



# RIA Training - Environmental Impact Assessment

## EXPERTS:

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# Contents of the day

Introductions

What today will cover

The format for the day

Outcomes





# Ask Questions At Any Time!





# Aim of Training & Schedule

- What is an Environmental Impact Assessment
- Calculating EnvIA
- Cost Benefit Analysis
- Roles and Responsibilities
- Tools
- Worked examples
- Real life Croatian Examples
- Feedback & Discussions





# What is a Regulatory Impact Assessment?

A Regulatory Impact Assessment (RIA) is a straightforward process which helps the development of Government policies and regulation by:

- Identifying the benefits, costs and risks of a proposed public policy and the options available for implementation;
- Provides evidence on the probable consequences of those options and of introducing new legislation; and
- Takes into account the views of a wide range of stakeholders, thus enabling policy development to be better informed as to the most cost-effective means of achieving the policy objectives, as well as greater transparency and accountability which in turn helps lead to greater public confidence in the process and outcomes of public policies.”

*RIA Guidelines July 2015*





# RIA Guidelines: 13 categories of impact

1. Climate
2. Transport and use of energy
3. Air quality
4. Biodiversity, flora and fauna and landscape
5. Quality of water and water resources
6. Quality of soil and resources
7. Use of land





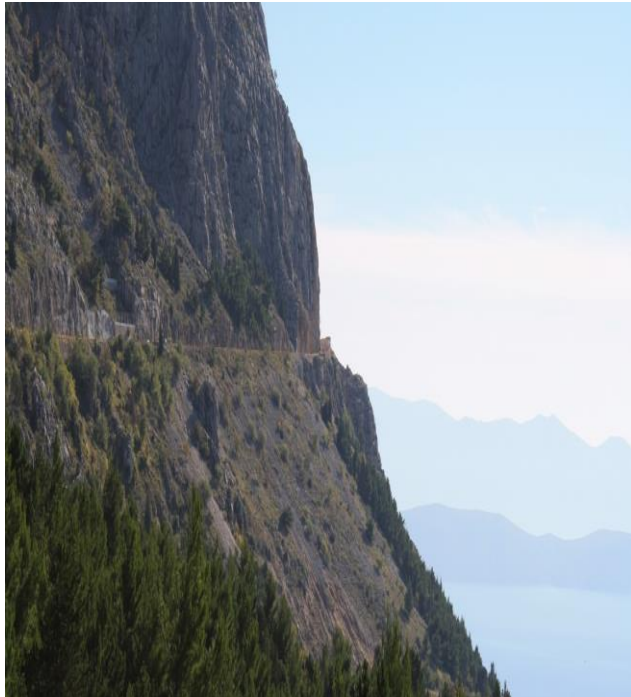
# RIA Guidelines: 13 categories of impact

8. Renewable or non-renewable resources
9. Ecological consequences of companies and consumers
10. Generation of waste/ use/ recycling
11. Possibility of ecological risks
12. Animal welfare
13. International ecological impacts





# What impact might these projects have on the environment?







# What is an Environmental Impact Assessment?

- An essential element of RIA
- RIA process establishes the most significant NEGATIVE and POSITIVE Impacts on areas of Economy, Social Welfare and Environment
- RIA will inform decision makers on expected impacts





# What do you need to consider Environmental Impact Assessment?

Expected impacts on the environment are estimated against the following criteria:

- Climate
- Energy use
- Air quality
- Water quality, sea and water resources
- Soil quality and resources
- Biodiversity and landscape diversity
- Use of land
- Renewable and non-renewable resources



- Waste management
- Environmental risks and the protection of industrial installations,
- Protection and safety of food and animal feed,
- Protection from the effects of genetically modified organisms
- Protection from the effects of chemicals
- Other expected impacts on the environment if considered significant at the discretion of the qualified authorities.



# Definition: What is an Environmental Impact Assessment?

Assessing the impact on sustainable development includes a considered accumulation of mutual impacts on the economy, socially vulnerable and other groups and on impacts on the environment.





# What does it mean in practice?

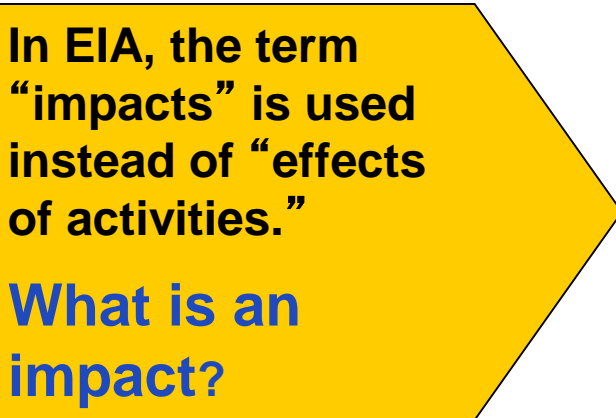
## Environmental Impact Assessment is

A formal process for identifying:

- likely effects of activities or projects on the **ENVIRONMENT**, and on human health and welfare.
- means and measures to mitigate & monitor these impacts



**Environment** is broadly interpreted: physical, biological, and social.



In EIA, the term “impacts” is used instead of “effects of activities.”

