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Future funding for flood and coastal erosion risk management

Consultation on the future Capital Grant-In-Aid allocation process in England

November 2010



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This document is available on the Defra website:
<http://www.defra.gov.uk/corporate/consult/flood-coastal-erosion/index.htm>

Published by the Department for Environment, Food and Rural Affairs

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Foreword by the Secretary of State

Sir Michael Pitt's independent review into the summer floods of 2007, which drew widespread political support, set out a series of recommendations as to how we could better equip ourselves and our communities to be resilient to the increasing risk of flooding. The Coalition Agreement affirms our commitment to taking forward the review's findings.

This consultation forms an important part of delivering Sir Michael Pitt's vision for the future of flood risk management in this country. There will always be projects that tick every box, and schemes already under construction or where funding is committed will continue under current arrangements. But the real challenge is to find ways of helping those other projects, the ones which often narrowly miss the grade, to get underway.

The Pitt Review said that long-term plans should not simply assume all flood risk management costs will be met centrally. If they were, local ambitions would always be limited by what central Government can afford. Instead, he recommended that those who would benefit from flood defences should be allowed and encouraged to contribute towards their costs. In doing so, each local area can have a bigger say in what is done.

The objective of this consultation is to pave the way towards making this vision a reality, and consider how to enable more flood defence schemes to get underway in the future. In recent years funding has been focused on those projects at the top of the national priority list, those that are good enough to make the grade. This has led to many other projects with strong local support being held back or deferred time and time again.

The reality is that there will always be more risk management projects worth doing than Government can afford – whatever the state of the economy. A number of pressures, including our changing climate, mean investment costs are expected to rise. Understandably, communities want to see more and more spent. But all funding has to come from somewhere. At the moment 95% of the funding within the system is paid for through general taxation. There will always be a limit to what we can expect the taxpayer to pay for.

The costs of investment are often discussed, but the nature and scale of the benefits often overlooked. We know investment realises long-term savings worth much more than the costs involved – on average, eight times more. Where defences are built, they deliver significant private and financial benefits. Not least, investment sustains affordable insurance. Defences can also regenerate local areas, boost local economies and open up new opportunities for tourism and recreation. At the moment we have an unfair system where many such benefits are fully funded while projects in other areas have to be deferred.

So how can we create a funding system that is fairer to each community at risk, and is economically sustainable over the long-term? Within such a system what would be the fairest way of allocating Government money, and who should decide which projects go forward if there isn't enough money to go around? This consultation seeks to tackle all these difficult issues.

We need to open up the funding system so that it is no longer constrained by what central Government alone provides. We need a new, forward-looking approach that encourages costs to come down and innovative solutions to come forward. If we can reduce the costs of even the most important projects, and leverage more contributions towards their significant benefits, it would free up more money to be spent elsewhere and help more communities get their projects off the ground.

Thinking of flood and coastal defence in the narrow terms of Government funding is restrictive and unimaginative. By setting out a long-term investment framework we have the potential over time to better support local needs, build our resilience as a society, and give each community a much bigger say in their own future.

Caroline Spelman

Secretary of State for Environment, Food and Rural Affairs

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Consultation responses

This consultation is running in parallel with one being conducted by Defra and the Environment Agency on a National Flood and Coastal Erosion Risk Management Strategy for England, as well as other draft guidance and proposals prepared under the Flood and Water Management Act 2010. These are available at the following website:

<https://consult.environment-agency.gov.uk/portal/ho/flood/fcerm/strategy>

Defra would be grateful if responses to this consultation on potential funding reforms are sent directly to the email address below:

floods.funding@defra.gsi.gov.uk

All responses should be received at the latest by 16th February 2011.

If you have any queries, please call the Defra Flood Management helpline on 020 7238 6239.

Executive Summary

The benefits of managing the risk of flooding and coastal erosion typically outweigh investment costs many times over, delivering significant financial gains to land and property owners and others, by avoiding future damage to property, safeguarding insurance terms, and preventing the serious trauma and health impacts that flooding and erosion can cause. But currently costs almost entirely fall to the general taxpayer, and this artificially constrains how much can be done, as well as creating potential for inequity in the system. In the future, the Government would like to encourage additional local investment in flood and coastal erosion risk management, and give areas at risk a bigger say in the action taken. Decisions would be taken locally on whether and how to contribute towards schemes. Those most at risk and in the most deprived areas will continue to be the focus for Government support.

A new 'payment for outcomes' funding approach is proposed for all capital maintenance and defence projects seeking funds from 1 April 2012. This includes projects that may already be in development and have indicative levels of Flood Defence Grant-In-Aid ("FDGIA") allocated to them in 2012/13 or later years. Funding for schemes already under construction will continue under current arrangements.

The objectives of new approach are to:

- **Encourage total investment in flood and coastal erosion risk management by operating authorities to increase** beyond levels provided by central Government alone, as Sir Michael Pitt suggested in his review of the 2007 flooding¹.
- **Enable more local choice within the system, and encourage innovative, cost-effective options to come forward** in which civil society may play a greater role.
- **Maintain the widespread take-up of flood insurance**, by helping to keep insurance affordable through risks being properly managed, whilst focusing Government support on those least able to pay.

