UPDATING THE PARTNERSHIP DEFINITION OF ICT GOODS FROM HS 2007 TO HS 2012

UNCTAD Technical Notes on ICT for Development





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Updating the Partnership Definition of ICT Goods From HS 2007 to HS 2012

I. Introduction

To maximize benefits from participation in the information economy, governments need to monitor and benchmark progress based on measurable indicators with a view to designing and reviewing national policies and strategies. The Partnership on Measuring ICT for Development¹ (the Partnership) is a multi-stakeholder initiative which promotes the measurement of the information society at the international level, and is aimed at improving the availability and quality of internationally comparable ICT statistics. The United Nations Conference on Trade and Development (UNCTAD) is a founding member of the Partnership, focusing on measuring the information economy. UNCTAD is among other things responsible for the collection of the two Partnership Core Indicators on trade in ICT goods: the proportion of ICT goods in total exports and total imports by country.²

The ICT goods classification adopted by the Partnership was developed by the Organization for Economic Co-operation and Development (OECD) through its Working Party on Indicators for the Information Society (WPIIS). When the definition was first released in 2003 it was based on a list of 6-digit items according to the World Customs Organization (WCO) Harmonized System (HS) classification, the HS 1996 and HS 2002 editions. Since then the definition of ICT goods has been revised (2008) and the transition from HS 2002 to HS 2007 resulted in a break in time series.³ UNCTAD prepared a technical note on the analytical implications of applying the new definition of ICT goods.⁴

This technical note focuses on the next transition: from HS 2007 to HS 2012. With the adoption of HS 2012 as of 1 January 2012, the definition of ICT goods has again to be updated to reflect the latest HS edition. UNCTAD requested the United Nations Statistics Division (UNSD) to establish the exact correspondence between HS 2007 and HS 2012 as regards the current definition of ICT goods. The correspondence table covers all five categories of ICT goods: a) electronic components, b) computers and peripheral equipment, c) communication equipment, d) consumer electronic equipment, e) miscellaneous. Annex I shows the list of ICT goods in HS 2012.

¹ Members of the Partnership are Eurostat, ITU, OECD, UNCTAD, UN-DESA, UNECA, UNECLAC, UNEPSBC, UNESCAP, UNESCO UIS, UNESCWA and the World Bank.

² See the *Manual on the production of statistics on the information economy, UNCTAD 2009, revised edition.* UNCTAD publishes annually data on its core ICT indicators in UNCTADstat, available online at: <u>http://unctadstat.unctad.org</u>.

³ Measuring trends in ICT trade: From HS2002 to HS2007 / ICT product definition, OECD 2011, available online at: <u>http://unstats.un.org/unsd/class/intercop/expertgroup/2011/AC234-23.PDF</u>.

⁴ Implications of applying the new definition of "ICT goods", UNCTAD 2012, available at: <u>http://new.unctad.org/Documents/ICT%20sector/ICTA_TN_1_unedited.PDF</u>.

II. Methodology

The step-by-step procedure applied by UNSD is described below.

The main goal was to update the ICT goods definition of the Partnership from HS 2007 to HS 2012 and to minimize the impact of converted data. The HS 2007 definition of ICT goods from the Partnership Core Indicators 2010⁵ was used together with the UNSD correlation table between HS 2007 and HS 2012.⁶ Correlation tables specify how subheadings in a given HS edition will be converted into subheadings of a different HS edition.

The next step was to identify the relationship of each ICT good subheading (HS 2007) with the corresponding HS 2012 subheading(s), select what subheadings in HS 2012 they should be converted into, and take action accordingly. There are five different possible courses of action corresponding to four types of correlations:

- a. Correlation 1:1. The HS 2007 subheading has an exact one-to-one match in HS 2012. In other words, this subheading did not change between the two HS editions. *Action*: Do nothing [CASE 1].
- b. Correlation 1:n. Multiple HS 2007 subheadings were merged into a single HS 2012 subheading. *Action*: Check if all HS 2007 subheadings being merged are in the same sub component. If yes, keep HS 2012 subheading in that sub component [CASE 2], otherwise designate the right sub component [CASE 3].
- c. Correlation n:1. A single HS 2007 subheading was split into multiple HS 2012 subheadings. *Action*: Keep all HS 2012 subheadings into the same sub component as the original HS 2007 subheading [CASE 4].
- d. Correlation n:n. Multiple HS 2007 subheadings were converted into multiple HS 2012 subheadings. *Action:* cross check with UNSD conversion table between HS 2012 and HS 2007 and compare the descriptions. Take a decision on a case-by-case basis [CASE 5].

