

#### WORLD CUSTOMS ORGANIZATION ORGANISATION MONDIALE DES DOUANES

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#### HARMONIZED SYSTEM REVIEW SUB-COMMITTEE

28<sup>th</sup> Session

NR0459E1 (+ Annexes I and II)

O. Eng.

Brussels, 4 August 2003.

## COMPREHENSIVE REVIEW OF THE EXPLANATORY NOTES

## POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES

## TO CHAPTERS 84, 85, 87 AND 90

(Items III.C.1 to III.C.10 on Agenda)

Reference documents :

NR0302E1 – NR03010E1 (RSC/26) NR0355E1 – NR0364E1, NR0384E1 (RSC/27) NR0332E3 – Annexes E/11 – E/19 (RSC/26 - Report) NR0400E3 – Annexes E/1 – E/10, (RSC/27 - Report)

### I. <u>BACKGROUND</u>

1. Subsequent to the preparation of the relevant working documents on Agenda Items III.C.1 to III.C.10, the Secretariat received the following comments from the US and Canadian Administrations on various proposals concerning the comprehensive review of the Explanatory Notes. These comments are reproduced in the Annexes to this document without Secretariat comment.

### II. CONCLUSION

2. The Review Sub-Committee is invited to examine the comments by the US and Canadian Administrations when it examines the relevant Agenda Items.

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Note : Shaded parts will be removed when documents are placed on the WCO documentation database available to the public.

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#### COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE

#### AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 84.01 TO 84.29

"The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0355E1 :

#### Annex II/1 to Doc. NR0355E1. Section XVI. Page 1386. General. Part (III). First Sentence.

The United States believes that the reference to ADP machines is inappropriate as it conflicts with Note 5 to Chapter 84 and the corresponding General Explanatory Note (E) to Chapter 84 on page 1395.

#### Annex II/3 to Doc. NR0355E1. Page 1405. Heading 84.05. Exclusion (b).

No new information has been provided on the new proposed exclusion (b). This exclusion is unclear as it refers to "town gas generators (coking ovens), as used in gasworks". While we recognize the comments by the Secretariat in paragraph 12 of the working document about "coke ovens" being expressly mentioned in EN 84.17 (5), page 1429, we would also note that in the EN to heading 84.05, page 1404, 6<sup>th</sup> paragraph, it specifically describes gas generators that may be adapted for burning many kinds of solid fuel (e.g., coke). The term "town gas" is not widely used by our industry. We can agree to the exclusion of "coking ovens (town gas generators"), but the expression, "as used in gasworks" needs to be deleted.

#### Annex II/5 to Doc. NR0355E1. Pages 1458 – 1459. Heading 8426. Item (6). Tower Cranes.

We support adding a reference to "tower cranes" in the Explanatory Note to heading 84.26. Our technical experts have provided the following alternative text for "tower cranes".

"**Tower cranes**. These cranes comprise essentially a tower, usually composed of individual sections, of considerable height, fixed or running on rail, a main horizontal jib, fitted with trolleys, winches, service platforms and a cab for the operator, a counterweight jib with counterweights, tie bars to support the jibs, and a slewing device, either at the top or at the bottom, to enable the crane to rotate. The tower may contain hydraulic cylinders or jacks and a climbing frame which raise the jib so that additional tower sections can be attached to increase the working height of the crane."

The proposed changes would emphasize the ability of tower cranes to raise their working height. This is an important characteristic of tower cranes. Our proposed text would also eliminate the reference to luffing jibs, as we believe such jibs are relatively rare.

Annex II/4 and 5 to Doc. NR0355E1. Pages 1458 to 1459. Heading 84.26. Sixth Paragraph.

Our technical experts recommend that proposed Items (3) and (7), which describe "transporter cranes" and "portal or pedestal cranes", respectively, be combined as these types of cranes are similar in nature.

Our technical experts also recommend that proposed Items (1) and (2), which describe "bridge cranes" and "gantry cranes and overhead travelling cranes', respectively, be combined inasmuch as bridge cranes are a type of gantry crane.

#### Annex II/6 to Doc. NR0355E1. Page 1463. Heading 84.28. Part (II). Item (B).

We recommend that a separate inclusion item be created for escalators and moving walkways. The current working draft includes "escalators" and "moving walkways" in inclusion item (B), Elevators. This could be confusing because elevators are provided in subheadings 8428.10 through 8428.39, while escalators and moving sidewalks are provided for separately in subheading 8428.40. A separate inclusion item should be created for escalators and moving walkways, explaining the difference between elevators on the one hand and escalators and moving sidewalks on the other hand.

