

Compilation of Statistics of Exports of ICT-enabled services: Experiences from a survey

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Plan of the Presentation

1. Background

2. Survey Format & Methodology

3. Findings & Experiences

4. Observations & Recommendations

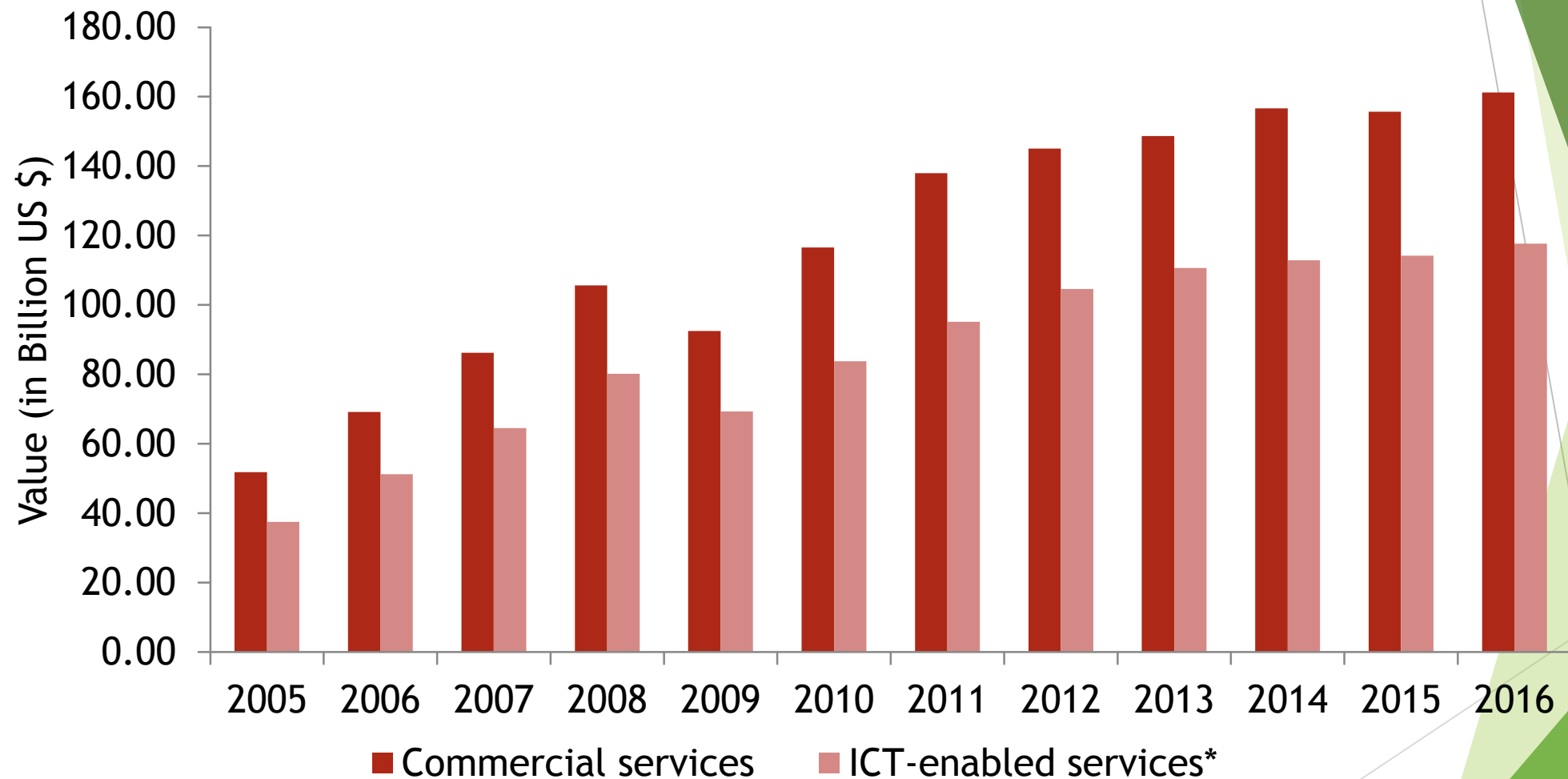
Background

- ▶ Services trade statistics in India is at present generated from the International Transaction Reporting System (ITRS) implemented under the Foreign Exchange Management Act (FEMA) and few other surveys (annual) conducted by the Reserve Bank of India.
- ▶ The Reserve Bank of India provides aggregate level statistics on services trade following the standard classification as stipulated under the IMF's Balance of Payment Manual, Version 6 (BPM 6).
- ▶ RBI does not compile and publish disaggregate level services trade statistics - by partner country and mode of delivery.

Background

- ▶ Services exports has a significant contribution in Indian economy and there is a need to generate disaggregate level services trade data.
- ▶ *'Potential ICT-enabled'* services currently consists of around 70% of India's total exports of services.
- ▶ Growth in exports of potential ICT-enabled services has surpassed that of services exports.
- ▶ Directorate General of Commercial Intelligence & Statistics (DGCIIS), the nodal agency responsible for compilation of services trade statistics decided to adopt the UNCTAD classification of *'potential ICT-enabled'* services in an all India survey for collection of disaggregate level data on exports of these services.
- ▶ **According to the definition followed, services delivered through Mode 1 are essentially *'ICT-enabled'* services while those delivered through Mode 1, Mode 2 & 4 are *'potential ICT-enabled'* services.**

India's total exports of services vis-à-vis exports of potential ICT-enabled services



Source: WTO Services Trade Database;

