ESPON

ADES

Airports as Drivers of Economic Success in Peripheral Regions

Targeted Analysis 2013/2/17

Annexes | Version 1 30/11/2012

EUROPEAN UNION
Part-financed by the European Regional Development Fund
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This report presents the interim results of a Targeted Analysis 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.

This report does not necessarily reflect the opinion of the members of the Monitoring Committee.

Information on the ESPON Programme and projects can be found on www.espon.eu

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This basic report exists only in an electronic version.

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Annexes to the Scientific report

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Annex 1. Data and dataset provided to the ESPON database

Regions

European random sample, 336 NUTS2 or NUTS3

Source: Eurostat, BAKBASEL

Tab. **Error! No text of specified style in document.**-1 Austria, NUTS2

NUTS	Name	Corecity
AT11	Burgenland	Eisenstadt
AT12	Niederösterreich	St Pölten
AT13	Wien	Wien
AT21	Kärnten	Klagenfurt
AT22	Steiermark	Graz
AT31	Oberösterreich	Linz
AT32	Salzburg	Salzburg
AT33	Tirol	Innsbruck
AT34	Vorarlberg	Bregenz

Tab. **Error! No text of specified style in document.**-2 Belgium, NUTS2

NUTS	Name	Corecity
BE1	Bruxelles / Brussels	Bruxelles
BE21	Prov. Anvers	Antwerpen
BE22	Prov. Limbourg	Hasselt
BE23	Prov. Flandre Orientale	Gent
BE24	Prov. Brabant Flamand	Leuven
BE25	Prov. Flandre Occidentale	Brugge
BE31	Prov. Brabant Wallon	Wavrre
BE32	Prov. Hainaut	Charleroi
BE33	Prov. Liège	Liege
BE34	Prov. Luxembourg	Arlon
BE35	Prov. Namur	Namur

Tab. **Error! No text of specified style in document.**-3 Switzerland, NUTS2

NUTS	Name	Corecity
CH01	Genferseeregion (GE, VD, VS)	Genève
CH02	Espace Mittelland (BE, FR, JU, NE, SO)	Bern
CH03	Nordwestschweiz (AG, BL, BS)	Basel
CH04	Zürich (ZH)	Zürich
CH05	Ostschweiz (AR, AI, GL, GR, SG, SH, TG)	St.Gallen
CH06	Zentralschweiz (LU, NW, OW, SZ, UR, ZG)	Luzern
CH07	Tessin (TI)	Lugano

Tab. **Error! No text of specified style in document.**-4 Germany, NUTS2

NUTS	Name	Corecity
DE11	Regierungsbezirk Stuttgart	Stuttgart
DE12	Regierungsbezirk Karlsruhe	Karlsruhe
DE13	Regierungsbezirk Freiburg	Freiburg
DE14	Regierungsbezirk Tübingen	Reutlingen
DE21	Regierungsbezirk Oberbayern	München
DE22	Regierungsbezirk Niederbayern	Landshut
DE23	Regierungsbezirk Oberpfalz	Regensburg
DE24	Regierungsbezirk Oberfranken	Bayreuth
DE25	Regierungsbezirk Mittelfranken	Nürnberg
DE26	Regierungsbezirk Unterfranken	Würzburg
DE27	Regierungsbezirk Schwaben	Augsburg
DE30	Berlin	Berlin
DE41	Regierungsbezirk Brandenburg - Nordost	Frankfurt/Oder
DE42	Regierungsbezirk Brandenburg - Südwest	Potsdam
DE50	Bremen	Bremen
DE60	Hamburg	Hamburg
DE71	Regierungsbezirk Darmstadt	Frankfurt
DE72	Regierungsbezirk Gießen	Gießen
DE73	Regierungsbezirk Kassel	Kassel
DE80	Mecklenburg- Vorpommern	Rostock
DE91	Regierungsbezirk Braunschweig	Braunschweig
DE92	Regierungsbezirk Hannover	Hannover
DE93	Regierungsbezirk Lüneburg	Celle

DE94	Regierungsbezirk Weser-Ems	Osnabrück
DEA1	Regierungsbezirk Düsseldorf	Düsseldorf
DEA2	Regierungsbezirk Köln	Köln
DEA3	Regierungsbezirk Münster	Gelsenkirchen
DEA4	Regierungsbezirk Detmold	Bielefeld
DEA5	Regierungsbezirk Arnsberg	Dortmund
DEB1	Regierungsbezirk Koblenz	Koblenz
DEB2	Regierungsbezirk Trier	Trier
DEB3	Regierungsbezirk Rheinhessen-Pfalz	Mainz
DEC0	Saarland	Saarbrücken
DED1	Direktionsbezirk Chemnitz	Chemnitz
DED2	Direktionsbezirk Dresden	Dresden
DED3	Direktionsbezirk Leipzig	Leipzig
DEE	Sachsen-Anhalt	Halle
DEF0	Schleswig-Holstein	Kiel
DEG0	Thüringen	Erfurt

Tab. **Error! No text of specified style in document.**-5 Denmark, NUTS2

NUTS	**Name**	**Corecity**
DK01	Hovedstaden	Kobenhavn
DK02	Sjælland	Ringsted-Soro
DK03	Syddanmark	Kolding
DK04	Midtjylland	Arhus
DK05	Nordjylland	Alborg

Tab. **Error! No text of specified style in document.**-6 Spain, NUTS3

NUTS	**Name**	**Corecity**
ES111	A Coruña	La Coruna
ES112	Lugo	Lugo
ES113	Ourense	Ourense
ES114	Pontevedra	Vigo
ES12	Principado de Asturias	Gijon
ES13	Cantabria	Santander
ES211	Álava	Vitoria-Gasteiz
ES212	Guipúzcoa	Donostia-San Sebastian
ES213	Vizcaya	Bilbao
ES22	Comunidad Foral de Navarra	Pamblona
ES23	La Rioja	Logrono

ES241	Huesca	Huesca
ES242	Teruel	Teruel
ES243	Zaragoza	Zaragoza
ES30	Comunidad de Madrid	Madrid
ES411	Ávila	Ávila
ES412	Burgos	Burgos
ES413	León	Leon
ES414	Palencia	Palencia
ES415	Salamanca	Salamanca
ES416	Segovia	Segovia
ES417	Soria	Soria
ES418	Valladolid	Valladolid
ES419	Zamora	Zamora
ES421	Albacete	Albacete
ES422	Ciudad Real	Ciudad Real
ES423	Cuenca	Cuenca
ES424	Guadalajara	Guadalajara
ES425	Toledo	Talavera de la Reina
ES431	Badajoz	Badajoz
ES432	Cáceres	Cacéres
ES511	Barcelona	Barcelona
ES512	Girona	Girona
ES513	Lleida	Lleida
ES514	Tarragona	Tarragona
ES521	Alicante	Alicante
ES522	Castellón	Castellon de la Plana
ES523	Valencia	Valencia
ES53	Illes Balears	Palma de Mallorca
ES611	Almería	Almeria
ES612	Cádiz	Jerez de la Frontera
ES613	Córdoba	Cordoba
ES614	Granada	Granada
ES615	Huelva	Huelva
ES616	Jaén	Jaen
ES617	Málaga	Malaga
ES618	Sevilla	Sevilla
ES62	Región de Murcia	Murcia
ES63	Ciudad Autónoma de Ceuta	Ceuta

ES64	Ciudad Autónoma de Melilla	Melilla
ES70	Canarias (Nuts2)	Las Palmas de Gran Canaria

Tab. **Error! No text of specified style in document.**-7 Finland, NUTS3

NUTS	Name	Corecity
FI131	Etelä-Savo	Mikkeli
FI132	Pohjois-Savo	Kuopio
FI133	Pohjois-Karjala	Joensuu
FI134	Kainuu	Kajaani
FI181	Uusimaa	Helsinki
FI182	Itä-Uusimaa	Porvoo
FI183	Varsinais-Suomi	Turku
FI184	Kanta-Häme	Hämeenlinna
FI185	Päijät-Häme	Lahti
FI186	Kymenlaakso	Kotka
FI187	Etelä-Karjala	Laapenranta
FI191	Satakunta	Pori
FI192	Pirkanmaa	Tampere
FI193	Keski-Suomi	Jyväskylä
FI194	Etelä-Pohjanmaa	Pietarsaari
FI195	Pohjanmaa	Vaasa
FI1A1	Keski-Pohjanmaa	Kokkola
FI1A2	Pohjois-Pohjanmaa	Oulu
FI1A3	Lappi	Rovaniemi
FI20	Åland (Nuts 2)	Maarianhamina

Tab. **Error! No text of specified style in document.**-8 France, NUTS3

NUTS	**Name**	**Corecity**
FR1	Ile de France	Paris
FR21	Champagne-Ardenne	Reims
FR22	Picardie	Amiens
FR23	Haute-Normandie	Rouen
FR24	Centre	Orleans
FR25	Basse-Normandie	Caen
FR26	Bourgogne	Dijon
FR3	Nord-Pas-de-Calais (Nuts2)	Lille

FR411	Meurthe-et-Moselle	Nancy
FR412	Meuse	Bar-le-Duc
FR413	Moselle	Metz
FR414	Vosges	Epinal
FR421	Bas-Rhin	Strasbourg
FR422	Haut-Rhin	Mulhouse
FR431	Doubs	Besançon
FR433	Jura (France)	Lons-le-Saunier
FR432	Haute-Saône	Vesoul
FR434	Territoire-de-Belfort	Belfort
FR51	Pays de la Loire	Nantes
FR52	Bretagne	Rennes
FR53	Poitou-Charentes	La Rochelle
FR61	Aquitaine	Bordeaux
FR62	Midi-Pyrénées	Toulouse
FR63	Limousin	Limoges
FR711	Ain	Bourg-en-Bresse
FR712	Ardèche	Privas
FR713	Drôme	Valence
FR714	Isère	Grenoble
FR715	Loire	St-Etienne
FR716	Rhône	Lyon
FR717	Savoie	Chamberry
FR718	Haute-Savoie	Annecey
FR72	Auvergne	Clermont-Ferrand
FR81	Languedoc-Roussillon	Montpellier
FR821	Alpes-de-Haute-Provence	Manosque
FR822	Hautes-Alpes	Gap
FR823	Alpes-Maritimes	Nice
FR824	Bouches-du-Rhône	Marseille
FR825	Var	Toulon
FR826	Vaucluse	Avignon
FR83	Corse	Ajaccio

Tab. **Error! No text of specified style in document.**-9 Greece, NUTS2

NUTS	**Name**	**Corecity**
GR11	East Macedonia and Thrace	Komotini
GR12	Central Macedonia	Thessaloniki

GR13	West Macedonia	Kozani
GR14	Thessaly	Larissa
GR21	Epirus	Ioannina
GR22	Ionian Islands	Corfu
GR23	West Greece	Patras
GR24	Central Greece	Lamia
GR25	Peloponnese region	Tripoli
GR30	Attica	Athens
GR41	North Aegean	Mytilene
GR42	South Aegean	Ermoupoli
GR43	Crete	Heraklion

Tab. **Error! No text of specified style in document.**-10 Ireland, NUTS3

NUTS	**Name**	**Corecity**
IE011	Border Ireland	Dundalk
IE012	Midland Ireland	Portlaoise
IE013	Western Ireland	Galway
IE021	Dublin	Dublin
IE022	Mid-East Ireland	Bray
IE023	Mid-West Ireland	Limerick
IE024	South-East Irland	Waterford
IE025	South-West Ireland	Cork

Tab. **Error! No text of specified style in document.**-11 Italy, NUTS2 and NUTS3

NUTS	**Name**	**Corecity**
ITC11	Torino	Torino
ITC12	Vercelli	Vercelli
ITC13	Biella	Biella
ITC14	Verbano-Cusio-Ossola	Domodossola
ITC15	Novara	Novara
ITC16	Cuneo	Cuneo
ITC17	Asti	Asti
ITC18	Alessandria	Alessandria
ITC2	Valle d‘Aosta	Aosta
ITC31	Imperia	San Remo

ITC32	Savona	Savona
ITC33	Genova	Genova
ITC34	La Spezia	La Spezia
ITC41	Varese	Varese
ITC42	Como	Como
ITC43	Lecco	Lecco
ITC44	Sondrio	Sondrio
ITC45	Milano	Milano
ITC46	Bergamo	Bergamo
ITC47	Brescia	Brescia
ITC48	Pavia	Pavia
ITC49	Lodi	Lodi
ITC4A	Cremona	Cremona
ITC4B	Mantova	Mantova
ITD1	Bolzano	Bolzano
ITD2	Trento	Trento
ITD31	Verona	Verona
ITD32	Vicenza	Vicenza
ITD33	Belluno	Belluno
ITD34	Treviso	Treviso
ITD35	Venezia	Venezia
ITD36	Padova	Padova
ITD37	Rovigo	Rovigo
ITD41	Pordenone	Pordenone
ITD42	Udine	Udine
ITD43	Gorizia	Gorizia
ITD44	Trieste	Trieste
ITD5	Emilia-Romagna	Bologna
ITE1	Toscana	Firenze
ITE2	Umbria	Perugia
ITE3	Marche	Ancona
ITE4	Lazio	Roma
ITF1	Abruzzo	Pescara
ITF2	Molise	Campobasso
ITF3	Campania	Napoli
ITF4	Puglia	Bari
ITF5	Basilicata	Potenza
ITF6	Calabria	Reggio di Calabria

ITG1	Sicilia	Palermo
ITG2	Sardegna	Cagliari

Tab. **Error! No text of specified style in document.**-12 Luxembourg

NUTS	Name	Corecity
LU	Luxembourg	Luxembourg

Tab. **Error! No text of specified style in document.**-13 Netherlands, NUTS2

NUTS	Name	Corecity
NL11	Groningen	Groningen
NL12	Friesland	Leeuwarden
NL13	Drenthe	Emmen
NL21	Overijssel	Enschede
NL22	Gelderland	Arnhem
NL23	Flevoland	Almere
NL31	Utrecht	Utrecht
NL32	Noord-Holland	Amsterdam
NL33	Zuid-Holland	Rotterdam
NL34	Zeeland	Terneuzen
NL41	Noord-Brabant	Eindhoven
NL42	Limburg	Maastricht

Tab. **Error! No text of specified style in document.**-14 Norway, NUTS3

NUTS	Name	Corecity
NO011	Oslo	Oslo
NO012	Akershus	Skedsmo
NO021	Hedmark	Hamar
NO022	Oppland	Gjøvik
NO031	Østfold	Fredrikstad
NO032	Buskerud	Drammen
NO033	Vestfold	Sandefjord
NO034	Telemark	Skien
NO041	Aust-Agder	Arendal
NO042	Vest-Agder	Kristiansand
NO043	Rogaland	Stavanger
NO051	Hordaland	Bergen
NO052	Sogn og Fjordane	Førde

NO053	Møre og Romsdal	Ålesund
NO061	Sør-Trøndelag	Trondheim
NO062	Nord-Trøndelag	Steinkjer
NO071	Nordland	Bodø
NO072	Troms	Tromso
NO073	Finnmark	Alta

