

Part II – Derogation Tests

A project that has an adverse effect on the integrity of a European site can only proceed under the article 6(4) derogation requirements provided three sequential tests are met:

- There must be no feasible alternative solutions to the project which are less damaging to the affected European site.
- There must be “imperative reasons of overriding public interest” (IROPI) for the project to proceed
- All necessary compensatory measures must be taken to ensure that the overall coherence of the network of European sites is protected

Test 1 – Alternative Solutions

The DEFRA core guidance (2012) states that “The first step is to identify the objective of the plan or project to help frame the consideration of alternatives. Alternative solutions are limited to those which would deliver the overall objective as the original proposal.” The Further Information document (May 2016) submitted by the applicant sets out 6 Objectives for the project (Table 1, page 25). It also states that “the overarching objective for this project is to achieve a sensitive and sustainable approach to the management of the Pagham Harbour and Pagham Beach shorelines” (section 2.3.1, page 23). This is too broad and general an objective for the present test, and the 6 more specific objectives are used here, but with the coastal defence benefits for the Pagham Beach foreshore (Objective 1) being considered the primary objective. The six objectives are:

1. Larger and longer term coastal defence benefits for Pagham Beach
2. Improvements to amenity and human health
3. Cost effective use of money
4. Application of a soft solution that works with nature
5. Greater assurance of tidal functioning
6. Minimise breeding bird habitat damage

The alternative solutions identified by the applicant are:

1. Installing / upgrading cross shore groynes structures.
2. Excavating a breach in the spit and trying to fix it in place with a training wall.
3. Closing the existing channel at Pagham beach.
4. Progressively extending existing revetment / protection / shingle recycling on a reactive basis.

5. Maintaining the new breach further along the spit [i.e. the natural breach] and closing the existing tidal inlet.
6. Doing nothing and allowing the foreshore to evolve naturally.

Table 3 – Assessment of Alternatives

Project Objective	1. Cross-shore groynes	2. Breach with training wall	3. Closing the existing channel	4. Reactive long-shore protection	5. Maintain natural breach	6. Do nothing	7. Proposed project
1. Larger and longer term coastal defence benefits for Pagham Beach	Short term coastal defence benefits only, so only partially meets the objective	Meets the objective	Meets the objective as the section of the spit will roll back onto the beach and re-charge it	Meets the objective, particularly now the shingle beyond the natural breach is highly likely to roll back and re-charge the beach	Combined with a bar across the old tidal channel this would deliver the objective over the short and long term, albeit with some reduction in shingle roll-back compared to the project proposal	Does not meet the objective, as some scouring in the old tidal channel may occur in the short term. In the longer term, roll back of shingle from the natural breach is likely to give a substantial re-charge to the beach	Meets the objective

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2. Improvements to amenity and human health	As above, short terms benefits to human health only	Meets the objective	Yes – improves the protection of property and the amenity use of the beach	Partially meets the objective – protects human health and property but not amenity value of Pagham beach. However impacts are mainly visual	As the natural breach is to the south-west of the eroded section of beach, a breach in this position is likely to improve the amenity as shingle naturally rolls back to the beach.	Does not meet the objective – risk of damage to property and the amenity of the beach without some form of adaptive management	Meets the objective
3. Cost effective use of money	Not cost effective as may cause longer term shingle supply problems	Would be more expensive than the current proposal	Uncertain - Similar costs to the proposed project?	Meets the objective as a lower cost alternative than the proposed project	Meets the objective as working with the natural breach reduces the excavation costs	Low cost for public money but this has to be weighed against the risk of private losses to property.	Meets the objective
4. Application of a soft solution that works with nature	No	No – a hard solution by definition	No - works against natural process by closing the existing tidal system	Partially meets the objective – the reactive nature of this alternative works with nature, but in the short term hard rock armour defences are required	Meets the objective as the same approach as the project is implemented in a different location	Meets the objective	Meets the objective

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5. Greater assurance of tidal functioning	Uncertain – unlikely to cause closure on its own	Meets the objective	Does not meet the objective – removes the harbour from tidal functioning	Uncertain – the ‘natural breach’ may well remain open under this scenario, but there is no mechanism for maintain it open	Uncertain - the channel would not be as straight as the project proposal and so the rate of tidal flows and incoming wave energy would be reduced leading to increased risk of having to deploy mitigation measures to maintain the breach	Uncertain – without at least adaptive management there is a risk of unexpected outcomes	Some risk of closure but with mitigation (management plan) it meets the objective

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6. Minimise breeding bird habitat damage	Meets the objective – the groynes would be within the SPA but not in the areas used by nesting birds	Does not meet the objective as there would be the same loss of spit area as the project proposal and potentially more adverse impacts in the long term	Does not meet objective as there would still be loss of the spit and additional impacts on the habitats of over-wintering birds (including SPA features) within the harbour	Unclear - the further information report makes the case that multiple interventions will have “adverse consequences for the appearance and ecology of the shoreline” but this seems to refer to the Pagham beach and not the little tern habitat on the spit	Meets the objective as the area of the spit nesting habitat lost through deliberate intervention is reduced compared to the proposed project. The bar on the old channel increases risk of increased disturbance but these can be mitigated in the same manner proposed for the project breach.	This may occur naturally to greater extent than already but natural change is not subject to the Habitats Regulations.	Provides the baseline against which the other alternative can be assessed – see Part I above for more details on this.

