

Hornsea Project Four

Compensation measures for FFC SPA: Derogation and Compensation Update Position Statement

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Glossary

Term	Definition				
Area of Search	A term used to identify the locations for each of the proposed primary Compensation Measures.				
Compensation Measures	The measures that have been developed by the Applicant pursuant to the HRA Derogation Provisions "without prejudice" to the Applicants position of no Adverse Effect on Site Integrity at the Flamborough and Filey Coast in respect of the qualifying features. The Compensation Measures are: [offshore and onshore nesting; predator eradication; bycatch and fish habitat enhancement measures]. Each a Compensation Measure and together Compensation Measures.				
Development Consent Order (DCO)	An order made under the Planning Act 2008 granting development consent for one or more Nationally Significant Infrastructure Projects (NSIP).				
Effect	Term used to express the consequence of an impact. The significance of an effect is determined by correlating the magnitude of the impact with the value, or sensitivity, of the receptor or resource in accordance with defined significance criteria.				
Environmental Impact Assessment (EIA)	A statutory process by which certain planned projects must be assessed before a formal decision to proceed can be made. It involves the collection and consideration of environmental information, which fulfils the assessment requirements of the EIA Directive and EIA Regulations, including the publication of an Environmental Statement (ES).				
Habitats Regulations	The Conservation of Habitats and Species Regulations 2017 and the Conservation of Offshore Marine Habitats and Species Regulations 2017.				
Hornsea Project Four Offshore Wind Farm	The term covers all elements of the project (i.e. both the offshore and onshore). Hornsea Four infrastructure will include offshore generating stations (wind turbines), electrical export cables to landfall, connection to the electricity transmission network. Hereafter referred to as Hornsea Four.				
Orsted Hornsea Project Four Ltd.	The Applicant for the proposed Hornsea Project Four Offshore Wind Farm Development Consent Order (DCO).				



Acronyms

Term	Definition
AEol	Adverse Effect on Integrity
DCO	Development Consent Order
EIA	Environmental Impact Assessment
ExA	Examining Authority
FFC	Flamborough and Filey Coast
HRA	Habitats Regulations Assessment
MCA	Maritime and Coastguard Agency
MOU	Memorandum of Understanding
NFFO	National Federation of Fishermen's Organisation
OGA	Oil and Gas Authority
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning
OREI	Offshore Renewable Energy Installation
RIAA	Report to Inform Appropriate Assessment
SoCG	Statement of Common Ground
SPA	Special Protection Area
TCE	The Crown Estate
UK	United Kingdom

Units

Unit	Definition
ha	Hectare



1 Introduction

- 1.1.1.1 This position statement updates the Examining Authority (ExA) on the Applicant's Without Prejudice Derogation Case (APP-182) and associated Compensation measures (B2.6 RP Volume B2 Chapter 6 Compensation measures for FFC SPA Overview (APP-183)) since the DCO Application was submitted in September 2021. Future updates throughout the Examination will be set out in the Roadmaps for the compensation measures:
 - B2.7.2: Compensation measures for FFC SPA: Offshore Artificial Nesting Roadmap (APP-188);
 - B2.7.4: Compensation measures for FFC SPA: Onshore Artificial Nesting Roadmap (APP-190(:
 - B2.8.2: Compensation measures for FFC SPA: Bycatch Reduction: Roadmap (APP-195);
 - B2.8.4: Compensation measures for FFC SPA: Predator Eradication: Roadmap (APP-197); and
 - B2.8.6: Compensation measures for FFCSPA: Fish Habitat Enhancement: Roadmap (APP-199).
- 1.1.1.2 This position statement is comprised of seven sections:
 - 1. Introduction;
 - Update on the 'without prejudice' derogation case and conclusion of adverse effect on integrity (AEoI) on kittiwake at Flamborough and Filey Coast (FFC) Special Protection Area (SPA);
 - 3. Consultation on compensation measures;
 - 4. Development of compensation measures;
 - 5. Compensation value updates;
 - 6. Prey resource; and
 - 7. Strategic compensation.
- 1.1.1.3 Section 2 describes the change to the Applicants position regarding the conclusion of AEol since the Norfolk Boreas Secretary of State (SoS) decision. The implications to the submission documents and associated updates including production of further documents are set out in Section 2.
- 1.1.1.4 Sections 3 and 4 describe the compensation consultation that was undertaken in 2021 and describes the refinement of the compensation options on which areas are no longer being progressed following the consultation and engagement with stakeholders.
- 1.1.1.5 **Section 5** outlines the calculation methods of Hornsea Four's proposed compensation measures.
- 1.1.1.6 In addition, we have provided information on prey resource and strategic compensation work that has been undertaken since DCO submission (see **Section** Error! Reference source not found. and Error! Reference source not found. respectively).