Tab. **Error! No text of specified style in document.**-15 Portugal, NUTS2

NUTS	**Name**	**Corecity**
PT11	Portugal Norte	Porto
PT15	Algarve	Faro
PT16	Portugal Centro	Coimbra B
PT17	Lisboa	Lisboa
PT18	Alentejo	Beja

Tab. **Error! No text of specified style in document.**-16 Sweden, NUTS2

NUTS	**Name**	**Kernstadt**
SE11	Stockholm	Stockholm
SE12	Östra Mellansverige	Uppsala
SE21	Småland med öarna	Jönköping
SE22	Sydsverige	Malmö
SE23	Västsverige	Göteborg
SE31	Norra Mellansverige	Gävle
SE32	Mellersta Norrland	Umea
SE33	Övre Norrland	Skelleftea

Tab. **Error! No text of specified style in document.**-17 United Kingdom, NUTS2

NUTS	**Name**	**Kernstadt**
UKC1	Tees Valley and Durham	Middlesbrough
UKC2	Northumberland and Tyne and Wear	Newcastle
UKD1	Cumbria	Carlisle
UKD2	Cheshire	Warrington
UKD3	Greater Manchester	Manchester
UKD4	Lancashire	Preston
UKD5	Merseyside	Liverpool
UKE1	East Riding and North Lincolnshire	Kingston upon Hull

UKE2	North Yorkshire	York
UKE3	South Yorkshire	Sheffield
UKE4	West Yorkshire	Leeds
UKF1	Derbyshire and Nottinghamshire	Nottingham
UKF2	Leicestershire, Rutland and Northamp-tonshire	Leicester
UKF3	Lincolnshire	Lincoln
UKG1	Herefordshire, Worcestershire and War-wickshire	Worcester
UKG2	Shropshire and Staffordshire	Stoke-on-Trent
UKG3	West Midlands	Birmingham
UKH1	East Anglia	Cambridge
UKH2	Bedfordshire and Hertfordshire	Luton
UKH3	Essex	Southend-on-Sea
UKI1	Inner London	London
UKI2	Outer London	London
UKJ1	Berk, Buckingham and Oxford	Oxford
UKJ2	Surrey, East and West Sussex	Brigthon
UKJ3	Hampshire and Isle of Wight	Southampton
UKJ4	Kent	Maidstone
UKK1	Gloucestershire, Wiltshire and North Somerset	Bristol
UKK2	Dorset and Somerset	Bournemouth
UKK3	Cornwall and Isles of Scilly	Truro
UKK4	Devon	Plymouth
UKL1	West Wales and the Valleys	Swansea
UKL2	East Wales	Cardiff
UKM2	Eastern Scotland	Edinburgh
UKM3	South Western Scotland	Glasgow
UKM5	Aberdeen Region	Aberdeen
UKM6	Highlands and Islands	Inverness
UKN	Northern Ireland	Belfast

Data on economic performance

Tab. **Error! No text of specified style in document.**-18 Data on economic performance

Shortcut	Indicator	Unit	Source
XXN	nominal GDP	in Mio. Euro	BAKBASEL
XXR	real GDP	in Mio. Euro PPP[1]	BAKBASEL
NN	employment	in thousand persons	BAKBASEL
XAN	nominal hourly productivity of labour	in Euro	BAKBASEL
XAR	real hourly productivity of labour	in Euro PPP	BAKBASEL

Gross Domestic Product

Definition

Gross Domestic Product

Gross domestic product at market prices is the final result of the production activity of resident producer units.

It can be defined in three ways:

- GDP is the sum of gross value added of the various institutional sectors or the various industries plus taxes but minus subsidies towards products (which are not allocated according to sectors and industries). It is also the balancing item in the total economy production account.
- GDP is the sum of final uses of goods and services by resident institutional units (actual final consumption and gross capital formation), plus exports but minus imports of goods and services.
- GDP is the sum of uses in the total economy generation of income account (compensation of employees, taxes on production and imports minus subsidies, gross operating surplus and mixed income of the total economy).

Market Prices, nominal

Market prices are those paid by purchasers for the goods and services they acquire, excluding deductible value added tax (VAT).

Constant Prices, real

Valuation at constant prices means valuation of flows and stocks in an accounting period at the prices of a previous period. The purpose of valuation at constant prices is to break down changes over time in values of flows and stocks into changes in price and changes in volumes. Flows and stocks at constant prices are said to be in volume terms. In the Dataset the basic year is 2000.

[1] PPP = purchaising power parity corrected

Employment

Definition

Employment

Employment covers all persons, both employees and the self-employed, engaged in some productive activity that falls within the production boundary of the system.

Employees (in paid employment)

Employees are all persons who work under contract for another resident institutional unit and receive remuneration.

They fall into the following categories:

- Persons (manual and non-manual workers, management personnel, domestic staff, people carrying out remunerated productive activity under employment programmes) engaged by an employer under an employment contract,
- civil servants and other government employees whose terms and conditions of employment are laid down by public law,
- armed forces, consisting of those who have enlisted for both long and short engagements and also conscripts (including conscripts working for civil defence),
- ministers of religion, if they are paid directly by a general government or a non-profit institution
- owners of corporations and quasi-corporations if they work there,
- students formally committed to contributing some of their own labour to an enterprise's production process in return for remuneration and (or) education services,
- outworkers if there is an explicit agreement that the outworker should be paid on the basis of work done. That is to say, the amount of labour contributed to some production process and
- persons employed by temporary employment agencies, who are to be included in the industry of the agency which employs them, and not in the industry of the enterprise they actually work for.

Self-employed Persons

Self-employed persons are defined as persons who are the sole or joint owners of the unincorporated enterprises in which they work, excluding unincorporated enterprises classified as quasi-corporations.

Self-employed persons include:

- unpaid family members, including those working in unincorporated enterprises engaged wholly or partly in market production,
- outworkers whose income is a function of the value of the output of some production process for which they are responsible, regardless of how much or little work they put in, and
- workers engaged in production undertaken entirely for their own final consumption or own capital formation, either individually or collectively.

Jobs

A job is defined as an explicit or implicit contractional relationship between a person and a resident institutional unit to perform work in return for compensation for a specified period or until further notice. That definition covers both employed and self-employed persons.

Full-time Equivalence

Full-time equivalent employment, which equals the number of full-time equivalent jobs, is defined as total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory.

Hourly productivity

Definition

General Remarks

Two measures of labour productivity are usually used in economic analyses: hourly productivity and employment productivity. Hourly productivity is defined as output per hour of labour input. Employment productivity is the output per person in employment. Although basically providing the same information, the measures can differ from one another. Reasons for differences are especially found in the usual hours worked and the part time employment structures in the different countries. Other issues like overtime, holidays, average sick leave duration and similar issues influence the results as well. The differences can be observed in the levels as well as in the dynamics of the indicators.

Hourly Productivity (Output per Hour Worked)

In the International Benchmarking Report hourly productivity is calculated as real value added divided by the effective total number of hours worked over the year. Hourly productivity is a measurement of labour productivity.

Total Hours Worked

Total hours worked represent the aggregate number of hours actually worked by an employed or self-employed person during the accounting period, when their output is within the production boundary.

Total hours actually worked include:

- hours actually worked during normal working times,
- hours worked in addition to those worked during normal working times, and generally paid at higher than normal rates (overtime),
- time spent at the place of work on tasks such as site preparation, repair and maintenance work, preparation and cleaning of tools, and making-out receipts and invoices, keeping time sheets and writing-up other reports and
- time corresponding to short rest periods at the work place, including refreshment breaks.

Hours actually worked do not include:

- hours which are paid but not worked, such as paid annual leave, public holidays, or sick-leave,
- meal breaks and
- time spent travelling between home and the work place, even when paid for (construction workers).

Data on airport performance (assign to the regions)

Tab. **Error! No text of specified style in document.**-19 Data on airport performance

Shortcut	Indicator	Unit	Source
AXP	number of commercial passengers	passengers	BAKBASEL, ACI[2]
AXC	cargo (freight & mail)	in metric tonnes	BAKBASEL, ACI

Data on population and area

Tab. **Error! No text of specified style in document.**-20 Data on population and area

Shortcut	Indicator	Unit	Source
PO	population	in thousand persons	BAKBASEL
FL	area	in square miles	BAKBASEL

Data on location factors

Location factors describe the attractiveness of a region. Their quality can determine economic performance in the long run. Many location factors can be influenced by policy decisions; hence countries and regions have some scope in determining their long term growth path. Although some location factors are elusive, others can be measured with the help of quantitative indicators. The following location factors and their respective indicators are included in the database

Tab. **Error! No text of specified style in document.**-21 Data on location factors

Shortcut	Indicator	Unit	Source
AC	Total accessibility	Index	BAKBASEL

[2] ACI = Airport Council International

AG	Geographical accessibility	Index	BAKBASEL
AT	Transport accessibility	Index	BAKBASEL
RGEP	national regulation of labour markets	Scale	BAKBASEL
RGPM	national regulation of product markets	Scale	BAKBASEL
TXCO	tax burden for companies	in %	BAKBASEL
TXMP	tax burden for manpower	in %	BAKBASEL
FEGP	research & development	in % of GDP	BAKBASEL
IVSE	secondary education	in % of labour force	BAKBASEL
IVTE	tertiary education	in % of labour force	BAKBASEL
Pat	patents	Scale	BAKBASEL

Comments

Total accessibility

The European accessibility is measured by calculating travel times from and to almost all big European Cities by train, by car and by inter-European flights. The total accessibility of a region consists basically of two components (AG, AT).

Geographical accessibility

Geographical location, exogenous, Not influenceable by politics

Transport accessibility

Transportation efforts (good or poor transport infrastructure and transport services), Influenceable by politics

National regulation of labour markets

Scale: 0 (no regulation) – 6 (restrictive), The Index of Regulation is available on national level only

National regulation of product markets

Scale: 0 (no regulation) – 6 (restrictive), The Index of Regulation is available on national level only

Tax burden for companies

It measures the Effective Average Tax Rate including all kinds of direct company taxes for a typical profit-able investment.

Tax burden for manpower

It measures the average tax rate for a highly qualified employee (available income after taxes: 100,000 EURO; single). Taxes include the expected tax burden on pensions and social security contributions if mandatory and appropriate (has a tax characteristic).

Research & development

Expenditure on research and development (R&D) measures the investments of firms and the public sector into the innovation process. This figure heavily depends on the size of the regional economy and the met-ropolitan regions. The size of the regions used in the benchmarking is quite different. Therefore, the indi-cator is calculated as a ratio of GDP of a region.

Patents

Patents are measured at the place of residence of the inventor, not at the place of the patent owner. Further the "Fractional Counts" methodology is used.

Taxation

Taxation: An important Location Factor

There are several ways for tax levels to influence regional economic development. Taxation is a key topic for businesses evaluating the attractiveness of a location. A lower tax burden attracts new companies to a location and provides an incentive for existing companies to stay. Even if no location decision is involved, it increases competitiveness in the market by lowering the tax costs for a company which, in turn, supports company survival or growth.

Such a connection between taxes and economic growth is obvious for direct company taxation. For personal income taxation, this is less straightforward, but a similar connection is expected for several reasons.

First, company owners and top management in general earn more and, therefore, have to pay high income taxes in most countries or regions. Their individual preferences might influence the decisions for the company location.

Second, employees' decisions are influenced as well. Employees focus on net available income which is different from a firm's costs. If employees have some bargaining power and are mobile between regions, the companies will be forced to bear at least part of the difference in the tax burden between competing regions. Otherwise, mobile employees will move to regions with lower tax levels since their available income is higher there (everything else kept equal). Therefore, higher income tax levels can result in higher costs

for companies. Highly qualified individuals are especially and increasingly internationally mobile. At the same time, these individuals are becoming more important for a knowledge based economy. Income taxation, especially the burden on highly qualified employees, can work as a cost factor just as much as company taxation does.

Taxation is an issue defined to a large extent on the national level. But it is important to regions' prospects for growth. Therefore, it should be considered as an important location factor in an international benchmarking for regions. Furthermore, depending on the national setting, there are possibilities for regions to increase or decrease the tax burden, in many countries at least to some extent, in some countries to a large extent (e.g. Switzerland, USA).

The BAKBASEL International Benchmarking Programme (IBP) includes indicators for the tax burdens of companies as well as for highly qualified employees. As no data for a quantitative comparison of differences in tax burdens on a region level was available, BAKBASEL developed in cooperation with the Zentrum für Europäische Wirtschaftsforschung (ZEW) in Mannheim, Germany, models to measure and compare the tax burdens.

BAK Taxation Index: Quantitative Indicators for Tax Burdens

Taxation is a large field of research and many indicators are available. The choice gets much more limited when the data should be internationally comparable, reflect the complete tax system instead of only one particular issue or tax rate, and fit the economic reasoning given above. We have two indicators fulfilling these conditions, one for company taxation and one for the tax burden on highly qualified employees.

The indicators available in the IBD are:

- Company tax burden (in percentage-points of profits): It measures the Effective Average Tax Rate (EATR) including all kinds of direct company taxes (e.g. on profits, capital or real-estate) for a typical profitable investment.
- Tax burden on a highly qualified employee (in percentage-points of gross income): It measures the average tax rate for a highly qualified employee (available income after taxes: 100'000 EURO; single). Taxes include the expected tax burden on pensions and social security contributions if mandatory and appropriate (if the social security contribution has a tax characteristic).

The indicators available in the IBD take regional differences into account when appropriate.

BAK Taxation Index: Highly Qualified Manpower

The BAK Taxation Index for highly skilled manpower is calculated as an effective average tax rate (EATR) based on the model developed by Elschner and Schwager (2005). The effective average tax rate is equal to the difference between total remuneration and disposable income (the tax wedge) divided by the total remuneration. The total remuneration represents the costs the employer has to guarantee the highly skilled employee a specific disposable income after taxes and charges.

Taxes in this context are all income taxes including surcharges and state and municipality taxes, as well as payroll taxes paid by the company. Social security contributions are part of the tax burden inasmuch as the employee does not earn a specific individual benefit by paying them. According to the basic idea of competition, there is little risk of unemployment for the kind of qualified employees considered in this study. Accordingly we define contributions to unemployment insurance, and with a similar reasoning also

contributions to accident insurance, as taxes. In contrast, we consider health insurance contributions not to be taxes since they are deemed to provide a genuine insurance.

Contributions to public pension schemes partly qualify as taxes as well. The first pillar of old-age insurance is usually organised as a pay-as-you-go system involving redistribution between generations and between high and low earning workers. Inasmuch contribution payments do not result in actual fair pension entitlements; they constitute an implicit tax rather than an insurance premium. In order to account for this implicit tax, we compute entitlements earned by the highly qualified employee according to the legislation currently in force and offset against contributions.

The model distinguishes between three kinds of compensation:

(1) Cash compensation,

(2) contributions to old-age provisions and

(3) benefits in kind.

These components are taxable in different periods. Cash compensation and benefits in kind are taxable income in the year of payment. Contributions to old-age provisions are either excluded from taxable income and thus pension benefits are subject to taxation, or contributions are paid out of taxed income implying that pensions are nontaxable income during retirement. The model explicitly deals with the timing of tax and pension payments by using an intertemporal approach.