If adopted the new approach would mean:

- **Every potential investment could have access to some funding from central Government** over time, including to tackle surface water flooding, and for property-level resistance and resilience. Potential grant levels for projects would be based on the level of benefits and outcomes that would be delivered, rather than as now, some projects being fully-funded and others not at all.
- **More transparency over potential funding levels for projects**, allowing alternative options to be considered or local funding found where, in the new system, projects do not deliver enough in terms of outcomes to attract full support from the general taxpayer.
- **Greater local choice and discretion over what projects can proceed**, and when, based on local willingness to contribute towards the benefits that would be delivered. Subject to decisions made by Regional Flood and Coastal Committees, projects that attract sufficient local funding or can find ways to reduce costs would proceed part-funded by the general taxpayer. In addition, Regional Flood and

¹ *Learning lessons from the 2007 floods*, independent review by Sir Michael Pitt, June 2008

Coastal Committees can decide which other projects go ahead by part funding them through existing arrangements. Projects delivering the most in terms of benefits and outcomes per £1 would be taken forward as part of a national priority programme.

- **A free choice over whether and how local funding and contributions are raised** in each case, based on the additional benefits that would be delivered, and what communities and local partners decide is most appropriate. If they choose, local authorities and communities already have a range of options available to them to supplement national funding for flood and coastal erosion risk management, to help fund additional locally-important schemes and in doing so achieve levels of protection that might otherwise not be possible. Local partnerships may wish to consider who stands to benefit overall as a result of the local flood risk management strategy, and agree how best to spread any local contributions in light of such benefits and different sectors' ability to pay. This approach is consistent with the Coalition Government's approach to fiscal decentralisation.

Households in the most deprived areas of the country need particular support as they are least likely to be adequately insured, less likely to be able to contribute, and more likely to need additional support from the State in order to recover from flooding. It is suggested that outcomes achieved in the most deprived parts of the country should be rewarded with payment levels higher than elsewhere. This means that such projects are more likely to be fully funded by central Government.

Overall, it is anticipated that fewer projects would have to be deferred, and therefore more benefits delivered in terms of avoided future damages to people and property, the economy and the environment.

The new system is designed to 'fail safe'. If the improved opportunities to invest in additional projects are declined, and cost savings prove impossible, then there are expected to be enough projects of sufficient strength in the pipeline to fully utilise the funds available and achieve the anticipated level of outcomes. Even in this scenario, the new system would represent an improvement as additional investment is encouraged, cost savings are rewarded, and local choices can be made. Potential funding levels for each project, and decisions to invest or not, are made more transparent and explicit. Finally, value for money to the taxpayer is safeguarded under any scenario, as payments would relate directly to the eventual outcomes delivered.

1. The need for a new capital allocation system

The existing funding system is efficient and delivers very good value for money...

The current funding system - in which around 95% of funding for risk management authorities is paid for by central Government - has only been in place since 2004. The final piece fell in to place in 2006 when the Environment Agency (EA) was given responsibility for allocating funds direct to local authorities for coastal protection schemes, meaning EA could objectively appraise, prioritise and allocate funds to flood and coastal erosion risk management activity across England in line with where greatest benefit could be achieved with the funding available. The current system emerged after a number of flood incidents, reports and reviews in the late 1990s and early 2000s pointed to inadequacies in how the locally-driven funding model in place at the time prioritised and delivered projects.

Channelling taxpayer funding as block grant through the Environment Agency has created an efficient system of national prioritisation and delivery, exploiting economies of scale and relative certainty over funding within spending review periods. Value for money is amongst the best in the public sector, delivering on average £8 in long-term benefits to society for every £1 of capital investment.

...but at the expense of local choice and responsibility, and clarity over why some projects are funded and not others

However, some accuse the system of being too centralised; lacking local democratic input and control. Those who live daily with flood risk say that not enough is being done to protect their property and livelihoods, and that they have little say in future plans. At the same time, those who benefit when risks are managed are rarely asked to contribute towards the costs involved. The risk of flooding and erosion varies greatly across the country. At the extreme end, some areas would not be habitable or economically-viable if it weren't for flood and coastal defences. Defences make the difference; preventing floods and protecting properties, businesses and agricultural production; safeguarding insurance terms, economic returns, land and property values.

Despite this, the costs of managing flood and coastal risks are at present largely borne by society as a whole, through general taxation. This means everyone across the country pays irrespective of whether, and to what extent, they are at risk. The average long-term value of being better protected is estimated to be in the region of £20,000 per household². Such benefits being provided for 'free' could be seen as unfair in a situation where not everyone can be afforded similar levels of protection. In instances where Government funding is declined or deferred, communities have to face the uncertainty of future funding rounds or find the entire costs themselves, whilst continuing to be exposed to flooding and coastal erosion.

Furthermore, the predominance of Government funding within the system, coupled with uncertainty over whether individual projects may be funded or not, creates an expectation that Government may invest in most cases eventually. This can be a false hope, and the uncertainty undermines any case for local action in the meantime. Fully funding projects also leaves communities without a direct financial stake in the defences being built. In cases where full funding is likely, this limits the incentive to help operating authorities find ways of keeping costs proportionate; trading off potential approaches and levels of risk reduction against the costs involved. If the costs of even the most beneficial projects could be reduced, there would be more funding available for projects elsewhere.

