

ENTSO-E workshop on CBA methodology

19 November 2012

Externalities:

Social and environmental sensibility

DT PS: Martti van Blijswijk & xxx

Contents

14:30 – 16:00

- Methodology
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 - Considerations
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 - CBA scoring
- Stylised example
- Alternative approaches
- Questions and discussion

Introduction

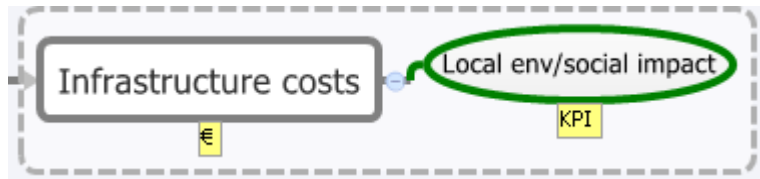
“Social and environmental sensibility characterises the project impact as perceived by the local population and assessed through preliminary studies, and as such, gives a measure of the social and environmental sensibility associated with the project.”

- Impact on nature
- Impact on human activity
- Social compatibility

Considerations

- Importance
 - Increase public acceptance
 - Successful licensing
 - Prevent project delays
- Assessment of multiple possible trajectories
 - Expert assessment
 - Preliminary environmental studies

Indicators



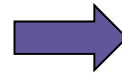
Current approach

- **Internalised (avoidance costs, compensation costs):**

- Land use/human activity (avoidance, compensations)
- Soil, subsoil, water (avoidance, technical standards)
- Waste/decommissioning (life cycle costs)
- Safety (minimal distance)
- Visual impact (avoidance, compensation)
- Faune, flora, vegetation (avoidance, compensation)

- **Residual impact or uncertain impact**

- Landscape
- Biodiversity
- Reduction of amenity



Criteria	Project assessment									
	Grid Transfer Capability Increase	Socio-economic Welfare	RES integration	Improved Security of Supply	Losses variation	CO2 mitigation	Technical resilience	Flexibility	Social and environmental impact	Project costs
	MW	M€/year	MW/year	MW/year	Mt	Mt				Mt
Project A	1000	150	500				++	++		650
Project B	500	30					++			
Project C	800	225		10			++			

Dense area
Protected area
Former conflicts



Risk ?

CBA scoring

Indicative colours are assigned as follows:



Light green: desk-top studies indicate that sensibility is low (no protected or dense urban area is affected, there are no known former infrastructure conflicts in the area, the visual impact is perceived as low).

