

# Introduction

- John Kester
- independent consultant
- 22 years of service at UNWTO with responsibility for statistics trends and policy, taken early retirement from March
- 7 years of Statistical researcher at Statistics Netherlands
- Master's degree in Social Science with specialisation in research methodology and data analysis
- worked with tourism data of all countries in the world and have been in contact with most
- participated in events, gave presentations, workshops and trainings and attended meetings in some 70 countries

Linked in www.linkedin.com/in/john-kester-28800650

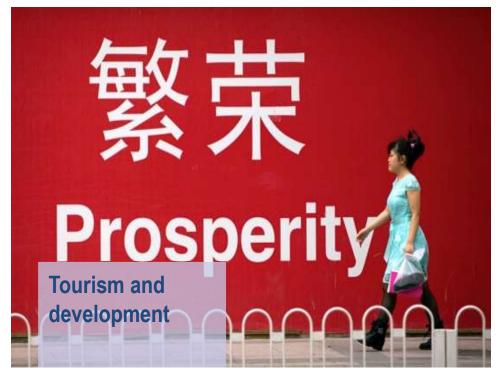
## About the workshop

- · informal, interactive, hands-on
- my role is facilitator
- · encourage active participation
- Q&A, ask questions if its not clear or if you would like to expand
- · I will also ask you where relevant
- · share issues, experiences, comments and ideas
- open discussion
- we are here to learn from each other
- opportunity to build a network
- 3

# Description of the the existing statistical framework with the statistical Framework for Measuring the Sustainability of Tourism (MST). This is also is basis for the development of indicators for the measure of Sustainable Development Goals (SDGs)

## The programme

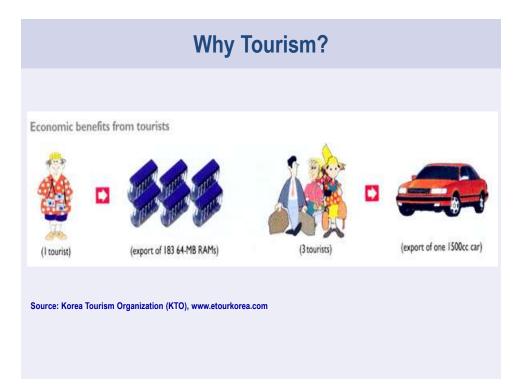
- there is a lot to deal with...
- aim is to get a general understanding, time is to limited to know all the details, nor is there need to
- above all aimed to be practical guidance, want to get something out of it that's useful for your everyday work

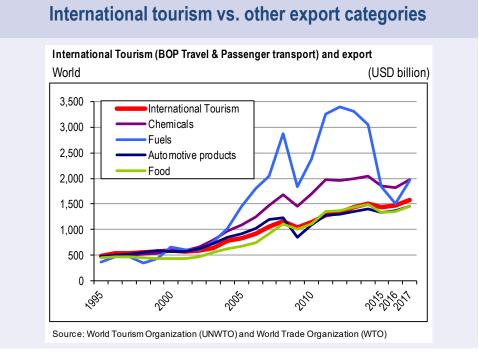


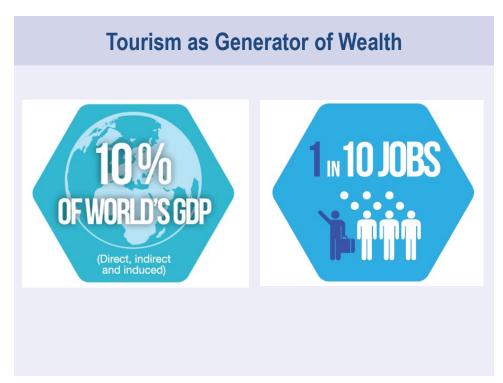
# Why Tourism?

