



Greening EU Cooperation

Integrating Environment, Climate Change and Disaster Risk
Reduction in EU External Action

Session 7: Environmental Impact Assessment (EIA)
& Environmental Management Plan (EMP)

Environmental Impact Assessment



“ the process of identifying, predicting, evaluating and mitigating the bio-physical, social and other relevant effects of development proposals **prior to** major decisions being taken and commitments made ”

IAIA (International Association for Impact Assessment)



Greening EU COOPERATION
Integrating environment & climate change

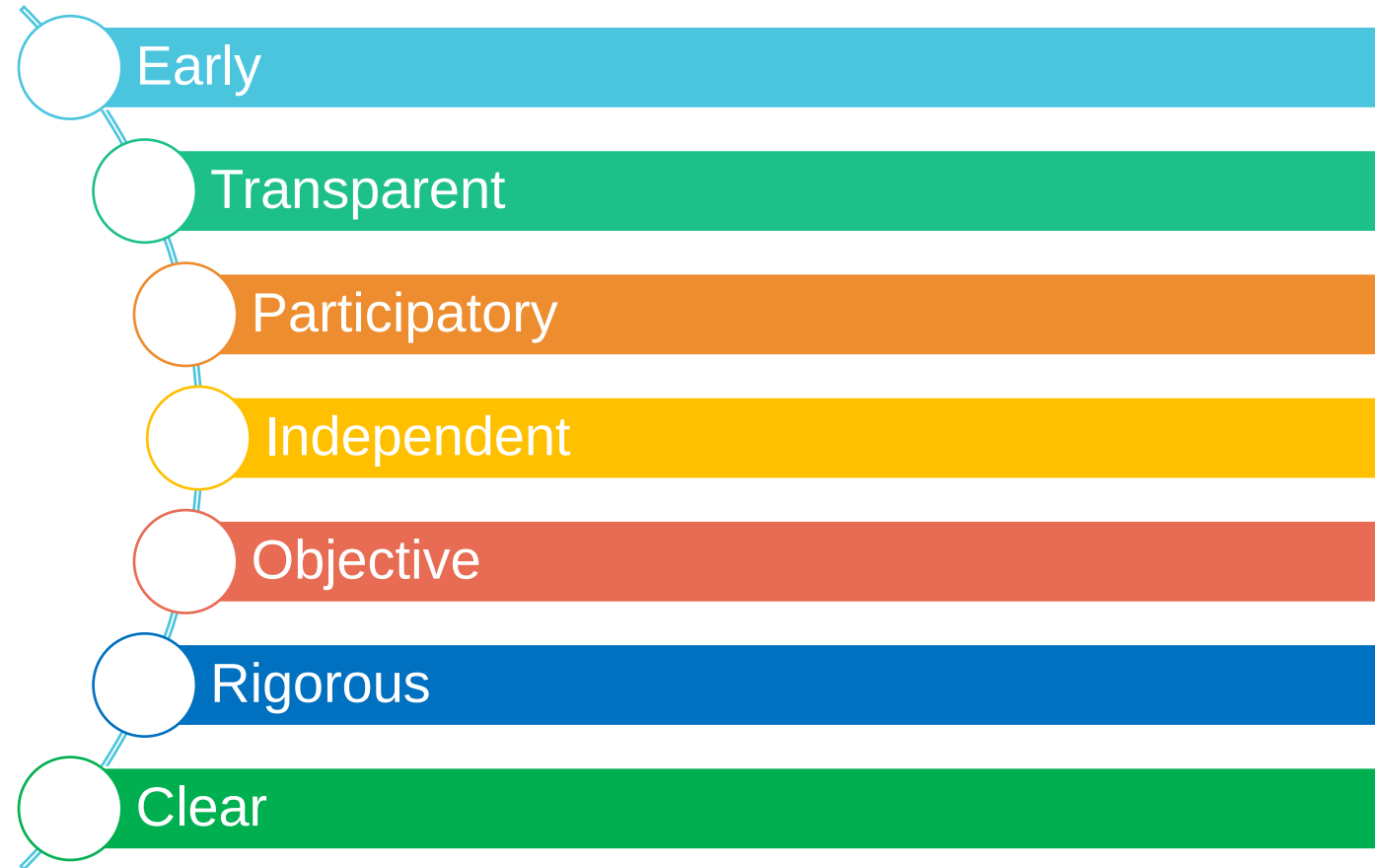


Basic facts

- Widely established world-wide
- Applicable to projects with **potential significant adverse impacts on the environment and health**
- **Decision-informing** in development consent
- Traditionally **impact-centered**
- Often also addresses **social impacts** (ESIA)



