#### **EXPLANATORY MEMORANDUM TO**

#### THE FLOOD RISK (CROSS BORDER AREAS) REGULATIONS 2010

#### 2010 No. 1102

**1.** This explanatory memorandum has been prepared by the Department for Environment, Food and Rural Affairs and is laid before Parliament by Command of Her Majesty.

#### 2. Purpose of the instrument

2.1 Its purpose is to complete transposition of the Floods Directive 1 (Directive 2007/60/EC on the assessment and management of flood risks) into domestic law in England and Scotland. In particular it extends application of the Flood Risk Management (Scotland) Act 2009 to the Scottish part of the Solway-Tweed River Basin District and makes arrangements for cross-border co-ordination of flood risk assessments, maps and plans between England and Scotland.

#### 3. Matters of special interest to the Joint Committee on Statutory Instruments

3.1 None.

#### 4. Legislative Context

- 4.1 This instrument is made under section 2(2) of the European Communities Act 1972 in order to complete transposition and implementation of the Floods Directive. The approach to transposition meets all the requirements of the Directive and ensures that where a river basin crosses the England/Scotland border, there will be cross-border co-ordination between the relevant authorities in order to assess, map and manage flood risk from all sources.
- 4.2 The Floods Directive has previously been transposed in Scotland by the Flood Risk Management (Scotland) Act 2009 (the Scottish Act) and in England and Wales by the Flood Risk Regulations 2009. However, the Scottish Act enables the Directive to be implemented only in River Basin Districts that lie entirely within Scotland. So given that the Solway-Tweed River Basin District extends into England it could not be implemented in the Scottish part of that district.
- 4.3 This instrument amends the Scottish Act to extend its application to the Scottish part of the Solway Tweed River Basin District. It also amends both the Scottish Act and the Flood Risk Regulations 2009 to make arrangements for two catchments within the Solway Tweed River Basin District that cross the border between Scotland and England and in which cross-border co-ordination is necessary to achieve effective flood risk management and compliance with the Floods Directive.
- 4.3 We hope to be able to consolidate these regulations with the relevant provisions from the Flood and Water Management Bill and other flood related legislation using appropriate existing legislation in the near future. This would achieve a single coherent set of provisions dealing with flood risk assessment and management.
- 4.4 A transposition note explaining in broad terms how this instrument completes transposition is attached at Annex A.

#### 5. Territorial Extent and Application

5.1 This instrument extends to Great Britain, but the amendments made will only have effect in England and Scotland.

<sup>&</sup>lt;sup>1</sup> Official Journal of the European Communities, No. L288, 6.11.2007, p 27.

5.2 Separate transposing legislation is in place for England & Wales, Scotland and Northern Ireland.

#### 6. European Convention on Human Rights

6.1 As the instrument is subject to negative resolution procedure and does not amend primary legislation, no statement is required.

#### 7. Policy background

#### What is being done and why

- 7.1 The Flood Risk Regulations 2009 and the Scottish Act transpose the Floods Directive in England & Wales and Scotland for most of the territory except for the Scottish part of the Solway Tweed River Basin District. This amending legislation simply clarifies arrangements for the cross-border areas between England and Scotland to make sure that there is sufficient co-ordination to ensure effective flood risk management and co-ordinated plans for the river basin district as a whole.
- 7.2 As an EU Member State we are obliged to transpose Directives into domestic legislation. Consideration was given to making administrative arrangements for the Solway Tweed River Basin District instead of legislation, but compared with making amending legislation, this would pose a higher risk of the EC imposing penalties for incomplete transposition.

#### 8. Consultation outcome

- 8.1 The transposing legislation in both England and Scotland was subject to full public consultation, the outcome of which was published by the respective administrations.
- 8.2 No consultation on this instrument is necessary given that it primarily extends existing transposition policy in Scotland to the Solway Tweed River Basin Districts and makes arrangements for cross border co-ordination. Small additional costs will be incurred by the Scottish Environment Protection Agency (SEPA) and the Environment Agency (EA), both of whom were involved in drafting this instrument.

#### 9. Guidance

- 9.1 SEPA and EA will be providing guidance to local authorities to explain the cross-border obligations regarding the preparation of preliminary flood risk assessments, maps and plans.
- 9.2 A new cross-border organisation, the Cross Border Advisory Group (CBAG) may also issue guidance to local authorities.
- 9.3 The Secretary of State and Scottish Ministers will determine the location of flood risk areas (those at potential significant risk of flooding) for the cross border area.