*: Computed on the basis of 10 services identified by UNCTAD

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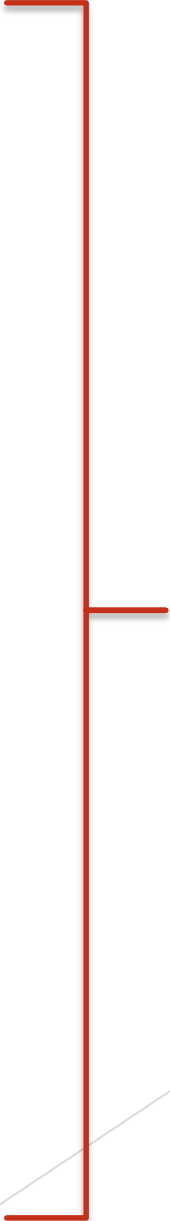
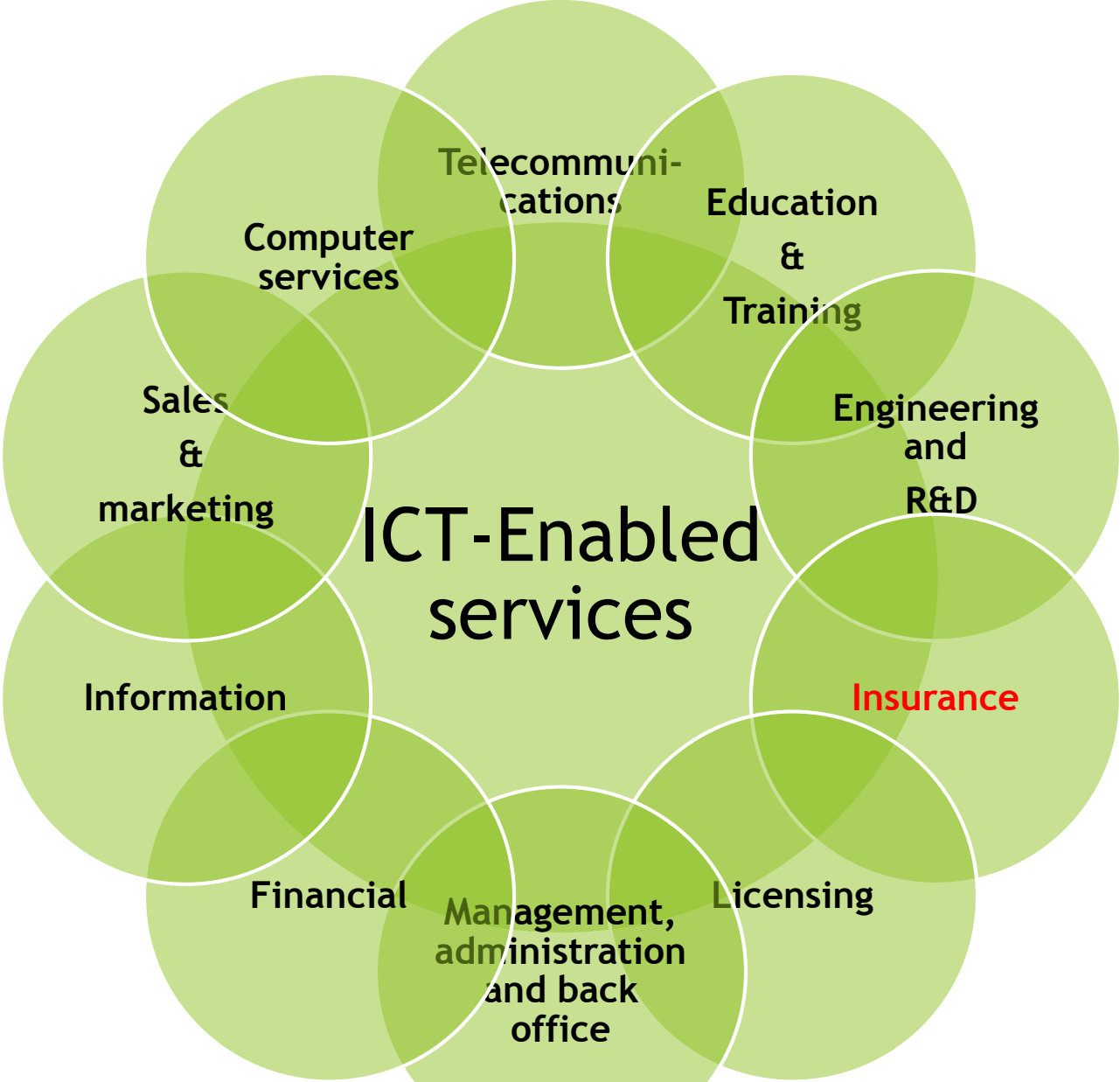
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Coverage of potential ICT-enabled services



10 categories

Coverage of potential ICT-enabled services

- ▶ In view of the complexity involved in collection of information for insurance sector and also because of the fact that the usual concept of mode of supply does not appropriately apply to this sector, it has been decided to develop a separate questionnaire to collect information for insurance services.
- ▶ The questionnaire, prepared by UNCTAD on the basis of model questionnaire (questionnaire 12) as suggested in the BPM6 compilers' guide, has been modified to make provision for collection of information on :
 - ▶ Exports of services for a group of pre-defined trading partners that are important for India
 - ▶ Exports of services by Mode 2 and Mode 4 in addition to Mode 1
- ▶ An excel format of the questionnaire has also been designed and the same has been made available through the website of DGCIS.

Reference Period

- ▶ Information in the survey has been collected for the financial year 2016-17, i.e., from April 2016 to March 2017.

Legal Framework

- ▶ The survey has been conducted under the legal framework of Collection of Statistics Act 2008 that makes statutorily obligatory on part of the respondents to furnish the information called for within the prescribed time.
- ▶ The Collection of Statistics Act, 2008 also guarantees the confidentiality of the information provided.

Sampling Scheme

- ▶ Simple Random Sampling without Replacement (SRSWOR) has been followed for selection of samples.

