Impact Scoring & Aggregation for SEA

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INTRODUCTION

- What is COST
- Scope of COST 350
- Scoring and aggregation
- Getting involved

What is COST

- Intergovernmental framework for European Co-operation in Scientific and Technical Research
- EU and most of Central and Eastern Europe (44 countries)
- Managed by the European Science Foundation

What is COST

- Participation on an “à la carte” principle
- Minimum of 5 participants from member states for an “Action”
- Actions usually last 4 years

Scope of COST 350

- ***Integrated Assessment of Environmental Impact of Traffic and Transport Infrastructure***

Scope of COST 350

- *The main objective of the Cost 350 Research action is to establish a concept integrating at regional scale all the environmental aspects of traffic and land-transport infrastructure in relation to the decision making process.*

Working Groups

- Working Group 2 - Planning contexts
- Working Group 3 - Scope of impacts, indicators and quantification methods
- Working Group 4 - Methods for assessment of options

Working Groups

- Working Group 5 - Impact scoring & aggregation
- Working Group 6 - Synthesis
- Working Group 7 - Reporting

WORK GROUP 5

- Inventory of aggregation and scoring methods
- Selection of methods for different transport planning situations
- Use of modelling procedures
- Research requirements

AGGREGATION AND SCORING

- Scoring:
  - The assignment of quantitative or qualitative values to reflect impact significance
- Aggregation:
  - The process of combining impact scores to arrive at an overall score or summary

SCORING

- Issues:
  - Quantified and non-quantified impacts
  - 3, 5 or 7 point scale
  - Standardised scoring frameworks versus local flexibility
  - Equivalence across topics: apples and oranges
  - Transparency

