



Office for
National Statistics

The Feasibility of a Virtual Tourism Observatory for Europe

9th TourMIS Users' Workshop

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Presentation Outline

- Vision for the VTO
- What sort of collaboration model?
- The Project Approach
- The Policy, Research and and Data Frameworks
- The Database development and web 'front end'
- Ongoing and Future Work

Context

What is the EC vision for a future Virtual Tourism Observatory?

- **A statistical database for informed, evidence-based policy making.**
- **The analysis section of the Observatory is expected to deliver regular reports.**
- **The policy watch section will monitor policy developments in the Member States.**

“The Virtual Tourism Observatory is meant to become a central source of information for policy makers, tourism stakeholders and researchers. It will provide reliable, comparable and up-to-date information. It will identify trends and developments in the tourism industry and will provide explanatory analysis”.

The challenge is to ensure that users are motivated to engage or collaborate with the VTO..

Vision for the VTO

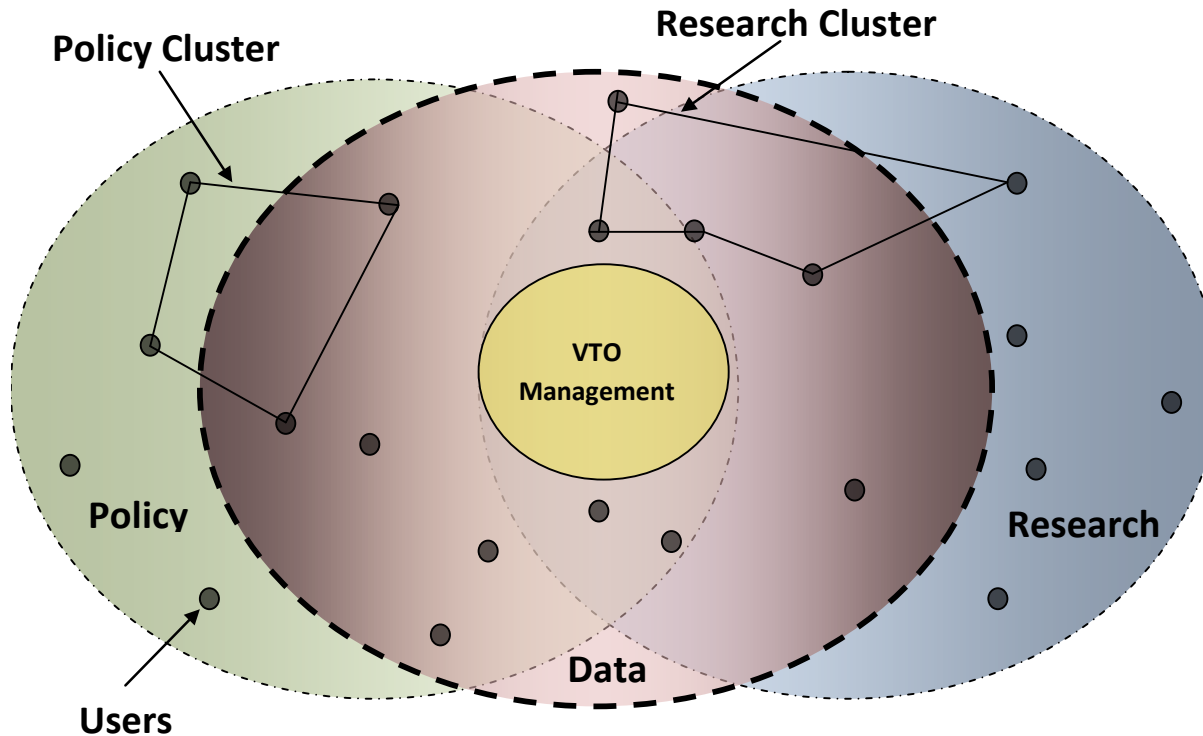
- A repository for up to date information about the tourism sector in Europe encompassing data, policy and research
- Managed and hosted by DG-ENTR on the Europa website
- Potential to develop collaborative working through the VTO User Community
- Drawing on existing data and information with scope to facilitate the presentation of national and regional level information

A Vision for the VTO

- User friendly interface with easy download facilities, user defined content and analysis tools
- Robust data framework and metadata structures for data and documents that allow the system to be expanded
- Scope for inclusion of other sources of information, e.g. OECD, UNWTO, member states data, sustainability indicators
- Potential vehicle for presentation of TAC Member States Reports