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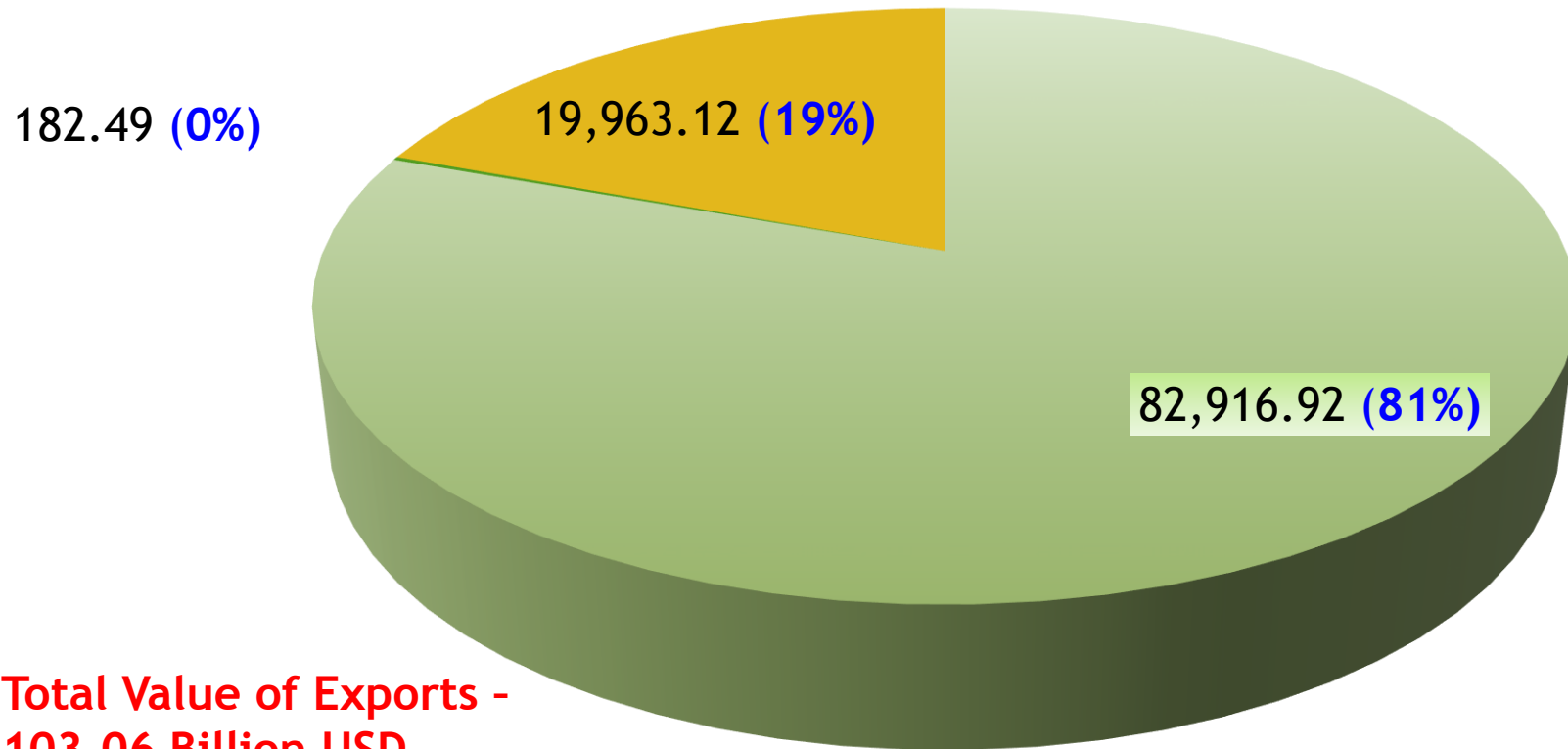
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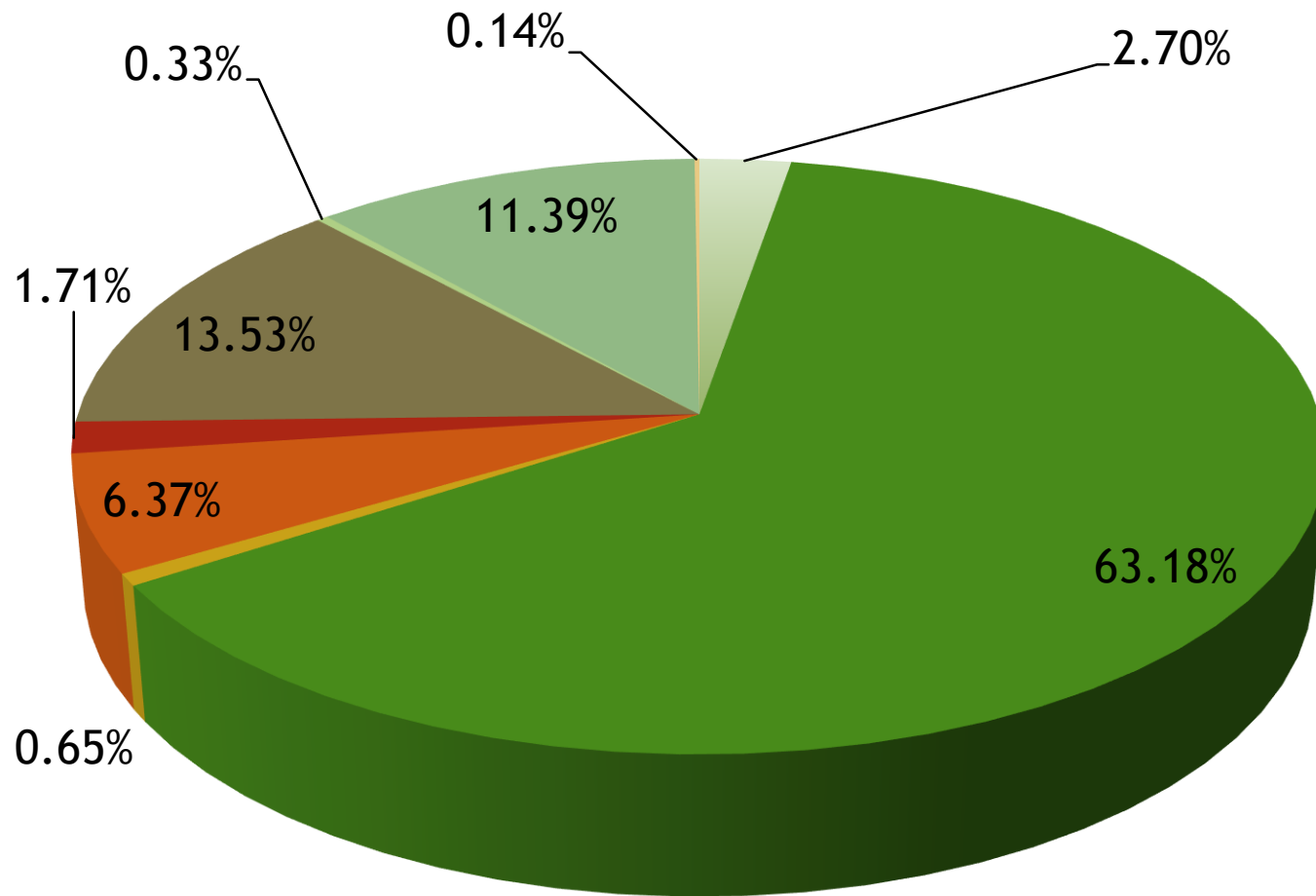
Exports of potential ICT-enabled services (in USD Million) by Mode of supply