The BAK Taxation Index as part of the IBD reflects the EATR for an employed, single individual with a disposable income of € 100,000. Other examples – e.g. different income levels, material status – are calculated within the project BAK Taxation Index but are not part of the International Benchmarking Database (available upon demand).

BAK Taxation Index: Companies

The BAK Taxation Index for company taxation is calculated as an effective average tax rate (EATR) based on the model developed by Devereux and Griffith (1999). The EATR is calculated as the tax burden at the company level on the net present value of a hypothetical investment.

The model considers an incremental, hypothetical corporate investment. The investment we assume consists of five different types of assets with equal weights (intangibles, industrial buildings, machinery, financial assets, and inventories). We take three different sources of finance into account: retained earnings (55 %), new equity (10%), and debt (35%). These assumptions are typical for investments of companies from the manufacturing sector. The hypothetical investment takes place in the beginning of a period and generates a return in its end. Thus, we suppose a one period change of the capital stock. We measure the cash flows connected with this investment.

The EATR is calculated as the tax burden at the company level on the net present value of this investment. Therefore, we include taxes on corporate income and capital. The effective tax rates computed for each region comprise taxes levied at the national, the state and the municipal level. The calculations consider the statutory tax rates of these taxes as well as the interaction of different kinds of taxes and the most important rules determining the tax base, e.g. differences in depreciation allowances and inventory valuation. The model considers several economic parameters: the unique market interest rate, the rate of inflation, geometrically declining economic depreciation of intangibles, industrial buildings and machinery, and a pre-tax rate of return on the investment of 20 %. In order to isolate the effects of taxation from other economic effects, these economic parameters supposed to be equal for all investments regardless of their location.

The BAK Taxation Index measures EATR of a profitable investment. Various other information from the model – e.g. tax burden for particular types of investment or financing; effective marginal tax rates of a marginal investment, cost of capital, tax burdens including the shareholder level – are calculated within the project BAK Taxation Index but are not part of the International Benchmarking Database (available upon demand).

Regulation of Product and Labour Markets

Concept

Regulation corrects market failures and compensates for externalities. On the other hand regulation is costly. There are direct costs like administration and controlling and there are indirect costs as well, e.g. incompatible incentives or government failure. The optimal level of regulation can not be determined theoretically; empirical studies have to be used to answer this question at least partly. Regulations work through many channels of an economic system, and the relationship between regulation and growth is very complex. The International Benchmarking database contains two indexes as proxies for the regulation of product and labour markets. Both indexes are scaled between 0 (no regulation) and 6 (restrictive).

Methodology

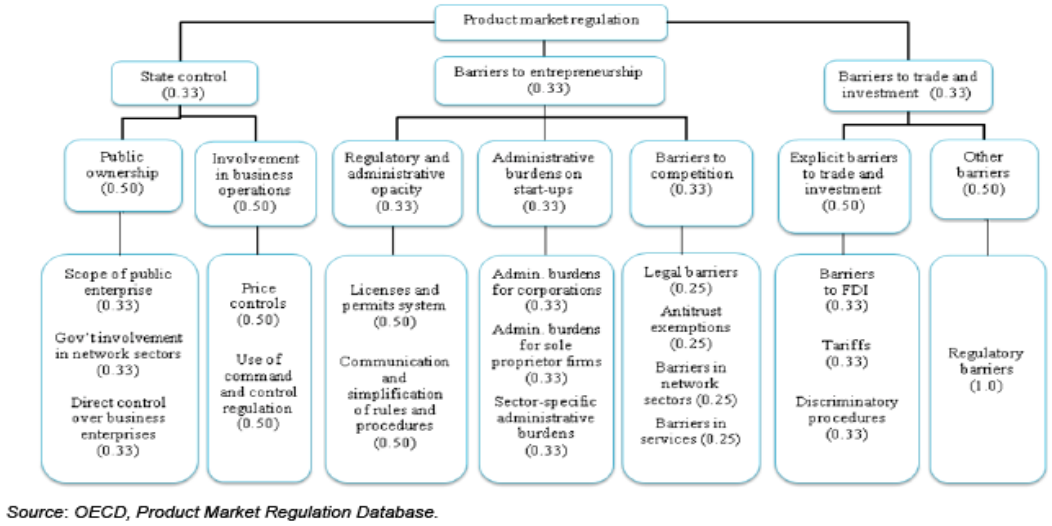
OECD Regulation Database

The Regulation Indicators are essentially based on the OECD regulation database, which is available for the years 1990 (employment protection), 1998, 2003 (product market regulation, employment protection) and 2008 (product market regulation). The two indicators used are a summary of a wide range of regulation indicators collected by the OECD, weighted according to the results of a factor analysis.

Indicators of regulation

The individual indicators include among others regulation on market access, the use of inputs, output choices, pricing and international trade and investment; administrative regulation (i.e. the interface between government agencies and economic agents) including means for communicating regulatory requirements to the public as well as compliance procedures; and employment protection legislation (EPL) for regular as well as temporary employment contracts. For a detailed illustration of the aggregation methodology see Fig. **Error! No text of specified style in document.**-1 and Fig. **Error! No text of specified style in document.**-2.

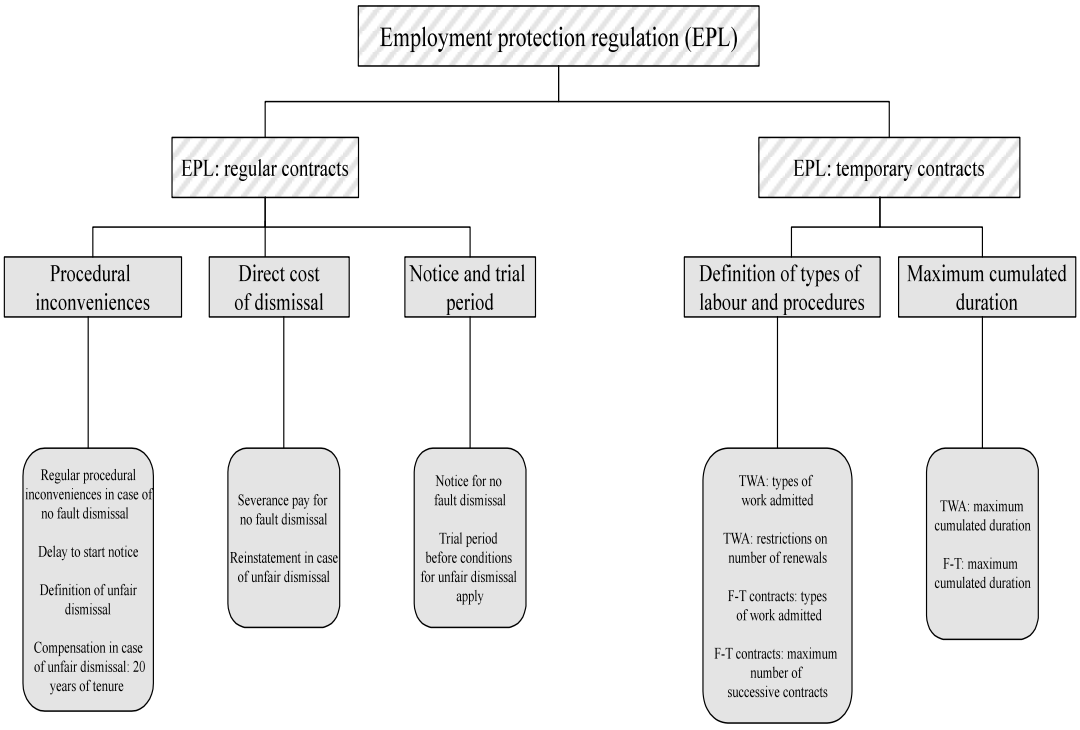
Fig. Error! No text of specified style in document.**-1 OECD indicators for product market regulation**



Source: OECD, Product Market Regulation Database.

Source: OECD (2009)

Fig. **Error! No text of specified style in document.**-2 OECD-indicators for employment protection



Source: OECD (2000b)

Estimation of Annual Regulation Indexes

With the objective of an annual monitoring of regulatory reforms in IBP-countries, additional quantitative information from the OECD on the evolvement of sector specific regulation over time and from the «Index of Economic Freedom», yearly published by the Fraser Institute is used to build time series for the two regulation indicators. The 1990, 1998, 2003 and 2008 values of the OECD indicators thereby serve as anchor values. The

approach of the used indices of the Fraser Institute - «Business/Labour Market Regulations» - is similar to the OECD, and a cross section comparison yields similar country ratings.

Continental accessibility

Economic Theory

Transport infrastructure plays an important role in the development of regions. According to economic theory, regions with a well established access to markets are more productive, more competitive, and hence basically more successful than regions with less developed access possibilities. Economical reasons for this are lower transport and time costs enterprises and individuals have to bear in easily accessible regions. Such lower costs allow a division of labour between regions and thus regional specialisation, which entails economies of scale and benefits of specialisation. In an increasingly globalised world the extent a region can take part in economic growth and benefits of globalisation depends mainly on its accessibility. This is why the improvement of regional accessibility has a high priority in the European Regional Development Fund (ERDF), one of the four structural funds of the EU.

Accessibility is a complex term. Before specifying indicators it has to be clear what is going to be measured. The concept of accessibility is to evaluate or analyzes this gains to be achieved by accessing other places/regions. The advantages to be gained depend on what can be gained in other regions as well as on the efforts necessary to get access to other regions. In other words, two components of measures are necessary:

- Activity of regions (population, places of work, GDP etc.) and
- impedance (geographical distance, travel cost, travel time etc.).

Accessibility analysis utilises a combination of travel costs with structural data of locations. Although the discussion and examples here are limited to the macroeconomic perspective, the concept can be applied in similar ways on a microeconomic base as well as in many other areas, e.g. cultural diversity or quality of life.

Continental Accessibility

The continental (interregional) indicator focuses on the access to the European markets, to clients, suppliers, partners, and advanced business services. Activity values are economic potential, level of advanced producer services, level of research, prominence as conference cities, etc. Impedance values are calculated on the basis of the fastest daily connection using all modes.

Accessibility as Location Factor

Discussing regions' location factors, accessibility is an important topic, though its significance is differently assessed. In a survey conducted 1997 by BAKBASEL among location sensitive enterprises with headquarters in Switzerland, the international linkage is mentioned as an important location factor, while the quality of regional public transport and the situation of private transport are seen as slightly less relevant. In 2002, BAKBASEL started the empirical analysis in this topic. The results were the BAKBASEL Accessibility Indices for the global and the continental accessibility.

Specifications of the BAKBASEL Accessibility Index:

- Focus on accessibility requirements of companies and institutions

- Access to input and goods markets (activity)
- Only accessibility of persons
- Travel time as impedance measure
- Modes road, rail and air
- Separate view on the global and the continental accessibility

Measurement:

Usually a negative exponential function for the relationship between accessibility and time needed is employed. To determine a location's potential, the activities (regional GDP's) at the destinations are weighted with the travel time and added together for all destination locations (see following formula).

$$AU = \sum_{z=1}^{Z} W_Z * e^{-\beta * c_{uz}}$$

where U = starting locations,

W = activity (here regional GDPs),

Z = destinations,

c = travel time and

β = parameter.

The formula is calibrated differently to suit the sensitiveness to distance. This is done by assigning parameter β to a specific half-time that represents the period of time in which the significance of a destination is halved. For example a half-time of 2 hours indicates that an opportunity lying 2 hours away is only half as valuable as an opportunity at the location in question. In the BAKBASEL Accessibility Model, the half-time amounts 2 hours and 15 minutes in the continental model.

Starting Points

Because accessibility is a punctual information calculated on the basis of transportation networks made up of nodes and connections, one representative point has to be designated for each region. The central city of each region is used, which fits the usual assumption that regions normally interact with other regional economies by way of their central cities. In each city the main railway station is taken as geographical centre.

Destination Points

As destinations to be reached from the aforementioned starting points.

In the continental model, the main cities (and their main stations) of all NUTS-2 regions in Europe are defined as destinations. Besides the EU member countries, this also covers the EFTA countries. Furthermore, the rest of Europe all the way to the Urals is covered via existing major cities. Altogether the model includes about 300 destinations that cover 100% of European economic output.

The calculated global travel time is made up of:

1. Connection time from starting point (main station) to airport based on the road and rail models. The shortest connection of public and individual transport is used.
2. Transfer time from parking facility or public transport stop to check-in desk is assumed to be 10 minutes. Precise calculation of these transfer times for each airport would be prohibitively complicated.

3. Check-in time according to SWISS and Lufthansa, depending on airport and destination. The model uses arithmetic mean from business and economy class check-in times.
4. Flight travel time including time for changing planes, in each case the fastest possible connection assuming maintenance of the MCT (Minimum Connection Time). Plane changing outside Europe also possible.
5. Connection time from arrival airport to the centre of the destination city. Based on the data in official airline guides. The shortest connection of public and individual transport is used.

Continental Travel Time

The continental travel time is calculated based on the minimum time from the rail, road and air transport models. If one leg of a journey is covered by air, the travel time is calculated similarly to the global model.

Connection Frequency

To take the connection frequency into account as well, individual time windows were analyzed. The global model calculates accessibility times separately for all weekdays in order to combine them into a single figure afterwards. All of the weekdays are weighted equally in this process. The intra-European model shows accessibilities separately for six starting time windows of a workday (5.30 – 9, 9 – 12, 12 – 15, 15 – 18, 18 – 21, 21 – 24; Central European Summer Time). In the calculation the morning windows are weighted more heavily than the afternoon and evening windows, since day trips are clearly dominant in business travel within Europe.

Accessibility Indicators: BAKBASEL vs. ESPON

Accessibility indicators were also used in the Interreg III Espon Programme. The Indicator "multimodal potential accessibility" is created by a very similar method like the BAKBASEL continental accessibility indicator. But there are some differences as well: The ESPON indicator uses the regional population as destination activity and the multimodal accessibility doesn't refer to the shortest mode of location, but of a function of the travel times by the three modes (road, rail, air).

Tab. **Error! No text of specified style in document.**-22 shows detailed information about the different sources of the BAKBASEL Accessibility Index.