A vision for the VTO

- Schematic representation of the VTO

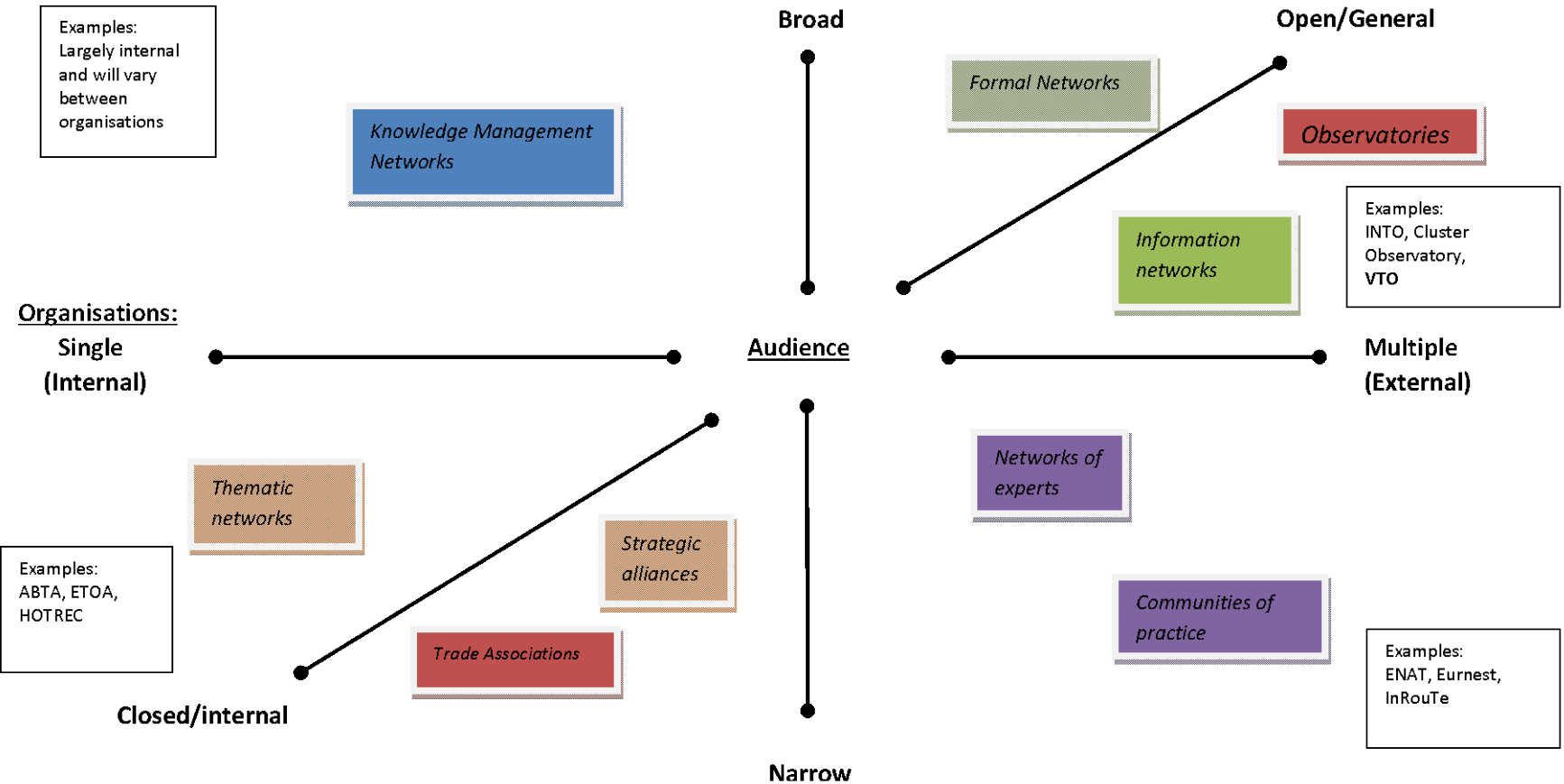


What should an observatory do?

- “An observatory should be outward looking, have a strong focus in data and research presentation without necessarily providing interpretation of this information (which is often left to the user). An observatory may provide linkages to relevant policy activity in the field and be used to inform the policy making process but it is not usually the purpose of an observatory to steer a particular policy agenda”.
- The VTO is not a knowledge network but does share some of the characteristics of KNs – there is potential for the VTO to develop collaborative working, e.g. through project working

What sort of Collaboration?

Spectrum of Interests:



Project Methodology

- Phase 1: Data and Information Gathering
 - User Needs Survey
 - Data Sources Survey
 - Survey of Existing Observatories and experts
 - Policy, data, and research frameworks
- Phase 2: Analysis of data and information
 - Includes Gap analysis and derived variables
- Phase 3: Database Development and web “front end”
- Phase 4: Future Management Strategies