III. Analysis and results

From the total of 95 HS 2007 subheadings of ICT goods, the following cases were identified:

Type of case (correlation)	No of subheadings
CASE 1 (1:1)	90
CASE 2 (1:n)	4
CASE 5 (n:n)	1

The details of each case are elaborated below.

CASE 1:

Ninety subheadings retain their definition and scope between HS 2007 and HS 2012. *Action*: these subheadings are kept unchanged.

CASE 2:

Four subheadings were merged into two subheadings:

⁵ Available online at: <u>http://www.itu.int/dms_pub/itu-d/opb/ind/D-IND-ICT_CORE-2010-PDF-E.pdf</u>. ⁶ Available online at :

 $[\]underline{http://unstats.un.org/unsd/trade/conversions/HS\%20Correlation\%20and\%20Conversion\%20tables.htm}$

A. Subheadings 8540.40 and 8540.50 in HS 2007 were merged into subheading 8540.40 in HS 2012

HS 2012		HS 2007	
	Data/graphic display tubes,		Data/graphic display tubes,
	monochrome; data/graphic		colour, with a phosphor dot
	display tubes, colour, with a	8540.40	screen pitch smaller than 0.4mm
	phosphor dot screen pitch		Data/graphic display tubes, black
8540.40	smaller than 0.4mm	8540.50	& white/other monochrome

Action: HS 2012 subheading 854040 is kept on the list of ICT goods under electronic components.

B. Subheadings 854072 and 854079 in HS 2007 were merged into subheading 8540.79 in HS 2012

HS 2012		HS 2007	
		8540.72	Klystrons
8540.79	Other; Other valves and tubes	8540.79	Microwave tubes n.e.s. in 85.40

Action: HS 2012 subheading 854079 is kept on the list of ICT goods under electronic components.

CASE 5:

The <u>old</u> HS 2007 subheading 9504.10 is discontinued, and 9504.90 in HS 2007 is split into 9504.90 and 9504.50 in HS 2012, then 9504.10 in HS 2007 is included in 9504.50 in HS 2012.

The <u>new</u> HS 2012 subheading 9504.50 covers:

(a) Video game consoles from which the image is reproduced on a television receiver, a monitor or other external screen or surface; or

(b) Video game machines having a self-contained video screen, whether or not portable.

This subheading does not cover video game consoles or machines operated by coins, banknotes, bank cards, tokens or by any other means of payment (subheading 9504.30).

In HS 2007, the part (b) of HS 2012 subheading 9504.50 (video game machines with its-own screen, such as Nintendo DS) was classified in HS 2007 under subheading 9504.90.

HS 2012		HS 2007	
			Video games of a kind used with
		9504.10	a television receiver
	Video game consoles and		
	machines, other than those of		
9504.50	subheading 9504.30		
9504.90	Other	9504.90	Other

Action: the new HS 2012 subheading 9504.50 is added into the list of ICT goods under consumer electronic equipment (replacing the old HS 2007 subheading 9504.10).

A complete list of ICT goods based on HS 2012 is provided in Annex I (total of 93 HS 2012 subheadings).