**What is an impact?**



# Rijeka Port





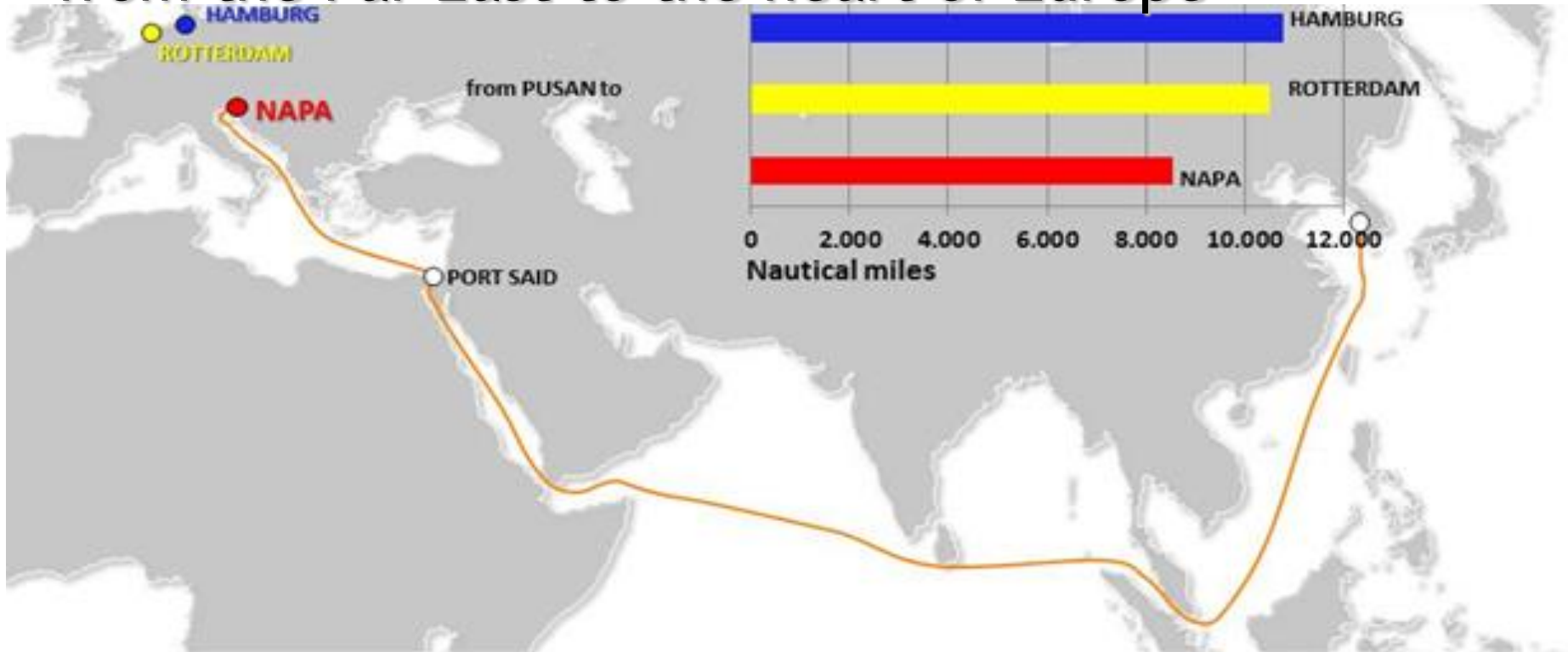
# Environment Impact Assessment in practice: Rijeka Port?



- Reconstruction of railway stations Rijeka and Rijeka Brajdica related to construction of new Zagreb Pier & extension of existing (Brajdica) Container Terminal
- What environmental aspects are there?



