


Risks

	How can these reduced?	Need for further discussion? How, Who should be involved? Lead?
NAVIGATION	Lighting, painting, admiralty charts. Electronic marker for radar 500m exclusion zone? Stand by vessel for Beatrice (future considerations for a wind farm)	<u>M.C.A.</u> Lighting - local community
ENV IMPACTS	Research <ul style="list-style-type: none"> - more for fresh water/diadromus species - data sharing with COWRIE DOWNWIND Lighting & bird attraction	Freshwater fisheries Lab (Pitlochry)
RESEARCH	<ul style="list-style-type: none"> • Will it provide answers • Can it be extrapolated to a larger wind farm  <ul style="list-style-type: none"> • Fit for purpose 	? JNCC & others
BLUE GROUP		
NAVIG SAFETY	Consultation & assessment. Effective utilisation of practice	Detailed consultation with fisheries & Chamber of Shipping & MCA MCA
Biological Impact	Research on range of bio components (needs longer term study). use most benign tech. Mitigation measures	SNH SEERAD FRS DFBS European bodies universities NGOs
SAFE OP & MAINT	Consultation-wide. Best practice elsewhere (oil & gas)	HSE BWEA

BLACK GROUP		
<u>NAVIGATION</u> Lighting. Flights. Migration HSE/MCA/SEPA	Planning – consultation agency/stakeholders. Relevant approvals/permission Research other areas to learn from. Oil industry guidelines (best practice)	Yes Routing around installation Meeting MCA HSE etc (users: oil/fishing) Lead: Talisman/SSE MFP
<u>INSUFFICIENT LEARNING</u>	Demonstrate results in real time – allows adjustment. Project monitoring – liaison in terms of today) Measure impacts – model scales ↕ (fish pop models) Identify what to be monitored	Yes eg - FRS depends on the issue - liaison + industry Agencies & stakeholders Talisman & SSE (MFP – updates) Local communities MFP
<u>WILDLIFE/FISHING</u>	Gather data <u>before</u> project begins.	
PURPLE GROUP		
<u>WILDLIFE</u>	Developing investigation on all environmental aspects Lighting eco-friendly ↑ ↓	JNCC involvement Agencies Communities Universities <u>Lead</u> Talisman
<u>NAVIGATION</u>	Radar Beacon Lighting suitable for safe navigation	Consultation with pleasure craft, harbour users, etc. MOD CAA MFP
<u>MAINTENANCE RISKS</u> - landing on structure Pollution Risk	Systems & training. Operational standards	Responsibility Talisman
<u>VISUAL IMPACT</u>	Design & location	Communities Agencies Lead: Talisman
GREEN GROUP		
<u>ECOLOGICAL MARINE IMPACTS</u>	Research programme - <u>Design</u> - Control sites locally? - Local issues need local research, ie deepwater site - All issues covered? - Installation methods - Noise/electromagnetics/vibration Minimisation techniques	<u>YES</u> More detail on Swedish <u>V Moray Firth projects</u> MFP, Aberdeen Uni, Talisman, FRS, SMRU, Fishermen, UHI, Salmon Fishery Boards
<u>FISHERIES</u>	"	"
<u>ECO-TOURISM</u>	"	"