

Trans-European Networks: Policy and Appraisal

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*Presentation to Seminars on EU Spatial and Transport Policies,
Tokyo and Sendai, June 2006*



Overview

- Background
- The Common Transport Policy and the TENs
- Appraising Trans-European Network Projects
- Improving policy formation
- The appraisal framework
- Conclusions

Background

- Trans-European Networks (TENs) developed as a means of using core infrastructure to further the integration of the European Union.
- TENs would serve both to foster competitiveness (by reducing costs) and enhance cohesion (through improving accessibility, especially in peripheral regions).
- The implementation of the TENs involves a multi-billion euro programme of investment
 - only a small part funded centrally by the EU;
 - most of the investment from national and regional public authorities and the private sector.
 - appraisal has to meet the requirements of many different potential funders.
- Common Transport Policy sets only broad framework of policy objectives and rules
- Implementation of policy relies on transport policies of national and regional authorities which affect appraisal and implementation of TENs projects.
- Leads to conflicts in policy and implementation which distort impacts, especially spatial impacts.
- Need for assessment of implications for evaluation

Common Transport Policy and TENs

- CTP in Treaty of Rome
- Subsidiarity: international transport and cross-border issues
- CTP history: active and passive periods
- Increasing emphasis in past 15 years
- Competitiveness and cohesion goals
- Transport policy and non-transport objectives
- Core networks and economic integration

TENs development

- Essen projects 1994
 - 14 high level projects – all in advanced state o planning
 - Political nature of choice – modes and countries covered
- Consolidation, development and TINA
 - More strategic phase – need to extend to Central and Eastern European countries, including links to Russia
 - Networks (2001): 75200 km of roads, 78000 km of railways, 330 airports, 270 international seaports, 200 inland ports + Galileo satellite navigation system.
- Lack of completion, need for renewal
 - 2003 only 2/14 Essen projects complete, only 5/14 expected complete by 2007 (Van Miert Group)
 - But 16 more priority projects added + 'Motorways of the Sea'
- The funding gap
 - Cost ~ €600bn
 - EU funds €23.2bn + EIB €6.6bn

The projected size of the trans-European transport network in 2010*

** according to Decision 1692/96/CE as amended by Decision 1346/2001/CE*

- 75 200 kilometres of roads
- 78 000 kilometres of railways
- 330 airports
- 270 international seaports
- 210 inland ports
- traffic management systems, user information and navigation services

TEN-T – costs and financing

total estimated costs	€ 400 000 million (1996 estimate)
estimated total funding	€ 19 000 million per year (average 96/97)

Community funding in 2000-2006:

