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Generic Impact Assessment Approaches

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What is EIA?

- Definition

- *EIA is a systematic **process** to identify, **predict** and evaluate the environmental effects of **proposed actions** and projects.*
- Applied prior to major **decisions** and commitments



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What is EIA?

- A **planning tool** providing an **aid** to decision-makers, policy makers, developers, industrialists and the public. It does not provide the answers - only a **vehicle** to get to the answers in a logical and ordered manner



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Purpose of EIA

- Short term

- improve environmental design of a proposal
- ensure that resources are used appropriately and efficiently
- identify measures for mitigating the potential impacts of the proposal
- facilitate informed decision making



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Purpose of EIA

- Long term
 - protect human health and safety
 - avoid irreversible changes and serious damage to the environment
 - safeguard valued resources, natural areas and ecosystem components
 - enhance the environmental and social aspects of a proposal



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The EIA Process

- Why a process?
 - Does not consist of linear step by step activities
 - EIA is iterative - includes feedback loops to continually improve project and understand the implications for the environment
 - Represents a method of refining a proposal, informing decision making and addressing the environmental effects



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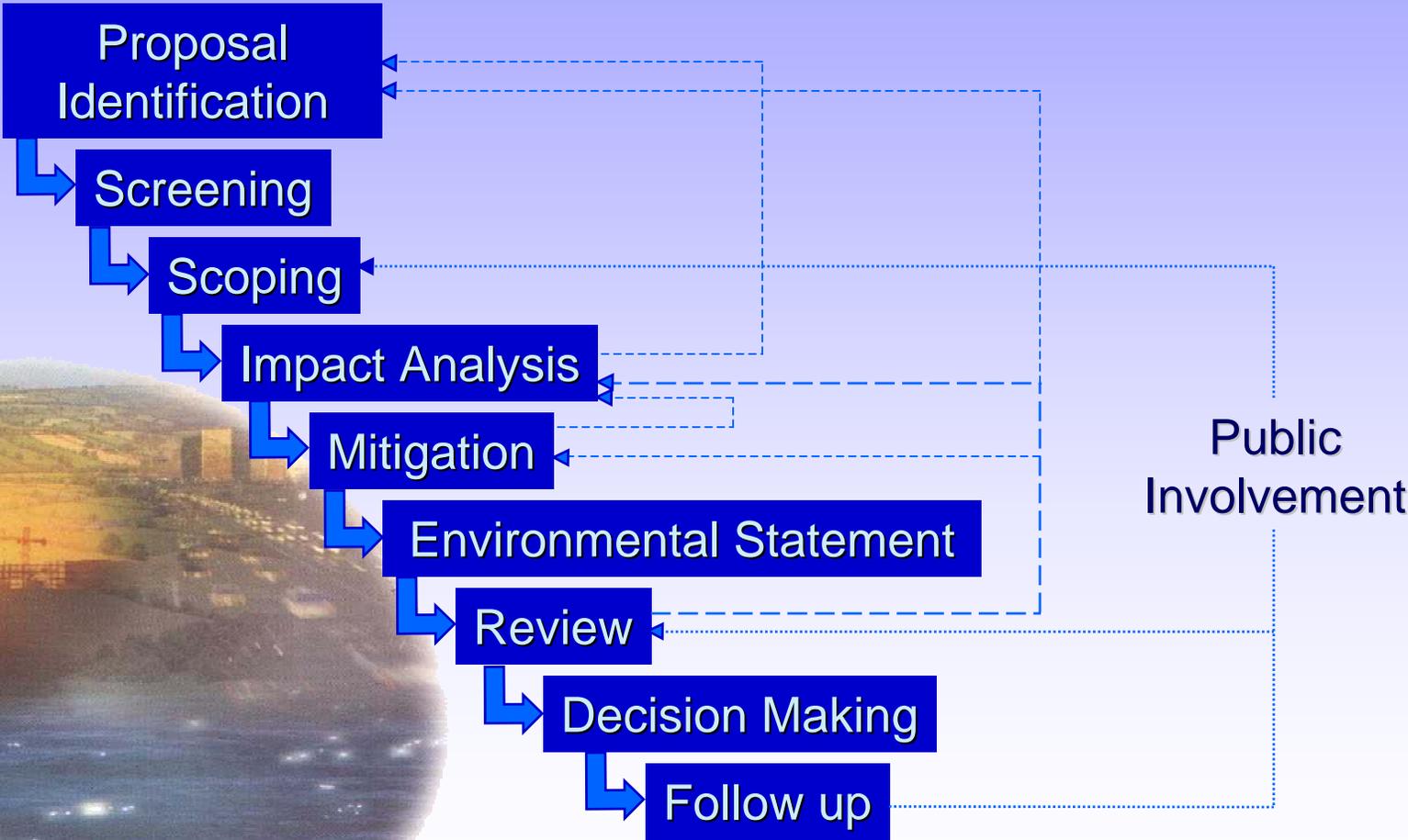
The EIA Process



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The EIA Process



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EIA in a marine context

■ Problems

- Extent of study areas
- Quantity & quality of baseline data
- Uncertainty of responses to activities
- Lack of frameworks & known reference points for assessing significance

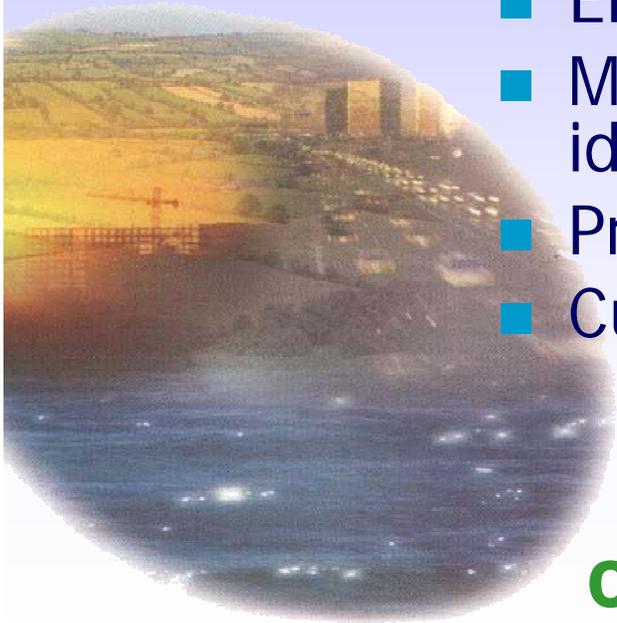


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EIA in a marine context

- Wider use of secondary data
- Interpretation of limited data
- Use of GIS to assimilate baseline data
- Worst case assessments
- Use of models
- Environmental risk assessment
- More use of impact avoidance through identification of sensitive areas
- Precautionary principle
- Cumulative effects assessment



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Conclusions

- EIA works best when integrated with project planning
- Lack of systematic policy & regulation for marine environment makes EIA important
- Risk assessment can be useful, but use in conjunction with other tools
- Strategic Environmental Assessment provides an opportunity for more systematic management of cumulative effects



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