#### 10. Impact

10.1 The only impact from the implementation of this instrument will be the cost of setting up a Cross Border Advisory Group, the advice the Group provides and limited additional work for EA and SEPA in co-ordinating cross-border flood risk assessments, maps and plans. This is addressed in the appended Impact Assessment – Annex B.

#### 11. Regulating small business

11.1 This legislation does not apply to small business.

#### 12. Monitoring & review

- 12.1 The success of this instrument will be form part of a review into the success of Floods Directive implementation more broadly in terms of a reduction in the probability and/or consequences of flooding.
- 12.2 Indicators of success will include: compliance with the Floods Directive, thereby attracting no infraction proceedings; efficiency savings as data from flood risk management assessments, maps and plans are integrated in order to manage flood risk from all sources; and improved transparency and public consultation on flood risk management plans; coordination with river basin planning under the Water Framework Directive; and reduced impacts of flooding.
- 12.3 Defra expects to carry out a full review of this measure after the European Commission has provided feedback following the first cycle of appraisals, maps and plans in 2016. Interim reviews are also likely to be carried out after each product is completed.

#### 13. Contact

Matthew Hampshire at the Department for Environment, Food and Rural Affairs. Tel: 020 7238 6167 or email: matthew.hampshire@defra.gsi.gov.uk can answer any queries regarding the instrument.

#### Annex A: TRANSPOSITION NOTE – EU FLOODS DIRECTIVE (2007/60/EC)

#### The Flood Risk (Cross Border Areas) Regulations 2010

This Note sets out how the Flood Risk (Cross Border Areas) Regulations 2010 will complete transposition into UK law of the main elements of the EU Floods Directive.

- 1. This Transposition Note has been prepared by the Department for Environment, Food and Rural Affairs to show how the main elements of Directive 2007/60/EC of the European Parliament and of the Council of 23rd October 2007 on the assessment and management of flood risks ("the Floods Directive") have been transposed in the Solway Tweed River Basin District.
- 2. The note has been published to accompany the Flood Risk (Cross Border Areas) Regulations 2010 ("the Regulations").
- 3. The Regulations stipulate arrangements for the preparation of preliminary flood risk assessments, flood maps and flood risk management plans and on the determination of significant flood risk in the Solway Tweed River Basin District. In essence the Scottish transposition policy applies in catchments that lie solely within Scotland and the English transposition policy applies in catchments that lie solely within England. For the cross-border catchments a Cross Border Advisory Group advises relevant local authorities and agencies on the preparation of Directive assessments, maps and plans and these are co-ordinated across the border.

#### The Directive

- 4. The Floods Directive prescribes a common framework for measuring and managing flood risk. Member States must make a preliminary assessment of flood risk from all sources, except sewers<sup>2</sup>, and then identify areas at significant potential risk of flooding. For these 'significant risk' areas maps must be plotted to show the potential flood extent and the adverse consequences arising from such a flood. Flood risk management plans including objectives and measures to reduce this flood risk must then be developed.
- 5. The Directive needs to be implemented in co-ordination with the Water Framework Directive, notably by aligning flood risk management plans with river basin management plans, and by consulting with the public on the content of flood risk management plans. All assessments, maps and plans must be made available to the public and we must encourage the active involvement of interested parties in the preparation of flood risk management plans.
- 6. Although the Solway Tweed River Basin District is not truly an international boundary, Member States must co-ordinate flood risk management practice in shared river basins to avoid measures that might increase flood risk in a neighbouring country. This measure applies that same principle to the respective catchments crossing administrative boundaries.
- 7. The Floods Directive sets in train a six yearly assessment, mapping and planning cycle that begins with the first preliminary flood risk assessment which is due by 22 December 2011. The assessment forms the basis for determining areas of potential significant flood risk which will subsequently be mapped and for which flood risk management plans will be then prepared. The maps, both flood hazard and flood risk maps, are due to be completed by 22 December 2013.

<sup>&</sup>lt;sup>2</sup> Member States may exclude flooding from sewerage systems from transposition and within the UK, England, Wales, Scotland and Northern Ireland have opted to exclude such flooding where it is caused entirely by a system failure or blockage.

Finally, based on the information provided in these maps flood risk management plans must be prepared by 22 December 2015.

8. The assessment, mapping and planning cycle continues thereafter on a six-yearly basis with the first review of the preliminary flood risk assessment due by 22 December 2018. Flood maps must be reviewed by 22 December 2019 and flood risk management plans by 22 December 2021. Each review must take into account the likely impact of climate change on the occurrence of floods.

