



21 December 2017

The Australian Competition & Consumer Commission

Email: [insurance@accc.gov.au](mailto:insurance@accc.gov.au)

Dear Commissioner(s)

## Northern Australia Insurance Inquiry

### Actuaries Institute Response to the October 2017 Issues Paper

The Actuaries Institute welcomes the opportunity to respond to the Issues Paper prepared by the Australian Competition and Consumer Commission (ACCC) in relation to the Northern Australia Insurance Inquiry. Our response comments briefly on each of the sections raised in the issues paper. The Actuaries Institute and its members would be pleased to assist the ACCC throughout the inquiry.

We note that the Institute has taken an active interest in the various inquiries and reviews of insurance in northern Australia.

#### 1. Costs, premiums and profits for insurance in northern Australia

##### Background

As opined in the work of the AGA titled "Report on Home and Contents Insurance Prices in North Queensland"<sup>1</sup> the major reasons why premiums have risen at a rate greater than CPI since 2005 are likely to be:

- Insurer reaction to losses caused by several natural disasters, Cyclone Larry in 2005-06, the Mackay storms in 2007-08 and Cyclone Yasi in 2010-11;
- Developments in catastrophe modelling, including cyclone modelling; and
- Changes in the geographical allocation of the cost of catastrophe reinsurance.

Other factors which will have impacted premium increases are:

- Inflation in the cost of home repairs which has seen Australia-wide increases in average claim size for buildings insurance of more than 10% per annum between 2004 and 2016; and
- Increased availability of flood cover with Northern Australia having a high proportion of flood-prone properties.

Together, these factors have caused insurers to increase their estimates of Northern Australia home insurance risk.

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<sup>1</sup>

Martin, P. (December 2014). *Report on Home and Contents Insurance Prices in North Queensland*. Australian Government Actuary.



### *Technical premiums*

Home insurance premiums need to cover the following costs:

- The cost of non-natural peril claims (e.g. fire [other than bushfire], theft, water leakage, etc.);
- The cost of natural peril claims (storm, flood, cyclone, earthquake, bushfire, storm surge);
- Reinsurance which can be considered as an additional cost for natural perils claims that is passed to the international reinsurance market which can hold the risk more effectively than domestic Australian insurers;
- Acquisition, administration and claims management expenses of insurers; and
- Profit margin.

Whilst investment earnings on premiums can offset some of this cost, with low yields and the relatively short duration of home insurance policies, this is only a small consideration for this class of business.

### *Calculation of technical premiums*

Insurers and reinsurers calculate various components of premiums based on different data, models and future considerations:

- Non-natural perils claims costs – projection of historic costs adjusting for things such as frequency and inflation trends. Over the longer-term frequency of non-natural peril claims has generally declined due to increased excesses and reduced theft, but has been stable in the last few years. As noted above, inflation in repair costs for buildings cover has been very high;
- Natural perils claims costs – a combination of historic data adjusted for longer term weather trends and models for the more severe cost;
- Reinsurance costs or extreme peril costs (floods, earthquakes, bushfire...) – mainly use complex natural peril models that consider the size and frequency of the covered event, the exposure to the event and the vulnerability of the building to such an event;
- Expenses – similar to any other enterprise although the insurer does need to be able to service infrequent but significant large event losses where many insureds are impacted at the same time; and
- Profit Margin – generally calculated through a relationship between the statutory capital required and also in relation to the security each company affords its policyholders and appropriate return for the riskiness of the capital employed to protect policyholders.

Claims costs together with reinsurance costs typically represent around 65% of premium and it is changes to the cost of claims that is therefore the major driver of changes to aggregate premium levels.