2 "Without prejudice" Derogation case

- 2.1.1.1 The Applicant originally submitted its DCO application for Hornsea Four with evidence and assessments supporting its position that there was no adverse effect on integrity (AEoI) either alone or in-combination with other projects upon species at FFC SPA. This conclusion drew on new assessment methodologies and analysis providing evidence considered sufficient to justify departing from the AEoI conclusion (in-combination) previously reached in the Hornsea Three decision.
- 2.1.1.2 After considering the Secretary of State's decision for Norfolk Boreas and the associated Habitats Regulations Assessment (HRA), which follows from the decision made for Hornsea Three, the Applicant has revisited its conclusion of no potential for AEoI in respect of the black-legged kittiwake feature of the FFC SPA from Hornsea Four in-combination with other plans and projects.
- 2.1.1.3 The Applicant therefore considers that there is a potential for AEoI on kittiwake from Hornsea Four in-combination with other plans and projects.
- 2.1.1.4 On that basis, the Applicant will present an update to the Report to Inform Appropriate Assessment (RIAA) (APP-167-178) and its derogation case (APP-182) based on an overall conclusion that there is potential for an AEoI on kittiwake at the FFC SPA from Hornsea Four in-combination with other projects (see Kittiwake Adverse Effects on Integrity (AEoI) Conclusion (AS-023). These changes will be captured in Revision 2 of B2.2.1.2 Report to Inform Appropriate Assessment Part 2 and Revision 2 of B2.5.1: Without Prejudice Derogation Case and subsequently updated upon request from the ExA.
- 2.1.1.5 In respect to other species (gannet, guillemot and razorbill) and sites, the Applicant firmly maintains the position that there would be no AEoI as a result of the project alone and incombination with other plans and projects and an AEoI can be ruled out beyond reasonable scientific doubt.
- 2.1.1.6 In the DCO Application the Applicant's proposed without prejudice compensatory measures for gannet and kittiwake were presented together in a single Gannet and Kittiwake Compensation Plan (APP-186). However, as set out in the Applicant's position paper (AS-023), the Applicant is updating the RIAA and its derogation case based on an overall conclusion that there is potential for an AEoI on kittiwake at the FFC SPA from Hornsea Four in-combination with other projects.
- 2.1.1.7 In light of the Applicant's updated position on kittiwake, it is considered appropriate to separate the compensatory measures for gannet (FFC SPA: Gannet Compensation Plan; to be submitted at Deadline 5) and kittiwake (FFC SPA: Kittiwake Compensation Plan (APP-186) into separate compensation plans (and consequently separate Implementation and Monitoring plans), reflecting that compensatory measures for kittiwake are now considered necessary, whereas for gannet the Applicant remains confident there would be no AEoI alone or in combination and the compensatory measures for gannet remain "without prejudice" measures. The new gannet specific documents are listed in G1.43 Examination Deliverables Summary.
- 2.1.1.8 In addition, following the evidence gathered and site selection refinement process and increased confidence from stakeholders reflected in the SoCG (e.g. F3.4 AAI Volume F3 SoCG between Hornsea Project Four and Natural England Derogation and Compensation



- Matters (APP-257)), the Applicant has adopted the terminology regarding these previously referred to "feasibility studies" outlined in the Compensation Measures Roadmaps as "implementation studies".
- 2.1.1.9 The Applicant considered that to call the studies 'feasibility studies' is no longer a true reflection of the scope of the studies and therefore the Roadmaps are to be updated to correctly refer to the studies as 'being in anticipation of implementation' as the sites have been refined and the Applicant is now gathering information to aid the implementation of the measures.
- 2.1.1.10 The Roadmaps will continue to be updated through Examination as the implementation studies progress and any subsequent documents to summarise the outputs from these studies will be produced and will be set out in G1.43 Examination Deliverables Summary.