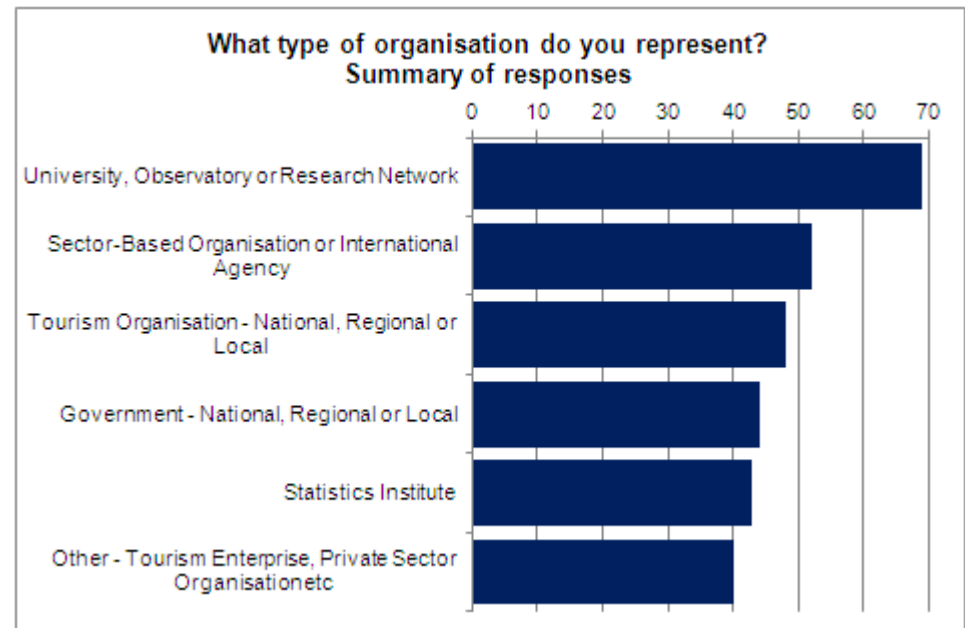
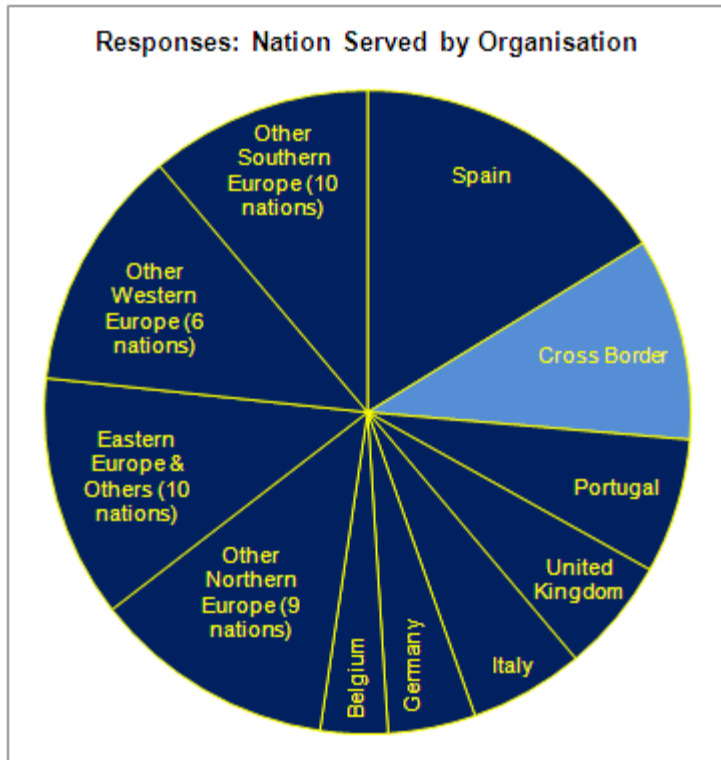
Building the framework

- The three main themes of the VTO – data, research and policy were developed into a framework for the database development based on identifying user needs through survey work and secondary analysis
- We know consider these in more detail.

Survey of User Needs

- We have sought potential users' views on how data, research and policy issues should be presented in the VTO
- the survey focused on the following:
 - What data/information is currently used and how important?
 - What are the important themes/issues?
 - What are the gaps?
 - How should data/information be presented?
 - What are the priorities?

Response to the Survey



296 completed responses were received in total from 41 different countries (sample frame: 1,200 contacts)

The Policy Framework

- **Tourism Policy Priority Areas/Issues:**

Growth and competitiveness

Performance of markets

Seasonality

Enterprise performance and support

Innovation and ICT

Employment and labour supply

Skills and training

Quality and standards

Climate change and resource efficiency

Transport and access

Social inclusion/ accessibility

Natural and cultural heritage

Area development, diversification, regeneration

Delivery structures

Budgets and funding

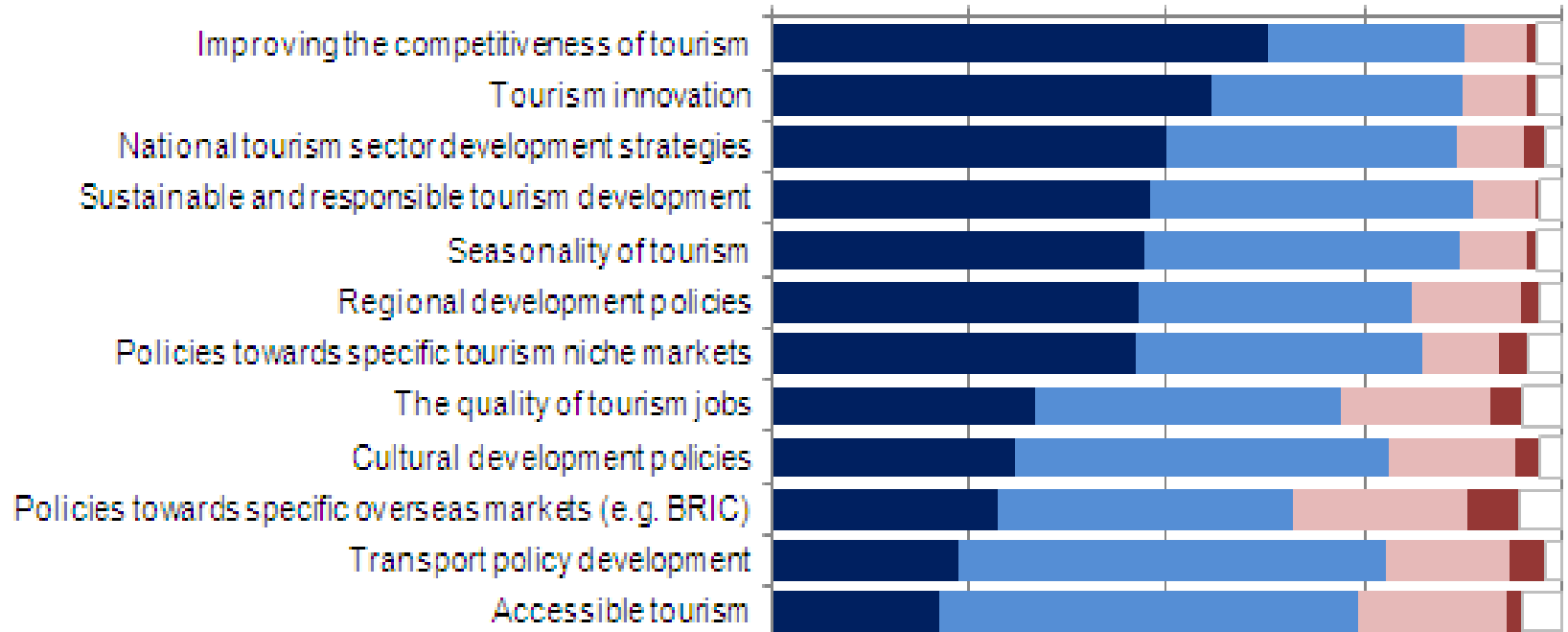
These Policy issues have been assessed against key data variables to identify information that informs these issues