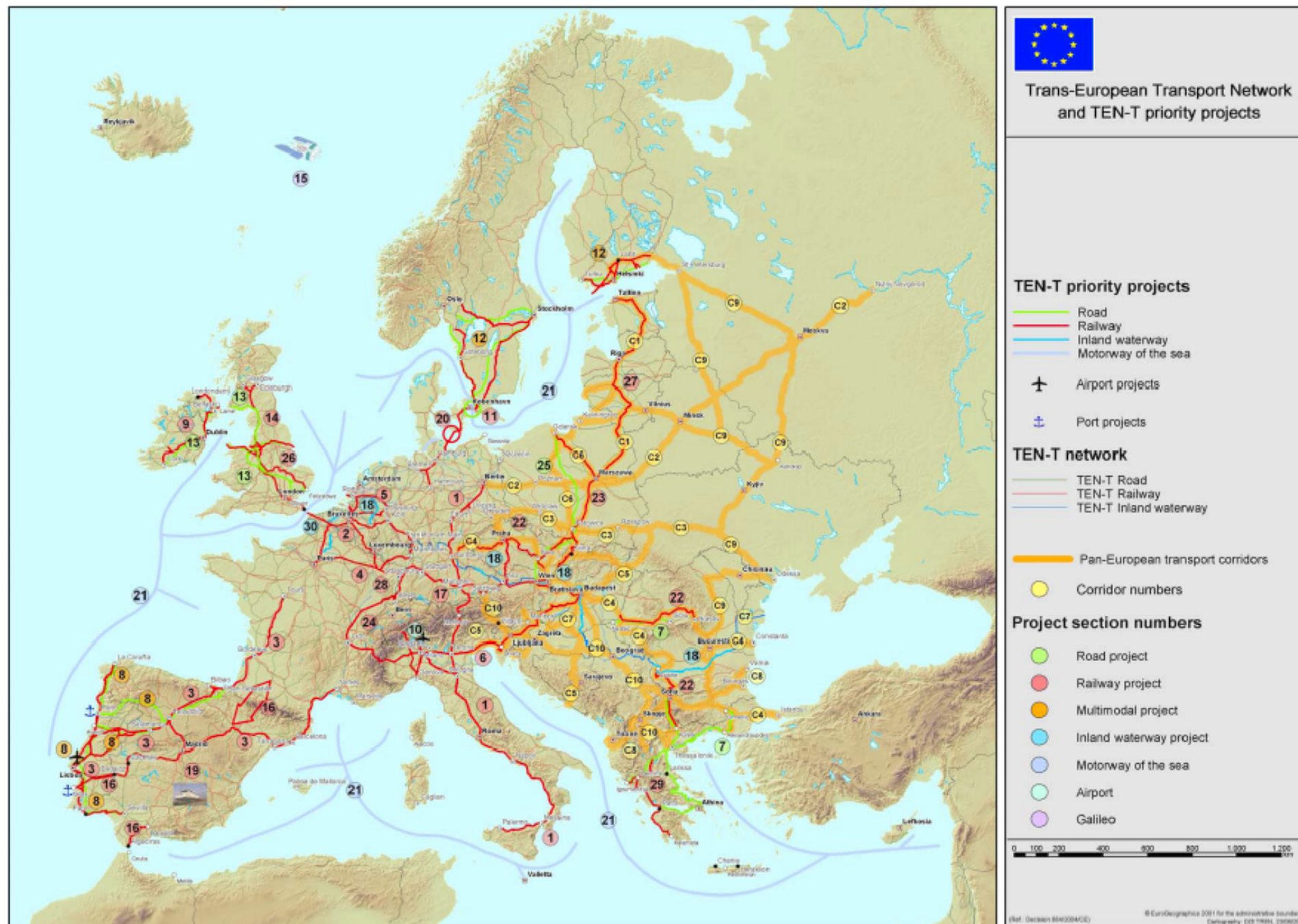
trans-European networks budget	€ 4 200 million
Cohesion Fund	€ 9 000 million
Structural Funds	€ 4–6 000 million
annual loans by the European Investment Bank (in 2000)	€ 6 600 million

Van Miert Recommendations (1)

- Carrying out priority projects by 2020
 - Finishing 5 of the Essen projects before 2010 (List 0)
 - Starting new 22 priority projects in an expanded Union with a time horizon of 2020 (List 1)
 - Four further projects to be agreed (List 2)
 - Projects for territorial cohesion (List 3)
 - Horizontal or cross-cutting priorities aimed at a better management of the European transport system
- Facilitating the creation of the trans-European network
 - Costs of priority projects: €235 billion (0.16% of GDP), total cost of network: > €600 billion,
 - Member States invest < 1% GDP in transport infrastructure and only one-third of this TENs
 - Cross-border projects held up through difficulty of coordination

Van Miert Recommendations (2)

- Guaranteeing funding for priority projects
 - EU share in funding TENs only about €20 billion 2000-2006.
 - Need for more active role in financing cross-border projects
 - Need to develop the financing capacity of EIB
 - Conflict between investment needs and constraints on public expenditure
 - Initiatives to promote public-private partnerships.
- Better coordination of projects
 - Operational coordination between States
 - Joint appraisal procedures for cross-border projects
- Preparing the next stages in the construction of the network
 - Priority projects defined by transnational traffic on major trans-European axes.
 - Need for definition of a core network



(C)Prof. Roger VICKERMAN, Institute for Transport Policy Studies, 2006

List 0 (Part 1)

<i>Projects completed by 2007</i>	<i>Date for start of operation</i>
PP2 High Speed Train Paris-Brussels-Cologne-Amsterdam London	2007
PP5 Betuwe Line	2007
PP9 Rail Line Cork-Dublin-Belfast-Stranraer	2001
PP10 Malpensa Airport (finished)	2001
PP11 Öresund fixed link (finished)	2000

Source: European Commission (2003)

List 0 (Part 2)

