



HARMONIZED SYSTEM
REVIEW SUB-COMMITTEE

-
28th Session
-

NR0417E1
(+ Annex)

O. Eng.

Brussels, 3 July 2003.

POSSIBLE CREATION OF A NEW HEADING FOR SEMICONDUCTOR AND
FLAT PANEL DISPLAY MANUFACTURING EQUIPMENT

(PROPOSALS BY THE US ADMINISTRATION AND THE EC)

(Item III.A.19 on Agenda)

Reference documents :

42.223 (RSC/18)

42.500, Annex A/3 (RSC/18 – Report)

NR0003E1 (RSC/19)

NR0042E1 (RSC/19)

NR0045E2, Annex A/2 (RSC/19 - Report)

NR0381E1 (RSC/27)

NR0400E3, Annexes D/12 and F/25 (RSC/27 – Report)

I. BACKGROUND

1. At its 27th Session, the Review Sub-Committee held a preliminary discussion on the **US** and **EC** proposals concerning the possible creation of a new heading for semiconductor and flat panel display manufacturing equipment.
2. With respect to the classification of parts and accessories, the **EC** Delegate pointed out that no provisions had been made for these commodities in the **EC** proposal, pending the outcome of the discussion on the proposals for Chapters 84, 85 and 90, which also provided for an amendment of Note 2 to Section XVI. The **US** Delegate informed the Sub-Committee that the **US** proposal to include parts (and accessories) of ceramics and of glass would take into account the fact that a number of specific parts and accessories for the machines at issue were made of these materials. A reference to “accessories” had been incorporated in his administration’s proposal with a view to avoiding disputes on the question whether a particular commodity was to be regarded as a part or as an accessory.
3. Concerning the proposed priority for classification in new heading 84.85, the **EC** Delegate clarified that a Section Note would be preferable to a Chapter Note, thus ensuring that a potential classification in Chapter 85 would also be included in this provision. He shared the doubts expressed by the Secretariat vis-à-vis the use of the appropriateness of the term “repair” in proposed subheading 8485.30 (**US** proposal). However, he was prepared to reflect on it.

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

File No. 2581

4. The **US** Delegate clarified that the term “transport” in his administration’s proposal did not refer to commodities of Section XVII, but to handling and loading equipment of current heading 84.28, and that the expression “machines used for storage” referred to the temporary storage of the wafers between two processing stages. Having said that, he indicated that he was prepared to have another look at the wording proposed.
5. The **EC** Delegate agreed with the Secretariat that any amendment to Note 5 to Chapter 85 might influence the scope of new heading 84.85. In this connection, he drew the Sub-Committee’s attention to the ongoing discussion with regard to the restructuring of Chapters 84, 85 and 90, which also included a possible amendment to Note 5 to Chapter 85.
6. The **US** Delegate was of the view that machines for inspection, measuring and checking, should continue to be classified in Chapter 90, possibly in a separate heading, since they could be used for the inspection, measuring and checking of other products as well. The **Japanese** Delegate agreed with the **United States** that these machines and apparatus should stay in Chapter 90.
7. With respect to the terminology proposed by the Secretariat, the **EC** Delegate indicated that, in principle, he could accept the reference to “machines and apparatus”.
8. The Chairperson concluded that the proposals should be re-addressed at the Sub-Committee’s next session, on the basis of further information to be provided by the interested parties. Pending those discussions, the texts would be placed in square brackets.
9. Parties participating in the Informal Working Group on restructuring Section XVI, which was held from 12 to 14 May 2003, agreed that a separate heading for semiconductor and flat panel display manufacturing equipment should be created in Chapter 84. This heading would, however, not include measuring or verifying equipment, as initially suggested by the **EC**.

II. SECRETARIAT COMMENTS

10. The draft amendments and, where appropriate, alternative proposals, have been reproduced in the Annex to this document, taking into account the agreement among the participants in the Informal Working Group. A number of issues remain to be addressed, which call for the following comments.

