



**“Statistics of International Trade in Service:  
Challenges and Good Practices”**

Regional Workshop for South-East Asian Countries

**Measuring Trade in Services  
by GATS Modes of supply**

*Hanoi, Vietnam, 30 November – 3 December 2010*

# Chapter V in MSITS 2010



- **Defines GATS modes of supply**
- **Clarifies Mode 4 coverage in statistical frameworks**
- **Identifies relevant information needs for measuring modes of supply**
- **Proposes a simplified approach to allocate the value of services transactions to modes of supply**
- **Identifies additional indicators for the analysis of international trade in services**

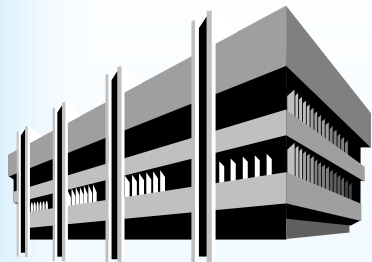




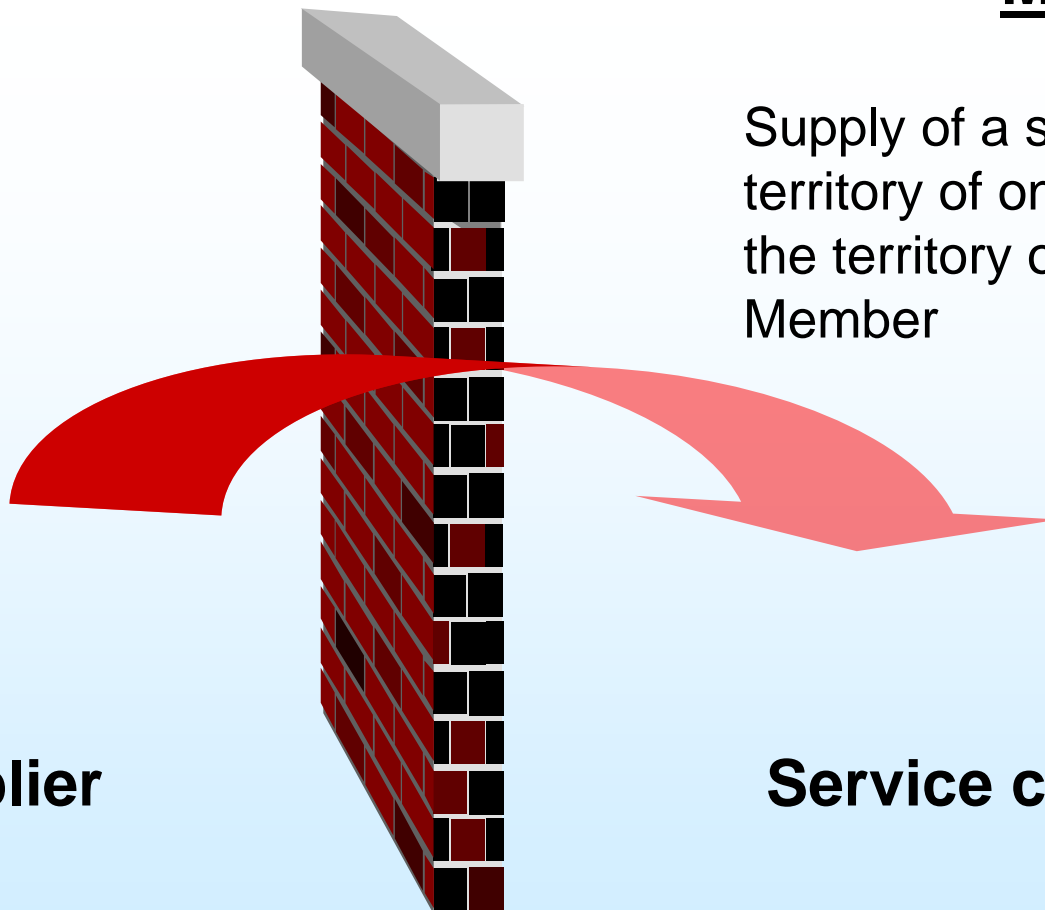
# The 1<sup>st</sup> Mode of Supply

Member A

Member B



**Service supplier**



Supply of a service from the territory of one Member into the territory of any other Member

