify the agency or the insurance undertaking from which it had purchased the insurance.

Upon receiving such a notification, the relevant insurance undertaking shall immediately notify the agency of the insurance event. As soon as possible, after receiving information about a loss which would likely be subject to natural disaster insurance, the agency shall make arrangements to determine whether the loss shall be compensated and, if applicable, have the loss appraised.

## Arrangements to avert loss

### Article 13

Upon the occurrence of an insurance event, the agency shall determine whether specific arrangements are necessary to secure insured property to avert further loss. Such arrangements shall, insofar as possible, be made in cooperation with the Icelandic Civil Protection Department.

## Insurance location

### Article 14

Should an insured property be located elsewhere than specified when the insurance was taken out upon the occurrence of an insurance event, right to compensation shall be determined in accordance with Article 83 of Act 20/1954 on Insurance Contracts as applicable. The provisions of Article 83 regarding the maximum amount compensated being ISK 10,000,- shall however not be applied.

The provisions of paragraph 1 shall apply regardless of provisions in a fire insurance contract regarding compensation for damage to property located elsewhere than at the insured location.

## Obligation to pay and processing of claims

### Article 15

The board of directors of the agency shall issue rules on the handling of claims and payment of compensation. The board of directors is permitted to entrust the settlement of claims to insurance undertakings.

Provisions regarding appraisers and general principles in determining insurances compensation shall be prescribed for in a regulation.

### Article 16

It shall be permitted to lower compensation amount or reject a claim:

1. When a building or other structure which is damaged is erected a location known to be dangerous with regard to natural disasters, e.g. if a structure in the same location has more than once incurred the same kind of damage. The same shall apply to movables stored in a building or another structure in such a location.
2. When the type or maintenance of a building or other insured property is questionable or contrary to law or regulations and it is clear that this has resulted in loss or more extensive loss than it otherwise would have been.

### Article 17

Insurance compensation shall be paid as soon as possible, cf. Article 24(1) and (2) of Act 20/1954 on Insurance Contracts.

### Article 18

The aggregate obligation of Icelandic Catastrophe Insurance to make payments on account of a single insurance event shall be limited to 0.75% of the total amount of insured amounts covered at the occurrence of the insurance event. From 1 January 1994, the aggregate obligation to pay shall be limited to 1% of the total insured amounts.

Should compensation on account of the same insurance event exceed the aforementioned amount the share received by each insured which suffered loss shall be reduced proportionally.

### Article 19

The agency shall as soon as possible make a determination on a dispute regarding its obligation to pay and the amount of the compensation. The agency's board of directors shall rule on disputes and should the insured party not wish to accept the agency's ruling, it may, within 30 days from having received a notification from the board of directors, refer the dispute to an appeal board. The appeal board shall be appointed by the minister. The appeal board shall be comprised of four persons. One shall be appointed by the nomination of the Supreme Court of Iceland and that person shall be chairman of the appeal board. The second person shall be appointed by the nomination of the Icelandic Meteorological Office, the third by the University of Iceland and the fourth without nomination. Alternates shall be appointed in the same manner. The appeal board may seek the assistance of specialists if deemed necessary.

## Reinsurance and authorisation to borrow

### Article 20

The agency shall be permitted to reinsure its risk both domestically and abroad.

Should the agency's assets and amounts received from reinsurers not suffice to pay compensation as prescribed for by this act, the agency's board of directors may, with the consent of the minister, borrow funds in order to be able to discharge its obligations. Such loans are guaranteed by the government of Iceland.

## Various provisions

### Article 21

The board of directors of the agency shall be permitted to allocate funds to subsidise research and construction intended to avert or mitigate loss on account of natural disasters. [Also, the board of directors may allocate funds in relation to the education and training of those national organisations which have entered into a cooperation agreement with the [National Commissioner of Iceland]<sup>1)</sup> to regarding disaster relief teams.]<sup>2)</sup> The annual allocation of funds in this regard may not exceed 5% of the book value of premiums received the preceding year.

1) Act 44/2003, Article 11.

2) Act 35/1995, Article 7.

### Article 22

Iceland Catastrophe Insurance is exempt from the payment of income tax.....<sup>1)</sup>, municipal tax and facilities tax. Stamp duty shall not be paid on account of the agency's documents.

1) Act 129/2004, Article 97.

### Article 23

The board shall negotiate with insurance undertakings and others which operate on behalf of the agency in accordance with this act.

### Article 24

Iceland Catastrophe Insurance can demand any data and information from insurance undertakings regarding their operations on behalf of the agency. During regular office hours the agency shall further have a right to unhindered and immediate access to the books of such insurance undertakings regarding premiums on natural disaster insurance.