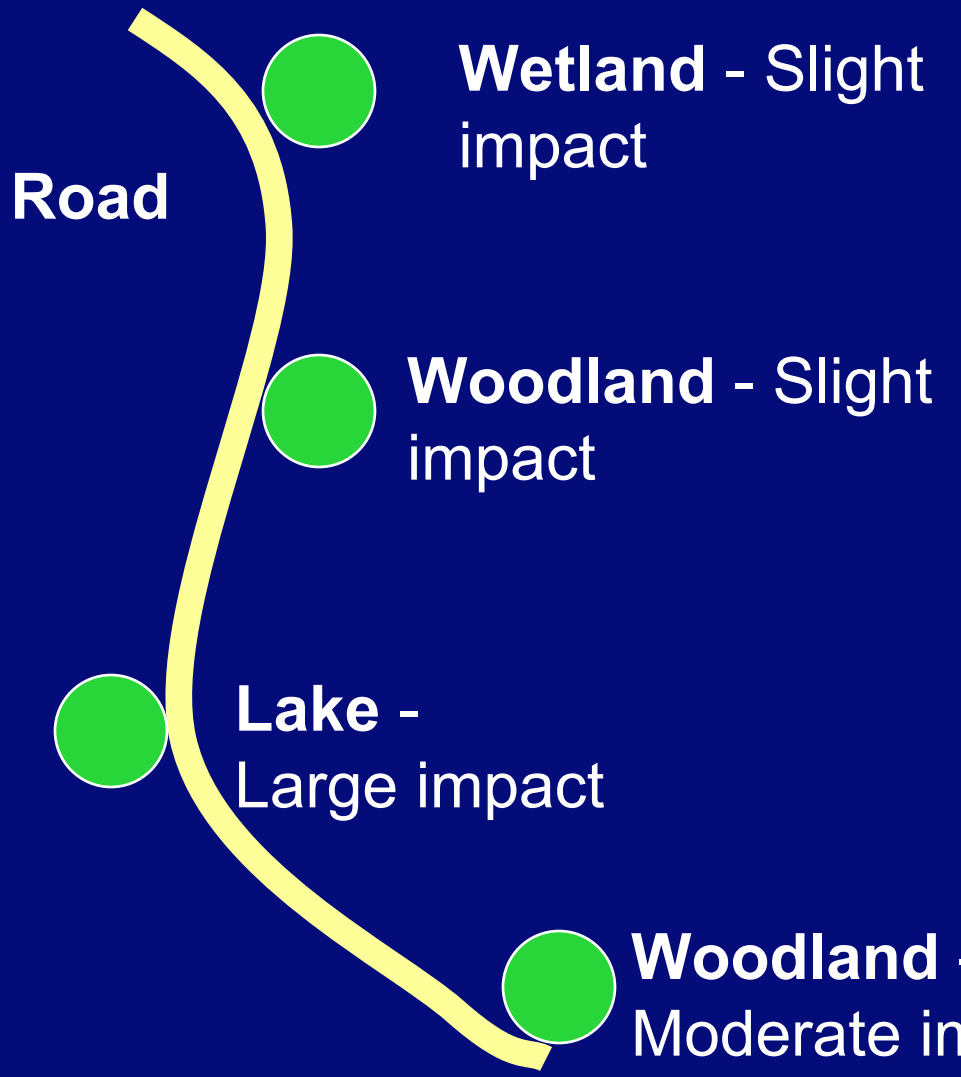
SCORING

- Issues:
  - Scaling methods
  - Handling uncertainty
  - Dealing with future community values
  - Role of the public in validation of scores
  - Application in different contexts

SCORING - ACTIONS

