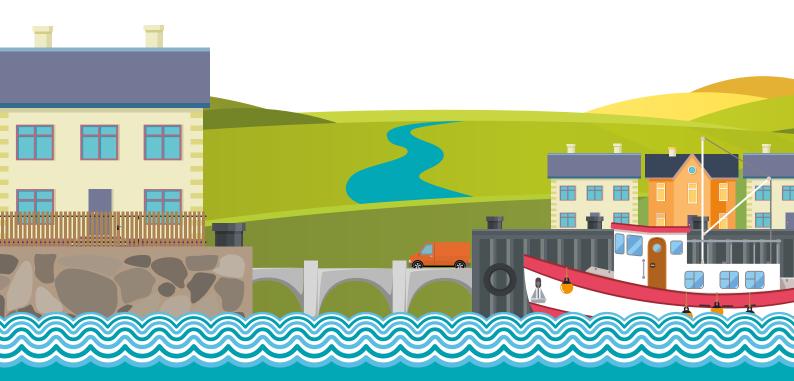
FLOODRE

Regulation 27:

The Quinquennial Review

July 2019



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ABOUT FLOOD RE

ABOUT THIS REPORT

The Flood Re Scheme is a joint initiative between the UK insurance industry and the UK Government. The Scheme was established by the Water Act 2014.

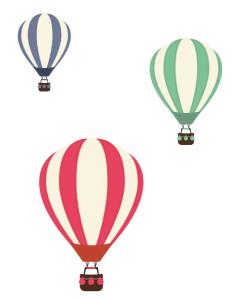
Flood Re's purpose is to promote the availability and affordability of household insurance for eligible homes. It must also manage, over its lifetime, the transition to risk reflective pricing for household insurance for those households at risk of flooding.

Flood Re is authorised by the Prudential Regulation Authority and regulated by the Prudential Regulation Authority and Financial Conduct Authority (FRN 706046). Flood Re is a temporary scheme and by 2039 it will have exited the market. Flood Re is required to review the Scheme at least once every five years throughout the lifetime of the Scheme and report on its findings to the Secretary of State. This report is Flood Re's first such statutory review.

FURTHER INFORMATION

For further details about this publication or Flood Re, please visit www.floodre.co.uk.





Flood Re is a unique and highly successful, world-first, joint Government and insurance industry initiative. It is efficiently achieving its Purpose.

Through its experience and insight gained by administering the Scheme to date and its focus on the changes required to meet its transition objective, Flood Re recommends a package of proposed changes to the Scheme. This package represents Flood Re's best understanding of the behavioural and market evolution required at this stage of the Scheme's existence. It also includes certain changes to continue to optimise the efficiency of the Scheme.

The package balances the needs of the Scheme's stakeholders and builds on the Scheme's strengths in order to be more responsive and flexible in bringing about the change it needs to see.

The Quinquennial Review Flood Re is a successful, world-first scheme, carefully designed as a transitional measure, with a limited lifespan of 25 years, expiring in 2039. **Our obligations** Promote the transition of the market availability and affordability to [affordable] risk reflective pricing for household insurance for those at for eligible homes risk of flooding Conclusions Flood Re has completed What is the QQR? a comprehensive review of: of the QQR: Highly successful in relation What has/ has not The Scheme's inbuilt the first statutory objective review mechanism: the Scheme to date and progress made against both of its objectives Made good progress do Flood Re need to see? Successes so far: Our recommendations for change in 2021:



1. EXECUTIVE SUMMARY OF PROPOSALS

Background

Flood Re's purpose is to promote the availability and affordability of household insurance for those people living at the highest risk of flood. It must also manage, over its 25-year lifetime, the transition to risk reflective pricing for home insurance for these households.

Fundamental to the design of the Scheme was the requirement to review its continued success against its statutory objectives and make recommendations for any required changes. Flood Re, as Scheme Administrator, must formally review the Scheme at least every five years ("the quinquennial review" or "QQR") and make any such necessary recommendations to the Secretary of State.

This is the first of such QQRs and provides Flood Re with the opportunity to "fine tune" the Scheme in order to accelerate its Policy outcomes, as part of an ongoing programme of improvements. It is the opportunity to review the specific Scheme parameters (which were set for the first five years) and where possible, align them concurrently to achieve the greatest Scheme efficiency. It is also the opportunity to prepare the Scheme for the future and enable the changes required for a successful transition.

Flood Re worked closely with Government to plan the QQR, including significant engagement with Department for Environment, Food and Rural Affairs ("DEFRA") on the scope, timetable and process for the consultation. The scope of this QQR was approved by the Minister in July 2018.

Recommended changes

As a consequence of the continuing need for the Flood Re Scheme, it was agreed with the Government that the QQR should not include an existential consideration of the Scheme itself, firmly reflecting the fact that, in the absence of Flood Re, the original issue of affordability and availability for those most at risk of flooding has not gone away. As such, the agreed scope of this QQR is to consider all elements of the Scheme from an operational, financial and statutory purpose perspective, with efficiency and effectiveness in mind.

Through the QQR process, we are seeking proactively to optimise the Scheme and make it more efficient, more responsive and more flexible. The recommended changes to achieve these aims can be defined within two categories:

- a) Recommendations to improve the efficiency of the Scheme administration; and,
- b) Changes to enable and accelerate the transition process.

Flood Re is proposing a package comprising the following seven changes to the Scheme:

Recommendations to improve the efficiency of the Scheme administrations

Proposal one: Levy I

Flood Re proposes that Levy I is set so it runs on a three-year basis aligned to the scheme's outwards reinsurance programme. Levy I is currently fixed at £180m per annum. Having achieved its initial capital and liquidity needs, the setting of Levy I should now be more flexible to the needs of Flood Re and reflect the agreed Levy II risk profile.

We believe the decision to reduce or increase the Levy I amount should be subject to the following:

- a. Alignment with the risk appetite of calling a Levy II over the upcoming three-year period;
- b. Maintaining the financial robustness and stability of the Scheme;
- c. Reflecting the costs to administer the Scheme, including the delivery of both objectives; and
- d. Allowing sufficient time for insurers to embed any changes into their respective planning processes.

Proposal two: Liability limit

Flood Re proposes that going forward, the calculation of the Liability Limit and Levy I are concurrent and assessed every three years.

The Liability Limit defines the maximum level of gross claims in any one financial year that Flood Re is liable to pay to the market. The Liability Limit was set in April 2016 at £2.1bn plus Consumer Price Index ("CPI") for an initial period of five years. Flood Re believes that the calculation method for the Liability Limit should remain, as should the necessity to change it if circumstances require.

Flood Re believes that the Liability Limit should be adjusted more regularly relative to the total volume and level of risk assessed for business ceded to Flood Re, rather than being fixed for another five-year period. This will allow the Scheme to provide the intended level of protection more efficiently.

EXECUTIVE SUMMARY OF PROPOSALS (cont.)

Proposal three: Stop loss requirement

Flood Re proposes that to the extent that the Government continues to require this guarantee of Flood Re, we will procure the most effective and economic financial instrument to achieve this.

Flood Re is prohibited from exceeding the Loss Limit in any given year. This is designed to limit the Scheme's potential adverse impact on the UK Government's Public Sector Net Borrowing to a maximum of £100m in any one financial year.

Flood Re is currently required to purchase a specific type of insurance ("Stop Loss") to achieve this but now that the Scheme is well established with its current level of capital, the protection of the Loss Limit by way of a Stop Loss reinsurance might not be considered value for money.

Proposal four: Investment restrictions

Flood Re is seeking permission for the Scheme to invest part of its non-solvency capital in a broader selection of investments to avoid the deterioration in value of its funds, relative to inflation.

The current investment restrictions require Flood Re to invest only in certain defined, low risk, UK Government cash and Gilts. Flood Re had funds under management of £358m as at 31 March 2019 and has returned an annualised investment rate of 0.55% for the full financial year. This compares to a 12 month CPI rate of 2.4% i.e. representing a real net deterioration in funds.

Flood Re will determine an appropriate risk appetite and investment mandate in line with its regulatory obligations.

Changes to enable and accelerate the transition process

These proposals seek to ensure that the Scheme itself is a proactive and deliberate catalyst for change and does not become a barrier to progress in relation to certain activities which would otherwise advance Transition. The proposals seek to address that ambition and are the minimum requirements to enable that to happen.

They are proposed on a permissive basis and might not be taken up or adopted by industry until a later date.

Flood Re believes that the combination of the following recommendations will make tangible progress on the Scheme's Transition objectives over the period up to 2026.

Proposal five: Lower premiums for PFR

Flood Re is proposing to offer lower premiums on policies where property level flood resilience ("PFR") measures have been installed.

The premiums currently charged by Flood Re to insurers vary by the Council Tax Band of the insured property. Whilst the existing Regulations do not specifically prevent the introduction of different pricing levels within Council Tax Bands, there is no specific allowance for, or expectation of, alternative premiums to be charged for properties within those Bands to, for example, reflect PFR measures that householders have installed.

By offering lower premiums, Flood Re aims to incentivise the take up of PFR measures by householders. Through lower inward insurance premiums, Flood Re will reward those who have taken active steps to reduce the impact and costs of future flooding events on their property. This will also help to support a market for resilience products and help to change attitudes and behaviours.

Proposal six: Build Back Better

Flood Re is proposing that the Scheme is amended to permit the payment of claims which include a limited amount of resilient and/or resistant repair, above and beyond the flood-related loss, designed to reduce the future risk of flooding to the property (known as "Build Back Better").

Flood Re believes that in order for a successful Transition, the cost of flood claims and the risk of flooding must reduce. This requires an increase in the number of homes in the UK with property level resistance and resilience measures in place. For its part, Flood Re cannot currently reimburse insurers after a flood to pay for a home to be repaired in a more resistant or resilient manner. This proposal aims to encourage the take up of PFR measures by householders after a flood claim, support a market for PFR products and help to change attitudes and behaviours.

Proposal seven: Change to statutory objective

Flood Re is proposing to change its statutory objective in legislation so the Scheme is obliged to manage "the transition of the market to *affordable* risk reflective pricing" for household insurance for those at risk of flooding.

The insertion of "affordable" will ensure that Flood Re is able to leverage its statutory Purpose to achieve the policy outcomes set out in its Transition Vision and that there is appropriate focus on long-term risk reduction activity.

In undertaking this QQR, Flood Re has consulted widely alongside its own detailed review of the existing Scheme. The Board is satisfied that these seven proposals, in aggregate, represent the necessary changes required for Flood Re to continue to deliver is purpose over the next five year period and as such, it recommends them to the Secretary of State.

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Mark Hoban, Chair

Signed on behalf of the Board

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2. BACKGROUND TO THE FLOOD RE SCHEME

The Flood Re Scheme ("the Scheme") was a joint initiative by the Government and insurers to improve the affordability and availability of flood cover for households at high flood risk. In the three years since its launch, it has been successful in doing so. As well as addressing the immediate public policy issue, it is now laying the foundations for a return to affordable risk reflective pricing.

Prior to the launch of Flood Re, following a series of significant UK flood events, householders at risk of flooding were finding it increasingly difficult to obtain home insurance to protect their homes against the flood peril at an affordable price. Pricing developments and competitive pressure in the insurance market saw rapid and significant increases in the pricing of flood risk (including both premiums and excesses) for some householders, making household property insurance unaffordable and therefore leaving householders without compensation for flood-related damages. In this way, the traditional home insurance market was starting to fail.

Since 2002, Government and the insurance industry had in place an arrangement known as the "Statement of Principles". This replaced the "gentlemen's agreement" which had existed previously. Under the Statement of Principles, insurers agreed to continue to provide cover to the riskiest homes (homes with a flood risk of less than 1 in 75 years) only with the commitment from Government that investment in flood defences would continue and only if they could have the option of charging risk-reflective premiums. In July 2008, the Government and the Association of British Insurers ("ABI") renewed the Statement of Principles for a further five years, which committed UK insurers to continue to make flood insurance available to high-risk homes and SME properties

built before 2009. In return, Government committed to managing flood risk effectively and continuing to provide data relating to flood risk to the insurance industry. There were separate but virtually identical agreements for England, Wales, Scotland and Northern Ireland. All four expired on 30th June 2013.

The Statement of Principlesⁱ required insurers to continue to offer cover to their existing policyholders, regardless of their flood risk. However, it did not require insurers to do so at an affordable premium and or excess. Nor did it require insurers to offer cover to new policyholders and as such, policyholders found themselves unable to shop around to take advantage of the otherwise competitive home insurance market. It was not therefore a sustainable solution for either the insurance industry or the Government and was unsatisfactory for householders. Nor did it provide a sustainable solution to the policy issue. Furthermore, one of the key drivers of Flood Re was the emergence of new entrants in the home insurance market after 2000. These new entrants were able to take advantage of advances in the quality of flood risk data available and, therefore, avoid customers at the highest flood risk, resulting in a distortion in the home insurance market. The Flood Re Scheme would be designed to include these new entrants and ensure all relevant insurers paid an equitable share of the cross-subsidy required to maintain affordability, levelling the playfield between the insurers.