3 Consultation on compensation measures

- 3.1.1.1 The Applicant undertook non-statutory, targeted consultation on the Hornsea Four proposals for compensation measures pre-application. At the time of consultation, the Compensation Measures were proposed "without prejudice" to the Applicant's conclusion of no AEoI upon the seabird species (kittiwake, gannet, guillemot and razorbill) in the RIAA.
- 3.1.1.2 To support the consultation exercise, an Environmental Impact Assessment (EIA) Project Description Annex described the Compensation Measures that could be implemented to compensate for potential impacts upon ornithological features of FFC SPA. The potential Compensation Measures proposed, sub-options, locations, location ID and species being compensated are set out in Table 1 and the respective Compensation Measure Areas of Search presented in Figure 1.

Table 1 Compensation Measures proposed in 2021 for consultation, sub-options, locations, location ID and species being compensated.

Compensation Measure	Option	Location	Location ID	Kittiwake	Gannet	Guillemot	Razorbill
Offshore nesting	New	southern North Sea	Al				
Offshore nesting	Repurposed	southern North Sea	Al				
Onshore nesting	New	Cayton Bay to Newbiggin by the Sea	B1				
		Suffolk Coast	B2				
Bycatch		Thames Estuary	C1				
		South coast of England: Broadstairs to Plymouth	C2				
Predator eradication		Isles of Scilly	D1				
		Rathlin Island, Moyle, Northern Ireland	D2				
		Torquay, Devon	D3				
		Guernsey and Aldernery	D4				
Fish habitat enhancement	Seagrass	Rathlin Island, Moyle, Northern Ireland	El				
	Seagrass	Isles of Scilly	E2				
	Seagrass	Celtic Sea, Wales	E3				
_	Seagrass	Plymouth Sound to Helford River	E4				
	Seagrass	Solent	E5				
	Seagrass	Essex Estuaries	E6				
	Seagrass	Humber Estuary	E7				



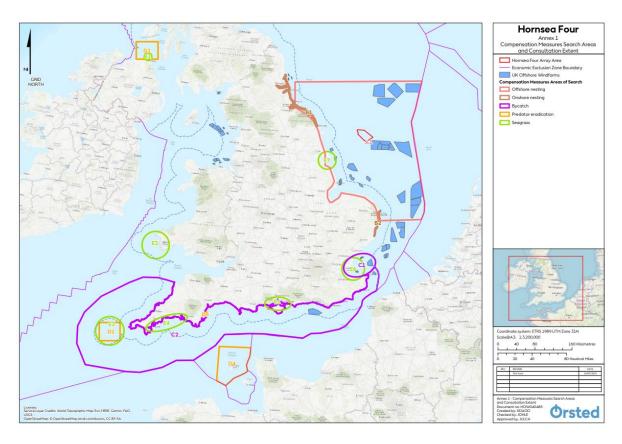


Figure 1 Compensation Measure search areas proposed in 2021 for consultation.

3.2 Compensation Measures EIA and HRA

- 3.2.1.1 Consideration of the environmental impacts associated with the implementation of the proposed Compensation Measures, an Annex to the Hornsea Four Environmental Statement was produced (A4.6.5 Compensation EIA Annex Part 1-6 (APP-061 to APP-066)). The Habitats Regulation Assessment (HRA) of the proposed compensation measures was also considered in B2.2.2 Habitat Regulations Assessment Compensation Measures Part 1-2 (APP-179 and APP-180). The HRA documents (APP-179-180) includes both Screening and information to inform Appropriate Assessment, to provide the information necessary for HRA. These documents were provided as part of the consultation carried out in 2021.
- 3.2.1.2 The Compensation EIA concluded no likely significant effect (in EIA terms).
- 3.2.1.3 The HRA Compensation Measures documents concluded for all Compensation Measures, a conclusion of no AEoI and therefore no requirement to progress beyond Stage 2 HRA was identified.