## => Tourism is economic activity with substantial impact

- Employment
- Diversification of economy / Tax revenues
- Earning foreign currency / balancing Balance of Payments (inbound tourism = export / outbound = import ; tourism = 7% of overall exports worldwide and 30% of service exports)
- Development of weak regions / Regeneration of regions in decay
- Redistribution of wealth between countries and within countries
- Multiplier effect > impact in several other sectors
- Preservation of culture
- Soft diplomacy





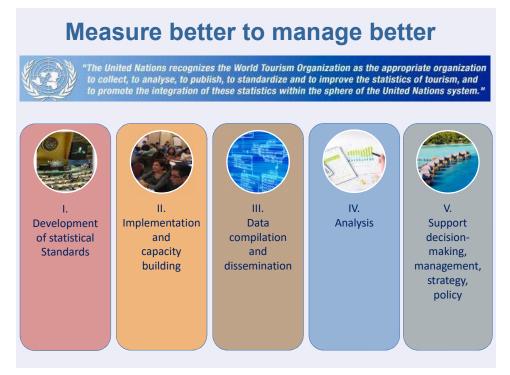


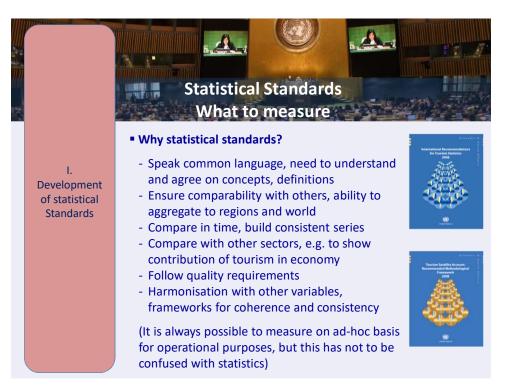


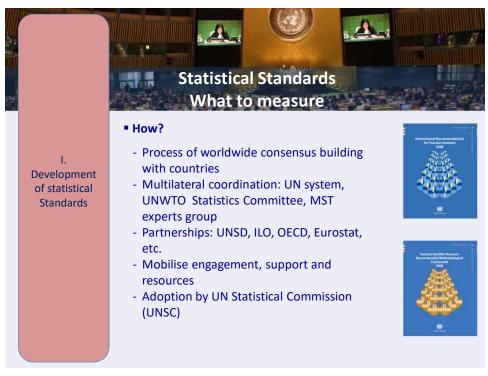


# Why measure and analyse? Measure better to manage better, i.e. better informed, evidence based decision making Needed for: Planning, strategy and policy Marketing Management Furthermore important for: Advocacy

- Support policy and actions
- Evaluation
- Transparency

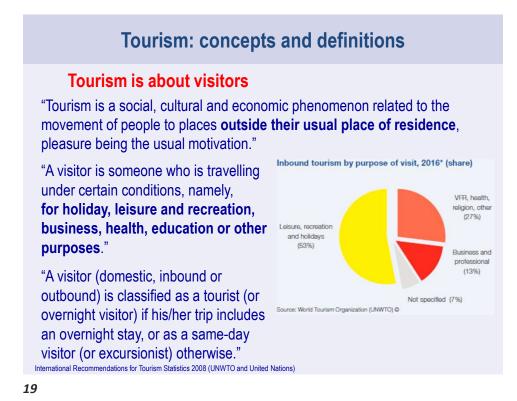


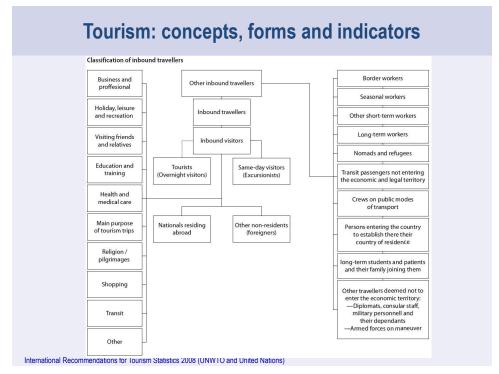












## What do we want to know?

- · Tourism demand, both inbound, outbound and domestic
- Tourism supply, businesses
- Economic contribution
- Employment
- Both measures of volume and value

## For:

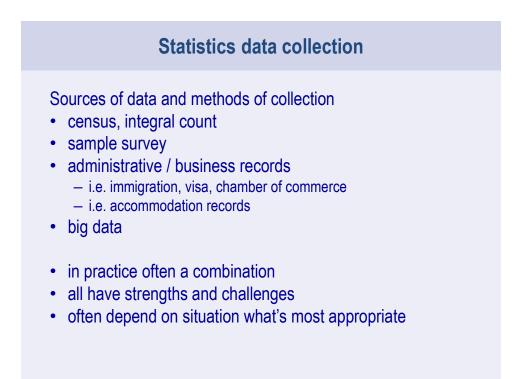
- · Comparison in time: evolution, trends, and evt. projections
- Breakdown by various characteristics, such as:
  - place(s) visited, source markets, purpose of visit, means of transport, visitor characteristics
- Comparing with competitors (uniform methodology)





