



# Measuring Sustainable Tourism

**Sustainable Development  
and Circular Economy**  
Papeete, French Polynesia  
20-21 November 2017

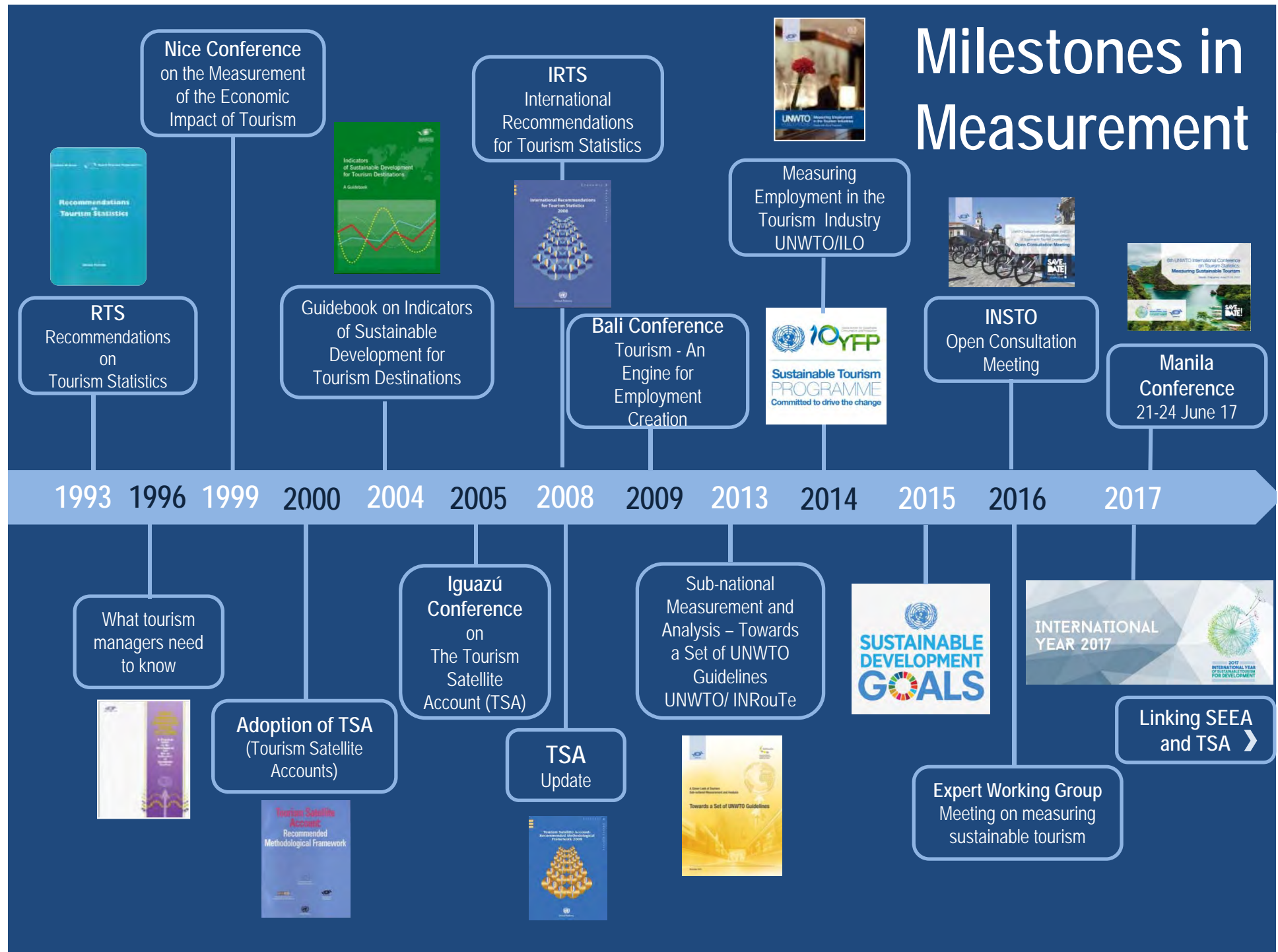


## Creating Trust Through Evidence

Clear **Evidence** about the positive and negative impacts of tourism, in order to support decision-makers effectively.

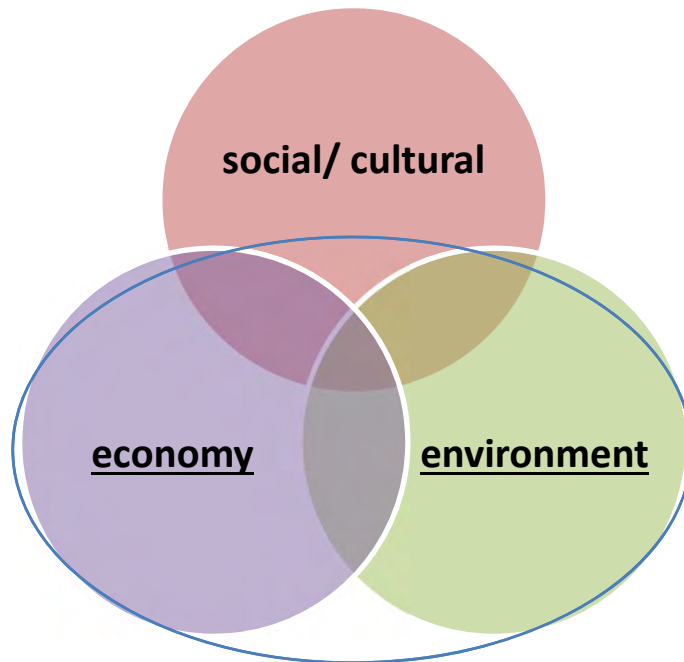
- Creation of strong foundations -

# Milestones in Measurement



# Scope MST statistical framework

First: mostly economic-environmental, some social (employment). Why?