Government and the insurance industry continued to explore possible solutions that would address the issue of flood risk and home insurance in the longer term. A number of schemes were considered and on 27th June 2013, the ABI and the Government agreed a Memorandum of Understanding on how to develop the model of "Flood Re".

July 2008 June 2013 April 2016 Rapid and Ongoing issues "Statement Statement Memorandum of significant Flood Re Flood Re of Principles" Understanding for of Principles uninsured / self "Go-Live" Flood Re agreed ended agreed ricing of flood risk insured

The Flood Re Scheme was carefully designed to provide significant benefits: insurers would be able to address the previous inequity in the market and the operational difficulties of the Statement of Principles, whilst Government benefitted from Flood Re as part of its overall flood management strategy. The Flood Re Scheme would allow insurers to transfer the highest flood risk elements at a set premium. They continue to pay claims to policyholders on flood risks transferred to Flood Re and then recover those costs from the Scheme. At the same time, it ensures affordable premiums and excesses for the policyholder. Ceding to the Scheme is voluntary and insurers retain the option to reinsure such risks in the general reinsurance market.

The Scheme was designed as a transitional measure, with a limited lifespan of 25 years, expiring in 2039. By then, market conditions should enable insurers to price flood

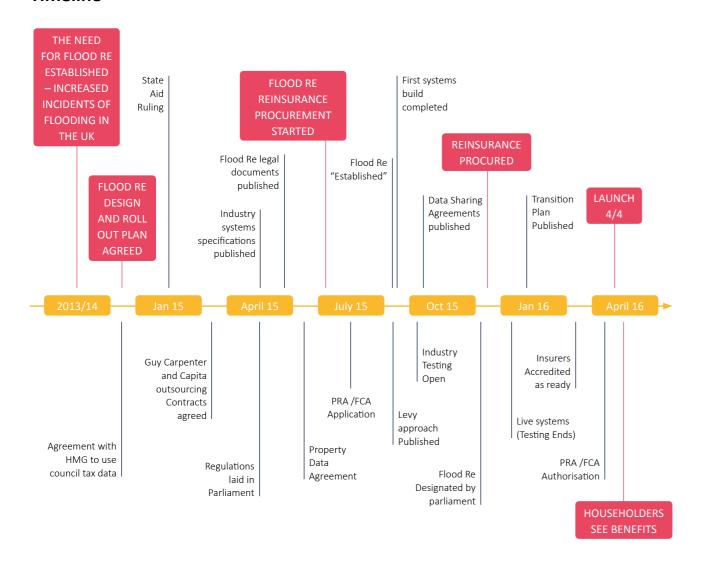
insurance depending on risk but at affordable levels. In order to make the risk reflective pricing of such insurance sustainable, during this period the UK Government committed to continue to invest in infrastructure to mitigate flood risk. Flood Re would be funded entirely by the UK insurance industry through (1) a Levy charged to all insurance companies active in the UK home insurance market, with Levy contribution based on market share, and (2) to premiums paid by the insurers for risks transferred to the Scheme. The Government would not contribute to the funding of the Scheme.

Parliament passed the Water Act 2014ⁱⁱ and supporting Regulations^{iii/iv} (the "Regulations") and (Flood Re Limited ("Flood Re")) a new entity was established, to administer the Scheme day to day, in accordance with statute.



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Timeline



Flood Re is unique

It is owned, funded and operated by insurers but publicly accountable to Parliament. It is a private limited company, a purpose-focused entity and necessarily regulated by the Prudential Regulation Authority and the Financial Conduct Authority. It is not-for-profit and managed efficiently and

effectively in a commercially rigorous manner. The entity is a public body, sponsored by the DEFRA but is wholly independent both operationally and financially. Its constitutional documents were approved by Parliament but it is run and managed independently.

Flood Re – a unique Scheme

- Private limited company (owned by its Members)
- Limited lifespan of 25 years
- Not-for-profit, but commercially rigorous
- Purpose-focused entity

- Regulated by the PRA and the FCA
- Publicly accountable to Parliament
- An arm's length body of DEFRA but wholly independent both operationally and financially

Flood Re launched on 4th April 2016 with a significant national awareness campaign.

The Scheme was designed to be appropriate and proportional for achieving its statutory purposes. It is an illustration of how Government and industry can work together to design effective measures that contribute to important public Policy goals. This unique structure has already afforded Flood Re a number of benefits, not least in relation to the third parties with which it interacts, including more open data and intellectual property sharing, reduced rates and significant convening power.

Flood Re accepts all eligible properties ceded into the Scheme. It is well understood that the volume of insurance policies actually ceded to the Scheme at any given time will depend on a number of factors over which Flood Re has varying degrees of control. These include:

- Understanding of flood risk;
- Building of new flood defences;
- Overall premium trends in the insurance market;
- Efforts by householders to shop around;
- Underwriting and ceding appetites of respective insurers;
- The weather and specific flood events;
- Public awareness of the availability and affordability of flood cover through the Scheme; and
- Availability of the Scheme to insurers and the wider insurance market.

In view of the above factors, the real impact of the Scheme's existence is much wider than the direct protection provided to the number of policies ceded to the Scheme at any given time.

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3. SCHEME PURPOSE AND PARAMETERS

Given the time-bound nature of Flood Re, the Scheme has two statutory objectives ("the purpose"):

- **A.** To promote the availability and affordability of household insurance for eligible homes; and
- **B.** To manage, over its lifetime, the transition of the market to [affordable] risk reflective pricing for household insurance for those at risk of flooding.

The Scheme was designed to promote affordable cover for high flood risk residential property; it was not designed to cover businesses and the eligibility criteria directly reflect the identified market failure:

• The Scheme covers properties held for **residential use** (which must have a Council Tax Band).

Small businesses and other commercial buildings are excluded from the Scheme. The Scheme design directly addressed the market failure in the home insurance market which was not apparent in the SME / commercial market. It also allows for a possible cross-subsidy.

 The Scheme accepts homes insured in the name of individuals and insured on an individual basis.

Properties ceded must be occupied by the policyholder or their immediate family. This expressly excludes Buy-To-Lets and properties with more than three residential units.

In addition, the Scheme only covers homes built before
 1 January 2009.

This mirrors the Statement of Principles and was designed to reflect the Government's commitment to building and maintaining flood defences. It was also to ensure that the establishment of the Scheme did not act as an incentive for irresponsible planning decisions and house building in the future.

Flood Re's policy is to be "back-to-back" with insurers' standard polices; it does not expect policies to be "gold-plated" as a response to Flood Re. Flood Re's fundamental underwriting principle and eligibility criteria are designed to ensure that there should not be an increase in the number of residential properties at risk of flooding as a result of Flood Re.

Parameters to suit the Purpose

Flood Re offers insurers subsidised premiums paid in accordance with a property's Council Tax Band, irrespective of flood risk. It also offers a low, fixed excess of £250 per property.

In addition to the premiums paid by insurers, Flood Re raises an annual Levy ("Levy I"). This is currently set at £180m per year.

Levy I and premiums are primarily used to:

- 1. Pay flood claims;
- 2. Purchase outwards reinsurance;
- Maintain its capital resources and financial strength; and
- 4. Fund the administration of the Scheme (including to further the Scheme's Transition objective).

To date, Levy I has been sufficient to meet Flood Re's regulatory Solvency Capital Requirement. However, should Levy I not be sufficient to meet the requirements following an extreme series of events and Flood Re needed additional funds to meet its Solvency Capital Requirement, a further Levy ("Levy II")vi can be called against the same insurers for an unlimited amount.

The Scheme is subject to an index linked maximum annual limit of flood claims ("Liability Limit") to insurers, established at £2.1bn at the time of authorisation. Above this amount, liability for the claims would revert back to insurers. Flood Re purchases its own outwards reinsurance to protect the Scheme up to its Liability Limit. This initial three-year programme was one of the world's largest global single peril multi-year procurements of reinsurance and the first to be placed by way of OJEUvii compliant public procurement. Recently, a second, consecutive, three-year programme was successfully re-procured at a significant costs saving.

Flood Re is prohibited by the Government from losing more than £100m in any given operating year (the "Loss Limit").

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4. PROGRESS AND ACHIEVEMENTS SINCE LAUNCH

As a unique and highly successful, world-first, joint Government and insurance industry initiative, Flood Re is already efficiently achieving its Purpose. As evidenced below, the Scheme is being used by the majority of the home insurance market and householders have seen immediate benefit in their premiums and excesses.

Since launch, the Scheme has sought to achieve its goals within the constraints of the Scheme rules. This QQR allows the Scheme to be more forward looking and proactive in making certain recommendations and in doing so it will build on its strengths in order to be more responsive and flexible in bringing about the change it needs to see.

Key statistics

- 94% of the home insurance market offer the Scheme
- 4 out of 5 households with previous flood claims have seen a price reduction of more than 50%
- 93% with prior flood claims can now receive quotes from five or more insurers
- Nearly 250,000 homes have benefitted since launch
- Over 500 claims made

4.1 Availability and affordability

In this first, foundational period of the Scheme, the primary focus of Flood Re's activity and effort has been necessarily and appropriately on the first statutory objective (promoting the availability and affordability of flood insurance). The first premiums were ceded to the Scheme at just past midnight on 4th April 2016 and the immediate and significant impact of the Scheme was observed.

Impact on Availability:

- 1. Number of quotes available to customers with prior flood claims:
 - Pre-Flood Re: Only 9% could get 2 or more quotes and none could get 5 quotes.
 - Post-Flood Re: 93% can get 5 or more quotes.
- 2. Channel readiness: 81% of all sales channels in the market are now open for Flood Re based products for new business, with 87% channel readiness for renewals business.

Impact on Affordability:

- 1. Pre-Flood Re: Often prohibitively expensive premiums and uncapped excesses.
- 2. Post-Flood Re: 4 out of 5 customers with a prior flood claim saved over 50% on their home insurance premium when compared to before Flood Re's launch. £250 excesses is now a standard offering.

The above data has been regularly and independently tested by Consumer Intelligence and reconciles with the conclusions of DEFRA's own Market Study. Since April 2016, the Scheme has benefitted nearly 250,000 homes in the UK, considered by insurers to be at risk of flooding. Those homes have benefited from a subsidised reduction in premium and a stable, low excess on the flood peril element of their home insurance policy. In doing so, Flood Re has successfully enabled the re-creation of an accessible and effective insurance market for these homes.

Flood Re's financial performance has been strong and it has reached a financially robust position, as set out in its published Annual Report and Accounts^{viii}. This strength is a consequence of a number of factors including:

- 1. Three benign years of operation with no substantial flood events;
- 2. Receipt in full of Levy I payments from the market;
- 3. Successful placement of the Flood Re outwards reinsurance programme, limiting the net impact from future events and so reducing the current capital requirement; and
- 4. Delivery of the Scheme within planned expense levels over the previous three years.

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The Scheme's financial strength has reduced the risk of a Levy II call. Summary financial highlights appear below.

Financial Highlights	31 March 2019	31 March 2018	31 March 2017
Profit before tax	£136m	£134m	£130m
Invested and liquid assets	£358m	£257m	£157m
Solvency capital ratio	349%	425%	237%
S&P rating	A- (stable)	A- (stable)	A- (stable)

This financially robust position has allowed Flood Re to reduce premium rates proactively, relative to wider pricing trends in the insurance market. This is one of the limited number of areas within the Scheme rules where Flood Re can make changes that reflect its learning to date:

- In April 2017, Flood Re chose not to increase the premiums it charged in line with CPI. This reflected the firm's strong financial position and a decrease in premiums in the wider insurance market. This was well received. As such, for the first time, the premiums charged by Flood Re were lower than the Premium Thresholds set out in statute.
- The Scheme went further in October 2018 following a market-wide study of pricing and affordability, reducing the Scheme's premiums effective January 2019. The move sought to better align premiums and risk for Contents policies. Flood Re anticipates that the reduction in premiums will further benefit householders and increase volumes ceded to the Scheme.

Further work on understanding "Affordability" is ongoing.

Flood Re has actively (and independently) measured its impact in relation to availability and affordability during this period. Flood Re has seen a marked increase in the number of insurers, managing general agents ("MGAs") and brokers offering quotes to homes most at risk of flooding. Flood Re has also identified market benefits extending beyond those properties ceded to the Scheme which clearly demonstrate the wider impact on pricing felt by the market as a result of the Scheme.

Over 85 home insurance brands are 'on board', representing 93% of the home insurance market.