<i>Projects due for completion by 2010</i>	<i>Date for start of operation</i>
PP1 Berlin-Verona	
- Nürnberg-München	2006
- Kufstein-Innsbrück	2009
PP3 Southern TGV	
- Madrid-Barcelona	2005
- Barcelona-Figueres-Perpignan	2008
- Madrid Vitoria-Hendaya	2010
PP4 TGV Est	
- Paris-Baudrecourt	2007
- Metz-Luxembourg	2007
- Saarbrücken-Mannheim	2007
PP6 Lyon-Torino-Trieste	
- Torino-Venezia	2010
PP7 Greek Motorways	
- Via Egnatia	2006
- Pathe	2008
PP8 Multimodal link Portugal/Spain-rest of Europe	
- Rail line Coruña-Lisboa-Sines	2010
- Rail line Lisboa-Valladolid	2010
- Rail line Lisboa-Faro	2004
- Road Coruña-Lisboa	2003
- Road Lisboa-Valladolid	2010
- Road Seville-Lisboa	2001
PP12 Nordic Triangle	
- Road and rail projects in Sweden	
- Road link Helsinki-Turku	2010
- Rail line Kerava-Lahti	2006
PP13 UK/IRL/Benelux road link	2010
PP14 West Coast Main Line (UK)	2007

Source: European Commission (2003)

List 1

<i>Projects due to start by 2010 and completion by 2020</i>	<i>Dates for completion</i>
1. Galileo	2008
2. Eliminating the bottlenecks on the Rhine- Main- Danube	2011-2019
3. Motorways of the Sea	n.d.
4. Mixed railway line Lyon-Trieste/Koper-Ljubljana-Budapest	2011-2017
5. Mixed Railway line Berlin-Verona –Napoli/Milano-Bologna	2006-2015
6. Mixed railway line Greek/Bulgarian border- Sofia –Budapest – Wien -Praha- Nürnberg	2010-2015
7. High Speed Railway lines, South-West	2010-2020
8. Mixed railway line Gdansk-Warszawa-Brno/Zilina	2010-2015
9. Mixed railway line Lyon/Genova –Basel – Duisburg - Rotterdam/Antwerp	2009-2018
10. Mixed railway line Paris - Strasbourg - Stuttgart –Wien –Bratislava	2010-2015
11. Interoperability of the high-speed rail network of the Iberian Peninsula	n.d.
12. Multimodal links Ireland/UK/Continental Europe	2008-2015
13. Rail/road bridge over the Strait of Messina	2015
14. Fixed link rail/road across the Fehmarn Belt	2014
15. The Nordic Triangle	2014-2015
16. Multimodal connection Portugal/Spain with the rest of Europe	n.d.
17. Motorway Greek/Bulgarian border -Sofia-Nadlac (Budapest)/(Constanta)	2007-2010
18. Motorway Gdansk –Katowice –Brno/Zilina – Wien	2009-2010

Source: European Commission (2003)

List 2

Longer-term Priority Projects

1. New high-capacity railway crossing of the Pyrenees
 2. Rail Baltica: Helsinki-Tallinn-Riga-Kaunas-Warszawa
 3. Dedicated freight railway line Gdansk-Bydgoszcz-Katowice-Zwardon
 4. Inland waterway Seine-Scheldt
-

Source: European Commission (2003)

List 3

<i>Projects for territorial cohesion</i>	<i>Date for completion</i>
1. Accessibility and interconnections of networks	
- Multimodal logistic centres in Slawkow (Poland) with connections to the Russian gauge rail network	2012
- Railway line Bari–Durres-Sofia-Varna/Bourgaz (Black Sea)	2020
- Railway line Napoli-Reggio Calabria – Palermo	2015
- Road/Railway Corridor linking the West and Dublin	2010
- Limassol port and road access	2015
- Larnaka port and road access	2020
- Ports of Valletta and Marsaxlokk	2012
- Ionian/Adriatic intermodal Corridor	2015
- Road Dover-Fishguard (except M25)	2015
2. Cross-border connections	
- Motorway Dresden/Nürnberg-Praha-Linz	2010
- Railway line Praha/Linz	2010
- Motorway Zilina - Bratislava- (Wien)	2012
- Railway line Maribor-Graz	2015
- Motorway (Ljubljana)-Maribor-Pince-Zamardi-(Budapest)	2012
- Road permeability through the Pyrenees	2010

Source: European Commission (2003)

EU Funding for TENs

€ billion	1993-1999	2000-2006 EU15	2000-2006 EU25
TEN Budget	2.2	4.2	4.4
Cohesion Funds	7.6	9.0	12.8
ERDF*	5.0	6.0	6.0
ISPA	--	2.1	na
Total	14.8	21.3	23.2