1. Tourism measurement has a particularly significant gap in relation to the environment, and yet so much policy interest (degradation/conservation)
2. Relatively more progress on economic-environmental integration
3. These integrated frameworks are extendable to measurement at multiple scales, very important in tourism

In time: social/cultural

- e.g. UNESCO's work on Culture Satellite Accounts
- *Social/cultural indicators can be considered, but it is acknowledged these will not yet be sourced from an integrated framework*



# SEEA-TSA: topics to be considered

## TSA

- Inbound, domestic, outbound tourism consumption
- Production by tourism industries
- Direct tourism GVA, GDP
- Employment in tourism industries



**tourism -  
economy**



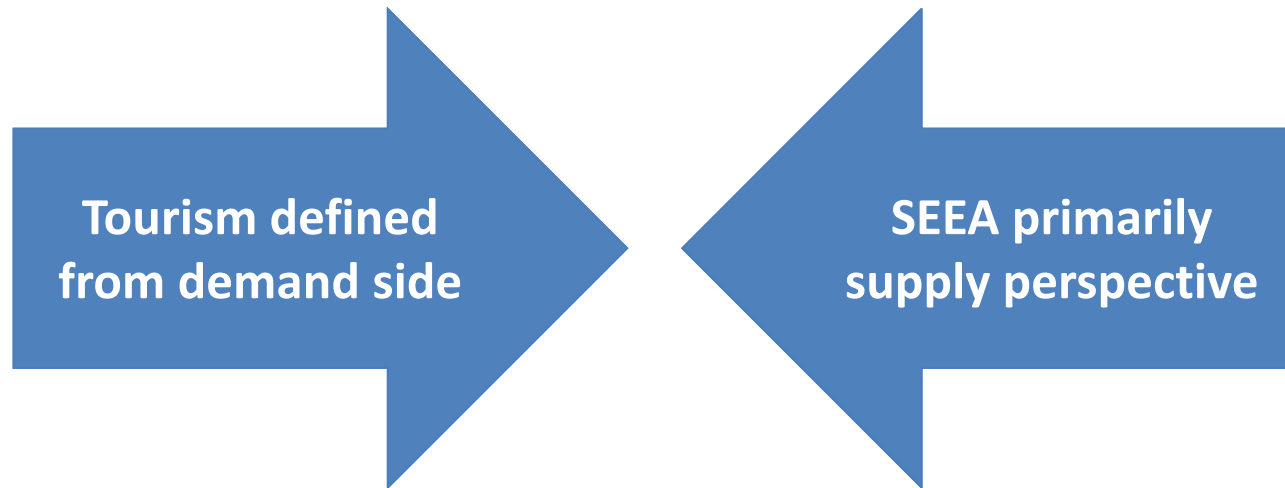
**environment  
- economy**

## SEEA

- Physical flows: water, energy, emissions, waste
- Stock (depletion) of resources: water, land, fish, timber
- Expenditures on the environment
- Ecosystems condition & services (ie spatially-based data accounts)

- Environmental impacts of tourism: GHG emissions, solid waste, wastewater, disruption of ecosystems and biodiversity
- Dependency of tourism on the environment: healthy and good quality ecosystems (beaches, reefs, forests), water and energy requirements to meet visitor consumption
- Environmental protection expenditure, environmental taxes
- Some socio-economic impacts & dependencies of tourism: employment,...

# Challenges in SEEA-TSA



Tourism characteristic products (CPC based)	Tourism characteristic industries (ISIC based)
1. Accommodation services	1. Accommodation
2. Food and beverage serving services	2. Food and beverage serving activities
3.- 6. Passenger transport services	3.- 6. Passenger transport services (rail, road, water, air)
7. Transport equipment rental services	7. Transport equipment rental
8. Travel agencies and reservation services	8. Travel agencies and reservation activities
9. Cultural services	9. Cultural activities
10. Sports and recreational services	10. Sports and recreational activities
11. Country-specific tourism characteristic goods	11. Retail trade of country-specific tourism charac. goods
12. Country-specific tourism characteristic services	12. Other country-specific tourism characteristic activities

**- Not 100% consumed by visitors**  
**- Other industries also cater to visitors**

# Manila Call for Action



## Manila Call for Action on Measuring Sustainable Tourism

We, the representatives of tourism, economic, environmental and other related administrations, statistical institutes, international and regional organizations, the private sector, the academia and civil society, gathered at the 6th UNWTO International Conference on Tourism Statistics: Measuring Sustainable Tourism, organized by the Government of the Philippines and the World Tourism Organization (UNWTO) on 21-24 June 2017 in Manila, the Philippines, and on the occasion of the International Year of Sustainable Tourism for Development, 2017:

1. Acknowledge that sustainable tourism contributes to the three dimensions of sustainable development – economic, social and environmental – and to the 17 Sustainable Development Goals (SDGs) of the universal 2030 Agenda for Sustainable Development, as affirmed by the United Nations (UN) General Assembly when announcing the adoption of the International Year of Sustainable Tourism for Development, 2017;
2. Draw attention to the fact that tourism has become one of the fastest growing and most important economic sectors in the world, benefiting destinations and communities worldwide. With over 12 billion international overnight visitors and many more domestic visitors in 2016, the sector represents an estimated 10% of the world's GDP and 1 in 10 jobs globally. This growth comes with the need to uphold the foundations of prosperity for tourism destinations: the rich natural resources of our planet and its diverse cultural heritage.
3. Recall that sustainable tourism is defined as "tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities". Sustainable tourism should thus make optimal use of environmental resources, respect host communities and ensure viable, long-term economic operations so that benefits are equitably distributed among all stakeholders.

## 6th UNWTO International Conference on Tourism Statistics: **Measuring Sustainable Tourism**

Manila, Philippines, June 21-24, 2017



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## Tourism evolution in Costa Rica



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# Characteristics of SPI Model

3 dimensions y 12 thematic components





# UNWTOINSTO

World Tourism Organization International Network of Sustainable Tourism Observatories

[HOME](#)[ABOUT](#)[OBSERVATORIES](#)[INSTO FRAMEWORK](#)[HOW TO JOIN](#)[DOCUMENTS](#)[NEWS](#)[EVENTS](#)[FAQs](#)[CONTACT](#)[Q](#)

## A NETWORK OF TOURISM OBSERVATORIES monitoring sustainable tourism AT DESTINATION LEVEL

The UNWTO International Network of Sustainable Tourism Observatories (INSTO) is a network of tourism observatories monitoring the economic, environmental and social impact of the tourism at destination level. The initiative is based on UNWTO's long-standing commitment to support sustainable and resilient growth of the sector through measurement and monitoring, fostering the evidence-based management of tourism

### MISSION

INSTO strives to support and connect destinations that are committed to the regular monitoring of economic, environmental and social tourism impacts to unlock the power of evidence-based decision making at destination-level, fostering sustainable tourism practices locally and globally.

### VISION

Nurturing a dynamic network of partners that strive together towards creating healthy places for tourists and the host communities, leaving resilient destinations to future generations.