² Source: Environment Agency, *Investing for the future, a long-term investment strategy*, June 2009

Finally, those with the biggest incentive to invest themselves - where the benefits of improved protection are greatest – are those that are defended for free under the current prioritisation system. And almost by definition, these areas have the greatest collective ability to pay, as investment tends towards the more densely populated areas where the benefits and expected damages to the local economy are greatest. In contrast, projects in other areas are arguably those that need more Government support, as the benefits and therefore the incentives to invest locally are by definition less strong, and collectively there are likely to be fewer people, businesses and others in the area to share the costs.

Government investment should only be the beginning, and not the end of the future funding story

The future system therefore needs to move away from being almost entirely reliant on the general taxpayer. Action should become more aligned with what that those at risk value being achieved; to avoid future damages and safeguard economic returns, property and land values, and insurance terms. Communities having a financial stake in the solution would help build local awareness of flood and coastal erosion risk and encourage debate around the options. It would create an incentive for communities to work to minimise costs in the development and the construction of schemes; their own costs as well as the general taxpayers'. More local funding within the system would have another distinct advantage; free from the confines of national prioritisation it would allow each local area to have a bigger say in what, and when, action can be taken. Whether communities adopt this approach would be voluntary.

In the future, a greater proportion of funding for flood and coastal erosion risk management by operating authorities should be encouraged to come from local areas, so that overall more can be achieved and to reflect the benefits being delivered. Those most at risk and least able to afford to contribute will continue to be the focus of support from central Government. Under such a system, local communities can have a bigger say in what action is taken. Sir Michael Pitt's review of the 2007 floods recommended such an approach, noting that long-term plans "*should not simply assume that the costs of flood risk will be met centrally. There are direct beneficiaries from flood defence work, and aligning those who benefit with those who pay will bring greater efficiency and greater responsiveness from those carrying out the work.*"

Instead, he recommended, Government should "*develop a scheme which allows and encourages local communities to invest in flood risk management measures*". This document sets out for consultation how such a scheme could operate from April 2012 onwards.

- Q1. Do you think that the existing funding prioritisation and allocation system should continue, in which Government focuses on funding the most cost-beneficial projects?
- Q2. Do you have any other comments or anything to add to the analysis in Section 1?

2. Objectives of the funding system

The objectives of the future funding system for flood and coastal erosion risk management are to:

- (i) **Encourage total investment in FCERM by operating authorities to increase beyond levels affordable to central Government alone** in order to meet the twin challenges of climate change and asset deterioration. Otherwise flooding will occur that would cost far less to prevent, causing significant economic, environmental and societal damages that could have been cost-effectively avoided. The Pitt Review said that long-term investment plans “*should not simply assume that the costs of flood risk management will be met centrally*”.
- (ii) **Enable more local choice within the system, and encourage innovative, cost-effective options to come forward in which civil society may play a greater role** by giving those that live and work at risk a bigger say in what gets done, in return for greater local and private contributions towards the benefits delivered. In doing so, levels of activity will become based on people’s willingness to pay for the benefits of risk being managed, as opposed to what the Exchequer alone can afford. The Pitt Review, recommendation 24, says Government should develop a scheme that “*allows and encourages local communities to invest in flood risk management measures*”.
- (iii) **Maintain the widespread take-up of flood insurance** with policy terms that encourage and reflect appropriate risk management actions. The best way to keep insurance premiums affordable is to minimise local risk, ideally to the point where the benefits of additional action no longer exceed the costs involved. At the moment, uncertainty over funding for individual projects means other actions are being postponed, and funding constraints mean projects are deferred that would deliver benefits many times greater than their costs. This means future damages and insurance premiums may be many times higher than necessary in some areas unless additional action is taken.

Q3. Do you agree with the objectives in Section 2? If not, which would you change, or what others would you add?
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3. Guiding principles

It is proposed that the funding system for capital projects from April 2012 will be based around the following principles. In all cases projects would need to be compliant with the relevant legislation, including being consistent with the national and relevant local strategies prepared in accordance with the Flood and Water Management Act 2010. Any consents (planning, environmental, or relating to the type of watercourse, etc) would still be needed from the relevant authorities.