Tab. **Error! No text of specified style in document.**-22 BAKBASEL Accessibility Index: Sources

Source	Indicator	Time Period Covered
Original Data		
Institut für Verkehrsplanung und Transportsysteme (IVT) der ETH Zürich / OAG Data Base	Air traffic data	1980, 1991, 1996, 2000, 2002, 2003, 2004, 2006, 2008
Institut für Verkehrsplanung und Transportsysteme (IVT) der ETH Zürich	Rail data	1980, 1990, 2002, 2006, 2008

Institut für Verkehrsplanung und Transportsysteme (IVT) der ETH Zürich	Road data	1980, 1990, 2000, 2008
World Development Indicators (World Bank)	GDP World	1980-2008
BAKBASEL, Eurostat	GDP Europe	1980-2007/08

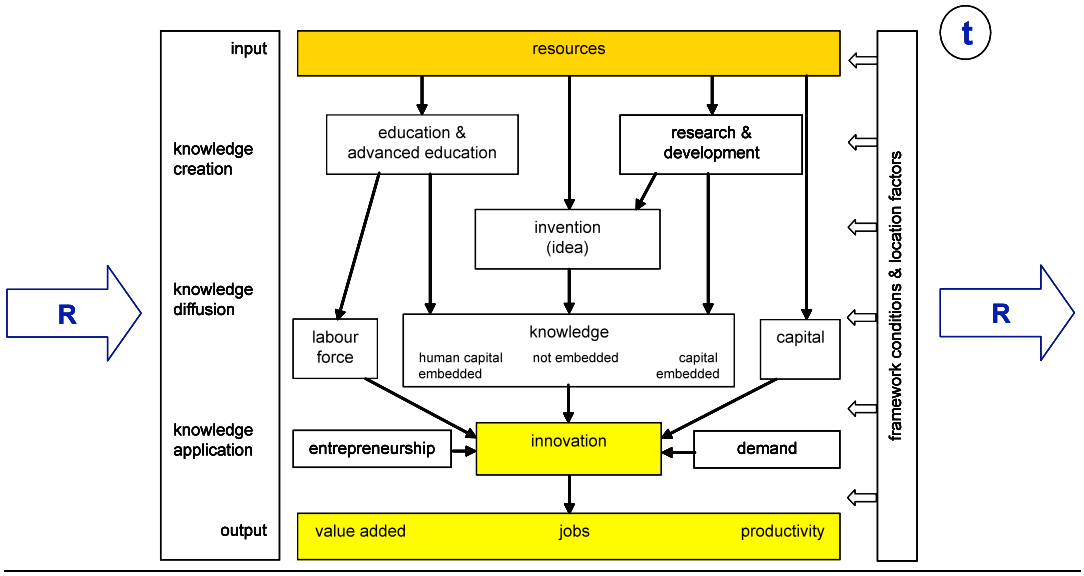
Source: BAKBASEL

Innovation

Economic theory

Error! Reference source not found. illustrates the regional innovation process as a simplified chain of innovation. Regions have been rediscovered as being highly important in innovation. In recent literature, one finds discussions of regional innovation systems, regional clusters as well as learning regions. The more components of such a system of innovation a region has and the better they are, the greater the scope for successful and constant innovation.

Fig. **Error! No text of specified style in document.**-3 The regional innovation process



Source: BAKBASEL

In an innovation chain, initial public and private financial resources are at best transformed through several steps and interactions into value added, jobs and prosperity. Hence the innovation process is not a linear one, but a process with a lot of feedback effects. For example the prototype of a product is tested, comes back with feedback, goes to a customer and comes back with feedback again etc. These processes are embedded in a regional network and formed by regional and national institutions like regulations, laws and

culture. To avoid over-specialisation in one industry to the exclusion of others, external linkages are very important to a region. Therefore, good accessibility to other continental and global nodes or city regions in globally organised economy is of high relevance.

Human Capital: Qualification of Labour Force by Highest Education

Definition

These indicators measure the qualification of employment. They are defined as the ratio of the number of persons in employment that have had a certain level of education to total employment. The levels of education are defined according to the following 6 levels of the International Standard Classification of Education (ISCED):

Level	Description
Level 0	Pre-Primary Education
Level 1	Primary Education or First Stage of Basic Education
Level 2	Lower Secondary or Second Stage of Basic Education
Level 3	(Upper) Secondary Education
Level 4	Post-Secondary Non-Tertiary Education
Level 5	First Stage of Tertiary Education (Not leading directly to an advanced research qualification)
Level 6	Second Stage of Tertiary Education (Leading to an advanced research qualification)

Secondary education is the stage of education following primary school. Secondary education is generally the final stage of compulsory education as described in the ISCED levels 3 and 4. The next stage of education is usually college or university. Secondary education is characterised by transition from the typically compulsory, comprehensive primary education to the optional, selective tertiary, "post-secondary", or "higher" education (e.g., university, vocational school). Depending on the system, schools for this period or a part of it may be called secondary schools, high schools, gymnasia, lyceums, middle schools, colleges, vocational schools and preparatory schools, and the exact meaning of any of these varies between the systems.

The exact boundary between primary and secondary education varies from country to country and even within them, but is generally around the fifth to the tenth year of education. Secondary education occurs mainly during the teenage years.

The purpose of secondary education can be to give common knowledge, to prepare for either higher education or vocational education, or to train directly to a profession.

Tertiary education, also referred to as third stage, third level, and post-secondary education, is the educational level following the completion of a school providing a secondary education, such as a high school, secondary school, or gymnasium. Higher education is normally taken to include undergraduate and postgraduate education, while vocational education and training beyond secondary education is known as further or continuing education.

Colleges, universities, institutes of technology and polytechnics are the main institutions that provide tertiary education for (sometimes known collectively as tertiary institutions).

Tertiary education generally culminates in the receipt of certificates, diplomas, or academic degrees.

Patents

Patent applications (EPO) is a necessary indicators to measure the scientific output of the regional innovations system. They are also an indication of the existence of technology transfer between the regional economies. Additionally, codified knowledge can be also a way to enlarge a regions knowledge base and to create positive spillovers to neighbouring regions.

The indicator is used as a density measure. The data are usually weighted by population or total employment.

Expenditures on Research and Development

This indicator measures the expenditures on research and development as a percentage of GDP. It comprises total intramural R&D expenditures in all sectors of performance, i.e. business enterprise sector, government sector, higher education sector and private non-profit sector.

Methodology

Data on R&D expenditures is available for most countries for quite long time periods (exception: for Luxembourg data are only available from 2000) but the data quality varies considerably between the countries. Missing years are estimated with linear interpolation, corrected for differences in trend growth. Data availability on the regional level is much worse than on the national level. For many EU- and US-regions, data are obtainable, but only at NUTS1- and NUTS2-level and for comparatively short time periods or for few years only. In order to construct continuous time series from 1980 to 2010, national dynamics were taken into account. Furthermore, GVA-data from the International Benchmarking Database (IBD) has been used as weighting-factors to estimate the R&D expenditures in regions at the NUTS3-level or regions that are not defined as NUTS-regions. For some countries, no regional data are available. In these cases regional data were estimated by combining sector specific R&D expenditures and the regional industry structure. In addition to total R&D expenditures, the IBD comprises values by performance sector as well as data for the industries.

Annex 2. Questionnaires and interviews

2.1 Interviews and questionnaires: FORMS

Interviews

The objective is to know what relevant stakeholders in the region think about the role and situation of airports and accessibility in their region.
The infrastructure, without real and widespread processes of economic support, without coherent strategies and territorial projects, don't bring any development.
But things are changing and the persistence of a crisis that changes the nature of the phenomena, their speed and priority of the solutions requires new forms of analysis and sustainable alternatives with the new context that will lead to a greater sensitivity to changes and stays the present time. In this framework, the infrastructure becomes the main topic: one thing is to talk about the infrastructure issues in a context of development, and other thing is to talk about it in a state of constant slowdown and perhaps stable situation.
Even more today, in this moment of crisis, build new infrastructure does not reveal the most sustainable strategy, considering sustainability as a aim in relation to social and territorial changes. The European Commission's White Paper (2001) indicates that as a strategy that provides absolutely necessary to interrupt the connection between increased mobility and economic growth.
An alternative to the excessive construction of new infrastructure is it possible: don't built new roads but strengthen the existing public system; at the same time don't built new airports, but reuse the existing airport infrastructure and use them as activators of economies and local contexts.
The recycle of existing infrastructure, that does not work, and re-use in order to optimize their potentialities become the solution most sustainable and desirable. Re-think not only on the infrastructure abandoned and unused that are looking for a new identity, but re-use all those infrastructures that are already active but poorly operating and production.

Notes: XXX Airport is the name of each local regional airport. YYY city is the name of the main city connected to the airport (e.g. Villanova d'Albenga Airport - Savona city).

History of the XXX Airport

- Are you informed about the political-economic process, the reasons and the data that brought to the decision to build the XXX Airport? Who wanted it?

- How was the economical and infrastructural situation before the construction of the XXX Airport? Was there a noticeable change on the economical and logistic assets after the construction of the XXX Airport or the situation has remained unchanged?

- In your opinion, did have the infrastructural intervention led the territorial development? Why? Do you have the data to argue your answer?

Importance of regional Airport

- How relevant is the presence, efficiency and growth of the XXX Airport to improve the accessibility and the regional transport system?

- Which are the main groups of passengers (firms' staff/customers, other organizations' staff, tourists, inhabitants of the region)?

- Why are the air connections important in different organizations (their function)?

- From how large area does the XXX airport attract passengers?

- How does the instability (uncertainty) of air connections affect firms' location and investment decisions, international operations etc.?

- Which organizations or actors suffer most from the small number of flights/lack of flights? How does this affect regional development (internationalization, production, knowledge base, tourism, events, etc.)?

- What is the minimum number of flights that supports the economic performance of the region (importance of schedules)?

- What are the main final destinations of the passengers leaving from the XXX airport?

- Is the air connection to Helsinki (YYY city) sufficient or are there needs for direct flights to the European cities (viewpoint of the European accessibility)?

- Is the XXX airport easily accessible and what is the role of intraregional accessibility?

- How does the XXX airport affect regional image (competitiveness)?

Role of the nearest airports - competition

- Are there other airports competing with the XXX airport? Why?

- What are the characteristics of the XXX Airport compared to the nearby airports?

- How could the competitiveness of XXX airport be improved in regard to competing airports?

Development of the XXX Airport

- In recent times, the data of the passengers traffic show a decreasing trend for the airport: what do you attribute the decline of the passengers number?

- How could regional authorities support the growth of the number of passengers (marketing, airport transportation, financial support, etc.)?

- Where are the main bottlenecks and infrastructural inefficiencies in the regional transport system? How are they relevant for the regional development?

- What can be done to improve the actual situation and who could be the best coordinator in the process (cooperation between regional authorities, firms, airline companies etc.)?

- How does the national/regional transport policy work (relations to regional policy, industrial policy)? How are the air traffic issues taken account in the regional decision making, strategies etc. (in relation to other forms of transportation)? What would be the optimal/most effective transport policy (in a given region/at the European level)?

- How could the XXX airport and its surroundings be developed in order to support the competitiveness of the XXX airport?

- Which are the destinations with more affluence that lead the people to choose the XXX Airport to fly?

- Which are the new destinations that you would like to activate in the near future? Do you have already some negotiations going on?

- Does there are possibilities to develop cargo transportation?

- If the cargo vocation is confirmed, could it coexist with the scheduled flights?

- The XXX Airport is already equipped with all the specifics structures that it could need with the possibility to accommodate a cargo airport?

- (If not) Which are the politics in act to improve the infrastructures as support to the airport?

- What is your dream/vision for the XXX Airport?

Alternatives for air traffic

- What is the principal alternative form of transportation for air traffic (at this moment / in the future)?

- What are the main determinants affecting the choice of transportation (prices, schedules, etc.)?

- Which are the links with the activities and the companies in the airport area and all around it? For example, regarding the land, who is the owner? What processes were followed to give that land? Were you involved in the "chosen" of the actual companies?

- The White Book of the European Commission (2001) shows as absolutely necessary strategy to interrupt the existed connection between the growing of mobility and the growing of economy. Do you think that this strategy could involve the XXX Airport development in the further vision of a re-used structure, not only for flights activities but also for commercial and productive activities, as activator of locals' contexts and economies?

- In your opinion the XXX Airport could be occasion for the development of local economies (agriculture, industry, tourism, ..)? In which way? Do already exist any political strategies on going?

- Which are the initiatives already actives and which ones you want to realize to keep high the attention of the authorities and of the public opinion about the XXX Airport?

Questionnaire

Structured questionnaires distributed in local languages to relevant regional/national stakeholders:

- Relevant regional/national stakeholders: big firms, politicians, spatial planners, companies (infrastructures, industries, ..). **(50-100)**
- Telephone interviews

Basic Information:

Location:

Country:

Industry:

Annual turnover (in 2011):

Trend during the last years:

- Growth
- Decline
- Remain stable
-

Number of employees:

- 1-10
- 11-25
- 26-50
- 51-100
- more than 100

Export (share of turnover, in 2011):

Trend during the last years:

- Growth
- Decline
- Remain stable

Number of other domestic units:

Location of other domestic units (in km from your unit or country and cities):

Number of foreign units:

Location of other foreign units (in km from your unit or country and cities):

Importance of regional Airport:

1) How important are the air connections for your company with regard to domestic accessibility?

- Not important at all
- Somewhat important
- Important
- Very important
- Of crucial importance

2) How important are the air connections for your company with regard to international accessibility?

- Not important at all
- Somewhat important
- Important
- Very important
- Of crucial importance

3) How the following operations in your company affected by the supply of air connections?
Please assess the importance by giving a value from 1 (No importance) to 5 (Crucial importance).

	1	2	3	4	5
International business contacts					
Domestic business contacts					
Production					
Research and development					
Investments					
Provision of services					
Imago					
Cargo transportation					
Location					
Other (please specify):					

4) How important do you consider the development of the *XXX Airport* to improve the accessibility and the regional transport system?

- Not important at all
- Somewhat important
- Important
- Very important
- Of crucial importance

5) How accessible is the XXX airport for you?

- Very easily accessible
- Rather easily accessible
- Not so easily accessible
- Poorly accessible
- Not accessible

6) What is the minimum number of flights per day leaving from *XXX Airport* from the viewpoint of your company's needs?

- 1-3
- 4-6
- 7-8
- more than 8

7) What is the minimum number of bi-weekly flights leaving from *XXX Airport* from the viewpoint of your company's needs?

- 1-5

- 6-10
- 11-20
- more than 20

8) How large share of your company's trips are done annually by air:

a. If the final destination is domestic?
- 0-24%
- 25-49%
- 50-74%
- 75-100%

b. If the final destination is abroad?
- 0-24%
- 25-49%
- 50-74%
- 75-100%

9) Which cities are your company's main final destinations abroad?

- Domestic destinations (Please indicate 1-2): _____
- European cities (Please indicate 1-2): _____
- Cities outside Europe (Please indicate 1-2): _____

10) What is the average number of flights per week departing or arriving from/to *XXX Airport* that is used by your unit (staff, customers, collaborators, etc.)? *(One trip means that one person travels to one direction - one-way ticket):* _____

Role of the nearest airports – competition:

11) Does your company use other provincial airports?

- YES. Which ones: _____
- NO

12) What are the main reason for using that airport? (Please, choose maximum 3 options).

- Lower prices
- Better airport services
- Direct flights to abroad
- Better transportation to airport increased accessibility
- Increased reliability of airport flights
- More flights per week/day
- Other (please specify): _____

Alternatives to air travel:

13) What is your principal alternative to the air travel at this moment? (Please, choose only 1option).

- Car
- Bus
- Taxi
- Train
- Ship
- A solution based on information technology (as web conference, online meeting, etc.)
- Other (please specify): _____

14) How significant are the following issues from your company's view with regard to flights from the XXX airport?
Please assess the importance by giving a value from 1 (No importance) to 5 (Crucial importance).

	1	2	3	4	5
Prices					
Schedules					
Traveling time					
Reliability of the transportation					
Direct flights to domestic destinations					
Direct flights to destinations abroad					
More flights per day/week					
Airport's location					
Airport's services					
Airport transportation					
Other (please specify):					

15) Could the XXX Airport be the occasion for the development of local economies?