## INSTO at the destination level

- Integrated approach to monitoring the use of resources
- Performance measurement of the implementation of (sustainable) development plans, policies and management actions
- Enables stakeholders to analyze risks, costs, impacts, limits and opportunities
- Helps to identify investment opportunities
- Greater public accountability, better communication
- Provides a strong basis for evidence-based decision making
- Ensures continuous improvement



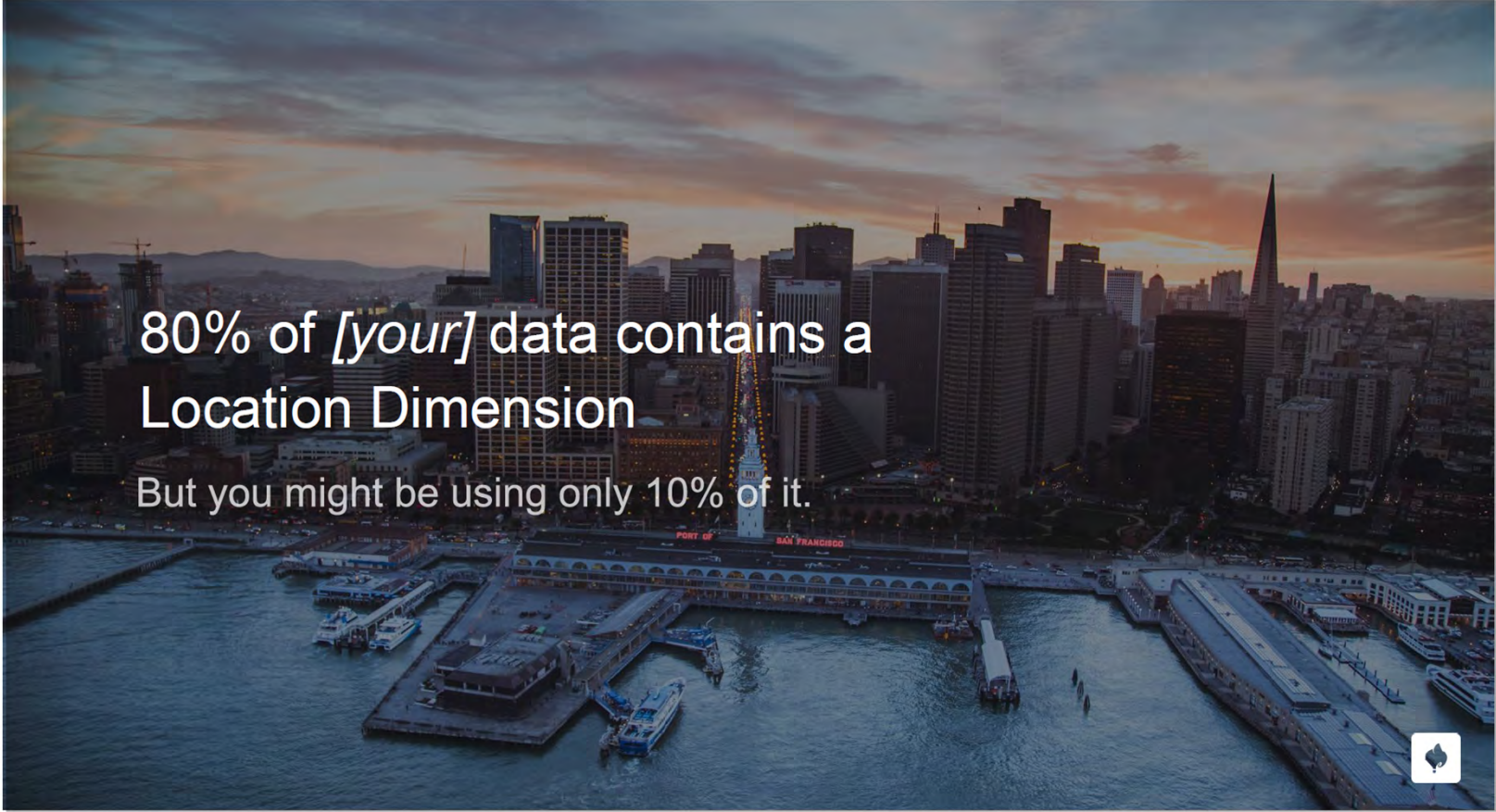
# Standard set of baseline issues

1. Local satisfaction with tourism
2. Destination economic benefits
3. Employment
4. Tourism seasonality
5. Energy management
6. Water management
7. Sewage treatment
8. Solid waste management
9. Development control

**Methodology in constant development to provide further guidance to Observatories and including annual exchanges among the members of the network**





An aerial photograph of the San Francisco skyline at dusk. The city's dense collection of skyscrapers is silhouetted against a sky with soft orange and blue hues from the setting or rising sun. The San Francisco Bay is visible in the foreground, with several piers and boats. The Transamerica Pyramid is a prominent feature on the right side of the skyline.

80% of *[your]* data contains a  
Location Dimension

But you might be using only 10% of it.