## **Tourism Statistics:** Implementation of standards **IRTS 2008 Compilation Guide:** A companion document to the IRTS providing further clarification, practical guidance for using sources and methods to compile statistics on tourism, and country examples. Designed to support the production of a high quality set of basic data and indicators in each country, and to strengthen the international comparability of tourism statistics For national compilers, international experts, and international/regional organisations By national compilers, international experts, and international/regional organisations under UNWTO-UNSD coordination PDF version online at: https://unstats.un.org/unsd/tourism

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## THE SYSTEM OF TOURISM STATISTICS

C. International comparability and national Systems of Tourism Statistics (STS): the basic information network data set

http://statistics.unwto.org/content/sts\_nss

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INBOUND TOURISM

Concepts and definitions	Observation units	Characteristics	Related data / indicators	Statistical sources
Visitors	Inbound visitors	Classes of visitors (overnight visitor-tourists-/ same-day visitor-excursionist-)	BASIC DATA // Arrivals by classes of visitors • overnight visitors (courist) • same-day visitors (excursionist) • of which, cruise passengers 2/	E/D card     Other type of administrative register     Surveys:     Borders     Accommodation
		Country of residence/regions	Arrivals by region 3 Africa Americas East Asia and the Pacific Europe Middle East South Akia Other not classified - divincin, nationals residing abroad	Transport     Other
	Travel party	Size	Average size of travel parties 4/	Surveys: • Borders • Accommodation • Transport • Other
Trips To	Tourism trips	Main purpose	Artivals by main purpose of the trip • personal • holidays, leisure and recreation • other personal purposes • business and professional	E/D card     Surveys:     Borders     Accommodation     Transport     Other
		Modes of transport	Arrivals by mode of transport used • Air • Water • Land • railway • road • others	E/D card     Other type of administrative registers     Surveys:     Borders     Accommodation     Transport     Other
		Types of accommodation used	Accommodation related data • overnight stays in hotels and similar establishments • genes in hotels and similar establishments • overnight stays in all types of accommodation establishments	E/D card     Other type of administrative registers     Surveys:     Borders     Accommodation     Transport     Other

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## Concepts and Observation definitions units Characteristics Related data / indicators Statistical sources Surveys: Borders Accommodation Transport Travel agencies Tour operators Others Arrivals by form of organization of the trip package tour other forms Organization BP items Travel International passenger transport Inbound tourism expenditure s/ • "travel" • "passenger transport" Expenditure Inbound tourism expenditure by main purpose of the trip or • personal • holidays, leisure and recreation • other personal purposes • business and professional NDICATORS 7/ Average length of stay #/ • All types of accommodation establishments • Hotel and similar establishments • Non commercial accommodation Average expenditure per day Surveys: Hoseholds Borders Accommodation Transport Travel agencies Tour operators Other - Other type of admin trative registers

INBOUND TOURISM

 Notes:
 In the same of the same into account that the flows of inbound tourism are measured in arrivals (in case of using the border surveys) or in persons (in case of using the guest type information in accommodation establishments). In both cases, national practices are not known which, for statistical purposes, define the corresponding databases of each observation system with the purpose of grouping the corresponding registers to the same person: the difficulties and cost associated with this distation explains why registers of internationals flows do not refer to individuals but to the entry or accommodation of travelers.

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 Even though this is not strictly speaking a typology of visitors, its importance in some countries (sland countries and thereis) warants its separate identification, as published by the UNWTO in the "Compendium of Tourism Statistics", in case some rules passengers make an overnight stay in the country of reterence, they should be considered as units and classified as such.

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 It is recommended that regions should be derived as the aggregation of the composition of themation visitors. If not possible, nationally should be used instead.

 31
 It IRTS does are Balance of Payments data.

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 These data are Balance of Payments data.

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 These data are balance of Payments data.

