

Measuring ICT-enabled Services Exports project background and motivation

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Expert Meeting on Results from Pilot Surveys on Exports of ICT-enabled Services
28-29 November 2017
Geneva



Our project

- ❑ We come from the perspective of statistics on the information economy - including the ICT sector, and the use ICT by enterprises
- ❑ No comparable statistics on trade in ICT-related services
- ❑ Many existing alternative approaches and definitions
- ❑ Demand for better data from countries exporters of such services
- ❑ Need to understand the impact of enhanced ICT access and use on services trade
- ❑ Rapidly growing demand for better e-commerce statistics, and especially cross-border e-commerce

Motivation for the project

- ❑ Services are increasingly traded, but the statistical system for classifying and capturing them lags behind
- ❑ ICTs are a key enabling factor
 - ✓ Falling prices for voice and data communications
 - ✓ Can segment and relocate work to remote locations (ICT-enabled services)
 - ✓ Evolution from basic call centers to much more complex business processes (BPO >>> KPO)
- ❑ Trade negotiations: renewed interest in **services** and **e-commerce**
- ❑ It is crucial that policymakers can quantify such trade more accurately than the current statistical system allows
- ❑ Interest to understand how better ICT access can lead to growth in trade in services

Motivation for the project

- ❑ In **Thailand** exports of telecommunication, computer and information services + other business services = USD 9 billion, equivalent to 15% of Thai services exports in 2016, 7% annual growth rate in the past 10 years
- ❑ H.E. Alexander Mora, Minister of Foreign Trade of **Costa Rica**
 - ✓ "Digitally-enabled is key. We need to identify opportunities, such as from digital development, and bring those opportunities into business, and our societies"
 - ✓ telecommunication, computer and information services + other business services = USD 3.9 billion, or nearly ½ of services exports, 6.5 times higher than in 2005
- ❑ In **India** telecommunication, computer and information services + other business services = USD 109 billion, represent more than 2/3 of total services exports in 2016, and 3 times higher than in 2005 >>> Reserve Bank of India survey, 82% of software services are delivered via mode 1
- ❑ In **Egypt** - same sector - USD 1.3 billion in 2015 (latest year with available data), about 7% of total services exports; high volatility from one year to the next

Events and initiatives related to e-commerce and digital trade

- ❑ UNCTAD E-commerce Week 2017
- ❑ Global Aid for Trade Review July 2017
- ❑ MC11 WTO Ministerial Dec 2017
- ❑ G20 2017 discussions
- ❑ First UNCTAD Intergovernmental Expert Group on E-commerce and the Digital Economy, 4-6 October 2017
 - ✓ recommended establishment of a **Working Group on Measuring E-commerce and the Digital Economy**
 - ✓ **SAVE THE DATE:** UNCTAD E-commerce Week & 2nd Intergovernmental Expert Group on 16-20 April 2018



Motivation in similar studies and reports

- ❑ US BEA Trends in US Trade in ICT services and ICT-enabled services, May 2016:
 - ✓ "to promote a better understanding how US companies engaged in services trade are reaching global markets"
 - ✓ "it is not possible to identify precisely ICT-enabled services using the EBOPS 2010 measurement framework because this is based on types of services, not on the mode of delivery"
- ❑ Eurostat, November 2016
 - ✓ "there is a need to enable an assessment of the relative importance of the different modes of supply in a given sector and the impact of measures affecting each mode of supply"



The UNCTAD initiative on ICT services statistics

- ❑ Goal: to develop **indicators** + practical **proposals** on how to collect country-level data in the context of limited resources
- ❑ In 2014 set up Partnership Task Group on Measuring Trade in ICT Services and ICT-enabled Services (TGServ)
 - ✓ Members: UNCTAD, WTO, OECD, UNSD, UNESCWA, World Bank and ITU
 - ✓ Tim Sturgeon, MIT, lead consultant
 - ✓ Stock-taking of existing approaches: NASSCOM, Everest Group, ITU, WTO, US BEA, Costa Rica Ministry of Foreign Trade
 - ✓ Close interaction with UN Task Force on International Trade Statistics (TFITS)
 - ✓ Proposed definition and methodological approach
- ❑ Funding provided by the Government of Sweden



