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Implementing a Survey on Exports of ICT-enabled Services

Analytical report on the main findings and lessons learnt from survey implementation during 2017¹

¹ This technical note is based on a detailed report prepared by Dr. Thierry Coulet, from Sciences Po Lyon, with contributions and guidance from Torbjörn Fredriksson (team leader) and Diana Korke of the ICT Policy Section at UNCTAD. The report was commissioned by UNCTAD, following the implementation in 2017 of a model questionnaire in three developing countries, namely Costa Rica, India and Thailand. The model questionnaire had been commissioned by UNCTAD and prepared by Dr. Thierry Coulet in December 2016, with inputs and feedback from the Central Bank of Costa Rica, the Directorate General of Commercial Intelligence and Statistics, of the Ministry of Commerce and Industry of India, the Thai Electronic Transactions Development Agency, WTO, IMF, OECD. Lessons learned from the implementation of the survey in Costa Rica, India and Thailand were reflected in the revised version of the model questionnaire attached in the annex to this report. Financial contribution from the Government of Sweden is gratefully acknowledged for this project.

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1. BACKGROUND AND OBJECTIVES OF THE PROJECT

This project lies within the perspective of statistics on the digital economy. It stems from the observation that no comparable statistics on trade in ICT-related services are currently available while there is a growing demand for better data from countries exporting such services. There is also a need to better understand the impact of enhanced ICT access and use on services trade. The major motivations for this project thus related to the discrepancy between the growing importance of trade in ICT-enabled services and the lack of associated statistics.

Information and communications technologies (ICTs) are a key enabling factor for the development of services trade. This is directly related to the falling prices for voice and data communications which enable companies to segment and relocate work to remote locations. This trend is accompanied by a transformation of the nature of the traded services, with an evolution, in particular, from basic call centre activities to much more complex business process operations.

Trade negotiations were also at the core of a renewed interest in services and e-commerce. In this context, it is crucial that policymakers can quantify such trade more accurately than the current statistical system allows. New statistics would allow to understand how better ICT access affects growth in trade in services.

In 2015 UNCTAD launched a project to measure international trade in ICT-enabled services. Between 2015 and 2016 a Task Group on ICT Services and ICT-enabled Services has been created to coordinate efforts and reduce the risk of duplicating work. The Task Group was created under the umbrella of the Partnership on Measuring ICT for Development, an inter-agency initiative to improve ICT statistics, especially in developing countries by coordinating efforts between the several specialized agencies. The Task Group is led by UNCTAD and member organizations are UNSD, WTO, OECD, UNESCWA, ITU and the World Bank. Based on the terms of reference developed in consultation with the Task Group, UNCTAD commissioned a first study to assess the feasibility of measuring trade in ICT-enabled services and to take stock of existing approaches. A first report² published in October 2015 presented a summary of issues and proposed a new approach and indicators for measuring exports of ICT-enabled services from developing countries. The report has been presented for review and approved by the United Nations Statistical Commission at its 47th session in 2016.³ Throughout the project, coordination with the inter-agency Task Force on International Trade Statistics has helped ensure consistency with the existing standards for measuring trade in services.

In a second phase of the project (2016 to 2017) a model questionnaire for an enterprise survey was developed and four countries, Costa Rica, Egypt, India and Thailand expressed an interest in implementing a pilot survey based on national adaptations of this model questionnaire. While Egypt preferred to postpone

² UNCTAD (2015). International trade in ICT services and ICT-enabled services. UNCTAD Technical Notes on ICT for Development No. 3, Geneva, http://unctad.org/en/Pages/DTL/STI_and_ICTs/ICT4D-Technical-Notes.aspx.

³ *Report of the Partnership on Measuring Information and Communications Technology for Development: information and communication technology statistics to the 47th Session of the UN Statistical Commission (E/CN.3/2016/13)*, <http://unstats.un.org/unsd/statcom/47th-session/documents/2016-13-Partnership-on-measuring-ICT-for-development-E.pdf> and *Report of the Interagency Task Force on international trade statistics to the 47th Session of the UN Statistical Commission (E/CN.3/2016/24)*, <http://unstats.un.org/unsd/statcom/47th-session/documents/2016-24-Interagency-TF-on-international-trade-statistics-E.pdf>.

the implementation of the project, pilot surveys were conducted in Costa Rica, India and, partly, in Thailand. The project was funded by the Government of Sweden and it came to an end in December 2017.