**Service consumer**

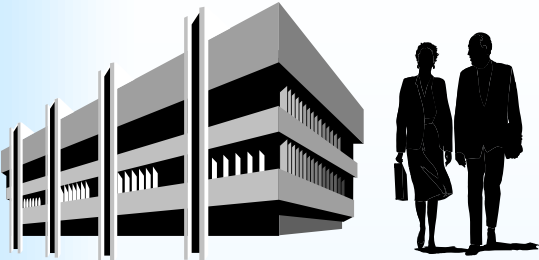
**Cross-border supply**



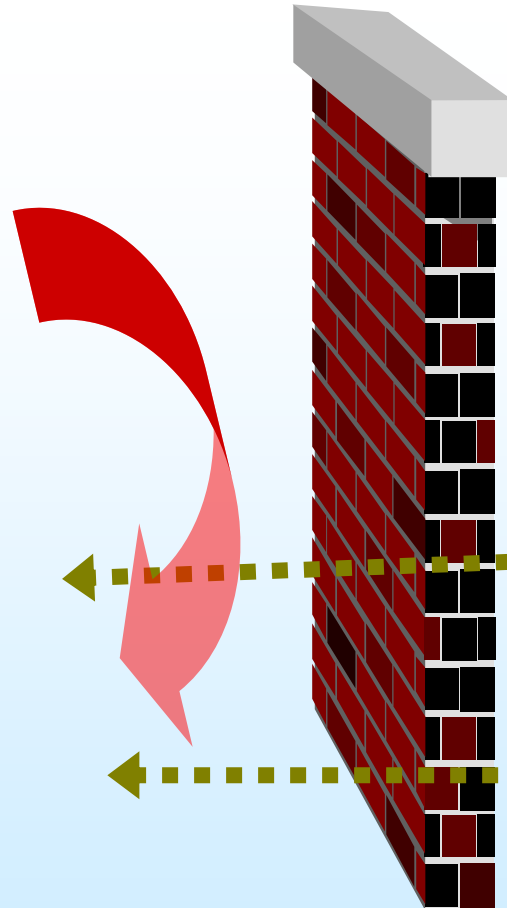
# The 2<sup>nd</sup> Mode of Supply

Member A

Member B



**Service supplier**



Supply of a service in the territory of one Member to the service consumer of any other Member



**Service consumer**

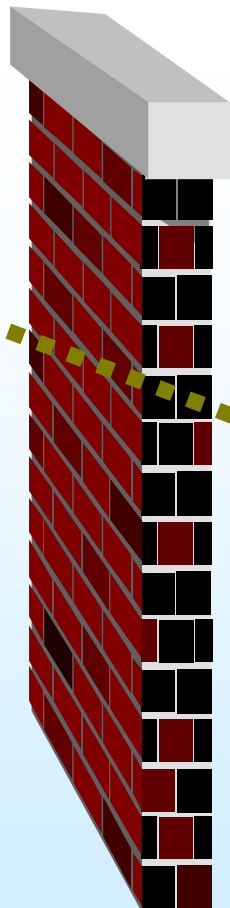
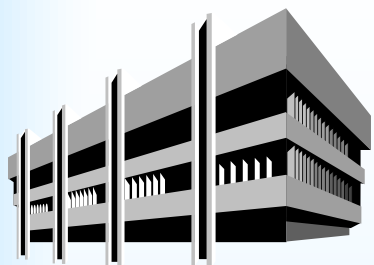
Consumption abroad



# The 3<sup>rd</sup> Mode of Supply

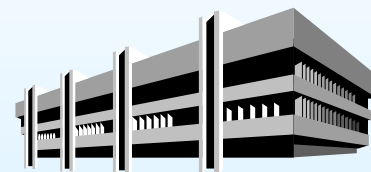
Member A

Member B



Supply of a service by a service supplier of one Member, through commercial presence in the territory of any other Member

**Service supplier**



**Service consumer**

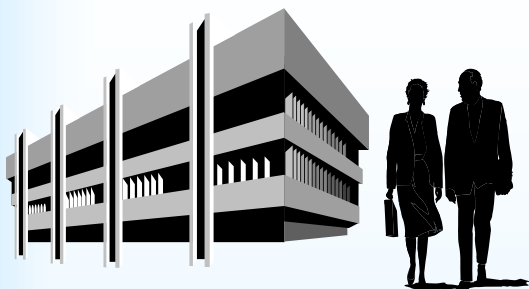


**Commercial presence**



# The 4<sup>th</sup> Mode of Supply

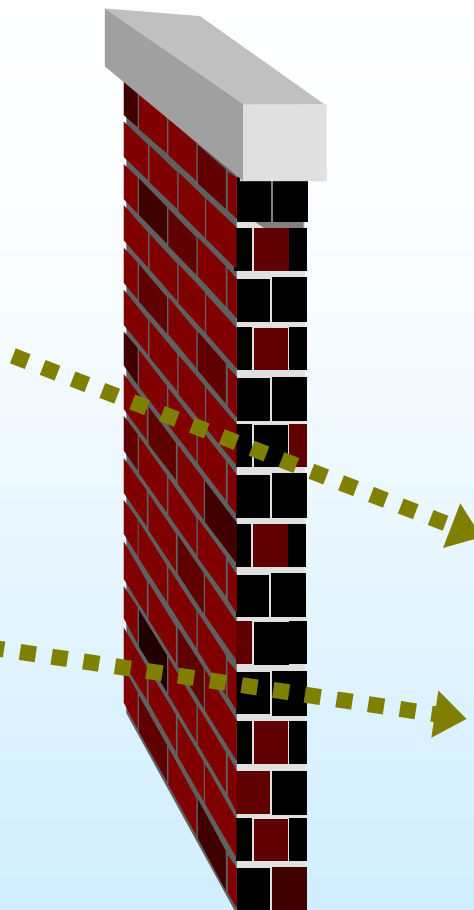
## Member A



**Service supplier**

## Member B

Supply of a service by a service supplier of a Member, through presence of natural persons of a Member in the territory of any other Member