Notwithstanding the relatively dry weather and correspondingly low levels of flooding, Flood Re has also received over 500 claims in the first three years of operation. Significantly, eight of these claims relate to four homes which have flooded twice in the first three years of the Scheme's operation. Through its limited claims experience to date, Flood Re is learning more about the time and costs incurred in different flood claims.

For these reasons, the Scheme has been very successful to date and significant progress has been made in relation to its Availability and Affordability objective.

4.2 Transition

4.2.1 Flood Re's Transition Vision

Flood Re published a Transition Plan within the first year of its operation in line with its statutory requirement. This was an early statement of intent that Flood Re made about its Transition aims.

After two years of operation, Flood Re was better placed to understand what was needed for the market to transition to risk-reflective pricing by 2039 and it published a second Transition Plan, called "Our Transition Vision" ('the Transition Vision') in July 2018. This focused on:

- reducing the risk of flooding;
- reducing the costs of flooding; and
- raising awareness of flood risk.

The strategy makes clear that Flood Re needs to consider both the effective transfer of flood risk and its reduction. The two must necessarily be considered together and activities focused on one may well appear to be contrary to the other. As Scheme Administrator, Flood Re must embrace and work with this paradox.

As set out above, the Scheme is working effectively, through mutualisation, to transfer a greater element of flood risk from householders to insurers but risk reduction will take time and require the cooperation of multiple stakeholders. Flood Re itself has limited direct levers to impact risk transfer or reduction but where possible, it has used these levers effectively (such as by reducing premiums to drive affordability).

The Transition Vision noted that Flood Re has made marked progress on its second statutory purpose (transitioning the market) with a variety of activities including:

- a) Commissioning research into incentivising householders to protect their homes and separately, into the merits of property level protection; and
- b Reducing premiums charged to better understand affordability and price elasticity.

These activities have been carried out in conjunction with Flood Re's various stakeholders and have been well received. This early activity has highlighted a number of challenges with achieving transition, including, reaching the addressable population, defining "affordable" risk reflective pricing, incentivising household resistance and resilience action, and data sharing in a competitive market. A number of these reiterate the inherent paradoxes of the Scheme, which Flood Re is continuing to better understand.

The Transition Vision also noted how Flood Re's choice and prioritisation of activity has been governed by a set of "Principles" that it has devised which it applies to its Transition-focused activity. They are:

- a) **Additionality:** Flood Re engages in activities that are additive or complementary to the work that others are already undertaking, seeking out gaps in existing knowledge and action to contribute to these gaps.
- b) Expertise: Flood Re engages in work where it has the necessary expertise to contribute meaningfully or identifies others who are well placed to undertake this work.
- c **Impact:** Flood Re seeks to maximise the impact of the action it takes such that the action is proportionate to the potential benefit for its purposes.
- d) **Sustainability:** Flood Re engages in work that promotes the sustainability of its statutory purposes and supports Transition to 2039 and beyond.
- e) **Partnership:** With few direct Policy levers, Flood Re's primary role will be in supporting, facilitating and promoting the actions of others.

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Flood Re's own role in Transition activities is currently limited by certain parameters of the Scheme's design. In fact, Flood Re has very few direct opportunities to make an impact on its Transition objective which largely concerns mitigating physical flood risk. Where Flood Re does not have the ability to make a direct impact, it continues to exercise its convening powers and to work with stakeholders who do. Through this QQR, it is Flood Re's intention that policymakers consider a number of changes that enable and permit the Scheme to evolve to better support Transition activity, both directly and indirectly and avoid a situation where the Scheme itself is a constraint on the achievement of Transition.

4.2.2 The role of other parties in delivering larger transition

The Scheme's ultimate success will also depend on the continued responsibilities of other stakeholders, including householders who currently benefit from the Scheme.

a) Information sharing

Flood Re's own research, along with third party evidence, shows that householders are not generally aware of the real flood risk of their homes nor are they aware of what to do to reduce it. Insights from the Social Market Foundation ("SMF") report and our Flood Re quantitative research with Populus, an independent market research company, clearly points to household decision-making being significantly hindered by the fact that there are currently few credible sources of information that they can use to understand the likely efficacy of flood protection measures. Our own research is also corroborated by Environment Agency ("EA") studies that show that householders are not always aware of the true flood risk that they face. Greater information sharing and analysis about flooding and flood risk could better inform consumers to make better choices in the wider public interest.

Flood Re believes that greater consumer awareness of flood risk is central to the reduction of that risk and the damage caused by it. The process of raising awareness will be evolutionary in nature and will, over time, positively increase householders' level of understanding of flood risk and how they could take steps to improve their homes.

Flood Re will continue to work with other third party, trusted voices to raise consumer awareness more broadly.

b) Wider flood risk management and policy impacts

Central to the success of the Scheme in the next QQR period will be the continued commitment by Government to maintain (or increase) spending on flood risk management, both in relation to new protection and the maintenance of existing protections in line with the clear obligation set out in the original Memorandum of Understanding between the Government and the ABI.

Flood Re recognises that such investment is just one measurement of this issue and is involved in a number of other activities to this end as part of its Transition Vision. Flood Re will continue to work with its stakeholders in the insurance industry, through the ABI, to inform public debate about the importance of flood defences.

As part of the agreement between Government and the insurance industry, Government committed to spend £2.65bn over seven years in its last Comprehensive Spending Review. Flood Re is already seeking to engage with the Government in advance of its next Comprehensive Spending Review in relation to its continued investment in this area. In support of that activity, Flood Re has recently worked with RMS, an expert third party to quantify the benefit of the existing flood defences in the UK. RMS' researchix found that flood defences reduce UK fluvial flood losses by £1.1bn annually. on average. This corresponds to an 82% reduction of fluvial losses nationally, with more deprived households benefiting from 70% of the loss reductions. The probability of Flood Re achieving its policy objectives would be significantly reduced if the level of Government spending falls during the next QQR period: this would result in higher instances and severity of flooding and greater requirements for market cross subsidy.

Other factors which are not directly within the control of Flood Re include planning decisions which might increase the housing stock in areas at risk of flooding and the impact of climate change which could increase the number of existing homes at risk of flooding. The risk of both of these is likely to impact the Scheme during its lifetime and as such, Flood Re is involved in a number of activities designed to consider the impacts of these factors including working with DEFRA, the Environment Agency, Natural Resources Wales and Scottish Environment Protection Agency and industry partners to shape long term investment strategies to address climate change and to enable sustainable development with flood risk in mind.

Furthermore, a number of the proposed changes are permissive in nature and designed to allow the Scheme to be more flexible and responsive to a changing portfolio of properties deemed to be at flood risk. Flood Re has been working closely with policymakers including the Environment Agency (such as its production of the Flood and Coastal Erosion Risk Management Strategy ("FCERM")) and DEFRA to ensure that their respective Policy Statements support the statutory purposes of Flood Re.

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5. THE FIRST STATUTORY REVIEW ("QQR")

Fundamental to the design of such an innovative Scheme was the requirement to review its continued success against its statutory objectives and make recommendations for changes to benefit the next period and beyond. Flood Re, as Scheme Administrator, must formally review the Scheme at least every five years ("the quinquennial review" or "QQR") and make any such necessary recommendations to the Secretary of State. Such reviews will take place throughout the lifetime of the Scheme.

The first QQR period runs from April 2016 to March 2021 and provides Flood Re with the opportunity to "fine tune" the Scheme after three years of its operation in order to accelerate its policy outcomes, as part of an ongoing programme of improvements. It is also the opportunity to review the specific Scheme parameters (such as the Liability Limit and Levy I) which were set for the first five years.

5.1 Process and scope

Flood Re agreed the scope of its QQR with the Government in July 2018. Since that time it has commenced a thorough and independent review of the Scheme (as Scheme Administrators) to consider both the efficiency and effectiveness of the Scheme from a financial, operational and policy perspective. This is based on both its experience in administering the Scheme day to day and its understanding of the changes required to achieve its Transition objective.

Flood Re is in the unusual position of being required by law to review the Scheme that it administers. However, this has significant advantages, including that it is best placed to make the recommendations contained in this paper. Flood Re worked closely with Government to plan the QQR, including significant engagement with DEFRA on the scope and process for the consultation.

As a consequence of the continuing need for the Flood Re Scheme, it was agreed with Government that the QQR should not include an existential consideration of the Scheme itself, firmly reflecting the fact that, in the absence of Flood Re, the original issue of affordability and availability for those most at risk of flooding has not gone away. As such, the agreed scope of the QQR was to consider all elements of the Scheme from an operational, financial and statutory purpose perspective with efficiency and effectiveness in mind.

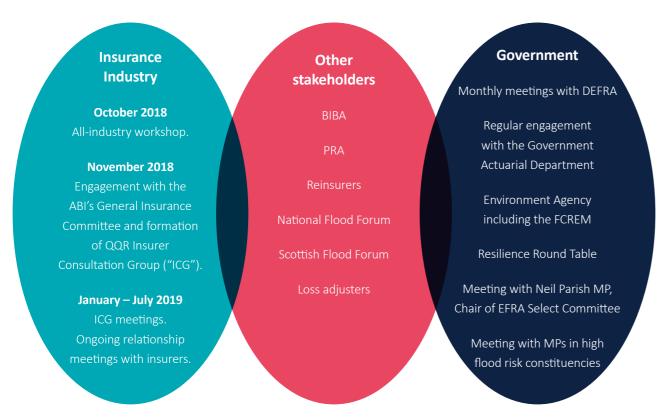
The scope of the QQR, as detailed in the box below, was approved by the Minister in July 2018.

In scope	Out of scope
"Core issues only" – financial and administrative parameters. Includes core requirements to optimise	Fundamental and existential review of Flood Re to consider wholesale efficiency and effectiveness from
Flood Re's efficiency and effectiveness and help	policy perspective, being:
transition to affordable risk reflective prices, being:	
	 Reconsideration of current government exemptions;
✓ Levy I and Levy II;	 Appropriateness of scope of Scheme;
✓ Excesses and premiums;	, '' ' , ' , ' , ' , ' , ' , ' , ' , '
	Extent of control over Flood Re.
✓ Liability Limit;	
✓ Loss Limit (and Stop Loss requirement);	
✓ Borrowing limit;	
✓ Spending and annual accounts;	
openang and annual deceants,	
✓ Scheme definitions;	
✓ Use of capital.	
V OSC OF Capital.	

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5.2 Consultation

As set out below, Flood Re has also carried out active stakeholder engagement in line with an agreed timetable. Stakeholders include:



Specifically with insurers, Flood Re has held a detailed workshop with all insurers in plenary to obtain insight and early testing views on the proposals. In addition, Flood Re has continued those discussions with individual insurers on a one-to-one basis through its usual relationship meetings. Flood Re has discussed its specific proposals with insurers' Property underwriting teams and other informed stakeholders and believes, as a result, that they are broadly aligned. More formally, Flood Re established the Insurer Consultation Group ("ICG"), appointed in conjunction with the ABI's General Insurance Committee and Executive Forum. The ICG further discussed the proposals to seek industry support for them and the proposals are better as a result of those discussions.

Separately, Flood Re has also engaged with Government bodies and Officials throughout the process and worked closely with the Government Actuarial Department in relation to testing and feasibility of the package of proposals. Wider stakeholders have been consulted on all relevant matters.

The feedback of all stakeholders has been incorporated into the proposals below. In considering its recommendations in this QQR, Flood Re is mindful that it is designed to exist for just 25 years and the period directly affected by this QQR will end almost half way through that lifespan. It is Flood Re's view that significant progress ought to have been made by then, towards transitioning the market to affordable risk reflective pricing.



Flood Re has considered broader policy considerations and specifically examined its efficiency and effectiveness and how it manages public money for the benefit of all of its stakeholders. Flood Re has reviewed the core financial and administrative parameters of the Scheme, considering whether these continue to allow Flood Re to work for stakeholders, whether it continues to be based on a sound financial model and whether there are any changes necessary to Flood Re's basic model to help transition to affordable risk reflective prices.

Flood Re has also considered changes that it foresees in the insurance market more generally and the potential impact of these changes on the Flood Re Scheme, both directly and indirectly. These include greater interest in InsureTech propositions (e.g. Lemonade), a move towards a "no questions asked" method of obtaining customer information, a rise in single category insurance products (e.g. mobile phones) and the prevalence of multi-cover (home / car) insurance products.

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Market Observations:

Market drivers and 'disruptors'

- Deterioration in home insurance combined operating ratios in 2018.
- Disruptors such as Lemonade and Amazon yet to have an impact; home insurers looking at opportunities brought by InsurTech companies, particularly linked to the Internet of Things and connected devices in the home.
- Detection devices (e.g. those which detect a leak) increasingly becoming part of insurers' product offerings.
- Simplification of product offerings, speed of service and claims handling capabilities increasingly seen as differentiators with increasing commoditisation of home insurance.