In all three implementing countries, prior to the launch of the survey, a preparatory workshop was organised with the following general objectives:

- to present the project as well as the model questionnaire;
- to discuss methodological characteristics of the survey to be implemented, including concepts, definitions and classifications;
- to agree on a timeline for the survey implementation;
- to discuss a tabulation plan as well as other analytical aspects to be included in the final report.

In the wake of these three pilot surveys, an expert meeting was organized by UNCTAD in December 2017 to review preliminary results and draw lessons from survey implementation.⁴ Finally, a dedicated session during the UNCTAD E-commerce Week 2018 presented a review of findings and recommendations.⁵

This synthesis report analyses the results achieved through the implementation of the three pilot surveys and incorporates clarifications agreed during the discussions at the December 2017 expert meeting and the E-commerce Week 2018 dedicated session. It also proposes certain adaptations to the survey questionnaire considering the lessons learned. The revised model survey questionnaire is attached in Annex 1, which also includes a cover letter to accompany the survey questionnaire. Annex 2 provides the detailed description of services covered under the main reporting categories in the survey questionnaire. Annex 3 shows a minimum tabulation plan for presenting results after survey implementation.

2. MAIN FINDINGS AND LESSONS LEARNT FROM SURVEY IMPLEMENTATION IN 2017

A. General findings and recommendations

The pilot surveys allowed for the finetuning of important methodological and procedural issues outlined in this report. These are relevant for other countries that consider implementing a similar survey on trade in ICT-enabled services. The pilot surveys also produced significant results, even though in one case the survey was limited to one sector.

In *Costa Rica*, the survey found that most companies exporting services over ICT networks belonged to the services sector (81.8 %) and that most of them were large companies (63.2 %). The survey also showed that affiliates from foreign companies play a significant role in these exports. Such facts are fundamental to better understand the dynamics of trade in ICT-enabled services and to develop evidence-based policies to foster its development. The survey also found that, in 2016, *potential* ICT-enabled services represented 39% of total services exports.⁶ Some 97% of the exports of services that could be ICT-enabled were found to

⁴ For more information see UNCTAD (2017). UNCTAD Expert Meeting on Results from Pilot Surveys on Exports of ICT-enabled Services, 28-29 November 2017, <http://unctad.org/en/pages/MeetingDetails.aspx?meetingid=1651>.

⁵ For more information see UNCTAD (2018). UNCTAD E-commerce Week 2018. Session on Measuring Exports of Digitally-delivered Services, 16 April 2018, <http://unctad.org/en/conferences/e-week2018/Pages/MeetingDetails.aspx?meetingid=1720>.

⁶ Costa Rica: Exports of Services Over Information and Communication Technology Networks (ICT), Rigoberto Torres Mora, Chief, International Accounts, Macroeconomic Statistics Department, Central Bank of Costa Rica, 16 April 2018, http://unctad.org/meetings/en/Presentation/dtl_eWeek2018p03_RigobertoTorresMora_en.pdf.

have been delivered over ICT networks, with a predominance of the management, administration and back-office services sector. The *actual* ICT-enabled services thus represented 38% of total services exports.