**Service consumer**



Presence of natural persons

# The Presence/Movement of Natural Persons



## GATS

- Main text: mode 4 → **presence** of natural persons
- Annex → **movement** of natural persons

## In GATS Main Text and Annex

### Purpose of stay

Fulfilling ***directly*** a service contract, as service supplier (**self-employed**) or as an **employee**

***Indirectly***: Presence ***instrumental*** to supply of service: through commercial presence or supply at a later stage

### Duration of stay

#### Temporary

Measures regarding citizenship, migration, residence and permanent employment are not covered

# Who's in and Who's out?



<b>Falling under Mode 4</b>	Not falling under Mode 4
<p><b>Supply of services</b></p> <p><b>All skill levels</b></p> <p><b>Contractual service suppliers</b></p> <ul style="list-style-type: none"><li>– Self-employed service suppliers</li><li>– Employees of foreign service supplier</li></ul> <p><b>Intra-corporate transferees</b></p> <p><b>Services sellers...</b></p> <p><b>Temporary movement</b></p>	<ul style="list-style-type: none"><li>• Employees in the “goods” sector</li><li>• No skill excluded</li><li>• Employees of host country firms</li><li>• Permanent migration</li></ul>





# Mode 4 and temporary



## What is “temporary”?

### GATS does not define “temporary”

- In WTO Members’ schedules of commitments

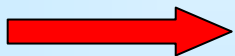
Between **3 months** (service sellers) → **2 to 5 years** (intra-corporate transferees)

- In international statistical standards (BPM6, SNA, migration, tourism)

#### One-year rule

→ distinction between residents/non-residents

*Statistics on residents also include*



*Mode 4 service suppliers*



# Mode 4 categories in statistical framework?



## ***Contractual service suppliers***

- Self-employed (independent) service suppliers
- Employees of foreign service suppliers