New heading 84.86
11. The Secretariat would like to point out that the separate heading for semiconductor and flat panel display manufacturing equipment was numbered as heading 84.85, in the **US** proposal, while current heading 84.85 and its subheadings were renumbered as new heading 84.86. The **EC**, in its proposal, had not suggested a specific heading number for the new heading, but could apparently agree with placing it in Chapter 84. If the new heading for semiconductor and flat panel display manufacturing equipment were to be numbered as heading 84.85, the code numbers 8485.10 and 8485.90 cannot be used, since they are currently in use, which would restrict the number of code numbers in the new heading. The Secretariat would, therefore, suggest identifying the new heading as heading 84.86 and renumbering current heading 84.85 as heading 84.87. The comments below and the draft amendments in the Annex to this document reflect this suggestion.
12. Following the discussions in the Informal Working Group, the Secretariat has duly amended the **EC** proposal, by deleting (i) the references to “apparatus for the inspection, measuring or checking” from the heading text and (ii) the proposed corresponding

subheading. The Secretariat has also replaced the term “apparatus” by the expression “machines and apparatus” in the **EC** proposal, following the discussions during the 27th Session of the Sub-Committee.

13. With respect to the proposed wording, the Secretariat prefers to use the conjunction “or” instead of “and” between “electronic integrated circuits” and “flat panel displays”, and to repeat the preposition “of”. To clarify the scope of the heading, the Secretariat suggests referring to (i) “semiconductor wafers”, (ii) “semiconductor devices”, (iii) “electronic integrated circuits” and (iv) “flat panel displays”. This would result in the following text for heading 84.86, which is reproduced in the Annex as the Secretariat’s alternative :

“Machines and apparatus for the manufacture of semiconductor wafers, of semiconductor devices, of electronic integrated circuits or of flat panel displays.”

New Note 9 to Chapter 84

14. Both proponents (**United States** and **EC**) have suggested that classification of the machines of new heading 84.86 should have priority over classification elsewhere in the Nomenclature. The **EC** Delegate indicated that a Section Note to that effect would be preferable, thus ensuring that a potential classification in Chapter 85 would also be included in this provision. The **United States**, on the other hand, suggests inserting such a Note in Chapter 84 (i.e., proposed new Note 9).
15. The Secretariat has some doubts whether it is necessary to place this provision at the Section level, since the proposed text indicates that classification in heading 84.86 should take precedence over any other heading in the Nomenclature (emphasis added) and not only in Section XVI. Moreover, the proposed Note will also describe the scope of new heading 84.86. The Secretariat would, therefore, be in favour of inserting the Note at the Chapter level, i.e., as a new Note to Chapter 84. A similar provision can be found in Chapter 30, where Note 4 to that Chapter (i) describes the scope of heading 30.06 and (ii) provides for priority classification in that heading. Nevertheless, the Secretariat leaves it to the Sub-Committee to decide whether or not the proposed Note, if accepted, should be placed at the Section level or at the Chapter level.
16. With respect to the wording of the proposed Note, the Secretariat would like to offer the following comments.
17. Both proposals (i.e., **United States** and **EC**) limit the scope of proposed heading 84.86 by using the qualifier “solely or principally” in connection with the use of the machines and apparatus. The Secretariat agrees to use this expression in the proposed new Note, since this would solve the problem of the classification of equipment also usable for other purposes.
18. With respect to the references to the transport, handling or storage of semiconductor devices, etc., referred to in the **US** proposal, the **US** Delegate indicated that he would have another look at the precise wording, noting that the term “transport” did not refer to commodities of Section XVII, but to handling or loading equipment of current heading 84.28, and that the term “storage” referred to the temporary storage of the wafers between two processing stages.
19. As indicated in paragraph 14 of Doc. NR0381E1, the Secretariat would be in favour of inserting the various descriptions in parts (a), (b) and (c) of the proposed **US** Note in the Explanatory Note to proposed heading 84.86. The Sub-Committee is invited to express its view on this question.