#### Responsibility for transposition

- 9. Responsibility for flood risk management is a devolved matter although this Department is ultimately accountable for UK compliance with the Floods Directive.

  The Directive has been transposed through the Flood Risk Management (Scotland) Act 2009 which was enacted on June 16, 2009, the Flood Risk Regulations 2009 which came into force on 10 December 2009 and by the Water Environment (Floods Directive) Regulations (Northern Ireland) 2009 that came into operation on14 December 2009. The Government of Gibraltar intends to transpose the Directive by 30 June 2010.
- 10. Each administration is responsible for legislating for river basin districts falling wholly within its land area. For river basins that cross these administrative boundaries the amendments made by these regulations provides a duty for relevant authorities to cooperate and share data.

#### The legal context for transposition

- 11. In Scotland transposition of the Floods Directive formed part of the Flood Risk Management (Scotland) Act 2009 which includes other arrangements for flood risk management not required by the Directive. However, as the Scottish Act applies only to river basin districts which are entirely in Scotland, it has been necessary to amend it such that it is extended to the Scottish part of the Solway Tweed river basin district. The amending legislation also makes provision for cross-border co-operation and co-ordination of assessments, maps and plans in the cross-border catchments within the Solway Tweed RBD.
- 12. Within England and Wales the Floods Directive has been transposed by the Flood Risk Regulations 2009. It was initially the intention to transpose as part of the Flood and Water Management Bill, but the timetable for enactment would have presented a risk of infraction. These transposing regulations have been prepared in close co-ordination with the drafting of the Flood and Water Management Bill so that they are aligned with the proposed changes in roles and responsibilities. Once the Bill is enacted, we hope to be able to consolidate these provisions into a single Act.

#### Amendments to transposition of the main elements of the Directive

- 13. The following Table sets out how this amending legislation changes how the main elements of the Directive have been transposed into law in Scotland, England (and Wales). The regulation and section numbers referred to in the table are those inserted into the existing legislation.
- 14. Note that where no amendment is made to the existing legislation, it is considered to already transpose the respective articles.

Article and objective	Amendment to Flood Risk Regulations 2009	Amendment to Scotland Act
Article 1 – the purpose of	Already provided for.	Already provided for.

the Directive setablishing		
the Directive, establishing a framework for the assessment and management of flood risks.		
Article 2 – defining 'flood' and 'flood risk'	Already provided for.	Already provided for.
Article 3 – option to appoint different competent authorities and units of management for coastal areas and river basins from those for the Water Framework Directive	New regulation 5 defines which are to be the units of management (defined as "river basin districts" and an area identified on the Cross Border Map consisting of either "a river basin in England" or an "English cross border area" for the purpose of the regulations. Regulation 5A defines "English cross border area" as an area identified on Cross Border Map in relation to a river basin that is partly in England and partly in Scotland, which is in England.  Regulation 5B defines the Cross Border Map as one recorded electronically entitled "Cross Border River Basins Map (England and Scotland) 2010" which is deposited in the principal library of Defra.	Section 55 cross references to the definition in the (amended) Flood Risk Regulations 2009 of "English cross border area". It also extends the definition "river basin" to include the part of a cross border river basin that is within Scotland and "Scottish cross border area" as flood risk management district which comprises the Scottish part of a river basin which crosses into England.
Article 4 – preliminary flood risk assessment (PFRA) on all river basin districts and coastal areas; to include maps showing topography and land use, a description of significant past floods and their impact both past and potential, and may include a detailed assessment of the potential consequences of future floods (characteristics, impact, effect of flood defences and impact of climate change). Information exchange for	Regulation 12(7) requires an authority preparing a preliminary assessment report for an English cross border area to have regard to guidance prepared by the Environment Agency and the Scottish Environment Protection Agency acting jointly. Regulation 39(1) requires a Cross Border Advisory Group to advise the relevant authority on the preparation of a preliminary assessment report in an English cross border area and in a	Section 50A requires an authority in preparing a flood risk assessment to have regard to: the impact of flood risk management actions in England on an adjacent Scottish cross border area and in Scotland on an adjacent English cross border area; any relevant document produced in England for the Floods Directive; and the advice of the Cross Border Advisory Group.