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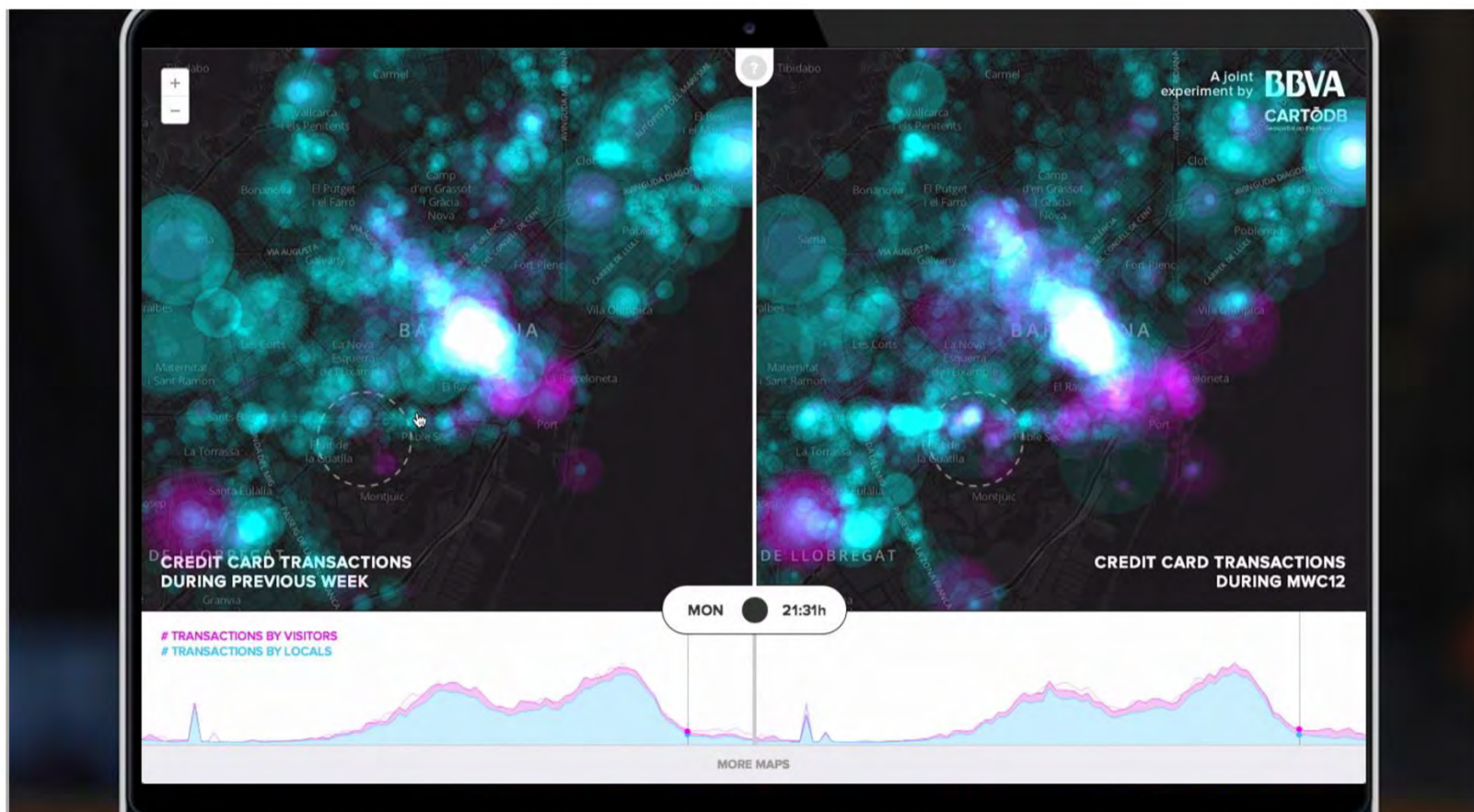


World Resources Institute monitors in real time all Earth natural resources, from deforestation to fires