20. As indicated in paragraph 16 of Doc. NR0381E1, the Secretariat also has some difficulty in accepting proposed subparagraph (d) of the **US** proposal, which refers to parts and accessories as part of the definition of “machines and apparatus (. . .)” of heading 84.86. The Secretariat has suggested not incorporating this part of the **US** proposal in new Note 9.
21. It is to be noted that in the **US** proposal the definitions for “diodes, transistors and similar semiconductor devices” and “electronic integrated circuits” as provided for in Notes 5 (A), 5 (B) (a) and 5 (B) (b) to Chapter 85, should be applied for the purposes of proposed Note 9. In addition, the expression “semiconductor devices” as used in the new Note would also cover monocrystal semiconductor boules or wafers, photosensitive semiconductor devices and light emitting diodes. The Secretariat understands this proposal as including the devices classified in heading 85.41 (except for mounted piezo-electric crystals) in the description.
22. The **EC**, on the other hand, describes the expression “semiconductor devices” as those specified in Note 5 to Chapter 85. From the presentation it is not clear whether it refers to Note 5 (A) only, which covers semiconductor devices in broad terms, or also to part (B) of that Note, which defines the expression “electronic integrated circuits and microassemblies”. Moreover, Note 5 (A) covers only part of the scope of heading 85.41, i.e., semiconductor devices and not photosensitive semiconductor devices and light emitting diodes. Finally, it should be noted that Note 5 to Chapter 85 is also under consideration in the context of the restructuring of Chapters 84, 85 and 90 (see item III.A.24 on the Agenda). Any amendments to the scope of that Note may effect the scope of the proposed new Note 9.
23. Having said this, the Secretariat would be in favour of being more precise in describing the scope of the expressions “diodes, transistors and similar semiconductor devices” and “electronic integrated circuits” in new Note 9, which could be done on the basis of the **US** proposal.
24. The Secretariat has some doubts whether the proposed wording for the definition of “flat panel displays” as suggested by the **United States** is appropriate and workable. First, reference is made to the term “unit”. From the context it appears that the displays at issue are in fact articles which need further processing to become an output unit for an automatic data processing machine, a television receiver, a video monitor or similar apparatus. The Secretariat, therefore, considers that the term “unit” would be inappropriate.
25. Second, since the description is self-explanatory in terms of the word “display”, the Secretariat would be inclined to refer to the applied technique only. It suggests referring to flat panel displays as “liquid crystal displays, light emitting diode displays, gas discharge plasma displays, electro-luminescent displays and vacuum fluorescent displays”.
26. The **EC** suggests referring to “flat panel displays (as specified in heading XX.XX)” (emphasis added). Since the proposal to create a separate heading covering monitors, projectors and flat panel displays will be discussed at a later stage (heading XX.X2 resulting from the discussion of the Informal Working Group), the Secretariat suggests leaving the reference to that heading open. However, if that heading is not accepted and the text of the text proposed by the **EC** is accepted, further consideration to the wording of the Note would be necessary.
27. Finally, the expression “This heading” at the beginning of the last sentence of the **EC** proposal could be ambiguous given the fact that the text in brackets at the end of the penultimate sentence also refers to a heading.

28. Taking into account the observations above, the Secretariat suggests an alternative text, which has been placed in square brackets in the Annex to this document, together with the texts proposed by the **United States** and the **EC**. The wording suggested by the Secretariat would avoid any ambiguity concerning the scope of the Note or of the heading concerned, and would also avoid a possible conflict with the provisions of Note 1 to Section XVI and Note 1 to Chapter 84. Finally, the wording would be consistent with similar provisions elsewhere in the Nomenclature. The proposed alternative could read as follows :

“9.- Heading 84.86 applies only to machines and apparatus which are solely or principally used for the manufacture of semiconductor wafers, of semiconductor devices, of electronic integrated circuits or of flat panel displays.

Notes 5 (A), 5 (B) (b) and 5 (B) (c) to Chapter 85 also apply with respect to the expressions “diodes, transistors and similar semiconductor devices” and “electronic integrated circuits” as used in this Note and in heading 84.86. However, for the purposes of this Note and of heading 84.86, the expression “semiconductor devices” also covers photosensitive semiconductor devices and light emitting diodes.

For the purposes of this Note and of heading 84.86, the following expressions have the meanings hereby assigned to them :

(a) **Semiconductor wafers**

Monocrystal semiconductor boules or wafers.

(b) **Flat panel displays**

Liquid crystal displays, light emitting diode displays, gas discharge plasma displays, electro-luminescent displays and vacuum fluorescent displays.

Subject to Note 1 to Section XVI and Note 1 to Chapter 84, goods answering to the description in heading 84.86 are to be classified in that heading and in no other heading of the Nomenclature.”

Note 2 to Section XVI

29. The references to heading 84.85 in Notes 2 (a) and (c) to Section XVI should be replaced by a reference to heading 84.87, following the renumbering of current heading 84.85.