There is significant variability in actual claims costs from year to year due mainly to the cyclical and sporadic nature of natural perils events. During the period covered by the Government Actuary's report<sup>2</sup> (from 2006 to 2013), insurance losses from cyclone events were estimated to be upwards of \$3bn – this equates to about 20% of the total insurance losses from all natural peril events.<sup>3</sup>

Whilst the estimated average annual losses from other natural perils (such as riverine flood or storm) may be larger than for cyclone risk, these risks are spread more broadly across Australia. In contrast, cyclone risk exists exclusively in northern Australia, South-east Queensland and South-west Western Australia. It is estimated that around 70% of the cyclone risk exists in northern Australia, which makes up approximately 5% of the total insurable market.<sup>4</sup>

As a result of the concentration of cyclone risk, the cyclone premium represents the most substantial part of the average northern Australian premium. Figure 1 shows the expected home buildings and contents claim costs (per \$100,000 sum insured) broken down by peril as provided by insurers to the Australian Government Actuary.

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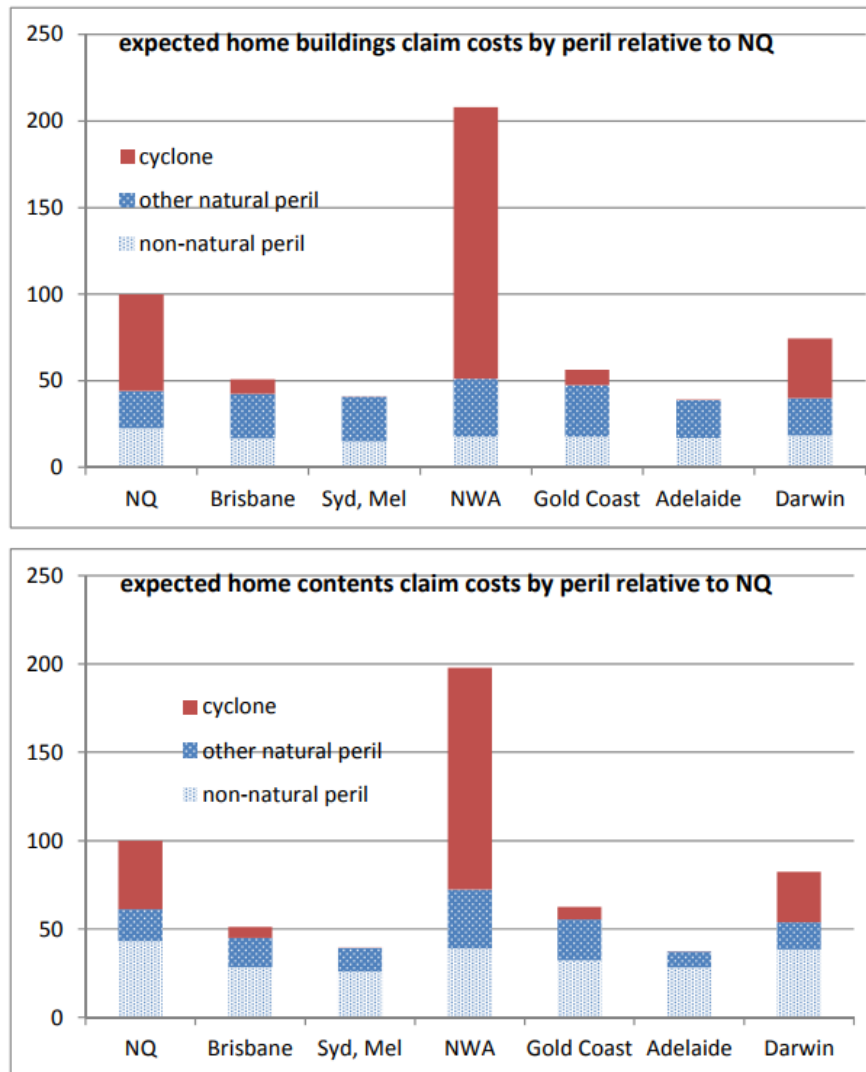
<sup>2</sup> Martin, P. (December 2014). *Report on Home and Contents Insurance Prices in North Queensland*. Australian Government Actuary.