**Total Value of Exports -
103.06 Billion USD**

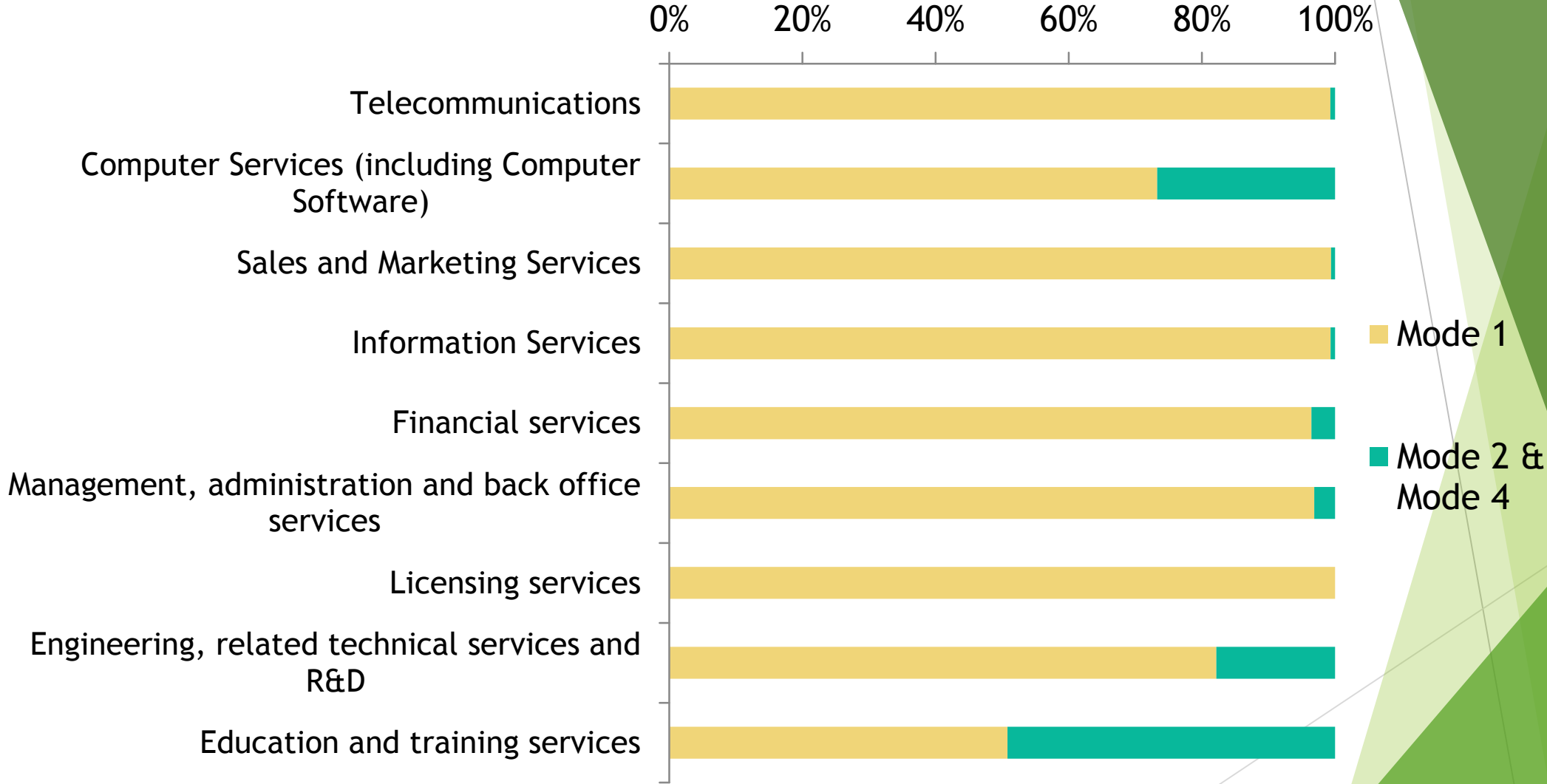
■ Mode 1 (ICT-enabled services) ■ Mode 2 ■ Mode 4

Exports of potential ICT-enabled services by categories



- Telecommunications
- Computer Services (including Computer Software)
- Sales and marketing services, not including trade and leasing services
- Information Services
- Financial services
- Management, administration and back office services
- Licensing services
- Engineering, related technical services and R&D
- Education and training services