**Estimate DG TREN of the share allocated to TEN-T*

Policy conflicts in TENs

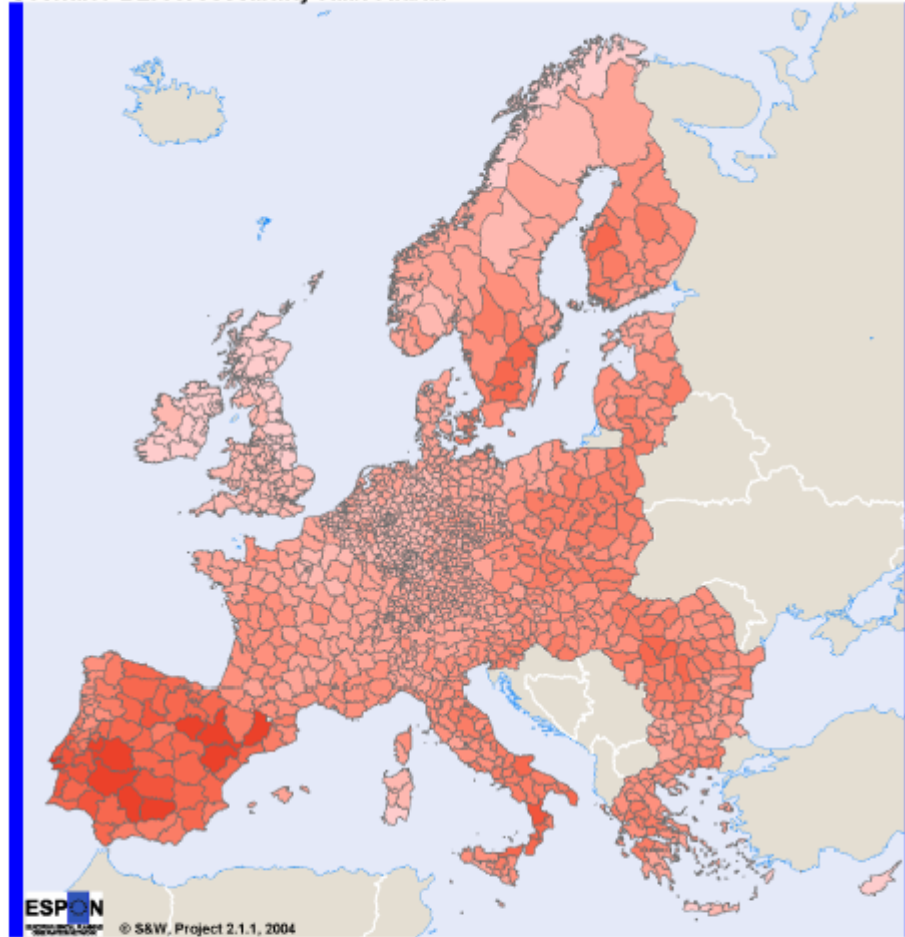
- Lack of clarity in responsibility
 - TENs an EU concept but responsibility for decisions with member states, local/regional government or private sector
- Intergovernmental/state-centric model
 - only matters on which cross-border agreement is needed (i.e. the strictly international elements of the TENs) should be resolved at EU level.
 - strict subsidiarity applies.
- Federal/multi-level governance model
 - assign specific functions to different levels on the basis of where they could be most efficiently administered
 - establish institutional structures to enable multi-level decision-making and their policing
- EU level transport policy addresses two fundamental concerns
 - development of a world class competitive economy (Lisbon Agenda)
 - increased cohesion within and between the member states
 - via initiatives such as TENs, 'fair and efficient' pricing, etc
- National level takes decisions and coordinates funding
- Problems
 - Horizontal conflicts with other policy areas
 - Vertical conflicts through policy refraction

Appraising TENs Projects

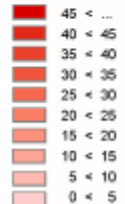
- EU-wide issues: added value to the EU of the network and of any link.
 - Integration effect in terms of contribution to economic growth
 - Cohesion impact
 - Redistribution and the ‘two-way road’ effect
 - Empirical evidence:
 - increase in welfare from completion of the TENs typically < 4 per cent of regional GDP
 - only 1/10 change in relative accessibility
 - can be negative
 - Regions may campaign for projects which harm them
 - EU may be promoting projects which ultimately promote economic divergence
 - The policy structure fails to establish a clear dialogue between the different levels of government to reduce asymmetric information problem

Changes in accessibility and GDP (SASI model)