<sup>3</sup> Insurance Council of Australia. (2017). *ICA Catastrophe Database*.

<sup>4</sup> Australian Bureau of Statistics. *2016 Census*.



Figure 1 - Expected home claim costs by peril relative to Northern Queensland<sup>5</sup>.



The technical insurance premium for an individual property will be impacted by the location of the property and its vulnerability to different perils. There is more variation in which properties are impacted by some perils compared with others and this additional variability impacts the technical price, for example:

- Flood pathways are relatively consistent. At the individual property level, the risk due to flood can be estimated using historic maps. That said, the unknown contribution to the frequency and extent of flood events from climate change and the development of the natural environment introduces additional uncertainty;
- Bushfire and cyclone are normally quantified at a district level since there is more variability about which specific properties will be impacted by these events. For example, it is known that cyclones are likely to predominantly impact the northern Australia coastline, however the exact path of a cyclone is unpredictable;
- Earthquake risk can only be assessed in quite broad geographic areas and the frequency of damage causing earthquakes in Australia is extremely infrequent.

<sup>5</sup> Martin, P. (December 2014). *Report on Home and Contents Insurance Prices in North Queensland*. Australian Government Actuary.



Thus, both the overall exposure to natural perils and the location of an individual property can lead to a very high technical premium. The 2015 Finity Report to the Northern Australia Insurance Premiums Taskforce estimated that:

- Cyclone premiums ranged from under \$300 to over \$2,000 in Northern Australia;
- When proximity to watercourses was considered premiums could increase to more than \$5,000 due to the additional flood risk;
- Premiums were higher for homes located closer to the coast;
- Premiums were more than 50% higher for pre-1980 houses due to improvements in building codes; and
- Premiums were higher for timber/fibro houses and for houses with metal roofs.

### **Market premiums**

Actual premiums for an individual property will depend on the technical premium determined for that property, the level of competition, and the individual insurer's risk profile and pricing strategies. Thus, the technical premium is an input into the premium charged to consumers and, whilst it is a significant element, it is only one of several factors which needs to be considered by insurers.

Ultimately insurance premiums will be driven by the level and variability of claims costs since this impacts both technical premiums and the desirability of underwriting particular locations – some insurers may determine that certain markets are too volatile in terms of claims costs relative to their size thus reducing competition.

### **Data**

The availability of better data has been a contributor to the increasing premiums in Northern Australia, since it has enabled a better assessment of risk. However, it is only through continued improvements in data availability – particularly local council and other engineering data – that risk assessments can be refined further and the most vulnerable properties identified.

Greater transparency of risk to consumers, governments and financial institutions (including insurers) is the best way to target long term mitigation investment and any short term financial assistance.

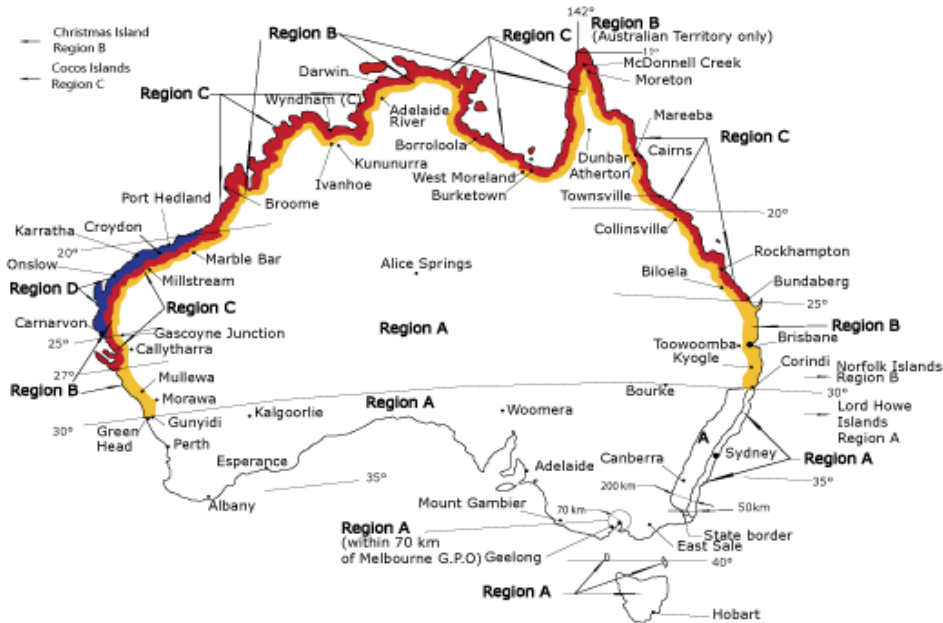
### **Definition of northern Australia**

