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The ESPON 2013 Programme

TIPTAP: Territorial Impact Package for Transport and Agricultural Policies

Applied Research Project 2013/1/6

Final Report – Annexes



EUROPEAN UNION
Part-financed by the European Regional Development Fund
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This report presents the draft final results of an Applied Research Project conducted within the framework of the ESPON 2013 Programme, partly financed by the European Regional Development Fund.

The partnership behind the ESPON Programme consists of the EU Commission and the Member States of the EU27, plus Iceland, Liechtenstein, Norway and Switzerland. Each partner is represented in the ESPON Monitoring Committee.

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ANNEXES to the SCIENTIFIC REPORT

ANNEX 1 – LIST of INDICATORS

Two sets of indicators, one for each sectoral policy considered.

1. Transport policies indicators:

Variable		Definition
E1	Productivity of inland transport infrastructure	Total traffic/km road and rail (passenger and tons / km)
E2	Productivity of airports	N° of persons noEU/ total N° of persons
E3	Economic growth	GDP variation including the marginal increase due to new infrastructure (€/capita)
E4	Congestion costs	Time on congestion/total time
Q1	Traffic passing through	Non-intraNUTS2 road freight traffic/total freight traffic (no internal)
Q2	Emissions	Road emissions for cars and trucks in MTonnesCO2 / usable land (million Tonnes CO2 / km2)
Q3	Safety	Traffic on motorways / (traffic 2-lane road + traffic on motorways)
Q4	Market opportunities	GDP at less than 3 hours multimodal (million €)
I1	Landscape fragmentation	Km of motorway + km of 2track rail / surface (km/km2)
I2	Exposure to external visitors	All passengers reaching the NUTS3 at more than 3h (number of passengers)
I3	Regional integration	Average time by road to other NUTS3 capitals in the same NUTS2 (time in hours)

2. CAP indicators:

Variable		Definition
E1	Economic growth	Modulation/Total GDP; modulation = [(regional increase in P2) – (regional cut in P1)] ¹
E2	Unemployment	(Unemployment rate)*(Share agricultural employment)*(PIM_E1 normalised)
E3	Tourism diversification	(Number of beds in rural areas/Km2 in agricultural areas)*(PIM_E2 normalised)
Q1	Environmental quality	((Total agricultural area entered into agri-environment schemes under Pillar2 of Cap)/Total agricultural area)*100
Q2	Community viability	[((Share of areas occupied by farms<10ha)+(share of population aged >65)+(share of employment in agriculture))*(PIM_E1 normalised)]/3
Q3	Emissions	Variation in livestock emissions (Tons CH4 per year)
Q4	Risk of soil erosion	Areas at risk of soil erosion (ton/ha/year)*(5% of areas of farms <10ha/total agricultural areas)*100
I1	Landscape diversity	(5% of areas of farms <10ha/total agricultural areas)*100
I2	Community identity	[(0,1*(Share of people aged >15 and <65) + (share of employment in agriculture)+(unemployment rate))*(PIM_E1 normalised)]*100/3
I3	Heritage products	[(Employment in agriculture/ Gross Fixed Capital Formation in agriculture)*(PIM_E1 normalised)]/Max value

¹ Regional cut in P1 = 0,2*0,4*Share of regional P1*Average Annual (2007-2013) National P1 budget
Regional increase in P2= (0,25*National P1 CUT)*(Share of regional P2).
Data on P1 and P2 regional shares are derived from ESPON DATABASE 2007, ESPON Project 2.1.3.

ANNEX 2 – LIST of DATABASE

The datasets uploaded on the ESPON INTRANET are as follows:

File name	Scenario	Data	Metadata
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 01	A – baseline	PIM	a
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 02	A – baseline	Sensitivity	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 03	A – baseline	Desiderability	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 04	A – baseline	Vulnerability	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 05	A – baseline	TIM	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 06	A – baseline	TIM – PM	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 07	A – baseline	Flags	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 08	B – Infrastructure	PIM	a
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 09	B – Infrastructure	Sensitivity	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 10	B – Infrastructure	Desiderability	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 11	B – Infrastructure	Vulnerability	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 12	B – Infrastructure	TIM	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 13	B – Infrastructure	TIM – PM	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 14	B – Infrastructure	Flags	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 15	C – Pricing	PIM	a
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 16	C – Pricing	Sensitivity	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 17	C – Pricing	Desiderability	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 18	C – Pricing	Vulnerability	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 19	C – Pricing	TIM	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 20	C – Pricing	TIM – PM	z
ESPON_2013_1_6_TIPTAP TRANSPORT DATA 21	C – Pricing	Flags	z
ESPON_2013_1_6_TIPTAP_CAP_DATA 1.xls	CAP	PIM	
ESPON_2013_1_6_TIPTAP_CAP_DATA 2.xls	CAP	Normalised PIM	
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ANNEX 6 – LIST of MISSING DATA