EIA key principles

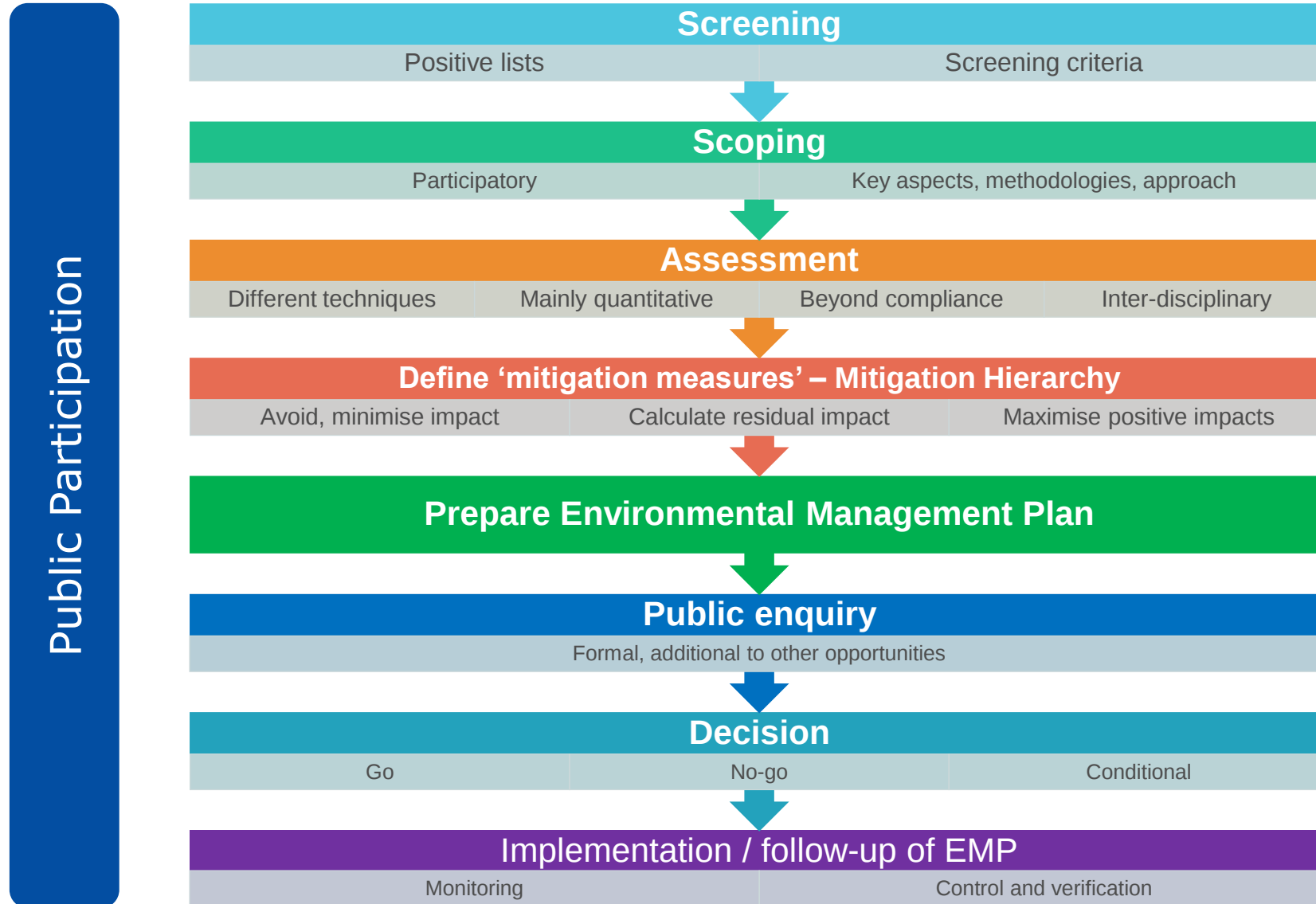


EIA regulatory framework

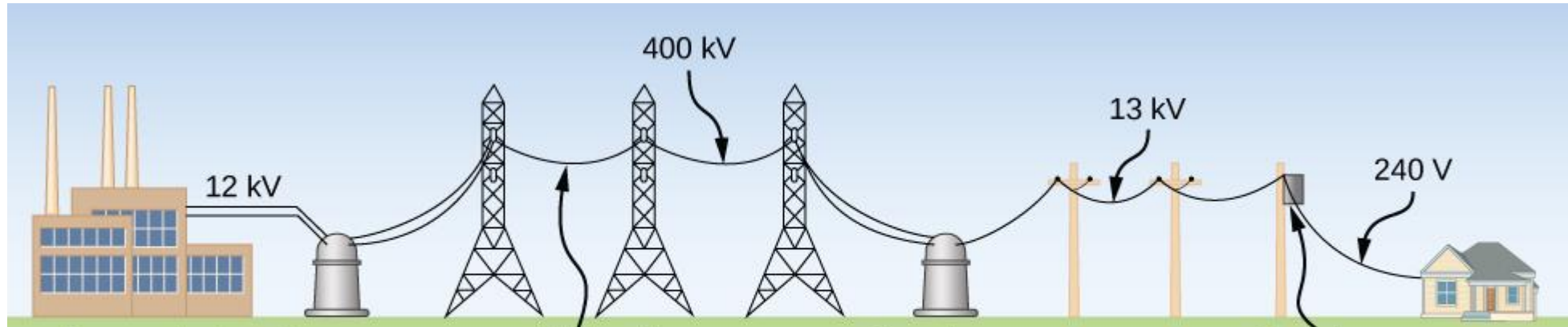
- Use **national systems** – unless not up to standard!
- **EIA Directive** (2011/92/EU amended by 2014/52/EU)
- **Aarhus Convention** (access to information, public participation, access to justice)
- **Espoo Convention** (transboundary impacts)
- Performance Standards of Financial Institutions (relevant for blending)



Main EIA steps



Key contents to highlight



- Non-technical summary
- Analysis of alternatives (including baseline scenario)
- Cumulative impacts
- Addressing climate vulnerability
- Impacts associated to vulnerability to major accidents and/or disasters
- All phases of the project
- Associated developments
- Transboundary consultations



Mitigation hierarchy



EIA methods

- Different and sometimes complex methods:
 - Checklists
 - Matrices: cause - effect
 - Network analysis
 - Graphical analysis
 - Models (e.g. noise, dispersion of pollutants)
 - Emission factors
 - GIS analysis
- The method and the complexity level must be appropriate for the problem