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cross border catchments. Completion by 22 December 2011.  Article 5 – on the basis of the PFRA, identify areas of potential significant flood risk or the likely occurrence thereof. Coordinated determination for cross-border catchments.	Scottish cross border area and Regulation 40 requires the relevant authorities to have regard to the impact of flood risk management actions in either cross border area and any relevant documents produced.  Regulations 13(4) and 14(10) remove the requirement for the Environment Agency and lead local flood authorities respectively to determine areas of significant flood risk in an English cross border area.  Regulation 14A requires the Secretary of State and Scottish Ministers acting jointly to determine for each English cross border	Section 13 changes references to Scottish Ministers to mean Scottish Ministers and the Secretary of State acting jointly in determining areas of potential significant flood risk in the Scottish cross border area.
	area where there is a	
Article 6 – prepare flood hazard maps and flood risk maps for significant risk areas. Information exchange on cross-border catchments. Flood hazard maps to include areas likely to be flooded with: a low probability; medium probability and a high probability – and to show: flood extent; water depths or level and flow velocity. Flood risk maps to show potential consequences of above flood scenarios for – numbers affected; economic activity; installations that might cause pollution; other information the Member State consider useful. Member States may limit maps to low probability/ extreme event scenarios only in defended coastal areas or where the risk is from groundwater. Maps to be completed by 22 December 2015.	Regulation 18(1) requires the Environment Agency to prepare a flood hazard map and a flood risk map for a flood risk area in an English cross-border area, identified by the Secretary of State and Scottish Ministers as at significant flood risk from the sea, main rivers or reservoirs. Regulation 19(2) requires lead local flood authorities to prepare a flood hazard map and a flood risk map for a flood risk area in an English cross-border area, with a significant flood risk from any source other than the sea, main rivers or reservoirs. Regulations 20(8) and 21(4) require a relevant authority preparing a flood hazard map or a flood risk map respectively for an English cross border area to have regard to any guidance issued by the Environment Agency and	Section 50A requires relevant authorities when preparing a flood hazard map and flood risk map for a Scottish cross border area to have regard to: the impact of flood risk actions in Scotland on an adjacent English cross border area and vice versa; relevant documents prepared for the Floods Directive in the English cross border area; and the advice given by the Cross Border Advisory Group.

	the Scottish Environment Protection Agency acting jointly. Regulation 40 requires the authority preparing a flood hazard map or flood risk map to have regard for cross border impacts and the advice of the Cross Border Advisory Group.	
Article 7 and Annex – on the basis of flood maps (Art. 6) MS shall establish flood risk management plans (FRMPs) with appropriate objectives and measures for reducing the consequences and/or likelihood of flooding. FRMPs to include components in part A of the Annex to the Floods Directive. FRMPs to take account of costs and benefits, flood extent, conveyance routes, flood retention and environmental objectives of the Water Framework Directive. Further aspects include spatial planning flood warning. FRMPs shall be completed and published by 22 December 2015.	Regulation 25(1) requires the Environment Agency to prepare a flood risk management plan for a flood risk area in an English cross-border area, with a significant risk from the sea, main rivers or reservoirs.  Regulation 26(2) requires lead local flood authorities to prepare a flood risk management plan for a flood risk area in an English cross-border area, with a significant flood risk from any source other than the sea, main rivers or reservoirs.	
Article 8 – one single FRMP or set of FRMPs co-ordinated at river basin district. Cross-border co-ordination.	Regulation 38 requires the Secretary of State and Scottish Ministers to establish a Cross Border Advisory Group. It shall include the Environment Agency, each Regional Flood Defence Committee in an English cross border area, the Lead Local Flood Authority, the Scottish Environment Protection Agency, the district advisory group, the subdistrict advisory group, any other responsible authority with functions relating to the Scottish cross border area, and any other	Section 50A establishes cross border co-ordination and co-operation (although within a Member State) to address flood risk in the England and Scotland cross border areas.  Section 50A requires SEPA to have regard to the impact on flood risk in an adjacent cross border area, documents produced under the Flood Risk Regulations 2009 and the advice given by the Cross Border Advisory Group in exercising its functions.