Scenario B2: Accessibility rail/road/air



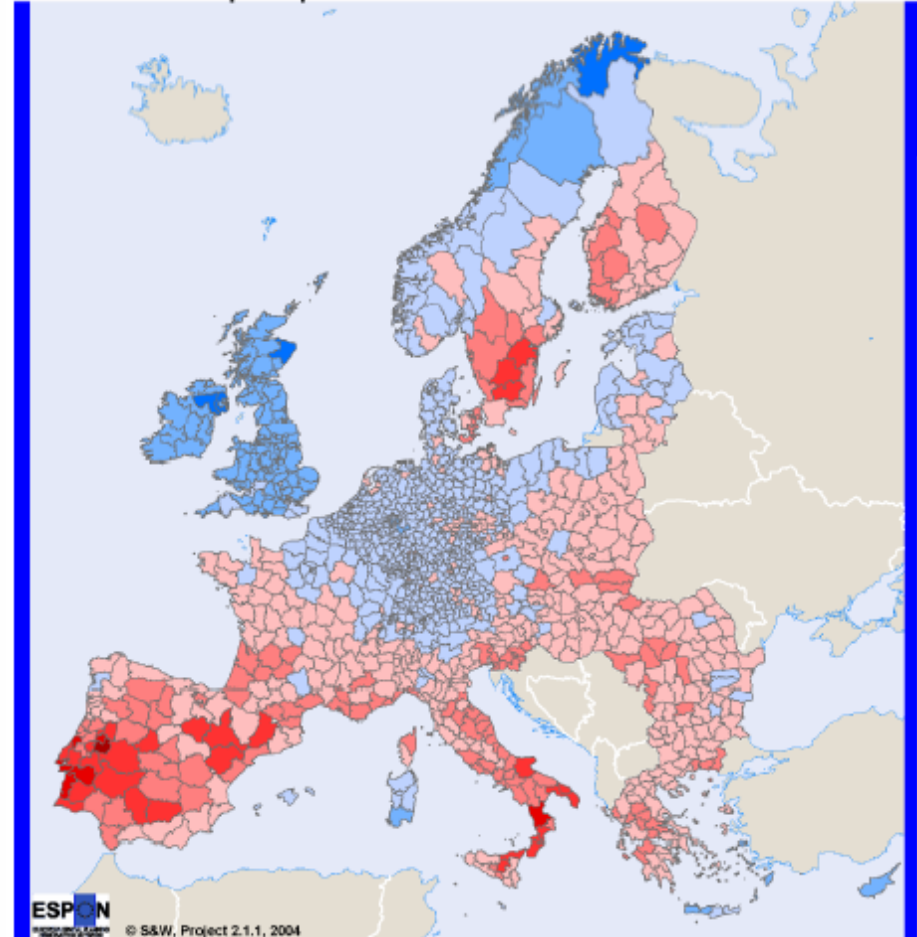
Difference to reference scenario in 2021 (%)



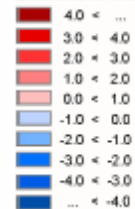
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Source: SASI Model

Scenario B2: GDP per capita



Difference to reference scenario in 2021 (%)



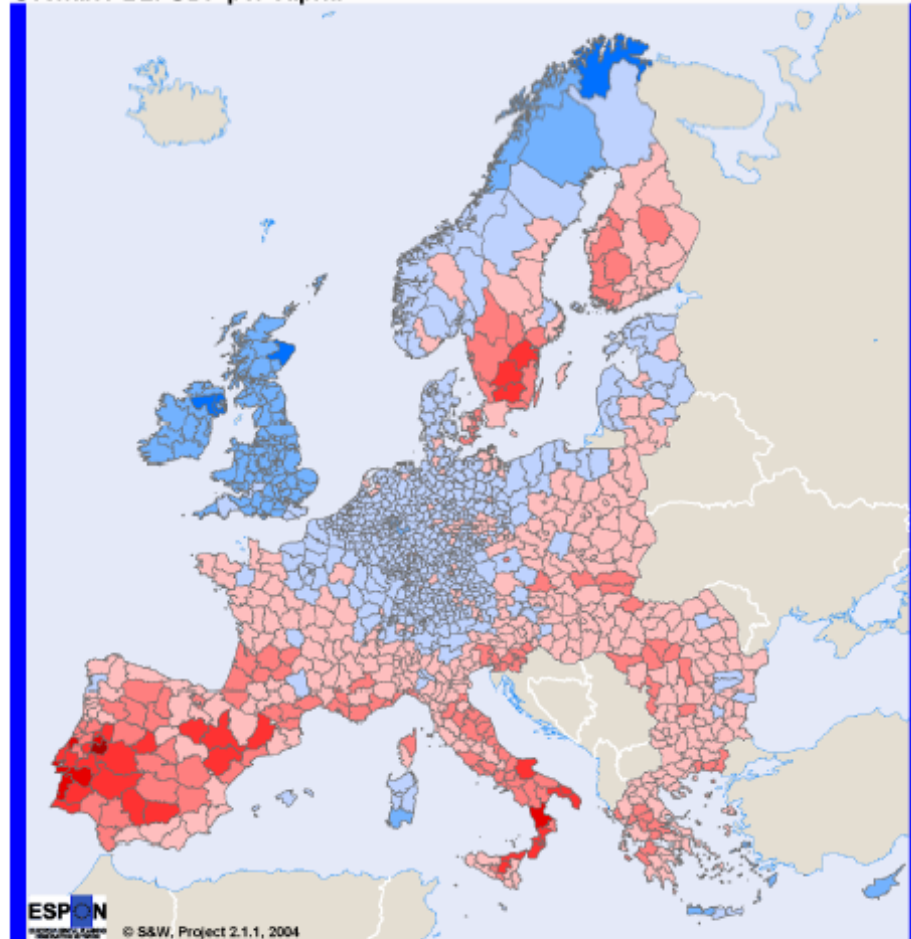
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Source: SASI Model