The Institute understands that the ACCC's definition of northern Australia has largely been based on the region where the most complaints had arisen in relation to the cost and availability of insurance. We note that similar problems could exist outside of this region and that this would ideally be taken into consideration in the ACCC's deliberations.

By way of example, Figure 2 shows that the high cyclone risk areas expand well beyond the ACCC's definition of northern Australia.



Figure 2 Australian Cyclone Region (Australian wind code AS1170.2 – spanman.net).



## 2. The competitiveness of markets for insurance in northern Australia

The competitiveness and spread of prices in the home and contents insurance market has changed considerably over the last 20 years or so.

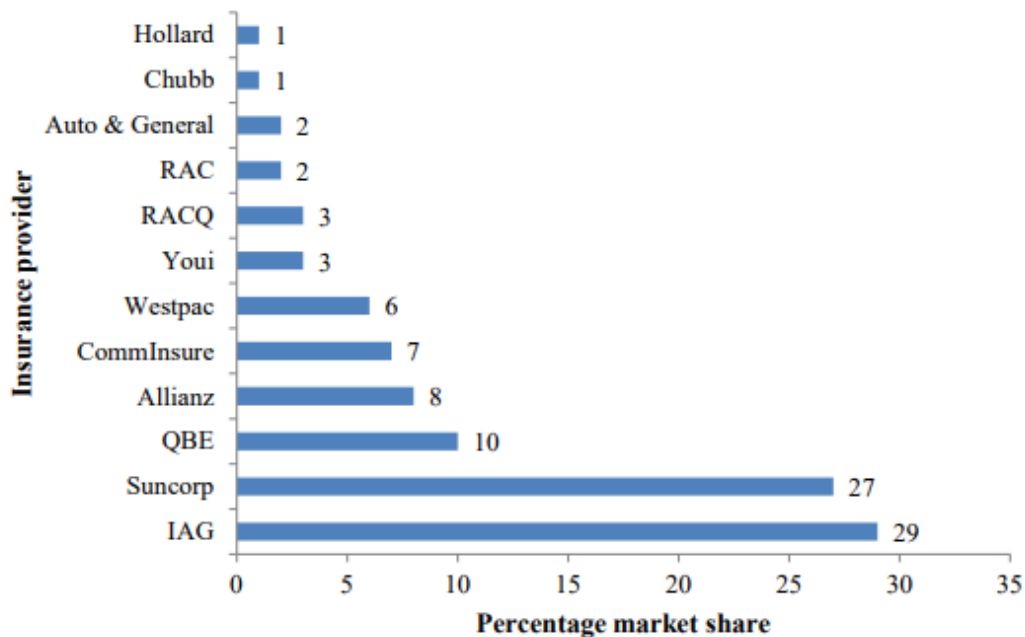
### *Australian insurance market share*

Four main insurers dominate the insurance market in Australia: IAG, Suncorp, QBE and Allianz. Together they contribute 74% of the market, issuing cover under multiple brands<sup>6</sup>. Figure 3 details the market share of the top 12 general insurers for home insurance in Australia.

