



WORLD CUSTOMS ORGANIZATION
ORGANISATION MONDIALE DES DOUANES

Established in 1952 as the Customs Co-operation Council
Créée en 1952 sous le nom de Conseil de coopération douanière

HARMONIZED SYSTEM
COMMITTEE

-
24th Session

-

NC0124E1
(+ Annexes I to VI)
O. Eng.

H9-3

Brussels, 30 September 1999.

CLASSIFICATION OF "ENW-9500-F FAST ETHERNET ADAPTER"

IN SUBHEADING 8471.80 :

RESERVATION BY THE EUROPEAN COMMUNITY

(Item VII.5 on Agenda)

Reference Documents :

42.047 (HSC/21)
42.466, (HSC/22)
42.750, Annex G/24 (HSC/22 - Report)

I. BACKGROUND

1. At its 22nd Session, the Committee decided, by 18 votes to 5 (heading 84.73), to classify the "ENW-9500-F Fast Ethernet Adapter" in subheading 8471.80 as other units of automatic data processing machines. For ease of reference, the precise description of the "ENW-9500-F Fast Ethernet Adapter" is given in Annex VI to this document.
2. The EC notified the Secretary General of its request that the decision of the Committee to classify the apparatus at issue in HS subheading 8471.80, be referred to the Council under the provisions of paragraph 2 of Article 8 of the Harmonized System Convention.
3. On 2 August 1999, the Secretariat received a Note from the EC in support of the reservation it had entered in respect of the decision at the Harmonized System Committee's 22nd Session to classify the apparatus at issue in heading 84.71. This note is reproduced below.

File No. 2618

II. MEMORANDUM FROM THE EC

- "Subject:**
- Classification of various items of networking equipment.
EC reservation
 - Dividing line between "units" and "parts", definition of the term "telecommunication" in heading 85.17 vis-a-vis heading 84.71 and classification of the "ENW-9500-F Fast Ethernet Adapter"
 - EC reservation (Article 8.2 of the HS Convention)

Ref. Doc. 42.750, Annexes G/5 and G/24

Background

4. The Harmonized System Committee decided to classify the products referred to in paragraph 2 of Doc. 40.140, together with the "Ethernet" adapter, in subheading 8471.80 on the basis that they constitute units of data processing machines, by application of Note 5(B) of Chapter 84 and GIR 1 of the Harmonized System. The HS Committee considered that these units perform a function solely of data processing of heading 84.71 and not a telecommunication function of heading 85.17.
5. In its letter of 26th January 1999, the EC asked the Secretary General of the WCO to refer the HS Committee decision to the Council in accordance with Article 8.2 of the HS Convention.
6. In its letter of 4th March 1999, the EC informed the Secretary General that the European Court of Justice is to decide in the coming months on various questions relating to the classification of LAN products in the Combined Nomenclature (CN) and on the interpretation of Note 5(B) and (E) of Chapter 84 of the CN. The Court's decision will be binding on the EC in so far as the legal texts remain unchanged. This should be considered as one of the essential reasons for the Community's reservation.
7. As noted by the Secretariat in paragraph 3 of document NC0005EI, "the Committee did not take any decision concerning the definition of the term 'telecommunication' of heading 85.17 vis-a-vis heading 84.71 nor the dividing line between 'units' and 'parts'." Clarification of the term "telecommunication" would seem to be essential in determining whether Note 5(E) of Chapter 84 of the HS should be taken into account, as the EC believes, in classifying the products in question. At its 19th session the HS Committee asked the Secretariat to undertake a study of the matter (Doc 41.100, Annex H/8, paragraph 5). An EC contribution to this study was published in Doc. 42.430.
8. The EC and its 15 Member States (comprising 16 Contracting Parties to the HS Convention) have difficulty in applying the decision of the HS Committee given the legal and therefore binding nature of the current HS nomenclature.
9. The first part of heading 84.71 is limited exclusively to automatic data processing machines and units thereof. To eliminate all doubt, the scope of this part of the legal text was specified in a legal note.