***Intra-corporate transferees and foreign persons directly recruited by the foreign affiliate***

***Services sellers / Persons responsible for setting up commercial presence***

## But in WTO members' schedules...



**Installers** → **contractual service suppliers  
or intracorporate transferees**

**Sportspersons** → **contractual service suppliers**

**Graduate trainees** → **intracorporate transferees**

**Artists** → **contractual service suppliers**

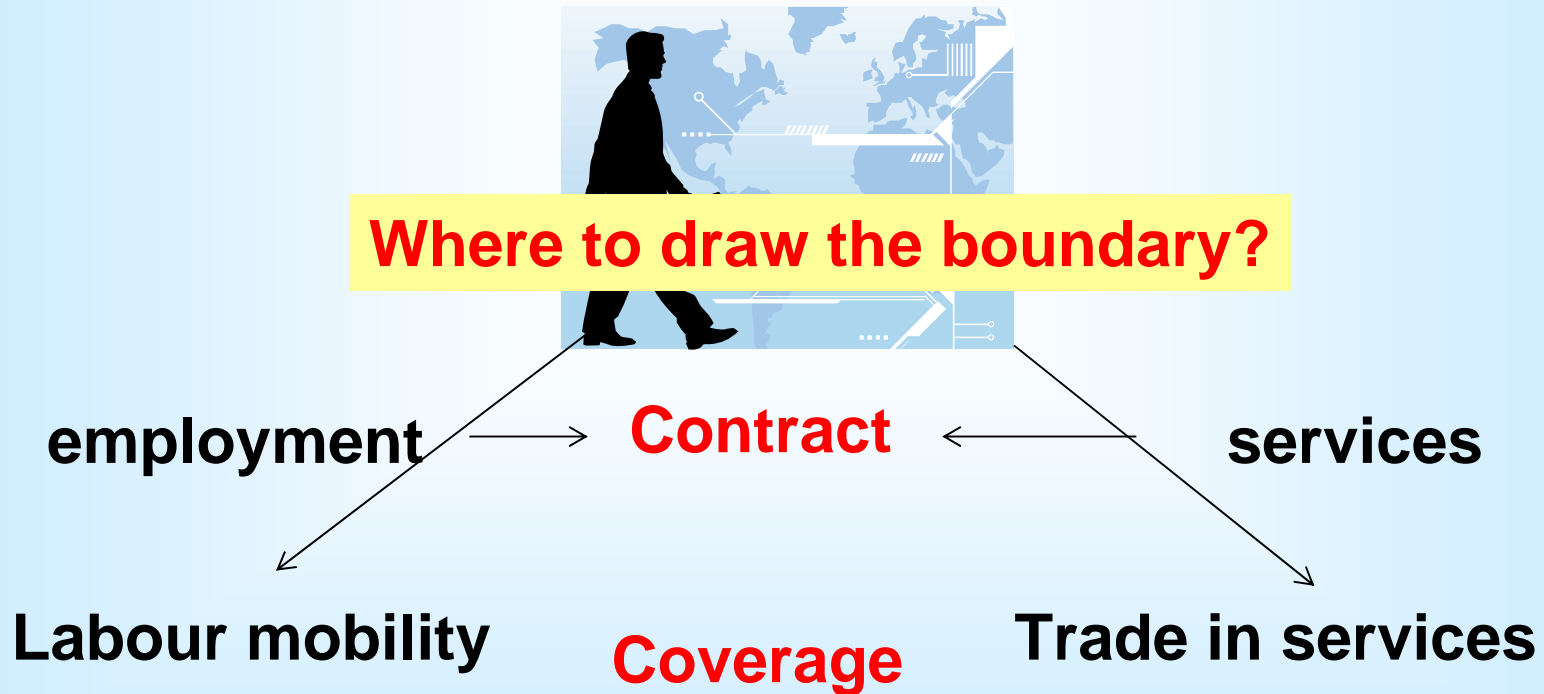
### Areas of uncertainty

- **what does constitute a service?**
- **difference between employment and service contract**
- **Self-employed or employee?**

# Movement of persons



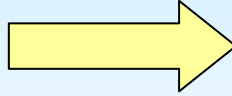
- Employment opportunities
- Income prospects
- Improved technology



# Service provision or provision of labour?



Person works for a remuneration in cash or kind (employment relationship)

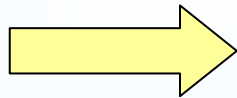


Provision of labour



Compensation of employees (in primary income)

Person contracted to produce a given result



Service provision



Services transactions (in current account)



# Self-employed service supplier... or employee?



- Operates own enterprise
- Makes own decisions
- Owns or rent machinery or work equipment
- Pays own social security contribution
- Pays taxes on the provision of service
- Remuneration depends on the profits made

# In what modes are the following services supplied?



- ✦ Temporary presence of independent professional accountant to provide accounting services in country B
- ✦ Establishment of a branch in B of an insurance company from country A
- ✦ Services consumed by a business traveller of A while travelling abroad
- ✦ Provision of medical advice by an expert team in country A to physicians carrying out by-pass surgery in country B

# In what modes are the following services supplied?



- ✦ A dentist from B offers treatment in a practice he owns in A
- ✦ An airline company from A has its plane repaired while stationed in country B. The crew stays in a hotel in B while the plane is being repaired.
- ✦ A cook from A opening his own restaurant in country B
- ✦ A banker from C sent by a bank of A to work in B



# What's the problem with measuring GATS Modes of Supply?



## Intermodal linkages

Services may be delivered through

**several modes of supply**

Mode 1

Mode 2

Mode 3

Mode 4

A single service transaction through different modes



Statisticians



Trade  
Negotiators

**Filling the gap....**



# What do we need to measure?

1) Value of services trade flows

2) Additional indicators



## Value of services trade

- By type of service product (by activity)
- By direction of the supply (origin/destination)