<sup>6</sup>Australia's general insurance industry – Parliament of Australia, Chapter 2, [https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Economics/Generalinsurance/-/media/Committees/economics\\_ctte/Generalinsurance/c02.pdf](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Generalinsurance/-/media/Committees/economics_ctte/Generalinsurance/c02.pdf) (2017)



**Figure 3** - Market share of the top 12 general insurers for home insurance in Australia<sup>6</sup>.



The number of licenced Australian insurers has steadily declined in recent years with APRA, the prudential regulator of the financial services sector, attributing this largely to the rationalisation of past mergers and acquisitions<sup>7</sup>.

In a competitive market it is not always possible for insurers to set prices at a level they believe to be necessary to achieve desired profit margins – when there is perceived to be a need to protect market share, competitive pressures affect prices. The Government Actuary's report on insurance affordability in North Queensland<sup>8</sup> presented the view that this competitive pricing pressure is largely missing in Northern Queensland (NQ):

In my view this competitive pricing pressure is largely missing in NQ. Those insurers who participate in the NQ market do not appear particularly anxious to protect or grow market share in that market. Accordingly, in my view, it has been possible for insurers participating in that market to make their pricing decisions largely unconstrained by competitive forces.

#### ***Allocation of costs in North Queensland***

The Government Actuary's report identified that home and contents premiums in North Queensland have increased by around 80% from 2006 to 2013. Comparatively, Brisbane saw an increase of around 45% while Sydney and Melbourne saw an increase of around 12%. Australia as a whole averaged an increase of 25%. The factors driving these increases are outlined in Section 1.

<sup>7</sup> Australian Prudential Regulation Authority, Annual Report 2015–16, p. 24.

<sup>8</sup> Martin, P. (December 2014). *Report on Home and Contents Insurance Prices in North Queensland*. Australian Government Actuary.



Developments in catastrophe modelling and increased sophistication in pricing mechanisms have enabled insurers to refine their pricing processes. Many insurers have transitioned from risk rating at the postcode level, where lower risk individuals will cross-subsidise higher risk individuals, to risk rating at the individual address level. Of particular significance is the move to address level risk rating for flood, bushfire and storm surge risks, where the exposure to risk for individual properties becomes very high. For example, the Government Actuary identified that the maximum flood risk for an individual North Queensland address was more than 2.5 times that of the maximum cyclone risk.

Given the competitive market, insurers are unwilling to cross-subsidise premiums between Northern and the rest of Australia due to the danger of anti-selection. As a result, insurers are passing on the increased risk and reinsurance costs directly to consumers who are high risk.

The lack of cross-subsidisation between risks means that consumers living in high risk areas, particularly consumers with exposure to more than one natural peril, will see a noticeably larger increase in premium compared to when risks were rated in broader regions. Hence, while the average premium for some natural perils may not look out of line with the rest of Australia, the variability of premiums at the individual property level can further amplify concerns over affordability.

From 2006 to 2013, the Government Actuary reported that loss ratios for North Queensland averaged 140%. As previously discussed, these high costs have caused fewer insurers to choose to participate in the Northern Australian market. The reduced competitive pressures have enabled insurers to increase premiums relatively rapidly to restore profitability to their Northern Australian portfolios.

Since the Government Actuary's report, Northern Australia has experienced a further three cyclone events which the Insurance Council of Australia has declared catastrophes. The estimated insurance losses for these recent events exceed \$2 billion, bringing the total losses over the past 11 years to over \$5 billion.<sup>9</sup>

### 3. Consumers' experience with insurance

There can be a wide variation between different insurance policies in terms of coverage, gaps, customer experience, insurance contracts, policy distribution and claims management and there is limited understanding of insurance and these differences amongst the general population. Those issues not only create confusion to the customers, but also can create uncertainty for the insurers in the pricing, distribution and settlement of the losses.