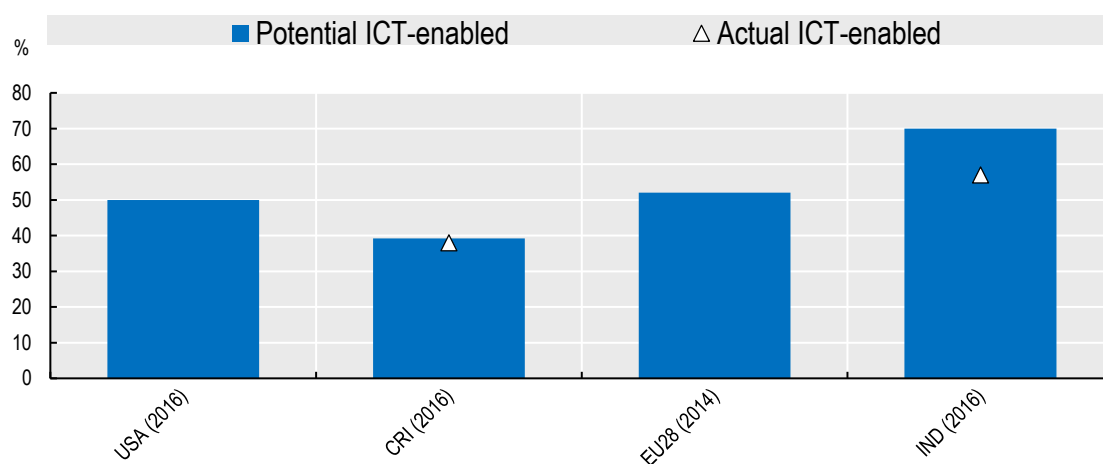
In *India*, balance of payments statistics indicate that 70% of total services exports could be ICT-enabled in the financial year 2016-17.⁷ The survey found that in 2016-17, about 81% of potential ICT-enabled services exports were actually delivered over ICT networks. ICT-enabled services thus accounted for 57% of total services exports from India. Computer services were the biggest contributor accounting for almost two-thirds of the total amount. For services exporting SMEs, delivery over ICT networks constituted the predominant mode of supply (more than 99%).

In Thailand the pilot survey was limited to the telecommunications sector, where most exports are (and were indeed found to be) ICT-enabled. Still the pilot survey offered the opportunity to collect feedback on the feasibility for services exporting enterprises to respond to the questionnaire.

In the United States, a study found that *potential* ICT-enabled services represented a little over 50% of total services trade in 2016. The Bureau of Economic Analysis considers modifying its questionnaire to be able to capture actual ICT-enabled services.⁸

In the case of the European Union, another study found that *potential* ICT-enabled services represented 52% of total services exports in 2014, when including intra-EU trade, and 56% when excluding intra-EU trade (US Department of Commerce, 2016).⁹

**Chart 1. ICT-enabled services as a percentage of services exports (actual and potential)
2016 or latest available year, countries with available data**



Source: UNCTAD, based on India: Directorate General of Commercial Intelligence and Statistics, Costa Rica: Central Bank, US: Bureau of Economic Analysis, EU28: US Department of Commerce. Note: For India the reference period of the survey was April 2016 to March 2017.

⁷ Compilation of Statistics of ICT-enabled services: Experiences from a survey, Amitava Saha, Director in-charge, Services Trade Statistics Division, Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce and Industry, India, 16 April 2018, http://unctad.org/meetings/en/Presentation/dtl_eWeek2018p04_AmitavaSaha_en.pdf.

⁸ Measuring Digital Trade in the U.S, Jessica R. Nicholson, Senior Economist, Bureau of Economic Analysis, United States, 16 April 2018, http://unctad.org/meetings/en/Presentation/dtl_eWeek2018p05_JessicaNicholson_en.pdf and Grimm (2016).

⁹ ICT-Enabled Services Trade in the European Union, US Department of Commerce, Office of the Chief Economist, August 2016, available online at: http://www.esa.doc.gov/sites/default/files/ICT-Enabled%20Services%20Trade%20in%20the%20EU_0.pdf.

The rest of the section discusses various qualitative, methodological and organizational recommendations stemming from the pilot survey implementation.

The implementation of a survey usually requires the use of a range of statistical tools and techniques, such as settlements and business registers, sampling and grossing-up methods, that usually are the matter of various national institutions. The successful implementation of such a survey therefore benefits from the cooperation of, at least, the central bank and the statistical office and, according to its administrative organization, the line ministry or national agency in charge of the development and regulation of e-commerce and services trade.

Effective inter-institutional cooperation is hence a pre-requisite for success. However, no survey can be successful without an understanding and a sharing of its objectives and modalities by those who will be solicited to answer the survey: the private sector. In this context, it is important to involve representatives of the private sector at an early stage of the conception of the survey. This may take the form of a roundtable gathering all the public entities involved in the development and implementation of the survey and the representatives of the professional organizations, and private sector associations or federations that are the most closely related to ICT-enabled services. Such a roundtable should be used to present and discuss the objectives of the survey, the modalities of its implementation and, more specifically, the details of the sampling strategy, the frequency of the survey, the questionnaire to be filled in by enterprises and the deadline for submission of the answers. The feedback from the private sector representatives on the draft questionnaire should, in particular, be key in ensuring its understanding by future respondents.