10. Legal Note 5 to Chapter 84 states that heading 84.71 covers :
- (1) automatic data processing machines if they fulfil the conditions set out in (A); and
 - (2) automatic data processing machines in the form of systems consisting of a variable number of separate units.
11. The definition could have been left at that. However, it was further specified what should be understood by "unit" of a computer. Four requirements for units are laid down in Note 5 (B):
- (1) They must be in line with the requirements of Note 5(E);
 - (2) They must be of a kind solely or principally used in an automatic data processing system;
 - (3) They must be connectable to the central processing unit;
 - (4) They must be able to accept or deliver data in a form (codes or signals) which can be used by the system.
12. The EC considers that the apparatus in question does not fulfil the first of these conditions, which automatically excludes it from heading 84.71.
13. Note 5(E) of Chapter 84 states that "Machines performing a specific function other than data processing and incorporating or working in conjunction with an automatic data processing machine are to be classified in the headings appropriate to their respective functions or, failing that, in residual headings".
14. The HS Committee focused on whether the apparatus in question could be considered as telecommunication apparatus of heading 85.17. However, the first and most important question the Committee should answer is whether these units perform a specific function other than data processing.
15. If the Committee considers that the function of this apparatus (transmission of signals between the various components of a network) is different from that of data processing, it must :
- (1) automatically rule out classification in heading 84.71, and
 - (2) decide which HS heading is specific to this function or, failing that, the residual HS heading in which they can be classified.
16. In Docs. 40.140, 41.309 and 42.430, the Secretariat confined its comments to whether or not the apparatus in question performs a telecommunication function of heading 85.17. It considered that if it does not, it should fall in heading 84.71. The fact that the EC was also in favour of classifying the apparatus in heading 85.17 as telecommunication apparatus led the Committee to confine the vote to these two headings.

This apparatus performs a specific function other than data processing

17. The function performed by this apparatus is essentially data transmission and not data processing. Messages are exchanged between the various components of a network by adapting the form (or format) of the signal. In this way the apparatus converts signals to make transmission possible, but although it changes the form of the signals it does not alter

their content. Networking equipment enables information (data) to be transmitted and thus performs a communication function. This is a particular function which differs from data processing. "Communication" is covered by various headings in the Nomenclature.

18. All the comments made by the Secretariat in the documents referred to above aimed to show that the apparatus in question does not meet the criteria of telecommunication apparatus of heading 85.17 (telephony or telegraphy). However, the EC's understanding is that classification in heading 85.17 could have been accepted if the apparatus enables digital data to be transmitted by line telephony or line telegraphy. In any event, it goes without saying that the very function of data "transmission" must be considered a specific function different from data processing, regardless of whether it takes place by telephonic, electromagnetic or other means, whether it can use different protocols or whether it is covered in heading 85.17 or elsewhere.
19. The most important consideration is that the function of data transmission - a communication function - is not a data processing function, as the data remains unchanged. Machines designed for such communication therefore have a specific function and cannot be classified in heading 84.71 by application of Notes 5(B) (introductory paragraph) and 5(E). The apparatus in question should be classified in the heading appropriate to this function and, failing that, in a residual heading, but never in heading 84.71.
20. The commercial term "computer" is not used in the HS. The more exact term "automatic data processing machines" was preferred. Consequently, classification of the apparatus at issue in heading 84.71 would create a broader interpretation of the term "data processing", allowing inclusion not only of data processing but also of signal conversion, transmission, etc.
21. In paragraph 55 of Doc. 42.430 [Annex V to this document], the Secretariat states that the term "data processing" should not be interpreted in "such a restrictive manner". However, the original intention seems to have been to make heading 84.71 restrictive : by including a legal note which specifies the exact scope of the heading, by wording the heading "automatic data processing machines" and by avoiding use of the broader term "computer".
22. Finally, the EC can understand that part of the industry, which was consulted by the Secretariat, feels that from the industrial point of view this apparatus could be considered as units of computers, but naturally we are obliged to classify them in the light of the legal texts of the current HS. The EC would not be opposed to a study being undertaken with a view to amending the Nomenclature in the future if necessary, bringing it more into line with the current industrial situation.