No.	Principle	Rationale and implications
1	Rather than some projects being fully funded and others not at all as under the current system, at least some Grant-in-Aid should be on offer to all potential projects over time based on the outcomes and benefits each would deliver	To give every potential project the opportunity of at least some funding support from central Government, and to focus operating authorities on the cost-effective delivery of outcomes over time. 100% grant rates will remain available, but only to projects that deliver sufficient benefits. Activity that delivers lower relative benefits will be offered funding based on the outcomes and value it delivers, if other money can be found to meet the remainder.
2	Funds from central Government should focus on increasing the resilience of society and the country in general , and not be expected to pay for benefits that are localised or result in private financial gains ("beneficiary pays")	Funding from central Government will always be limited and therefore needs to focus on delivering benefits to as many people as possible and society in general. Particular focus should be on the resilience of public infrastructure, plus supporting those least able to afford to protect or insure themselves. A "beneficiary pays" system creates the right incentives for risks to be managed cost-effectively by those most able to, reducing impacts overall.
3	All sources of risk, and projects sponsored by all operating authorities, should be treated and valued equally on a benefits and damages avoided basis	So that all sources of flood risk, and coastal erosion, are treated equally and given common access to FDGiA. Previously, capital grants have not been available for managing surface water risk. Also, property-level protection has been grant-funded separately in the past. In future these activities will have equal access to FDGiA, based on their relative benefits, to allow explicit trade-offs to be made between tackling different sources of risk, and between community-level and property-level solutions.
4	The general taxpayer should not pay to protect new development in areas at risk of flooding or coastal change, now or in the future ("polluter pays")	It is proposed that new properties built, or existing buildings converted into housing, after January 2009 will not be counted within the funding formula. This would encourage all new development to be suitably protected and/or resilient from the outset with appropriate climate change allowances made. In doing so, responsibilities are reinforced for local decisions taken over the nature and location of development. Sir Michael Pitt recommended developers should " <i>make a full contribution towards the costs both of building and maintaining any necessary defences</i> ".

Q4. Do you agree with the guiding principles outlined in Section 3? If not, which would you change, or what others would you add?

Q5. In particular, do you agree that the costs of protecting new development should not fall to the general taxpayer, now or over the long-term?

4. A framework for future outcomes and payment levels

Government has in recent years decided the priorities for national investment by setting outcome measures (OMs) with targets. Unlike in previous years, it is proposed that no specific targets against each OM will be set for the next period (Spending Review 2010: April 2011 to March 2015, or “SR10”). In previous years the targets have determined the relative priority of each project within the programme, based on each project’s contribution towards the achievement of the targets per £1 of funding required. Projects that have contributed sufficiently towards targets have been selected for funding, and others that contribute less and can’t be afforded have tended to be deferred pending decisions on future budgets.

Moving away from meeting costs, towards paying for outcomes

Instead, it is proposed that all capital projects will have on offer at least some Grant-In-Aid funding over time if costs can be saved and/or sufficient money can be found from elsewhere. Levels of funding from Government would be based on a ‘payment for outcomes’ system, so that the value of grants on offer relate directly to the level of outcomes expected, and the duration that benefits are expected to last for. Once set, payment levels per outcome would not be expected to change over time, giving greater long-term certainty of funding from Government in every case. All projects would have to demonstrate long-term benefits are greater than their costs to make sure they are worthwhile doing at all.

Proposed outcomes to be valued within the system

In order to provide some continuity with the previous period, it is proposed that the outcomes valued within the new system are based upon an evolution of those already in place. These were set by Government following a previous consultation exercise.

The existing outcome set seeks to represent the range of economic, social and environmental benefits achieved when risks are managed, and allow all outcomes and benefits achieved to be recognised to a greater or lesser extent. The primary focus for the existing set, which it is proposed should remain for the future set, is based on delivering better protection to households whilst ensuring sufficient environmental outcomes are achieved. By basing future outcomes upon those already in place, the details of all projects within the pipeline can readily be updated to fit the new system without having to be reviewed and re-evaluated against a different set of measures.

Whilst the general framework of outcomes from the previous period can be preserved, some changes are suggested to make them suitable for the new system. For example, coastal erosion would have a separate set of outcomes as the nature and potential scale of damages differ from those for flooding. Also, outcomes to promote household resistance and resilience measures are proposed for the first time, to encourage such options to be considered and allow explicit trade-offs to be made between protection at a community and individual property-level scale.

Why do the proposed outcome measures remain focused on households?

The proposed set of outcome measures focus on households for four reasons:

- *Households typically bear the greatest share of damages when flooding takes place, accounting for almost 40% of the total damages during the floods of 2007 for example, at around £23,000 to £30,000 per household flooded. If the importance of households within the outcome framework were to be diminished, or alternatively*

other outcomes included alongside, it would lead to resources being diverted away from protecting people and their property.

- *Households most at risk and on low incomes are least likely to be properly insured*, meaning that as well as suffering the trauma and health impacts of flooding, they are more likely to be left with a significant financial loss and may need further support from the State in order to recover and alleviate financial hardship. So payment rates in the most deprived areas would be higher than elsewhere, so that schemes in these areas would be more likely to be fully-funded, or at least require fewer local contributions as they may be harder to find in such areas.
- *Households serve as a good proxy indicator for other community benefits*, such as schools, other public buildings and small businesses co-located in residential areas. So schemes justified on the basis of households would be likely to protect local infrastructure and other important community assets at the same time.
- *Other beneficiary groups in the private sector, such as business, utilities, developers and agriculture, operate primarily for profit*. Therefore flooding and coastal erosion should be amongst the business risks that each will need to manage. These sectors should be encouraged to adapt to the risks and costs they face, and make themselves more resilient if it makes business sense to do so. This may include contributing towards the costs of a community-level defence that they will benefit from. As now, benefits to these sectors from flood and coastal erosion risk management would continue to be appropriately valued within project appraisals, and can influence the scope and design of schemes being developed. These benefits would also be supported by the general taxpayer as part of a general economic benefits outcome.