Natural catastrophes and weather

- Storm and subsidence events dominating weather-related claims in 2018.
- Relatively few flood events in 2018, or since Flood Re's launch.
- Global reinsurers exposed to significant weather events globally.

Regulatory focus

- Home insurers considering the implications of the super complaint from the Citizens Advice Bureau on what it describes as a 'loyalty penalty', with action and guidance expected from the Regulator in June 2019.
- Explicit recognition from the PRA on the need for insurers to factor climate change into their planning and modelling approaches.

The QQR has been conducted at this time in order to ensure that changes can be made to the Scheme to ensure its readiness for the second QQR period (April 2021 to March 2026).

6. QQR FINDINGS AND PACKAGE OF RECOMMENDATIONS

Flood Re is a unique and highly successful, world-first, joint Government and insurance industry initiative. It is efficiently achieving its Purpose.

Through its experience and insight gained by administering the Scheme to date and its focus on the changes required to meet its transition objective, Flood Re recommends a package of proposed changes to the Scheme. This package represents Flood Re's best understanding of the behavioural and market evolution required at this stage of the Scheme's existence. It also includes certain changes to continue to optimise the efficiency of the Scheme. The package balances the needs of the Scheme's stakeholders and builds on the Scheme's strengths in order to be more responsive and flexible in bringing about the change it needs to see.

In some instances, the changes are permissive and their implementation and impact needs, to be worked through with insurers, but their intention and objectives are understood by stakeholders. Not all of the changes will have equal impact on the Scheme's success and Transition agenda. Some are designed to accelerate and encourage certain behaviours during the next stage in the evolution of the Scheme and the market and their impact is difficult to predict.

6.1 Two types of changes

In this QQR Report, Flood Re presents a package of recommendations. Flood Re believes these represent a fair and balanced, objective approach to changes that are required of the Scheme at this time, balancing the efficient administration of the Scheme with evolving its Transition activity.

The original Memorandum of Understanding and subsequent creation and design of Flood Re was a product of negotiation between the insurance industry and Government. As a result, the Scheme was designed with very specific characteristics:

- 1. A clear and appropriate Scheme eligibility, closely aligned with Policy intent;
- 2. Operational, financial, legal and management independence;
- 3. A requirement to deliver both Affordability and Availability and transition to a risk-reflective market; and
- 4. The requirement for a periodic review of the Scheme and its effectiveness.

Flood Re's package of proposals progress both the efficiency and effectiveness of the Scheme, including:

- 1. The setting of Levy I and the Liability Limit every three years to more efficiently reflect the needs of the Scheme and align with the outwards reinsurance programme;
- 2. To enable Flood Re to mitigate value-erosion of assets by updating its investment mandate; and
- The opportunity to investigate and adopt appropriate alternatives to Stop Loss insurance to protect the Loss Limit.

QQR FINDINGS AND PACKAGE OF RECOMMENDATIONS (cont.)

The package also progresses the achievement of the Transition Vision: affordable risk reflective pricing by 2039, including:

- To permit the Scheme to offer the reinsurance of limited incremental costs incurred that deliver increased future flood resistance and/or resilience at the point of claim ("Build Back Better");
- 2. To permit Flood Re to offer a discounted set of premiums for properties that have installed "allowable" resistance and resilience measures and to work with the insurance industry to introduce a proportionate pricing approach to incentivise such behaviour;

and

3. To amend the statutory purpose to include an express aim of transition to <u>affordable</u> risk reflective pricing.

6.2 Feasibility and Testing

In making the recommendations within this report, Flood Re has considered the feasibility of each element of the Scheme in detail, including considering the potential impacts under a range of future business outcomes. This includes assessing the potential financial impact of the proposals under a range of future business outcomes. A detailed supplemental report entitled "Actuarial Analysis of QQR Proposals", which outlines in full the financial modelling and testing performed, has been prepared by Flood Re for DEFRA and has been reviewed by the Government Actuaries Department. That supplemental report contains commercially sensitive information and, as such, is not for wider circulation. Key results from that report are, however, presented herein and demonstrate that, based on the modelling and wide range of scenarios considered, the elements of the QQR recommendations are affordable both individually and in aggregate. Flood

Re recognises that the assumptions being made within the detailed scenarios considered may differ from those adopted in practice at a future point in time. The modelling and testing carried out also illustrates that Flood Re has been able to consider the impact of uncertainty around future outcomes on the financial stability of the Scheme, concluding that the existing business safeguards and governance processes designed to manage the risk profile of the Scheme are adequate to manage the future uncertainty, consistent with the approach already taken on wider business decision making. Decision making in the areas of proposed change will also be subject to the need to satisfy regulatory requirements on an ongoing basis.

It is Flood Re's view that the package of proposals is balanced and appropriate: on the basis of the current financial stability of the Scheme it would result in a lower Levy I on insurers after Flood Re has invested to a proportionate extent in order to contribute to the Transition.

The changes being proposed will allow Flood Re to develop and add further value to its stakeholders whilst also having a wider, indirect impact on the market. Flood Re has reiterated the safeguards that would be in place including operational efficiency and maintaining the financial integrity of the Scheme.

Further consultation with stakeholders has confirmed that it continues to be appropriate to provide protection to the level set out in the original Scheme design (to cover a 1 in 200 annual loss) (notwithstanding that the actual risk comprising that level may have changed) and so the recommendations for efficiencies reflect a continued requirement to meet the original Scheme design.

Our vision: Securing a future of affordable flood insurance B F O **€**€ → € € € € € of households who had made previous £20k - £45k 5.3m flood claims could get quotes from 2 Before typical cost for fully repairing or more insurers UK households are at Flood Re risk of flooding ocould get quotes from 5 or more insurers D 90% 100% could get quotes from 2 insurers 150,000 U With R Flood Re made previous flood claims N could get quotes from 10 or Four out of five households saw more insurers more than 50% price reduction Reducing the damage Reducing the risk of flooding Achieving an effective market and costs of flooding A smooth Flood Re exit nproving the operation of community flood resistance and resilience Improving consumer nformation on flooding and ncreasing the overall flood resilience the value of insurance and resistance of the UK's housing stock Active engagement in the market Reducing the cost of reinstatement The limits of affordability Continued support for those with unavoidably high level of flood risk ising the size of the highest risk group

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IMPROVEMENTS TO THE EFFICIENCY AND EFFECTIVENESS OF THE SCHEME ADMINISTRATION

ALIGNING THE SETTING OF THE LIABILITY LIMIT AND LEVY I WITH FLOOD RE'S REINSURANCE PROGRAMME

Proposal 1: Levy 1

It is proposed that Levy I is determined, through modelling, on a three-year basis aligned to Flood Re's outwards reinsurance programme procurement. The decision to reduce or increase the Levy amount should be subject to the following being true:

- A. Alignment with the risk appetite of calling a Levy II over the forthcoming three year period; and
- B. Allowing sufficient time for insurers to embed any change to the value of Levy I into their respective planning processes.

ALIGNING THE SETTING OF THE LIABILITY LIMIT AND LEVY I WITH FLOOD RE'S REINSURANCE PROGRAMME (cont.)

Background to Levy I

Levy I was established as the primary funding mechanism for Flood Re. It was intended to meet the initial capitalisation and liquidity requirements of Flood Re, subsidise premiums and excesses, and meet operational costs (including reinsurance and net claims). To date, it has allowed Flood Re to make financial plans with some certainty, a requirement which remains.

Levy I was set at an annual amount of £180m for an initial period of five years. This amount was calculated, based on the reported cross-subsidy in the market at that time. It was also set at a level to allow the Scheme to meet its initial Solvency Capital Requirements as a regulated entity. Since then, Levy I has enabled the Scheme to provide certainty and confidence to Regulators and stakeholders, as well as meeting all of its costs.

In circumstances where Flood Re requires funds in excess of Levy I, it has the power to raise a further Levy, "Levy II", up to an unlimited amount. Flood Re has expressed its appetite for calling a Levy II as follows:

"The ability of the organisation to withstand certain adverse occurrences prior to the capital or liquidity surplus falling below the level triggering a Levy II call, with:

- a very low appetite to call Levy II as a result of a flood related loss^x in one year alone (close to zero %);
- a low appetite to call a Levy II as a result of a second year of flood related losses (less than 2%);
- an appetite for calling a Levy II in a third consecutive year of flood related losses."

To date, Flood Re to date has not been required to call a Levy II.

Detail and experience of administrating the Scheme to date

Flood Re has invoiced for and fully collected £180m in each of its three years of operation. The formula for calculating the Levy, the identification of Levy payers and the invoicing mechanism have all been effective to date. At 31 March 2019 Flood Re had a Solvency Ratio of 349%, reflecting a Solvency Capital Requirement ("SCR") of £100.1m and Eligible Capital Resources of £349.4m.

Flood Re is aware that certain insurers pass the cost of Levy I directly on to their customers. In some cases this is transparent and is expressly set out in the customer's invoice. Other insurers take a different approach to addressing the cost of Levy I. At launch it was estimated by the ABI that, on average, the £180m of Levy I is reflective of in an increase of £10.50 in the cost of home insurance policies across the market.

Proposal

Having achieved its initial capital and liquidity needs, the setting of Levy I should now be more flexible: reflecting the needs of Flood Re and its prevailing risk profile. The amount should be set more regularly to better reflect the true income needs of the organisation whilst not presenting a greater risk to financial stability. The setting of the amount should ensure that it poses no greater Levy II likelihood for insurers. The collection and true-up mechanism should remain unchanged, causing no substantive impact on insurers. A more dynamic determination of Levy I allows for both the effective operation of the Scheme as well as appropriate expenditure on transitional and strategic activities. Flood Re expects that consumers will see savings in their premiums as a consequence of a reduced Levy I.

Furthermore, and as set out below, aligning the timing of the setting of Levy I with the setting of the Liability Limit, will allow for a more efficient and dynamic Scheme.

Proposed new basis of setting Levy I and frequency:

Setting Levy I more frequently has a number of benefits, including:

- a) better reflecting the income needs and portfolio exposure of Flood Re; and
- b) an expectation that in the case of a reduction, this will benefit householders that have policies ceded to the Scheme and reduce the cost of Flood Re to all households over the remaining lifetime of the Scheme; and
- c) consistency with Flood Re's stated risk appetite for Levy II and sufficient funding requirements to progress Transition objectives.

It is proposed that the determination itself is no longer based on the previous estimation (or an equivalent) of the cross-subsidy in the market. Instead, Flood Re will carefully assess:

- 1. The output of technical, financial modelling to meet and protect the Scheme's parameters (in both wet and dry periods) based on the financial position of the business and future expectations of business volumes and risk;
- 2. The costs of delivery of the Scheme's two statutory purposes; and
- 3. Allowing for an appropriate amount of prudence in the above (reflecting the relative evolution and current early life-stage of the Scheme).

The timing of the Levy I setting will recognise that insurers will have to embed any changes into their respective business planning processes and three-yearly revisions to Levy I will be timed accordingly. Stakeholders should recognise that on the new basis of setting Levy I, it would be expected to dynamically adjust (both upwards and downwards) in subsequent periods depending on the experience of the Scheme.

Flood Re recognises that if the proposal is adopted from April 2021, the first three-year Levy I period will not be concurrent with the start of the second five-year operational period of the Scheme (commencing April 2021). Flood Re will work closely with insurers, its outwards reinsurers and legislators to overcome any operational obstacles which may occur.

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ALIGNING THE SETTING OF THE LIABILITY LIMIT AND LEVY I WITH FLOOD RE'S REINSURANCE PROGRAMME (cont.)

Feasibility and testing

Feasibility testing has focussed on determining the scope for changing Levy I whilst ensuring that the risk of calling a Levy II is managed within the expressed appetite detailed above. As the Levy II risk appetite is expressed on a three-year basis, setting Levy I at an amount that satisfies that appetite will provide Flood Re and its stakeholders with the appropriate level of confidence that the potential financial demands on the business will be met over each three-year period without recourse to calling for a Levy II.

The results of this testing have allowed Flood Re to illustrate how modelling results would be combined with management judgement to set Levy I under different potential future conditions.

The appropriate level of Levy I for any given period will be dependent on the financial strength of the Scheme and future expectations for key business drivers such as likely future business volumes and outwards reinsurance costs. Testing has therefore been carried out on two different illustrative bases as follows:

- Using the financial position of Flood Re as at 31st
 March 2019 and its business plan, including expected policy volumes and the known reinsurance costs already purchased at that date; and
- An alternative scenario in which insurers' appetite for ceding business is higher, increasing business volumes and reinsurance needs by 50% but where outwards reinsurance availability has reduced and reinsurance costs are increased by a further 33.3%.

Under both scenarios we have tested and considered the likelihood of calling a Levy II for the agreed risk appetite scenario of two "1 in 50 year" losses of over consecutive years in Years 4 and 5 (aligned to our Levy II risk appetite as detailed in section 11.2.1).