- YES
- NO

16) If YES, which local economies could be developed by the XXX Airport?
Please assess the importance by giving a value from 1 (No importance) to 5 (Crucial importance).

	1	2	3	4	5
Agriculture					
Industry					
Tourism					
Leisure experiences					
Culture creation and consumption					
High tech research and productions					
Other (please specify):					

Development of the XXX Airport :

17) In which way regional actors should support airline operators in *YYY city*?

Please assess the importance by giving a value from 1 (no importance) to 5 (crucial importance).

	1	2	3	4	5
Marketing					
Airport transportation					
Direct financial support to airline operator					
Infrastructure improvement					
Development of new economies connected to the airport					
Firms and other regional employers advise their employees to use air connections					
Other (please specify):					

18) Should it be needed some new important destinations for your company's point of view?

- o There is NO need for new destinations
- o YES, the useful destinations would be:

  - Domestic destinations (Please indicate 1-2):_____
  - European cities (Please indicate 1-2): _____
  - Cities outside Europe (Please indicate 1-2):_____

19) From your viewpoint, how should the surrounding area of the airport or the airport itself be developed to support the growth of passengers' number and the competitiveness?
Please assess the importance by giving a value from 1 (not at all) to 5 (need for significant improvement).

	1 Not at all	2	3 Medium improvement	4	5 Need for significant improvement
Physical Characteristics of the airport					
Connections infrastructure to the airport					
Facilities					
Green areas					
Lounge areas					
Air companies' private areas					
Touristic information					
Food and beverage service					
Shops					
Multifunctional spaces					
Other (please specify):					

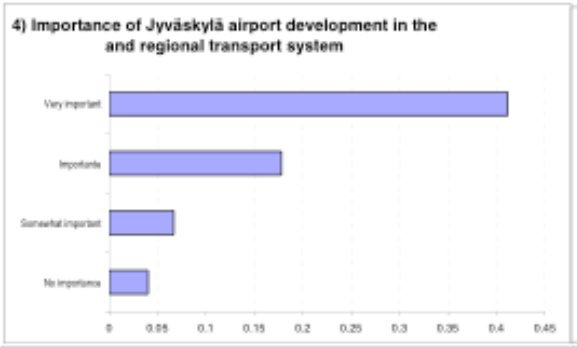
Business organization and operation management					
Business air travel					
Cargo transportation					
Tourism					
Cultural hub					
Energy operator of the territory					
High tech industrial pole					
Systems for energy self-sufficiency					
Recourses					
Personnel					
Management procedures					
Safety					
Other (please specify):					

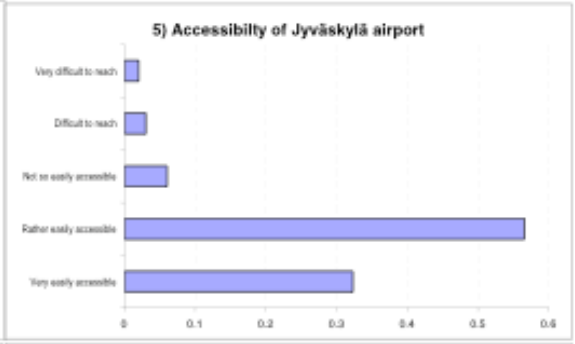
20) What is your dream or visions related to the XXX Airport?

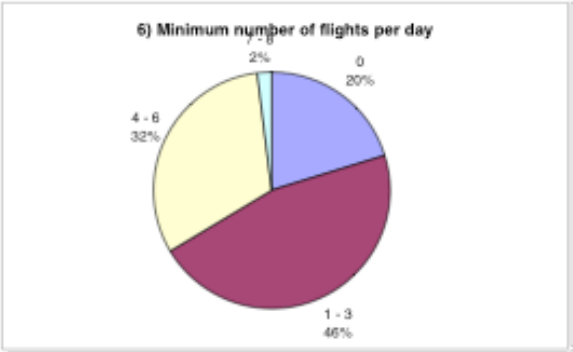
_____
_____
_____
_____

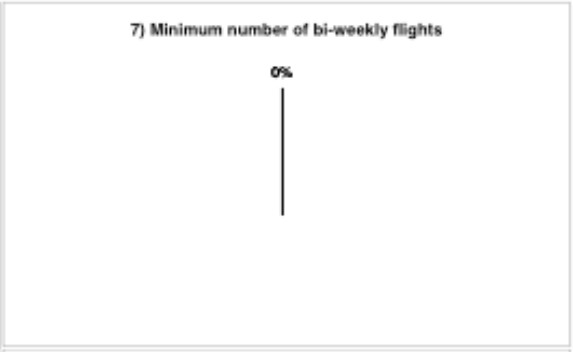
2.2 Interviews and questionnaires: RESULTS_GRAPHS

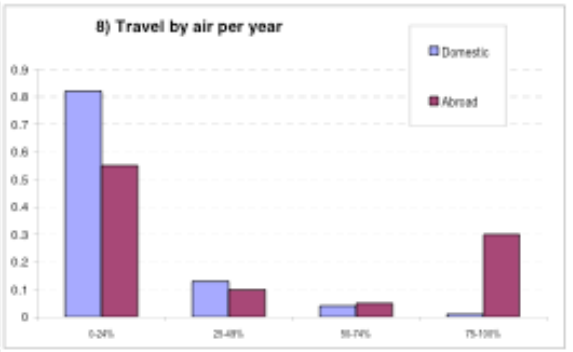
Central Finland


4) Importance of Jyväskylä airport development in the and regional transport system
Very important
Important
Somewhat important
No importance
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45


5) Accessibilty of Jyväskylä airport
Very difficult to reach
Difficult to reach
Not so easily accessible
Rather easily accessible
Very easily accessible
0
0.1
0.2
0.3
0.4
0.5
0.6

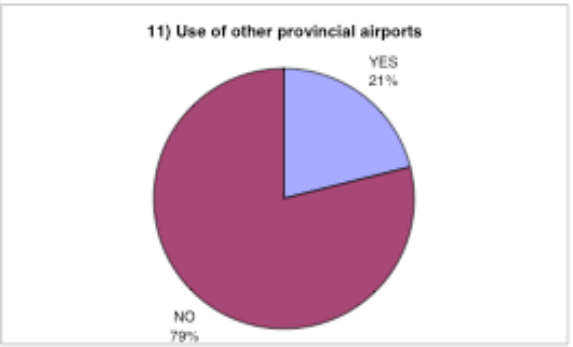

6) Minimum number of flights per day
7 - 8
2%
0
20%
4 - 6
32%
1 - 3
46%

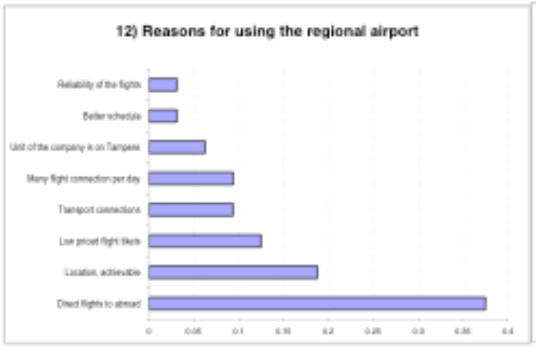

7) Minimum number of bi-weekly flights
0%

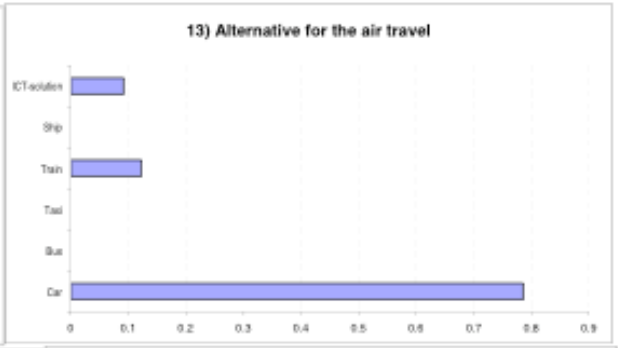

8) Travel by air per year
Domestic
Abroad
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0-24%
25-49%
50-74%
75-100%

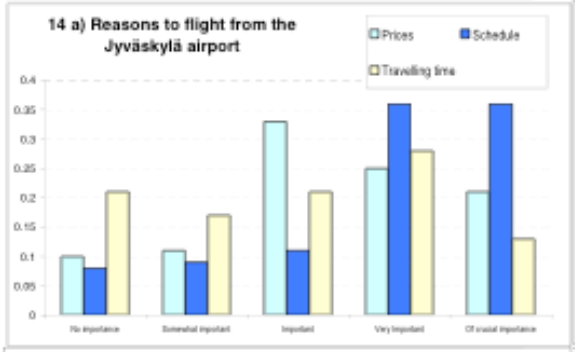
9) Main final destination
- Domestic : Helsinki
- European cities : Frankfurt, Copenhagen, Paris, St.Petersburg
- Cities outside Europe : Sanghaï/China, Atlanta/USA

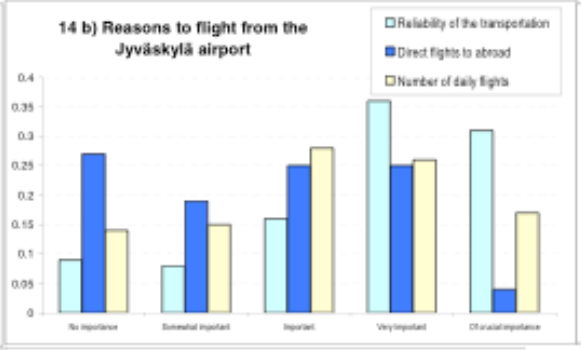
10) Number of flights per week from/to Jyväskylä airport used by the companies
6 - 10
4%
> 10
4%
2 - 5
19%
0 - 1
73%

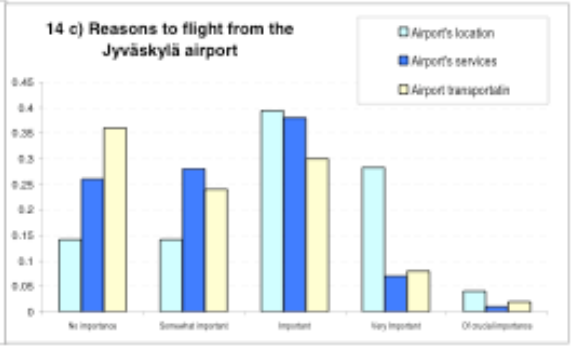

11) Use of other provincial airports
YES
21%
NO
79%

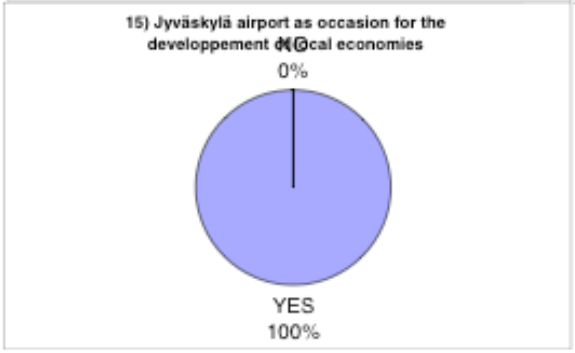

12) Reasons for using the regional airport
Reliability of the flights
Better schedule
Unit of the company is on Tampere
Many flight connection per day
Transport connections
Low priced flight tikets
Location, achievable
Direct flights to abroad
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4

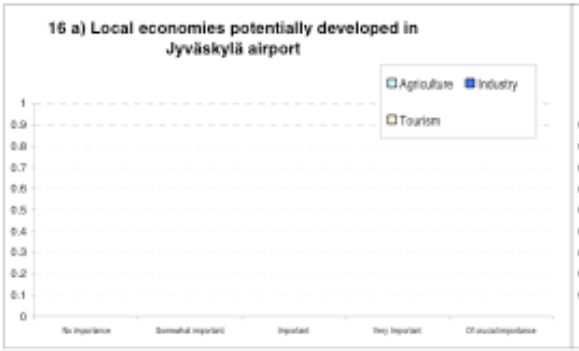

13) Alternative for the air travel
ICT-solution
Ship
Train
Taxi
Bus
Car
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9

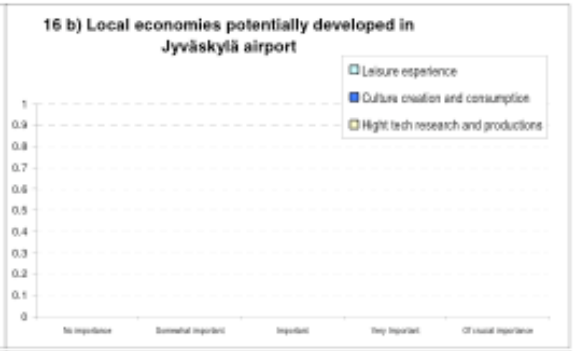

14 a) Reasons to flight from the Jyväskylä airport
Prices
Schedule
Travelling time
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance

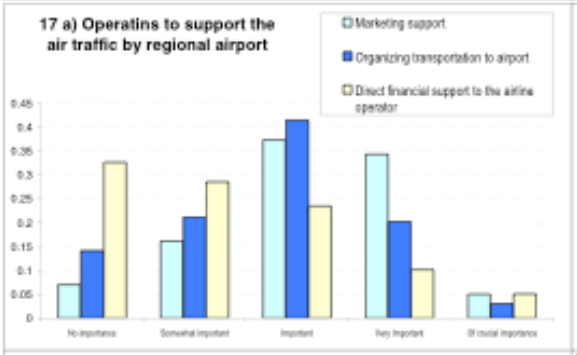

14 b) Reasons to flight from the Jyväskylä airport
Reliability of the transportation
Direct flights to abroad
Number of daily flights
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance

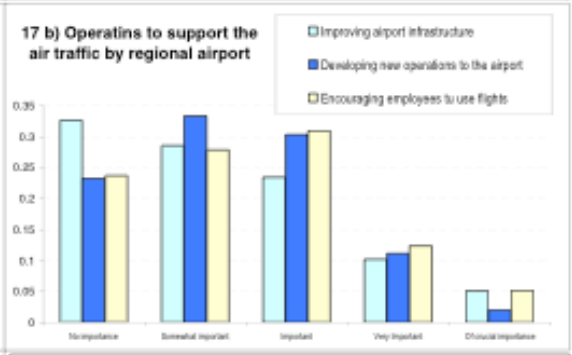

14 c) Reasons to flight from the Jyväskylä airport
Airport's location
Airport's services
Airport transportatin
0.45
0.4
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance


15) Jyväskylä airport as occasion for the developpement of local economies
0%
YES
100%