Under what heading should the apparatus be classified ?

23. The EC considers that two headings must be considered : 85.17 and 85.43.

Heading 85.17

24. Given the largely common principles of digital and telegraphic communication, networking equipment was classified by the administrations in heading 85.17 even before the HS was amended in 1996. In that year the situation was clarified with the amendment of the wording of heading 85.17, which now contains the terms "telecommunication apparatus for ... digital line systems" (Doc. 42.430, paragraphs 33 to 36) [Annex I to this document].

25. In Doc. 40.140, paragraphs 8 to 14 [Annex II to this document], classification in heading 85.17 was ruled out on the basis of the Larousse Dictionary's definition of the term "telecommunication", which was interpreted to mean that telecommunication apparatus only operates by electromagnetic systems. The definition states that telecommunication consists of "the transfer of information by wire, radio engineering, optical or other electromagnetic systems". It is not certain that "or other electromagnetic systems" means that all telecommunication systems are electromagnetic. Digital data may also be transmitted by electromagnetic waves.
26. The concept of telecommunication is not absolutely clear-cut, but according to another definition already put forward (Doc. 41.100/H1)[Annex III to this document], it covers the transmission of texts, sounds, images or data in the form of electronic or electromagnetic signals or pulses. Means of transmission include telephone (by wire or optic cable), radio, television, microwaves and satellite. Data communication is thus the transmission of digital data by wire or radio.
27. The Secretariat study in Doc. 41.309, paragraphs 5 to 12 [Annex IV to this document], can by no means be taken to rule out classification of LAN products in heading 85.17. In paragraph 8 it is stressed that even the definition by the International Telecommunication Union does not clarify the meaning of the term "telecommunication" in heading 85.17 or the distinction between headings 85.17 and 84.71.
28. In paragraph 10 of that document, the Secretariat draws a distinction between private computer networks/LANs on the one hand and public telephone networks within the meaning of heading 85.17 on the other hand, on the basis of which it asserts that the distinguishing criterion for the purposes of classification of apparatus in heading 84.71 or heading 85.17 is whether the apparatus in question is to be linked to a private or local area network before the modem or other interface, or to the telephone network beyond such equipment.
29. The EC considers that the criterion of private/LAN network and public network does not exist in the HS, that it is difficult to establish its exact meaning and, above all, that it cannot be put forward as a criterion enabling a distinction to be made between headings 84.71 and 85.17, even if they can use different protocols. This is moreover confirmed by what is said in paragraph 11 of the same document, i.e., that making a distinction between telephone networks and computer networks might become difficult, as both types of apparatus use digital signals. This is a pertinent comment.

Heading 85.43

30. In paragraph 19 of Annex G/5 to Doc. 42.750 (Report of the 22nd Session), the Secretariat indicated that "though this term used in heading 85.17 was limited to the telephone or telegraph line system, the term used in the context of heading 85.43 was not limited in this manner." Heading 85.43 must be taken as the correct heading for the classification of this apparatus if the Committee considers that the function it performs goes beyond the current scope of heading 85.17, by application of Notes 5 (B) and (E) of Chapter 84.