Why would you pay for environmental benefits?

The UK Government is obliged to achieve certain environmental outcomes under European Union legislation, such as the Habitats and Birds Directives, and the Water Framework Directive. Whilst these outcomes may be desirable locally, in that any enhanced amenity and access for recreational purposes will be enjoyed by the local community, their main justification is sustaining the ecosystem services provided for society at large. These aspects are less likely to be as high a priority for local funding and therefore may not be delivered without particular support from Government. Also, falling short of the UK's requirements under EU legislation would leave the UK Government, and therefore the general taxpayer, at risk of potentially large fines. Paying for these outcomes explicitly would help ensure that any necessary measures are secured and delivered as flexibly and cost-effectively as possible.

The payment values are intended to encourage every project to maximise the cost-effective delivery of these important environmental outcomes. In some cases, projects may deliver exclusively environmental outcomes. In other cases, the approach would provide incentives to find ways of reducing risks to people and property whilst also achieving such environmental outcomes. The approach supports Sir Michael Pitt's recommendation to achieve greater working with natural processes.

Payment levels could relate directly to the benefits delivered and damages avoided

When outcomes are achieved it delivers a range of benefits, not least a reduction in the likelihood of flooding or coastal erosion taking place in the area. Therefore, each outcome can be valued in terms of the direct benefit achieved and damages avoided when risks are managed. This provides a potential framework for attaching a financial value, and hence a payment level, to each outcome.

For example, assuming the average damage caused when a property is flooded is £30,000, then reducing the likelihood of flooding from say 1 in 20 (5%, 'significant risk') each year to a low likelihood, say 1 in 200 (0.5%) each year, means the expected annual damage to the household is reduced from £1,500 to £150. Protection would therefore represent an annualised benefit to the householder of £1,350. If protection is provided for fifty years, expected damages over the period are reduced by £67,500, or £32,075 in present value terms (i.e. future benefits discounted at 3.5% per year).

Fitting property-level measures to a household at say 1 in 15 (6.67%) annual risk - assuming this is equivalent to reducing the annual likelihood of damages to 1 in 40 (2.5%) - would deliver a reduction in annual damages from £2,000 to £750 – a £1,250 annual benefit to the householder. Over ten years, this amounts to £12,500, or £10,700 in present value terms.

In contrast, reducing a moderate likelihood of flooding, say from 1 in 100 (1%) to 1 in 200 (0.5%), reduces estimated annual damages only by half, from £300 to £150. This annualised benefit of £150 to the householder, or around £3,560 over fifty years in present value terms, would lead to payment rates being correspondingly lower for outcomes relating to households at moderate risk as opposed to those at significant or higher risk.

Ensuring value for money to the taxpayer

It would be important within such a framework to continue to achieve value for money to the taxpayer. If payments were the same as the reduction in annual damages achieved, it would represent a 1 to 1 return to the taxpayer, considerably worse than the average 8 to 1 benefit to cost return under the existing system. Therefore, to seek to preserve value for money it is proposed that payment rates are set at a fifth of the annual damages avoided, so that in every case Government can expect to achieve a minimum benefit to cost ratio of 5 to 1 for the taxpayer. In the first example above, where the risk of flooding is being reduced from 1 in 20 to 1 in 200, FDGiA worth £270 a year would be available ($£1,350 \div 5$), or £6,415 in present value terms if the defences are due to last fifty years.

Supporting those least able to pay, or recover without additional help

Furthermore, it is proposed that payment levels take account of the extent to which benefits are likely to be localised and private as opposed to benefitting wider society. In practice this would suggest paying higher rates for protecting households in deprived areas, as flooding in these areas is more likely to cause hardship and need further support from public bodies. Doing so would mean projects in these areas are less likely to be reliant on local contributions to go ahead. The HM Treasury Green Book³ contains weightings to take account of equity and distributional issues, and this suggests payment levels in the 20% most deprived areas in the county being set at 225% the levels elsewhere.

It also suggests Government should pay a lower rate for the economic benefits in the private sector, relating to businesses, utilities and privately-owned infrastructure. These sectors accounted for 73% of the non-household damages in the floods of 2007⁴, and therefore if protection is improved, 73% of the non-household benefits can be expected to accrue to the private sector. Based on this, and the need to achieve a minimum of £5 in benefit per £1 spent, it is proposed that the general rate paid for non-household economic benefits is £1 for each £18 of whole-life benefit (27% divided by 5).

³ *Appraisal and Evaluation in Central Government*, HM Treasury, ANNEX I

⁴ Source: Environment Agency 2009, *The Costs of the Summer 2007 floods*.

This framework of central Government paying for a share of the benefits being delivered can be extended to the entire outcome set.

Draft technical guidance has been produced to form part of this consultation. Section A of the guidance presents the full set of proposed outcome measures, together with the rationale in each case for the indicative payment levels proposed.

Case study examples

The following examples illustrate how the approach would apply to two fictitious projects.