In relation to the first scenario, we have modelled the probability of calling a Levy II, based on 31st March 2019 conditions, in any one of Years 4, 5 and 6 under varying levels of Levy I. The output modelling results range from £90m, which is below the amount required to meet the risk appetite, to £180m, being the current Levy I.

Back-testing has also been used to determine that a minimum mathematical Levy I of £91m would be required to satisfy the risk appetite before consideration of any factors not explicitly modelled, based on the 31st March 2019 conditions.

In relation to the alternative scenario, this would increase the need for Levy I beyond the current level and would result in a minimum mathematical Levy I of £185m.

Flood Re has considered the modelled outcomes of the scenarios above alongside other unmodelled factors within the Levy I setting process. These other factors include, for example, the impact of any changes to the commercial flood model vendors' assessments of UK flood risk

Accordingly, allowing for an appropriate management assessed level of prudence at this stage in the maturity of the Scheme, Flood Re has provided an illustrative Levy I at 31st March 2019 of £135m.

Note that these scenarios are indicative only and the actual process will reflect the circumstances of the time at which the Levy is set.

There are no direct costs associated with the implementation of this proposal.

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Proposal 2: Liability Limit

It is proposed that the calculation of the Liability Limit and Levy I are concurrent and assessed on a three-year basis.

Background to the Liability Limit

The Liability Limit refers to the maximum level of gross claims in any one financial year that Flood Re is liable to pay to the market and was established as £2.1bn (indexed linked to CPI) at authorisation. The Liability Limit was determined based on the Flood Re view of flood risk and notified to the Secretary of State as being sufficient to ensure that Flood Re could meet claims for beyond a 1 in 200 annual aggregate claims outcome. The figure was determined by Flood Re with support from Guy Carpenter and subject to independent validation by KPMG, prior to review by the PRA. It was based on a series of pre "go-live" assumptions reflecting the best available information with respect to expected future premium volumes and the anticipated resulting risk profile. Losses beyond the Liability Limit revert to the market in proportion to their contribution to the annual total losses.

The Liability Limit was set in April 2016 at £2.1bn plus CPI for an initial period of five years. The setting of that figure was based on estimations of the portfolio and a level of prudence reflective of the infancy of the Scheme.

Detail and experience of administrating the Scheme to date

The Regulations and supporting Scheme documentation require Flood Re to provide protection to the insurance market up to a level where cedants are not required to maintain a loading on their respective capital requirements at the 1 in 200 level annual aggregate loss ("AAL"). Flood Re's assessment of that 1 in 200 event year ("1:200") level is central to the setting of the Liability Limit.

Flood Re is now much better placed to determine the Liability Limit more accurately given the establishment of the actual current portfolio, whilst allowing for a certain amount of prudence for future event-related expansion. On the basis of a more accurate determination reflecting the current portfolio, as currently modelled and projected from 1st April 2019 to 31st March 2022, the Liability Limit would be approximately £1.6bn.

Having been set for an initial period of five years, to date, it has been determined by Flood Re that there has been insufficient evidence to justify changing the Liability Limit prior to this first QQR.

Flood Re procured a three-year reinsurance programme prior to authorisation which was designed to protect the assessed liability limit of £2.1bn which was associated with writing circa 350,000 policies by Year 3. The actual volume that would be written was always a key source of uncertainty and could, in theory, have been more than the initially estimated 350,000 policies. The latest assessment of written business volume levels at the end of year three is 165,000 polices, which while being 47% of the 350,000 level, it is also a more highly concentrated portfolio.

The table below shows that Flood Re's outwards reinsurance programme cost £152m over the first three years of operation.

Financial Year	Ceded Earned Premium	Earned Commission Receivable	Earned Premium Net of Commission
2016/17	£49m	£9m	£40m
2017/18	£74m	£18m	£56m
2018/19	£75m	£19m	£56m
Total	£198m	£46m	£152m

Because of the benign weather in the first three years of operation, Flood Re has recovered £4m on £8m of paid claims and provisions indicate an expectation of a total recovery of £17m on £34m of estimated incurred.

Reinsurance is the most significant area of expense for Flood Re and so ensuring the programme purchased provides the required level of security while being able to evidence value for money is key to managing the interests of all stakeholders.

Savings of circa £3m were achieved whilst the initial threeyear programme was still in force by re-procuring one element of the reinsurance programme and exposing 1.8% of the top layer of Aggregate Excess of Loss contract. As highlighted above, the original reinsurance programme, which commenced at launch in April 2016, was based on an assumed risk profile of the Flood Re portfolio. That programme expired at the end of the 2018/19 financial year. More significant further savings were achieved through the recent reinsurance re-procurement for operating Years 4-6 which was based on a sound understanding of the actual risk profile of the portfolio. Those savings amount to around £50m over three years (and provide greater benefit as a result of a restructuring of the programme to reduce the likelihood of a maximum net retained loss of £175m). The re-procured programme continues to protect the £2.1bn indexed Liability Limit.

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ALIGNING THE SETTING OF THE LIABILITY LIMIT AND LEVY I WITH FLOOD RE'S REINSURANCE PROGRAMME (cont.)

Proposal

Flood Re believes that the determination method for the Liability Limit should remain, as should the necessity to change it as circumstances require.

Flood Re believes that the Liability Limit should be adjusted more regularly relative to the total volume and level of risk assessed for business ceded to Flood Re, rather than being fixed for another five-year period. This will allow the Scheme to provide the intended level of protection and more dynamically respond to future changes in demand, particularly, post a flood event. As a consequence of a more accurate setting of the Liability Limit, better value outwards reinsurance can be purchased.

The setting of the Liability Limit should ensure that the overall protection offered to cedants reflects more closely the total volume and level of risk ceded to Flood Re and causes no impact on cedants or their Solvency Capital Requirements

Similarly, if the Liability Limit and the Levy I were set on a concurrent, three-year basis, Flood Re could procure more efficient and effective outwards reinsurance and offer certainty to the market without decreasing the level of protection offered to insurers or increasing Levy II risk. The three-year setting will also assist insurers with their efficient business planning.

Flood Re recognises that if the proposal is adopted from April 2021, the first three-year Levy I period will not be concurrent with the start of the second five-year operational period of the Scheme (commencing April 2021). Flood Re will work closely with cedants, its outwards reinsurers and legislators to overcome any operational obstacles.

The requirement to purchase appropriate reinsurance to protect the Loss Limit is addressed in the related Loss Limit section.

Feasibility and testing

There is expected to be a cost saving in the order of £5m per annum. Driven by the reduced need for reinsurance as a result of protecting a lower Liability Limit. The actual saving will be dependent on the assessed Liability Limit appropriate for each three year period based on the projected policy volumes in the Scheme and the prevailing reinsurance rates in the market. In carrying out its actuarial analysis, Flood Re has made prudent allowances for both future uncertainty around these aspects in addition to the inclusion of the impact of the package of proposals within this QQR.

As set out above, detailed and commercially sensitive actuarial analysis of the proposed approach to setting of the Liability Limit and calculations to estimate the future reinsurance saving has been provided to DEFRA and the Government Actuaries Department.

There will be no additional implementation costs incurred by the Scheme.

Consultation feedback on Proposals 1 and 2:

Flood Re did consider an annual setting of the Levy I and Liability Limit. Operationally, this would require significant additional effort to re-procure the outwards reinsurance on that basis, with no clear cost savings in doing so. Furthermore, insurer stakeholder feedback reiterated that a three-year basis offered certainty to them of no change to the level of protection originally agreed and no change in Levy II risk and was therefore preferable. The more frequent setting would also not assist insurers with their business planning.

As such, this proposal is widely accepted by insurers and the underlying risk-appetite (the balance of Levy I quantum and Levy II likelihood) is supported. The three-year period is accepted as being appropriate.

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LOSS LIMIT AND STOP LOSS PROTECTION

Proposal 3: Stop Loss requirement

It is proposed that to the extent that Government continues to require this guarantee of Flood Re, Flood Re will investigate the opportunities for a more effective and economic alternative financial instrument to achieve this.

Background to the Loss Limit and the Stop Loss

Under the Regulations and Scheme documents, Flood Re is prohibited from exceeding the Loss Limit in any given year. The Loss Limit represents the maximum loss in any one (financial) year. This is designed to limit the Scheme's potential impact on the UK Government's Public Sector Net Borrowing ("PSNB") to under £100m.

External reinsurance by way of a Stop Loss is the mechanism by which the Loss Limit has been protected to date. This protection, alongside insurance risk, covers Flood Re's financial result's including legal expenses, corporate expenses (to a limit) and investment market risk, however, this protection excludes investment, insurer (including Levy) and reinsurer credit risk. The Stop Loss product protects the Scheme for a P&L loss between £100m and £200m in any given year.

The Loss Limit was designed to prevent losses greater than £100m per year impacting the government's Balance Sheet. Flood Re has an express requirement to buy Stop Loss reinsurance (or some other financial instrument) which mitigates this risk. In the current circumstances, the Loss Limit is extremely unlikely to be reached and as such, the Stop Loss provides little substantive value for money or risk transfer.

Detail and experience of administrating the Scheme to date

Loss Limit exposure:

With the build-up of capital following the establishment of the Scheme, in the current business model structure, reaching the Loss Limit in any given financial year is considered to be highly unlikely (and beyond a 1 in 200 likelihood) and therefore protection of the Loss Limit (through means of Stop Loss reinsurance) may not be considered value for money, albeit affordable.

This is the result of a combination of secured undisputed Levy I income, fixed reinsurance costs, closely managed expenditure, a prudent investment portfolio and a maximum net claims retention. In fact, with the current business model, there is a minimal probability of making a loss of greater than £100m in any one financial year. If a loss were to arise, there is no cash impact on Her Majesty's Treasury ("HMT") (nor subsequent detriment to public services) as backstop funding is purely through the UK home insurance industry.

Current cost of the Stop Loss Reinsurance:

Flood Re originally purchased a Stop Loss reinsurance as part of its comprehensive reinsurance programme at a cost of circa £4.5m per financial year. No claims were made on that policy over the three year period. With a greater understanding of the true risk of exceeding the Loss Limit and the true value of the Stop Loss, Flood Re has recently secured equivalent cover for Years 4, 5 and 6 at a reduced cost. During the remaining lifetime of the Scheme it is not foreseen that the exposure of the Loss Limit will change materially. It is also unlikely that the cost of the Stop Loss will reduce materially. As such, the possible total cost of obtaining this "protection" would amount to more than £50m over the remaining lifetime of the Scheme.

Proposal

In light of the value for money, Flood Re must consider the continued appropriateness of purchasing the Stop Loss and consider alternative methods to protect the Loss Limit, such as buying more of the core programme reinsurance and reducing the firm's net claims retention.

It is Flood Re's view that the Scheme can continue to contain its annual aggregate losses to £100m (the "Loss Limit") with a high (greater than 1 in 200 modelled) degree of certainty; however, adopting greater flexibility in the mechanism to protect it should be adjusted with no change to the risk posed to Levy II.

Feasibility and testing

The key conclusion of Flood Re's actuarial Stop Loss analysis is that this contract provides poorer value than the rest of the reinsurance programme and that alternative ways of managing the modest level of risk protected under the existing Stop Loss should be considered and implemented as appropriate. Details of the cost/benefit analysis of the Stop Loss is commercially sensitive and, as set out above, has been provided to DEFRA and the Government Actuaries Department.

There are no direct costs associated with this proposal.

Consultation feedback:

Flood Re's insurer stakeholders have advised that they see this proposal as a necessary and appropriate evolution of the Scheme.

Flood Re has worked closely with the Government Actuarial Department to obtain its support and understanding of this proposal.

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INVESTMENT RESTRICTIONS

Proposal 4: Investments

It is proposed that Flood Re is granted permission to invest part of its capital in a broader selection of investments to mitigate the value-erosion of its assets due to inflation.

Background to the investment restrictions

Flood Re's mandate for investment is highly restrictive and causes the Scheme to suffer value erosion due to inflation. A permitted, broader selection of investments would better meet its Managing Public Money obligations and mitigate against the value-erosion of its assets. The proposed changes to the restrictions should not materially increase the real risk of Flood Re calling a Levy II.

Detail and experience of administrating the Scheme to date

As a regulated reinsurance entity, Flood Re is required at all times to have in place adequate resources, including specifically, funds to meet its liquidity and capital needs.

Furthermore, under the Regulations and Scheme documents, Flood Re is restricted in its ability to invest beyond certain defined, low risk, UK Government cash and Gilts. The current rates of return on such investments do not allow for Flood Re to ensure that its funds maintain their value in line with inflation.