In addition, the private sector representatives could, in some countries, contribute to the development of the sample frame. This is especially true when there is no national settlement or business register and when the list of enterprises belonging to these associations can be used as a basis for the constitution of the sample frame. Finally, the professional organizations could be mobilized in an awareness-raising campaign towards the private sector which would help to improve the response rate.

Once the principle of the survey is agreed upon and the cooperation of the private sector is secured, it is necessary to attach high importance to the specification of the technical characteristics of the survey. These include, in particular, the constitution of the sample frame, the sampling strategy, the devising of the questionnaire, the material form of the survey, the treatment of non-responses, the exploitation of the survey results and the dissemination of the statistics produced. These points are shortly developed in the next section.

B. Technical recommendations

i. The constitution of the sample frame

The preferred observation unit for this survey is the resident services exporting enterprise. For this purpose, the most natural sample frame is the business register, or ideally, the balance of payments (BOP) register of services exporting firms if one is available. Usually the BOP register is managed by the national central bank and it includes details about the exporting or importing resident enterprises. A BOP register should include not only the basic identification variables, such as name, postal address of the company, name of the president or CEO etc., but also key economic information regarding, in particular, the nature and type of exports and imports performed over the last few years.

In many developing countries, such a balance of payments register is not available at the central bank, which may still manage a settlement register that includes only identification variables. This could also be used as a basis for constituting the sample frame for the survey, even though the available information will most probably be more limited and will not provide the details required for the segmentation of the sample, as discussed below.

When neither a BOP nor a settlement register is available, another option is to use a general business register which is usually managed by the national statistical office. Finally, when no official register of companies is available, the only solution is to make use of private registers, such as the lists of members of one or several professional business organizations. In this case, in particular, the cooperation of these professional organizations is key to the success of the project.

ii. Segmentation and sampling strategy

Once the sample frame is constituted, it is necessary to devise a segmentation and sampling strategy which should both ensure the production of meaningful statistical results and be consistent with the treatment capacities of the institutions implementing the survey.

The segmentation of the sample aims at ensuring the statistical representativeness of the survey results while reducing the number of units to be surveyed. In a first stage, the segmentation should be simple and rely on one or two characteristics. These criteria will depend on the nature of the register that can be used for constituting the sample frame and on the economic and geographic characteristics of the country. The most usual criteria for segmentation are the size of the enterprise, defined in terms of turnover or value added or exports, its main economic activity and the location of its main establishment.

As for the sampling ratio, it will much depend on the population of units included in each of the strata resulting from the segmentation strategy previously defined. If unit size is one of the chosen segmentation characteristics, a simple sampling strategy could be to divide the whole sample frame into three tiers, a census tier for the largest units, for which the sample ratio would hence be 100%, a sampling tier, with a sample ratio to be defined according to the number of units in this segment and the management capacities of the national institution in charge of implementing the survey, and an uncovered tier including small and very small businesses which could be left aside the regular implementation of the survey. This third segment should still be included in the first implementation of the survey and in possible future benchmark surveys, even if with a very low sampling ratio.

iii. Devising the questionnaire

Devising the questionnaire is a crucial step in the development of a survey. It should follow some fundamental principles and, in particular, be simple and easy to understand by the respondent. In addition, the questionnaire should be administered in a form that is as short as possible to secure a satisfactory response rate.

A model questionnaire was devised by UNCTAD based on these principles. It was used, in some cases with minor adjustments, in the three pilot surveys and was revised in accordance with observations made during the implementation. It is attached in Annex 1 of this report and it includes a one-page cover letter. Annex 2 can be used as an aid to the questionnaire as it provides a detailed list of services to be included in each response service category.

The questionnaire comprises three parts. Part A aims at collecting basic information about the enterprise. Part B identifies exports of services that were delivered by the enterprise remotely over ICT networks (so-called ICT-enabled services) during the reporting period. Part C allows detailing these ICT-enabled exports by type of service, mode of delivery and partner economy.