and

- By relation between the parties

# GATS Modes of Supply and Statistical Domains: **The simplified approach**



Mode 1

Mode 2

Mode 4

**Balance of Payments Statistics**

Mode 3

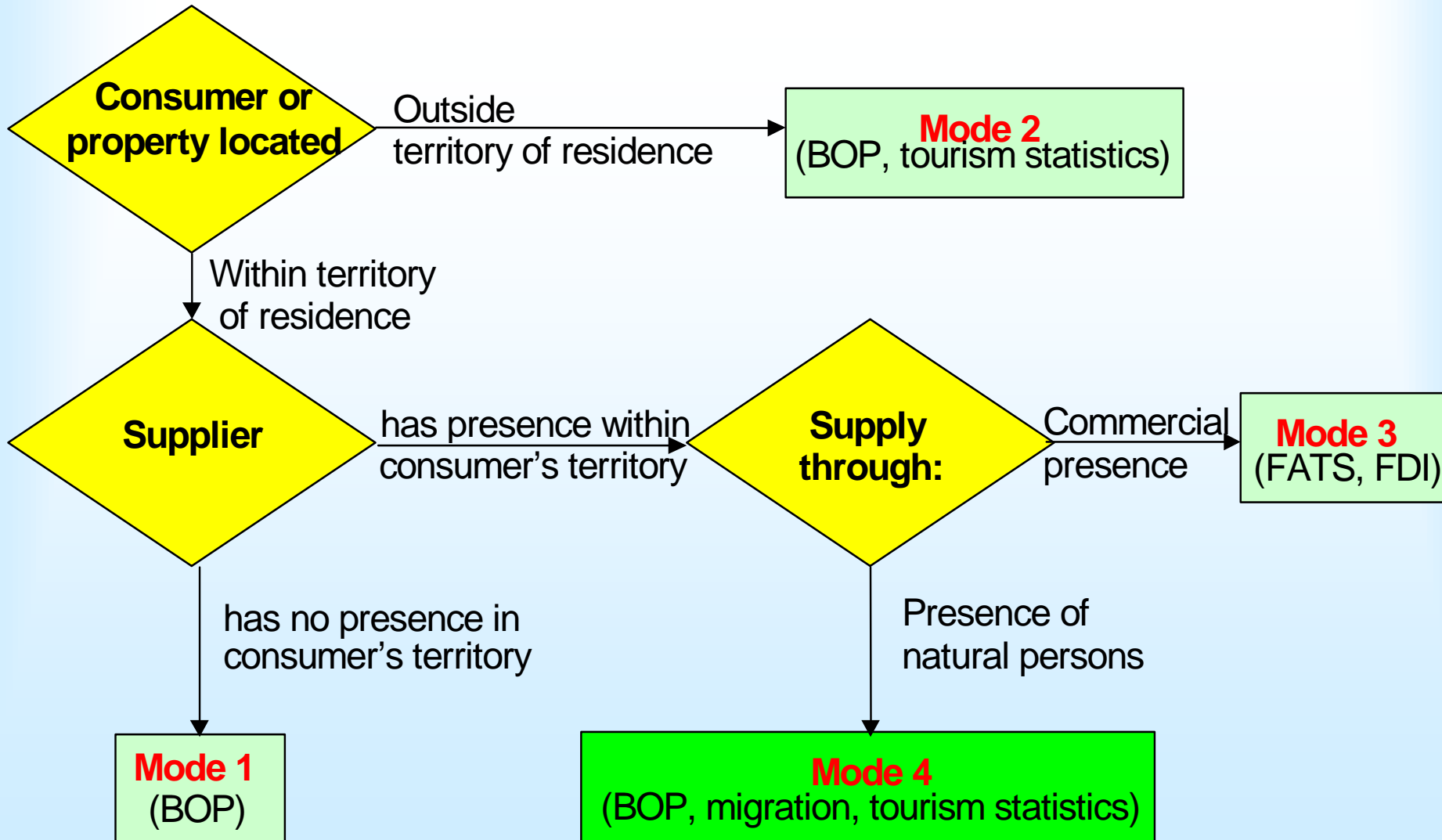
**Foreign Affiliates Statistics  
(FATS)**



In **Mode 4**, for which categories should we measure **the value** of services trade?

<b>Natural persons</b>	<b>Value of service trade flows</b>
<b><i>Contractual services suppliers</i></b> -Self-employed -Employees of foreign service suppliers	<b>Yes</b>
<b><i>Intra-corporate transferees and directly recruited by foreign affiliate</i></b>	<b>No</b>
<b><i>Services sellers - Persons responsible for setting up commercial presence</i></b>	<b>No</b>

# The four modes of supply: statistical simplified criteria





# An example: Tourism



## GATS GNS/W/120

- Hotels and restaurants
- Travel agencies and tour operator services
- Tourist guide services
- Other services

## 4 modes of supplying services

### BOP "Travel"



Mode 2

but

Sales of tourism operators (Mode 1)

Affiliates of hotel chains (Mode 3)

Foreign tourist guides (Mode 4)

Foreign managers/  
intra-corporate transferees (Mode 4)




# Simplified allocation of BPM6/EBOPS services items to Modes of Supply





## Services predominantly delivered through

Mode 1

- Transportation services 
- Telecommunications services
- Information services
- Insurance and pension services
- Financial services
- Charges for the use of intellectual property n.i.e
- Operational leasing (in “Other business services”)
- Trade-related services (in “Other business services”)

Mode 2

- Travel (only services acquired) 
- Supporting and auxiliary services to carriers in foreign ports (in Transport)
- Maintenance and repair services n.i.e.
- Manufacturing services on physical inputs owned by others 

# Simplified allocation of BPM6/EBOPS services items to Modes of Supply



Services predominantly delivered through

**Mode 4**

- Services incidental to agriculture and mining
- Services incidental to mining, and oil and gas extraction

But for services delivered through 2 modes of supply:

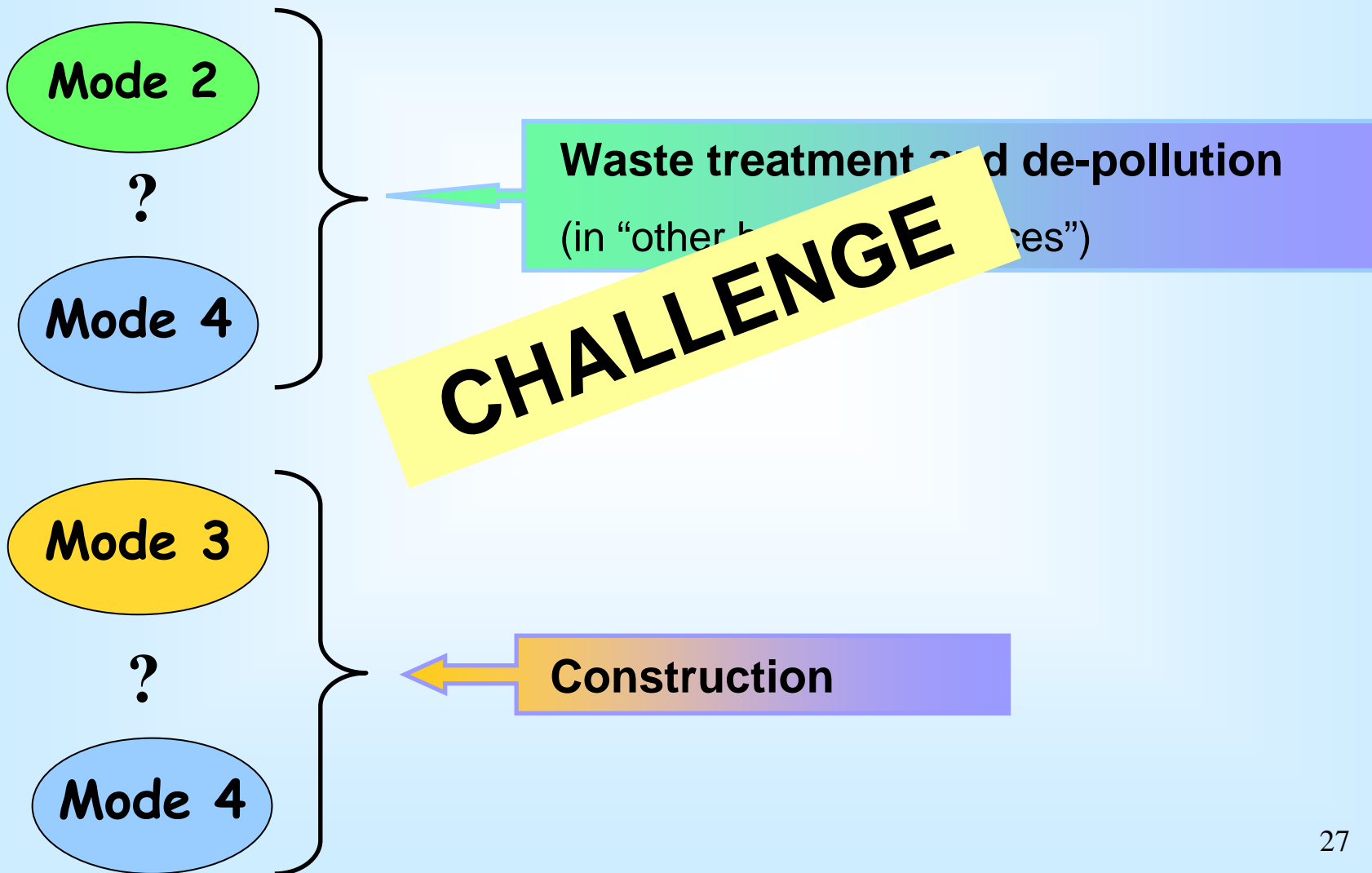
**Mode 1**

?

**Mode 4**

- Computer services
- Professional and management consulting services (in Other business services)
- Architectural, engineering, scientific and other technical services (in Other business services)
- Personal, cultural and recreational services

# Simplified allocation of BPM6/EBOPS services items to Modes of Supply



# Simplified allocation of FATS and EBOPS data to modes of supply (1/2)



	FATS (sales or output) *	Balance of payments trade in services					
	Mode	Mode(s)					
	3	1	2	4	1 and 4	2 and 4	3 and 4
<b>Manufacturing serv. on inputs owned by others</b>	X		X				
<b>Maintenance and repair services n.i.e.</b>	X		X				
<b>Transport</b>	X	X					
• Passenger	x	x					
• Freight	x	x					
• Post and courier services	x	x					
• Other	x						
– <i>Serv. to domestic carriers in foreign ports (and vice-versa)</i>	x		x				
– <i>Other</i>	x	x					
<b>Travel</b>			X				
• Goods							
• Local transport services			x				
• Accommodation services			x				
• Food-serving services			x				
• Other services			x				
<b>Construction</b>	X						X
• <i>Goods</i>							
• <i>Services</i>	x						x
<b>Insurance and pension services</b>	X	X					
<b>Financial services</b>	X	X					
<b>Charges for the use of intellectual property n.i.e. **</b>	X	X					

\* In territory where affiliate established. If not possible to breakdown by EBOPS 2010 product, by activity using ICFA Rev.1