Annex II/7 to Doc. NR0355E1. Page 1464. Heading 84.28. Part (III). New Item (M).

New proposed item (M) for the EN to Heading 84.28 states that these stair lifts are fixed to banisters. We believe that these devices are usually affixed to the stairway wall or to the steps, not the banisters, in order to provide greater support."

# COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE

#### AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 84.30 TO 84.40

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0356E1 :

Annex II/5 to Doc. NR0356E1. Page 1485. Heading 8436. Part (II). Top of the page.

2. As stated at RSC/27, we disagree with the reference to heading 84.28 in the proposed language. While the **United States** agrees that the counting function is secondary, the principal function of this system, placing chicks in boxes, is clearly encompassed by the language of heading 84.22. The current ENs to heading 84.22, page 1447, state that this heading provides for machinery for, *inter alia*, packing (e.g., placing in boxes) goods for sale, transport or storage. The chicks are temporarily "stored" in boxes so they may be transported to other areas of the hatchery for vaccination or other procedures.

Annex II to Doc. NR0356E1. Page 1496. Heading 8439. Part (I). Item (A)(7) and Item (E) on "Refiners".

3. For purposes of simplicity, it would seem logical to combine the new reference to refiners found under Part (I), Item (A) (7) and also under (new) (D), as both references to "refiners" are for use in making pulp.

Annex II/6 to Doc. NR0356E1. Pages 1496 to 1497. Heading 84.39. Part (II). Item (A).

4. Regarding the new language for "Machines for forming the stock into continuous sheets of paper or paperboard (e.g., Fourdrinier machines or twin wire machines)", the proposal correctly notes that such machines no longer utilize moving belts of metal wire. Accordingly, it would be beneficial to remove the reference to wire cloth on the 5<sup>th</sup> line in the proposed language ("...for distributing the stock onto the wire, an endless band of fine wire cloth, usually a woven fabric of synthetic monofilaments...") and to substitute the following : "...for distributing the stock onto an endless band, usually a woven fabric of synthetic monofilaments...".

Annex II/6 to Doc. NR0356E1. Pages 1496 to 1497. Heading 84.39. Part (II). Item (D).

5. Regarding the new proposal for "Sample drawing apparatus for making paper samples intended for testing", the balance of the proposed language ("These machines are sometimes called 'sample drawing machines' for controlling manufacture") appears redundant and could be removed without causing confusion.

Annex II/7 to Doc. NR0356E1. Page 1498. Heading 84.39. Parts. Second paragraph.

6. For the 2<sup>nd</sup> paragraph, it is proposed to delete some language in the current EN and substitute certain new language that would leave intact the current reference to "wire mesh cylinders for vat machines". Our technical experts believe such cylinders are usually made of

synthetic monofilaments, like the endless belts used in Fourdrinier and twin wire papermaking machines, and are thus excluded from heading 84.39 by virtue of note 1(e) to Sec. XVI. Accordingly, the **United States** suggests removing the phrase "wire mesh cylinders" from the  $2^{nd}$  paragraph and add it to the proposed new exclusion (a) language which states "Endless wire belts for Fourdrinier machines and twin wire machines..."."

COMMENTS BY THE UNITED STATES ADMINISTRATION ON THE POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 84.41 TO 84.59

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0357E1 :

Annex II/3 to Doc. NR0357E1. Page 1522. Heading 84.48. Part (A). Item (5).

2. We agree with the recommendation that the reference to "Jacquard card punching machines" in Item 5 be deleted. In this regard, we suggest that the Secretariat may also want to examine whether Note 1(d) to Sec. XVI which excludes perforated cards for these types of machines, should be maintained.

Annex II/3 to Doc NR0357E1. Page 1534. Heading 84.53. Part (I). First paragraph.

- 3. We support the decision at RSC/27 to drop the proposed insertion of a new last sentence.
- 4. **US Proposal** : Insert on page 1540, at the end of Part (I) to the Explanatory Note to heading 84.55, an exclusion for welded tube mill machinery (84.62). During its 26<sup>th</sup> Session the HSC unanimously agreed to classify welded tube mill machinery in heading 84.62 (Doc. NC0319E1 and Annex H/11 to Doc. NC0340; HSC/26/Nov.2000) rather than in heading 84.55. The corresponding Classification Opinion describes the product as, "Welded tube mill machinery presented without the welding equipment, used to process coiled metal strip into tubular forms." (See annex Q/13 to Doc. NC0430). The machinery consisted of the following components : an edge trimmer; breakdown and forming rolls; idler vertical closing rolls and fin pass rolls. A welded tube mill essentially takes coiled metal strip, passes it through a series of bending rolls which gradually form it into a cylindrical tube, welds the seam to close the tube and cuts it off to the desired length."