The adjustments introduced in the wake of the pilot surveys are:

- Exclusion of insurance and financial services from the survey. Indeed, the measurement of insurance and financial services implies to collect a wide range of accounting details that are specific to these activities. This means that they cannot be treated in a general survey and through a single questionnaire;
- Removal of references to the concepts of modes 1, 2, 3 and 4, while keeping the description of the different modes of supply defined as cross-border supply, consumption abroad, supply through a commercial presence and through the presence of natural persons. The terminology originally used was deemed confusing by many pilot survey respondents;
- Question A.7: the definition of employees was replaced by the definition of persons employed, to which the question refers;
- Questions A.9 and A.10 were inverted with the question on the principal activity coming first and then the question on the total turnover of the enterprise.

iv. The material form of the survey

Several methods for implementing the survey have been used in the frame of the pilot surveys, including face to face interviews, telephone interviews, sending of paper questionnaires by postal mail or the provision of an electronic questionnaire on a dedicated webpage.

All these methods are appropriate. The choice will depend on the national context and, in particular, on the number of enterprises to be surveyed and the existing relations between the institutional institution in charge of the survey and these enterprises. Methods can also be combined either by offering the possibility to the respondents to choose one method or the other or by using different forms of the questionnaire for different segments of the sample (paper, excel, online questionnaire).

In a pilot phase, the face to face interview has the advantage of enabling the implementing agency to collect and analyse possible questions raised by the respondents. This could allow for further finetuning of the questionnaire for a later implementation of the survey. On the other hand, the development and provision of an online version of the questionnaire could considerably lighten the burden on both the respondent and the compiler and, as a consequence, improve the response rate.

In any case, it appears necessary to provide some support to the respondents in the form of either a telephone platform, an email contact or a web forum. This helps to ensure a proper understanding of the questionnaire and high quality of the results. In addition, the provision of technical support to respondents is another way to improve the response rate.

v. Treatment of non-responses and extrapolation of survey results

The first objective regarding non-responses is to lower their incidence. As previously explained, three key tools can be used from this perspective: a) the cooperation with professional organisations; b) the development and provision of an electronic version of the questionnaire; and c) the provision of technical support to respondents. In addition, a system of reminders should also be devised.

Different statistical methods can then be applied to treat non-responses and to proceed with the grossing up of the survey results. As for the treatment of non-responses, two methods can be applied to straighten the sample, i.e. the replacement of the non-respondents and the post-stratification of the responding units. Both methods are relevant and the choice between them should depend on the characteristics of the sample and the distribution of the non-responses themselves. It is however legitimate to proceed with a simple random sampling without replacement, especially in the context of a pilot survey.

The extrapolation method should be defined in accordance with the stratification strategy adopted and with the treatment of non-responses applied. In the case of implementation of a simple random sampling without replacement, the extrapolation of the survey results should simply rely on the grossing up of the values obtained for each stratum of the sample, the grossing up ratio itself being defined, in this case, as the ratio between the number of units in each stratum of the sample frame and the number of units in the corresponding stratum of the sample.

Some of the characteristics collected through the survey could be used as proxies for the validation of its results, both in terms of internal and external consistency. In this respect, the traditional aggregation rules should be applied for checking the internal consistency of the results while some of the characteristics collected, such as the number of persons employed, the turnover or the total value of exports should be used to check external consistency with national accounts, business statistics and BOP data.

In order to make the most of the survey results, a tabulation plan should be conceived at an early stage of the project. This should help to shed light on the importance of international trade in ICT-enabled services and on its major characteristics. A minimal tabulation plan is proposed in Annex 3 of this report. This could be complemented by other tables according to specific stakes and challenges in each country implementing the survey. For example, India produced tables not only on the importance of ICT-enabled services transactions but also on the respective importance of all four modes of services supply.

The key information should ideally be made available not only in the form of tables and figures but also in the form of graphs and, possibly, infographics. It should be accompanied by an analysis of evolutions, challenges and perspectives, as detailed below.