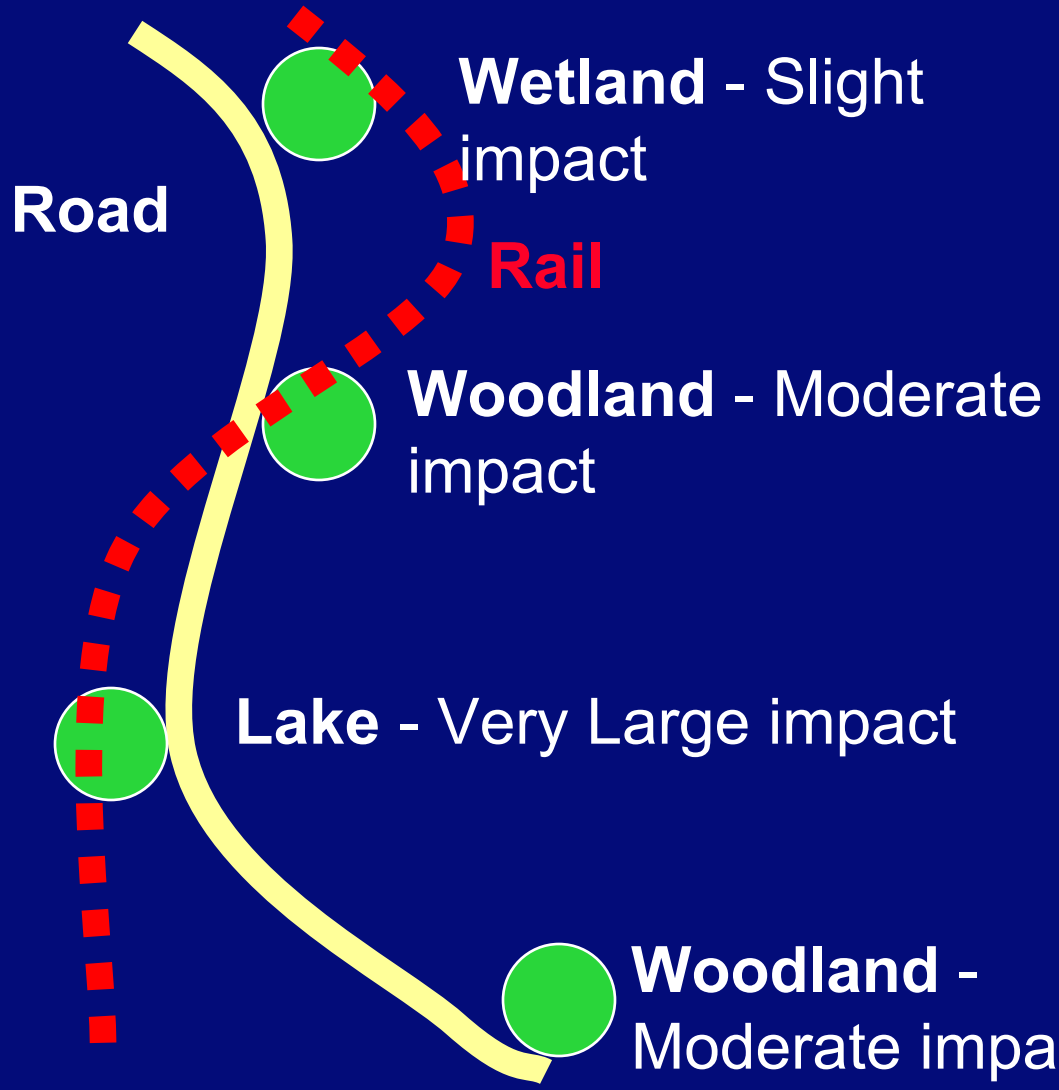
- Assemble scoring criteria
  - Define key characteristics
  - Identify features of similarity and divergence
  - Review “interesting” methods
  - Define what is “good practice”
  - Develop guidance for “good practice”