# Reducing fuel consumption: the shortest sea route from the Far East to the heart of Europe

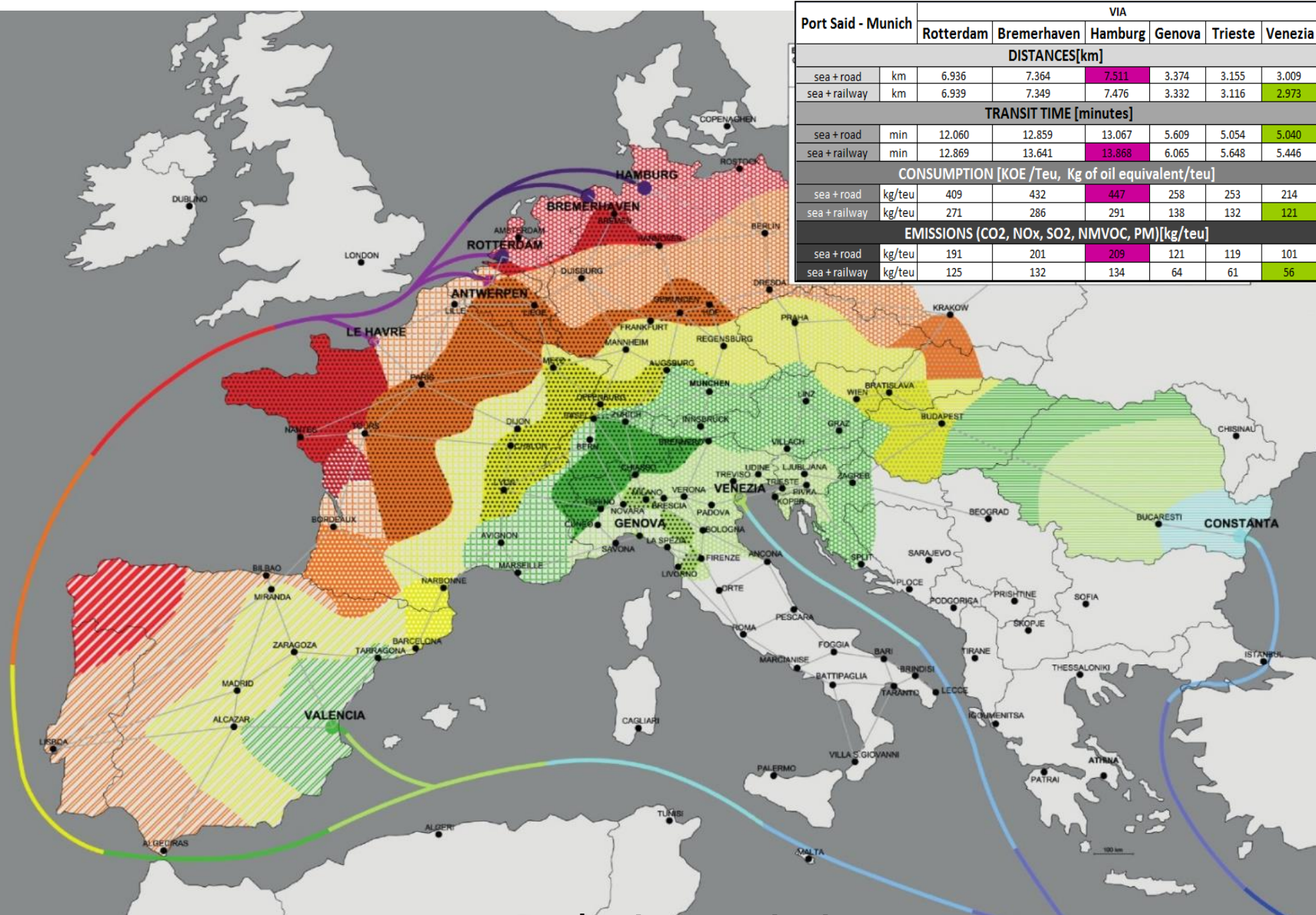


**2000 Nm SHORTER ROUTE**  
**up to 8 days shorter transit times\***

\* If "slow steaming" at 12 knots

Shipping 1 TEU (18 gross ton) from Korea to Koper saves 320 kg of CO<sub>2</sub>

Port Said - Munich		VIA					
		Rotterdam	Bremerhaven	Hamburg	Genova	Trieste	Venezia
<b>DISTANCES[km]</b>							
sea + road	km	6.936	7.364	7.511	3.374	3.155	3.009
sea + railway	km	6.939	7.349	7.476	3.332	3.116	2.973
<b>TRANSIT TIME [minutes]</b>							
sea + road	min	12.060	12.859	13.067	5.609	5.054	5.040
sea + railway	min	12.869	13.641	13.868	6.065	5.648	5.446
<b>CONSUMPTION [KOE/Teu, Kg of oil equivalent/teu]</b>							
sea + road	kg/teu	409	432	447	258	253	214
sea + railway	kg/teu	271	286	291	138	132	121
<b>EMISSIONS (CO2, NOx, SO2, NMVOC, PM)[kg/teu]</b>							
sea + road	kg/teu	191	201	209	121	119	101
sea + railway	kg/teu	125	132	134	64	61	56



**-97 KG CO2/TEU**

Reducing emissions: a greener way to EU markets





The Adriatic is the natural link between the Suez Canal and the “new heart” of Europe, open to the growing economies of the new EU member countries.