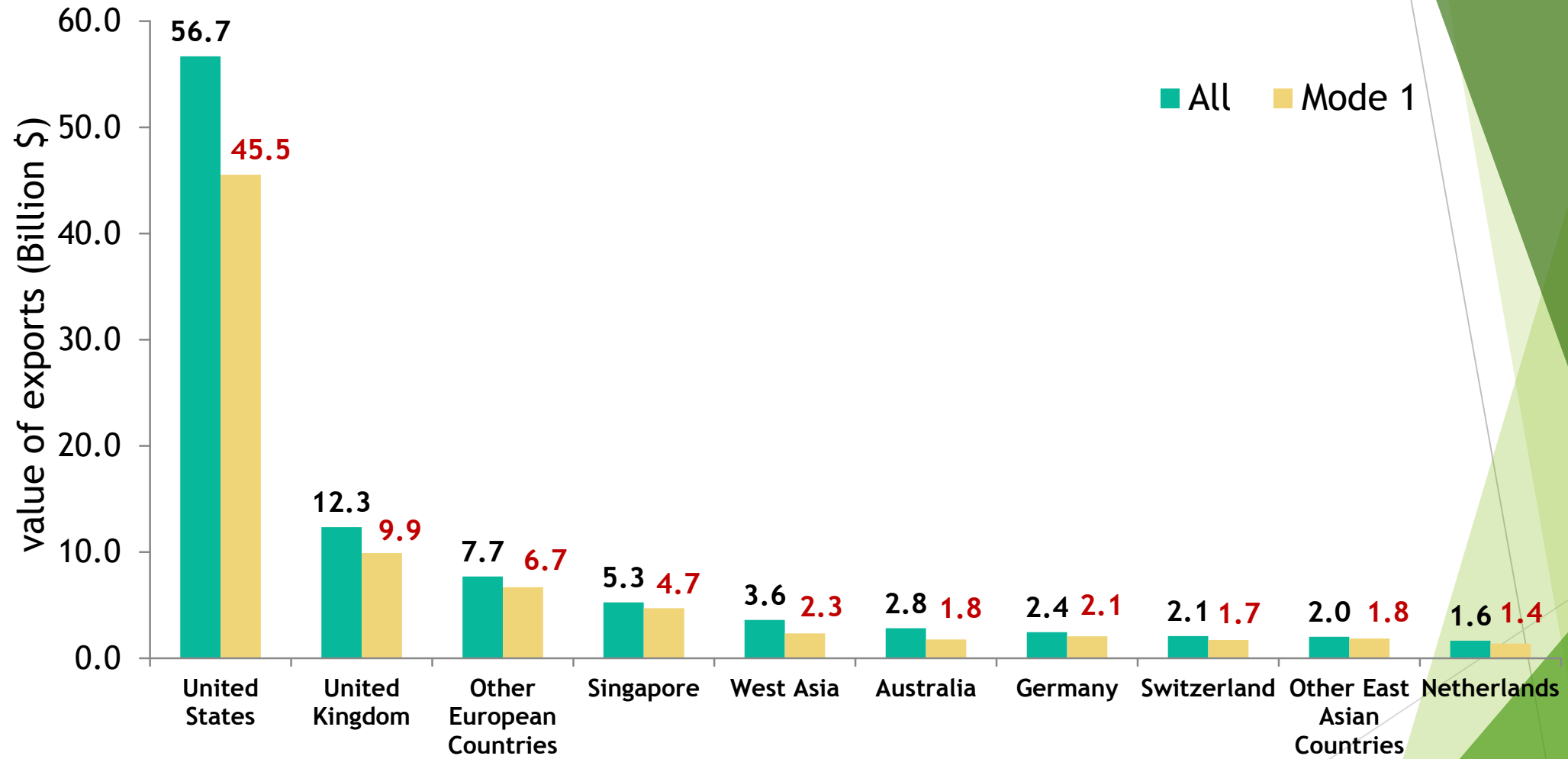
Exports of potential ICT-enabled services by mode of supply



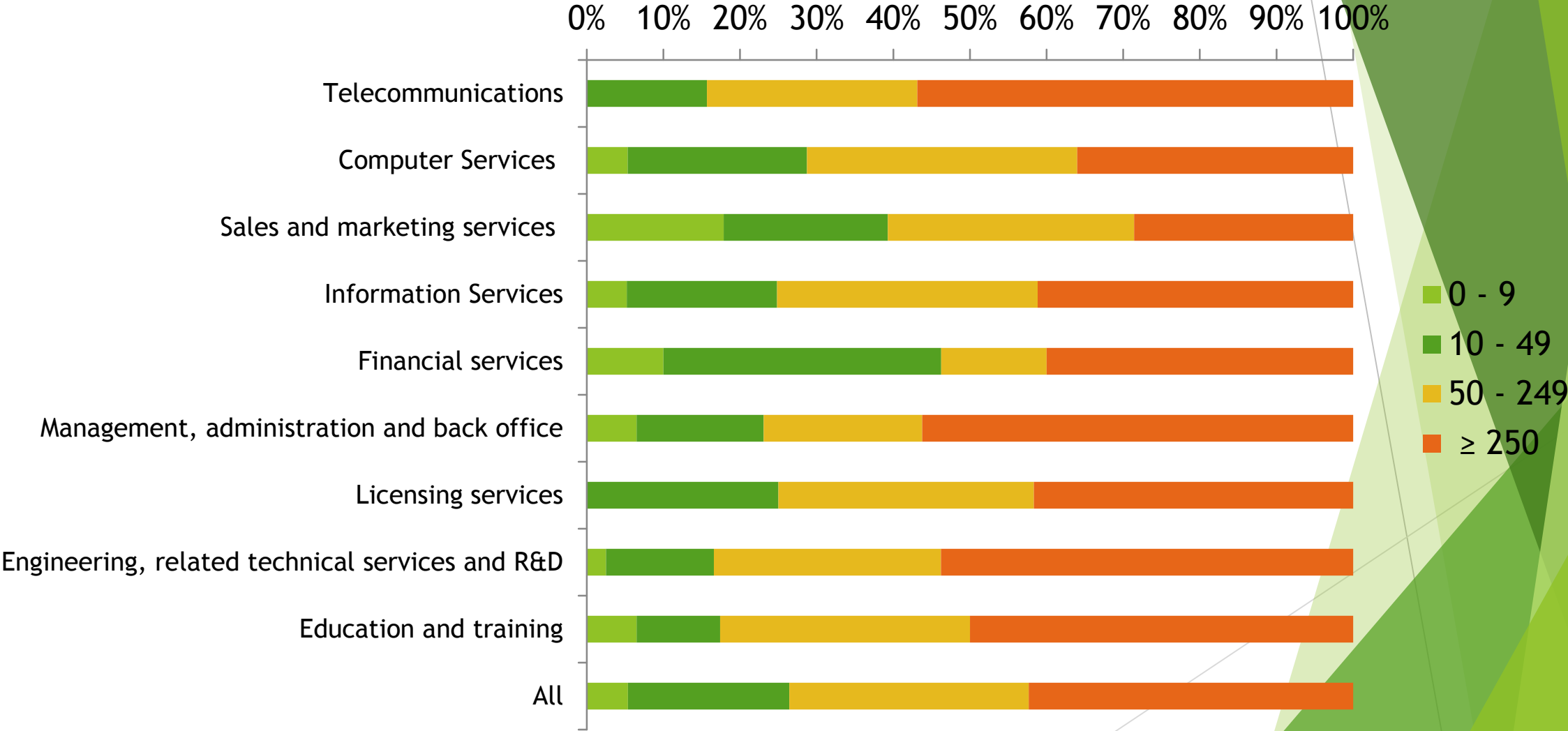
Exports of potential ICT-enabled services by mode of supply