User Requirements for Policy

What are the tourism policy themes in your region/nation that are of most importance to your organisation?

percentage of respondents to this question

0 25 50 75 100



■ Extremely Important ■ Important ■ Neither important or not important ■ Not important □ Don't know

Policy Priorities



Key Policy Areas

- Improving the competitiveness of tourism
 - Actions towards Sustainable Tourism
 - Innovation in the tourism sector
 - The seasonality of tourism
 - National and regional tourism policy
-
- Which leads to theme analysis...

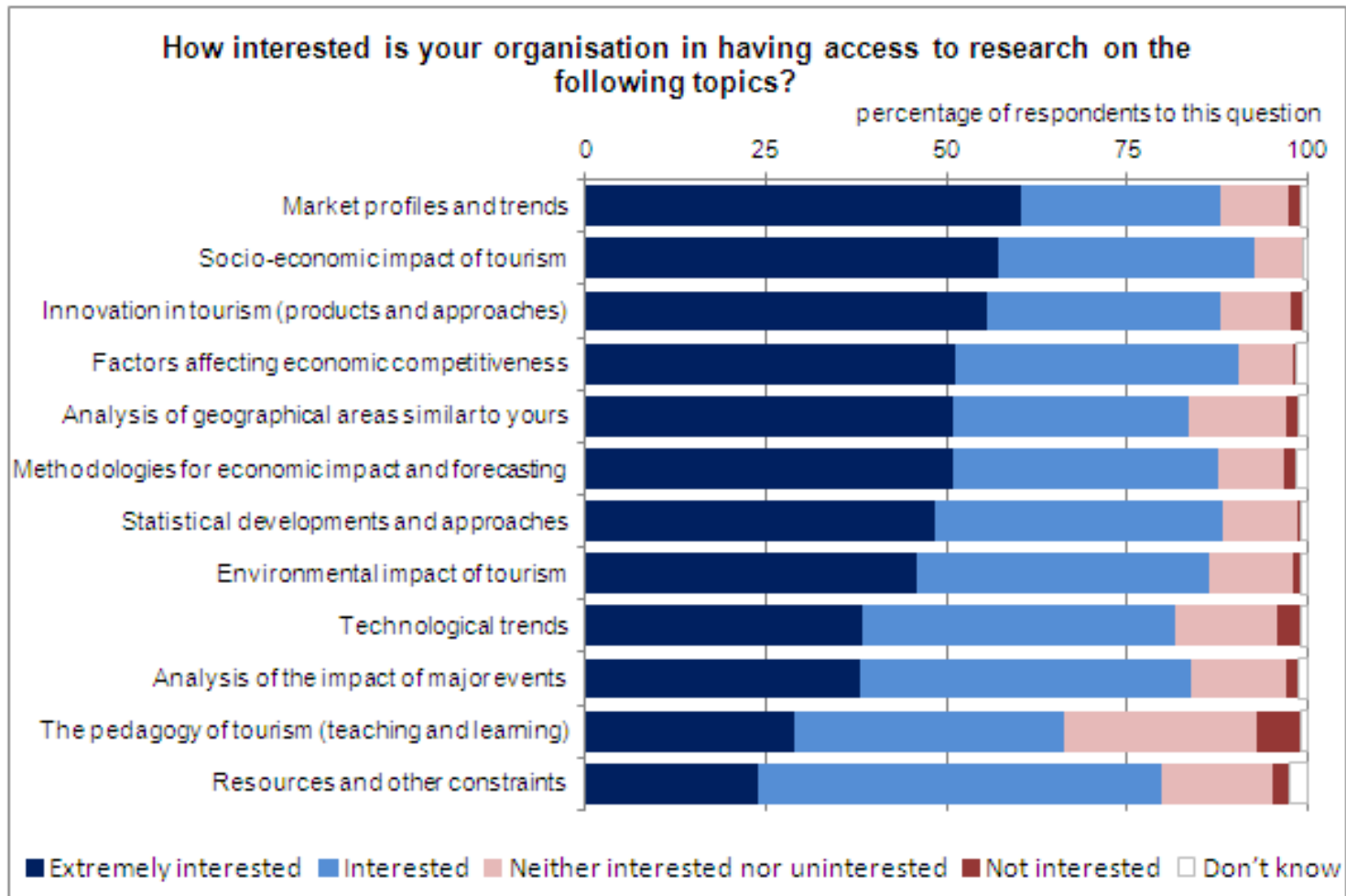
	Theme 4
	The seasonality of tourism
Links to other policy areas	Growth and Competitiveness, Performance of Markets (see section C2)
Potential Indicators	<p>School / Work Holiday Patterns (All indicators sourced from appendix C1.4)</p> <p>Second + Holidays & breaks Seasonality - Good Practice Availability of monthly data Indicators of seasonal smoothing Seasonality of Employment</p>
Datasets	<p>Most of the indicators for this theme are produced on an ad-hoc basis either nationally or locally.</p> <p>Labour force survey data available quarterly could provide some insights into the seasonal nature of employment in tourism. Quarterly employment data is included in the database development in section D of the report</p> <p>Monthly data from Eurostat on Arrivals and Nights spent in accommodation, together with occupancy rates could be an important source of information for seasonality and this is included in the database development in section D of the report.</p>
Comparability	Comparability of data on employment and occupancy rates and arrivals at accommodation is good at the EU level.
Data gaps & limitations	Data on school and second holidays would be of use and good practice and experience in analysing the impacts of tourism sustainability would be of use in the policy/research watch area of the VTO.
Summary of current situation	There is already substantial data included in the database development that informs the area of seasonality. Developing further links to good practice and research/policy material in the area would be a further step for the VTO moving forward.