### Article 25

Unless otherwise prescribed for in this act, the provisions on the Act on Insurance Contracts shall be applied as applicable.

### Article 26

After having received the recommendations of the board of directors of Iceland Catastrophe Insurance, the [minister]<sup>1)</sup> shall publish a regulation<sup>2)</sup> further outlining the implementation of this act.

1) Act 10/1995, Article 2.

2) Regulation 83/1993.

### Article 27

This act shall take effect effect on 13 January 1993

## Temporary provisions

### I.

[....]<sup>1)</sup>

Act 35/1995, Article 8.

### [II.

A 10% surcharge shall be collected on premiums prescribed for in Article 10 in the years 1995-1999. Income on account of the surcharge shall be diverted to the avalanche and rock slide fund, cf. Article 10 of Act 28/1995 on defences against avalanches and rock slides. The collection of this fee shall be governed by Article 10]<sup>1)</sup>

1) Act 36/1995, Article 1.

## APPENDIX II REGULATIONS ON THE ICELAND CATASTROPHE INSURANCE

### Article 1

The perils insured against by the catastrophe insurance, cf. Act No. 55/1992 on the Iceland Catastrophe

Insurance, are the following:

1. A volcanic eruption, e.g. when lava or volcanic ash cause damages or destruction of insured valuables.
2. An earthquake which causes damages or destruction of insured valuables.
3. A landslide, i.e. when a slide from a mountain or a hillside abruptly falls onto insured valuables causing damages or destruction thereof.
4. A snow-avalanche means an avalanche of moving snow which abruptly falls from a mountain or a hillside onto insured valuables causing damages or destruction thereof. It is not a snow-avalanche when the roof or walls of a house are strained or broken from accumulated snow caused by snowfalls, drifting snow or blowing snow. The same applies to other valuables that are damaged in a similar manner.
5. A water flood means a flood which occurs when rivers or brooks abruptly over flood their banks or when flood waves from the sea or lakes run ashore causing damages or destruction of insured valuables. Annual or regular floods from rivers, brooks, the sea or lakes are not to be construed as water floods herein. The same applies to usual melt-water or floods caused partly or wholly by man, e.g. when water tanks, dams or other structures break due to conditions other than catastrophes. When insured valuables are damaged in a fire which can be traced directly to some of the above-mentioned catastrophes the Iceland Catastrophe Insurance shall recompensate the losses.

### Article 2

Comprehensive insurance policies of movables which are classified as property insurance, cf. Paragraph 1, Article 5 of the Iceland Catastrophe Insurance Act, are inter alia the following: home insurance, family insurance, all-risk home insurance, baggage insurance, cattle insurance, horse insurance (live-stock insurance) and agricultural insurance.

### Article 3

It is mandatory to insure the following house-property publicly owned, cf. Paragraph 2, Article 5 of the Icelandic Catastrophe Insurance Act:

1. Geothermal heating systems for the distribution of hot water or steam, including subterranean pipelines but not boreholes. Pumps, pump facilities, bridges and roads which exclusively serve the transformer system shall also be insured as well as facilities for geothermal heating or for other sources of energy.
2. Waterworks, including main systems, subterranean pipelines other than boreholes and wells. Pumps, pump facilities, bridges and roads which exclusively serve the transformer system.
3. Sewage systems including pump facilities and refinery facilities.

4. Permanent harbour installations, i.e. piers, quays, immovable harbour cranes, immovable lightning, electric installations, lamp-posts, junction boxes, water and drainage pipelines, bollards and pavement on piers but not cranes on rails, wheels or belts or other movable harbour appliances and equipment. Only quays which are boarded with steel or timber, stacked with hewed stones or made of concrete or other comparable permanent materials shall be insured. Areas which are more than 30 meters from the quays are not parts of harbour installations. Breakwaters, rubble mound breakwaters, rubble mound shore protection or other installations for the protection of piers, quays or accompanied movables shall not be insured.
5. Electric installations, including distribution systems, dams and transformer facilities.
6. Telephone appliances, telephone lines and communications networks. It is also mandatory to insure permanent bridges 50 m or longer whether they are publicly or privately owned, cf. Subparagraph 3, Paragraph 2 of Article 5 of the Iceland Catastrophe Insurance Act. A road leading to or from a bridge shall not be construed as a part thereof nor shall levees be construed as such.

### Article 4

[Suspended following modification of law]

### Article 5

Structures referred to in Articles 3 [and 4] shall not be insured while under construction. The Board of Directors of the Corporation is nevertheless permitted to set down Rules allowing deviations here from, with the consent of the Minister.