Annex I. List of ICT goods based on HS 2012

A-Compu	ters and peripheral equipment
844331	Machines which perform two/more of the functions of printing,
011001	copying/facsimile transmission, capable of connecting to an automatic data processing machine/to a network
844332 847050	Other printers, copying machines & facsimile machines, whether/not combined, exclud. the ones which perform two/more of the functions of printing, copying/facsimile transmission; capable of connecting to an automatic data processing machine/to a network Cash registers
847130	Portable automatic data processing machines, weighing not more than 10 kg, consisting of a least a central processing unit, a keyboard & a display
847141	Other automatic data processing machines : Comprising in the same housing at least a central processing unit & an input & output unit, whether/not combined
847149	Other automatic data processing machines, presented in the form of systems.
847150	Processing units other than those of sub-heading 8471.41/8471.49, whether/not containing in the same housing one/two of the following types of unit : storage units, input units, output units
847160	Input/output units, whether/not containing storage units in the same housing
847170	Storage units
847180	Other units of automatic data processing machines, exclud. 8471.50, 8471.60, 8471.70.
847190	Magnetic/optical readers, machines for transcribing data onto data media in coded form & machines for processing such data, n.e.s.
847290	Other office machines (eg. hectograph/stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting/wrapping machines, pencil-sharpening machines, perforating/stapling machines), exclud. 8472.10 & 8
847330	Parts & accessories of the machines of heading 84.71
847350	Parts & accessories equally suitable for use with machines of two/more of the headings 84.69 to 84.72
852841	Cathode-ray tube monitors, of a kind solely/principally used in an automatic data processing system of heading 84.71
852851	Other monitors, of a kind solely/principally used in an automatic data processing system of heading 84.71
852861	Projectors, of a kind solely/principally used in an automatic data processing system of heading 84.71
B-Commu	inication equipment
851711	Line telephone sets with cordless handsets
851712	Telephones for cellular networks/for other wireless networks, other than Line telephone sets with cordless handsets
851718	Other telephone sets, incl. telephones for cellular networks/for other wireless networks, other than 8517.11 & 8517.12
851761	Base stations for transmission/reception of voice, images/other data, incl. apparatus for communication in a wired/wireless network (such as a local/wide area network)
851762	Machines for the reception, conversion & transmission/regeneration of voice, images/other data, incl. switching & routing apparatus

851769	Other apparatus for transmission/reception of voice, images/other data, incl. apparatus for communication in a wired/wireless network (such as a local/wide area network), other than $2517.61 & 8517.62$
851770	area network), other than 8517.61 & 8517.62 Parts of telephone sets, including telephones for cellular networks/for other wireless networks; other apparatus for the transmission/reception of voice, images/other data, including apparatus for communication in a wired/wireless network (such as a local or wide area network), other than transmission or reception apparatus of heading 8443, 8525, 8527 or 8528 Transmission apparatus for radio-broadcasting/television
852560	Transmission apparatus for radio-broadcasting/televison incorporating
853110	reception apparatus Burglar/fire alarms & similar apparatus
C-Consum	ner electronic equipment
851810	Microphones & stands therefor
851821 851822	Single loudspeakers, mounted in their enclosures Multiple loudspeakers, mounted in the same enclosure
851829	Loudspeakers n.e.s. in 85.18, whether/not mounted in their enclosures
851830	Headphones & earphones, whether/not combined with a microphone, & sets consisting of a microphone & one/more loudspeakers
851840	Audio-frequency electric amplifiers
851850	Electric sound amplifier sets
851890	Parts of the apparatus & equip. of 85.18
851920	Apparatus operated by coins, banknotes, bank cards, tokens/by other means of payment
851930	Turntables (record-decks)
851950	Telephone answering machines
851981	Other sound recording/reproducing apparatus, using magnetic, optical/semiconductor media, other than 8519.20, 8519.30, 8519.50
851989	Other sound recording/reproducing apparatus, other n.e.s. in Ch. 85.19
852110	Video recording/repr. apparatus, whether/not incorporating a video tuner,
852190	magnetic tape-type Video recording/repr. apparatus other than magnetic tape-type, whether/not
852210	incorporating a video tuner Pick-up cartridges for use solely/principally with the apparatus of 85.19-85.21
852290	Parts (excl. pick-up cartridges) & accessories suit. for use solely/principally with the apparatus of 85.19-85.21
852580	Television cameras, digital cameras & video camera recorders
852712	Pocket-size radio cassette-players
852713	Radio-broadcast receivers capable of operating without an external source of
852719	power, combined with sound recording/repr. apparatus (excl. of 8527.12) Radio-broadcast receivers capable of operating without an external source of
852721	power (excl. of 8527.12 & 8527.13) Radio-broadcast receivers not capable of operating without an external source of power, of a kind used in motor vehiclescombined with sound
852729	recording/reproducing apparatus Radio-broadcast receivers not capable of operating without an external source of power, of a kind used in motor vehicles, incl. apparatus capable of receiving also radio-telephony/radio-telegraphy, other (excl. of 8527.21)
852791	Other reception apparatus for radio-broadcasting, combined with sound