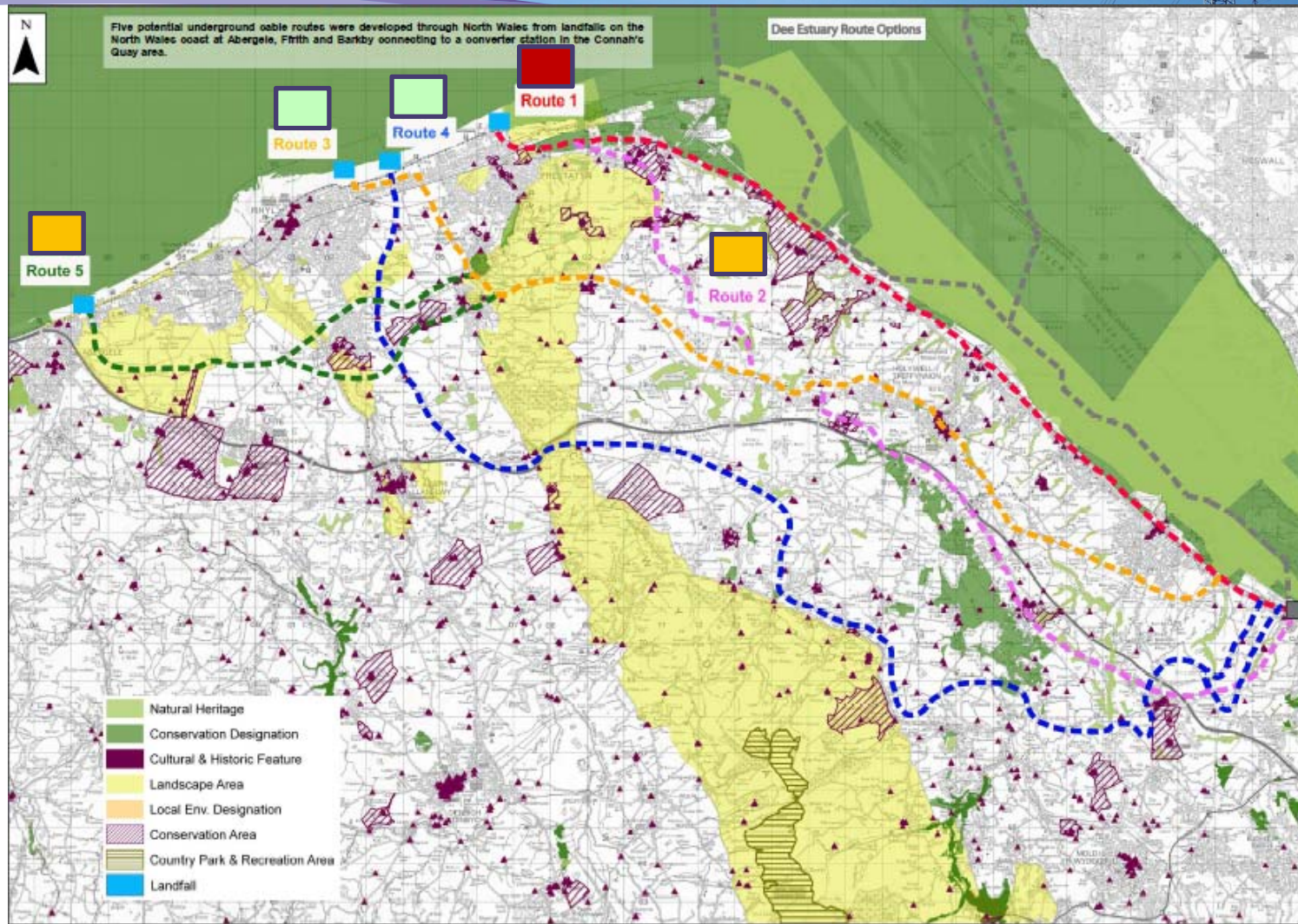


Amber: desk-top studies indicate that sensibility is medium (protected or urban area may be affected in a limited way, visual impact is perceived as moderate).



Red: desk-top studies indicate that sensibility is high (visual impact is perceived as high, protected or urban area may be affected, there have been former conflicts in the area).

Example



Example

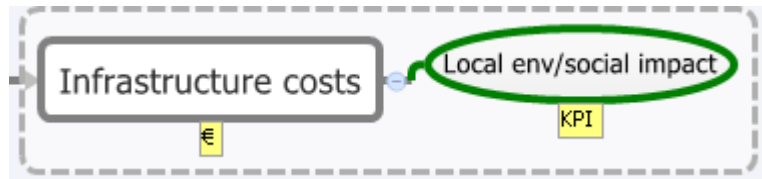
EARLY STAGE

Possible
interconnector
routes

- A : crosses urban areas
- B: crosses protected areas, shortest
- C: crosses semi-urban area (high social sensitivity), longest



Alternative approach ?



•Sub-indicators ?

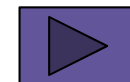
- Landscape
- Biodiversity
- Reduction of amenity
- Others ?

•Additional sub-indicators for :

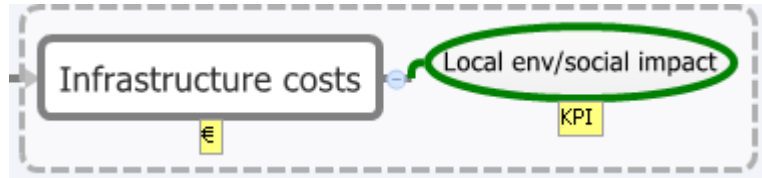
- Underground cables ?
- Submarine cables ?

Other approach ?

Which metrics for an early stage assessment ?



Alternative approach ?



Other approach ? Which metrics for an early stage assessment ?



-Landscape

Preserve landscape integrity
Preserve protected buildings

Distance from/
length *factor

-Biodiversity/soil

Prevent impact on ecosystems
and species
Minimize perturbation of soil

Distance from/length
* factor (level of
protection)

-Amenity/safety

Minimize impact

Nb of people living
nearby

CIGRE report on SEA

WG C3.06
STRATEGIC ENVIRONMENTAL ASSESSMENT

Members of the WG:

Dr. Ricardo Furtado (Convener) (Brazil), Mrs. Flavia Serran (Secretary) (Brazil), Mrs. Stephanie Cochart (France), Mr. Fernando Crespo (Spain), Mr. Christoph Doernemann (Germany), Mr. Vincent Du Four (Belgium), Mrs. Fiona Havenga (South Africa), Mr. Stephen Martin (Australia), Mr. John Ojavei (USA), Mr. Francisco Pinado (Portugal), Mr. Hank Sanders (Netherlands), Dr. Glen Singleton (Canada), Mr. Hector Solbeizon (Argentina), Mrs. Mercedes Vazquez (Spain), Mr. Massimo Cecconia (Italy), Mr. Wenli Wang (China), Mr. Jean-Luc Bessede (France)

STRATEGIC ENVIRONMENTAL ASSESSMENT FOR
POWER DEVELOPMENTS



February 2011

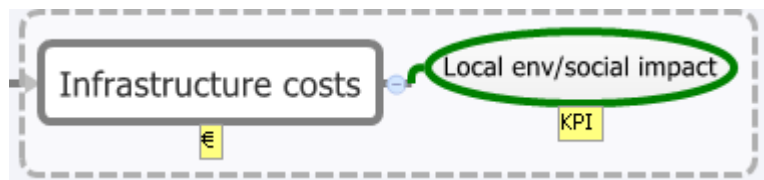


Aspects	Objectives	Indicators	Parameters
Land use	Identify land use and land use changes	Land use and land use changes	Land use and land use changes
Biodiversity	Identify biodiversity and biodiversity changes	Biodiversity and biodiversity changes	Biodiversity and biodiversity changes
Water	Identify water quality and water quantity	Water quality and water quantity	Water quality and water quantity
Aquatic environment	Identify aquatic environment and aquatic environment changes	Aquatic environment and aquatic environment changes	Aquatic environment and aquatic environment changes
Soil	Identify soil quality and soil quantity	Soil quality and soil quantity	Soil quality and soil quantity
Climate	Identify climate change and climate change impacts	Climate change and climate change impacts	Climate change and climate change impacts

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Alternative approach ?



- Landscape/biodiversity:
 - nb of km in protected areas ?
- Soil:
 - nb of km underground cables ?
- Amenity/safety:
 - nb of km in urban areas ?
- Others ?

Other approach ?
Which metrics for an early stage assessment ?



Score ?

Questions & discussion