### What might it mean?

Re-route the traffics to ports along the northern Adriatic means **reducing fuel consumption and emissions** as well as saving total transit times and road distances.



# How to quantify an Environmental Impact Assessment?

Assessment of expected criteria are classified as:

- None
- Probably small
- Significant
- Highly Significant





## What level is?

- A project with minimal or no adverse impact technical assistance projects on institutional development, computerization, and training
- Education and Health projects not involving construction
- Rehabilitation of a limited number of small buildings (e.g., schools or health clinics where health care waste is not an issue) – no changes in blueprint; and
- Institutional development, training and certain capacity building activities





# What level is?



## Hospital rehabilitation, Turkey



## What level is?

- Small scale irrigation and drainage projects
- Small-scale, relatively clean (gas or light diesel oil fired) thermal power plants, micro hydro power plants, and small sanitary landfills;
- Rehabilitating or maintaining an existing infrastructure (e.g., roads, power, transmission and irrigation networks)





## What level is?

- Large-scale conversion or degradation of natural habitats
- Extraction, consumption, or conversion of substantial amounts of forest
- Direct discharge of pollutants resulting in degradation of air, water or soil
- Production, storage, use or disposal of hazardous materials and wastes
- Risks associated with the proposed use of pesticides





THE GOVERNMENT OF  
THE REPUBLIC OF CROATIA  
Legislation Office

TWL SCIRIAS HR/2011/IB/FI/02

# What level is?



**Plovdiva Dam, Bulgaria**





# Peljesac bridge





## Peljesac bridge

PM Milanovic: "Peljesac bridge will be built for sure"

"The Peljesac bridge has been assessed in a feasibility study as the best way to connect the southernmost part of Croatia with the rest of the country and will be built for sure, Prime Minister Zoran Milanovic said"

15.07.2015 <https://vlada.gov.hr/news/pm-milanovic-peljesac-bridge-will-be-built-for-sure/17361>



## Case Study: Group discussion

### Key facts

- 2.4-km-long bridge will connect two parts of Croatia – Dubrovnik and divided by a 14-km stretch of territory belonging to Bosnia
- The total cost of the project will be €380 million, while the bridge itself will cost around €206 million
- Refer to handout



# Plastic bags levy





# Plastic bags – the problem

- Plastic bags usage in Ireland:
  - 328 bags per capita in 2003
  - 21 bags per capita in 2003
- Plastic bags as percentage of all litter
  - 5% in 2002
  - 0,13% in 2014



# Plastic bags - options

- Solution 1: Take no action on the matter;
- Solution 2: Voluntary reduction in plastic bag consumption;
- Solution 3: Set-up a Plastic-bag Police Team to take action, or
- Solution 4: Impose a levy on plastic bags.



# Plastic bags - impacts

- What are the possible impacts of chosen policy?
- Refer to handout for the checklist of questions.



# Plastic bags - impacts

- Where would you collect the information needed to analyze these questions?
- How to evaluate whether the policy worked?



# Making Environmental Impact Assessment effective

It must be:

– An integral part of the project  
development cycle

**Must be undertaken early  
enough to affect project design**

**Mitigation and monitoring  
developed in the process is  
implemented**

– Honest

**The IA must consider real  
alternatives**

**Impacts must be assessed  
honestly**

– Transparent & accessible

**The products must be clear and  
accessible to key actors**





# How do we Calculate IMPACT in Environmental Terms?

## Cost Benefit Analysis

- Personnel
- Tools
  - RIA Guidance
  - RIA Monitoring Tool – Unit Cost Database
  - RIA Monitoring Tool – RIA Calculator





# Cost Benefit Analysis

'Systematic process for calculating and comparing costs and benefits of a project, decision or government policy'

Limited economic capacity across Croatian Ministries

SO – you have to use:

Personnel available

Any available tools

Increase competence

RIAs of other countries, EU RIA's

OECD research





# Cost Benefit Analysis

- Who is going to carry this out?
  - RIA Co-ordinators?
    - Colleagues in Ministries?
- Has this been addressed – what needs to be done, who needs to be involved, who needs to give authority?
- How can GLO RIA team help?
- Using the guidance and tools available will improve competence – THIS IS NOT ROCKET SCIENCE





# THIS is ROCKET SCIENCE!





# RIA Guidance

USE ONLY NEW REVISED RIA GUIDELINES





# Feedback and Discussions





# RIA – Environmental Impact Assessment

Summary

and

**ANY QUESTIONS?**





# Thank You and Goodbye