Finally, the analysis should try to establish relations between the various characteristics measured such as, for example, the size of the company or the nature of its control (i.e. national vs foreign) and the share of exports delivered over ICT networks.

vi. Dissemination of the statistics produced

Statistics are produced to be used, in particular, by policy-makers and operators themselves as well as by others. This means that the statistics resulting from this survey should be widely disseminated. Both the platform on which the information is made available and the content of the information are relevant.

As for the content, it is important to disseminate information about the results of the survey, i.e. rough figures, as well as about the characteristics of the survey, its context, its objectives and the methodological and technical choices that have been made in its development and implementation. This information constitutes what is usually labelled as the metadata by statisticians and is key to ensure a correct understanding of the results by the user of the information.

1.8.6. Design originals include:

- Original design concepts, produced on own account:
 - industrial product designs
 - aesthetic designs
 - graphic designs

1.8.7. Technical testing and analysis services include:

- Composition and purity testing and analysis services;
- Testing and analysis services of physical properties;
- Testing and analysis services of integrated mechanical and electrical systems;
- Technical inspection services of road transport vehicles;
- Other technical testing and analysis services.

1.8.8. Architectural services, urban and land planning and landscape architectural services include:

- Architectural advisory services;
- Architectural services for residential building projects;
- Architectural services for non-residential building projects;
- Historical restoration architectural services;
- Urban planning services;
- Rural land planning services;
- Project site master planning services services;
- Landscape architectural advisory services;
- Landscape architectural services.

1.8.9. Engineering services include:

- Engineering advisory services;
- Engineering services for building projects;
- Engineering services for industrial and manufacturing projects;
- Engineering services for transportation projects;
- Engineering services for power projects;
- Engineering services for telecommunications and broadcasting projects;
- Engineering services for waste management projects (hazardous and non-hazardous);
- Engineering services for water, sewerage and drainage projects;
- Engineering services for other projects;
- Project management services for construction projects.

1.8.10. Surface surveying and map-making services include:

- Surface surveying services;
- Map-making services.

1.8.11. Weather forecasting and meteorological services include:

- Providing meteorological analysis of the atmosphere and predicting weather processes and weather conditions.

1.8.12. Scientific and technical consulting services n.e.c. include:

- Environmental consulting services;

- Other scientific and technical consulting services n.e.c.

1.8.13. Publishing, printing and reproduction services include:

- Publishing, on a fee or contract basis and media, on a fee or contract basis;
- Printing services;
- Services related to printing;
- Reproduction services of recorded media, on a fee or contract basis.

1.8.14. Photographic processing services include:

- Sale or leasing of advertising time or space, on commission;
- Services of media buying agencies, which buy media space or time on behalf of advertisers or advertising agencies.

1.8.15. Translation and interpretation services include:

- Services generally related to the translation of texts from one language to another, resulting in a written document;
- Interpretation services are generally concerned with stating orally in one language what has been stated orally in another language.

1.8.16. Restoration and retouching services of photography include:

- Services consisting of old photograph restoration;
- Retouching and other special photographic effects.

1.8.17. Other photography services include:

- Microfilming services.

1.8.18. Interior design services include:

- Planning and designing of interior spaces to meet the physical, aesthetic and functional needs of people;
- Drawing up of designs for interior decorating;
- Interior decorating, including dressing of windows and stalls.

1.8.19. Other specialty design services include:

- Creating designs and preparing patterns for a variety of products by harmonizing aesthetic considerations with technical and other requirements, such as:
 - furniture designs;
 - aesthetic design for various other customer products.
- Package design services;
- Production of three-dimensional models;
- Graphic design services, including graphic design for advertising purposes.

1.8.20. Drafting services, n.e.c. include:

- Drafting services (detailed layouts, drawings, plans and illustrations of buildings, structures,

systems or components from engineering and architectural specifications, done by architectural draftsmen or engineering technicians).

1.9. Education and training services

Education and training services include :

- Pre-primary education services (see 1.9.1.);
- Primary education services (see 1.9.2.);
- Secondary education services (see 1.9.3.);
- Post-secondary non-tertiary education services (see 1.9.4.);
- Tertiary education services (see 1.9.5.);
- Educational support services (see 1.9.6.);
- Cultural education services (see 1.9.7.);
- Sports and recreation education services (see 1.9.8.);
- Other education and training services, n.e.c. (see 1.9.9.).