Case study 1: Rural defence project

A small market town is at a 1 in 20 annual risk of being flooded, and a £2 million scheme has been prepared that would protect 75 homes to a 1 in 200 standard, achieving £10 million in long-term benefits.

The comparatively low benefit to cost ratio means the project has been deferred in the past and would remain a low priority under the current system.

Under payment for outcomes, the scheme has the potential to attract around £900,000 of the necessary funds through FDGiA. The scheme is supported by the Regional Flood and Coastal Committee whose members vote to provide a further £500,000. With a reduced and clear funding goal to aim for, the town works hard through community groups and the local Chamber of Commerce to raise the remaining £600,000. For the £600,000 local investment, £10 million in long-term benefits are realised, a return of over 16 to 1 to the local area. Government, in providing £900,000, achieves an 11 to 1 return.

Case study 2: City centre defence scheme

A city centre, located downstream of the market town above, is at risk of flooding with an annual likelihood of 1 in 100. A scheme to protect the 1,000 households at risk and provide a 1 in 200 standard of protection for fifty years has been prepared by the Environment Agency, and will cost £50 million to deliver. If the scheme goes ahead, £600 million of long-term benefits would be realised by the area.

Under the existing system the project may be fully-funded due to its high benefit to cost ratio (12 to 1) and the large number of households being protected. Other schemes in the area, such as in Case Study 1, would need to be deferred if this scheme goes ahead fully-funded.

Under the payment for outcomes system, the city-centre scheme may be offered £35 million (70%) based on the outcomes and benefits being delivered. Recognising this, the Environment Agency revises the proposal in collaboration with local partners and the community, and manages to find cost savings of 10% - reducing costs to £45m. Recognising the benefits of the scheme going ahead, local flood risk partners and other community interests manage to secure the remaining £10 million. As a result, the scheme goes ahead and the £10 million local investment realises the £600 million benefits, representing a return of £60 for each £1 spent by the local area. Government, in spending £35 million, achieves an effective 17 to 1 return for the taxpayer.

As a result of the cost savings and contributions found towards the city centre project, both schemes are able to proceed within the FDGiA available, with a further £14.1 million saved and made available for other projects.

Q6. Do you agree with the rationale for the 'payment for outcomes' approach?

Q7. Do you agree that a payment for outcomes system would be more likely to deliver the objectives stated in Section 2, in comparison with the current prioritisation and allocation approach? An accompanying impact assessment provides a more detailed comparison.

5. Importance of the regional committees in deciding the overall programme

As required by the Flood and Water Management Act 2010, Regional Flood and Coastal Committees have a key role in agreeing projects within the regional programme. The existing 'local levy' powers – now extended in law to allow funds to be spent on coastal defence – could have an important role in controlling the overall flow of projects through the pipeline. In the past, the local levy has often needed to fully-fund projects for which FDGiA is unavailable. In the future, as all projects will have at least some FDGiA on offer, the local levy will only need to part-fund schemes that cannot be fully justified to national budgets.

However, in any given year, FDGiA will be limited. There may therefore be cases where there is insufficient FDGiA available to take forward every project meeting the criteria for funding within a region. If so, the RFCC can decide what to do by taking one or more of the following actions:

- agreeing to increase the value of the RFCC levy, or drawing down some reserves, to pay for the additional unmet costs of projects;
- agreeing which projects to defer until later years, or;
- asking particular project sponsors to find contributions and/or reduce the costs of their projects in order to release funds for other schemes.

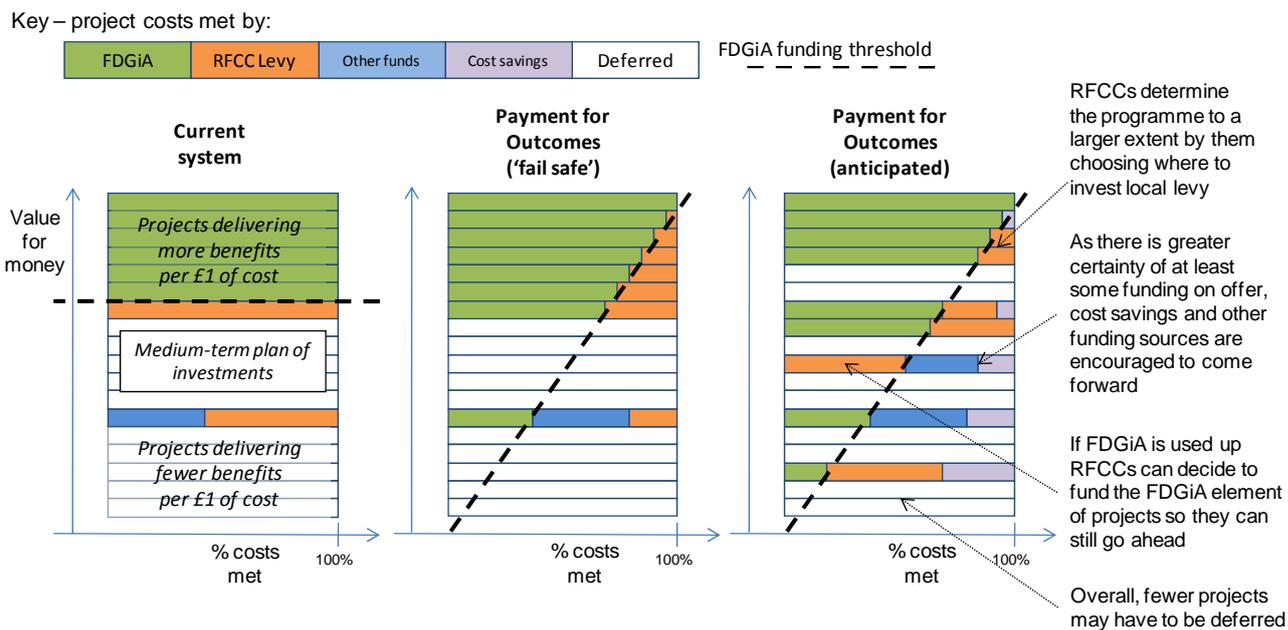
In this way, the RFCC determines the overall size and scope of the regional programme. More specifically, the local levy controls over and under-demand for FDGiA as follows:

- If FDGiA is under-subscribed (i.e. there are insufficient projects coming forward under the scheme to fully utilise the FDGiA available), RFCCs can use the local levy to pay the *External Contribution Required* by particular projects to allow them to proceed - up to the point at which FDGiA in the region is exhausted.
- If FDGiA is over-subscribed (i.e. there are more projects seeking FDGiA than is available), RFCCs can raise local levy to pay the *FDGiA Contribution* needed to avoid the projects having to be deferred, or the full project costs if no other funding is forthcoming – up to the value of the local levy the RFCC agrees on.

In the event that FDGiA is still undersubscribed within a region (because the RFCC decides not to raise enough local levy to take forward other projects) the excess FDGiA within a region would be made available to other RFCCs on a priority basis, or surrendered to help fund Defra's other priorities.

The following diagram illustrates how this would work, and shows two potential scenarios in comparison with the current system. The middle diagram shows how the system would 'fail safe' if no local contributions are forthcoming or cost savings found. The funds available to the Environment Agency and RFCCs would still be fully utilised, and same levels of outcomes expected, with projects funded by a different mix of FDGiA and local levy in some cases. However, in this scenario the RFCC may agree a different set of projects should proceed as long as the parameters of the system are still met.

Figure 1: The 'payment for outcomes' approach and importance of the local levy

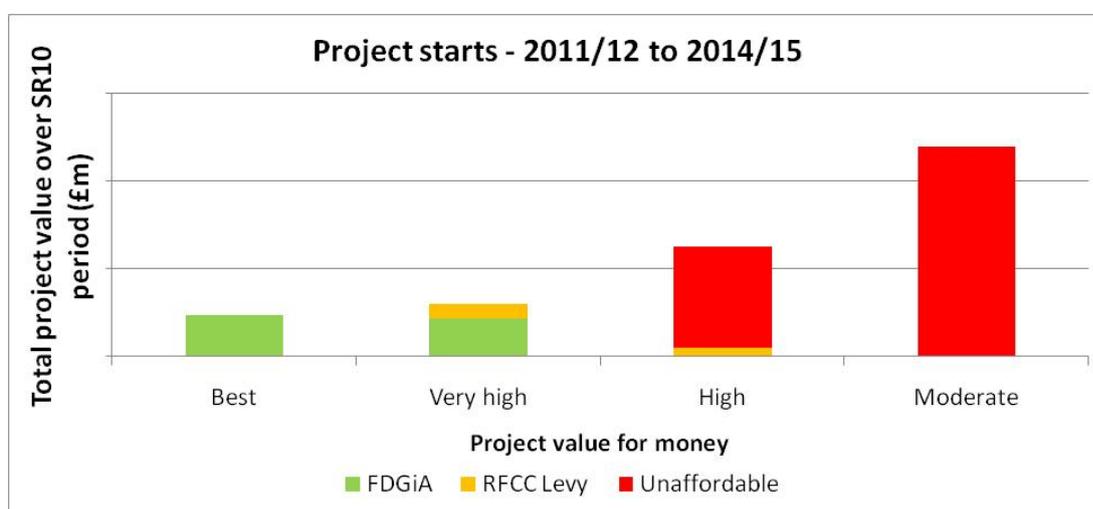


Q8. Do you have any comments or suggestions on the role of RFCCs and the local levy?

6. Expected impact of the new funding system

If the existing funding system were to continue, all the FDGiA available over the forthcoming period would be drawn in to delivering primarily the most cost-beneficial projects. Contributions towards these projects would be limited, as project sponsors and beneficiaries know that they are likely to be fully-funded by default. Projects that fall below the effective funding threshold would almost certainly be deferred as the costs are unsubsidised and the benefits less strong, making them relatively expensive and less attractive for the local areas to pursue alone. Because of the current ‘all or nothing’ funding system, some of the deferred schemes will have a benefit to cost ratio only marginally lower than some of the fully-funded schemes. As the projects that do go ahead tend to be fully-funded, it creates an expectation that all projects may be similarly funded in time. This encourages potential beneficiaries to delay any alternative actions and ‘wait and see’.