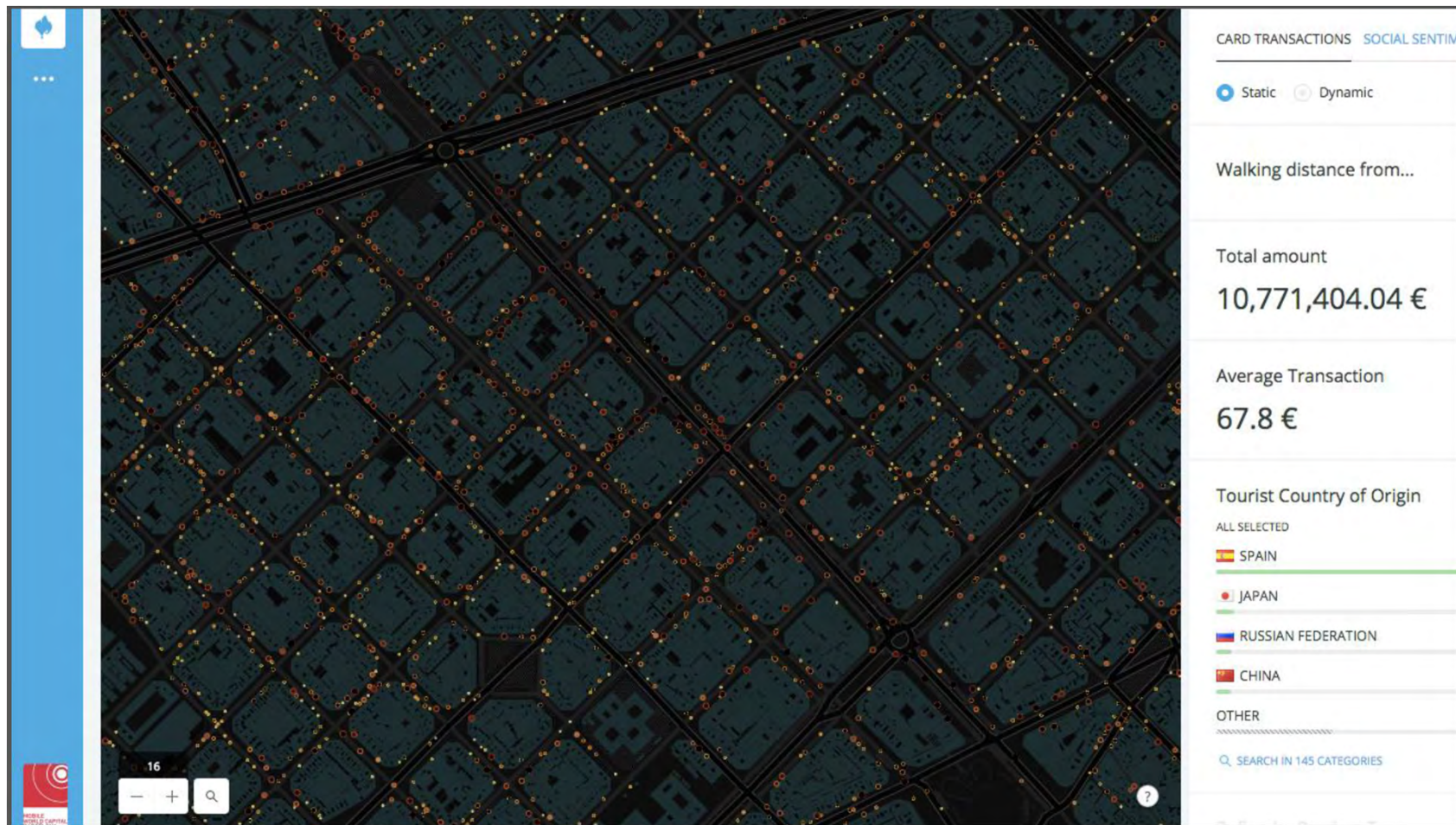


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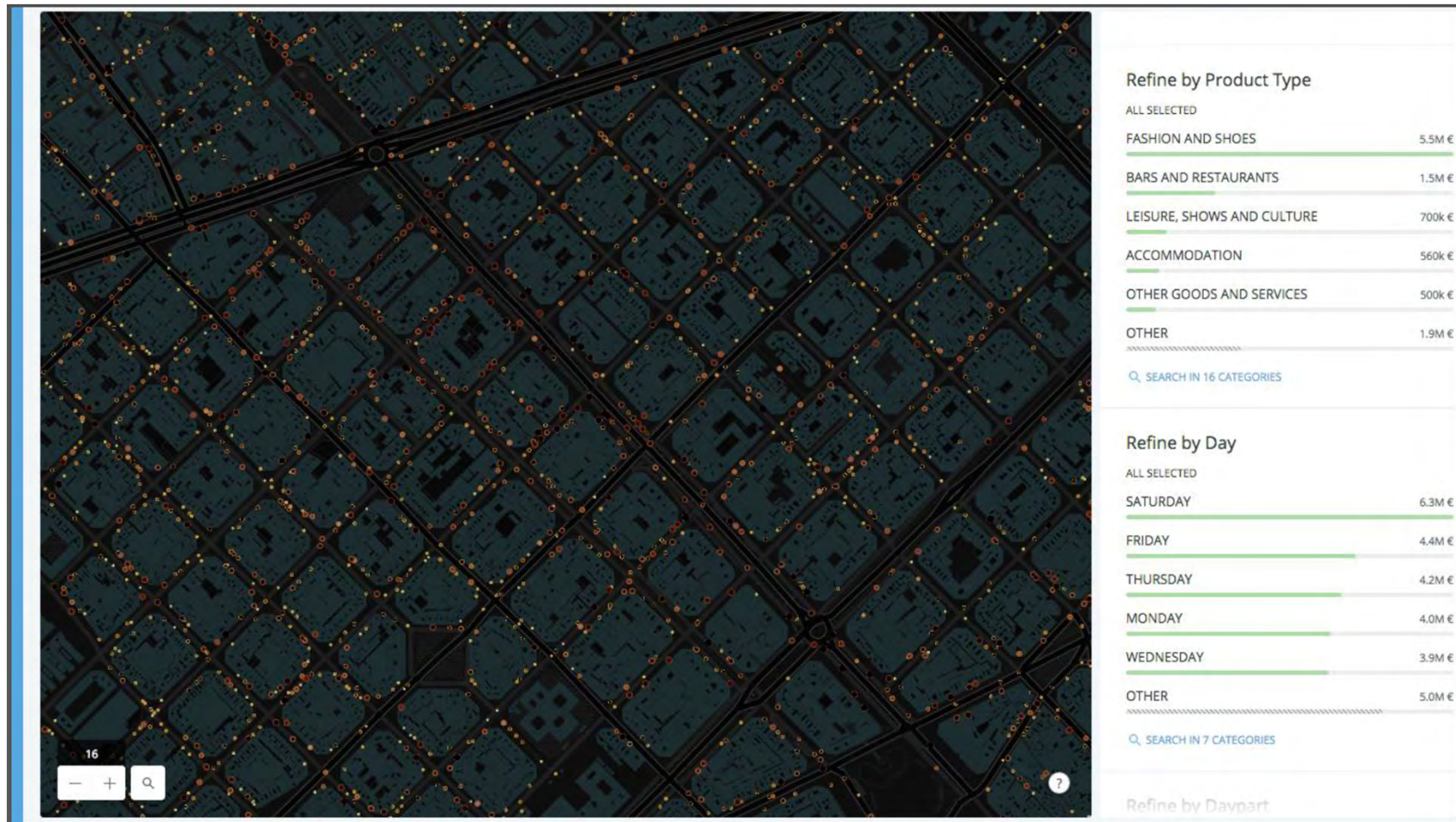


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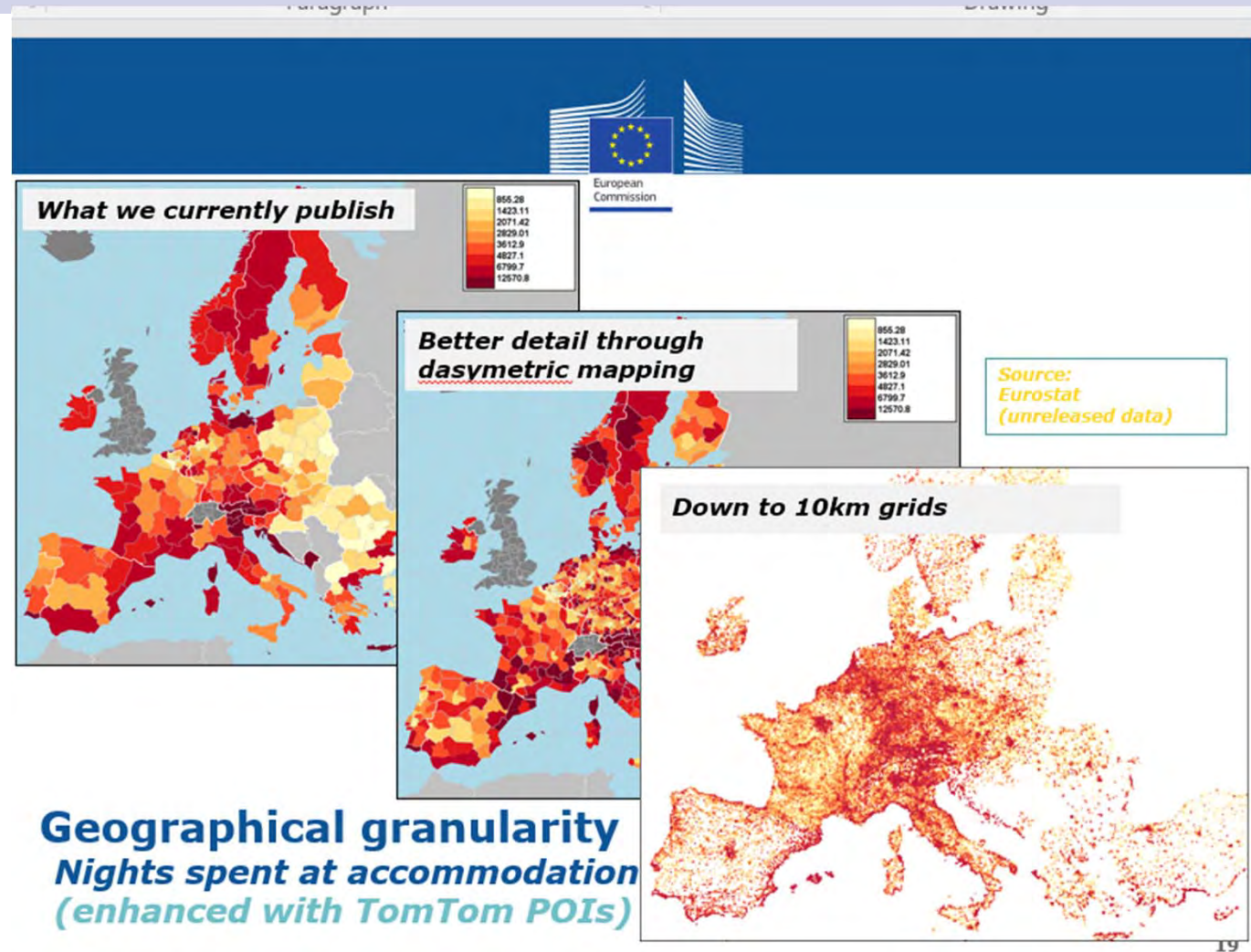