FOR CAP DATASETS:

CH, FR91-92-93-94, IS, LI, and NO

CAP DATASET – EU15

PIM_E1

BE10; DE30/50; ES53/63-4; FI18; UKI1

PIM_E2

BE10; DE30/50; ES53/63-4; FI18; UKI1; FI20; PT20/30

PIM_Q1

DECO; DEE1-2-3; UKI-2; PT20/30

DATA in PIM_Q2 (TOT 25 MISSING)

BE10; DE30/50; ES53/63-4; FI18; UKI1; DECO; DEE1-2-3; UKI-2; PT20/30; AT13; DE12/60/91-2/C0/D3

DATA in PIM_Q4 (TOT 40 MISSING)

BE10; ES30/63-4/70; FI13-8-9-A/20; GR30/41; PT20/30; SE11-2/21-2-3/31-2-3; UKI1-2; AT13; DE12/30/50/60/91-2/C0/D3/E1-2-3; UKI1-2

DATA in PIM_I1 (TOT 20 MISSING)

DECO; DEE1-2-3; UKI-2; PT20/30; AT13; DE12/30/50/60/91-2/C0/D3/E1-2-3; UKI1-2

DATA in PIM_I2 (TOT 15 MISSING)

BE10; DE30/50; ES53/63-4; FI18; UKI1; FI20; PT20/30

DATA in PIM_I3 (TOT 81 MISSING)

BE10; DE30/41-2/50; ES53/63-4; FI18; UKI1; all BE; DE11-2-3-4/41-2/B1-2-3; all ES; all IE; all IT; PT16-7-8; all Se.

MISSING DATA CAP – EU12

DATA in PIM_E1

No missing

DATA in PIM_E2

all SI

DATA in PIM_E3

all SI NUTS

DATA in PIM_Q1

All BG and all RO

DATA in PIM_Q2

All BG, all RO, all SI

DATA in PIM_Q3

All BG and all RO

DATA in PIM_Q4

All BG and all RO, CY00, MT00, SK01

DATA in PIM_I1

All BG and all RO

DATA in PIM_I2

All SI NUTS

DATA in PIM_I3

All BG, CZ01, all EE, all HU, all MT, all PL, all RO, all SI.

ANNEX 7 – LIST of PARTICIPANTS to EXPERTS MEETINGS

List of participants to the First Expert Meeting, VU University Amsterdam, March the 4th 2009

Prof. dr. Peter Nijkamp, Department of Spatial Economics, VU University Amsterdam.

Prof. dr. Piet Rietveld, Department of Spatial Economics, VU University Amsterdam.

Prof. dr. Roberto Camagni, Politecnico di Milano.

Dr. Henri de Groot, Department of Spatial Economics, VU University Amsterdam.

Dr. Jan Rouwendal, Department of Spatial Economics, VU University Amsterdam.

Dr. Frank Bruinsma, Department of Spatial Economics, VU University Amsterdam.

Dr. Gert-Jan Linders, Department of Spatial Economics, VU University Amsterdam.

Dr. Eveline van Leeuwen, Department of Spatial Economics, VU University Amsterdam.

Ceren Ozgen, Department of Spatial Economics, VU University Amsterdam.

Ahu Gulumser, Urban and Regional Planning Department, Istanbul Technical University

Dr. Eng. Andreu Ulied, MCRIT Barcelona

Efrain Larrea, MCRIT Barcelona

Dr. Camilla Lenzi, Politecnico di Milano.

Marian Raley, School of Agriculture, Food and Rural Development, Newcastle University.

Ron Vreeker, ARCADIS Nederland.

List of participants to the Second Expert Meeting, MCRIT Barcelona, April the 28th 2009

Sergi Lozano Sole - IET (Institut d'Estudis Territorials) / Public enterprise.

Josep Prat Roura - IET (Institut d'Estudis Territorials) / Public enterprise.