Category of service	Value of Exports (in USD Million)			
	Mode 1	Mode 2	Mode 4	Total
Telecommunications	2,762.70	0.00	20.15	2,782.85
Computer Services (including Computer Software)	47,704.29	5.77	17,407.05	65,117.11
Sales and marketing services, not including trade and leasing services	665.66	4.08	0.00	669.73
Information Services	6,519.88	0.97	42.97	6,563.82
Financial services	1,699.33	7.06	55.72	1,762.11
Management, administration and back office services	13,502.75	1.69	436.06	13,940.50
Licensing services	343.71	0.00	0.00	343.71
Engineering, related technical services and R&D	9,644.40	97.10	1,995.13	11,736.63
Education and training services	74.21	65.82	6.04	146.07
All	82,916.92	182.49	19,963.12	103,062.52

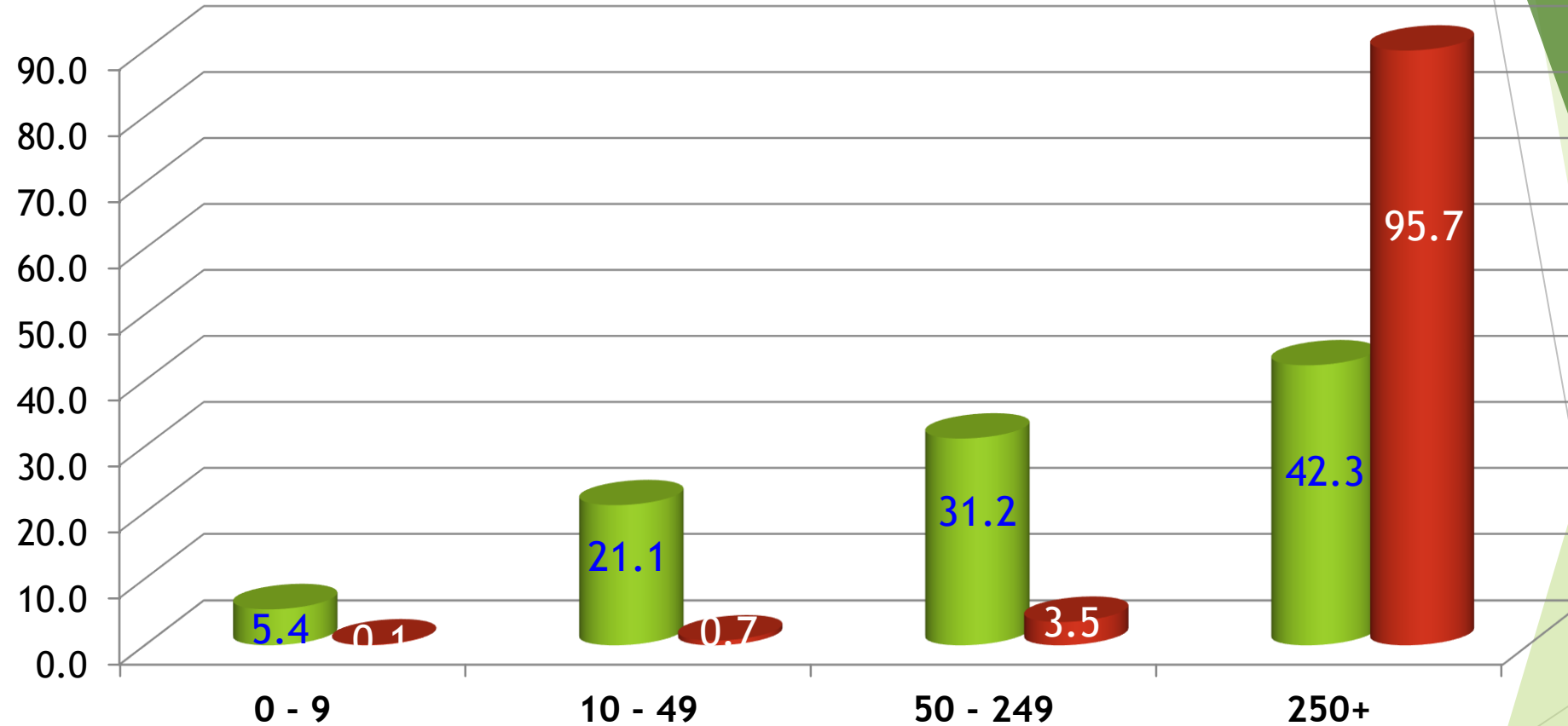
Top Destinations of Exports of potential ICT-enabled services



Potential ICT-enabled services exporting enterprises by size



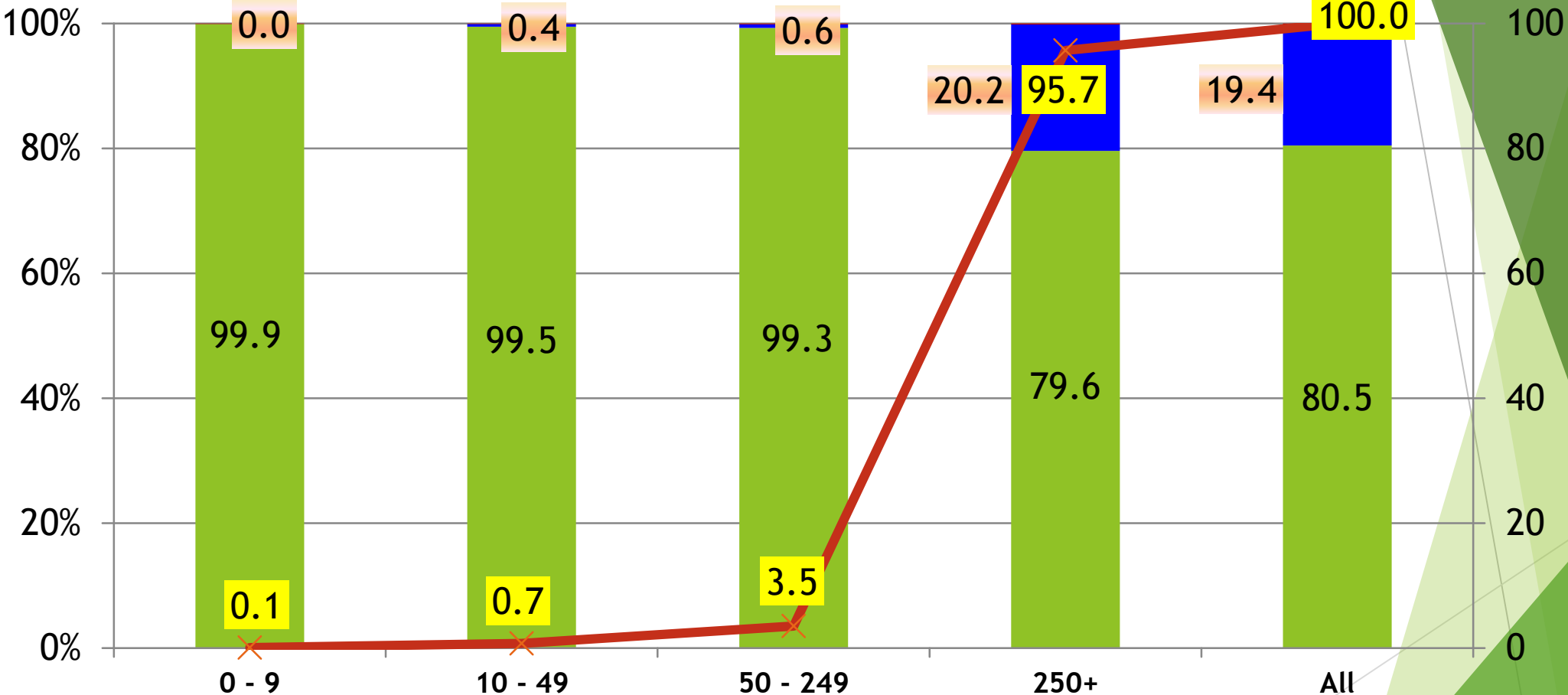
Contribution to total exports of potential ICT-enabled services by enterprise size