4 Development of compensation measures

- 4.1.1.1 The Applicant recognises the importance of engaging with the relevant stakeholders with respect to derogation and developing any potential compensation measures, as their knowledge is important. The Applicant has continued to engage openly and transparently with the key stakeholders since application to further refine the compensation measures search areas and options being proposed to compensate e.g. the Applicant was advised to not pursue Rathlin Island by RSPB as funding had been secured and advice from stakeholders was provided regarding consent requirements at a number of fish habitat enhancement seagrass restoration sites and the benefits of the Humber Estuary location. Further details are provided in updated the Roadmaps (APP-188; 190; 195; 197; 199) submitted at Deadline 1.
- 4.1.1.2 Consultation has been ongoing since the latter stages of the pre-application stage during a series of online workshops (employed during the COVID-19 pandemic to substitute meetings in-person). Throughout the consultation period, the Applicant sought the advice of key stakeholders and kept them updated on project developments.
- 4.1.1.3 The evidence gathered on the efficacy, feasibility and deliverability of the compensation measures has resulted in a refined compensation measures search area (see Figure 2 and Table 2). FiguresFigure 3 to Figure 8 show the search areas for each individual compensation measure.
- 4.1.1.4 Areas C1 Thames Estuary, D1-D3 Isles of Scilly, Rathlin, and Torquay, Devon and fish habitat enhancement areas E1-E6 Rathlin Island, Isles of Scilly, Celtic Sea, Plymouth, Solent and Essex Estuaries in
- 4.1.1.5 Table 1 and illustrated in Figure 1 are no longer being progressed. The Applicant is confident in the ecological efficacy, feasibility and viability of the refined locations (set out in Figure 2 and Table 2) and that compensation measures (and resilience measures) at these refined sites can be secured and delivered and are therefore being pursued.
- 4.1.1.6 Following the refinement of the compensation measures the Applicant considers it appropriate to now update the EIA and HRA Annexes supporting the consultation on compensation measures. These are anticipated to be ready for the end for the Examination.



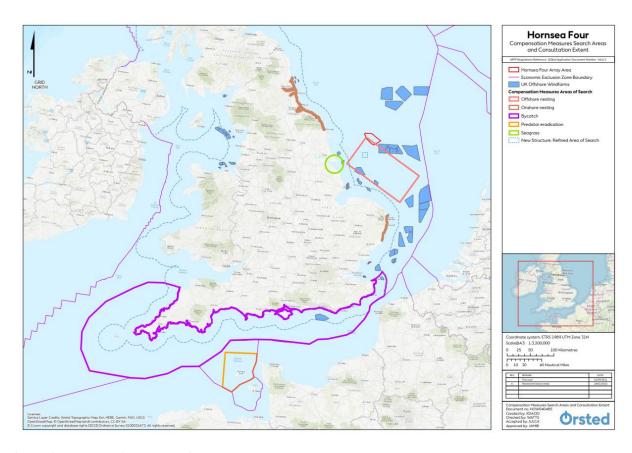


Figure 2 Updated Compensation Measure search areas.

Table 2 Updated compensation Measures proposed, sub-options, locations and species being compensated.

Compensation Measure	Option	Location	Kittiwake	Gannet	Guillemot	Razorbill
Offshore nesting	New	Southern North Sea				
Offshore nesting	Repurposed	Southern North Sea				
Onshore nesting	New	Cayton Bay to Newbiggin by the Sea				
	New	Suffolk Coast				
Bycatch Reduction		South coast of England				
Predator eradiation		Islands within the Bailiwick of Guernsey				
Fish habitat enhancement	Seagrass	Humber Estuary				



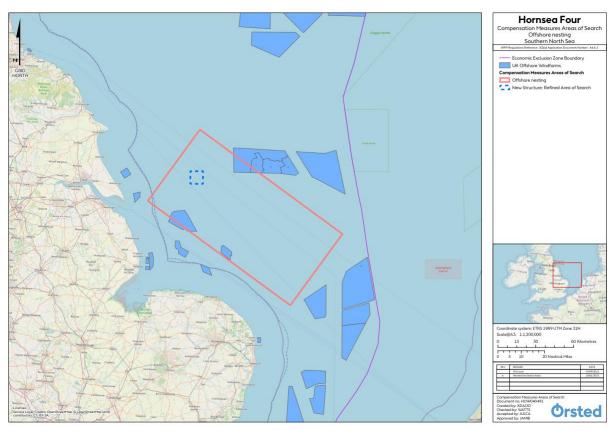


Figure 3: Updated compensation measures area of search: Offshore Nesting.