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Source: Eurostat, 'Environmental dimension of sustainability in the European tourism statistics / latest relevant developments in tourism statistics', C. Demunter, 2017





## New sources and methods

### Increased use of new, 'big' data sources

**Potential benefits (*all are relevant for measuring sustainability!*) :**

- ⇒ **Better timeliness (and overall quality?)**
- ⇒ **Better geographical granularity**
- ⇒ **Better temporal granularity**
- ⇒ **New indicators previously unavailable**
- ⇒ **Synergies with other fields of statistics (multi-source + multi-purpose)**

Source: Eurostat, 'Environmental dimension of sustainability in the European tourism statistics / latest relevant developments in tourism statistics', C. Demunter, 2017

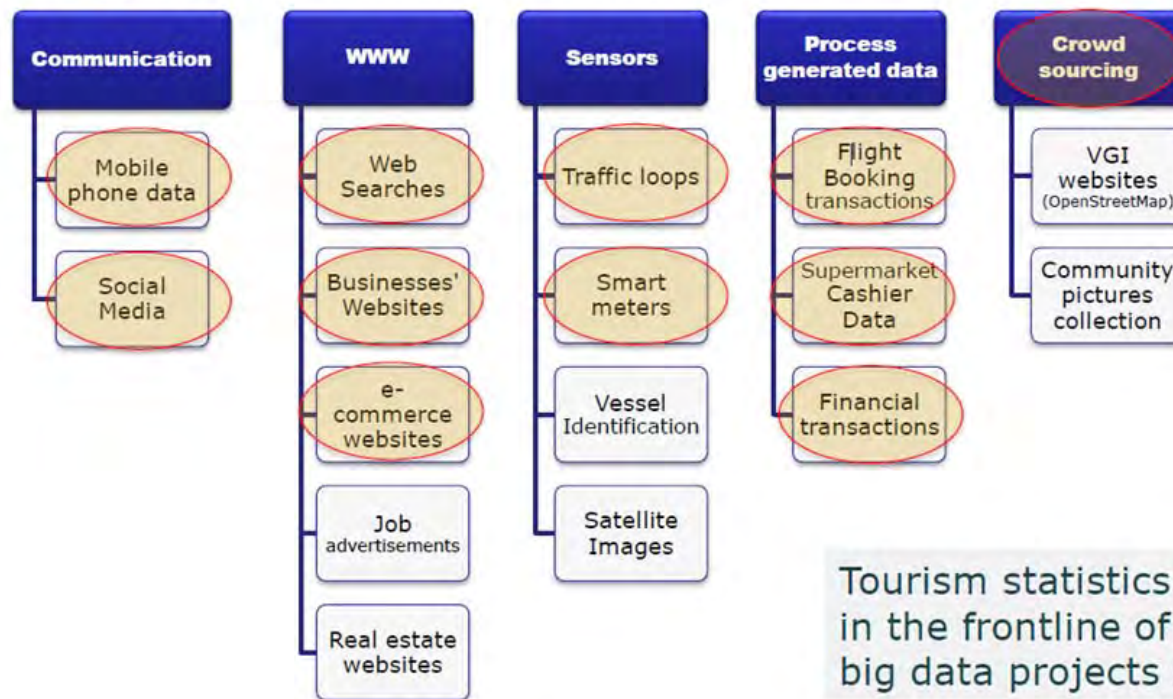


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# Tourism and the impact of non-traditional data sources



## Big data – main sources



Source: Eurostat, 'Big Data: Opportunities and Challenges - Lessons drawn by the Task Force Big Data', C. Demunter, 2017



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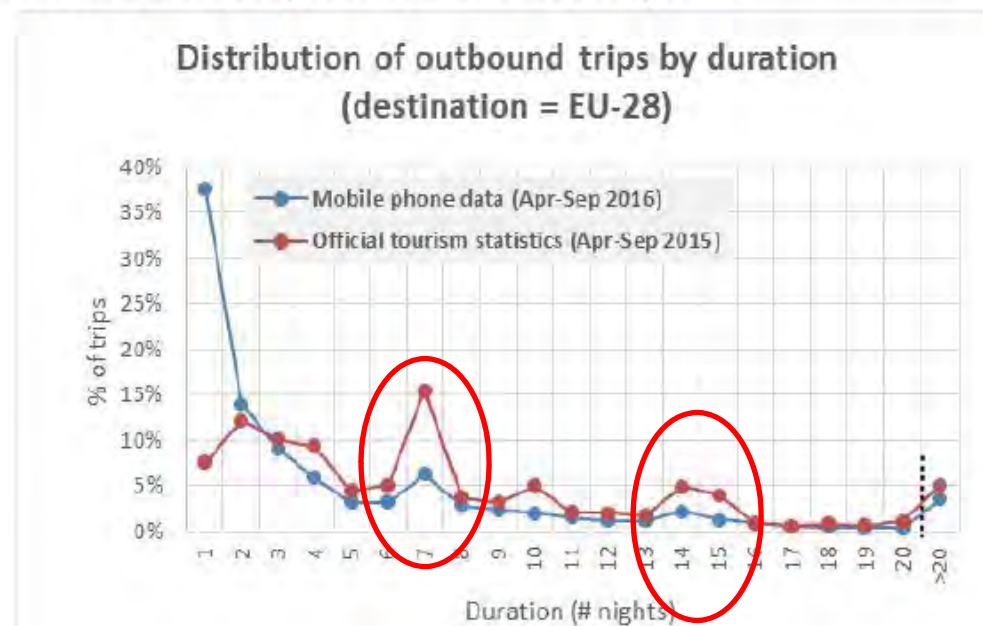