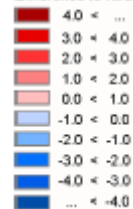
Source: ESPON 2.1.1

Comparison of alternative model results: SASI (left) and CGEurope (right)

Scenario B2: GDP per capita



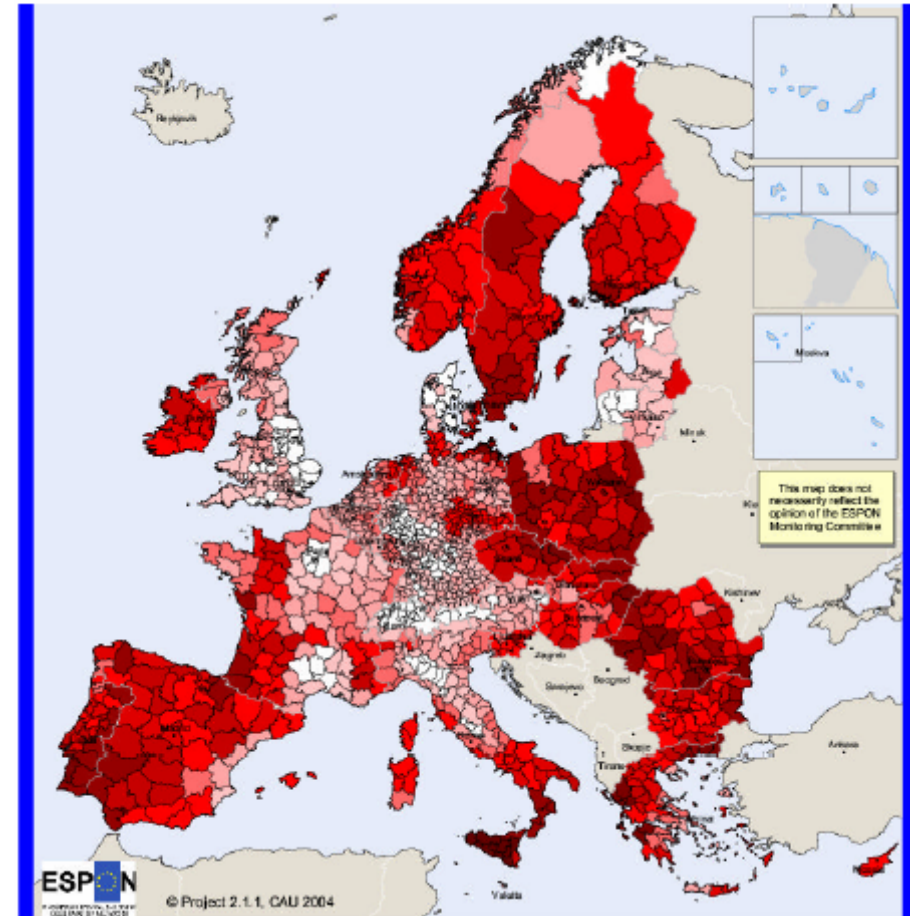
Difference to reference scenario in 2021 (%)



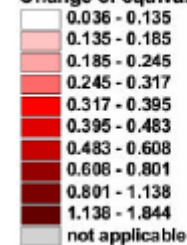
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Source: SASI Model