# COMMENTS BY THE UNITED STATES ADMINISTRATION ON THE POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 84.60 TO 84.85

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0358E1 :

# **US Proposal.** Amend the Explanatory Note to Heading 84.67. Page 1566. 5<sup>th</sup> paragraph.

2. The United States offers the following amendment for EN to heading 84.67, by adding an exclusion for hand-directed machines on wheels at the end of paragraph before the period as follows :

", and walk-behind or similar hand-directed machines on wheels, e.g., floor grinding machines, for concrete, marble, etc. (heading 84.64) or for wood (heading 84.65)".

# Annex II/4 to Doc. NR0358E1. Page 1600, Explanatory Note to Heading 84.79. Part (II). Item (E).

- 3. During RSC/27, the United States indicated that it may make a submission for amending this item. We would like to inform the Sub-Committee that we will not be making a submission and that the proposed text is acceptable.
- 4. Note: On page 1602 (EN 84.79), inclusion item (11), the comma after "Chapter 82" should be replaced by ") and"."

# COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE

#### AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 85.01 TO 85.16

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0359E1 :

**US Comment** on Annex II/1 to Doc. NR0359E1. Page 1628. Heading 85.05. Item (3). First sentence.

2. We note that during RSC/27 this proposal was dropped in light of the HSC/30 decision which held that electrostatic chucks were classifiable under heading 84.66 (by application of Note 2 (b) to Sec. XVI) and not in heading 85.05. In light of this decision, we would ask the Secretariat to include a reference to electrostatic chucks as "parts" under the Explanatory Note to heading 84.66, on page 1564."

#### COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE

#### AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 85.17 TO 85.22

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0360E1 :

Annex II/1 to Doc. NR0360E1. Page 1651. Heading 85.17. First paragraph.

2. We agree that this paragraph should be deleted and re-written. We have taken the proposed text and re-worded it to make it clearer as follows :

"The term "electrical apparatus for line telephony or line telegraphy" means apparatus for the transmission of speech or other sounds (telephony) or codes which represent characters, graphics or images or other data (telegraphy) between two points by variation of an electric current or optical wave flowing in a line communications medium. The line communications medium is usually a metallic or dielectric circuit (copper, optical fibres, combination cable, etc.), or a combination thereof, connecting the transmitting station to the receiving station, whether directly or indirectly. Transmission may be in the form of analogue or digital signals."

Annex II/5 to Doc. NR0360E1. "(III) Telephonic or Telegraphic Switching Apparatus". Proposed Item (A) for "Automatic switchboards and exchanges".

3. On the 7<sup>th</sup> and 8<sup>th</sup> line, we propose that the phrase "computers or automatic data processing machines" be deleted and replaced with "microprocessors". The reference to automatic data processing machines is unclear and we are very concerned that it could result in classification disputes.

Annex II/7 to Doc. NR0360E1. Top of page. Proposed Item (D).

4. We would request that more information be provided on data compressors/ decompressors before accepting this proposed item and its corresponding exclusion note for goods of heading 85.43.

# Annex II/11 to Doc. NR0360E1. Pages 1660 to 1661. Heading 85.20. Proposed Item (2). "optical type".

5. For proposed Item (2), the phrase "represented by microscopic indentations which are burnt onto the surface" should be replaced by "encoded onto the surface of the recording media, which can be read using a laser." Most optical discs do not encode by burning indentations onto the recording surface, and with technology constantly changing it would be best to use a more generic description.

> Note : During RSC discussions of the headings covering apparatus for laser recording and reading, and the headings covering optical recording media, a question arose regarding magneto-optical (opto-magnetic) recording technology for digital information

(audio, video, software and other digital data). Our research reveals that such technology, used with certain rewritable discs, involves encoding data onto a magnetic surface. The optical laser is used to soften the magnetic recording surface briefly so that it is more readily affected by the magnetic recording head. When the recording surface has cooled it is less likely to be affected by magnetic fields applied to adjacent tracks. The information on the disc is read by magnetic heads, not by a laser.

Annex II/13 to Doc. NR0360E1. Page 1662. Heading 85.21. Part (A).