■ % no. of enterprises

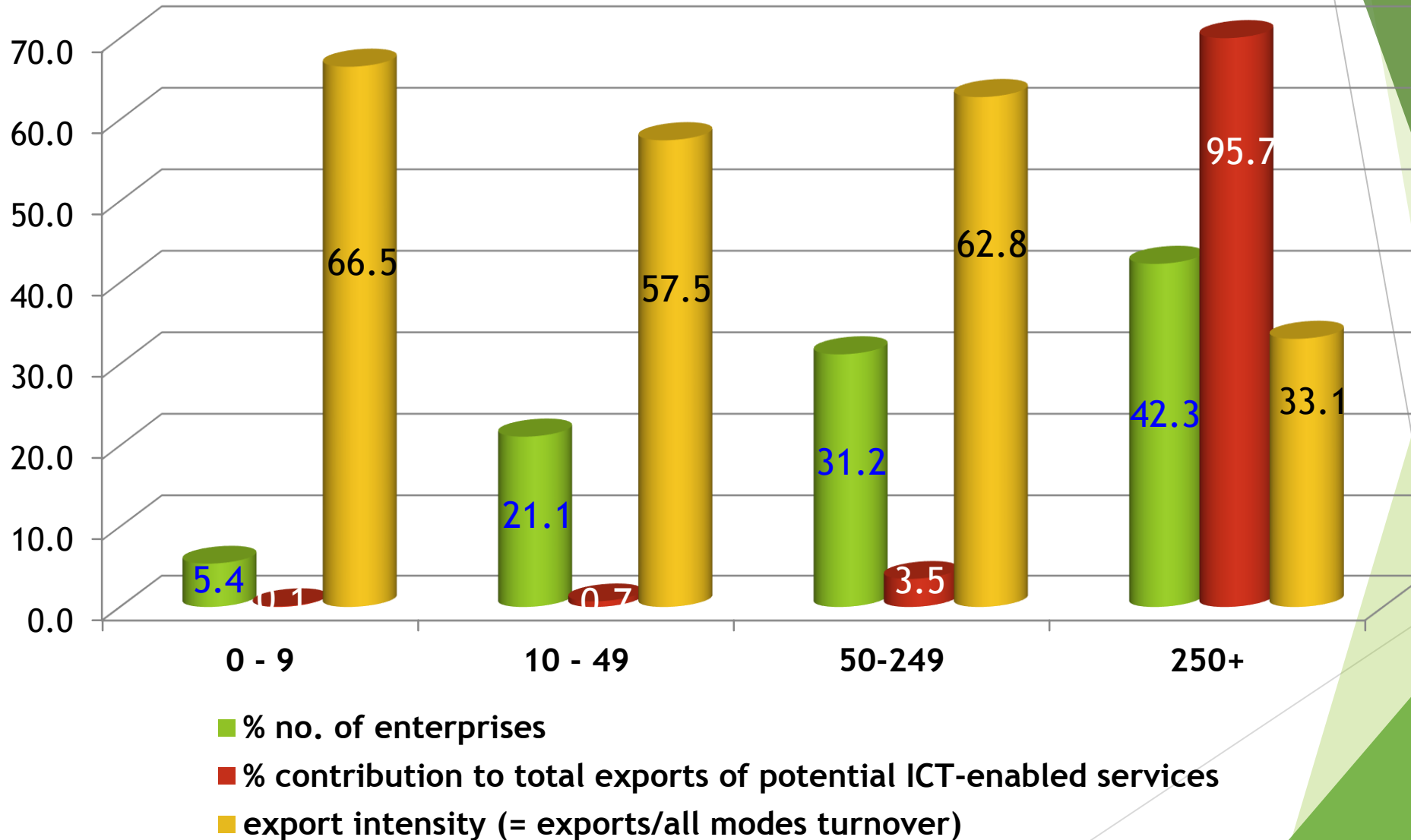
■ % contribution to total exports of potential ICT-enabled services