Matrices

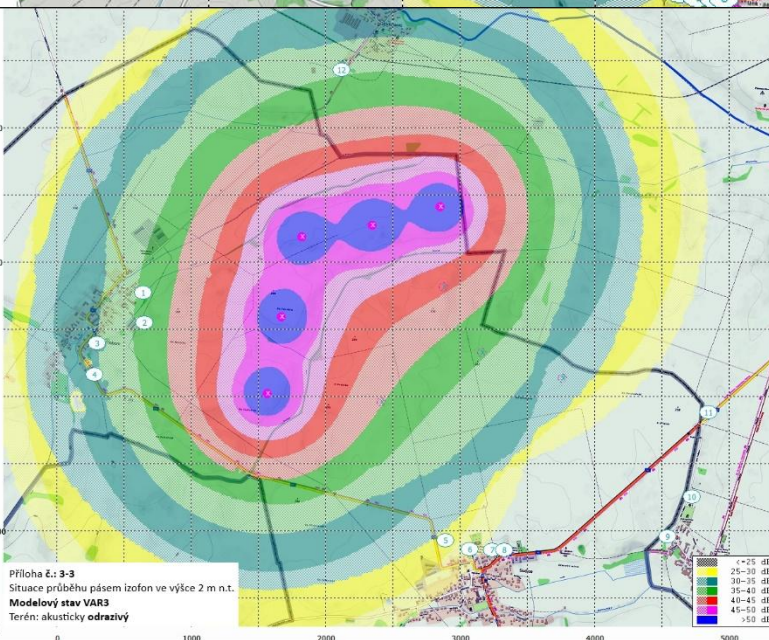
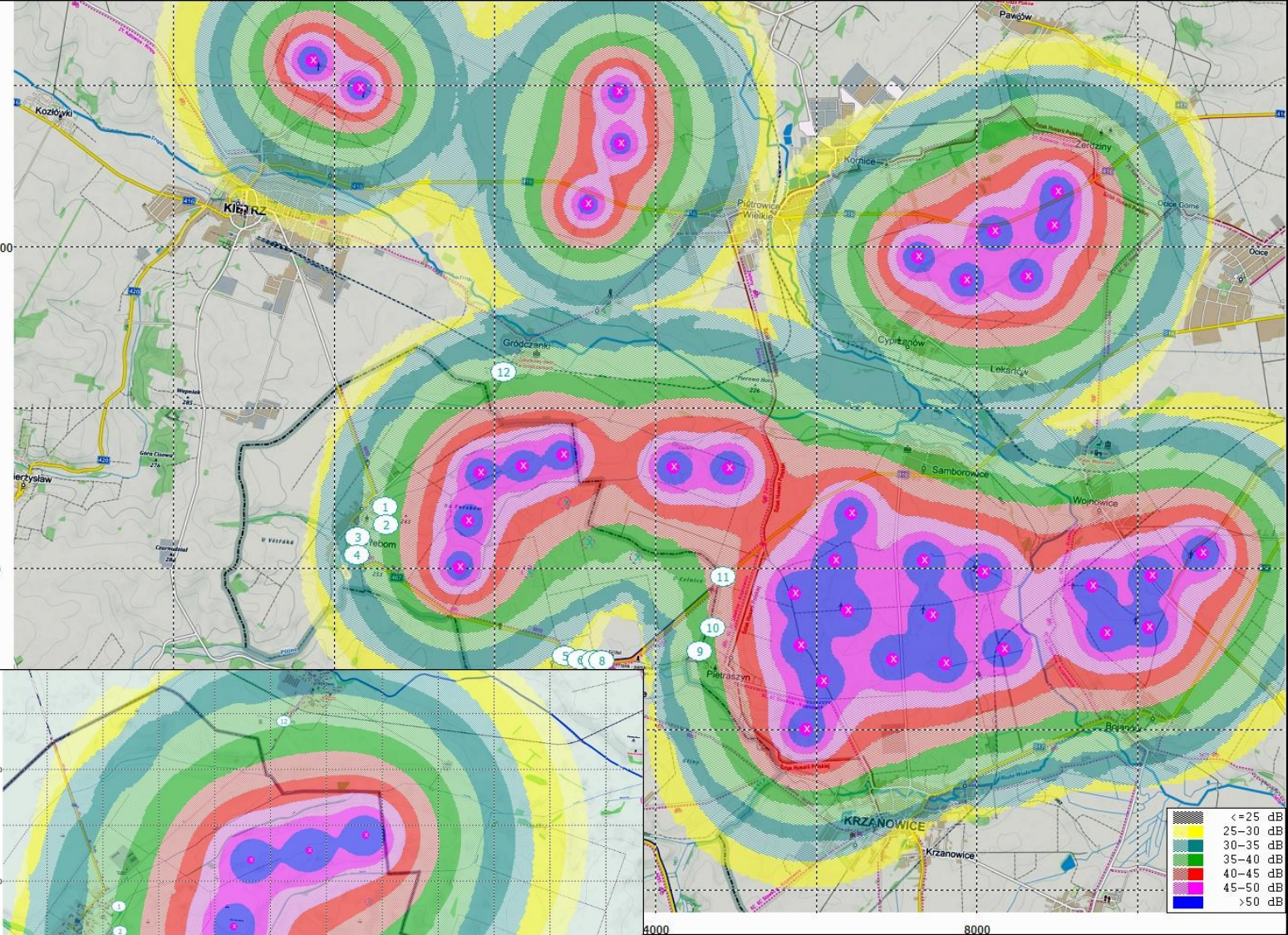
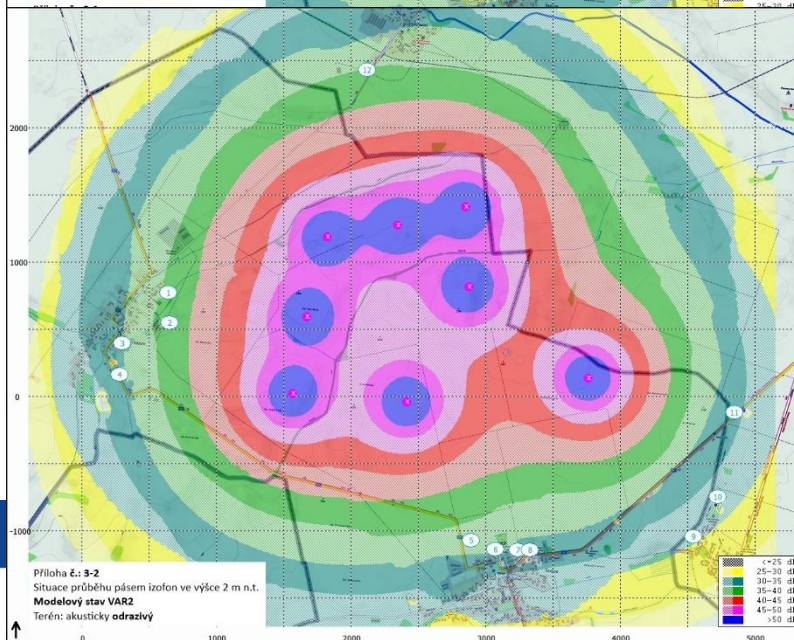
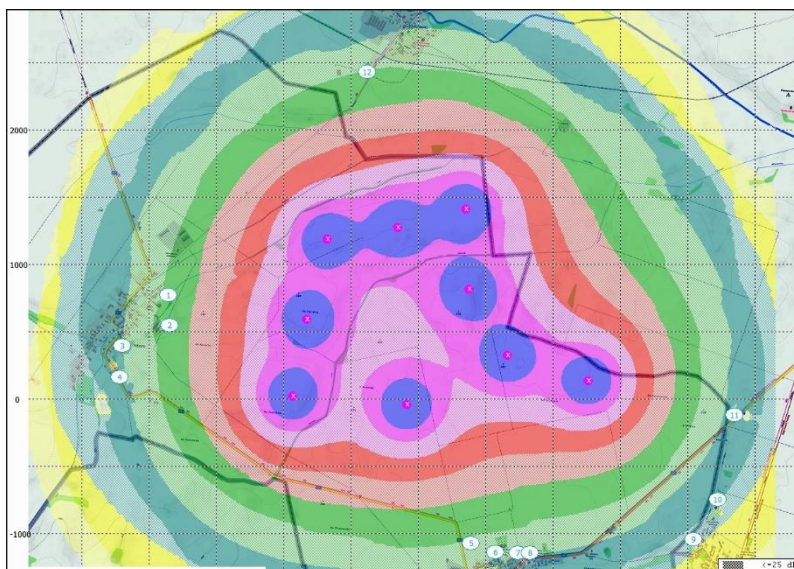
Actions → Factors	Construction			Operation		
	Movement of land	Urban services of the project	Building works	Use of housing draft	Consumption services	Generation of waste
Air (Quality Air System Sonic)	H	H	H	M	L	L
Floor (Use)	H	M	H	M	H	M
Surface water (Storm drain)	H	M	H	M	H	M
Underground water (Aquifer Level, Groundwater)	M	H	M	L	L	L
Flora fauna (Biotopes)	H	M	L	L	L	L
Empowerment	H	M	H	M	B	B
Sociocultural Condition (neighbours)	H	M	H	H	M	M
Generation Solid Waste	H		H	H	M	M
Management of dangerous substances (Combustibles etc.)	H	M	H	H	H	L
Scenery	H	M	H	H	B	B