6. We believe that proposed new 1<sup>st</sup> and 2<sup>nd</sup> paragraphs use descriptions that are too specific and do not allow for devices to connect to DVD players or multimedia monitors. The important issue here is that these paragraphs should indicate apparatus that has the ability to record a video image as their inherent function and not limit their use based on their connection to certain devices. For example, in the **United States**, there are devices that allow you to record television programs using internal hard drives inside the device."

#### COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE

#### AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 85.23 TO 85.48

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0361E1 :

Annex II/1 to Doc. NR0361E1. Pages 1664 to 1665. Heading 85.23. Last paragraph.

2. Our concerns as expressed at RSC/26 remain about this proposal for interpreting Note 6 to Chapter 85. This matter should be dropped until the resolution by the HSC on the classification of the Palm V presented along with software.

Annex II/2 to Doc. NR0361E1. Page 1666. Heading 85.24, Item (4). Second paragraph.

3. Our concerns as expressed at RSC/26 remain about this proposal for interpreting Note 6 to Chapter 85. This matter should be dropped until the resolution by the HSC on the classification of the Palm V presented along with software.

Annex II/2 to Doc. NR0361E1. Page 1667. Heading 85.25. Part (A). Second paragraph. Item (3).

4. We would recommend that the proposed text be split into two items with a new item being added, describing radio-telephone base-stations. The text can be taken from the last two sentences of current draft item (3) ("Mobile phones receive...").

Annex II/2 to Doc. NR0361E1. Page 1669. Heading 85.25. Part (D).

5. The heading for Part (D) of the Explanatory Note to heading 8525 quotes the current legal text to subheading 8525.40, "Still image video cameras and other video camera recorders; digital cameras." Several problems with the text have already been noted by this Sub-Committee. Firstly, the text utilizes an antiquated term, "still image video cameras." Furthermore, because the subheading text uses a semicolon to separate the new (2002) reference to "digital cameras" from the reference to "still image video cameras and other video camera recorders," the text could be construed to imply that the products on the two sides of the semicolon describe mutually exclusive categories. This is clearly not the case, since the HSC classified digital cameras in subheading 8525.40 before there was any reference to digital cameras in the legal text or Explanatory Note. The current Explanatory Notes attempt to explain the scope of each term and therefore only exacerbate the problem. Since the HS does not distinguish between any individual products among this group it is not necessary in the Explanatory Note to describe each term, as long as the scope of subheading 8525.40 is accurately described. To that end, we offer the following replacement text for Part (D). (We also note that the United States has proposed an improved legal text for subheading 8525.40 that avoids the current problems, as part of the Sub-Committee's examination of possible Article XVI changes to be implemented in 2007.)

#### Possible revision of ENs to heading 85.25, part (D), page 1669

Replace Part (D) with the following :

#### "(D) STILL IMAGE VIDEO CAMERAS AND OTHER VIDEO CAMERA RECORDERS; DIGITAL CAMERAS

This group covers all types of cameras that record images (still and/or motion picture) by electronic means (for example, on magnetic tape, optical recording media or semiconductor media). The data stored may be in analogue or digital form.

Many of the cameras of this heading may physically resemble the photographic cameras of headings 90.06 or the cinematographic cameras of heading 90.07. The cameras in heading 85.25 and the cameras in Chapter 90 typically include optical lenses to focus the image on a light-sensitive medium and adjustments to vary the amount of light entering the camera. However, photographic and cinematographic cameras of Chapter 90 expose images onto photographic film of Chapter 37, while the cameras of this heading record images as analogue or digital data on the media of heading 85.23.

The cameras of this heading capture an image by focusing the image onto a light-sensitive device, such as a complementary metal oxide semiconductor (CMOS) or charge-coupled device (CCD). The light-sensitive device sends an electrical representation of the images to be further processed into an analogue or digital record of the images. Images in analogue form are typically recorded onto a magnetic tape, while images in digital form may be recorded on magnetic tape or other media of heading 85.23.

The cameras of this heading may include an analogue/digital converter (ADC) and an output terminal which provides the means to send images to units of automatic data processing machines, printers, televisions or other viewing machines. Some cameras include input terminals so that they can internally record analogue or digital image files from such external machines.

Generally, these cameras are equipped with an optical viewfinder or a liquid crystal display (LCD), or both. Many cameras equipped with an LCD can employ the display both as a viewfinder when taking pictures and as a screen when reproducing images already recorded; in some cases the camera is capable of displaying images received from other sources on the LCD screen."

Annex II/3 to Doc. NR0361E1. Page 1673. Heading 85.27. Part (B). First paragraph. New Item (5).

6. Proposed new item (5) should also include a reference to speakers otherwise the stereo system would not be a set for retail sale as defined by the Explanatory Notes to General Interpretative Rule 3 (b).