TYPES OF AGGREGATION



Biodiversity Overall Score = ?

TYPES OF AGGREGATION



Wetland - Slight impact

Woodland - Moderate impact

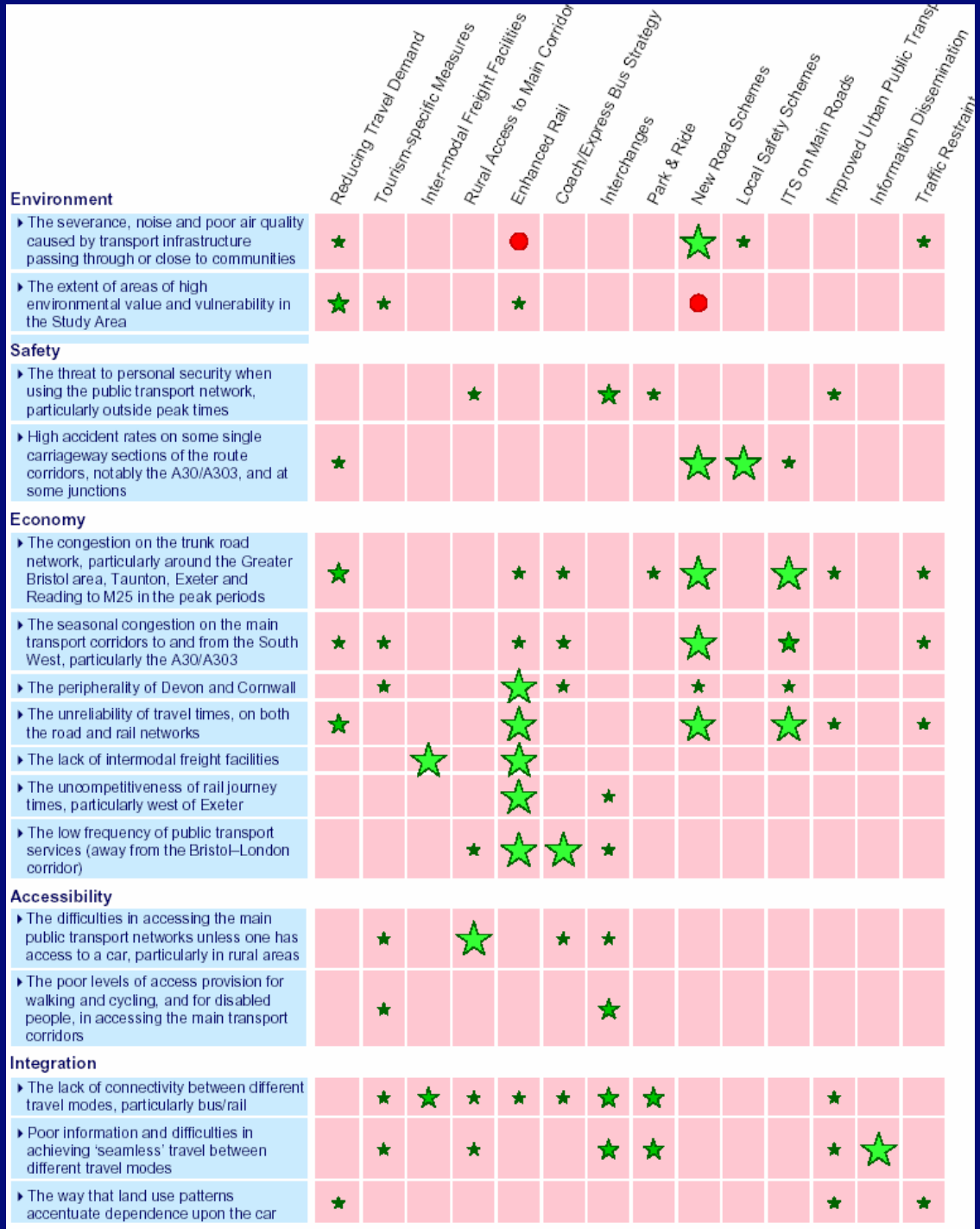
Lake - Very Large impact

Woodland - Moderate impact

Combined impact of strategy = ?

AGGREGATION

- Different aggregation methods for different purposes
- Aggregation methods may have different units such money, energy, material consumption
- Reporting pre-defined indicators or core indicators based on SEA results


Reducing Travel Demand
Tourism-specific Measures
Inter-modal Freight Facilities
Rural Access to Main Corridor
Enhanced Rail
Coach/Express Bus Strategy
Interchanges
Park & Ride
New Road Schemes
Local Safety Schemes
ITS on Main Roads
Improved Urban Public Transp
Information Dissemination
Traffic Restraint
Environment
The severance, noise and poor air quality caused by transport infrastructure passing through or close to communities
The extent of areas of high environmental value and vulnerability in the Study Area
Safety
The threat to personal security when using the public transport network, particularly outside peak times
High accident rates on some single carriageway sections of the route corridors, notably the A30/A303, and at some junctions
Economy
The congestion on the trunk road network, particularly around the Greater Bristol area, Taunton, Exeter and Reading to M25 in the peak periods
The seasonal congestion on the main transport corridors to and from the South West, particularly the A30/A303
The peripherality of Devon and Cornwall
The unreliability of travel times, on both the road and rail networks
The lack of intermodal freight facilities
The uncompetitiveness of rail journey times, particularly west of Exeter
The low frequency of public transport services (away from the Bristol–London corridor)
Accessibility
The difficulties in accessing the main public transport networks unless one has access to a car, particularly in rural areas
The poor levels of access provision for walking and cycling, and for disabled people, in accessing the main transport corridors
Integration
The lack of connectivity between different travel modes, particularly bus/rail
Poor information and difficulties in achieving 'seamless' travel between different travel modes
The way that land use patterns accentuate dependence upon the car

AGGREGATION - ACTIONS

- Explore aggregation practices and rules
  - Define key characteristics
  - Identify features of similarity and divergence
  - Review “interesting” methods
  - Define what is “good practice”
  - Develop guidance for “good practice”

Getting Involved

- Open to EU, Central and Eastern European researchers
- Open workshop Athens Spring 2005
- COST 350 web site
- SEA & Transport Planning Newsletter http://www.sea-info.net/