### Article 6

When a loss has occurred or is imminent it is not permissible to enter into new insurance contracts or to alter older contracts dealing with items in the endangered location or area.

### Article 7

The amounts insured shall be decided as follows:

1. The structures referred to in Paragraph 2, Article 5 of the Iceland Catastrophe Insurance Act shall be insured against their estimated price of restoration (price of reconstruction) as of the first date in each quarter of a year. The estimated price of restoration shall be compared to the cost of reconstruction of comparable property and consideration shall be given to the newest technology, work skills and cost of materials.
2. Owners of structures referred to in Subparagraph 1 shall prior to March 1 each year submit to the Corporation a list of new structures and alterations of older structures together with an estimate of the price of restoration compared to the price on January 1 the previous year. If there is reason to believe that the appraisal is unrealistic or that the owners of structures have neglected to give information about items which fall under mandatory insurance, the Corporation can appoint two experts to appraise these items and the outcome of their appraisal shall be binding as to the amount insured.

### Article 8

The insurance companies that cover fire insurance of the property which is insured with the Corporation under Paragraph 1, Article 5, cf. Paragraph 3, Article 10 of the Iceland Catastrophe Insurance Act, shall submit to the Corporation a monthly report of premiums collected during the

previous month and disburse the catastrophe insurance premiums not later than on the 15th of that month.

If a premium is in default an insurance company shall collect penalty interests in accordance with the provisions of the laws on interests. If an insurance company fails to disburse premiums or interests in accordance with the aforementioned, it is obliged to pay penalty interests on the delinquent amount in accordance with the provisions of the laws on interests.

Insurance companies shall annually submit to the Iceland Catastrophe Insurance an itemized report of insurance amounts, premiums and penalty interests. The Corporation shall decide on the format of the report.

### Article 9

The day of payment of the premiums which the Iceland Catastrophe Insurance collects itself shall be April 1 each year. If a premium is not paid within four weeks from the day of payment the debtor is obliged to pay penalty interests from the day of payment in accordance with the provisions of the laws of interests.

### Article 10

Under special circumstances, the Board of Directors of the Corporation, with the consent of the Minister, may decide that an insured party buy a short-term insurance on the property referred to in Article 6 of the Iceland Catastrophe Insurance Act.

### Article 11

A case of indemnity having taken place, the Corporation shall make arrangements for the inspection and appraisal of the damage and shall designate for this purpose a competent and impartial appraiser or appraisers. The Board of Directors of the Corporation may, according to circumstances, request that damage will be appraised by a Court designated appraiser or appraisers. Matters relating to the cost of an appraisal done by Court designated appraisers shall be regulated by the general rules of law.

The insured party shall at all times have the opportunity to be present at inspection and be able to present his views to the appraiser or appraisers.

The appraiser or appraisers shall submit a written appraisal and conclude their work as speedily as possible.

### Article 12

The amounts insured shall be decided in accordance with the principal rules of the laws of insurance, cf. inter alia the following rules:

1. The insurance is obliged to pay compensation solely for direct damages, cf. Article 36 of law No. 20/1954 on insurance contracts.
2. The amount insured is not a proof of the value of the insured valuables. Nevertheless, it is always the maximum of the responsibility to be measured against when compensation is decided upon.
3. The value of insured property shall be determined with regard to the real price value when the loss occurred. Also, consideration shall be given to depreciation due to age, use, decreased effective value and other conditions cf. Article 37 of law No. 20/1954 on insurance contracts.

4. Compensation for goods which the insured party has produced for sale or are otherwise intended for sale shall be determined in accordance with rules set down in Article 38 of law No. 20/1954 on insurance contracts.
5. In case of partial loss, compensation shall be determined as computed against the cost of reparation of the damaged valuable for its restoration to the same or next to the same condition as it was in before the loss. Nevertheless, compensation can never exceed the disparity of the value of the item prior to the loss and its value thereafter. The damaged party shall preserve the damaged property or item as best he can until compensation is forthcoming.
6. If the value of the insured item exceeds the amount insured compensation for the loss shall be computed as follows:

$$\frac{\text{loss amount} \times \text{amount insured}}{\text{real value}} = \text{compensation}$$

The insured party's own risk shall be deducted from the amount of compensation thus arrived at.

### Article 13

The present Regulations are set down in accordance with permission in Act No. 55/1992 on the Iceland Catastrophe Insurance and shall come into force forthwith. At the same time Regulations No. 772/1982 with amendments made thereto by Regulations No. 269/1983 and No. 358/1985 shall cease to be in force. The Ministry for Health and Insurance Affairs, 19th February 1993.