Annex II/3 to Doc. NR0361E1. Page 1673 to 1674. Heading 85.28. Second paragraph. Item (1). New third sentence.

7. As stated during RSC/27, we believe this sentence should be dropped as the classification of a television incorporating a modem has not been fully determined.

Annex II/3 to Doc. NR0361E1. Page 1673 to 1674. Heading 85.28. Second paragraph. New Item (4). Last sentence.

8. As stated during RSC/27, we believe this sentence should be dropped as the classification of a television incorporating a modem has not been fully determined.

Annex II/5 to Doc. NR0361E1. Page 1679. Heading 85.31. New exclusion paragraph (c).

9. With regard to the new exclusion, we cannot agree with the rationale stated in paragraph 29 to Doc. NR0361E1. However, we can accept the proposed exclusion, as drafted because it matches the **US** approach of looking at the LCD's principal use.

Annex II/5 to Doc. NR0361E1. Page 1687 to 1688. Heading 85.36. Part (III). New Item (A)(3).

10. As stated at RSC/27, the <u>United States</u> requests further information on the contact pads proposed for new item (A)(3) as we are not sure that this product is classified under this heading.

Annex II/6 to Doc. NR0361E1. Page 1703. Heading 85.43. New Items (19) and (20).

- 11. We request that further information be provided for the example proposed for Item (19) so that we can be assured that it is actually classified in heading 85.43.
- 12. The expression, "Electroluminescent devices, generally in the form of strips, plates or panels" is too vague and could encompass articles classifiable in other headings. If the intent of adding the expression is to refer to the subject of Classification Opinion 8543.89/1, the detailed information in that CO should be included."

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# COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES TO CHAPTER 87

1. "The proposed changes by the WCO for the Explanatory Notes to Chapter 87 are acceptable to the US Administration."

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#### COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE

#### AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 90.01 TO 90.10

1. "The US Administration submits the following comments in regards to the proposed amendments listed in Doc. NR0363E1 :

Annex II/1 to Doc. NR0363E1. Page 1770. Heading 90.01. New second paragraph.

2. The United States supports the proposal to define an optical element. However, we offer the following changes to the Secretariat's proposal:

"Optical elements are manufactured in such a way that they produce a required optical effect. An optical element does more than merely allow light (optical radiation : visible light, ultraviolet light, infrared light) to pass through it, rather the passage of light must be altered in some way, for example, by being reflected, attenuated, filtered, diffracted, collimated, etc."

Annex II/2 to Doc. NR0363E1. Page 1777. Heading 90.06. Present third paragraph. New Item (6).

3. We can accept changing the term "disposable" to "one-time use" to describe these cameras."

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# COMMENTS BY THE US ADMINISTRATION ON THE POSSIBLE AMENDMENT OF THE EXPLANATORY NOTES TO HEADINGS 90.11 TO 90.33

1. "The proposed changes by the WCO for the Explanatory Notes to headings 90.11 to 90.33 are acceptable to the **US** Administration."

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# COMMENTS FROM CANADA REGARDING PROPOSED CHANGES TO THE EXPLANATORY NOTES TO HEADINGS 85.19, 85.20 AND 85.21

- 1. "Doc. NR0360E1 proposes amendments to the Explanatory Notes to headings 85.19, 85.21 and 85.21 relating to compact disc and digital versatile disc players and recorders. Canada has concerns with aspects of the changes proposed for all three.
- 2. There are three formats of each type of disc; their design and function are discussed in Annex I. The comments that follow are based on the information found therein.

#### Heading 85.19

- 3. Heading 85.19 provides for sound reproducing apparatus. Proposed new item (4) to the fourth paragraph, on page 1658, refers to "…recordings in the form of microscopic pits on the surface of the rotating disc…".
- 4. Paragraph 66 of Doc. NR0360E1 explains that this amendment "...was added to expand on the explanation of the operation of laser optical disc players" and was based on based on information from the <u>McGraw-Hill Multimedia Encyclopedia of Science & Technology</u>, 2000. The subject goods are generally known as compact disc players; however, some audio disc players also use digital versatile discs.
- 5. The term "pits" is incorrect. In the basic CD format (see Annex I) it is actually the "bumps" on the reflective layer that allow data to be retrieved. However, even the term "bumps" would be inappropriate. Modern CD players are usually capable of also reading recordable CDs (CD-R) and rewritable CDs (CD-RW). The data is recorded on those formats by creating non-reflective points in the recording layer that serve the same function as the bumps in standard CDs.
- 6. Further, in all three formats, the bumps or non-reflective points are located inside the disc, not on its surface.
- 7. Canada suggests the text should read: "...recordings in the form of microscopic pits digital data encoded on the surface of the rotating disc..."