Map 4.13 Changes of regional welfare in scenario B2



Change of equivalent variation in % of GDP



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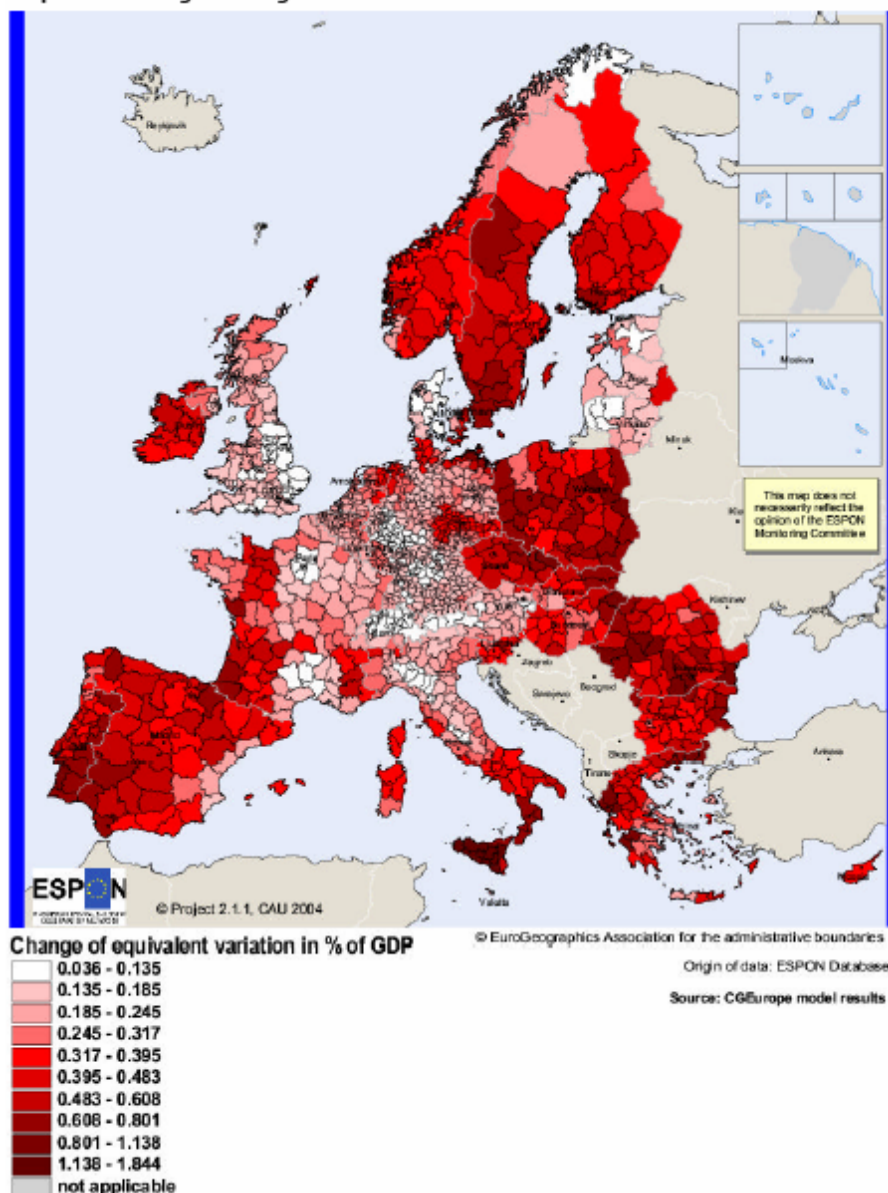
Origin of data: ESPON Database