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 These data are balance of Payments data.

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 These data are balance of Payments data.

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### DOMESTIC TOURISM

Concepts and definitions	Observation units	Characteristics	Related data / indicators	Statistical sources
Visitors	Domestic visitors	Classes of visitors (overnight visitor-tourists-/ same-day visitor-excursionist-)	BASIC DATA Trips by cavernight visitors 1/ overnight visitors (burnst) same-day visitors (excursionist)	- Surveys: Households Accommodation Transport Other Other The type of administrative registers
	Travel party	Size	Average size of travel party 2/	- Surveys: Households Accommodation Transport
Trips	Tourism trips	Main purpose:	Trips by main purpose • personal • holidys, leisure and recreation • other personal purposes • business and professional	Other     Other type of administrative registers
		Modes of transport	Trips by mode of transport used All Wator Land railway road others	
		Types of accommodation used	Accommodation related data • overnight stays in hotels and similar establishments • guests in hotels and similar establishments • overnight stays in all types of accommodation establishments	
		Organization	Trips by form of organization of the trip • package four • other forms	
			IEIDICATORS Average length of stay 3 • All types of accommodation establishments • Ion commercial accommodation Average expenditure per day	- Surveys: - Households - Accommodation - Transport - Tour operators - Tour operators - Other

Note::
1 Household surveys are the observation instrument by excellence for the measurement of resident traveller flows: however, only in the case that the survey makes use of a panel sample is the unit of analysis the trip and not the
2 The IRTS does not support any threshold for classifying trave particles by size.
3 Be wave that not all visions size and accommodation excellentiantements.

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## OUTBOUND TOURISM

Concepts and definitions	Observation units	Characteristics	Related data / indicators	Statistical sources
Visitors	Outbound visitors	Classes of visitors (overnight visitor-tourists-/ same-day visitor-excursionist-)	BASIC DATA Departures by classes of visitors • overnight visitors (tourist) • same-day visitors (excursionist)	E/D card     Other type of administrative registers     Surveys:     Borders     Households
Trips	Tourism trips	Main destination	Departures by region 1/ Artica Americas East Asia and the Pacific Europe Middle East South Asia Other not classified ' of which, nationals residing abroad Outbound tourism expenditure 2/	Surveys:     Borders     Households     Other type of administrative registers
			traver         t	BP Items     travel     international passenger     transport

Notes:

 1/
 It is recommended that regions should be derived as aggregation of the country of residence of international visitors. If not possible, nationality should be used instead.

 2/
 These data are Balance of Payment data.

 3/
 These data are Balance of Payment data.

 3/
 These data are Balance of Payment data.

 4/
 Either as part of an outbound tourism trip or as part of a domestic tourism trip.

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## TOURISM INDUSTRIES

Concepts and definitions	Observation units	Characteristics	Related data / indicators	Statistical sources
	Establishments (in the the tourism industries)	Other characteristics for specific industries	BASIC DATA Number of establishments in tourism industries, by size • accommodation for visitors (hotels and similar establishments) • tother accommodation services • food and beverage serving activities • passenger transportation • travel gencies and other reservation services activities • other tourism industries	- Surveys: Establishments Businesses - Other type of administrative registers
		Monetary Output Information added Compensation of employees Gross fixed capital formation	Accommodation for visitors (hotels and similar establishments)  Ai) monetary data  output  out	Surveys: Establishments Exclusions. Other type of administrative registers Surveys: Establishments Businesset Other type of administrative registers
			Travel agencies and other reservation service activities (A) monetary data (a) monetary data (b) monetary data (c) monetary value added (c) monetary value added (c) monetary value added (c) monetary data (c) mo	Surveys: Establishments Businesses Other type of administrative registers Surveys: Establishments Businesses Other type of administrative registers