When it was designed, there was very little appetite from either Government or insurers for Flood Re to be exposed to other "unavoidable / unnecessary" risks (such as investment credit and market risk) as these would ultimately be funded by the insurance industry and the cost financially reported through to Government. Accordingly, Flood Re's investment mandate was restricted

to that of exposure to cash held at the Debt Management Office or leading UK banks or invested in Government backed securities either directly or through relevant money market funds.

The investment restrictions prevent Flood Re obtaining a greater risk rated yield.

As at 31 March 2019, Flood Re had funds under management of £358m and returned an annualised investment rate of 0.55% for the full financial year. This compares to a 12 month CPI rate of 2.4% i.e. representing a real net deterioration in funds.

Flood Re's notional allocation of funds between operational, policyholder (claims) and capital at 31 March 2019 was as follows:

Operational Policyholder Capital Fund £10M Fund £155M Fund £193M Total Portfolio £358M

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Proposal

Flood Re should be granted greater freedoms to invest for an improved return, in accordance with a risk appetite to be determined by the Board. This will mitigate the value-erosion of Flood Re's assets by amending the current, restrictive permissions. The permitted, broader selection of investments will make no substantive impact on the firm's solvency or capital position. Broadly, this would involve investing in highly rated corporate and municipal bonds.

Feasibility and testing

The key conclusion of Flood Re's actuarial analysis of the investment proposals are that the proposed changes to the investment mandate do provide for the potential to mitigate some of the impact of inflation and do not, based on the assumptions made and modelling completed, materially increase the capital requirement. Given that expected returns increase in return for the modest additional level of risk indicated, the impact on the likelihood of calling Levy II is not materially affected. Indeed, an appropriate balance of risk/return may, all else being equal, modestly increase the risk of calling Levy II in any given single year, but reduce the likelihood of calling Levy II over the three year planning period and longer term. Full details of the cost/benefit analysis, as set out above, have been provided to DEFRA and the Government Actuaries Department.

An example modelling specification has been designed which addresses the required analysis for achieving an improved risk adjusted yield.

The table below shows a summary of the excess returns on capital given a notional £100m investment and a cost of capital of 8%.

It can be seen that:

- Investing in AA Corporate bonds spread across 10 counterparties results in both one of the highest additional diversified capital charges (£2.1m) and the highest excess rate of return compared to an 8% cost of capital (1.59%).
- Investing in Money Market Funds presented the lowest excess returns.

Investment Category	Duration (Years)	Anticipated Return %	Risk – SCR impact (gross) £m
Current Investment Mandate:			(8. 555)
Debt Management Office	0.5	0.66%	-
Money Market Funds – Government Backed	0.0	0.59%	-
UK Securities – Gilts & TBills	4.0	1.07%	1.5
Other Options:	0.0	0.00%	-
UK Local Authority	3.0	1.50%	1.1
UK Local Authority with spread and concentration risk	3.0	1.50%	3.1
Corporate Bonds AAA 5 counterparties	3.0	1.49%	2.6
Corporate Bonds AAA 10 counterparties	3.0	1.49%	1.9
Corporate Bonds AAA 20 counterparties	3.0	1.49%	1.6
Financial Bonds AAA 5 counterparties	3.0	1.18%	2.6
Financial Bonds AAA 10 counterparties	3.0	1.18%	1.9
Financial Bonds AAA 20 counterparties	3.0	1.18%	1.6
Corporate Bonds AA 5 counterparties	3.0	1.77%	2.8
Corporate Bonds AA 10 counterparties	3.0	1.77%	2.1
Corporate Bonds AA 20 counterparties	3.0	1.77%	1.8
Financial Bonds AA 5 counterparties	3.0	1.40%	2.8
Financial Bonds AA 10 counterparties	3.0	1.40%	2.1
Financial Bonds AA 20 counterparties	3.0	1.40%	1.8
Central Scenario – See Section 6.3	3.0	1.44%	3.3

As set out in the table above, each of the options set out are financially feasible for Flood Re and make no substantial impact on the firm's solvency or capital position. There are no financial implications for householders and limited financial impact on insurers.

There will be certain transaction costs associated with this proposal. These are expected to be modest and will be considered in the context of efficient management of the asset portfolio.

Consultation feedback:

Flood Re's stakeholders have advised that they see this proposal as a necessary and appropriate evolution of the Scheme. Flood Re has received positive feedback from stakeholders on the idea and readiness for enabling the Scheme to invest its funds more widely to obtain a return in line with inflation.

Insurers were reassured that Flood Re had the skills and experience to manage a more complex and diverse investment portfolio.

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PERMISSIVE CHANGES TO ENABLE AND ACCELERATE TRANSITIONAL ACTIVITIES

The following recommendations reflect the timeline of impact of this QQR in the context of the lifetime of the Scheme. They are proposed on a permissive basis and it is not proposed that insurers are mandated to adopt them should they choose not to do so. Similarly, whilst the intention of the proposals is understood at this time, further collaborative work with the insurance industry and other stakeholders is required to find the most operationally efficient way of effecting these changes. They are designed to enable and accelerate behaviours as well as to prevent the Scheme from being a hindrance to certain progressive behavioural and market changes. Their individual potential impact is unknown (and not intended to be equal), however stakeholders have confirmed that their aims are complementary to and aligned with broader flood risk management strategy. These changes are designed to avoid the Scheme itself becoming a barrier to progress in relation to certain activities which would otherwise advance the Transition and to be a proactive and deliberate catalyst for change. The proposals seek to address that inconsistency and are the minimum requirements to enable that to happen. Their success will require the collaboration of stakeholders and a significant effort by trusted voices to raise awareness.

Flood Re believes that the combination of the following proposals:

- a) offering discounted premiums for the proactive installation of resistance and resilience measures;
- b) making the Scheme permissive for resistant and resilient repair; and
- c) making an "affordable" risk reflective transition our explicit aim,

will make tangible progress on the Scheme's Transition objectives over the period up to 2026. In particular, these measures aim to indirectly increase the resistance and resilience of homes currently benefitting from the Scheme. Householders should use these changes as an opportunity to increase the resistance and resilience of their homes whilst their insurance premiums are being subsidised by the Flood Re Scheme.

DISCOUNTED PREMIUMS FOR HOUSEHOLDS WITH RESISTANCE AND RESILIENCE MEASURES

Proposal 5: Discounted PFR premiums

It is proposed that Flood Re is able to offer a discounted set of inwards premiums for properties that have fitted 'allowable' resilience measures and will work with the insurance industry to introduce a proportionate approach that incentivises resilience in this manner.

Background to discounted PFR premiums

Property Level Flood Protection ("PFR") means the installation of resistant and or resilient measures to provide enhanced protection to reduce the future risk of, or damage caused by, flooding to a property in the event of a flood.

Under the Regulations and Scheme documents, the premiums charged by Flood Re to insurers vary by the Council Tax Band of the insured property. The premiums charged by Flood Re are subsidised from the market risk- reflective rates. In addition, flood claims on ceded polices come with a fixed excess of £250 per claim. The Regulations specify the Premium Thresholds for each Council Tax Band in 2016 and provide for an increase by CPI thereafter.

It is Flood Re's view that Council Tax Bands remain an appropriate proxy for ability to pay. The current Regulations allow for Flood Re to vary the premiums it charges insurers, so long as these do not exceed the specified thresholds. Flood Re has used this flexibility twice. In December 2017, Flood Re announced its intention not to increase the premiums charged to insurers when the Premium Thresholds were increased by CPI. Flood Re went further in October 2018 in announcing a greater premium reduction which applied to policies bound on or after 1 January 2019. This was based on our better understanding of the relative costs of Buildings and Contents insurance in the light of the operation of the Scheme. That exercise followed considerable work in conjunction with insurers to test price elasticity. Insurers confirmed that consumers would directly benefit from premium reductions by Flood Re.

The Flood Re excess (or a lower one) is almost universally adopted and this is accepted as being a significant benefit of the Scheme.

Detail and experience of administrating the Scheme to date

Whilst the existing Regulations do not specifically prevent the introduction of different pricing levels within Council Tax Bands, there is no specific allowance for, or expectation of, alternative premiums to be charged for properties within those Bands to, for example, reflect PFR measures that householders have installed.

Currently, neither the market's understanding of the benefits of PFR, nor the mechanisms for validating their installation in specific properties are sufficient for the introduction of discounted premiums. However, Flood Re has committed to promote the development of a sound evidence base and engage with stakeholders to develop mechanisms to reward the adoption of PFR by householders.

The proactive uptake of PFR measures is not currently widespread by householders. There are various initiatives set out in the Transition Vision which seek to raise awareness of the merits of PFR. Flood Re is involved in a number of additive activities in this area including sponsoring the Cumbria Flood Resilience House, the DEFRA Industry Roundtable and the development of Code of Practice and BSI standards for PFR measures. All of these initiatives are consistent with the proposals being set out in this paper.

There is currently almost no link between the action of individuals in protecting their properties against floods and the insurance premium which they are charged by insurers. In principle, establishing such a positive link is an attractive approach, as it would provide a direct incentive for households to invest in PFR. Whilst Flood Re recognises the challenges and limitations of linking premium to PFR installation (highlighted in research reports by both the University of the West of England ("UWE") and the SMF) Flood Re does believe it has potential.

Discounted premiums should play a part along with other measures, if not by encouraging, then at least by recognising and rewarding responsible behaviour by householders. It is also an approach that has precedents in other areas of home insurance for example, with the voluntary installation of smoke detectors and mortice locks. The success in these precedents has been due, in part, to significant data held by insurers which demonstrates lower claims costs and lives saved through these installations.

Flood Re has been asked by householders how their installation of PFR measures is taken into account by the Flood Re Scheme.

PFR has been identified by Flood Re's own research as a key component of Transition. Therefore the ability to reward and incentivise its uptake through discounted premiums has potential to positively impact the wider market.

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DISCOUNTED PREMIUMS FOR HOUSEHOLDS WITH RESISTANCE AND RESILIENCE MEASURES (cont.)

Proposal

By offering discounted premiums Flood Re aims to incentivise the take up of PFR measures by householders. Through lower inward insurance premiums, Flood Re will reward those who have taken active steps to reduce the impact and costs of future flooding events on their property. This will help to support a market for resilience products and help to change attitudes and behaviours. Increasing the resilience of homes in the UK is important to Flood Re to deliver on its purpose and manage a transition to an affordable risk reflective home insurance market for those at risk of flooding by 2039.

Flood Re believes that consistent with raising greater awareness, householders should be rewarded for taking action to reduce the flood risk of their home. The Scheme does not currently permit this differentiation. At present, it is difficult for insurers to do so for a number of reasons including the lack of quantitative research about the merits of certain property level resistance and resilience measures and the ability to obtain installation information from householders. Flood Re believes that it could play a part in enabling this behaviour if it could offer premium discounts on policies ceded to the Scheme for those who have taken steps to reduce the flood risk of their home.

It is well understood that the premium discount itself is unlikely to trigger a substantive change in behaviour in itself, but this change is proposed as a "nudge", consistent with our other proposals in this section. It is also accepted that any discount on inwards premiums is unlikely to equate to the direct economic benefit of resilience or resistance measures installed, or to the level of risk reduction provided by any such measures. Its adoption requires further collaborative work with stakeholders to understand the most effective way of implementing such a change and would need to be supported by campaign activity to raise awareness of the benefits of PFR. There are a number of operational and technological factors to be considered and concluded before the implementation of this proposal. Flood Re will work with insurers to develop the detailed design of this proposal. This will include the specification of household measures that will be acceptable to qualify for lower premiums.

This proposal should extend to adaptations highlighted in property flood certificates, to the extent that they are included in the future.

Feasibility and testing

It is estimated that this proposal will cost Flood Re approximately £1m per annum in addition to some initial costs to operationalise, which will be met by the Flood Re annual operating expenses.

Flood Re estimated the current number of UK properties with PFR as circa 21,000. Based on providing a saving of 50% on the Flood Re premium (which would result in a saving of circa 25% on the total cost of insurance for a typical benefitting household protected by Flood Re), the cost of providing this discount would be £0.9m per annum (ignoring the reduction in cost of claims for these properties). A doubling of the number of properties with PFR over time would, all else being equal, double the cost of providing that benefit to those properties that continued to be passed to Flood Re.

Flood Re has tested the impact of awarding both a 50% and a 20% premium discount for properties with PFR on the existing tariff rates effective from 1st January 2019 and has indicated that the 50% reduction is the central scenario. This 50% premium discount was selected as the central estimate based on a judgement that it provided an appropriate level of reward/incentive to households who have invested in PFR. Given that Flood Re's premiums are determined by Council Tax Band (as a proxy for house value) and not by flood risk, any premium reduction would not

be linked to the actual risk reduction achieved. The Flood Re central scenario also adopts a current judgement-based assumption that 50% of all properties with some level of PFR will be ceded to the Scheme, as many will still have significant residual flood risk.