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Outcome of the UNCTAD initiative on ICT services statistics

- ❑ **Definition and methodology:** UNCTAD Technical Note on International Trade in ICT Services and ICT-enabled Services: (TN/UNCTAD/ICT4D/03) www.unctad.org/ict4d/technicalnotes
 - ✓ United Nations Statistical Commission reviews and adopts definition, 47th session (March 2016)
- ❑ In 2016 produced a **model survey questionnaire**
 - ✓ Developed by Thierry Coulet, UNCTAD consultant
 - ✓ Comments received from: WTO, Costa Rica (Central Bank and Ministry of Foreign Trade), India (Ministry of Industry and Commerce), Thailand (Electronic Transactions Development Agency), Egypt (Ministry of ICT), IMF, OECD
 - ✓ Builds on existing methodologies and measurement frameworks: IMF balance of payments -model survey forms - and Statistics New Zealand Census of Services (2011) by mode of supply
- ❑ During 2017 technical assistance provides for survey implementation in Costa Rica, India and Thailand in 2017

Preparatory meetings for pilot survey implementation

Central Bank of Costa Rica
3-4 May 2017



Electronic Transactions Development
Agency, Thailand, 30-31 October 2017



Ministry of Commerce and Industry,
India
13-14 July 2017

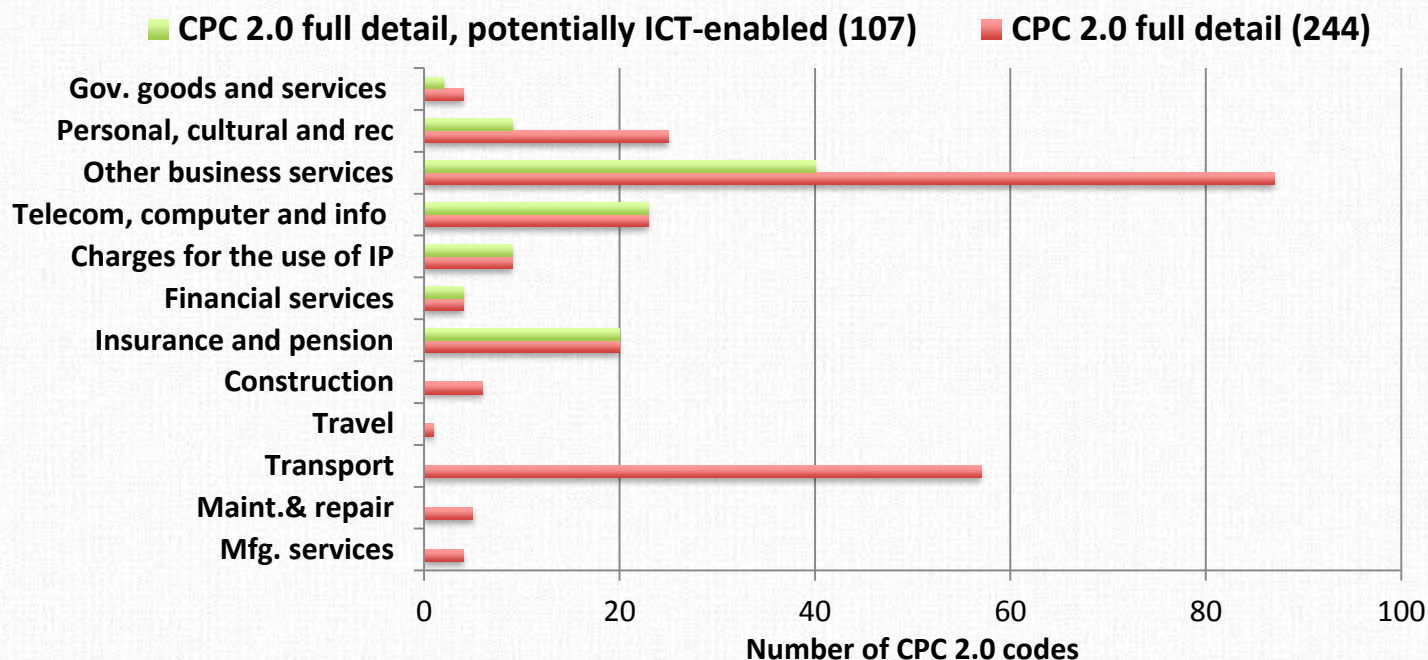
Definition

- ❑ Potential ICT-enabled services = *services with outputs that can be delivered remotely over ICT networks*
 - ✓ Define **potential** ICT-enabled services using detail in CPC Ver.2.1 and the official correspondence to EBOPS 2010
 - ✓ Exclude *transport services* (involve manipulation or transport of people, physical objects, material, or electricity)