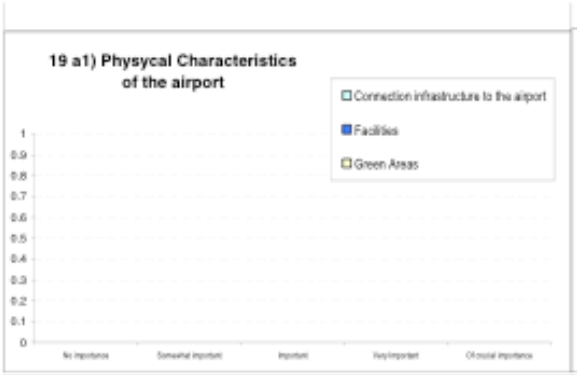


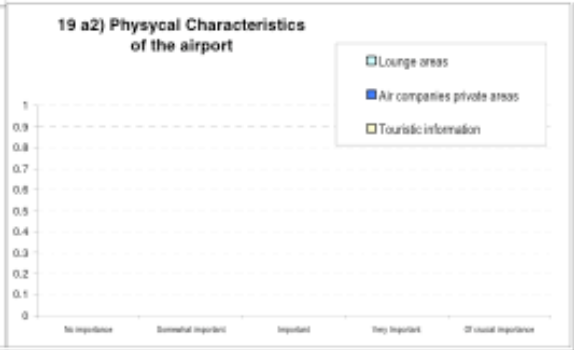
18 b) New Destination

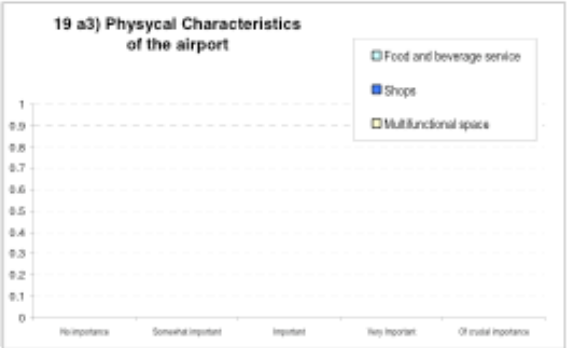
- Domestic : Oulu, Kittilä, Rovaniemi, Joensuu,Kuopio, Ivalo, Kuusamo, Tomio, Pori, Rauma

- European cities : Stockholm, Copenagen, Munchen

- Cities outside Europe : Moscow

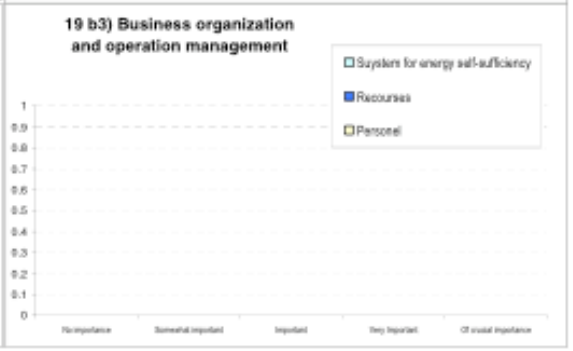

19 a1) Physycal Characteristics of the airport
Connection infrastructure to the airport
Facilities
Green Areas
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance


19 a2) Physycal Characteristics of the airport
Lounge areas
Air companies private areas
Touristic information
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance


19 a3) Physycal Characteristics of the airport
Food and beverage service
Shops
Multifunctional space
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance

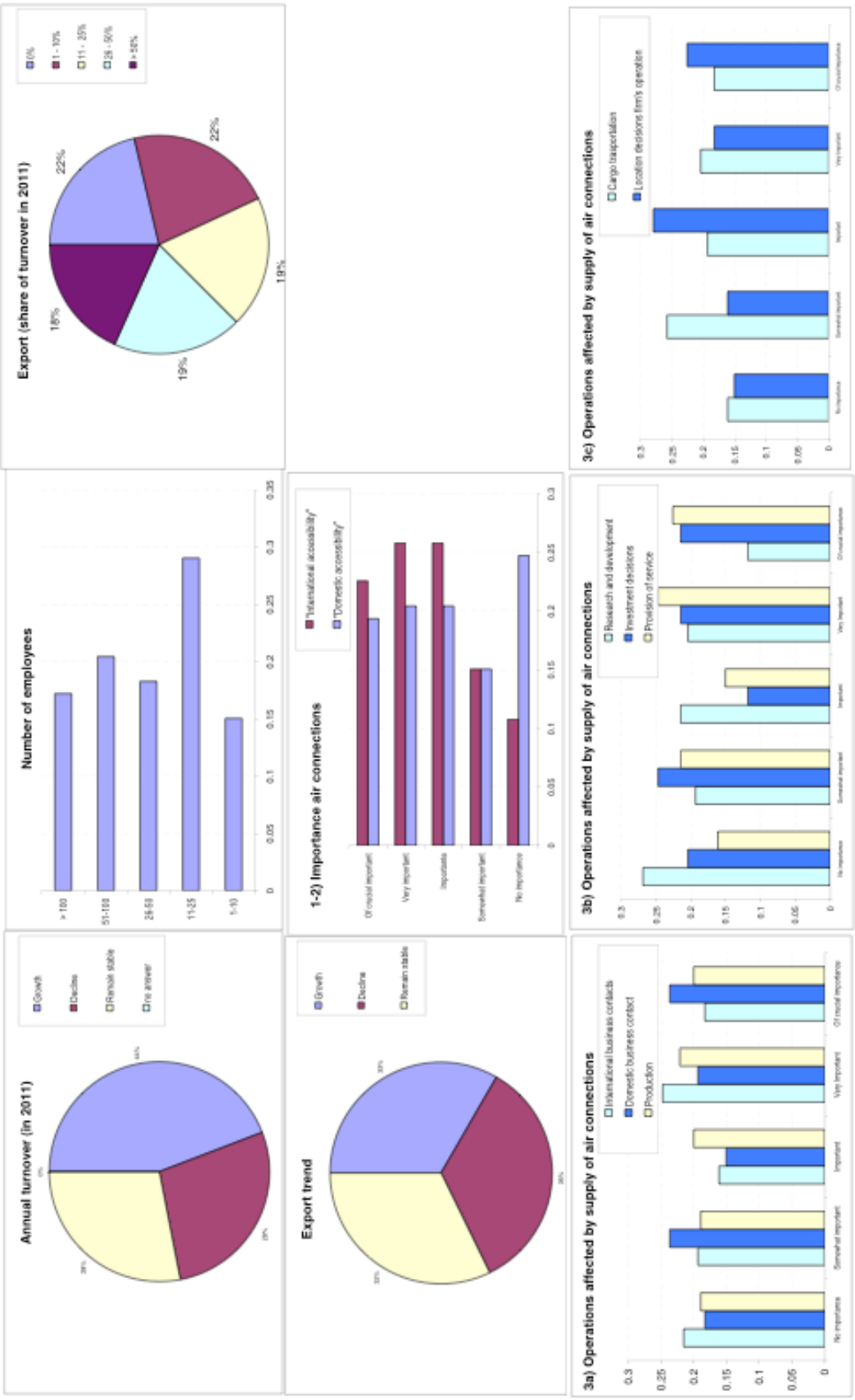
19 b1) Business organization and operation management
Business air travel
Cargo transportation
Tourism
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance

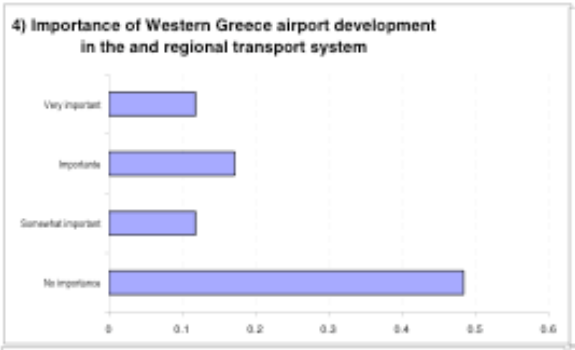
19 b2) Business organization and operation management
Cultural hub
Energy operator of the territory
Hight tech industrial pole
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance

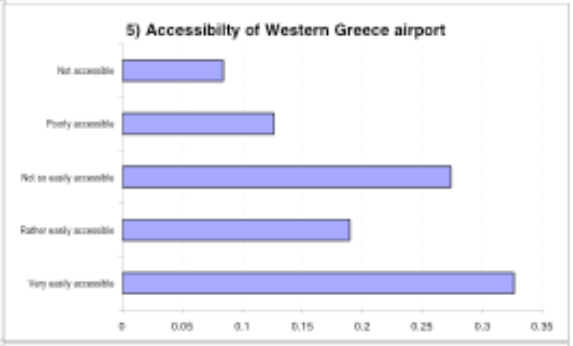

19 b3) Business organization and operation management
Suystem for energy self-sufficiency
Recourses
Personel
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance

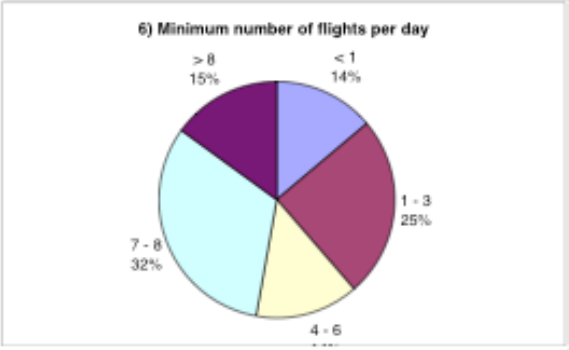
19 b4) Business organization and operation management
Management procedures
Safety
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
No importance
Somewhat important
Important
Very Important
Of crucial importance

Region of Western Greece

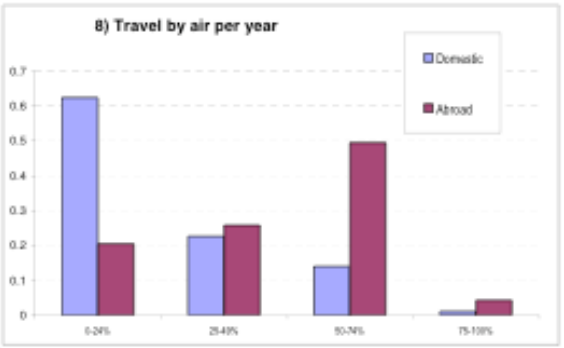



4) Importance of Western Greece airport development in the and regional transport system
Very important
Important
Somewhat important
No importance
0
0.1
0.2
0.3
0.4
0.5
0.6

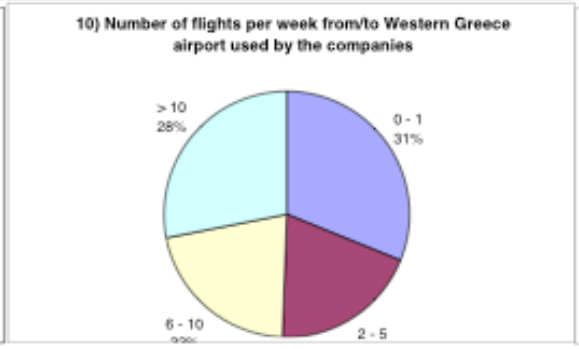

5) Accessibilty of Western Greece airport
Not accessible
Poorly accessible
Not so easily accessible
Rather easily accessible
Very easily accessible
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35

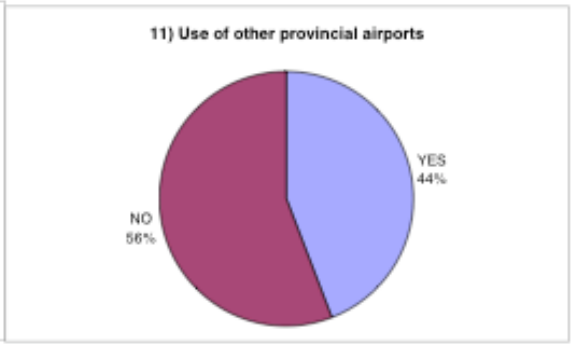

6) Minimum number of flights per day
> 8
15%
< 1
14%
1 - 3
25%
7 - 8
32%
4 - 6

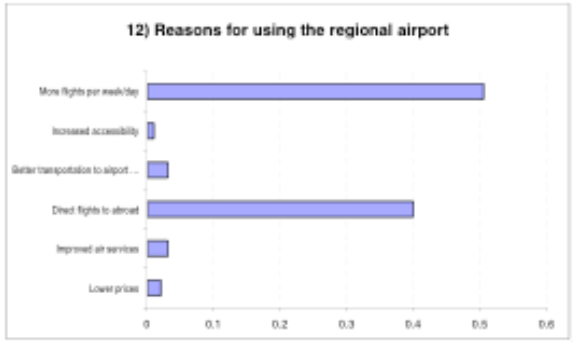
7) Minimum number of bi-weekly flights
20
8%
11 - 20
14%
1 - 5
54%
6 - 10
24%

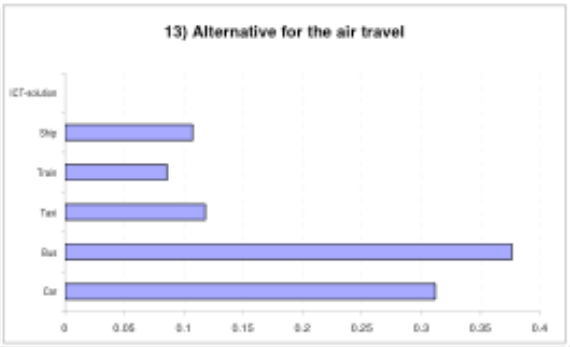

8) Travel by air per year
Domestic
Abroad
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0-24%
25-49%
50-74%
75-100%

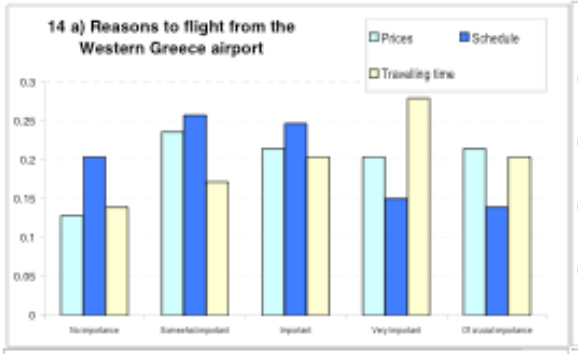
9) Main final destination
- Domestic : .....
- European cities : .....
- Cities outside Europe : .....