Full details of the cost/benefit analysis, as set out above, have been provided to DEFRA and the Government Actuaries Department. The key conclusion of the analysis is that each of the options set out are financially feasible for Flood Re and make no substantial impact on the firm's solvency or capital position and will also result in an immaterial impact on the expected projected 'Pre Tax Profit' per year.

Flood Re will work closely and collaborate with insurers to ensure that the operational implementation of this proposal is efficient and proportionate to the likely benefit. It needs to be proportionate in terms of the costs and operational overheads and reflect the current evolution in the insurance industry towards reduced questions sets at the point of sale.

Whereas Flood Re is seeking this permission from April 2021, the implementation date is subject to the development of the above and may therefore be after April 2021. Flood Re will ensure that insurers have 12 months' notice before implementation.

Consultation feedback:

Notwithstanding the operational considerations which will require further stakeholder collaboration if adopted, insurers supported this proposal in its clear signalling to householders of their responsibility to protect their homes.

Insurers indicated that the operational implementation will be critical. There was a desire to understand the potential market benefit forecasted.

Other stakeholders have indicated that this proposal is well aligned with the strategy set out in the UK's wider flood risk management agenda.

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BUILD BACK BETTER

Proposal 6: Build Back Better

It is proposed that the Flood Re Scheme is amended to permit the payment of claims which include an amount of resilient and or resistant repair, above and beyond the loss, designed to reduce the future risk and/or future cost of repairing flood-related damage of flooding to the property ("build back better"), where this is part of an insurer's proposition.

Background to Build Back Better ("BBB")

Build Back Better refers to the process of carrying out a more resistant and or resilient repair to provide enhanced PFR following a flood event, in order to reduce the future risk of, or damage caused by, flooding to a property in the event of a subsequent flood. BBB differs from the proactive installation of PFR as BBB is necessarily triggered by a flood event, but it has at its heart the same aim, of making homes more flood resilient.

There is currently no significant and established BBB scheme in place. Historically, insurers have resisted investing in BBB because policyholders might switch provider the following year. That said, two insurers, to differing extents,

have been proactive in offering BBB to their policyholders. Both "schemes" are operated on an ad hoc basis. There is insufficient evidence of the take-up of these schemes thus far to draw any conclusions, however, one insurer did install a standard set of measures into a number of their insured homes which flooded in Carlisle (and now uses this as a research cohort). Neither scheme has been established for long enough to understand what works well. There has been no impact on the premiums of those properties where PFR has been installed through these schemes. Both insurers retain minimal information about the PFR measures installed.

Detail and experience of administrating the Scheme to date

Under the Regulations and Scheme documents, Flood Re is restricted in its ability to indemnify insurers for BBB claims. The Scheme currently allows indemnification through claims for Loss arising from Damage from a Flood (all, as defined). This does not allow for "betterment" by way of permitting BBB claims, even where its adoption would be helpful to the Scheme's transitional aims. As such to enable this proposal, changes to the Scheme will need to be made accordingly.

Flood Re has not been asked to date for consent to enable BBB claims. This is likely to be because the Scheme rules are clear that it is not permitted. As a result, in relation to claims already paid by the Scheme for flooded properties where no BBB has been carried out, those properties remain at the same level of risk for future floods, even after repair.

The proactive uptake of PFR measures/BBB adoption is not widespread by householders. There are various initiatives set out in the Transition Vision which seek to raise awareness of the merits of PFR and BBB. Flood Re is involved in a number of additive activities in this area including, sponsoring the Flood Resilience House, the Property Flood Resilience Roundtable and the development of BSI standards for PFR measures. All of these initiatives are consistent with the proposals being set out in this report.

Flood Re published research in collaboration with UWE in 2018 which demonstrated the potential benefit of installing PFR measures, including after a flood. Flood Re is continuing to look at ways of quantifying and recognising the value of resilience and resistance measures, with UWE and others, including analysing historic flood claims data.

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Proposal

Flood Re believes that for a successful Transition, the cost of flood claims and the risk of flooding must reduce. One element of that requires an increase in the number of homes in the UK with property level resistance and resilience measures in place. For its part, the Flood Re Scheme cannot currently reimburse insurers after a flood who pay for the repair of homes in a more resistant or resilient manner. This proposal aims to encourage the take up of PFR measures by householders after a flood claim, support a market for PFR products and help to change attitudes and behaviours. This will help Flood Re to achieve its purpose of managing a transition to an affordable risk reflective home insurance market for those at risk of flooding by 2039.

Flood Re believes that the Scheme should permit flood claims which include an element of resilient and or resistant repair, above and beyond the loss, designed to reduce the future risk of flooding to the property. Certain insurers already offer this as a part of their commercial proposition and others are likely to within the timeframe of the next QQR period. Other insurers have also had an increasing focus on cost-neutral resilient and resistant repair. Flood Re believes that insurers who wish to offer such repairs to their policyholders, in appropriate circumstances, should be encouraged and enabled to do so.

It is critical that the Scheme's design does not fetter the activity of these insurers and instead, the Scheme can act positively to accelerate the adoption by other insurers. Whilst the number of homes improved in the lifetime of the Scheme through this change will be limited by those which flood and where householders are happy to have adaptations carried out, the move could have a much wider impact.

As such, the Flood Re Scheme should be changed to permit BBB claims to be made by insurers in order to contribute to the reduction in the risk of homes flooding and the reduction in damage caused by flooding. The Flood Re Scheme should be permissive (not mandatory) and will be back to back with an insurer's BBB proposition, subject to a cap. Flood Re's proposals will, where possible, cause minimal insurer impact. Where possible, no operational system changes will be required nor additional questions asked in the purchasing process. Flood Re will continue to employ controls to ensure insurers do not unfairly take advantage of Flood Re by inflating claims, i.e. "gold-plating". In line with the existing principles within the Flood Re Reinsurance Treaty, Flood Re will continue to expect insurers to demonstrate that claims are managed in a consistent way across policies whether they are ceded to Flood Re or not.

This does not mean that all flood claims must have 'Build Back Better' applied. Instead, Flood Re will seek comfort that home insurance policy wording applies a consistent rationale for the application of 'Build Back Better' and it is not determined by whether a policy is reinsured by Flood Re. The insurer proposition may state, for example, that BBB is offered through a specific product or distribution channel, or in relation to the level of flood risk of a property. Flood Re also understands that the specific application of PFR measures will continue to be dependent on customer choice as part of an insurer's claims process and will need to be aligned with any grants available at the time.

Whilst philosophically Flood Re would wish to provide an uncapped approach to BBB on a follow the fortunes basis, the reality of doing so introduces an undue level of additional uncertainty around the future cost of claims. This could make mitigating the risk via outwards reinsurance and increased capital requirements prohibitively expensive. Flood Re is proposing a cap therefore on each claim of £10,000 for BBB. That figure seems appropriate for the following reasons:

- 1) Flood Re understands it is twice the amount of the cap for one of the two existing BBB offerings in the market (the other not having expressed its limits publicly);
- 2) It is twice as much as the last grant offered by the Environment Agency for BBB; and
- 3) This cap results in a reasonable "outer bound" for the maximum technical increase in the cost of claims, which in turn reduces the cost of managing future uncertainty.

It should be noted that the £10,000 figure is not a "target' or an expected level of incremental spend per property, but has been set to act as financial protection for the Scheme. Flood Re expects insurers to install only such measures that are appropriate to the level of future risk of the specific property and which are proportionate to the cost and circumstances of the claim. Not all properties and not all claims will be appropriate for the consideration of BBB. For example, we expect that many properties that experience a single episode of surface water flooding would not be suitable candidate properties for BBB and we recognise that, based on recent Government grant take-up rates in England, perhaps only around 65% of those households that might benefit from BBB will accept the measures in their own homes.

Whilst most claims which are relevant for the consideration of BBB will be in relation to Buildings cover, there may be occasions where Contents become relevant. This is mostly likely to be in relation to floor coverings such as carpets. Flood Re does not consider that there

are any benefits in excluding Contents claims from Flood Re's permitting BBB claims and that BBB claims should be eligible across all home insurance policies.

In the absence of an established market for flood risk / BBB surveyors, Flood Re proposes that recommendations for enabling BBB claims form part of insurers' existing claims handling / loss adjusting process. Decisions on the most appropriate resilience or resistance measures should be informed by a survey or assessment carried out by suitably qualified person and should consider the specific circumstances of that property.

Where possible, the Flood Re Scheme will be permissive and will be back to back with an insurer's BBB proposition. This will minimise operational impact for insurers and ensure a timely and streamlined approach for the householder. Flood Re currently pays for the costs arising from the handling of claims and sees no reason to exclude the costs of any surveys or additional costs relating to the assessment of the appropriateness of BBB claims from the eligibility.

In line with our stated Transition "Principles", we believe that BBB claims should be additional and complementary to any initiatives or grants offered by public bodies. Flood Re would work with the Government and insurers to align the solution to maximise the benefit for flood risk reduction.

Flood Re believes that "Building Back Better" can and should over time, become normal for home insurance claims in a similar way to "New for Old". Supporting insurers' propositions in this way will have an indirect impact on the supporting industries around resistance and resilience. Flood Re also believes that permitting BBB will have a positive, wider impact of streamlining the claims process for such claims.

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BUILD BACK BETTER (cont.)

It should also act as an enabler to catalysing a more robust and sustainable market in PFR products and skills which currently requires development, in parallel with ongoing work in developing standards. It is recognised that for BBB to be most effective, standards for resilience and resistance measures should continue to be developed. Flood Re will continue to act as a catalyst to this effect.

Flood Re recognises that it has the ability to have a wider impact which makes this proposal more substantive because:

- insurers will have to offer BBB across their whole home insurance offering, rather than just on Flood Re ceded policies and as such, the impact of BBB after a flood event may be felt more widely than on those properties ceded to the Scheme;
- once established as an industry norm, BBB claims could extend beyond the lifetime of the Scheme; and
- the offer of permitting BBB claims may incentivise insurers to cede policies to the Scheme.

Flood Re cannot mandate insurers to offer BBB as this is a commercial matter, but it should not stand in the way of a market development. Where an insurer does offer BBB, it will only be reimbursed by Flood Re where the property has been ceded to the Scheme with the insurer meeting the full cost of BBB for unceded properties.

Flood Re considers that insurers could cede claims which include BBB to Flood Re in the same way as they do for non-BBB claims. This would require small changes to the standard bordereaux but nothing of significance.

The existing Flood Re insurer audit process currently reviews insurers' approach to all elements of Scheme eligibility. It is proposed that this mechanism would also be appropriate to include the audit of all elements of BBB claims, including to ensure that insurers apply it equally across their products.

The introduction of permitting BBB claims to the Flood Re Scheme will form only part of the solution to better protecting those homes most at risk of flood.

Under the Reinsurance Treaty, Flood Re is able to indemnify insurers for claims on policies ceded to the Scheme. Flood Re recognises (as set out above) that the real impact of enabling BBB claims is likely to be far wider, even if take up across the market is only at for example, 10% of claimants (with the likely consequence of flooded policies being ceded to the Scheme after a flood event in any case).

Insurers will notify Flood Re about the application of Build Back Better within a claim through the existing Claims Bordereaux process. Flood Re will work with insurers to amend the format and required fields to capture this data, and will give 12 months' notice before implementation.

In order to provide a cost-proportionate response to the management of Build Back Better, Flood Re will require insurers to notify their intention to offer this enhancement twelve months before doing so.

Flood Re proposes that, subject to the required permissive powers being granted, the BBB capability should be in place and operational from April 2021.

Feasibility and testing

It is estimated that this proposal will cost Flood Re approximately £1.9m per annum, with costs of operational implementation met within the annual Flood Re expense budget. Full details of the cost/benefit scenario analysis, as set out above, have been provided to DEFRA and the Government Actuaries Department.

Financial safeguards

Flood Re's contribution towards BBB will be managed efficiently and the financial stability of the Scheme will not impacted as a result. Flood Re will work with insurers to monitor the number of policies ceded to the Scheme which offer BBB. It will use this information to assess its exposure to potential claims. Using this assessment, Flood Re will be able to buy appropriate and cost-effective reinsurance cover in order to manage its exposure.

Assumptions

During the remaining lifetime of the Scheme the median estimate is for circa 30,000 Flood Re claims to be made to the Scheme (corresponding to around 250,000-300,000 flooded UK homes in total between 2021-2039). Even if 100% of those 30,000 homes adopted BBB, the macro impact on the risk of flooding and damage caused by flooding will be relatively modest. A more reasonable upper end for the median number of Flood Re properties that would benefit from BBB may be to assume an uptake from around one in three of all Flood Re claims, so implying a reasonable estimate of around 10,000 properties benefiting over the remaining 20 years of the Flood Re Scheme.