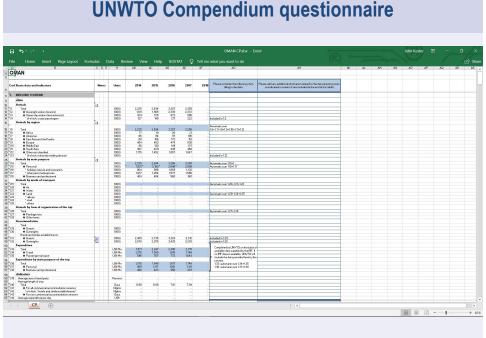
### EMPLOYMENT

Concepts and definitions	Observation units	Characteristics	Related data / indicators	Statistical sources
			BASIC DATA	
Employment	Establishments (in the the fourism industries)		Number of persons, by Jourishi Industries                excommosidiary amindes for vietors (hotels and similar establishments) other accommodation services endo and berevage serving activities passenger transportation travel agencies and other reservation service activities other tourism industries Number of jobs by status in employment employees self employed INDICATORS Number of full-time equivalent jobs by status in employment employees male self employed employeed	Surveyer, Establishments Business Business Other type of administrative registers

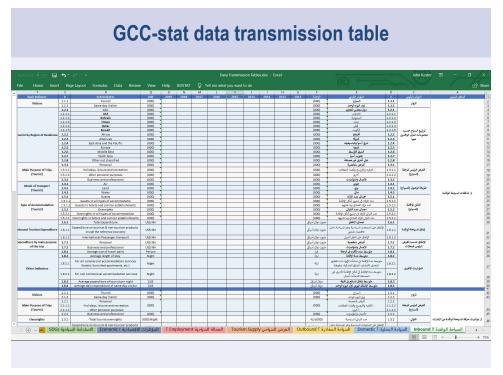
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## COMPLEMENTARY INDICATORS

Demand	Gross travel propensity
	Carrying capacity
Macroeconomic indicators related to international tourism	Inbound tourism expenditure over GDP
to international tourism	Outbound tourism expenditure over GDP
	Tourism balance (inbound minus outbound tourism expenditure) over GDP
	Tourism openness (inbound plus outbound tourism expenditure, over GDP)
	Tourism coverage (inbound over outbound tourism expenditure)
	Inbound tourism expenditure over exports of goods
	Inbound tourism expenditure over exports of services
	Inbound tourism expenditure over exports of goods and services
	Inbound tourism expenditure over Balance of Payments current account credits
	Outbound tourism expenditure over imports of goods
	Outbound tourism expenditure over imports of services
	Outbound tourism expenditure over imports of goods and services
	Outbound tourism expenditure over Balance of Payments current account debits
	Inbound tourism expenditure over workers' remittances



# **UNWTO Compendium questionnaire**



## **Considerations, strengths and challenges**

## Census, integral count

- who is conducting
  - stats office
  - third party
- access to data
- · is it needed to have all
- cost effectiveness

## Administrative / business records

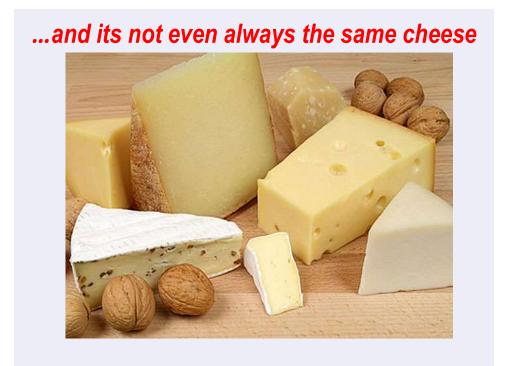
- access to data
- how to adjust to concepts and definitions
- · how to fill in missing data

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# Considerations, strengths and challenges Sample survey sample type and size dedicated survey or part of larger one frequency, once a year, continuous is unit individual or travel party when asking retrospectively, what period to take into account conducted self or subcontracted how to deal with non-response what is the universe and how to expand to it

# data in practice often like a Swiss cheese





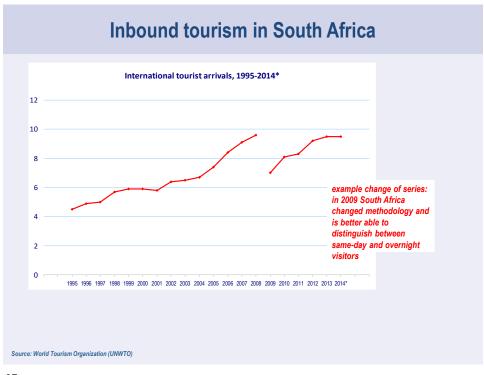






- distinguishing between travellers and visitors
- distinguishing between same-day visitors and tourists
- residence vs nationality, i.e. nationals residing abroad, immigration and expats
- transit (airport transfer vs longer duration)
- not always all flows included (i.e. some border crossings, means of transport, purpose of visit)
- no measure at borders, so proxy need to be used, i.e. arrivals at accommodation
- change in series