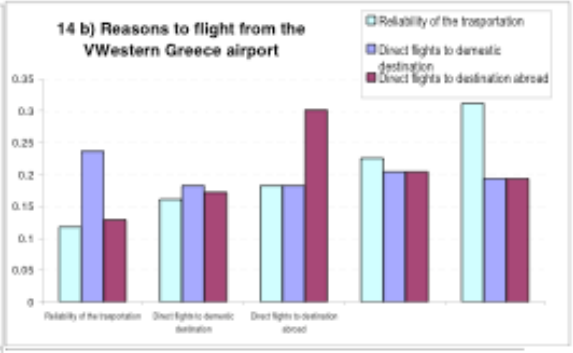

10) Number of flights per week from/to Western Greece airport used by the companies
> 10
28%
0 - 1
31%
6 - 10
2 - 5

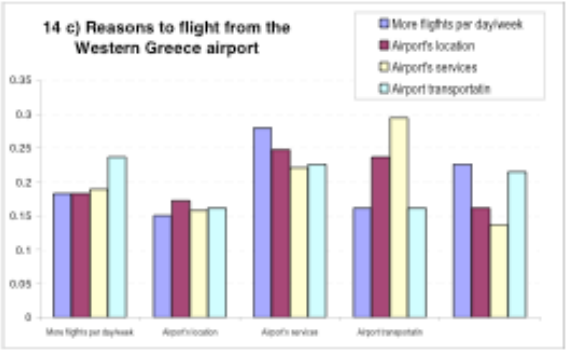

11) Use of other provincial airports
YES
44%
NO
56%

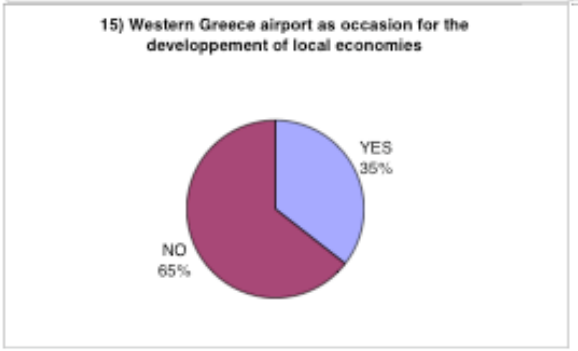

12) Reasons for using the regional airport
More flights per week/day
Increased accessibility
Better transportation to airport ...
Direct flights to abroad
Improved air services
Lower prices
0
0.1
0.2
0.3
0.4
0.5
0.6

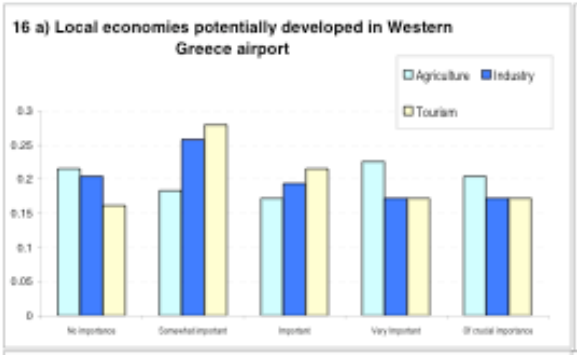

13) Alternative for the air travel
ICT-solution
Ship
Train
Taxi
Bus
Car
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4

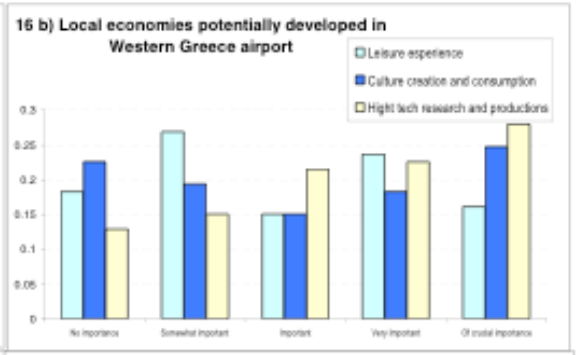

14 a) Reasons to flight from the Western Greece airport
Prices
Schedule
Travelling time
0.3
0.25
0.2
0.15
0.1
0.05
0

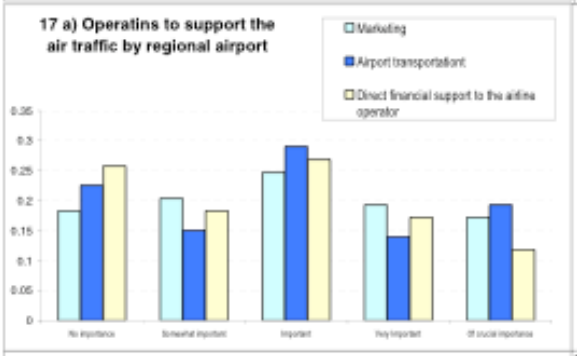

14 b) Reasons to flight from the VWestern Greece airport
Reliability of the trasportation
Direct flights to domestic destination
Direct flights to destination abroad
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0

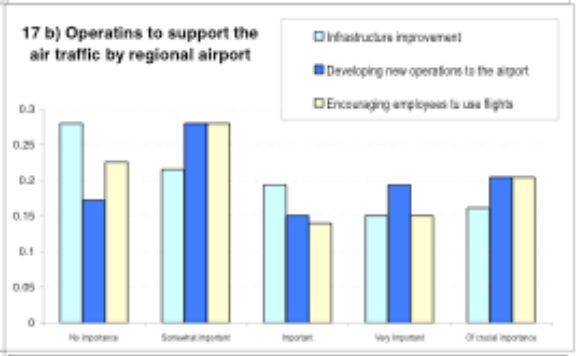

14 c) Reasons to flight from the Western Greece airport
More flights per day/week
Airport's location
Airport's services
Airport transportatin
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0

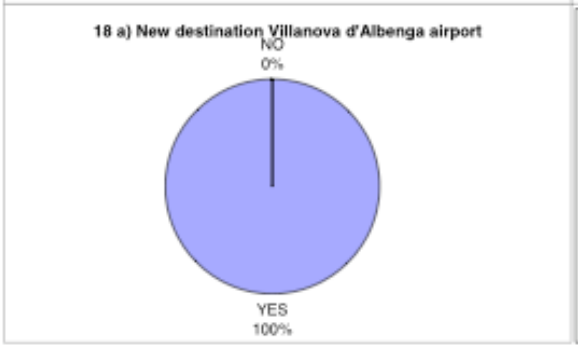

15) Western Greece airport as occasion for the developpement of local economies
YES
35%
NO
65%


16 a) Local economies potentially developed in Western Greece airport
Agriculture
Industry
Tourism
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance

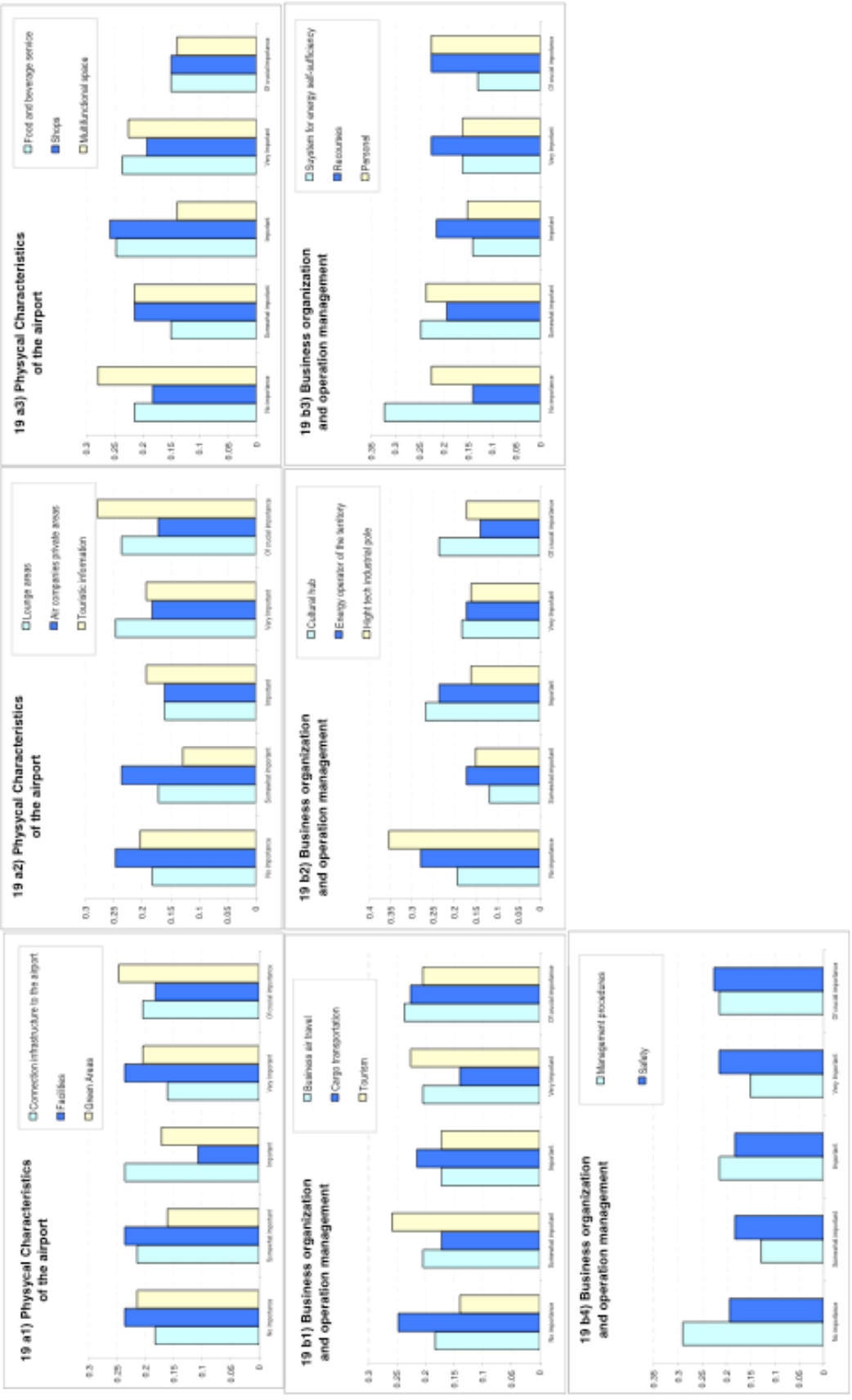

16 b) Local economies potentially developed in Western Greece airport
Leisure experience
Culture creation and consumption
Hight tech research and productions
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance


17 a) Operatins to support the air traffic by regional airport
Marketing
Airport transportation
Direct financial support to the airline operator
0.35
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance

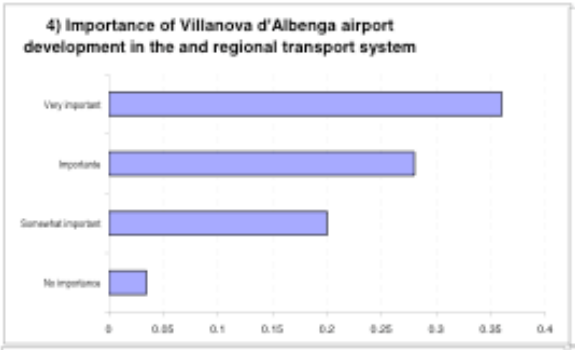

17 b) Operatins to support the air traffic by regional airport
Infrastructure improvement
Developing new operations to the airport
Encouraging employees to use flights
0.3
0.25
0.2
0.15
0.1
0.05
0
No importance
Somewhat important
Important
Very important
Of crucial importance

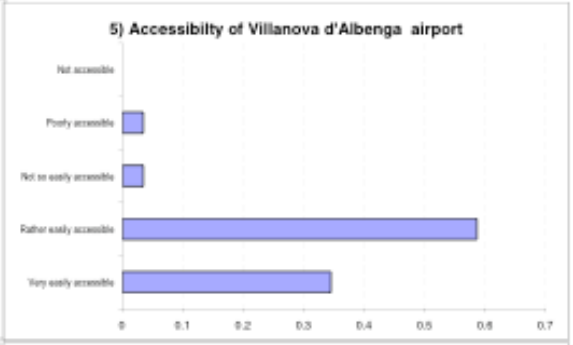

18 a) New destination Villanova d'Albenga airport
NO
0%
YES
100%

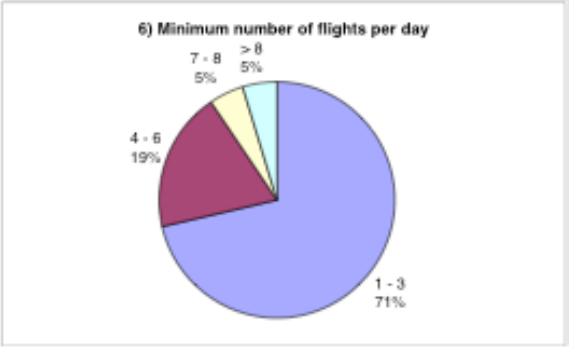
18 b) New Destination
- Domestic : .....
- European cities : .....
- Cities outside Europe : .....


19 a1) Physycal Characteristics of the airport
Connection infrastructure to the airport
Facilities
Green Areas
19 a2) Physycal Characteristics of the airport
Lounge areas
Air companies private areas
Touristic information
19 a3) Physycal Characteristics of the airport
Food and beverage service
Shops
Multifunctional space
19 b1) Business organization and operation management
Business air travel
Cargo transportation
Tourism
19 b2) Business organization and operation management
Cultural hub
Energy operator of the territory
Hight tech industrial pole
19 b3) Business organization and operation management
System for energy self-sufficiency
Recourses
Personal
19 b4) Business organization and operation management
Management procedures
Safety

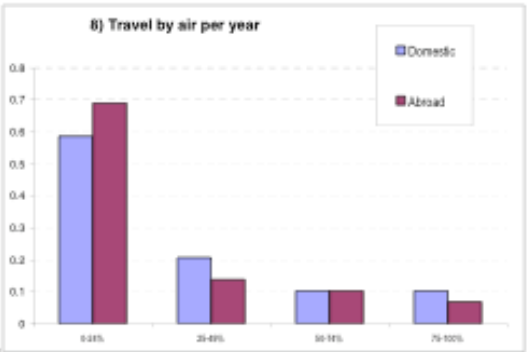
Province of Savona


4) Importance of Villanova d'Albenga airport development in the and regional transport system
Very important
Important
Somewhat important
No importance
0
0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4

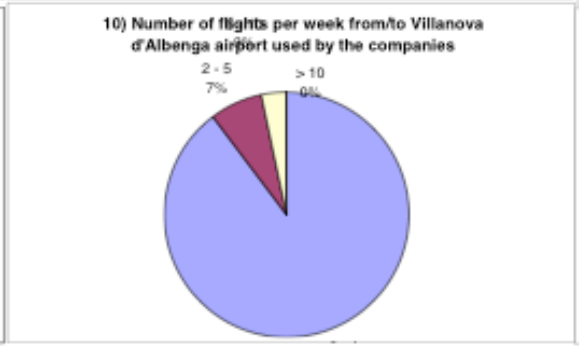

5) Accessibilty of Villanova d'Albenga airport
Not accessible
Poorly accessible
Not so easily accessible
Rather easily accessible
Very easily accessible
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7

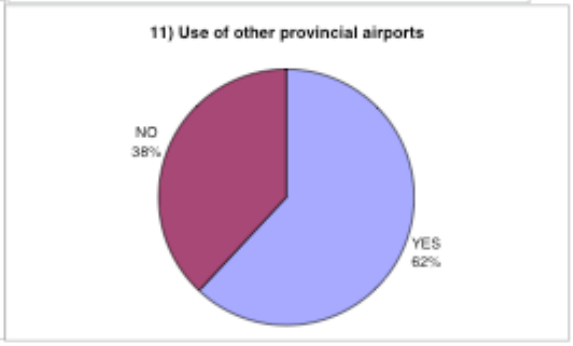

6) Minimum number of flights per day
7 - 8
5%
> 8
5%
4 - 6
19%
1 - 3
71%

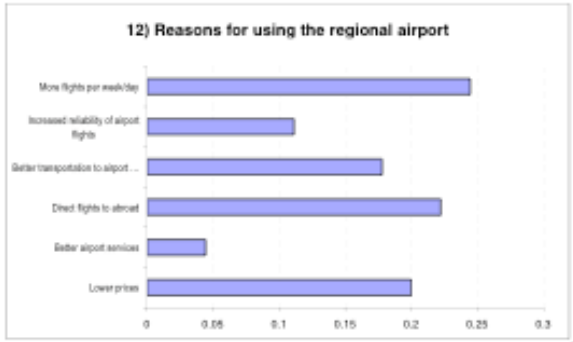
7) Minimum number of bi-weekly flights
20
8%
11 - 20
4%
6 - 10
25%
1 - 5
63%