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	person or nominated representative that the Secretary of State or Scottish Ministers acting jointly invite. Regulation 39 requires the Cross Border Advisory Group to advise the relevant authority on the manner in which it should exercise its functions, including the preparation of flood risk management plans, insofar as they relate to the Flood Risk Regulations 2009 and the Scotland Act. Regulation 40 requires the relevant authorities to take that advice into account, as well as the cross border impacts of what they and the Scottish flood authorities are doing. Regulation 35(3) requires the Environment Agency and a lead local flood authority to co-operate with any Scottish flood authority, to co-ordinate the exercise of its functions relating to an English cross border area with a Scottish flood authority and to take into account the risk of flooding in an adjacent Scottish cross border area.	Section 50A(3) requires SEPA and each lead authority to co-operate with any English flood authority in exercising its functions in an English cross border area and to co-ordinate the exercise of its functions which relate to a Scottish cross border area with the adjacent English flood authorities to take into account the risk of flooding in an adjacent English cross border area. Section 50A(3) defines an English flood authority as the Environment Agency or each lead local flood authority whose area falls partly or wholly within an English cross border area.
Article 9 – Member States to co-ordinate with Water framework Directive. Flood hazard maps and flood risk maps to be consistent with information provided for Water Framework Directive (WFD) and may be integrated into reviews. Flood risk management plans may be integrated into reviews of WFD river basin management plans (RBMP).	Already provided for.	Already provided for.
Article 10 – assessments, maps and plans to be made available to the	Regulation 15(3) requires the Environment Agency to publish the flood risk	Section 12 requires SEPA to make available for public inspection copies of

public. Active public involvement to be encouraged in development of FRMPs.  Article 11 – provision for Commission to specify	assessments prepared by SEPA for an adjacent Scottish cross-border area. Regulation 22(3) requires the Environment Agency to publish the flood hazard maps and flood risk maps prepared by SEPA for an adjacent Scottish cross-border area. Regulation 27(10)(a) requires the Environment Agency and SEPA acting jointly to consult the authorities listed in regulation 36(3) that might be affected by the plan and the public on the proposed content of a flood risk management plan. Regulation 27(10)(b) requires a lead local flood authority to have regard to any guidance issued by the Environment Agency and SEPA acting jointly about the form of flood risk management plan. Regulation 28(3) requires the Environment Agency to publish the flood risk management plans prepared by SEPA for an adjacent Scottish cross-border area. It is not necessary to transpose	flood risk assessments prepared by the Environment Agency and lead local flood authority for an adjacent English cross border area. Section 25(2) requires SEPA to make available for public inspection flood hazard maps and flood risk maps prepared by the Environment Agency and lead local flood authority for an adjacent English cross border area. Section 30(9) requires SEPA and EA to jointly publish a statement of consultation measures and dates 3 years before the period to which a cross-border flood risk management plan applies, and a draft flood risk management plan 1 year before this period. Section 32(7) requires SEPA to publish an approved flood risk management plan including the plans prepared by the Environment Agency and lead local flood authority for an adjacent English cross border area.
reporting formats two years before deadline.	this article.	
Article 12 – Commission committee arrangements	It is not necessary to transpose this article.	
Article 13 – transitional measures making use of existing assessments, maps and plans where equivalent to Directive requirements	Regulation 32(1) allows the Environment Agency, if it determines before 22 December 2010 to prepare a flood hazard map, flood risk map and a flood risk management plan for the whole of the Solway Tweed river basin district, to neither prepare a preliminary assessment	Already provided for.

	report for flood risk from	
	report for flood risk from main rivers, the sea and reservoirs, nor identify flood risk areas nor review such assessments, and lead local flood authorities may ignore flood risk from such sources except where it affects another source of flooding. The Secretary of State and Scottish Ministers may, however, take those risks into account when considering whether there is a significant risk of flooding from a source other than main rivers, the sea or reservoirs. Regulation 34(1) allows a lead local flood authority, if it determines before 22 December 2010 to prepare a flood risk map and a flood risk management plan for the whole of its area, to neither prepare a preliminary assessment report nor to identify flood risk areas (except where affected by flood risk from main rivers, sea or	
Article 14 – PFRA to be reviewed by 22 Dec 2018 and every six years thereafter. Flood maps to be reviewed by 22 Dec 2019 and every six years thereafter. FRMPs to be reviewed by 22 Dec 2021 and every six years	reservoirs).  Regulation 17A requires the Secretary of State and Scottish Ministers acting jointly to review flood risk areas before 22 December 2017 and at intervals of not more than 6 years.	Section 14(5) changes references to Scottish Ministers to mean Scottish Ministers and the Secretary of State acting jointly in reviewing significant flood risk areas in Scottish cross border areas.
thereafter. All to include likely impact of climate change.  Article 15 – make assessments, maps and plans available to the Commission three months after Article 14 deadlines.	It is not necessary to transpose this article.	
Article 16 – Commission reports to European Parliament	It is not necessary to transpose this article.	

Article 17 – Legal transposition by 26 November 2009, refer to Directive, communicate same to Commission.	It is not necessary to transpose this article.	
Article 18 – entry into force date.	It is not necessary to transpose this article.	
Article 19 – application of Directive.	It is not necessary to transpose this article.	