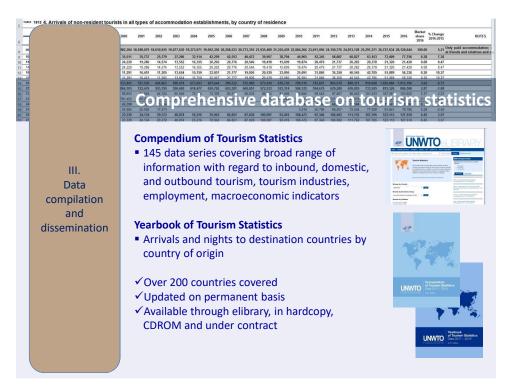


		Measur	ing iou	115111
	Visitors			
	Same-day	Tourists (overnight	visitors)	
	visitors (incl. cruise	In collective tourism	In private	
	passengers)		Other types of accommodation establishments (campsite, rented places etc.)	accommodation (2nd home, family and friends, etc.)
nternational		Interna	ational Tourist An	rivals
Domestic				

# Measuring Tourism: Example data Spain 2000 Source: Frontur and Familtur (Instituto de Estudios Turísticos)

## (millions)

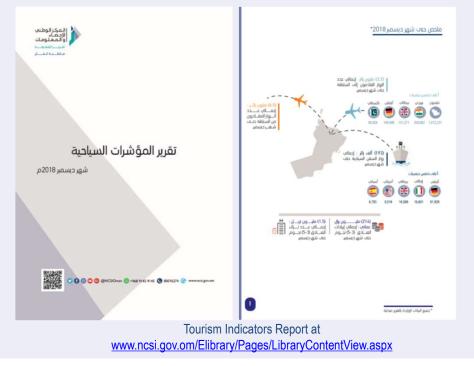
	Visitors								
	Same-day visitors (incl. cruise		Tourists	(overnigl	nt visitors	)			
			In collective tourism establishments				In private		
	passenge		Hotel and similar establishments		Other types of accommodation establishments (campsite, rented places etc.)		accommodation (2nd home, family and friends, etc.)		
International	25,7	35%	33,7	45%	7,5	10%	7,5	10%	74,5
			76%		59%		7%		
Domestic			10,6	9%	5,2	4%	103,7	87%	119,5
			24%		41%		93%		