#### Heading 85.20

- 8. Heading 85.20 provides for sound recording apparatus. Proposed new Part (A), item (2) on pages 1660 to 1661, refers to "The optical type in which the digital code that has been converted from the amplified currents of variable intensity (analogue signal) is represented by microscopic indentations which are burnt onto the surface of the recording medium by a laser". The subject goods are generally CD-R, CD-RW, DVD-R or DVD-RW recorders.
- 9. As explained in the Appendix, while both CD-R and CD-RW are referred to as having data "burned" onto them neither process creates indentations or bumps.

- 10. The concern expressed in paragraph 6 above also applies.
- 11. Canada suggests the text read: "The optical type in which the digital code that has been converted from the amplified currents of variable intensity (analogue signal) is represented by microscopic indentations which are encoded ("burnt") onto the surface of the recording medium by a laser".

#### Heading 85.21, Explanatory Note Part (A)

- 12. Heading 85.21 provides for video recording or reproducing apparatus. The proposed amendment to Part (A) of the Explanatory Note, on page 1662, states that "In optical recording on disc the images and sound are recorded on a glass, metal or plastic disc with a light-sensitive lacquer coating (a photoresist) by a laser which burns the surface of the disc with microscopic indentations". The subject goods are generally known as DVD players and DVD-R and DVD-RW recorder-players.
- 13. Our research has found references to "photoresist" only in the context of the production of basic CDs. The substance used in a recordable disc is different than that in a rewritable disc. The change effected to the recording layer of the former is irreversible, while the latter must be reversible to allow the bits to be re-written.
- 14. Further, our research also shows that CD-R, CD-RW, DVD-R and DVD-RW are plastic discs. Glass and metal discs are used in the production of basic CDs and DVDs but we are unaware of DVD-R or DVD-RW discs of those materials.
- 15. For theses reasons, and those cited in paragraphs 9 and 10 above, **Canada** suggests the text read "In optical recording on disc digital data representing the images and sound are recorded ("burned") on a glass, metal or plastic disc with a light-sensitive lacquer coating (a photoresist) by a laser which burns the surface of the disc with microscopic indentations onto a disc." The exact process is irrelevant.
- 16. In the same proposed text, the next two sentences state : "These indentations may represent analogue signals (often representing the images) and digital code (representing the sound). The microscopic indentations representing analogue signals are traces of continuously variable length, whereas digital code is represented as indentations of fractions of fixed nominal length."
- 17. While it is true that in some cases the source video signal or the display on which the recorded images are shown may be analogue, the data recorded on the disc is in all cases digital. Sony Canada confirmed that the data stored on a DVD is entirely digital. Even if there were some distinction between the length of the encoded bits of data, it is not relevant to the classification of either the discs or the apparatus in which they are used; further, it would not likely be available to the Customs officer at time of importation.
- 18. The two sentences cited in paragraph 16 are unnecessary. Canada suggests that they be deleted.

- 19. Finally, an earlier sentence in the proposed text states "The heading also includes apparatus which record, generally on a magnetic disc, digital code representing video images and sound, by transferring the digital code from a computer (e.g., MPEG 2 video players)."
- 20. The reference to "MPEG 2 video players" relates the goods to the manner in which the data is stored on the goods rather than their function. DVDs also use the MPEG 2 format to store its data.
- 21. The goods found on the Web site cited in paragraph 90 of Doc. NR0360E1 record data transferred from a computer, but function independently as a video player (much like certain MP3 audio players of heading 85.20).
- 22. There are also goods that function directly with a television receiver and record video on a hard disk as digital data (a common North American product is commercially known as **TiVo** www.tivo.com); they have no need of a computer. They are commonly known as digital (or personal) video recorders.
- 23. Personal computers that have an adapter card that allows the computer to display video input can perform the same function of they have the appropriate software to allow that data to be stored. There could be some confusion between the standalone units and the goods identified in the preceding paragraph.
- 24. For these reasons, Canada suggests that sentence read: "The heading also includes [independent] [standalone] apparatus which record, generally on a magnetic disc, digital code representing video images and sound, by transferring the digital code from a computer (e.g., MPEG 2 video players digital video recorders, digital video players)."