Conclusion

31. The EC thus maintains that these cards, which are designed to link the computers of a network, do not perform a data processing function but rather a data transmission function and should be classified in :

- (1) Heading 85.17 (line telephony or line telegraphy... digital line systems) as the most specific heading, by application of GIR 1, confirmed by Notes 5(B) and (E) of Chapter 84; or failing that in
 - (2) Heading 85.43 (electrical machines and apparatus, having individual functions, not specified or included elsewhere) as a residual heading, in strict accordance with the above legal note.
32. The EC would like to draw the Committee's attention to the fact that the HS Committee's decision will set a precedent. Increasingly today a large number of machines of all types incorporate or work in conjunction with a data processing machine and must be classified in accordance with their specific function.
33. An interpretation of the term "data processing" so broad that it would allow the apparatus in question to be classified in heading 84.71 could result in the scope of this heading being extended to such an extent that other headings would be emptied, in spite of Note 5(B) and (E) of Chapter 84. This would necessitate the revision of certain decisions taken by the HS Committee in this area.
34. Finally, the EC would like to stress that the European Court of Justice is due to decide in the coming months on four different cases relating to the classification of "LAN" products in the Combined Nomenclature, as well as on the interpretation of Notes 5 (B) and (E) of Chapter 84 of this nomenclature. The court's decision will be binding on the EC in so far as the legal texts remain unchanged."

III. SECRETARIAT COMMENTS

35. The Secretariat would first point out that the EC has put forward one document to cover both of its reservations under Agenda Items VII.1 and VII.5. In order to prevent confusion, the Secretariat has reproduced the EC's comments in both of the working documents.
36. The EC Note in support of its reservation reiterates the view that Note 5(E) to Chapter 84 is applicable to the product at issue. As a consequence, classification in heading 84.71 is ruled out, as the "ENW-9500-F Fast Ethernet Adapter" has a specific function other than data processing - that being a communications function. The EC considers that data transmission – a communications function – is not a data processing function, as the data remains unchanged. Accordingly, it is the view of the EC that this renders meaningless the question whether the communication takes place by telephonic, electromagnetic or other means, whether it can use different protocols or whether it is covered in heading 85.17 or elsewhere. Thus the EC concludes (paragraph 31 of this document) that the product should be classified in heading 85.17 or, failing that, residual heading 85.43.
37. The Secretariat remains of the view, as expressed in paragraph 55 of Doc. 42.430, that the term "data processing" should not be interpreted in a restrictive manner so as to cover only the function performed by a central processing unit (or processor). The Secretariat takes the view that apparatus which are designed to ensure interconnections of other ADP units within LAN systems according to special protocols, and which are not used for telephony or telegraphy, should remain classified in heading 84.71. Furthermore, Note 5 (B) to Chapter 84 allows for ADP systems. It would seem logical that apparatus that allow units of the system to be connected and for the system to function should also be classified with the system. In this connection, it should be noted that the Explanatory Note to

heading 84.71, page 1406, Item (4) reads as follows : "(4) **Control and adapter units** such as those to effect interconnection of the central processing unit to other digital data processing machines or to groups of input or output units which may comprise ...". This text supports the classification of the "ENW-9500-F Fast Ethernet Adapter" in question in heading 84.71. For ease of reference, the Secretariat has reproduced its comments from Doc. 42.430 in Annex V of this document.

IV. CONCLUSION

38. The Committee is invited to re-examine the LAN product in question, taking account of the arguments put forward by the EC and the Secretariat. The Committee is also invited to indicate what further action should be taken with regard to this matter.

*

* *

Extract from Doc. 42.430

33. Classification regulations have already been adopted for a number of network products. Classification regulations are rulings on how the goods should be classified in practice. Of course, they relate to products that have been specifically discussed; a product that differs from the product description in the regulation may be assigned a different classification. Products that differ only in technical design and construction from a product for which a classification regulation exists, but serve the same purpose, should be classified under the same heading as mentioned in the relevant classification regulation, to ensure that the law is consistent - insofar as their form and the scope of the heading permits, of course. In addition to Regulation (EEC) No 1638/94, which classifies certain LAN products under heading 85.17, there is also a ruling by the German Federal Finance Court (Bundesfinanzhof, ref- VII K 13/90) which classifies such products under heading 85.17.
34. As of 1 January 1996, the words "including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems" were added to heading 85.17. The use of the word "including" does not extend, but clarifies, the scope of the heading - the HS amendment was not intended to enlarge it. Therefore, the 1996 HS amendment did not extend the scope of the heading as formulated in the 1994 Nomenclature. According to some representatives from the automation sector, local networks cannot be regarded as telephone or telegraph systems. Upon initial consideration that may appear to be correct, because they use equipment other than the familiar telephones, switchboards, telex and fax equipment and they employ phenomena other than the usual ones (e.g. the transfer of voice, text or image). Upon closer inspection, however, there are substantial similarities, with regard to :