 - ✓ Exclude *on-site or in-person services* (require on-site or personal delivery)
 - ✓ EBOPS 2010 not amenable for identifying ICT-enabled services
- ❑ **Actual** ICT-enabled services are every similar to Mode 1 (GATS) cross-border supply for the selected services >>> survey question asks for *share of services delivered over ICT networks*
- ❑ Given the lack of data by mode of supply (GATS) a survey-based approach was preferred for producing the statistics
- ❑ For example: a firm delivers bookkeeping and accounting services by email/dedicated Internet platforms to a customer in a foreign country

The UNCTAD approach

- ❑ 1st step: look at existing measurement frameworks and identify and **define the types** of services that can be ICT-enabled >>> a taxonomy of such services using the most detailed international classification of services CPC Ver.2.1 >>> list of "*potential ICT-enabled services*" building on existing concepts, methods and classifications
- ❑ 2nd step: it matters **how** these services are actually **delivered** >>> need to build in another type of survey question by mode of delivery >>> similar to the discussion on WTO GATS modes of supply >>> "*actual ICT-enabled services*"
- ❑ Focus on **exports** of services, as smaller population of firms to survey
- ❑ The survey approach is different from the simplified allocation by mode of delivery in MSITS (2010)

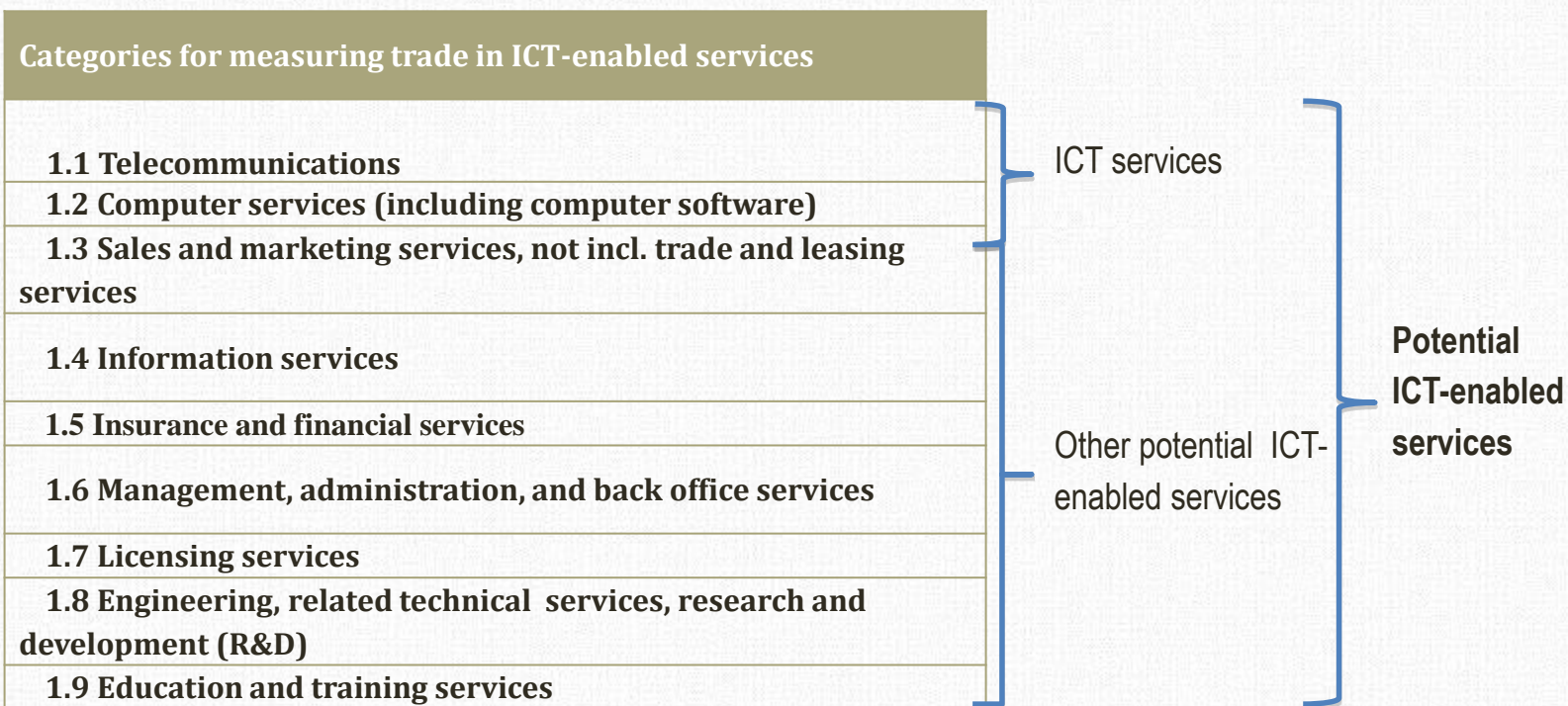
TGServ report main findings - under which headings would potential ICT-enabled services be included under existing trade in services data (EBOPS 2010 main components)?