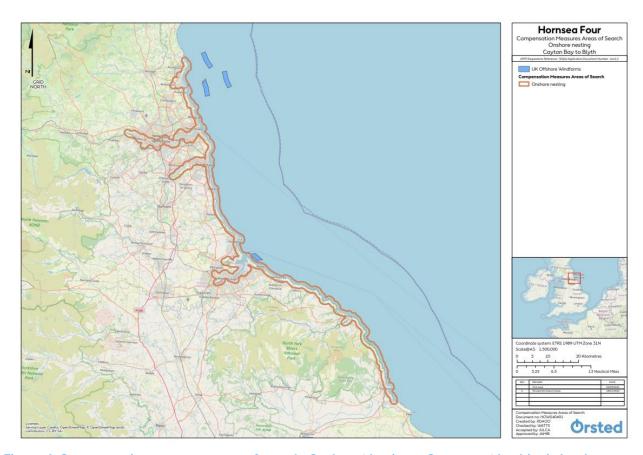


Figure 4: Compensation measures area of search: Onshore Nesting — Cayton to Newbiggin by the Sea.



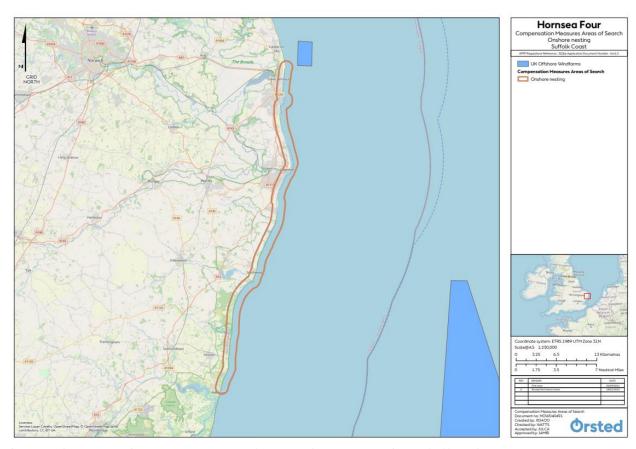


Figure 5: Compensation measures area of search: Onshore Nesting – Suffolk Coast.



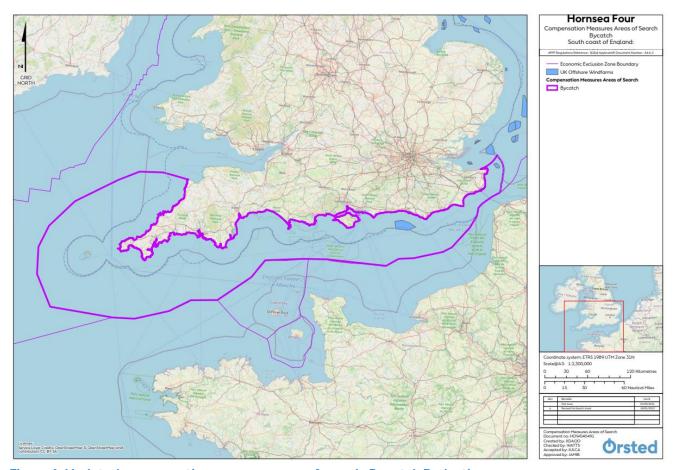


Figure 6: Updated compensation measures area of search: Bycatch Reduction.



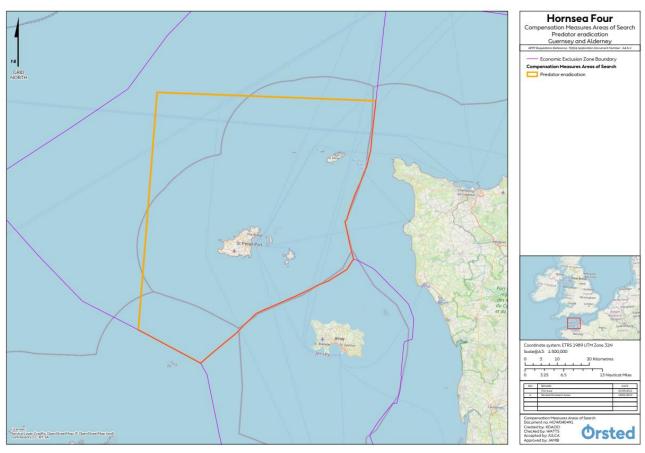


Figure 7: Updated compensation measures area of search: Predator Eradication.