# Department /Agency: Defra Title: Impact Assessment of cross border regulations for the Solway-Tweed river basin district (Floods Directive transposition). Stage: Final Version: 1.0 Date: 26 March 2010

Related Publications: Impact assessment of transposing the Floods Directive in England and Wales. Flood Risk Managemement (Scotland) Act impact assessment

Available to view or download at:

http://www.

Contact for enquiries: Matthew Hampshire Telephone: 020 7238 6167

#### What is the problem under consideration? Why is government intervention necessary?

The Floods Directive has been transposed in all of England, Scotland and Wales except for the Scottish part of the Solway-Tweed river basin district. The Scottish legislation applies only to entire River Basin Districts as defined under the Water Framework Directive and as the Solway-Tweed lies partly in England it could therefore not be included. Additional regulations are now required to extend the legislation to the Scottish part of the River Basin District and to formalise co-operation and between cross-border authorities so as to complete transposition and avoid infraction proceedings.

#### What are the policy objectives and the intended effects?

To complete transposition of the Floods Directive by legislating for flood risk management authorities either side of the Scottish border to co-operate in producing flood risk assessments, maps and plans, an overarching aim, at transnational scale, of the Directive. By making regulations for the cross-border catchments, flood risk management in the Solway Tweed river basin district will be co-ordinated, consistent and the risk of actions in one country exacerbating flood risk in the other will be minimised.

#### What policy options have been considered? Please justify any preferred option.

- 1. Apply the Scottish system to the entire Solway-Tweed river basin district (RBD)
- 2. Apply the English system to the entire Solway-Tweed RBD
- 3. Retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, extend the Scottish system to catchments entirely within Scotland and introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments.
- 4. As (3) but with a fully integrated planning process with a single set of plans.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

This cross-border policy will be reviewed as part of the Floods Directive implementation as a whole in 2016 and with interim reviews after each product is completed.

**Ministerial Sign-off** For final proposal/implementation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:

**Huw Irranca-Davies** 

......Date: 29th March 2010

#### **Summary: Analysis & Evidence Policy Option: Description: ANNUAL COSTS** Description and scale of key monetised costs by 'main affected groups' One-off (Transition) Yrs [Intentionally blank - costs are of a relatively small order compared with the transposition costs for all of England (and Wales) and £ Scotland which were included in the respective transposing **Average Annual Cost** legislation impact assessments]. (excluding one-off) £ Total Cost (PV) Other **key non-monetised costs** by 'main affected groups' Description and scale of key monetised benefits by 'main **ANNUAL BENEFITS** affected groups' One-off Yrs £ BENEFITS **Average Annual Benefit** (excluding one-off) Total Benefit (PV) £ Other key non-monetised benefits by 'main affected groups' Key Assumptions/Sensitivities/Risks Time Period Price Base Net Benefit Range (NPV) **NET BENEFIT** (NPV Best estimate) Year Years What is the geographic coverage of the policy/option? On what date will the policy be implemented? Which organisation(s) will enforce the policy? £ What is the total annual cost of enforcement for these organisations? Does enforcement comply with Hampton principles? Yes/No Will implementation go beyond minimum EU requirements? Yes/No £ What is the value of the proposed offsetting measure per year? £ What is the value of changes in greenhouse gas emissions? Will the proposal have a significant impact on competition? Yes/No Micro Small Medium Annual cost (£-£) per organisation Large (excluding one-off) Are any of these organisations exempt? Yes/No Yes/No N/A N/A Impact on Admin Burdens Baseline (2005 Prices) (Increase - Decrease) Decrease of £ **Net Impact** Increase of

Annual costs and benefits: Constant Prices (Net) Present Value

Key:

# **Evidence Base (for summary sheets)**

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

#### 1. Introduction

- 1. This impact assessment considers the options for transposing the Floods Directive in the Solway Tweed river basin district, specifically in the catchments lying solely in Scotland and in the cross-border catchments shared with England.
- 2.The Floods Directive has already been transposed in England & Wales and most of Scotland with impact assessments reviewing the cost and benefits for all territory within these countries. Given the preferred option explored here makes similar arrangements for the Solway Tweed river basin district, but with formalised co-operation and co-ordination particularly in the cross-border catchments, the marginal cost is considered to be relatively modest. Economists have therefore determined that there is no justification for this impact assessment to be formally signed off, but instead the effectiveness of the policy will be reviewed as part of a review of implementation of the Floods Directive more broadly.