Key: Significant Impact – requires assessment and establishment of measures

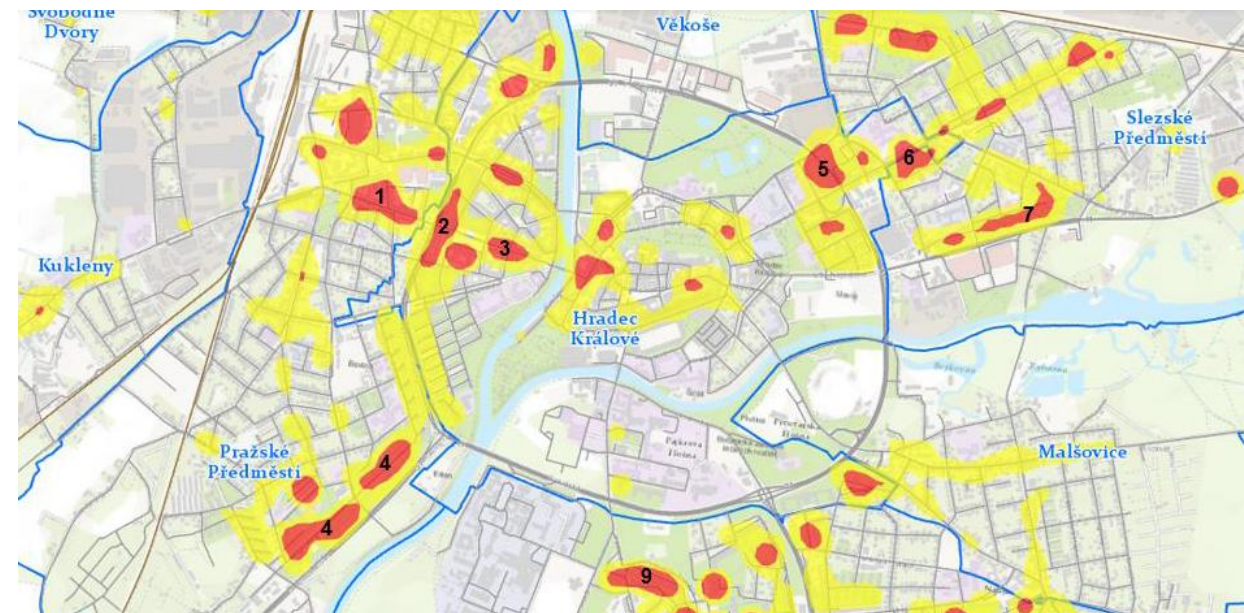
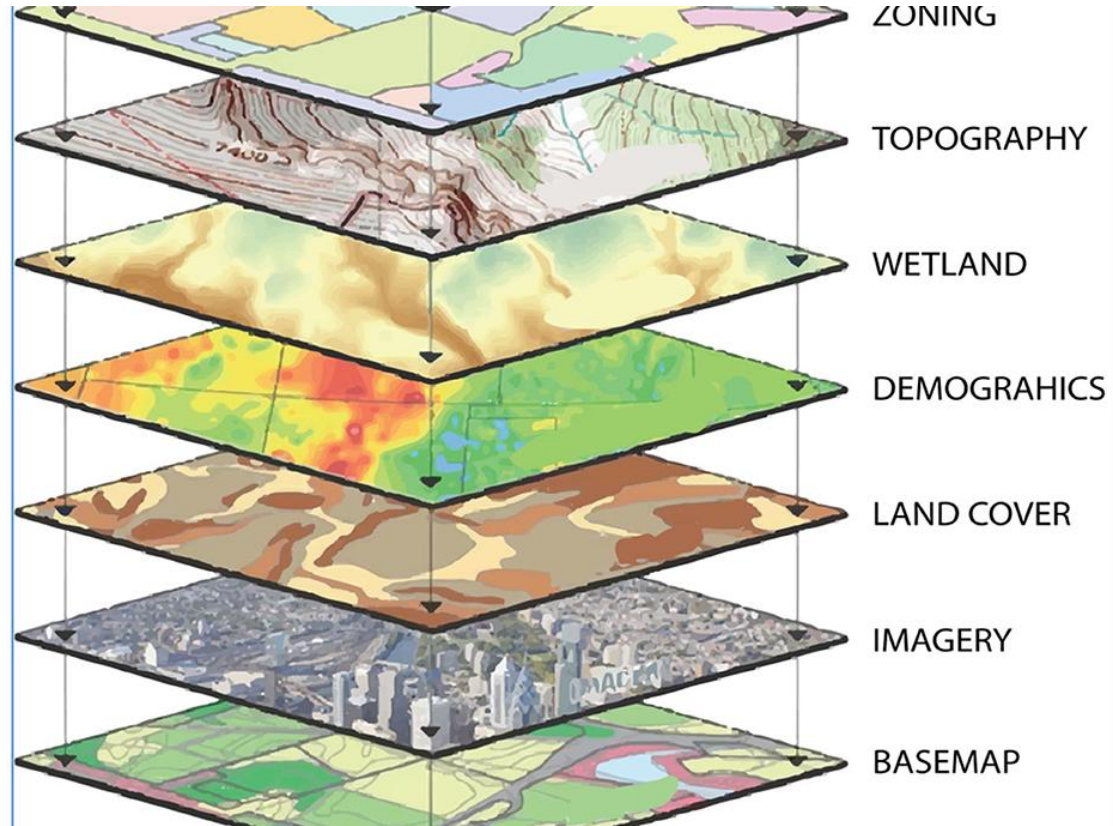
Impacts of low or non-existent significance (rated as A = High, M = Moderate, L = Low)