Flood Re's enabling of BBB claims can have a wider impact, including on properties not ceded to the Scheme (and after the lifetime of the Scheme). The ABI reports an average annual cost of claims since 2007 of £255m, with an annual average claim count of 18,000. Whilst this figure would appear high (perhaps due to counting Building and Contents elements of claims separately) even if only 10% of this number take up BBB options, this would imply around 36,000 properties would be better protected over the remaining 20-year lifetime of Flood Re.

Flood Re's actuarial analysis has assessed the financial impact on both the P&L and Capital position for a number of various BBB options with variable take up rate. Flood Re has also looked at the impact of including the increased cost of claims from BBB within the reinsurance. The modelled output is based on the existing reinsurance programme, assuming that BBB claims costs are covered within contract terms.

Ensuring that the reinsurance includes BBB claims will result in additional reinsurance costs as well as the additional expected cost of claims. On the basis of the existing reinsurance procurement, it is estimated that this cost could be approximately £1.2m assuming a take up rate of 11%. Increasing take-up to 24%, consistent with what may be expected following an event of the magnitude of the 2007 floods, increases this additional reinsurance cost to £2.6m.

The resulting Profit and Loss ("P&L") impacts would be as follows:

- 11% take-up: P&L reduction of £1.4m net impact.
- 24% take-up: P&L reduction of £3.0m net impact.

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BUILD BACK BETTER (cont.)

- The reinsurance costs will form a significant element of the overall cost of BBB to Flood Re, however the level of prudence in the assessment of the Liability Limit means that Flood Re retains the ability to monitor updates in the market and only purchase additional reinsurance if there is demand for PFR at a level higher than expected.
- When Flood Re better understands the uptake of BBB, it will be in a better position to purchase cheaper reinsurance.

If Flood Re's share of the market loss is 10%, then insurers will pay approximately £4m for BBB for properties not ceded to the Scheme.

It is Flood Re's view that the Liability Limit should necessarily apply to all claims including BBB claims and the Liability Limit should reflect this accordingly.

Consultation feedback:

Insurers understand the need to avoid Flood Re being a barrier to market innovation. Insurers accept that BBB is one of the few ways to start to make a change to the UK housing stock. It is important that the solution is cost-proportionate to the potential benefit and that the costs incurred are proportionate to take up. Insurers stressed the need to ensure the continued financial security of the Scheme. Any implementation needs to work alongside any Government resistance / resilience grants in a seamless manner. Insurers have expressed their desire for a mandated approach being required at some point in the future. Insurers identified the need to continue to develop quantified evidence for the effectiveness of PFR interventions.

Other stakeholders have indicated that this proposal is very well aligned and consistent with the strategy set out in wider flood risk management agendas and will not displace public spend on flood defences.

TRANSITION TO AN <u>AFFORDABLE</u> RISK REFLECTIVE MARKET

Proposal 7: Change to statutory objective

It is proposed that the purpose of Flood Re be formally changed in legislation to an obligation to manage "the transition of the market to **affordable** risk reflective pricing" for household insurance for those at risk of flooding.

Background to the statutory objective

The Scheme's purpose currently refers only to "managing over its lifetime the transition to a market for household flood insurance where prices reflect the risks of flooding".

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Detail and experience of administrating the Scheme to date

The first principle established in Flood Re's first Transition Plan was that the market that remains after Flood Re has ceased to exist must be an affordable one, or Flood Re would not have achieved its real purpose. Flood Re has stated previously that it was administering the Scheme with an affordable risk reflective market in mind.

Since Flood Re's launch, there have been significant improvements in affordability and availability of home insurance for those at risk of flooding. The key metrics are as follows:

- Before the introduction of Flood Re, only 9% of householders who had made prior flood claims could get quotes from two or more insurers, with 0% being able to get quotes from five or more.
- By March 2019, availability had improved so that 93% could get quotes from five insurers and 82% of those with flood claims could choose from at least 10 insurers.
- Four out of five householders with a prior flood claim saw price reductions of more than 50% compared to pre-launch of the Flood Re scheme.

At the end of Flood Re's third year of operation, more than 164,480 policies were reinsured by Flood Re. This figure is likely to increase as Flood Re plans to reduce the tariffs for ceding insurers, with insurers strongly indicating that customers will feel the benefits of such reductions through lower premiums. Affordability and availability are monitored routinely by Consumer Intelligence.

In its Transition Vision, Flood Re also set out the limits of affordability and its vision for what would need to happen to make an affordable market for household insurance with risk-reflective pricing of flood risk feasible by 2039. It noted that affordability will be limited as follows, by:

- Those with unavoidably high levels of flood risk:
 If some form of support is to continue, policymakers must develop a strategy to ensure that the small number of properties at the very highest unavoidable risk of flooding have access to and take up affordable household insurance.
- Minimising the size of the highest-risk group: The size
 of this potential group is actively monitored, and a
 strategy is in place to minimise its size by 2039.

Proposal

As a clear outcome of the conclusions from this QQR, it is Flood Re's view that the opportunity should be taken to formally incorporate this objective, as a clear statement of intent and provide total clarity of purpose. This will ensure that Flood Re is able to fully leverage its statutory Purpose in order to achieve the policy outcomes set out in its Transition Vision and that there is appropriate focus on

long-term risk reduction activity. As such, the Regulations and Scheme documents should make explicit that the aim of transition in relation to eligible properties is to an **affordable** risk reflective market.

There are no direct costs associated with this proposal.

Consultation feedback:

Flood Re received positive feedback from stakeholders on its Transition Vision, including the reference to an affordable risk reflective pricing future.

Stakeholders recognise that in the absence of this requirement, the Flood Re Scheme would not successfully achieve the policy intention.

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NO CHANGE

As set out above, Flood Re believes that the Scheme fundamentally continues to work effectively. As such, a number of elements of the Scheme have been comprehensively reviewed as part of this QQR and Flood Re is satisfied that they remain in operation as they are currently. They include:

Annual Accounts and expenditure:

The cap on annual expenditure and the requirement to lay annual accounts in Parliament

Use of Funds

The restriction on spending for administration and expenditure linked to the Scheme's Purpose

Borrowing Limit

The cap on annual borrowing levels

Levy II

Unlimited recall to insurers above Levy I

7. AGGREGATED VIEW

The aggregate impact of the changes proposed by Flood Re are illustrated below in order to support discussion of the package of measures. These figures have been assessed as if they were implemented in the 2019/20 year. There will be a "tapering" effect from some of the changes, as new terms will only apply to new business rather than previously written business that has not yet expired. The full financial impact therefore is assessed against the 2020/21 operating year.

The central scenarios for each of the key recommended changes which impact the financial position of the Scheme can be summarised as:

- Reduction of Levy I from £180m to £135m;
- Extending the investment mandate to mitigate some of the risk of asset value erosion through inflation;
- Removal of the Stop Loss costs;
- Follow the fortunes of the market where cedants provide BBB coverage; and
- Providing a 50% discount to properties ceded to the Scheme that evidence that PFR measures are installed.

The aggregate impact based on the actuarial analysis provided to DEFRA and the Government Actuaries Department is summarised below:

Scenario	•	•	P&L Impact 2021/22 Op	•		SCR Impact 2021/22 Op
	Year (£M)	Year (£M)	Year (£M)	Year %	Year %	Year %
Central estimate	-39.1	-38.6	-38.4	123.2%	132.8%	126.0%

It can be seen that for the 2020/21 year, there is a £38.4m reduction in expected profit to the P&L and an increase in the SCR of 132.8% to £73m. The majority of both the profit and capital impacts are driven by the change in Levy I proposed.

Flood Re has relied on a number of key assumptions, which include, in summary:

- 1. The impact of the actual risk profile of the portfolio;
- 2. Savings anticipated by finding an alternative to purchasing the Stop Loss based on costs for Years 4-6;
- 3. The Liability Limit is reduced to circa £1.6bn to be consistent with the portfolio risk profile and, which provides the market with equivalent security to that assessed appropriate at authorisation;

- 4. Investment mandate extended to allow investment in both fixed and variable rate Government and corporate bonds:
- 5. BBB assumes an average increase in claims costs of 15% on a mean claims year and a take up rate of 11% on the Flood Re share of market claims;
- 6. Discounted PFR premiums by 50%, with cost estimate shown based on assuming that 50% of circa 21,000 UK insured homes with PFR are ceded to Flood Re;
- 7. Prudence allowance recognising the early evolution of the Scheme and the potential for future increases to Levy I; and which all together
- 8. Allow for a potential for Levy I reduction whilst still meeting the risk appetite of <2% likelihood of calling Levy II after two 1 in 50 loss years in line with the proposed new basis for setting Levy I.

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8. EXPECTATIONS FOR RECOMMENDATIONS, CONSULTATION AND NEXT STEPS

The Board of Flood Re agreed at its meeting on 20th June 2019 to recommend these proposals to the Secretary of State and publishes this Report in accordance with Regulation 27.

The Board invites the Secretary of State to consider the findings of our Review and the proposals.

Flood Re looks forward to engaging with its stakeholders further going forwards.

Flood Re understands that the matters contained within this Report may be subject to public consultation before in-depth consideration by Government and debate, if required, by Parliament. Flood Re looks forward to the outcome of that process being effective in readiness for April 2021 and the start of the second QQR period.

Flood Re would like to thank its stakeholders for their active and constructive engagement with this, the first of its QQRs.

APPENDIX 1: DELIVERING THE QQR

The process and approach to the review

In relation to each parameter set out in the agreed scope, Flood Re has followed the QQR process below:

1. Identification of the issues

Flood Re has reviewed the legal / statutory provisions as well as other documentation including specifically, intentions set out in the Transition Vision. We have considered all relevant aspects of the scheme parameters including operational, financial, social, strategic and policy / political considerations. We have specifically considered opportunities to optimise Flood Re's efficiency and effectiveness from a functional perspective and in the context of Flood Re's strategic purposes (whether there are any changes necessary to help transition to risk reflective prices). We have also taken into account Managing Public Money considerations.

We have considered the inter-related nature of a number of the parameters of the Scheme and respective stakeholder measures of success of the Scheme.

2. Testing and Feasibility

We have set out what, if any, testing or modelling was required, including any external data / evidence on which we have relied.

Flood Re has been working closely with the Government Actuarial Department ("GAD") to ensure that they understand the methodology and assumptions applied by Flood Re in its QQR testing in order to ensure efficiency and where possible, reliance, in DEFRA's own review of Flood Re's QQR recommendations.

3. Stakeholder consultation

Flood Re has considered which, if any, external stakeholders should be consulted either on:

- a) the appropriateness and effectiveness of the current Scheme; and or
- b) on any proposals for change.

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Where possible we have sought to consolidate our consultation, whilst being mindful of any Competition Law considerations. In addition to the insurance industry, Flood Re has also consulted with DEFRA, the EA, HMT, PRA, MPs of high flood risk constituencies, considered feedback received from householders during the lifetime of the Scheme, National Flood Forum and PFR Roundtable.

Consultation of the insurance industry took place through the "Insurer Consultation Group" which met for the first time on 28th January 2019 to discuss and provide feedback on Flood Re's draft proposals for the Quinquennial Review. From the important feedback received from insurers at that meeting, there were three key areas of further information requested from Flood Re:

- Further information on Government's investment in flood and coastal risk management between April 2015 and May 2021.
- Greater understanding of the requirements for Build Back Better, lower premiums for PFR and improved information sharing in the context of the Transition Vision.
- Outputs of the modelling carried out by Flood Re to give insurers more insight on the balance between Levy I and Levy II.

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It was accepted that insurance industry consultation may not provide consensus opinion as different insurers would have different individual commercial drivers whilst collectively being representative of the industry. The insurers elected to the ICG were as follows:

Ageas	Aviva	AXA
Covea	DLG	L&G
LBG	LV	RSA

Representatives of the ABI also attended those meetings.

4. Corporate governance and Board approval

The Flood Re Board considered and approved each of the proposals and in the aggregate and where appropriate, were presented with options for consideration along with evidence-based justification for the recommendations.

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i See Statement of Principles ii See the Water Act 2014

iii The Flood Reinsurance (Scheme and Scheme Administrator Designation)
Regulations 2015

iv The Flood Reinsurance (Scheme Funding and Administration) Regulations 2015 $\,$

v Articles of Association, Membership Agreement, Scheme Document, Reinsurance Treaty

vi https://www.legislation.gov.uk/uksi/2015/1902/regulation/8

vii Official Journal of the European Union

viii https://www.floodre.co.uk/wp-content/uploads/Flood-Re-Annual-Report-2019.pdf

ix RMS and Flood Re: "Investing in Flood Risk Management & Defences" https:// www.floodre.co.uk/wp-content/uploads/Flood-Re-RMS-Results-Summary-ABIversion.a.pdf

x Where 'flood related loss' is a 1:50 event