# Example: analysis of mobile data in Belgium



## ***i. Outbound trips by duration: comparison***

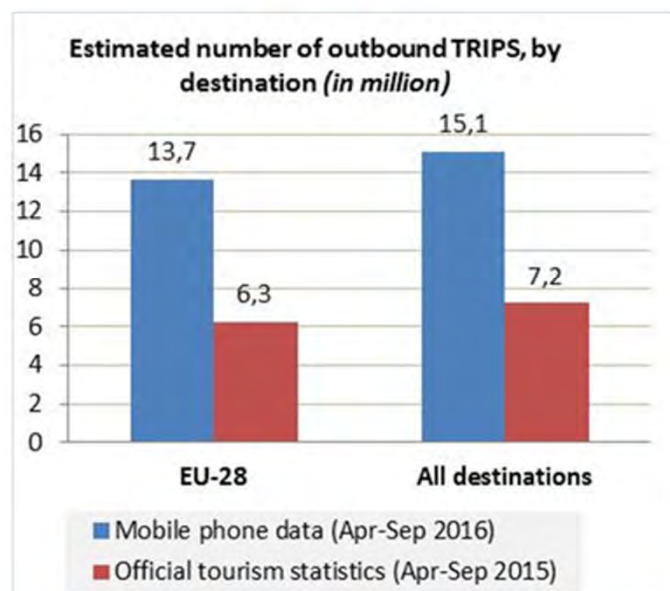
***Comparison of the distribution of outbound trips from Belgium to other EU countries, by duration of the trips***



Source: Eurostat, 'Big Data: Opportunities and Challenges - Lessons drawn by the Task Force Big Data', C. Demunter, 2017



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Source:  
Eurostat, Proximus,  
Statistics Belgium.

## **Quality, breaks, concepts, trust, access, ...**

### ***Outbound tourism trips by residents of Belgium***

18

Source: Eurostat, 'Environmental dimension of sustainability in the European tourism statistics / latest relevant developments in tourism statistics, , C. Demunter, 2017



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## Some conclusions on using big data

### Target: regular data production using big data

- ⇒ *first level*: exploring the feasibility of big data sources as **auxiliary information** for quality checks, calibration, etc.
- ⇒ *second level*: using big data to fill current **data gaps** and to produce experimental '**flash estimates**'
- ⇒ *third level*: using big data to **partially replace** 'traditional' sources/surveys
- ⇒ *fourth level*: **rethinking** in a user-oriented way the system of tourism statistics, taking into account the opportunities offered by integrating big data

### Essential conditions:

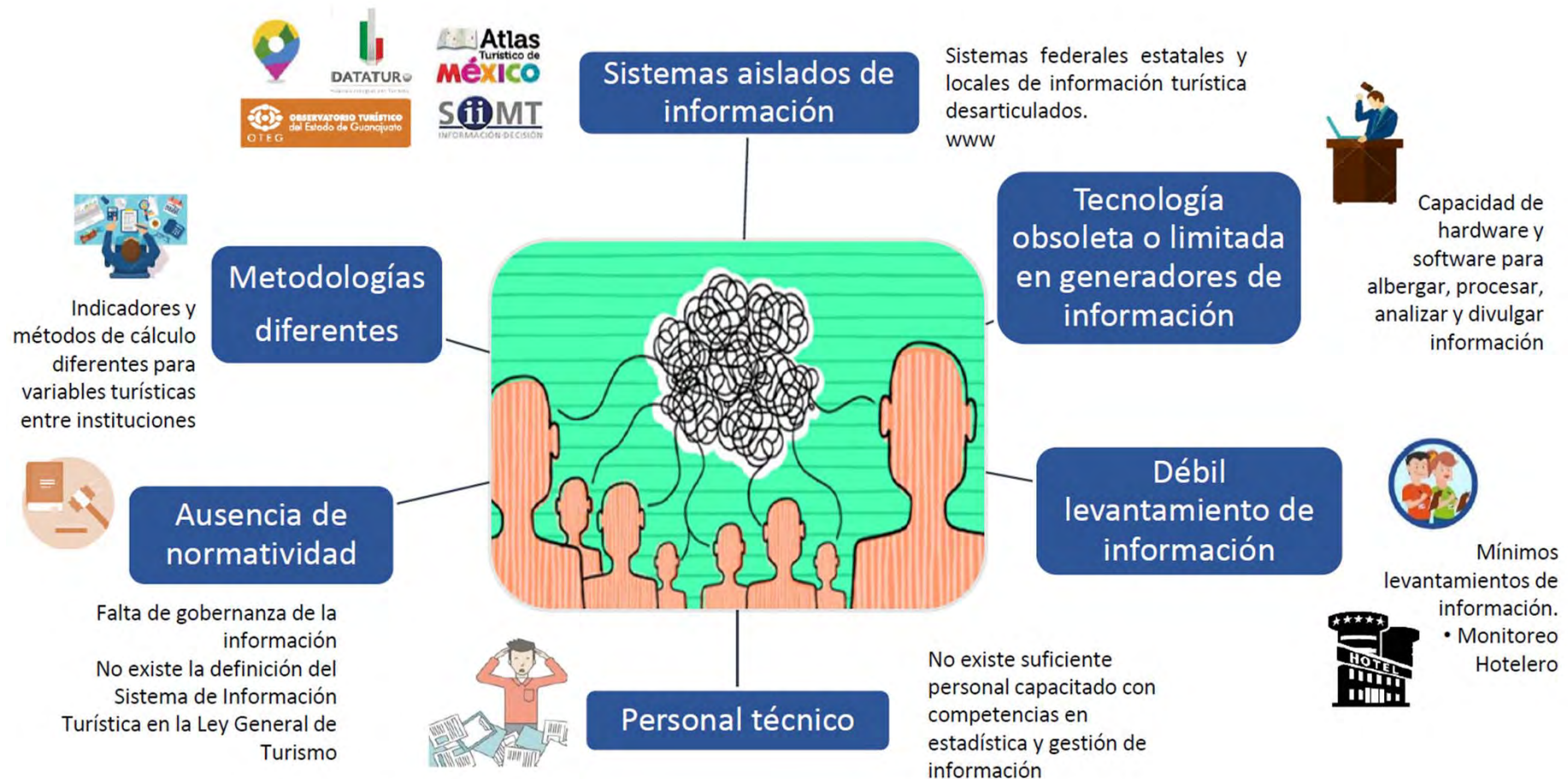
- ⇒ intensive cooperation (at all levels)
- ⇒ knowledge sharing

Source: Eurostat, '*Big Data: Opportunities and Challenges - Lessons drawn by the Task Force Big Data*', C. Demunter, 2017