The Actuaries Institute agrees that although the premium is a key focus for consumers looking at their insurance options that other terms and conditions of the policy are also important such as the sum insured, the risks/events that are covered, the risk of damage and the excess. The development of the ASIC insurance aggregator website enables people to more readily compare premiums, which is a positive result, however it also warns not to just focus on premiums as coverage and policy features should also be considered.

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<sup>9</sup> Insurance Council of Australia. (2017). *ICA Catastrophe Database*.





#### 4. Risk mitigation

The Actuaries Institute considers risk mitigation an important component of any effort to reduce insurance premiums. Mitigation effort, if conducted appropriately, brings a fundamental change to the actual hazard thereby reducing the actual risk and resulting in long term sustainable reductions in premium. In addition to the reductions in insurance premium, mitigation efforts also help to raise community awareness of hazards and improve risk resilience. It will also bring additional social benefits in terms of lower damage levels and less disruption to residents after an event.

Insurance companies estimate that mitigation actions, often proposed to achieve permanent reductions in insurance premiums by reducing both the size and frequency of claims, could reduce premiums for some properties by up to 20 per cent.

Risk mitigation can take several forms, including but not limited to activities applied to the property level (Micro Mitigation Activity) or the regional level (Macro Mitigation Activities). The discussion in this section will focus on the reduction in property risk rather than the risk to human life.

##### *Micro mitigation activity*

Australia's building codes in cyclone exposed areas were strengthened considerably in the early 1980s after the experience of Cyclone Tracy in 1974. In many areas these codes have been further upgraded and refined using more recent research on building vulnerability and windfield modelling. Stringent enforcement of the Australian building codes should be applied during the development certification process.

Experience from recent cyclones such as Oswald in 2013, Marcia in 2015 and Debbie in 2017 has validated the value of the strong building codes through the much lighter loss experience of newer build properties, especially those built after 2000.

For dwellings constructed prior to the 1980s, events across Northern Australia in the last 35 years have tested their construction. More vulnerable buildings have sustained damage or been destroyed. In many cases where partial damage was incurred, repair work has included strengthening work, in line with building codes. Consequently, many pre-1980 dwellings currently existing in Northern Australia are already 'hardened', with the most vulnerable having been destroyed.

Notwithstanding this gradual hardening, there remain opportunities to improve resilience at the individual property level. Incentives for owners to improve resilience should continue or even be amplified. Where such property-level work involves significant capital investment, indirect assistance could be provided in the form of low-interest loans, similar to some state schemes in existence for primary producers (such as [sustainability loans](#) in Queensland).

At the property level, property owners should seek to:

- Improve building resilience through retrofitting activities relating to roof, walls and windows;
- Reduce building vulnerability through activity such as raising floor height or improving drainage in the immediate vicinity of the premises;
- Reduce adjacent hazards such as trees and unsecured outdoor furnishings; and
- Apply external protections to windows and doors immediately prior to cyclone approach.



Key to owners seeking to improve the resilience of their property is to first survey the extent that such works are relevant for each property and then present this to the owner. In fact, education of owners at a 1:1 level (rather than just general, high-level discussion) of the readiness of a property and works that can be undertaken to improve that readiness is likely to be the most effective way to encourage owners to carry out their own mitigation works. Such surveys are also useful to allow stakeholders (insurers, reinsurers, government, etc) to obtain more accurate information on building vulnerability at scale and to more accurately price in the aggregate.

### ***Macro mitigation activity***

Governments – federal, state and local – have a key role to play in facilitating mitigation activity at a macro level. This is where the greatest scope for a co-ordinated effort over a long period of time exists to drastically reduce the risk in some of the most vulnerable areas.

At the regional level, this means government initiatives should target:

- Enhancing drainage networks;
- Installation of flood levees, backflow valves and associated works;
- Installation of flood compartments such as new dams or raising the walls of existing dams;
- Riverbank activity;
- Restrictions on construction in particular locations;
- Building approval and building construction code requirements for new build and renovation activities; and
- Retreat programs where properties in especially vulnerable locations are ‘bought back’.