\*\* Certain degree of uncertainty regarding certain charges

# Simplified allocation of FATS and EBOPS data to modes of supply (2/2)



	FATS (sales or output)	Balance of payments trade in services					
	Mode	Mode(s)					
	3	1	2	4	1 and 4	2 and 4	3 and 4
<b>Telecom., computer, and information services</b>	<b>X</b>				<b>X</b>		
• Telecommunications services	X	X					
• Computer services	X				X		
• Information services	X	X					
<b>Other business services</b>	<b>X</b>				<b>X</b>		
• Research and development services	X				X		
• Professional and management consulting services	X				X		
• Technical, trade-related and other business services	X						
– Architectural, engineering, scientific, other technical serv.	X				X		
– Waste treatment -depollution, agri. and mining services	X						
o Waste treatment and de-pollution	X						
o Services incidental to agriculture, forestry and fishing	X			X			
o Serv. incidental to mining, and oil and gas extraction	X			X			
– Operational leasing services	X	X					
– Trade-related services	X	X					
– Other business services, n.i.e.	X				X		
<b>Personal, cultural and recreational services</b>	<b>X</b>				<b>X</b>		
<b>Government goods and services n.i.e.</b>							
• <i>Government goods n.i.e., Credits and debits</i>							
• <i>Government services n.i.e., Credits</i>							
• <i>Government services n.i.e., Debits</i>							
– <i>Commercial services purchased in host economies</i>							
o <i>Government units in diplomatic and similar enclaves</i>					X		
o <i>Personnel from home economy and dependants</i>			X				
– <i>Other commercial serv. n.i.e purchased by government</i>					X		
– <i>Non-commercial services acquired by government</i>							
<b>Distribution (wholesale, retail trade) services</b>	<b>X</b>	<b>X</b>					

**CHALLENGE**

# Options to assess Modes of supply in surveys

1. Did the service delivery involve physical presence of service provider?

Yes? Then, **how** was most of the service value provided (time/resources)?

Mostly by fax, email, etc.



Mode 1

Natural person at the end  
(e.g. to supervise)

The person's knowledge  
was essential  
to deliver the service



Mode 4

2. Require in services surveys allocation by each GATS mode of supply

3. Require estimated share of services inputs for Mode 4 services trade



...and if the **self-employed** services supplier



stays abroad for **more than one year?**



**Resident of the host economy**

**If sends part of money home  
(in BOP remittances)**

**Normally small proportion  
of Mode 4 persons**

# Supplementary information from BPM6 linked to GATS Mode 4



- Contractual service suppliers  
(self-employed and employees)

- Service sellers/Persons responsible  
for setting up commercial presence

- Intracorporate transferees

Abroad for **less than 1 year**



Their expenditure in host country  
in BOP “**Travel**”

- Contractual service suppliers  
(employees only)

- Intracorporate transferees

Abroad for **more than 1 year**



Compensation from employer  
in BOP “**Compensation of employees**”  
If money sent home “**Workers’ remittances**”

**Nothing to do with service trade flows!**



# Remittances and compensation of employees are not measures of mode 4



## Labour mobility

**Value:** Compensation of employees  
Workers remittances  
BPM6: Personal transfers

## Trade in services

Services categories



# Sales of Services by GATS Modes of Supply: **2005** Statistical Approximation

<b>Mode of Supply</b>	<b>Estimated share</b>
<b>1 - cross-border supply</b>	<b>25-30%</b>
<b>2 - consumption abroad</b>	<b>10-15%</b>
<b>3 - commercial presence</b>	<b>55-60%</b>
<b>4 – presence of natural persons</b>	<b>less than 5%</b> Approx. 150 billion USD

# The size of mode 4 trade?



- **Small** compared to total trade, and to other modes of trade in services (*is the most restricted*)
- **Importance varies** across countries and sectors
- **Mobility for skilled workers increasing** and facilitated by special programs
- **Both developed and developing** countries are traders where mode 4 can be involved



# Indian International Trade in Computer Services, IT Enabled Services and BPO by Mode of Supply, 2007-08

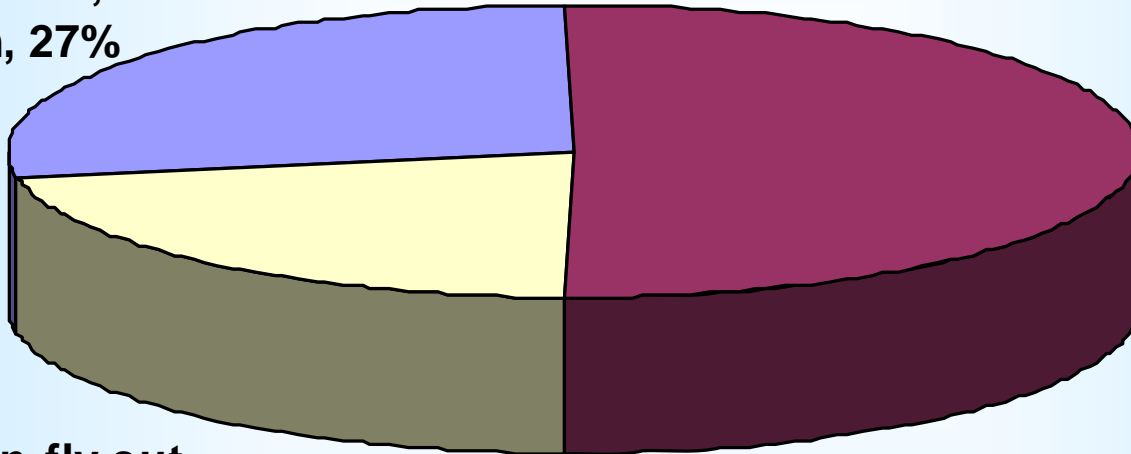
Size of Transactions (million USD)	Amount (million USD)					Per cent Share in Total			
	Mode 1	Mode 2	Mode 3	Mode 4	Total	Mode 1	Mode 2	Mode 3	Mode 4
< 0.2	49	0	5	1	56	87.2	0.9	9.3	2.7
0.2-2	455	7	47	28	537	84.6	1.4	8.8	5.2
2-20	2042	63	256	91	2451	83.3	2.6	10.4	3.7
> 20	21863	185	5291	10038	37378	58.5	0.5	14.2	26.9
<b>Total</b>	<b>24408</b>	<b>256</b>	<b>5599</b>	<b>10159</b>	<b>40422</b>	<b>60.4</b>	<b>0.6</b>	<b>13.9</b>	<b>25.1</b>