#### 2. Existing legislation

#### Scotland

- 3. In Scotland, the Scottish Environment Protection Agency (SEPA) is the competent authority for implementing the Floods Directive. SEPA has overall responsibility for carrying out an assessment of flood risk across in Scotland, identifying areas of potential significant flood risk ('potentially vulnerable areas'), producing flood hazard and flood risk maps, and producing the 'national' level flood risk management plan.
- 4. Local authorities and Scottish Water are responsible authorities with specific roles in managing flood risk. The Scottish Ministers, together with SEPA and the responsible authorities have a duty to co-operate with one another and to exercise their flood risk related functions with a view to reducing overall flood risk.
- 5. Local authorities are responsible for preparing <u>local</u> flood risk management plans to supplement the national plan. The local plan will set out a summary of the objectives and measures relevant to that local plan district, and a description of how the measures are to be implemented, including a detailed timetable for implementation.

#### **England**

- 6. In contrast with Scotland, in England there is no distinction between national and local flood risk management plans. But there is a difference between 'national' sources of flood risk and 'local' sources of flooding. The Environment Agency (EA) has an overview role and is responsible for flood risk from main rivers, the sea and reservoirs whereas lead local flood authorities (LLFAs) are responsible for all other forms of flood risk which are principally local in nature.
- 7. Both EA and LLFAs have a duty to prepare preliminary flood risk assessments (maps and reports), identify areas which are at significant risk of flooding ('Flood Risk Areas'), prepare flood risk and flood hazard maps and prepare a flood risk management plan for each 'Flood Risk Area'.

- In particular the plan must set objectives for the purpose of managing the flood risk and propose measures for achieving those objectives.
- 8. In practice the flood risk management plan will be an amalgamation of existing and developing flood risk plans covering different sources of flooding, and these will be drawn together as coordinated plans to present to the Commission.

#### 3. The Solway Tweed River Basin District

- 9. The Solway Tweed was formally identified as a River Basin District under the Water Framework Directive. Many of the catchments in the Solway Tweed RBD lie solely within England or in Scotland and only a limited number of catchments have the potential to cause cross border flooding issues, most obviously the river Esk and lower end of the Tweed.
- 10. In terms of coastal flooding most flood risk management measures are self contained within England or Scotland respectively, in terms of their location and zone of influence. Fluvial processes inland will affect sedimentation and therefore coastal erosion, and any progression of tidal barrage proposals in the Firth will require cross-border co-ordination in flood risk management policy.
- 11. So other than the river Esk and lower Tweed catchments that straddle the border, the majority of the Solway Tweed River Basin District can clearly be divided as either within England or within Scotland.

#### 4. Floods Directive requirements

- 12. Before considering the options for transposing in the Solway Tweed RBD it is necessary to consider any restrictions imposed by the Floods Directive.
- 13. Article 8 of the Floods Directive requires Member States to produce flood risk management plans setting objectives and measures to reduce flood risk. However, it does not require one plan per river basin district, rather it allows for a single plan or set of plans co-ordinated at the level of the river basin district. This degree of flexibility would enable us to produce separate plans north and south of the border at an appropriate local or catchment level and co-ordinate these in order to make them available to the Commission.

#### 5. Options considered

- 14. Considering the nature of the Solway Tweed and the existing legislation within England and Scotland, the options for transposition are therefore:
- (1) To apply the Scottish system to the whole of the Solway-Tweed river basin district;
- (2) To apply the English system to the whole of the Solway-Tweed river basin district;
- (3) Retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, extend the Scottish system to catchments entirely within Scotland and

- introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments; or
- (4) As (3) but with a fully integrated planning process resulting in a single set of plans.
- 15. The advantages and disadvantages of each of these options are considered below.

#### (1) Apply the Scottish system to whole of Solway-Tweed river basin district

#### **Advantages**

• The vast majority of the Solway-Tweed river basin district lies within Scotland, so the administrative burden would be consistent with the share of flood risk.

#### **Disadvantages**

- Quite a different system operates in Scotland compared with England with a distinction between national and local plans for the Floods Directive.
- Lead local flood authorities whose jurisdiction crosses into the Solway Tweed RBD might need to apply both the Scottish and English systems.

#### (2) Apply the English system to the whole of the Solway-Tweed river basin district

#### **Advantages**

 This would be consistent with the approach taken in transposing the Water Framework Directive

#### **Disadvantages**

- Again there are significant differences between the English and Scottish systems, and potential difficulties with some local authorities needing to apply both systems.
- (3) Retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, extend the Scottish system to catchments entirely within Scotland and introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments.
- 16. This would involve separate planning processes with general coordination, but no decision making occurring across the border and a set of plans pulled together for EC reporting purposes.