Source: UNCTAD ICT4D Technical Note 3, derived from UN Statistical Division, "Correspondence between the EBOPS 2010 and the Central Product Classification (CPC, version 2) - Detailed version"

New Complementary Grouping for trade in ICT-enabled services

- ❑ "ICT-enabled services" more comprehensive coverage than "call centers" or "business process outsourcing (BPO)"



Strengths of the current approach

- ❑ Follows as closely as possible the recommendations of the MSITS (2010), existing methodological guidelines and uses international classifications
- ❑ Rather than use assumptions to allocate a predominant mode of supply, the survey asks the question on how the service was actually delivered
- ❑ Builds on the IMF model survey forms, as well as New Zealand's 2011 Census of International Trade in Services
- ❑ Model survey questionnaire provided + possibility to add national questions
- ❑ First stage focus on exporting enterprises- a smaller, more concentrated population, easier to survey
- ❑ Allows for identification of foreign controlled enterprises (can give a picture of integration in global value chains), allows for identification of partner countries
- ❑ Engagement of different interested stakeholders: typically Ministries of Foreign Trade, Central Banks, private sector IT associations, export promotion agencies
- ❑ Strong ownership of the project: implemented by national agencies, with technical assistance from UNCTAD

Main challenges encountered

- ❑ Challenges to identifying the appropriate sampling frame:
 - ✓ absence of a business register (or not up to date)
 - ✓ absence of a balance of payments register / ITRS register
 - ✓ limited experience of the trade in services data compiler with enterprise surveys
- ❑ Challenges related to data confidentiality and the sharing information between institutions on for e.g. sampling frames, administrative data for validation, non-existing unique enterprise identifier
- ❑ Missing legal framework to enforce such data collection
- ❑ Difficulties to collect data from more specialized sectors, such as insurance services
- ❑ Any other difficulties?



After testing the questionnaire

- Satisfactory response rate?
- Do we need to insert more/fewer methodological notes?
- Are some questions typically left unanswered?
- Which questions needed frequently further clarification?
- but also...
- Were you able to obtain meaningful data?
- How do the new data compare with previous estimates?
- Are you considering publishing the results?
- Are you considering conducting the survey again in the future?
- Would you like to add further questions to the questionnaire?
- Is there any particular related areas in which you would need further technical assistance?

Expected outcomes / Next steps

- ❑ **28-29 November 2017** - UNCTAD to organize **expert meeting** on lessons learned from the surveys already conducted or under way - with the participation of the implementing agencies and experts from international organizations
- ❑ Update the questionnaire and prepare detailed report for the donors - opportunity to request additional funding for implementation in a second round,
- ❑ Publish a summary report of findings - first semester of 2018





Thank you for your attention!



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