Contribution by mode of supply & enterprise size

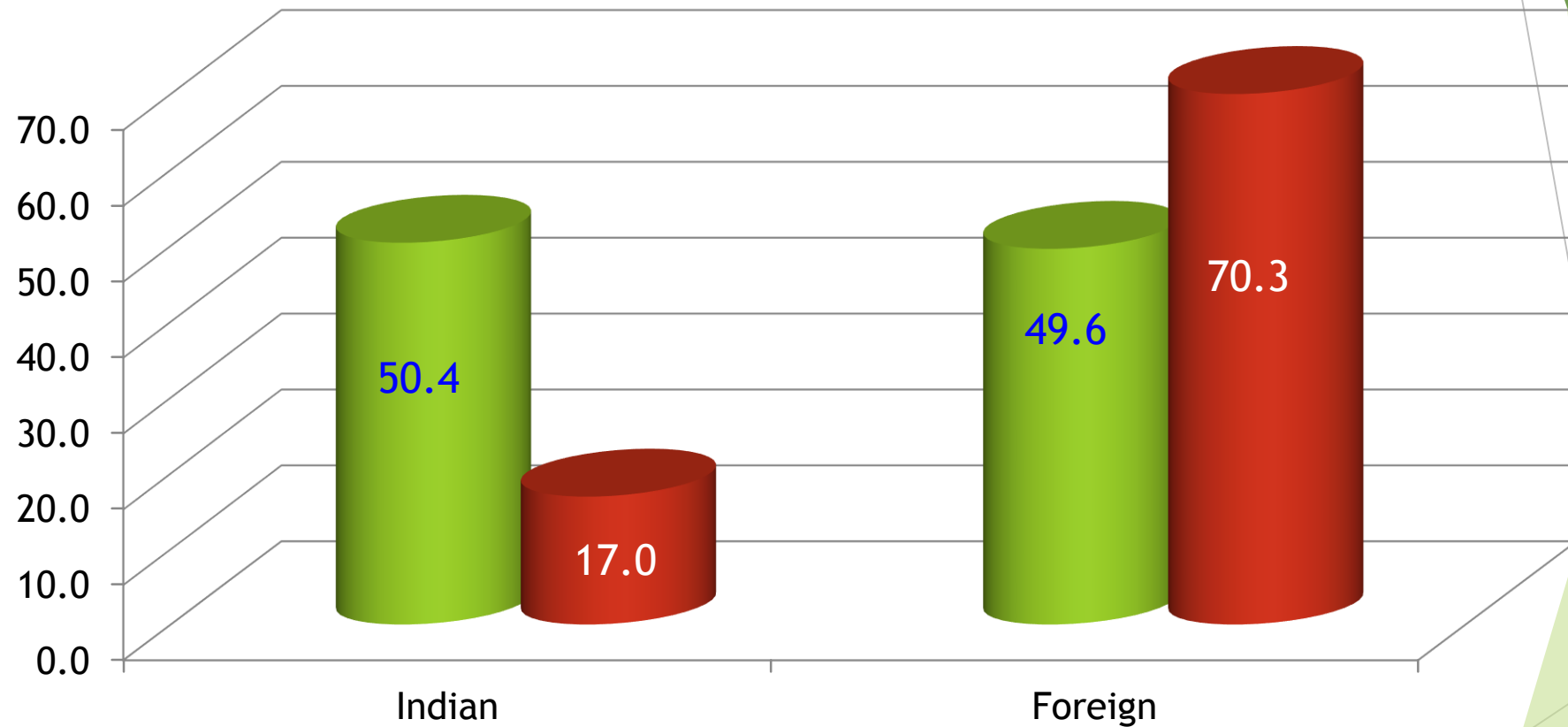


■ Mode1
 ■ Mode4
 ■ Mode2
 —x— % share to total exports

Export intensity of different types of enterprises



Contribution of Indian vis-à-vis Foreign owned companies to export of ICT-enabled services



■ % contribution to Mode1 export ■ export intensity (= exports/all modes turnover)

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Comparison with BoP figures

Service Category	Exports	BoP Item	Receipts
Telecommunications	2783	Telecommunications	2375
Computer services (including computer software)	65117	Software services	73651
Sales and Marketing Services (not including trade and leasing services)	670	<i>Corresponding category is not available in BoP data, comparable figures have been derived by identifying appropriate constituent BoP items.</i>	1756
Information Services	6564		1107
Financial Services	1762		5099
Management, Administration and Back Office Services	13941		11132
Licensing Services	344		490
Engineering, related Technical Services and R&D	11737		5275
Education and Training Services	146		367
Total of above	103063		

*Value figures:
Million USD*

Observations

- ▶ Information in this survey has been collected through self-compilation only. No field visit was made.
- ▶ Clarifications as well as assistance for compilation and submission of information has also been provided through e-mail and telephone.
- ▶ The excel format of the questionnaire designed in consultation with UNCTAD has been found to be simple and easy to use by the respondents.
- ▶ An overwhelming majority (77%) of the units preferred electronic mode for submission of data.
- ▶ This has resulted to a large extent in speedy processing and compilation of collected information.
- ▶ Enterprise-based approach has been adopted and information has been collected from the corporate headquarters of the establishments.

Observations

- ▶ This has resulted in significant savings in cost of survey as well the time needed for collection of information.
- ▶ The gender distribution of the employees engaged in potential ICT-enabled services exporting enterprises resembles that of other major sectors of the economy.
- ▶ The overall response rate in the survey has been 74% (76% for census and 70% for sample sector units).
- ▶ The response rates for census units of telecommunications, computer services and management & back office services have been more than 90%.

Limitations

- ▶ The estimates presented here are subject to the conventional sampling as well as non-sampling errors attributable to any survey sampling exercise.
- ▶ In the absence of a Business Register (BR), although best effort has been made to prepare an exhaustive sampling frame (complete list of units) of enterprises for selection of samples, it has not been possible to ensure completeness of coverage for all categories of services.
- ▶ This may induce some non-sampling error in estimation.
- ▶ Non-availability of auxiliary information for the enterprises restrained us from adopting any sophisticated sampling procedure (other than SRSWOR) for enhancement of precision of the estimates.
- ▶ However, comparison of the survey estimates with BoP figures shows that the methodology followed is capable of producing reasonably consistent estimates.

Recommendations

- ▶ The approach followed in India for generation of disaggregated level estimates of exports of potential ICT-enabled services is a simple one and can be replicated in other countries as well.
- ▶ In countries with updated BR, the precision of the estimates can be enhanced further by adopting advanced sampling designs through scientific utilization of available auxiliary information in the BR.
- ▶ On the basis of the experiences gained in the pilot studies conducted and in consultation with stakeholders, a comprehensive compilers manual with the following components may be prepared under the guidance and leadership of UNCTAD:
 - (i) Definitions with examples, (ii) A model questionnaire along with electronic format for collection of information, (iii) Sampling strategy for selection of units, (iv) Suggested tabulation of data.

Thank You

The background features abstract, overlapping geometric shapes in various shades of green, ranging from light lime to dark forest green. These shapes are primarily located on the right side of the frame, creating a modern, layered effect against the white background.