Northern Queensland is especially exposed to flood risk, whether it be through stand-alone rain events or associated with cyclones. Some towns in Queensland have beyond 20% (some as high as 50%) of domestic addresses exposed to a chance of over-floor flooding in any given year exceeding 1%. Decadal and Inter-decadal weather patterns (such as ENSO and PDO) can amplify the likelihood of rain and flooding events considerably meaning that the risk rises well above 1% for these properties in the most extreme phases of these cycles. In many cases, further flood mitigation works are possible which may see the proportion of exposed addresses fall considerably.

We note that these mitigation activities focus on flood and that there is also a need to consider mitigation actions relating to cyclone.

### ***Transparent premium relief funding***

To the extent that a mechanism is implemented to provide financial relief in the form of lower insurance premiums (subsidies) to selected members of the population, it is important to ensure that there is transparency in that mechanism so that the overall amount of relief is visible. This total cost should be presented with the cost of mitigation works to enable the whole cost to be understood. That will in due course allow prioritisation of mitigation works and other activities where the greatest reduction in subsidisation costs can be achieved.

Any such relief funding should ensure that no incentive exists for new projects to be developed and then receive relief. This can be achieved with a basic ‘built before’ criteria for assessment of applications for premium relief.



The federal government is best placed to enact a premium relief funding model in a way that is consistent across the country. Government agencies can use their existing methods and approaches for assessing whether individual customers meet the criteria for relief. Their systems can also facilitate the fulfilment of 'relief codes' that can be used by the customer to receive subsidised premiums from cover distributors.

### *Further considerations*

Economic theory and practice have demonstrated that price is a strong driver of behaviour. When the price for a service falls, the incentive to reduce the price is reduced. In the context of insurance, the incentive to reduce the risk (which would reduce price) is reduced. This can lead to the perpetuation of activities that create risk (such as new developments in flood plains).

Whilst the desire to make insurance affordable and accessible to all may seek mechanisms to subsidise the properties exposed to higher risk of loss or extent of loss, it is important to ensure that price signals remain to encourage risk management, mitigation and reduction.

## 5. Regulation

There are a range of stakeholders who contribute to the cost and availability of home and contents insurance. Insurers and their regulators are obvious stakeholders but the cost and availability is also impacted by decisions made by governments (federal, state and local), building regulators, courts and civil tribunals.

Unfortunately, whilst many local councils have strengthened their development requirements with respect to flood and storm surge risk, there remains inconsistencies in approach and application. Although councils have been traditionally responsible for such standards, there is considerable value in bringing uniformity to the approach to setting development rules, as there are for building codes.

It is important to note that home and contents is not a compulsory product so there are limits on the ability for the insurance regulator to regulate prices. The Actuaries Institute considers that increased insurance regulation is unlikely to solve or deliver considerable benefits to the northern Australia insurance issues.

## 6. Summary

In summary, our key observations are:

- There are currently issues with access and/or affordability of insurance in Northern Australia;
- There are a range of factors which contribute to the current situation with two major elements being the relatively small size of the market in northern Australia and the considerable exposure to natural peril events;
- The uncertainty surrounding the cost of natural perils and the future impact of climate change mean that the focus needs to be broader than the cost of insurance. Other risk sharing mechanisms should be considered;
- The Institute is strongly of the view that risk mitigation is crucial at both a property and regional level.



The Actuaries Institute would appreciate the opportunity to meet with the ACCC. We note that we are an independent body and do not act as advocates for the insurance, or any other, industry.

Please do not hesitate to contact myself or the Acting Chief Executive Officer of the Actuaries Institute, Elayne Grace (phone 02 9239 6100 or email [elayne.grace@actuaries.asn.au](mailto:elayne.grace@actuaries.asn.au)) to discuss any aspect of this letter.

Yours sincerely

A handwritten signature in black ink that reads "J.A. Lyon". The signature is written in a cursive style with a long horizontal stroke at the end.

Jenny Lyon  
President