#### Heading 85.21, Explanatory Note Part (B)

- 25. The proposed new last sentence states that "Subject to Note 3 to Section XVI apparatus which are capable of reproducing [image and sound data] [video (both image and sound) from digital versatile disks] and sound data [from compact discs] only are classified in this heading."
- 26. Canada feels the proposed text could be simplified to read :

"Subject to Note 3 to Section XVI, apparatus which [are] [is] capable of reproducing [image and sound data] [video (both image and sound) from digital versatile disks] and sound data [from compact discs] only both video (whether or not incorporating sound) and audio (i.e., sound only) recordings are to be classified in this heading."

# <u>Appendix</u>

#### **Compact Discs**

- 1. A compact disc (CD) is a fairly simple piece of plastic, generally about 1.2 mm thick. Most of a CD consists of an injection-moulded piece of clear polycarbonate plastic.
- 2. CDs are made by impressing a plastic disc with microscopic indentations arranged as a single, continuous, extremely long spiral track of data.
- 3. The disc is then coated with a thin, reflective aluminium layer that is then covered with a thin acrylic layer to protect it. The label is then printed onto the acrylic. A cross section of a complete CD (not to scale) looks something like this:



- 4. The indentations, or "pits", created in the polycarbonate layer, and thus the aluminium layer, appear as bumps on the side from which the laser reads the data.
- 5. The aluminium surface of the CD is reflective; the bumps disrupt that reflective surface. The laser detects the difference between the perfectly reflective surface and the imperfection caused by the bumps based on the difference in reflectivity. By interpreting a "perfect reflection" as a "1," and a "bump" as a "0," digital information is retrieved from the CD.
- 6. The bumps that make up the data track are a minimum of 0.83 microns long (i.e., one "bit"), but can be longer if the consecutive bytes have the same value. Looking through the polycarbonate layer at the bumps, they look something like this :



- 7. The exposed surface of the aluminium layer is covered with acrylic and the label is applied to the acrylic.
- 8. The "stamper" used to create the indentations described in paragraph 2 above are created as part of the "mastering process" :
  - a laser beam exposes minute areas of a photoresist layer on a rotating glass master disc; the lengths and spacing of the areas is defined by the data to be stored on the disc;
  - the surface is developed to remove the photoresist exposed by the laser, creating pits;
  - a thin layer of nickel is grown on the glass disc, using an electroforming process, to make what is known as a "Father";
  - a "Mother" is then grown on the Father; and,
  - as many "stampers" as required are grown from the Mother.
- 9. Throughout this document, the term "CD" is used to refer specifically to this type of compact disc and not as an abbreviation of the generic term.

#### **Recordable and Rewritable CDs**

- 10. Recordable compact discs (CD-R) are a distinctly different product. Distinctly different from what?
- 11. There are no bumps on a CD-R. A layer of clear dye covers the discs' reflective surface, beneath the polycarbonate plastic outer surface. The "write laser" heats the dye layer sufficiently to cause it to become opaque, or "burns it". The "read laser" is not powerful enough to cause the change; it detects the opaque ("burned") dye the same way it senses the bumps on a CD, by detecting the difference in reflectivity.
- 12. A rewritable CD (CD-RW) is similar in structure to a CD-R, but requires a "recording layer" whose transparency can be changed back and forth. A special material is used that when heated to one temperature cools to a transparent, crystalline state, but when heated to a higher temperature cools to an opaque, amorphous state. The crystalline areas allow the laser light to pass through and be reflected while the amorphous portion does not. A CD-RW drives use three laser powers :

#### **Digital Versatile Discs (DVDs)**

13. DVDs are physically and conceptually similar to CDs. They have a greater storage capacity as the data tracks are closer together and the individual "bits" are shorter. Consequently, they require more precise laser systems.

14. As with CDs, both recordable (DVD-R) and re-writable (DVD-RW) technology exists for DVDs."

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# COMMENTS FROM CANADA REGARDING PROPOSED CHANGES TO

## THE EXPLANATORY NOTE TO HEADING 90.06

 "Doc. NR0363E1 proposes new items (6) and (7) and changes to existing item (6), to be re-numbered as (8), in the third paragraph of Section (I) of the Explanatory Note to heading 90.06. Canada has comments to offer on all these proposals.

## New Item (6)

- 2. We have some concern about the term "disposable". When "disposable cameras" are submitted for developing, many are re-cycled and most of the components (e.g., battery, lens, case, etc.) in some way re-used (see Annex I, emphasis added).
- 3. The common commercial description for these goods is "one-time use" or "single use" cameras ; in French, "appareil-photo à usage unique". Any further description becomes complicated as users can remove the film themselves or deliver the entire camera for developing and the film processor can recycle the cameras but are not required to so.
- 4. Therefore, Canada suggests the text should read simply "Single-use (one-time) cameras".