Construction phase/ Decommissioning phase	
Ecological issues	Concerns
Disturbance to seabed habitats	Anchoring, mooring/foundation installation (as well as removal), and other seabed disturbances can lead to disturbance/destruction of seabed habitats
Disturbance of landward areas	Construction camp, storage of material, construction of associated infrastructure (transmission lines) can involve temporary impact on land (incl. cultivated) and terrestrial ecosystems
Pollution and contamination of water, seabed and wildlife (incl. fish stocks)	Underwater construction/decommission operations and use of machinery will cause local temporary increase in turbidity and involve a risk of contamination due to leakage of fuel or other chemicals
Socio-economic issues	Concerns
Construction waste minimisation and disposal	Waste resulting from construction operations needs to be soundly managed (storage, transport and disposal for all waste streams)
Community relations and employment in construction phase	Consideration shall be given to possibility of employing local workforce Minimization of community disturbance risks originating from presence of guest workers shall be ensured
Timing of activities regarding seasonal sensitivities	Any potential risks or limitations related to implementation timing shall be verified with the local community
Operation and maintenance	
Ecological issues	Concerns
Disturbance to water masses	The scale and implications of changes to such factors as nutrients, temperature, light levels, turbidity (suspended sediments), surface waves and current patterns should be considered
Shoreline disturbance	Potential change to the coastline such as erosion/deposition, change in character, either directly or indirectly should be considered
Behavioural changes in wildlife	Activities have the potential to affect the distribution of wildlife, namely fish, sea mammals, birds
Impacts on conservation areas/protected species	The area of potential impacts is located within a MPA and potential implications for its status and conservation value needs to be examined

Modelling

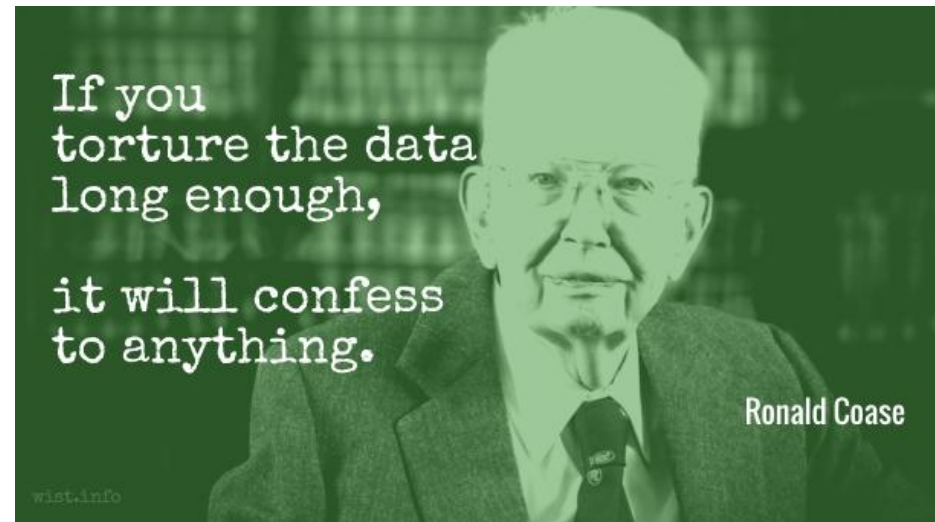


GIS overlays



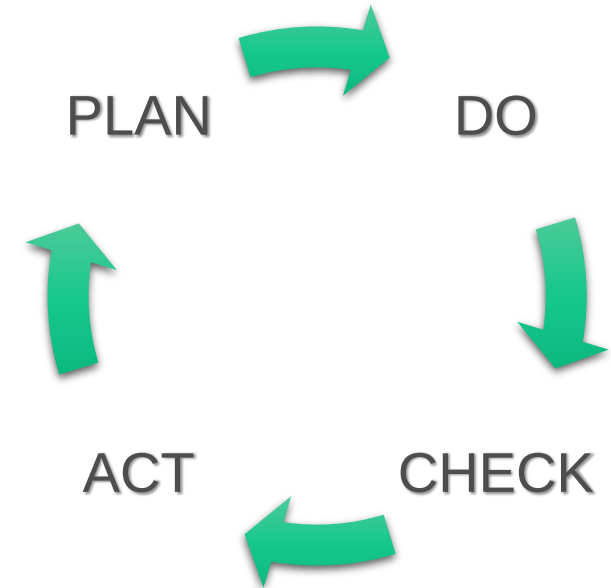
Common shortcomings in EIA

- 'Catch-all' approaches
- Limited participation
- 'Salami-slicing'
- Manipulation of data
- Unclear/un-precise
- Lack of quality control
- Little or no follow-up



Environmental Management Plan (EMP)

- Details for implementation and monitoring of mitigation measures
- What? How? Who? When? How much?
- Must be reflected in contractual documents
- Link to monitoring and evaluation