1.9.1. Pre-primary education services include:

- Education services usually provided by nursery schools, kindergartens, pre-schools, centres for early childhood education, centres for infant education or special sections attached to primary schools. Pre-primary education (ISCED Level 0) is defined as the initial stage of organized instruction designed primarily to introduce very young children to a school-type environment, that is, to provide a bridge between the home and a school-based atmosphere;

- Services related to the provision of special education programmes at this educational level.

1.9.2. Primary education services include:

- Educational services provided at ISCED Level 1, which includes programmes designed to provide students with an initial basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, social science, art and music;
- Services related to the provision of special education programmes at this educational level;
- services related to the provision of literacy programmes for adults at this educational level.

1.9.3. Secondary education services include:

- Lower secondary education services, general;
- Lower secondary education services, technical and vocational;
- Upper secondary education services, general;
- Upper secondary education services, technical and vocational.

1.9.4. Post-secondary non-tertiary education services include:

- Post-secondary non-tertiary education services, general;
- Post-secondary non-tertiary education services, technical and vocational.

1.9.5. Tertiary education services include:

- First stage tertiary education services;
- Second stage tertiary education services.

1.9.6. Educational support services

include:

- Non-instructional services that support educational processes or systems, such as:
 - educational consulting;
 - educational guidance counselling services;
 - educational testing evaluation services;
 - educational testing services;
 - organization of student exchange programmes.

1.9.7. Cultural education services include:

- Piano and other music instruction;
- Art instruction;
- Dance instruction and dance studios;
- Art instruction except academic;
- Photography instruction.

1.9.8. Sports and recreation education services include:

- Sports instruction (baseball, basketball, cricket, football, hockey, tennis, figure skating, etc.);
- Camps, sports instruction;
- Gymnastics instruction;
- Riding instruction;
- Swimming instruction;
- Martial arts instruction;
- Card game instruction (such as bridge);
- Yoga instruction.

1.9.9. Other education and training services, n.e.c. include:

- Training for car, bus, lorry and motorcycle driving licences;
- Training for flying certificates and ship licences;
- Management training services;
- Services provided by music camps, science camps, computer camps and other instructional camps, except for sports;
- Education services not definable by level.

Minimal Tabulation Plan

Table 1 – Key characteristics of enterprises exporting ICT-enabled services

	Number of persons employed	Turnover	Total services turnover	Total services exports	Intra-Group services exports
National control					
Foreign control					

Table 2 – Proportion of companies having exported services through modes 1, 2, 3 and 4

	Mode 1	Mode 2	Mode 3	Mode 4
National control				
Foreign control				

Table 3 – Total exports of Computer services and exports of computer services delivered remotely over ICT networks¹²

	Total exports of <i>computer services</i>	exports of <i>computer services</i> delivered remotely over ICT networks
National control		
Foreign control		

Table 4 – Major markets for exports of Computer services

Five major markets for total exports of <i>computer services</i>	Individual market share	Five major markets for exports of <i>computer services</i> delivered remotely over ICT networks	Individual market share

¹² In this table and the following, “Computer services” is taken as an example. The same tables should be produced for each category of ICT-enabled services.



UNCTAD Technical Notes on ICT for Development

1. Implications of Applying the New Definition of «ICT Goods», May 2011
2. Updating the Partnership Definition of ICT Goods From HS 2007 to HS 2012, January 2014
3. International Trade in ICT Services and ICT-enabled Services: Proposed Indicators from the Partnership on Measuring ICT for Development, October 2015
4. Global Assessment of Sex-disaggregated ICT Employment Statistics: Data Availability and Challenges on Measurement and Compilation, December 2015
5. Trade in ICT Goods and the 2015 Expansion of the WTO Information Technology Agreement, December 2015
6. In Search of Cross-border E-commerce Trade Data, April 2016
7. UNCTAD B2C E-commerce Index 2016, April 2016
8. The «New» Digital Economy and Development, October 2017
9. UNCTAD B2C E-commerce Index 2017, October 2017
10. Updating the Partnership Definition of ICT Goods From HS 2012 to HS 2017, February 2018

For more information about UNCTAD's work on ICT for Development please contact:

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