Source: Reserve Bank of India (2009), *Survey on Computer Software & IT Services Exports: 2007-08*. (converted to US dollars by the WTO Secretariat).



## Australia's legal services export income by mode of supply, 2006-07 (million USD and percentage)

**Commercial  
presence,  
\$116m, 27%**



**Australian  
projects,  
\$215m, 51%**

**Fly in-fly out,  
\$93m, 22%**



## on Mode 3 (FDI and FATS)

- FDI stocks and flows in services
- number of foreign affiliates, of employees, value of assets (FATS).

## on Mode 4:

### Number (stocks and flows) of:

- Contractual services suppliers
- Intracorporate transferees and foreigners directly recruited
- Services sellers/persons responsible of setting up commercial presence



# For which categories should we measure **the number of mode 4** persons?

Natural persons	Number of persons
<b><i>Contractual services suppliers</i></b> -Self-employed - Employees of foreign service suppliers	<b>Yes</b>
<b><i>Intra-corporate transferees and directly recruited by foreign affiliate</i></b>	<b>Yes</b>
<b><i>Services sellers - Persons responsible for setting up commercial presence</i></b>	<b>Yes</b> <b>(less important)</b>

# Mode 4, migration, tourism statistics (1/2)



RSIM Rev.1 categories

Purpose of trip or migration	Length of stay of individuals		
	Less than 3 months	3 to 12 months	more than 12 months
<b><i>IRTS 2008 categories</i></b>			
Visitors			
Personal			
Holiday, leisure and recreation			
Visiting friends and relatives			
Education and training			
Health and medical care			
Religion/pilgrimages			
Shopping			
Transit entering eco./legal territory			
Other			
Business and professional			
(no employer-employee relationship with entity established in compiling economy)			
Contractual service supply:			
- self-employed			
- employed			
Intra-corporate transfer:			
- in services producing company			
- other			
Serv. salespersons/ commercial pres. negotiation			
- serv. salespersons/ commercial pres. of serv. producing company negotiation			
- commercial pres. of goods producing company negotiation			
Other (incl. attending meetings, conferences, etc)			

**Categories of the UN Recommendations on Statistics of International Migration, revision 1:**

Non-Migrant categories

Migrant categories



# Mode 4, migration, tourism statistics (2/2)



Purpose of trip or migration		Length of stay of individuals		
		Less than 3 months	3 to 12 months	more than 12 months
<b>RSIM Rev.1 categories</b>	Employment (migrant workers, employment-based settlement)			
	<i>Intra corporate transfer:</i>			
	- <i>in services producing company</i>	x		X
	- <i>other</i>			
	<i>Directly recruited by a foreign established:</i>			
	- <i>services producing company</i>	x		X
	- <i>other</i>			
	International civil servants			
	<i>Other</i>			
	Trainees			
	Family reunification/formation			
	Family based settlement; Ancestry based settlement			
	Retiree settlement			
<b>Entrepreneurs and investors settlement</b> a	x	X		
Humanitarian reasons (refugees, etc.)				
Border workers; Frequent border crossers; Nomads				
Transit not entering economic/legal territory				
Diplomatic/consular personnel; Military personnel				

**Categories of the UN Recommendations on Statistics of International Migration, revision 1:**

Non-Migrant categories

Migrant categories

# Arrivals for business and professional purposes, selected economies, 2006 (thousands)



United Kingdom	9 717	Canada	2 651
Spain	6 084	Saudi Arabia	1 603
United States *	5 569	Japan	1 523
China **	5 548	Brazil	1 410
Poland	4 240	Australia	1 218
Hong Kong, China	3 862	Argentina	599
Russian Federation	3 233	Chile	442
Ukraine	3 040	South Africa	324
Singapore	2 925	Morocco	164

Source: UNWTO(2008); \* Excluding Mexico \*\* Excluding Hong Kong, China, Chinese Taipei and Macao and overseas Chinese.

# RECOMMENDATIONS OF MSITS 2010



## To measure modes of supply

- **FATS: Mode 3; BOP essentially to Modes 1,2, and 4 (except construction); BOP construction to modes 3 and 4;**
- **Each BOP service transaction to the dominant mode;**
- **Allocate services transactions to modes of supply according to EBOPS. If not possible allocate the 12 main BPM6 categories and the estimate of distribution services;**
- **Estimate distribution services;**
- **Other indicators for analysis, e.g.: Number of persons for mode 4 for all categories (migration/tourism statistics).**