Source: CGEurope model results

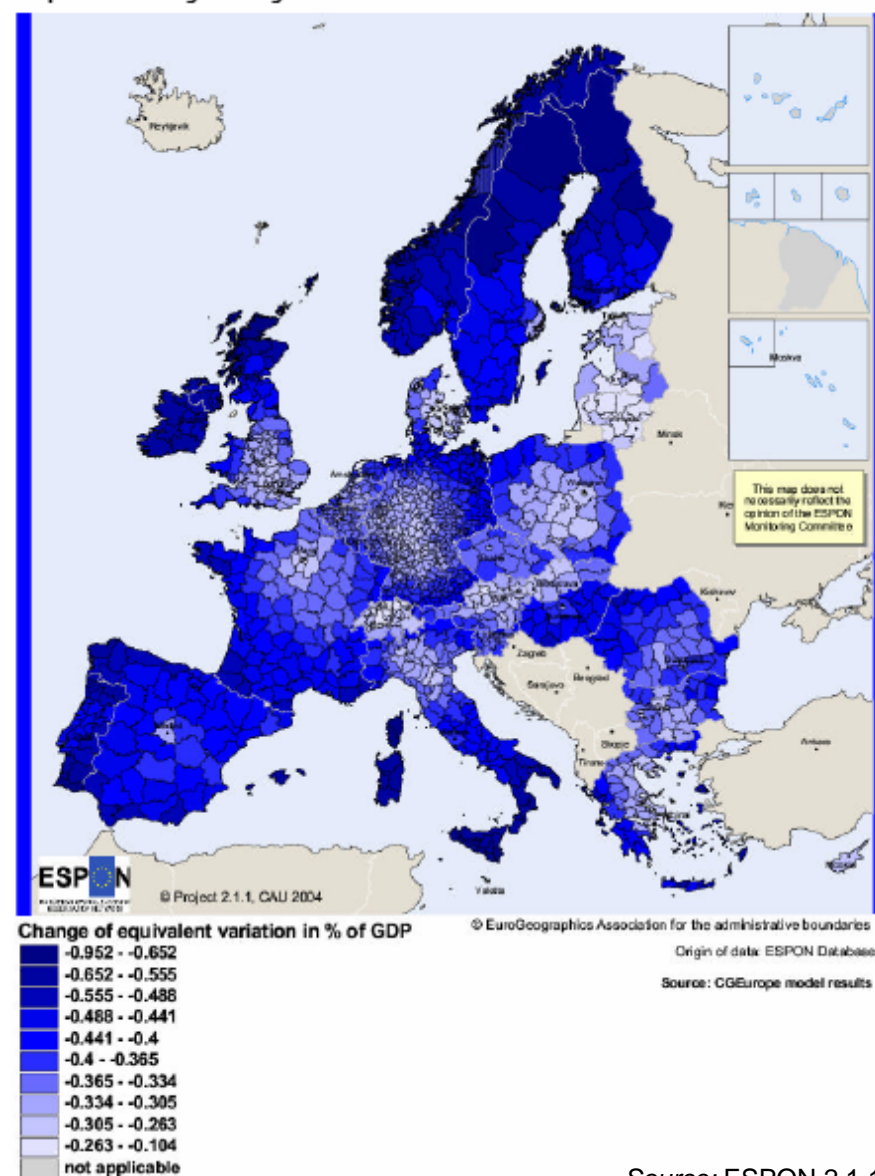
Source: ESPON 2.1.1

Comparison of alternative scenarios: infrastructure vs pricing (CGEurope model)

Map 4.13 Changes of regional welfare in scenario B2



Map 4.16 Change of regional welfare in scenario C3



Source: ESPON 2.1.1

Appraising TENs Projects

- EU-wide issues
 - Contribution to integration
 - Contribution to cohesion
- Spillover issues
 - Interoperability
 - Transit traffic
 - Budget shifting
 - Risk shifting
- Objective issues
 - Accessibility – to whom/where, for what
 - Economic performance – output or productivity
 - Welfare
- Investment vs. performance issues
 - Capacity and congestion
 - Sustainability and intermodality
 - Managing the networks

Improving policy formation

- Subsidiarity and governance
- Vertical inconsistencies
 - EU policy as a 'policy of convenience'
 - Used more in Objective 1 regions and new member states – financial leverage
 - Strong use in Switzerland – own policy agenda
- Horizontal inconsistencies
 - Interaction with other sectors
 - Transport as agent of economic growth conflicts with transport as destination of public funds.
 - Transport as agent of enhancing competitiveness conflicts with transport as agent of improving accessibility and cohesion.
 - Transport as source of welfare through mobility conflicts with need to control harmful effects on the environment.
 - Interaction within transport
 - Infrastructure as means of completing networks may conflict with need to regulate use of networks to reduce congestion and make users more aware of full resource costs of transport
 - Is new infrastructure most effective way of achieving overall sustainable transport objectives?

The appraisal framework

- Network effects
 - Competitive and complementary effects
 - Project definition, scale and spillovers
- Forecasting errors
 - Scale and longevity
 - Sensitivity
- Financing issues
 - Who pays?
 - Who bears the risk?

Conclusions

- The TENs concept: pros and cons
- Delivering the TENs: optimism, misunderstanding and mistakes
- Evaluating the TENs: added value, redistribution and network effects
- TENs, transport policy and policy delivery
- The appraisal framework
- Success or failure – only time will tell, but at what cost?