## New Item (7)

- 5. The phrase "...allows freedom of movement between them." in the last sentence could be taken to mean that objects/people can move between the lenses.
- 6. Canada suggests that "The bellows connects the lens board to the film holder and allows freedom of movement between them to move freely in relation to one another." would better describe the goods and would better align with the proposed French text. In the French text ", qui permet des mouvements de bascule, de décentrement, de rotation, etc." in the first sentence seems to be unnecessary as it is repeated in the last sentence.

## Existing Item (6)

- 7. Our research indicates that neither "amphibious" nor "housed type" underwater cameras are normally traded; rather, it is the waterproof housing for standard cameras, many if not most designed to accommodate a specific model of cameras.
- 8. Canada suggests deleting the existing item (6) and adding the housings as an example in the last sentence of the "Parts and Accessories" section of the Explanatory Note :
- 9. Such parts and accessories include : camera bodies; bellows; tripods; ball and socket mounting heads; shutters and diaphragms; shutter (including delayed action) releases; magazines for plates or films; lens hoods, pressure resistant cases to protect photographic cameras when used underwater, [film motor drive boosters,] specialised stands or bases for forensic photography to which a camera is fitted (these often include discharge lamps and an adjustable calibrated mast for varying the height of the camera).

#### KODAK Recycles Its 50-Millionth One-Time-Use Camera

ROCHESTER, N.Y., **July 19, 1995 --** Continuing the most successful consumer product recycling and reuse effort World-wide, Kodak announced today that it has recycled its 50-millionth one-time-use camera.

Although often incorrectly identified as "disposable," Kodak s one-time-use cameras are designed so consumers will not discard them.

First introduced to the United States by Kodak in 1987, the one-time-use camera has achieved phenomenal success. Consumers buy the camera with the film already loaded. Since the cameras are sealed, consumers must return the entire camera, with the film intact, to photofinishers to have their pictures developed. After removing the film, the photofinisher has the option of returning the camera to Kodak for recycling and reuse.

The 50 million one-time-use cameras that Kodak has recycled amount to more than seven million pounds or 549 tractor trailers of waste diverted from landfills. Laid end-to-end, the recycled cameras would measure 3,333 miles-greater than the distance between Rochester, N.Y. and Dublin, Ireland.

Kodak's current one-time-use cameras bear the "Fun Saver" trademark in the United States.

"Kodak Fun Saver cameras represent one of the best examples of closed loop recycling, so environmentally conscious consumers can feel comfortable buying these products," said Bob LaPerle, vice president and general manager, Kodak one-time-use cameras. "After removing the film for processing, retailers and photofinishers have done an outstanding job returning the cameras to Kodak for recycling and reuse."

Kodak actively encourages retailers and photofinishers to send the cameras back for recycling by reimbursing them for each camera returned plus shipping costs. Of the one-time-use cameras shipped in the United States, 63% are returned to Kodak for recycling and reuse.

Like all Kodak Fun Saver cameras, the latest models - Kodak Fun Saver pocket cameras - are designed to minimize impact on the environment with source reduction of 20 percent. On average, 86% of the weight of the camera is recycled or reused. Most of the remaining weight of the flash model is the battery, which is donated to charity or reused by the photofinisher.

- The outer covers of Kodak Fun Saver cameras (whether paperboard, polycarbonate or polystyrene) are recycled.
- The chassis, basic camera mechanism and electronic flash system (when included in the model) are tested, inspected and reused."

- Parts of the cameras that don't pass inspection are simply ground up and fed into the raw material stream for molding into new cameras.
- To ensure optical purity, the camera receives a new lens each time it is recycled. Used lenses are ground up and sold to outside companies as raw materials for other products.

Although 100% of the Kodak Fun Saver cameras on sale in stores today contain recycled and reused plastic and metal parts, the consumer always receives a fresh product with a new battery and lens.

Kodak currently manufactures and sells a number of easy-to-use one-time-use cameras, making it convenient to capture special moments in a variety of picture-taking situations. They include: Kodak Fun Saver pocket daylight camera, Kodak Fun Saver pocket flash camera, Kodak Fun Saver 35 camera, Kodak Fun Saver 35 camera with flash, Kodak Fun Saver panoramic 35 camera, Kodak Fun Saver Weekend 35 camera and Kodak Fun Saver telefoto 35 camera.

#### REFERENCE: http://www.kodak.com/US/en/corp/pressReleases/pr19950720-1.shtml

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