#### **Advantages**

 This option fits well given that many of the catchments lie solely within England or Scotland and can be accommodated by existing (or extending the Scottish) legislation • It would address separately the limited number of catchments with the potential to cause cross-border flooding

#### **Disadvantages**

 Some work involved in setting up a cross-border advisory group and co-ordinating maps and plans.

#### (4) As above but with a fully integrated planning process with a single set of plans.

17. This would mean a properly integrated planning process with single plans published for public consultation based on joint approaches and regulations. A cross-border group would determine significant risk areas in cross-border catchments

#### **Advantages**

 This would appear to result in the most cohesive reporting to the Commission and would minimise the risk of infraction, but would require complete agreement between crossborder authorities on the measures and objectives in this single set of plans

#### **Disadvantages**

- There may be substantial difficulties if cross-border groups are left to determine (rather than just advise on) significant risk in cross-border areas without much more work on developing joint methods leading to joint regulations on the form and content of the Preliminary Flood Risk Assessment.
- Because a substantial area of Scotland with significant flooding issues lies in the Tweed crossborder catchment, this would need to either adopt the Scottish approach, or attempt to develop a UK wide approach. The latter is not feasible in the time available.
- Similar difficult issues arise when thinking about including maps and setting objectives and measures within the remit of cross-border groups.
- 18. The preferred option is therefore (C); to retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, to extend the Scottish system to catchments entirely within Scotland and to introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments.

#### 6. Benefit-cost analysis

- 19. The estimated cost of implementing the Floods Directive in England, Wales and Scotland has been calculated in separate impact assessments - see box 1 below. These assessments considered the cost of implementing the Directive in all respective territories even though in practice Scottish implementation at present does not include the Solway Tweed RBD. Neither impact assessment estimated the benefits in monetary terms.
- 20. The additional cost of transposing the Directive in the Solway Tweed under the preferred policy is therefore negligible by comparison and primarily concerns administrative arrangements including setting up a cross-border advisory group and the Environment Agency and SEPA co-ordinating the resulting plans.

#### **Box 1: Cost of Scotland implementing the Floods Directive**

First flood risk management cycle (2009 to 2015) = £78.1million

Ongoing annual running costs = £13.6 million

Costs are total costs of implementing the Directive minus the cost of amending the statutory process and local authority functions, and amending the enforcement responsibilities for the Reservoirs Act 1975.

Benefits have not been quantified.

The figures are not discounted or presented in net present values terms.

#### Cost of England and Wales implementing the Floods Directive

First flood risk management cycle (2009 to 2015) = £6.26 to 6.66 million

Ongoing annual running costs = (Not estimated)

Other costs are included in local flood risk management impact assessment, but are not directly attributed to the Floods Directive.

Benefits have not been quantified, but costs are discounted and presented in net present value terms.

#### Specific impact tests

23. This policy proposal will have similar, though smaller, impacts to the transposition of the Floods Directive in England, Scotland and Wales. Implementation in the Solway Tweed river basin district is unlikely to impact on any of the criteria listed below. It should enhance flood risk measurement and management policy and make better use of resources.

#### Competition

24. No impact on competition. The objectives and measures set in the Flood Risk Management Plan will inform decisions on investment in flood management infrastructure, but this will be subject to existing procurement procedures.

#### Small firms - no impact

25. No impact - the work demanded by the Directive will be carried out my large public organisations, the Environment Agency and lead local flood authorities.

#### Legal aid

26. The policy measure introduces no new criminal sanctions or civil penalties.

#### Sustainable development

27	. The Floods	Directive	complements	current flood	risk mana	gement pol	icy which	supports
	sustainable	developm	nent.					

### **Health impact**

28. None is anticipated.

## Race, disability, gender equality and human rights

29. No impact is anticipated from transposition and implementation of the Floods Directive.

## **Rural proofing**

30. Existing flood risk management policy will apply.

# **Specific Impact Tests: Checklist**

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	Results in Evidence Base?	Results annexed?
Competition Assessment	Yes	No
Small Firms Impact Test	Yes	No
Legal Aid	Yes	No
Sustainable Development	Yes	No
Carbon Assessment	Yes	No
Other Environment	Yes	No
Health Impact Assessment	Yes	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	Yes	No
Rural Proofing	Yes	No

# Annexes

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