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Derogation test: Is the Adverse Effect on the Integrity of the European site less than proposed project?	Yes, as the spit area is not deliberately reduced. However, the alternative does not meet primary project objective.	No – potentially greater AEoI due to the hard nature of the engineering.	No - greater AEoI than project proposal, see Objective 6 above,	Yes, as the spit area is not deliberately reduced above the area to be lost through the natural breach. However this alternative does not fully meet all the secondary project objectives.	Yes, as the spit area is not deliberately reduced above the area to be lost through the natural breach.	Yes	N/a

The appearance of a natural breach, albeit in a different location from the project breach, considerably alters the baseline condition for this Habitats Regulations assessment. In particular, the AEoI position for Option 5 changes from that assessed in the Environmental Statement. Most of the impact in terms of little tern habitat loss (the main cause of AEoI, see part I above) for this option can now be put down to natural changes. Consolidation of the natural breach by deepening it and using the excavated shingle to construct a bar across the old tidal channel would create impacts for the SPA features. Specifically, access across the bar to the remaining distal end of the spit would increase. Secondly an intervention on the coast, even working with the natural line of the breach, would create an on-going need for mitigation against possible closure. Both these impacts are assessed in Part I of this report as being mitigatable for the project breach and the mitigation measures remain valid for a breach in the natural position.

The question is then: would consolidation and maintenance of a breach in the 'natural breach' position still meet all the project objectives and so be a valid alternative to the project? The assessment in Table 3 above is finely balanced. The likelihood of being able to maintain the breach open is put forward as one of the main reasons for creating a breach in the proposed position using as short a route as possible to the open sea as possible. Conversely the main area where alternative 5 does not fully meet the objectives is on "Greater assurance of tidal functioning". On the balance of probabilities this alternative just fails to meet all the project objectives and so the Test of No alternative can be assessed as being met.

Where no viable alternative with less damage to the site's conservation objectives exists then the planning authorities can proceed to the tests of Imperative Reasons of Overriding Public Interest (IROPI) and compensatory measures.

Part III – the IROPI and compensatory measures tests

Test 2 - Imperative Reasons of Overriding Public Interest (IROPI)

The competent authorities must consider each element of this test. Firstly is the interest or benefit of the project public or private?

The public interest can occur at a national, regional or local level. In this case the benefits are local ones but there is clearly a wider public interest in terms of coastal defences protecting housing.

Secondly, does the public interest override the harm (or risk of harm) to the integrity of the site?

The economic and social cost of not achieving the coastal defence objectives and so housing being damaged or even lost to the sea is considered to outweigh the environmental damage that would be caused by carrying out the project. The natural breach that has occurred since the application was made also reduces the degree of harm to the integrity of the site and so makes it easier for the social and economic benefits to outweigh the harm. These benefits are considered to be overriding in this case.

The final part of the test is for those reasons of overriding public interest to be “imperative”. Is it essential that the project is carried out?

On the basis that no alternative is feasible (see above), the project is essential compared to the ‘do-nothing’ baseline position.

Conclusion: the project does meet the derogation requirement of there being Imperative Reasons of Overriding Public Interest.

Test 3 – Compensatory Measures

If a project that harms the integrity of a European site is to be allowed under derogation because there is no alternative and IROPI can be shown, then the competent authorities and the appropriate authority (i.e. the Secretary of State) are responsible for ensuring that all necessary compensatory measures are identified and delivered.

The documents submitted by the applicant propose the creation of new habitat for nesting terns by turning an existing peninsula of shingle into a new island within the harbour. This involves a modest enlarging of the area, creating a cut to further isolate it from human and predator disturbance and re-profiling the shingle to make it more attractive to nesting terns. Provision for ongoing maintenance of the compensatory site in a suitable condition and clearance of vegetation will have to be secured.

The key considerations for this test are:

- Are the measures technically feasible?
- Is there a clear plan for undertaking the work and the ongoing provision of maintenance?
- Are the measures close to the original site?
- Will the measures be established to the required quality in time to compensate for the harm when it occurs?
- Is the habitat creation methodology considered reasonable?

Addressing each of these points in turn:

- Yes, the measures are considered technically feasible (subject to any further NE advice). The design has been made elongated and narrow in order to be more suitable for little terns. In addition, the size of the island is now more comparable to the additional habitat to be lost through the project breach, compared to the new baseline set by the natural breach.
- There is a clear plan for the implementation of the work and funding for the ongoing maintenance can be secured through s106 agreement. The RSPB as site managers can carry out monitoring and maintenance.
- The measures are within the existing SPA Ramsar site.
- The loss of the little terns habitat due to roll-back of shingle from spit to beach will take several years, giving time for compensatory measures to be implemented. The bare nature of the shingle preferred by little terns means no substantial time period for habitat establishment is required.

- The compensatory habitat is more sheltered than the exposed site of the spit. The applicant cites evidence from Langston Harbour SPA that similar enhancement work at Hayling oysterbeds has been successful in a similarly more sheltered location.

Overall, subject to the compensatory measures being fully secured financially before permission is granted, the measures are assessed to be adequate to meet the derogation requirements.

Therefore, all elements of the derogation test under art. 6(4) are considered to be met. It is recommended to the competent authorities that the Habitats Directive does not require the application to be refused, subject to the usual call-in period for the Secretary of State, and subject to the mitigation and compensation measures being secured by legal agreement. Other ecological matters, including those relating to the impact on the SSSI features, will need to be considered separately as part of assessing the application.