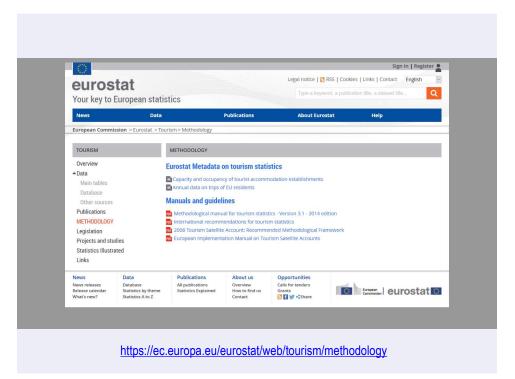


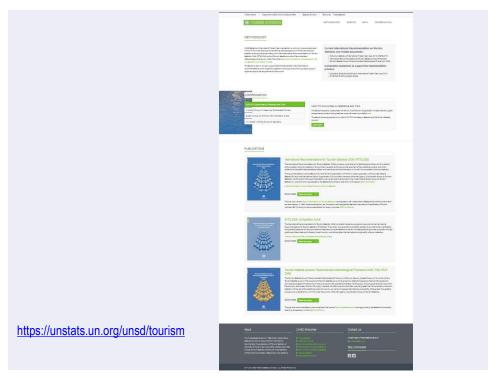




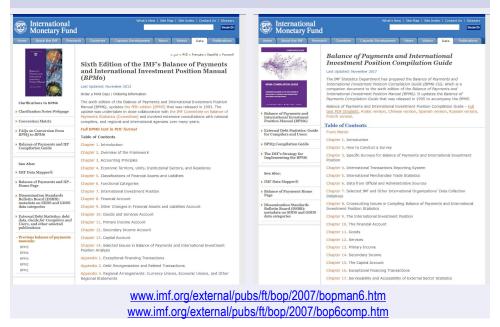






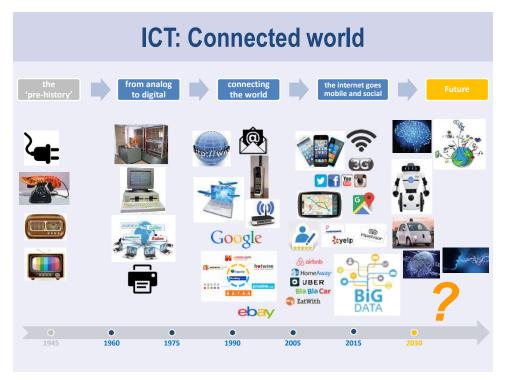


# BoP travel and int'l passenger transport credit and debit









# **Digital footprint**



## Opportunities but also many questions

• For operational or statistical use?

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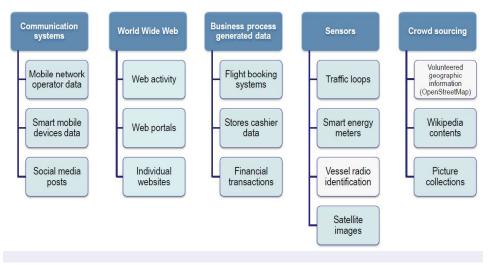
# <section-header> Big data for statistics Plenty of possible sources mobile phones internet use search social networks reservation data payment data smart energy meters etc., etc., etc.

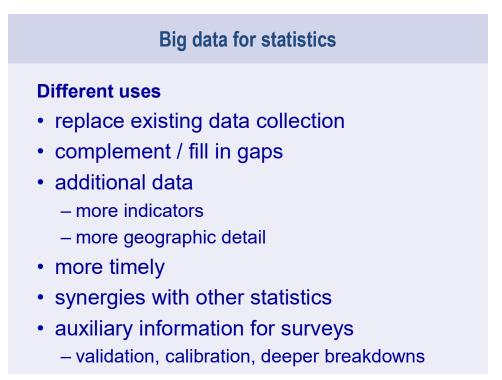






## **Sources linked to tourism**

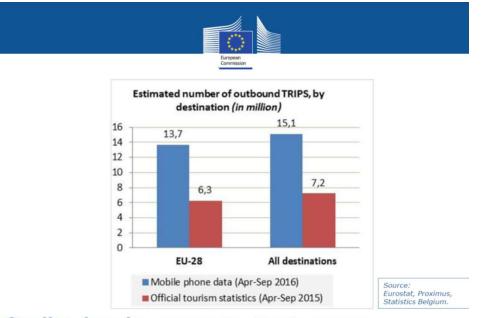




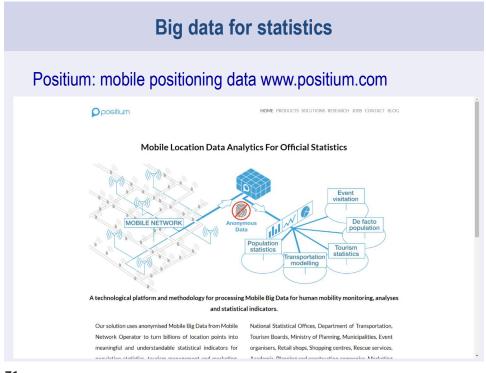
## **Big data for statistics**

## **Plenty of challenges**

- access to data
- adjustment to statistical concept and definitions
- need to develop algorithms
- coverage
- selectivity bias / representativeness
- · comparability over time
- continuity
- cost
- privacy
- independence
- trust
- skills