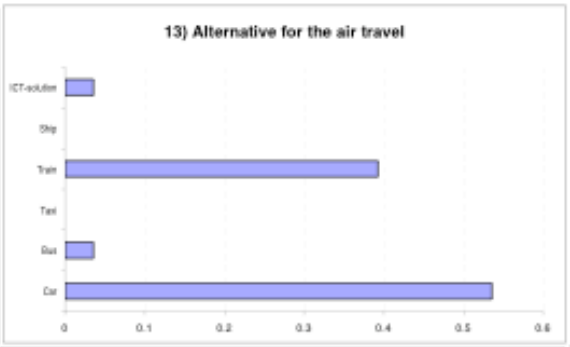

8) Travel by air per year
Domestic
Abroad
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8

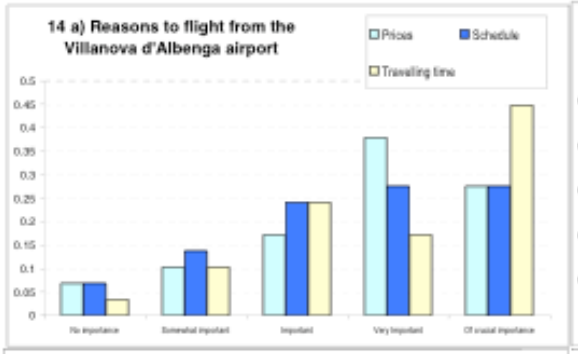
9) Main final destination
- Domestic : Roma, Torino, Milano, Venezia, Palermo, Napoli
- European cities : Parigi, Londra, Varsavia, Praga, Conenhagen, Dusseldorf, Berlino, Berna, Valencia, Madrid, Amsterdam, Budapest
- Cities outside Europe : New York, Mosca, Istanbul, Tunisi, Bangkok, Mosca, Buenos Aires

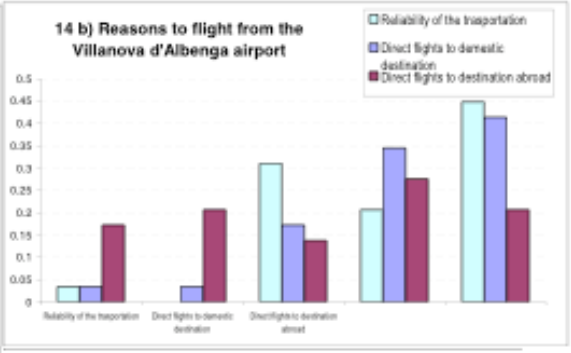

10) Number of flights per week from/to Villanova d'Albenga airport used by the companies
2 - 5
7%
> 10
0%

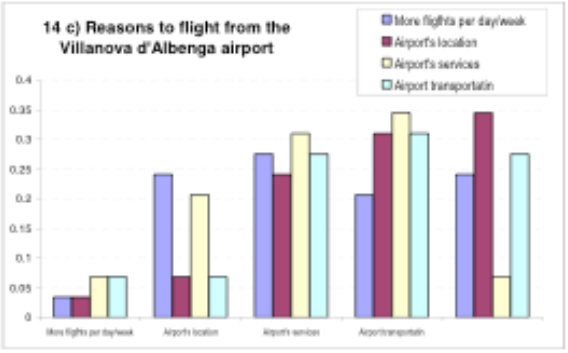

11) Use of other provincial airports
NO
38%
YES
62%


12) Reasons for using the regional airport
More flights per week/day
Increased reliability of airport flights
Better transportation to airport ...
Direct flights to abroad
Better airport services
Lower prices
0
0.05
0.1
0.15
0.2
0.25
0.3

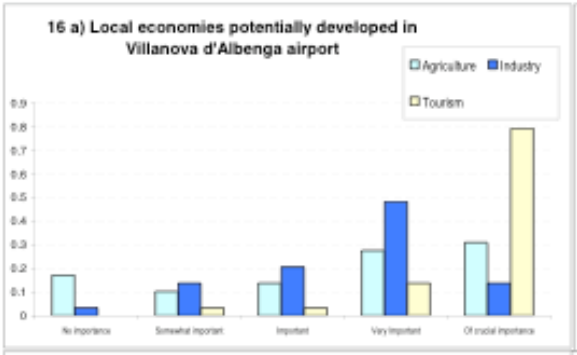

13) Alternative for the air travel
ICT-solution
Ship
Train
Taxi
Bus
Car
0
0.1
0.2
0.3
0.4
0.5
0.6

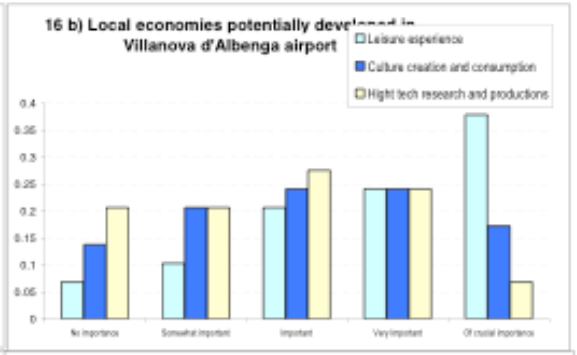

14 a) Reasons to flight from the Villanova d'Albenga airport
Prices
Schedule
Travelling time
No importance
Somewhat important
Important
Very important
Of crucial importance

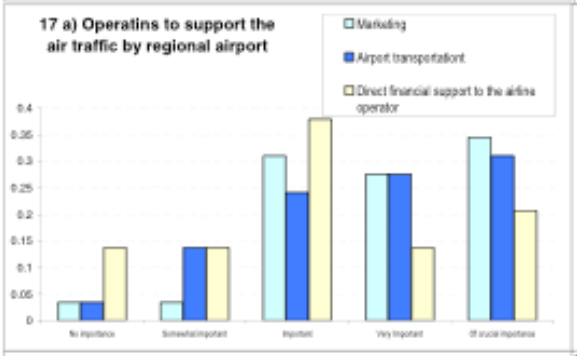

14 b) Reasons to flight from the Villanova d'Albenga airport
Reliability of the trasportation
Direct flights to domestic destination
Direct flights to destination abroad

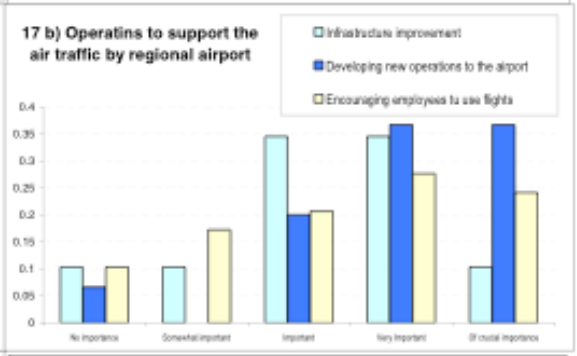

14 c) Reasons to flight from the Villanova d'Albenga airport
More flights per day/week
Airport's location
Airport's services
Airport transportatin

15) Villanova d'Albenga airport as occasion for the developpement of local economies
NO
0%
YES
100%







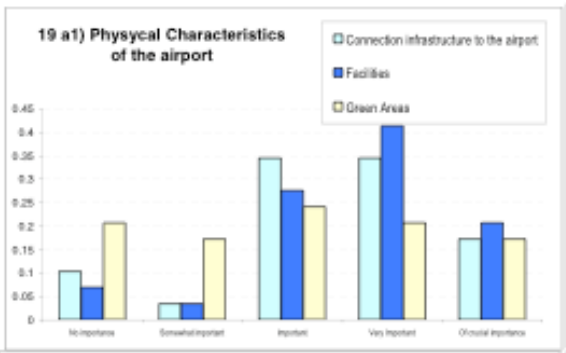


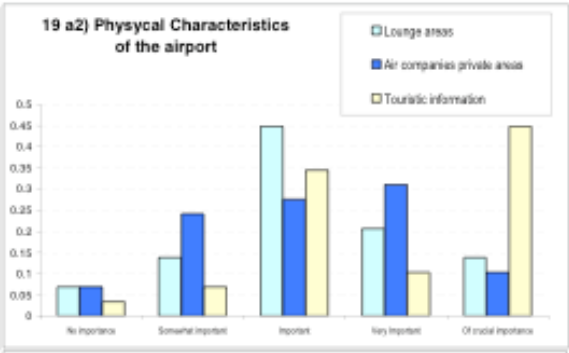
18 b) New Destination

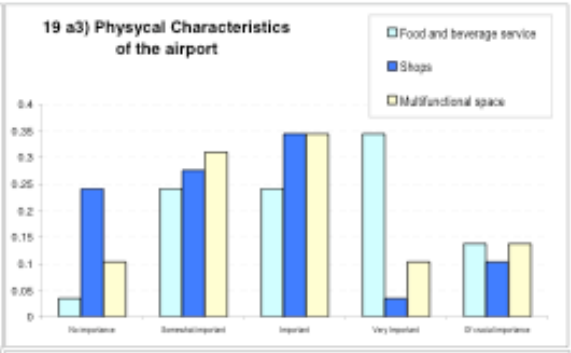
- Domestic : Torino, Milano, Venezia, Roma, Palermo, Olbia, Cagliari

- European cities : Parigi, Londra, Varsavia, Praga, Dusseldorf, Berlino, Monaco, Amsterdam, Stockholm, Copenagen, Munchen

- Cities outside Europe : New York, Moscow, Istanbul, Hamman, Casablanca, Messico City


19 a1) Physycal Characteristics of the airport
Connection infrastructure to the airport
Facilities
Green Areas


19 a2) Physycal Characteristics of the airport
Lounge areas
Air companies private areas
Touristic information


19 a3) Physycal Characteristics of the airport
Food and beverage service
Shops
Multifunctional space

19 b1) Business organization and operation management
Business air travel
Cargo transportation
Tourism

19 b2) Business organization and operation management
Cultural hub
Energy operator of the territory
Hight tech industrial pole

19 b3) Business organization and operation management
Suystem for energy self-sufficiency
Recourses
Personal

19 b4) Business organization and operation management
Management procedures
Safety

Annex 3. *Maps-Book*

See external annex book.

Annex 4. Dissemination + List of TPG publication

List of Dissemination activities

The events in which different TPG participated until now are:

- International VDH3 Seminar, 19th-20th September 2011, IUAV Venice, Italy (DSA, Genoa).
  "Europeénne Peripherique: Transport Infrastructure for Peripheral Regions' Economic Development"_Sara Favargiotti

- International Workshop "Emerging Infraestructural Landscapes", 16th-21st October 2011, Lleida-Alguaire, Cataluña, Spain (DSA, Genoa).
  "Skywalk"_Mosè Ricci
  "Emerging Infraestructural Landscapes: Case Study"_Sara Favargiotti

- International VDH3 Seminar, 1st-2nd December 2011, MAXXI, Rome, Italy (DSA, Genoa).
  "Europeénne Peripherique: Airports for Peripheral Regions' Development"_Sara Favargiotti

- International VDH3 Seminar, 8th-10th March 2012, TU Delft, The Netherlands (DSA, Genoa).
  "The Afterlife Airports. The Re-Cycle of secondary airports and new opportunities for the territory"_Sara Favargiotti

- Joint NS-RSA and ESPON Norba Scientific Seminar, 14th-15th March 2012, Oslo, Norway (Jyväskylä University).
  "Regional airports and regional growth"_Tervo Hannu, Mukkala Kirsi

- AIRDEV 2012 Conference, 19th-20th April 2012, Lisbon, Portugal (DSA, Genoa).
  "The Re-Cycle of secondary airports and new opportunities for the territory – ADES Research (ESPON 2013 Project)"_Mosè Ricci, Sara Favargiotti

- Regional Studies Association European Conference, 13th-16th May 2012, Delft, The Netherlands (Jyväskylä University).

- MED.NET.EU.12 International Congress, 28th-29th June 2012, Genoa, Italy (DSA, Genoa).
  "*MED Airports On Hold - ADES Research (ESPON 2013 Project)_Sara Favargiotti*

- Dissemination of the project scope to over 2000 firms in the Region of Western Greece through information for the Project presented the introductory letter of the questionnaire.

- 52nd European Congress of the RSAI (ERSA), 21st-25th August 2012, Bratislava, Slovakia (Jyväskylä University).

- Jyväskylä University wrote a Finnish summary about the results of the case study of Jyväskylä, which was delivered at the end of August to all those persons who were interviewed in March 2012 plus to other influential local politicians and other persons. The title of this summary was *"Lentoliikenteen merkitys Keski-Suomessa" ("The significance of air traffic in Central Finland").*

- In September, Jyväskylä University gave a (media) release about the results of the Jyväskylä-case. The title of the release is *"Keski-Suomi tarvitsee hyvät lentoyhteydet – Jyväskylän lentoliikennettä analysoitu eurooppalaisessa tutkimuksessa" ("Central Finland needs good air connections – air traffic in Jyväskylä has been analyzed in an European research"*). This release will be circulated by University of Jyväskylä to all newspapers and electrical media.

- EAAE/ISUF "New Urban Configuration" Conference, 16th-19th October 2012, TU Delft, The Netherlands (DSA, Genoa).

  The Conference invites professionals from both research and practice dealing with the built environment (architecture, engineering, urbanism, landscape architecture, planning, geography, sociology and urban history. It deals with the following themes: 1. Innovation in building typology, 2. Infrastructure and the city, 3. Complex urban projects, 4. Green spaces: the city and the territory, 5. Delta urbanism: Living with water in the urban Deltas.
  In our opinion, it will be important to participate at this conference in order to share common experiences with other experts in our sector (2. Infrastructure and the city). All the papers will be published and will have a Europe-wide distribution.

- Internal ESPON Seminar, 5th-6th December 2012, Paphos, Cyprus (TPG).

- Jyväskylä University has written an article based on our results into a Finnish Espon-publication, which will be published in December. The title of the article is *"Lentoliikenne ja alueiden kehitys"* (*"Air traffic and the development of regions"*). The title of the book will (probably) be *"ESPON tekee tulosta"* (*"ESPON bears fruit"*) edited by Timo Hirvonen and Ossi Kotavaara and published by the Ministry of Employment and the Economy). Based on this article, they will present the main results of the project in a Finnish ESPON seminar in Helsinki in December.

- Regional meeting organized in Villanova d'Albenga Airport on the 30th November 2012.

- Regional meeting in the City of Jyväskylä on the 10-11th January 2013.

www.espon.eu

The ESPON 2013 Programme is part-financed by the European Regional Development Fund, the EU Member States and the Partner States Iceland, Liechtenstein, Norway and Switzerland. It shall support policy development in relation to the aim of territorial cohesion and a harmonious development of the European territory.

ISBN