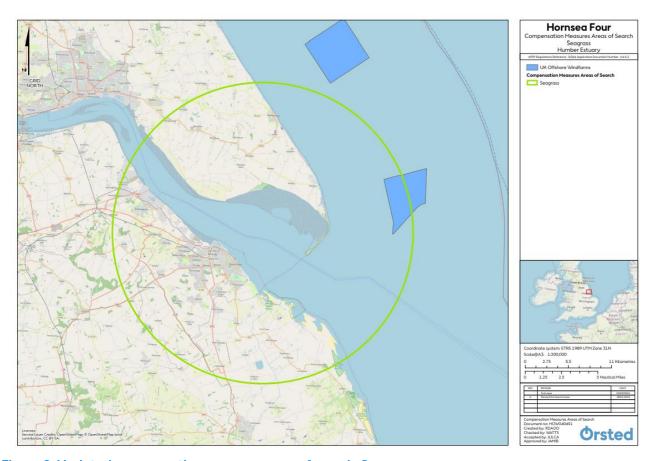


Figure 8: Updated compensation measures area of search: Seagrass.



5 Compensation values

- 5.1.1.1 Following the DCO Application, the Applicant provided detail on the calculation methods of Hornsea Four's proposed compensation measures. This has then been updated as Natural England requested the Applicant to consider all bird behaviour (sitting and in flight) for the assessment of auk displacement. This has resulted in a slight increase in the required compensation and the calculation methods of Hornsea Four's proposed compensation measures note has been updated to reflect this change (submitted at Deadline 1 at G1.41: Calculation Methods of Hornsea Four's Proposed Compensation Measures for Features of the FFC SPA).
- 5.1.1.2 During the compensation workshops held with Natural England on 3rd and 14th February 2022 discussions were held on the calculation methods and Natural England agreed with the approach.
- 5.1.1.3 The Applicant confirms that the refined compensation locations for compensation measures (and resilience measures) delivery can be scaled, secured and delivered.

6 Prey Resource

- 6.1.1.1 With respect to exploring the sustainability of prey resource for kittiwake, guillemot and razorbill, the Applicant is building on research work committed to in Hornsea Project Three's compensation strategy (investigating prey species of importance to kittiwake), with the intention of informing management measures for guillemot and razorbill prey species. Ørsted is undertaking consultation with the Joint Nature Conservation Committee to set out an appropriate pathway for strategic research taking in OWSMRF¹ Research Objectives 3.9 and 3.10, including a breakdown of activities and delivery mechanisms. Proposed delivery routes include a combination of expert consultants, academic research and multi-partner work.
- 6.1.1.2 Once an outline of activities is established, the Applicant will continue consultation with Natural England as the relevant Statutory Nature Conservation Body, and UK Government, to ensure the research activities meet the aim of informing future prey resource management.

7 Strategic Update

7.1.1.1 The Applicant, through its parent company Ørsted, is contributing to the development of a strategic approach to ecological compensation for the offshore wind industry. Ørsted is currently the Chair of a developer collaboration hosted by the Offshore Wind Industry Council, with the ambition that ecological compensation will be delivered on a strategic basis in advance of project need. Lessons learned through the development of Hornsea Project Three and the Application have been incorporated into a proposed framework. The intention for this work is that when developers identify a risk of compensation being required, they may contribute to a compensation fund, and the management organization for that fund would ensure the overall coherence of the national site network through delivery of ecological schemes and associated research, in line with a 2050 forecast.

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¹ OWSMRF | JNCC - Adviser to Government on Nature Conservation



- 7.1.1.2 This strategic approach supports the Application in providing reassurance that any residual questions on evidence and sustainability are being addressed at industry scale, in a collaborative effort with developers, UK Government and its advisors.
- 7.1.1.3 In the short term, the developer collaboration has enabled alignment between offshore wind developers and the identification of opportunities to collaborate on a project basis, pending the securing of a strategic mechanism for delivery. The Applicant is working closely with other developers to consider strategic artificial nesting compensation measures, collaborative evidence gathering and implementation.