The Research Framework

Review of Research Sources

<u>Main Research Themes</u>	<u>Research Sub-Themes</u>
Economic Competitiveness	<i>Destination Competitiveness and Management</i> <i>ICT, the Internet & Mobile Technology</i> <i>Skills and Human Capital</i> <i>The Economic Context</i>
Environmental Pressures	<i>Climate Change</i> <i>Sustainable Destinations</i> <i>The Impact of Oil and Energy</i>
Tourism Measurement and Modelling	<i>Statistical Approaches to Measurement at National Scale</i> <i>Modelling and Impact Assessment</i> <i>Sub-National Measurement:</i>

User Requirements - Research



Research Priorities



Final Themes

- Tourism Trends
- Economic Impact and competitiveness of tourism (incorporating 'volume and value')
- Innovation in the Tourism Sector
- Social impacts of tourism
- Environmental impacts of tourism

The Data Framework

- Identifying potential sources of data around a set of key topic areas - informing the database construction
- Metadata standards and a simplified set of metadata requirements developed
- Refinement of the Tourism 'data map' taking account of policy priorities identified

Tourism Data Map

Tourism Industries – Economic data

GVA
Compensation of employees
Turnover
Number of enterprises
Size / age of enterprises
Business births & deaths

Tourism Industries – Employment data

Number of employees / self employed
Part time / full time
Earnings
Characteristics (age, gender, nationality etc.)

Tourism Products – expenditure data

Household final consumption expenditure
Public transport trips by mode and purpose
Maintenance of second homes
Sport & cultural ticket information

Other Products – expenditure data

Spend by product at airports / ports
Information about shopping day trips
Non ticket spend at cultural, sport activities
Personal transport trips by purpose

Outbound Visitors

Visits, Nights, Expenditure
Nil nights, transit
Purpose of visit
Country of visit, nationality
Mode of travel
Points of departure & arrival
Whether package
Activities undertaken
Purchases made
Domestic purchases en route
Visitor characteristics

Domestic Overnight Visitors

Visits, Nights, Expenditure
Purpose of visit
Location of visit
Accommodation type
Mode of travel
Activities undertaken
Purchases made
Visitor characteristics

Derived tourism data

Tourism Satellite Account Tables
Tourism direct GVA, tourism ratios
Tourism direct employment
Value of tourism within regions

Inbound Visitors

Visits, Nights, Expenditure
Nil nights, transit
Purpose of visit
Country of origin, nationality
Mode of travel
Points of arrival & departure
Whether package
Accommodation type(s)
Location(s) of accommodation
Activities undertaken, Purchases made
Visitor characteristics

Domestic Day Visitors

Visits, Expenditure
Purpose of visit
Location of visit
Mode of travel
Activities undertaken
Purchases made
Visitor characteristics

Location Data

Airport / port arrivals & departures
Detailed origin / destination data
Visits to attractions
Accommodation stock
Occupancy data
Location of second / holiday homes
Locally produced survey data

Other research & data

Academic papers
Tourism multipliers
Local research
Event impact research
Sustainability assessments and indicators

User Requirements - Data

five tourism data variables which are considered extremely important by over 60% of respondents and these are as follows:

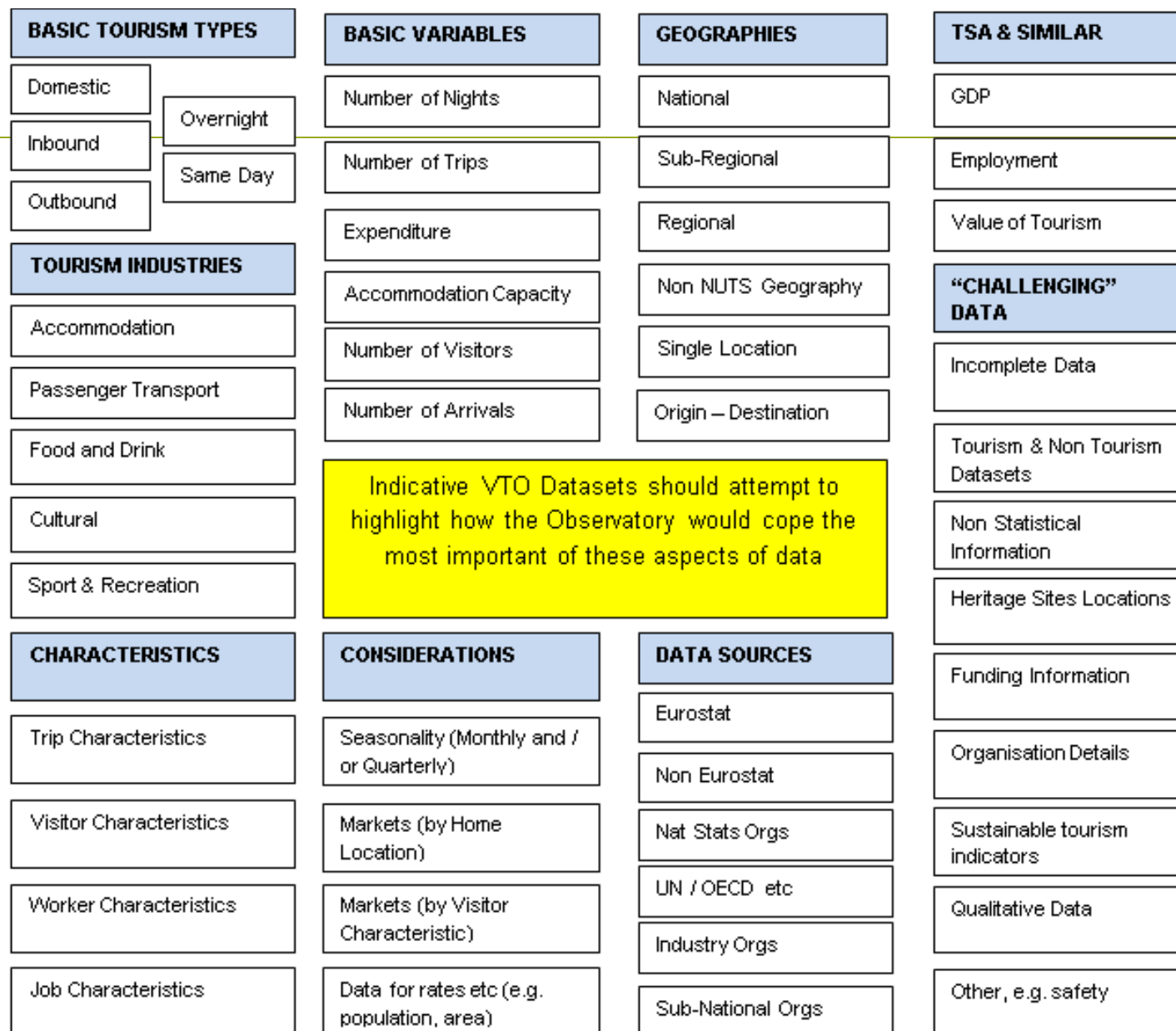
- Overnight inbound tourism (numbers and spend)
- Origin of inbound visitors
- Economic data on tourism industries
- Overnight domestic tourism visits (numbers and spend)
- Tourism employment data

Data Priorities



Database and Web Development

- Selected datasets included in a VTO 'demonstration site'
- Additional data included in separate database files for use by EC
- Gap analysis carried out
- Metadata developed and included in demonstration site (this applied to research and policy material)



Web 'front end' – 1. Search



VTO - Search the VTO

Search the VTO - Data Analysis - Reports - Databases - Administration - Home - VTO Help - Log On

The common search criteria across all VTO content are:

Geographies: Austria

Data Topics: All Topics

Select geographies and data topics.
Click here to search: All below:

Click to select all Geographies

- Africa
- America
- Asia
- Europe
 - European Republics of the f...
 - European Union (27 countries)
 - Austria
 - Belgium
 - Bulgaria
 - Cyprus
 - Czech Republic
 - Denmark
 - Estonia
 - Finland
 - France
 - Germany (including former)
 - Greece
 - Hungary
 - Ireland
 - Italy

Click to select all Data Topics

- Date
 - Accommodation
 - Expenditure
 - Railway Passenger Transport
 - Road Passenger Transport
 - Air Passenger Transport
 - Basic Units of Measurement
 - Employment
- Worker Characteristics
- Geography
- Product / Industry / Asset
- Purpose
- Trip Characteristics

Documents

To export the Tree select a file type: and click

Drag a column header here to group by that column

Click to Open	Contact Organiat	Contact Name	Document Descr	Pub
<input type="checkbox"/>		Anna Scutten, Ludwig Czaibunger	Statistics of traffic inbound and outbound flows related to tourism to work out hidden tourism and daily trips in South Tyrol	200
<input type="checkbox"/>	European Environment Agency	Pawel Kosmierzak	Pilot test shows on national sustainable consumption and production policies	200
<input type="checkbox"/>	Eurostat	Hans-Werner Schmidt	The correlation between climate change in tourism and the environment	200
<input type="checkbox"/>	European Union	Christophe Demunter	Are recent evolutions in tourism compatible with sustainable tourism?	200
<input type="checkbox"/>	European Commission	Marin Lagerstrom	Methodological work on measuring the sustainable development of tourism	200

Web 'front end' – 2. Build tables/charts



VTO - Build a Table and Chart

Search the VTO - Data Analysis - Reports - Cubes - Administration - Home - VTO Help - Log In

To export as: click

Select geographies, data topics, measures and a period.
Click here to show table and chart:

Click to select all Geographies

- Albania
- Andorra
- Austria
- Belgium
- Bosnia and Herzegovina
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia

Show Data Topics

Click to select all Data Topics

- Data
- Worker Characteristics
- Geography
- Product / Industry / Asset
- Purpose
- Trip Characteristics

Select a time level:

Show Measures

Click to select all Measures

- Accommodation Capacity
 - Number of establishments
 - Bedrooms
 - Collective tourist accomm
 - Holiday dwellings
 - Other collective accommo
 - Other collective accommo
 - Hotels and similar establi
 - Tourist campsites
 - Number of bed-places
 - Holiday Expenditure by Destina

Years from: to:

Drop Filter Holds Here

Year	Accommodation Capacity - Bedrooms- Hotels and similar establishments (NUTS0 - Austria)	Accommodation Capacity - Bedrooms- Hotels and similar establishments (NUTS0 - Belgium)
2002	282,725	65,209
2003	282,611	65,745
2004	290,491	53,854
2005	289,879	54,325
2006	282,002	55,957
2007	285,558	56,693
2008	286,571	57,214
2009	285,954	57,957
2010	290,287	59,022
2011	290,509	60,053

Chart type: show values:

Legend:

- Accommodation Capacity - Bedrooms-hotels and similar establishments (NUTS0 - Austria)
- Accommodation Capacity - Bedrooms-hotels and similar establishments (NUTS0 - Belgium)

Web 'front end' – 3. Mapping

The screenshot displays the VTO web application interface. At the top left is the European Union flag. The main title is "VTO - Map and Rank Data". Below the title is a navigation menu with options: Search the VTO, Data Analysis, Reports, Cuba, Administration, Home, VTO Help, and Log In. The interface is divided into several sections:

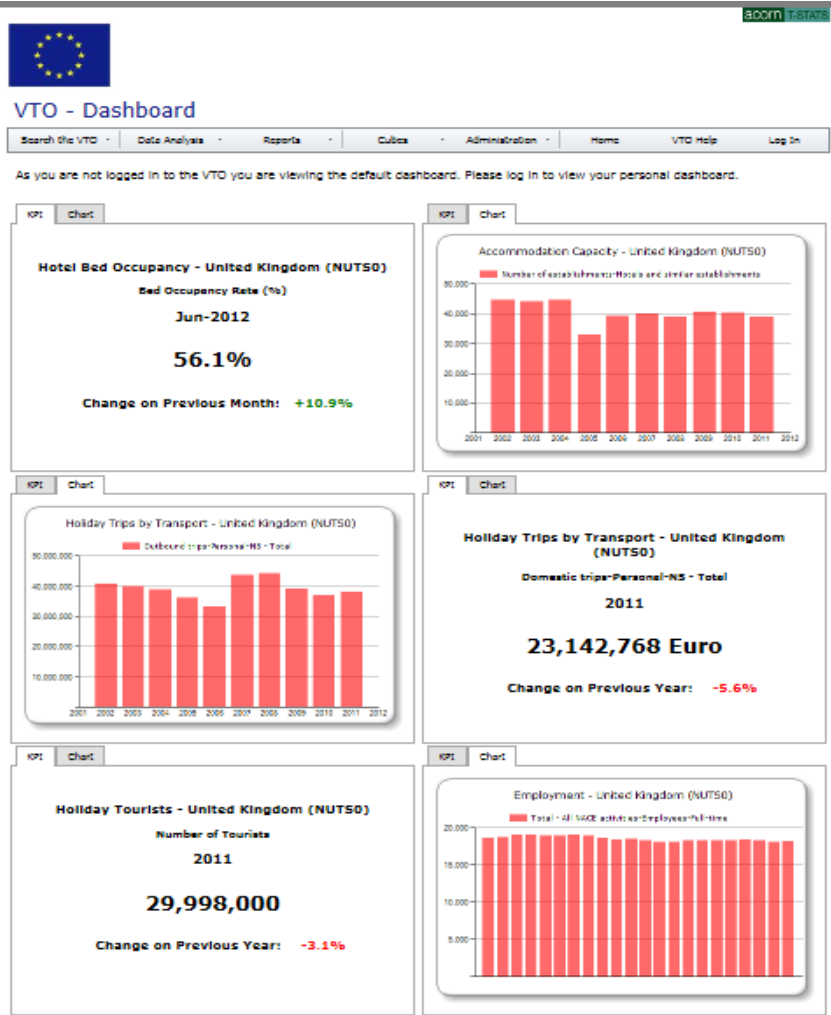
- Select geographies, data topics one measure and a period.** A "Go" button is present.
- Select geographies:** A list of countries with checkboxes: Austria, Belgium, Bulgaria, Cyprus, Germany (Including former GDR), Denmark, Estonia, Greece, Spain, Finland, France, and Hungary.
- Show Data Topics:** A list of data topics with checkboxes: Data, Worker Characteristics, Geography, Product / Industry / Asset, Purpose, and Trip Characteristics.
- Select a time level:** A dropdown menu set to "Yearly".
- Show Measures:** A list of measures with checkboxes: Holiday Expenditure by Destination, Holiday Trips by Transport, Holiday Tourists (checked), Accommodation Capacity, Accommodation Nights by Acco, All Arrivals at Accommodation, Non Resident Arrivals at Accom, and Employment.
- Years from:** A dropdown menu set to "1998" and "to:" a dropdown menu set to "2012". A "Clear all selections" button is at the bottom.

The main area features a map of Europe with a data popup for "Holiday Tourists - Number of Tourists". The popup includes a bar chart and a table of data from 2002 to 2011. The table data is as follows:

Year	Number of Tourists	Flags Set
Y2011	603,000	No Flags Set
Y2010	586,000	No Flags Set
Y2009	586,000	No Flags Set
Y2008	579,000	No Flags Set
Y2007	568,000	No Flags Set
Y2006	541,000	No Flags Set
Y2005	629,000	No Flags Set
Y2004	488,000	No Flags Set
Y2003	422,000	No Flags Set
Y2002	426,000	No Flags Set

The map shows red markers with numbers indicating the number of tourists for each country. The interface also includes a search bar at the top, a "Select marker type" dropdown set to "Number", and map navigation controls (Map, Satellite, Hybrid).