Impacts/ concerns	Mitigation actions	Mitigation timeframe	Responsibility	Verification/control
General	Maintain Incident register to record any complaint of local residents or other affected stakeholders, any accident with impact on the environment or human health, or any other irregularity concerning the environmental management of the LSWEF	Throughout the Construction phase	Contractor	Incident register
Air pollution	Ensure all construction vehicles, engines and machinery are maintained and operated in accordance with design standards and specifications	Throughout the construction works	Contractor – construction company, all sub-contractors operating machinery	Daily visual assessment of dust plumes
Exhaust emissions from boats, construction machinery and vehicles (on shore).	No engines to be left running when not in use			Random machinery checks
Dust generated during the movement of vehicles (on shore) and construction materials handling	Staff trained/briefed in and aware of construction best practice			Registered complaints for noise
	All potential sources of dust emissions on site (on shore) i.e. unpaved roads used by LSWEF-related vehicles, areas of uncovered soil, etc., should be sprayed with water every four hours on working days, and more frequently as necessary to prevent dust emissions during dry and windy weather conditions			
	Loose material (if any) shall be bunded and covered when transported to or off-site			
Noise	Organizing construction works and transport of the materials only during the day time i.e. between 7am and 6pm. Notify any nearby residents if construction work is planned outside of those times.	Throughout the construction works	Contractor – construction company, all sub-contractors operating vehicles/boats	Registered complaints for noise
Ambient noise from drilling activities, and vehicles and boats operation.	If complaints regarding noise are received from residents, consider installing partial screening around the noisiest activities and/or mufflers on noisy equipment.			
	Maintain all generators, vehicles, vessels and other equipment in good working order to inimize exhaust fumes and excess noise.			

EIA – the role of the EU delegation



- Screening for EIA*
- Verify national systems are up to EU standard
- Quality check ToR**
- Quality check EIA/EMP
- Reflect relevant elements of EMP in design, contractual documents and project monitoring indicators

* Annex 3 of the Greening Toolbox

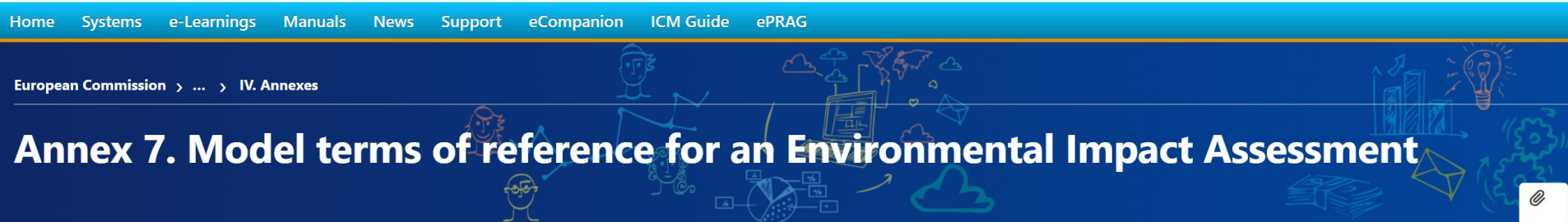
** Model ToR for an EIA available in Annex 6 of the Greening Toolbox



Greening EU COOPERATION
Integrating environment & climate change



Greening Toolbox resources



IV. Annexes

- Annex 1. Greening EU cooperation tools
- Annex 2. Aid to environment, DRR and Rio markers
- Annex 3. Model terms of reference for a Country Environmental Profile
- Annex 4. Environment and climate risk screening
- Annex 5. Sources to understand the environment and climate context
- Annex 6. Model terms of reference for a Strategic Environmental Assessment
- **Annex 7. Model terms of reference for an Environmental Impact Assessment**
- Annex 8. Model terms of reference for a Climate Risk Assessment

Annex 7. Model terms of reference for an Environmental Impact Assessment

Terms of Reference for the Environmental Impact Assessment of *(name of the project)* in *(country/region)*



Annex 7. Model ToR for an EIA

- Online and .doc versions



EIA in the context of blending and guarantees



- Environmental & Social Safeguards (ESS) of lead Financial Institution apply
- IFC Performance Standards as international benchmark
- Need to verify applicable standards and their quality – special attention to intermediary FIs!
- Reflect EMP in contractual conditions and monitoring system



EIA follow-up

Project Design

EIA Environmental
Impact Assessment

EMP
Environmental
Management Plan

Project Operation

EMS
Environmental
Management System

**Environmental
Audit**

**EMP
implementation**

Internal

External (including IFIs)