30. It should be noted that the **EC** had suggested inserting a reference to “accessories” in Note 2 to Section XVI, thus considering the classification of these articles in the same way as parts of the machines of that Section. However, this proposal has been dropped from the current review cycle. The **United States**, in its proposal, had suggested the inclusion of accessories in new heading 84.86 (see proposed new Note 9 to Chapter 84 above). At the Sub-Committee’s 27th Session, the **US** Delegate further clarified that this reference had been incorporated with a view to avoiding disputes on the question whether a particular commodity was to be regarded as a part or as an accessory.

31. The Secretariat has some misgivings about the appropriateness of this proposal. First, the scope of the term “accessories” is not defined and it might, therefore, be difficult to establish a demarcation line between such articles which should be considered to be an accessory and those which could not. Second, the Secretariat wonders whether the classification of accessories in new heading 84.86 should also take priority over the classification elsewhere in the Nomenclature, given the fact that both proponents suggested

such provisions for the machines of new heading 84.86 (see paragraphs 14 and further above).

32. In any case, if the Sub-Committee agrees to provide for accessories of semiconductor and flat panel display manufacturing equipment in new heading 84.86, the Secretariat suggests inserting, after a semi-colon, a reference to that effect in the heading text, as follows : “accessories suitable for use solely or principally with the foregoing machines” (French : “accessoires reconnaissables comme étant exclusivement ou principalement destinés aux ces machines”. The Secretariat has inserted this text in square brackets in the Secretariat’s proposed alternative text for new heading 84.86 in the Annex to this document.

Notes 1 (b) and 1 (c) to Chapter 84 (US proposal)

33. At the 27th Session, the **United States** clarified that a number of specific parts and accessories for the machines of new heading 84.86 were made of ceramics or glass. It should be noted that with this proposed amendment, parts of ceramics or of glass, of the machines and apparatus of new heading 84.86, remain excluded from Chapter 84 if they are of a kind described in Notes 2 (a) and 2 (c) to Section XVI, but will be included in new heading 84.86 in other cases, i.e., on the basis of Note 2 (b) to Section XVI. Furthermore, if the reference to accessories is accepted in heading 84.86, such articles if of glass or of ceramics would also be included in that heading. It should also be noted that articles (be they apparatus or parts or accessories of apparatus) of vulcanised rubber, of leather or of textile material will continue to be excluded, by virtue of Notes 1 (a), 1 (b) and 1 (e) to Section XVI. The Secretariat has placed this proposal in square brackets, pending the outcome of the discussions.

Note 2 to Chapter 84 (US proposal)

34. The **United States** had proposed to insert a reference to proposed heading 84.86 in Note 2 to Chapter 84 with a view to ensuring the classification in heading 84.86 of machines and apparatus which answer to the text of that heading and at the same time to a description in one or other of the headings 84.25 to 84.80. The Secretariat had suggested a similar provision in paragraph 9 of Doc. NR0003E1 (i.e., adding the expression “or 84.86” after “headings 84.01 to 84.24”). However, as indicated in paragraph 10 of Doc. NR0381E1, the Secretariat considers that the amended wording might create a conflict between classification in one of the headings 84.01 to 84.24 on the one hand, and heading 84.86 on the other. Moreover, since proposed new Note 9 to Chapter 84 (see paragraphs 14 and further) would prioritise classification in heading 84.86, it appears that there will no longer be a need to specify it in Note 2 to Chapter 84. However, if the Sub-Committee considers that it would be appropriate to have a reference to new heading 84.86 in Note 2, the Secretariat suggests, as an alternative, the following text for the first paragraph (the amended parts have been underlined) :

“Subject to the operation of Note 3 to Section XVI and subject to Note 9 to this Chapter, a machine or appliance which answers to a description in one or more of the headings 84.01 to 84.24, or to the text of heading 84.86 and at the same time to a description in one or other of the headings 84.25 to 84.80 is to be classified under the appropriate heading of the former group or under heading 84.86, as the case may be, and not the latter.”

Subheadings 8456.9 to 8456.99

35. The content of subheading 8456.91 will be transferred to new heading 84.86. Consequently, this subheading should be deleted and the structure of subheading 8456.9 should be revised, as suggested by the **United States**.