**Quality, breaks, concepts, trust, access, ...** *Outbound tourism trips by residents of Belgium* 



# **Big data for statistics**

# mobile positioning data (mpd) in Indonesia: Positium and Estonia

### 

HE PRODUCTS SOLUTIONS RESEARCH JOBS CONTACT BLOG

NO REPLIES

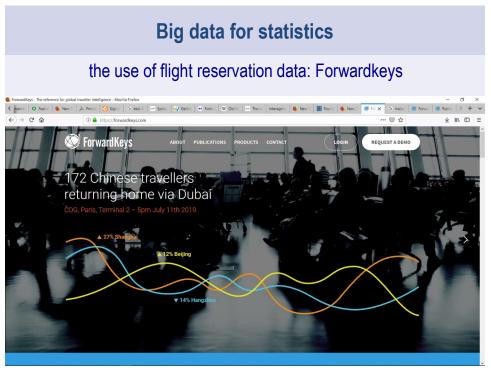
# Partnership with BPS - Statistics Indonesia: Using MPD for Official Statistics

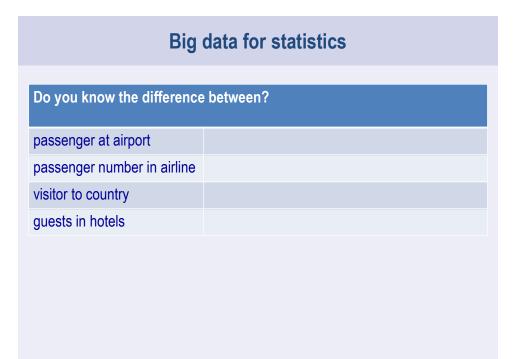
community. On January 30, 2019 we have signed a Memorandus	n of Un-
derstanding with BPS - Statistics Indonesia, launching a cooper	ation to
use mobile positioning data (MPD) in the official statistics produ	uction in
Indonesia.	

When we begin our own, we how that BLD aba would offer grant barflas in future research and policymaking. With this memorandum, indoer is han become a front nomer in and a backnot to the global statistical community. The relation of modern statistical institutes is not just to report the numbers, but also to investigate the reasons behind the change in soders). Big data in general, and expectially MPD, is one of the best sources today to learn about the spatio-formand theradivator of polyce.



E-mall		
Comment		
Submit		





Dia	data	for	otatiotico
DIY	uala		statistics

## Do you know the difference between?

passenger at airport	1 visitor arriving by air counted at least 4 times
passenger number in airline	1 visitor arriving by air counted at least 2 times
visitor to country	1 visitor arriving by air counted 1 time
guests in hotels	1 visitor can be counted more than one time



## **Mirror statistics**

# Some indicators should be mirrored in other countries

- for instance inbound travel to you and outbound from you with any country should ideally mirror his outbound to and inbound from you
- · equally Balance of payments travel credit and debit
- opportunity for partnerships, especially with neighbours (where numbers are large with many over land borders, and NRA also prevalent)
  - for instance Mexico and US, and Canada and US work together on inbound and outbound statistics for their common borders

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Exar	npl	e in	exc		rror or G			tics	5					
Outbound			Inbound		Inbound		Inbound		Inbound		Inbound		Inbound	
AUDI ARABIA			BAHRAIN		KUWAIT		OMAN		QATAR			RAB EMIRATE		ABIA
a8111			bh121		kw121		om121		qa 111		ue711		sa111	L
utbound tourism - trips abro														
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	201
<b>D:</b>														
ahrain		3,537,114			237,189				135,202	68,360			918,432	
Jwait		1,841,361							93,115	83,985			2,064,087	
man		314,019			24,936				98,617	74,526				195,15
latar	1,072,706	606,571	0.040.004	0.040.047	67,682				040.445	467 700			623,917	274,93
audi Arabia			8,942,321	9,919,617	2,621,805				949,145	467,799				
nited Arab Emirates		3,680,065			104,565				134,578	58,206			947,628	649,90
			881,007	1,108,007					167,326	71,092	6 200 472	6 353 600		
	•											6,253,609		
ther countries of Middle East Il countries of Middle East							_					.,,		
							GCC exclue	led?						



# Vitamin 4C : Communication, collaboration, cooperation and coordination

- between tourism and other government departments policy areas (transport, foreign affairs, environment, etc.)
- between national, regional and local authorities
- between policy makers and tourism board
- between public and private sector
  - ppp public-private sector partnerships
- with civil society
- in the value chain, between destination and travel trade
- with various distribution channels

=> It is teamwork, you only can do it together

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# Thank you very much for your attention!

John G.C. Kester