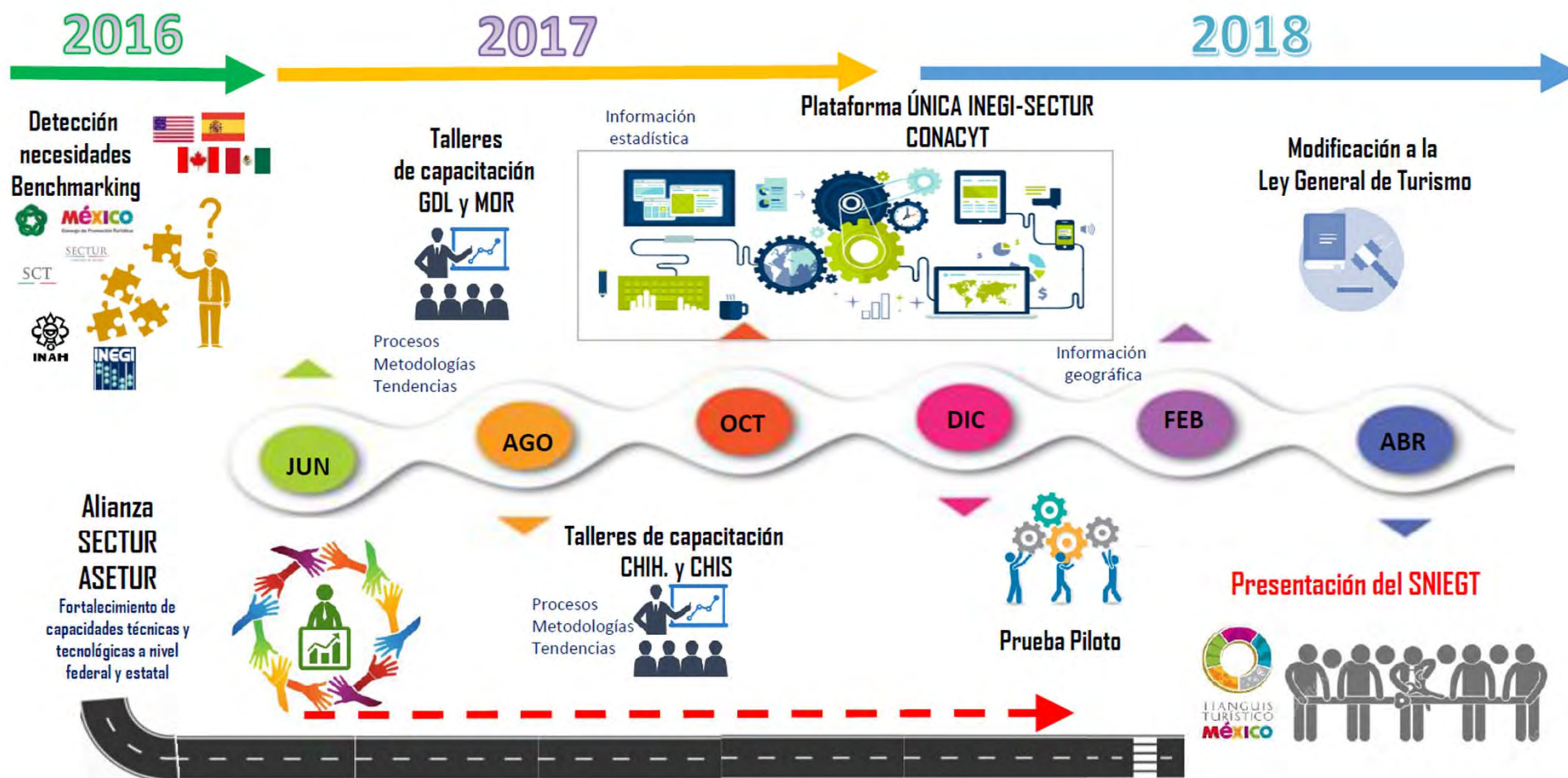
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# Observatories – The case of Mexico



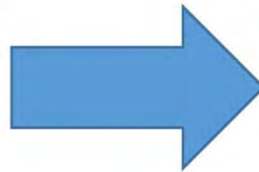


# Process of change



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# Interpretation of observatories



**SNIEGT**

**Tecnología**

**Lineamientos  
metodológicos**

**Canales formales de  
comunicación**

**Procedimientos**

**Fundamento Legal**



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# Observatories - The case of Indonesia



## SUSTAINABLE TOURISM PROGRAMS



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# The case of Indonesia

## SUSTAINABLE TOURISM PROGRAM: Initiatives / Activities



### SCOPING

#### STD

- ✓ National Guidelines on Sustainable Tourism Program
- ✓ Sustainable Tourism Strategy Platform
- ✓ Sustainable Tourism Master plan
- ✓ MoU and Destination Contract on Sustainable
- ✓ National and International Assessor Training Program
- ✓ Facilitator and Local Partner Training
- ✓ International Conference
- ✓ National Conference on STD
- ✓ Prototyping 10 Priority Destination

#### STO

- ✓ National Guidelines on STO
- ✓ Prototyping 5 STOs
- ✓ STO:
  - ❑ Pre-Establishment
  - ❑ Acceptance Procedure
  - ❑ Stakeholder Engagement
  - ❑ Developing Issues and Indicators
  - ❑ Monitoring and Reporting
  - ❑ Communication and information sharing

#### STC

- ✓ National Guidelines on STC
- ✓ Certification in Sustainable Destination
- ✓ Training for Assessors
- ✓ Cooperation with GIZ, Earthcheck
- ✓ Prototyping 3 destinations

### KEY MEASURES

- ✓ Economic
  - Capacity Building Local Community
  - Training for Trainers
- ✓ Community
  - Empowerment facilitators and local partners
- ✓ Environment
  - Climate Change Response

- Research
  - Field Research
  - Action Research
- Reporting
  - National Conference on STO
- Recommendations
  - National Conference on STO (Wonderful Indonesia Sustainable Tourism Observatory/WINSTO)
  - INSTO

- Assessment
  - Comprehensive and snapshot assessment
- Accreditation
  - National Agency
- Recommendation
  - Indonesia Sustainable Tourism Award
  - ASEAN Sustainable Tourism Award
  - Labelling



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# #INSTO2017

<http://insto.unwto.org/evento/2017-global-insto-meeting/>

## 2017 Global INSTO Meeting

13-14 December. UNWTO Headquarters. Madrid, Spain.



2017  
INTERNATIONAL YEAR  
OF SUSTAINABLE TOURISM  
FOR DEVELOPMENT



SAVE <sup>THE</sup>  
DATE!





# #INSTO2017

<http://insto.unwto.org/evento/2017-global-insto-meeting/>

## Programme Highlights

- Local actions supporting the SDGs
- Catalytic areas in the tourism sector
- The importance of geospatial data in tourism
- Advancing circular economy thinking in tourism





# Thank you

Dr. Dirk Glaesser

Director

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World Tourism Organization (UNWTO)

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