Structured nomenclature of proposed heading 84.86

36. The Secretariat would be in favour of the structure proposed by the **EC**, because of its simplicity. The **United States** has not indicated why a detailed structured nomenclature, as suggested in its submission, would be necessary. In its alternative proposal, the Secretariat has inserted a reference to “electronic integrated circuits” in proposed subheading 8486.20 to reflect the wording of the heading text and to be more precise.
37. If the Sub-Committee opts for the **US** proposal, the following should be considered. The text of proposed subheading 8486.42 could read “Step and repeat aligners” (emphasis added), which is the text of current subheading 9010.42. The Secretariat has placed this term and the one proposed by the **United States** in square brackets in the **US** proposal in the Annex (English version only).
38. As explained in paragraph 31 above, the Secretariat is not in favour of classifying accessories in this heading. In its alternative proposal it has, therefore, placed this reference in square brackets in subheading 8486.90.

Explanatory Note to heading 84.86

39. The **EC** has presented a draft Explanatory Note to new heading 84.86 (see Annex II to Doc. NR0381E1). The Secretariat, while recognising that amendments to the Explanatory Notes are certainly needed, would suggest refraining from drafting it, pending the outcome of the discussions on the scope of the heading. The appropriate amendments to the Explanatory Notes could be drafted once the Sub-Committee has agreed on the scope of the heading. Nevertheless, the Secretariat considers the submission to be very helpful when discussing the scope of the new heading.

Note 1 (c) to Chapter 85 (US** proposal)**

40. Since there is no proposal to create a new heading 90.33 covering inspecting and verifying equipment, the Secretariat suggests deleting the reference to that heading from the proposed new Note 1 (c) to Chapter 90. The Secretariat also suggests referring to “machines and apparatus”, this being the wording of proposed new heading 84.86. An alternative text is reproduced in the Annex to this document.

Subheadings 8543.1 to 8543.19

41. The content of subheading 8543.11 will be transferred to new heading 84.86. Consequently, this subheading should be deleted and the structure of subheading 8543.1 should be revised. It should be noted, however, that code number 8543.10 was in use until 1996. However, given the current structure, it will be difficult to use another code number than 8543.10 if the one dash subheading is to be retained. Reported world trade volumes for the years 1997 to 2000 under current subheading 8543.19 were :

- 1997 : 65,872,000 USD
- 1998 : 87,106,000 USD
- 1999 : 74,573,000 USD
- 2000 : 83,075,000 USD.

Note 1 (g) to Chapter 90

42. The **United States** suggests inserting a reference to “articles of heading 84.86” in Note 1 (g) to Chapter 90. The Secretariat, although not convinced of the need for this inclusion, given the wording of proposed new Note 9 to Chapter 84, would prefer to use the terms of the heading concerned, i.e., “machines and apparatus of heading 84.86”. The alternative text is reproduced in the Annex to this document.

Note 2 (a) to Chapter 90

43. The amendment proposed by the **United States** is a consequence of renumbering current heading 84.85.

Heading 90.10 and subheadings 9010.4 to 9010.49

44. The amendments to the heading and to the structured nomenclature are the result of transferring the apparatus at issue to new heading 84.86.

III. CONCLUSION

45. The Sub-Committee is invited to examine the **US** and **EC** proposals to amend the Nomenclature, as set out in the Annex to this document, taking into account the comments of the Secretariat in paragraphs 10 to 44 above and its alternative proposals, and, in particular, to express its views on the following issues :

- (a) The wording of proposed heading 84.86 (see paragraph 13 above);
- (b) Whether a priority Note should be placed at the Section or at the Chapter level (see paragraphs 14 and 15 above) and how this Note should delineate the scope of new heading 84.86 (see paragraphs 17 to 28 above);
- (c) Whether or not the definition of machines and apparatus should include a reference to parts and accessories (see paragraph 20 above);
- (d) The scope of the expressions “semiconductor devices” (see paragraphs 21 to 23 above) and “flat panel displays” (see paragraphs 24 to 26 above);
- (e) Whether or not proposed heading 84.86 should cover parts and accessories of ceramic material or of glass (see paragraph 33 above);
- (f) Whether Note 2 to Chapter 84 should be amended and if so, how (see paragraph 34 above); and
- (g) The wording of proposed Note 1 (c) to Chapter 85 (see paragraph 40 above) and Note 1 (g) to Chapter 90 (see paragraph 42 above).

46. The proposed amendments, together with the proposed alternatives and texts in square brackets are set out in the Annex to this document.

* * *