Chris Kunigenas - UB (Universitat de Barcelona) / University.

Carlos Aquirre - CPSV - UPC (Centre de Política de Sòl i Valoracions - Universitat Politècnica de Catalunya) / University.

Carlos Marmolejo - CPSV - UPC (Centre de Política de Sòl i Valoracions - Universitat Politècnica de Catalunya) / University.

Meritxell Font - MCRIT / Private enterprise.

Javier Villamayor - Diputació de Barcelona / Regional Government.

Ramon Ruiz - Diputació de Barcelona / Regional Government.

Andreu Orte - Diputació de Barcelona / Regional Government.

Andreu Ulied, MCRIT, Barcelona.

Prof. Dr. Roberto Camagni, Politecnico di Milano.

Dr. Camilla Lenzi, Politecnico di Milano.

Frank Bruinsma, Department of Spatial Economics, VU University Amsterdam.

Ron Vreeker, ARCADIS Nederland.

Efrain Larrea, MCRIT Barcelona.

List of participants to the Third Expert Meeting, University of Newcastle upon Tyne, Newcastle, May the 12th 2009

Lionel Hubbard, School of Agriculture, Food and Rural Development, Newcastle University.

Carmen Hubbard, School of Agriculture, Food and Rural Development, Newcastle University.

David Harvey, School of Agriculture, Food and Rural Development, Newcastle University.

Philip Cain, School of Agriculture, Food and Rural Development, Newcastle University.

Eric Ruto, School of Agriculture, Food and Rural Development, Newcastle University.

Charles Scott, School of Agriculture, Food and Rural Development, Newcastle University.

Mark Shucksmith, – School of Architecture, Planning and Landscape, Newcastle University.

Guy Garrod, School of Agriculture, Food and Rural Development, Newcastle University.

Prof. Dr. Roberto Camagni, Politecnico di Milano.

Dr. Camilla Lenzi, Politecnico di Milano.

Frank Bruinsma, Department of Spatial Economics, VU University Amsterdam.

Matthew Gorton School of Agriculture, Food and Rural Development, Newcastle University.

Marian Raley School of Agriculture, Food and Rural Development, Newcastle University.

Ron Vreeker, ARCADIS Nederland.

ANNEX 8 - LIST of ABBRAVIATIONS and GLOSSARY

CAP Common Agricultural Policy

CBA Cost Benefit Analysis

CTP Common Transport Policy

DG-ECFIN EC's Directorate General for Economy and Finance

DGTREN EC's Directorate General for Transport and Energy

DGREGIO EC's Directorate General for Regional Policy

EC European Commission

EEA European Environmental Agency

EET European Energy and Transport

ETS EU Emissions Trading System

EU12 Czech Republic, Cyprus, Hungary, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Poland, Malta, Romania, Bulgaria

EU15 Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and United Kingdom, Austria, Finland and Sweden

HST High-Speed Trains

ICT Information and Communication Technology

IT information technology

ITS Intelligent Transport System

IWW Inland Water Ways

JRC European Commission's Joint Research Centre

GDP Gross Domestic Product

GHG Greenhouse Gas

MCA Multi Criteria Analysis

NCT Neighbouring Countries in TRANS-TOOLS

NST/R Standard Goods Classification for Transport Statistics (Nomenclature uniforme des marchandises pour les statistiques des transports)

NUTS Nomenclature of Territorial Units for Statistics

PB Pocket Book
PPP Public-Private Partnership
R&D Research and Development
RTD Research in Transport Development
S&T Science and Technology
SDS Sustainable Development Strategy
TEN-T Trans-European Network for Transport
SSS short sea shipping
TENs Trans European Transport Networks
TEM Trans European Motorways
TER Trans European Railways
TT TRANS-TOOLS
UCEs Units of Carbon Entitlements

ANNEX 9 – LIST of REFERENCES²

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² This Annex groups two different lists indicated in the document TPG_guidance_Applied_Research_February 2009, Annex 10 page 6: 1) the list of references, including the use of results from projects outside the ESPON 2013 Programme; 2) Bibliography.

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ANNEX 10 – LIST of PUBLICATIONS of the TPG MEMBERS RESULTING from the IMPLEMENTATION of the TARGETED ANALYSIS

Dissemination activities will take place from September 2009 (see the Inception Report p. 62). Dissemination activities have already taken place but publications are still under way.