

# SUSTAINABLE DEVELOPMENT, ENVIRONMENT AND INFRASTRUCTURES

Strategic Reflection Forum

“The integration of South America and the role of the infrastructure”

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# TOPICS

Environmental sustainability criteria in the planning of infrastructures

- Previous ideas
- Focus
- Environmental and territorial effects

Incorporation of the infrastructures to the planning process (the case of the PEIT)

# ENVIRONMENTAL SUSTAINABILITY CRITERIA

## PREVIOUS IDEAS

- The sustainable Development as the center of the international agenda (Río 92): balance/juggling of objectives: social progress; economic development; and conservation of resources
- To integrate the environment in all policies that have an effect on the territory; and in phases of the process
- To incorporate the *territorial dimension*
- Transportation infrastructures have been pioneers in relation to integration

# FACTORS THAT MOTIVATE INTEGRATION

- Increase in the scale and complexity of the relations among action areas (globalization)
- Increase in the transformation capacity of the environment by means of technical opportunities and the available capital = increase in the geographical area of influence
- Dissatisfaction regarding the results of the traditional sectoral focuses (inefficiency related to *a posteriori* corrections)

## European references

- Integration strategy MA in transportation policy (1999)
- Guidelines for environmentally sustainable transportation (OECD – OCDE, in Spanish, 2002)
- Environmental and strategic assessment

# TERRITORIAL AND ENVIRONMENTAL EFFECTS OF THE INFRASTRUCTURES (1)

## **Economic and competitiveness:**

- Changes in transportation costs
- Changes in competitiveness conditions (sectors/territories)
- Creation of infrastructures = colonization of the territory

## **Accessibility and connectivity**

- Opportunities and threats: delocalization; markets
- Importance of anticipating and managing suitably

## **Territorial model: uses of soil and localization:**

- Polarization or re-balance?
- Conflicts among alternative uses

# TERRITORIAL AND ENVIRONMENTAL EFFECTS OF THE INFRASTRUCTURES (2)

## Environmental

- Energy consumption and natural resources
- Contribution to climate change (30% emissions)

## Nature and biodiversity

- Direct; habitat fragmentation
- Landscape and cultural heritage (deterioration, identity)

## Emissions and pollution of air, water and soil

- Degradation, erosion, soil sealing, noise

## Health, security and quality of life

- Functional and social segregation linked to types
- Accident rate and road security

# ARTICULATION AMONG TRANSPORTATION AND TERRITORIAL DEVELOPMENT POLICIES

Transportation (all types) more than infrastructure (DGTREN)

- Balance among “transnational” networks and “capilar” networks (national, regional ones)
- Actions in integrated territorial development strategies (according to characteristics of each territory)
- Environmental and territorial impact assessments (TIA) in programs and big infrastructure and transportation projects

# INFRASTRUCTURE IN THE PLANNING PROCESS. THE CASE OF THE PEIT

Diagnosis as a starting point:

- Predominance of negative trends against positive ones
- Derived character of the “demand” and transportation activity
- Difficulty related to change in “isolated” focus (cost-efficacy of the actions)
- Contradictions/balance among objectives: transportation-environment-territory
- Relevance of the problems in metropolitan and urban areas



# THE PROCESS OF THE PEIT

- Agreement Council of Ministries (July, 2004)
- Forums and previous queries
- Proposal document (December, 2004)
- Outreach, institutional debate and public participation
- Environmental assessment
- Approval by Council of Ministries (July, 2005)
- Sectoral plans and other development instruments (2006-2007)
- Follow-up, assessment and revision

# ENVIRONMENTAL AND TERRITORIAL OBJECTIVES OF THE PEIT

- Equitable accessibility conditions
- Modal balance (road, RW –FC, in Spanish, ports and airports) and integration of the system
- Social cohesion
- Energy efficiency, reduction of global impacts
- Improvement in environmental quality
- Fulfillment of environmental agreements

# ENVIRONMENTAL ACTIONS IN THE PEIT

- Environmental objectives
- Report on environmental sustainability (Directive 2001 CE)
- Social and public participation
- Environmental memory agreed by the Ministries of Development and the Environment
- Incorporation of the recommendations of the environmental memory
- Follow-up instruments

# BASIC ENVIRONMENTAL CRITERIA

Integration of the inter-modal transportation system:

- Travelers: public transportation
- Goods: RW and sea

Energy and environmental efficacy

- Reduction of transportation intensity in the economy
- Demand management

Fulfillment of agreements related to Climate Change

- NP of allocation of emissions
- Quality of the air in urban zones

Environmental assessment and follow-up

# RECOMMENDATIONS OF THE ENVIRONMENTAL MEMORY

- Improvement of the methodologies for socio-economic and environmental assessment
- Additional study on the impact of the infrastructures in the natural surrounding
- Environmental objectives in the follow-up system of the PEIT
- Integration of sectoral policies: climate change, energy, cohesion, etc.
- Promotion of social participation

# CONCLUSIONS - MARGIN OF ACTIONS

- Prioritization of transverse aspects (global ones and territorial dynamics in design/planning/management)
- Prioritization of environmental objectives = reinforcement of actions related to compatibility/fulfillment of environmental agreements
- To relate territorial and environmental objectives in all the phases of the process: decision/planning/performance
- Inter-modal integration
- Adaptation to the institutional management structure
- Improvement in assessment system; knowledge and information
- Promotion of innovation
- Transparency and fostering of participation