Web 'front end' – 4. Dashboards



Web 'front end' – pivot grids



VTO - Bed Occupancy Rate (%)

Search the VTO - Data Analysis - Reports - Cubes - Administration - Home VTO Help Log In

Description: Net occupancy rate of bed places in hotels and similar establishments Source: Eurostat Coverage: Jan-1-2007 to Jul-31-2012

Pivot Table Chart

To show a saved grid select a layout: Bed Occupancy Rate (%) by Month and click Show Show heat map:

To export the grid select a file type: Excel and click Export

Source Of Data		Flags		Bed Occupancy Rate (%)													
Month		Month															
NUTS0		June 2011	July 2011	August 2011	September 2011	October 2011	November 2011	December 2011	January 2012	February 2012	March 2012	April 2012	May 2012	June 2012	July 2012		
Austria	8	41.8	52.0	59.4	42.7	32.5	25.5	35.0	54.7	53.5	47.1	33.2	31.1	39.2	51.5		
Belgium	1	43.1	45.1	45.5	42.9	41.2	35.9	34.4	27.4	31.2	35.2	42.4	42.1	41.5			
Bulgaria	1	29.0			33.9			17.2	22.1	30.5	19.3	19.5	21.2	49.5	53.2		
Cyprus	1	73.3	53.2	51.5	75.4	55.5	41.7	29.1	27.3	35.5	39.3	45.4	53.4	51.5			
Czech Republic	5	35.9	43.5	47.0	40.1	39.4	30.3	25.1	27.2	29.1	31.7	37.4	39.2	35.5			
Denmark	0	45.0	53.0	54.0	44.0	35.0	35.0	27.0	24.0	27.0	32.0	35.0	43.0	49.0	52.0		
Estonia	0	52.0	70.0	59.0	43.0	43.0	35.0	39.0	33.0	32.0	37.0	43.0	45.0	52.0			
Finland	0	41.5	55.1	45.7	39.1	37.1	35.2	34.9	35.2	39.3	42.7	35.7	34.5	43.9	53.4		
France	9	55.9	51.1	52.9	54.5	45.2	29.5	40.4	35.3	39.5	43.2	47.5	49.3	54.5			
Germany (including former GDR from 1991)	2	44.5	45.4	47.2	47.9	43.4	33.9	30.5	27.7	31.5	34.2	35.1	43.2	44.9	47.0		
Greece	5	55.1	74.9	79.1	55.5	35.9	22.5	24.4									
Hungary	5	33.2	40.7	42.5	43.7	32.3	32.0	33.7	21.3	21.5	25.4	32.2	31.0	32.5	42.2		
Ireland	0	30.0	55.0	59.0	49.0	42.0	37.0	31.0									
Italy	5	47.5	55.5	53.7	42.1	35.5	22.5	24.5	25.7	29.0	29.5	32.7	30.2	43.2			
Latvia	0	35.1	45.5	43.5	30.2	25.4	24.1	22.9	27.7	23.3	25.3	32.3	35.9	43.0	53.5		
Lithuania	0	41.2	47.4	45.5	37.1	30.2	29.1	27.0	25.4	23.1	27.5	30.4	37.5	42.5			
Luxembourg	5	24.9	22.5	24.5	20.5	15.3	11.3	9.7	15.1	17.1	17.4	20.5	21.9	29.5			
Malta	1	59.4	51.0	53.4	71.5	50.9	39.3	25.3	29.3	37.2	43.2	57.5	55.2	55.5			
Netherlands	1	52.0	53.9	55.0	50.4	47.0	41.1	35.4	31.5	34.7	39.5	52.1	51.4	50.4			
Poland	9	35.5	39.5	41.3	39.1	34.0	29.7	24.9	25.3	27.9	29.5	31.2	35.3	34.5	40.5		
Portugal	5	45.0	55.0	59.5	52.1	40.2	24.5	21.2	20.4	25.7	27.9	35.9	40.2	45.2	54.9		
Romania	2	25.4	32.0	40.7	29.5	25.9	25.5	20.1	17.1	15.9	19.2	20.5	25.5	25.2	25.5		
Slovakia	1	30.0	35.0	37.0	31.0	27.0	23.0	20.0	23.4	25.7	24.4	22.7	25.9	25.2	32.1		
Slovenia	1	47.2	55.7	54.3	47.5	40.0	22.5	30.0	27.5	35.9	35.2	40.2	39.4	45.2	55.4		
Spain	9	55.9	57.3	72.3	51.7	51.0	42.3	35.1	37.4	42.2	44.9	50.5	49.2	59.5	59.4		
Sweden	7	41.5	59.5	47.7	39.5	35.9	35.7	25.9	23.5	29.0	34.2	32.3	35.3	41.1	55.1		
United Kingdom	0	59.0	59.0	59.0	55.0	50.0	44.0	39.0	33.4	39.5	43.5	45.0	50.0	55.1			
Croatia	5	57.3	50.5	55.9	55.3	34.1	19.5	15.2	14.5	15.5	20.7	34.3	43.5	55.5	51.2		
Iceland	5	49.5	57.5	51.4	31.5	32.5	22.9	20.5									
Liechtenstein	7	34.2	30.5	33.7	27.5	24.5	22.5	20.2									
Montenegro	1	45.2	57.3	54.0	47.5	23.1	19.2	12.5									
Norway	1	42.7	51.1	45.5	35.5	31.5	32.4	25.2	25.0	34.2	34.2	25.3	32.1	44.0	49.5		
Switzerland	5	45.9	52.0	45.1	44.2	37.7	32.5	33.5	27.4	43.3	39.5	34.7	39.7	43.4	45.5		

Next Steps

- Preparing video demonstrations of the website developed and then publication of report
- EC carrying on the development of the VTO using their own systems and web standards

Thank you for your attention

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