Figure 2: Illustration of the project pipeline under the current funding system



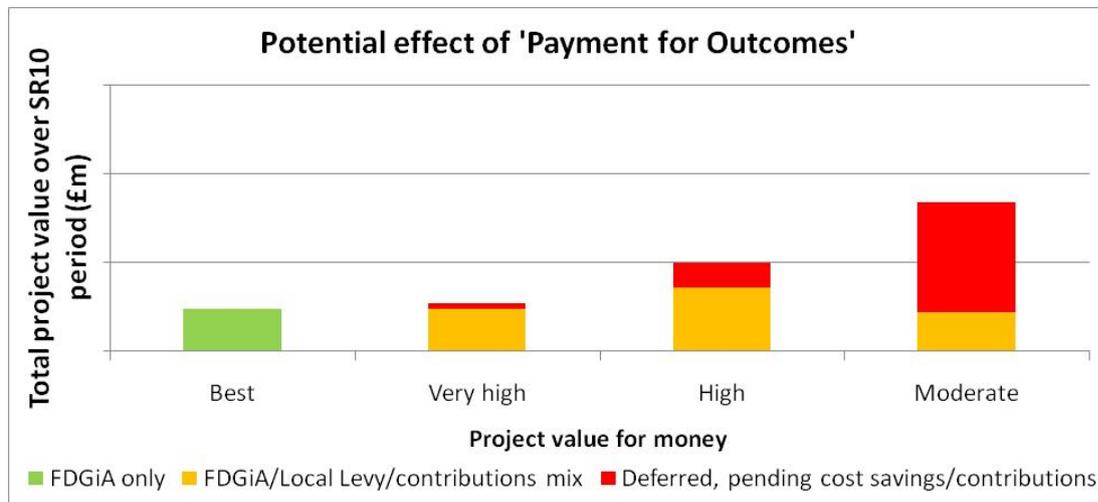
Under the proposed ‘payment for outcomes’ system, projects with lower benefit to cost ratios are more likely to proceed, as the system encourages costs to be minimised, and national funding is potentially on offer if enough other money can be found. As such, the approach encourages innovation and alternative ways of achieving the same outcomes, including greater involvement by volunteers and other community groups in the construction, maintenance and operation of assets.

As national funding will still need to be rationed each year, there would be greater ‘bottom-up’ pressure for FDGiA created by the relatively lower benefit projects seeking and attracting funds. This would increase the competition for funding in general. So even projects that deliver high levels of benefits and outcomes would be encouraged to reduce their costs or find contributions in order to avoid being the ones that have to be displaced from the programme. Whilst the Regional Flood and Coastal Committee would decide which projects need to be deferred, in order to stay within the overall availability of FDGiA and local levy, RFCCs could be expected to fund first those projects where there is strong evidence of cost efficiency and a robust approach to external contributions.

Local authorities could also decide to leverage the benefits of any schemes that go ahead in their area as a result of FDGiA and local levy, and seek to raise funds locally from the beneficiaries of these projects if they have not already contributed. Any money raised by local authorities in this way could help fund other projects within the local flood risk

management strategy, and allow the costs and benefits of the local strategy overall to be shared between sectors and geographical areas in a way that seems most fair to them and their flood risk management partners.

Figure 3: Illustration of the project pipeline under 'payment for outcomes'



The combined effect of payment for outcomes may be to significantly reduce the number and value of projects that have to be deferred. This is due to putting added pressure on justifying costs in every case both nationally and locally (hence the size and value of the bars in figure 3 being reduced in comparison to figure 2), and by encouraging more local contributions to be found to help pay for the local benefits being delivered (hence the value of the yellow bars being bigger in figure 3).

In every case, projects would only be deferred if the local area, local flood risk partnership and the RFCC between them all decide that the benefits are not sufficient to warrant the remaining costs involved, in lieu of other priorities at that time.

The payment for outcomes system has been designed so that even if there are no local contributions coming forward, nor any cost reduction amongst future projects, the portfolio of projects is sufficiently strong to fully utilise the anticipated levels of FDGiA and RFCC local levy over the next four years. In this way, the system is designed to 'fail safe' - delivery of expected outcomes over the period is not reliant on local contributions being forthcoming. Even in this 'worst case' scenario, the future system aims to be better than the current one as every project will have had the chance of at least some funding support from central Government, and explicit choices will have been made between communities, local risk management partnerships and the relevant Regional Flood and Coastal Committee if projects are deferred.

An impact assessment has been prepared and published alongside this consultation document. The impact assessment more fully assesses and quantifies the potential costs and benefits of the 'payment for outcomes' approach, in comparison with the alternatives.

Q9. Do you have any comments on the analysis in Section 6, or your own views of the potential benefits and risks of the payment for outcomes approach?

Q10. Do you have any suggestions for improving the way a payment for outcomes system might work?

Annex: Consultation questions

- Q1. Do you think that the existing funding prioritisation and allocation system should continue, in which Government focuses on funding the most cost-beneficial projects? . 10
- Q2. Do you have any other comments or anything to add to the analysis in Section 1?..... 10
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