1	recording/reproducing apparatus.
852792	Other reception apparatus for radio-broadcasting, not combined with sound
002772	recording/reproducing apparatus but combined with a clock.
852799	Other reception apparatus for radio-broadcasting, excl. 8527.91 & 8527.92
852849	Other cathode-ray tube monitors, not of a kind solely/principally used in an automatic data processing system of heading 84.71
852859	Other monitors, not of a kind solely/principally used in an automatic data processing system of heading 84.71
852869	Projectors, not of a kind solely/principally used in an automatic data processing
852871	system of heading 84.71 Reception apparatus for television, Not designed to incorporate a video display/screen
852872	Other colour reception apparatus for television, whether/not incorporating radio-broadcast receivers/sound/video recording/reproducing apparatus,
852873	Other reception apparatus for television, whether/not incorporating radio- broadcast receivers/sound/video recording/reproducing apparatus, black & white/other monochrome.
950450	Video game consoles and machines, other than those of subheading 9504.30
D- Electro	onic components
852321	Magnetic media for the recording of sound/of other phenomena, but excl.
050250	products of Ch. 37., cards incorporating a magnetic stripe
852352	Semi-conductor media, "Smart cards" for the recording of sound/of other phenomena, but excl. products of Ch. 37.
853400	Printed circuits
854011	Cathode-ray television picture tubes, incl. video monitor cathode-ray tubes, colour
854012	Cathode-ray television picture tubes, incl. video monitor cathode-ray tubes, black & white/other monochrome
854020	Television camera tubes; image converters & intensifiers; other photo-cathode tubes
854040	Data/graphic display tubes, monochrome; data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4mm
854060	
854071	Magnetrons
854079	Other; Other valves and tubes
854081	Receiver/amplifier valves & tubes
854089	Valves & tubes n.e.s. in 85.40
854091	Parts of cathode-ray tubes
854099	Parts of the tubes of 85.40 other than cathode-ray tubes
854110	Diodes (excl. photosensitive/light emitting diodes)
854121	Transistors (excl. photosensitive transistors), with a dissipation rate of <1W
854129	Transistors (excl. photosensitive transistors), other than those with a dissipation rate of $< 1W$
854130	Thyristors, diacs & triacs (excl. photosensitive devices)
854140	Photosensitive semiconductor devices, incl. photovoltaic cells whether/not assembled in modules/made up into panels; light emitting diodes
854150	Semiconductor devices n.e.s. in 85.41
854160	Mounted piezo-electric crystals
854190	Parts of the devices of 85.41

- 854231 Electronic integrated circuits, processors & controllers, whether/not combined with memories, converters, logic circuits, amplifiers, clock & timing circuits,/other circuits
- 854232 Electronic integrated circuits, memories
- 854233 Electronic integrated circuits, amplifiers
- 854239 Other Electronic integrated circuits, other than Amplifiers/Memories/Processors & controllers
- 854290 Parts of electronic integrated circuits

E- Miscellaneous

E- Miscell	E- Miscellaneous		
852351	Semi-conductor media, solid-state non-volatile storage devices, for the recording of sound/of other phenomena, but excl. products of Ch. 37.		
852359	Other semi-conductor media, for the recording of sound/of other phenomena, but excl. products of Ch. 37., other than "Smart Cards" & Solid-state non-volatile storage devices		
852380	Discs, tapes, solid-state non-volatile storage devices, "smart cards" & other media for the recording of sound/of other phenomena, whether/not recorded, incl. matrices & masters for the production of discs, but excl. products of Ch.37., other n.e.s.		
852910	Aerials & aerial reflectors of all kinds suitable for use solely/principally with the apparatus of 85.25-85.28; parts suitable for use therewith		
852990	Other parts suitable for use solely/principally with the apparatus of headings 85.25 to 85.28., other than aerials & aerial reflectors of all kinds		
901320	Lasers (excl. laser diodes)		



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