Telephone systems :

35. Communication via telephone lines takes place by means of transfer of an analogue audio signal, while communication in and between computers normally takes place by use of digital signals. Nonetheless, computers can communicate via a telephone line using a modulator/demodulator (modem). The modem is capable of converting digital signals (on/off pulses) into analogue signals (on/off tones). It may require an intermediate stage (signal conversion), but communication is nonetheless via line telephony.

Telegraph systems :

36. The similarities between networks and telegraph systems (transmitting text and pictures) are even more striking. Historically, we can trace their development from Morse code via Baudot code (used in telex) to American Standard Code of Information Exchange (ASCII, for telex and computers) and Extended Binary Coded Decimal Interchange Code (EBCDIC, for IBM computers). Each new code has increased the number of possible combinations, leading to ever more efficient modes of communication. Morse code allowed 40 different characters to be transmitted. Baudot expanded this to 64, ASCII to 128 and EBCDIC to 256. The similarity in the construction of the signal used in these codes, illustrated below, is striking.

Capital letter			
	A	B	C
MORSE	l nnn	nnn l l l	nnn l nnn l
BAUDOT	l l m m m 16 8 4 2 1 16+8 = 24	l m m l l 16 8 4 2 1 16+ 2 +1= 19	m l l l m 16 8 4 2 1 8+4+2 = 14
ASCII	l m m m m l m 64 32 16 8 4 2 1 64+ 1= 65	l m m m m l m 64 32 16 8 4 2 1 64+ 2 = 66	l m m m m l l 64 32 16 8 4 2 1 64+ 2 + 1= 67
EBCDIC	l l m m m m l m 128 64 32 16 8 4 2 1 128+64+1 = 193	l l m m m m l m 128 64 32 16 8 4 2 1 128+64+2 = 194	l l m m m m l l 128 64 32 16 8 4 2 1 128+64+2+1 = 195

l = Bit on
m = Bit off
nnn = Long bit on

Three of the four codes shown above use bit on (current on=1), bit off (current off=0). Morse code differs only in that the current impulse is short or long rather than off or on (0 or 1). In fact, all of them use discrete binary values. This binary or digital system using noughts and ones (digital data) is used for communication in and between computers. This demonstrates that digital communications (and ASCII in particular) is an extension of the Morse and Baudot codes, which together formed the basis of telegraphy.

*

* *

Extract from Doc. 40.140

8. To facilitate examination of this question, the Secretariat has consulted the French dictionary Grand Dictionnaire encyclopédique Larousse, which contains the following definition of the term "télécommunication" (telecommunication) :

TELECOMMUNICATION : "Transfer of information by wire or line, radio-electricity, optical means or other electromagnetic systems" (translation).
9. It is clear from the foregoing that the term "telecommunication" refers to the transfer of information by electromagnetic systems. The question is therefore whether the equipment at issue transfers information electromagnetically.
10. In this connection, the Secretariat notes that the apparatus described in paragraphs 2 (a) to 2 (c) above use digital signals which, insofar as the Secretariat is aware, are not electromagnetic signals. Moreover, these apparatus cannot transmit data to distant terminals without the help of modems.
11. However, the optical fibre converter does transmit light waves which are indeed electromagnetic waves whose frequency (in hertz) fall between 3.85×10^{14} and 7.5×10^{14} , according to the Grand dictionnaire encyclopédique Larousse. The signals emitted by these apparatus can be transmitted long distances over telephone lines.
12. By way of information, the inclusion of "telecommunication apparatus for digital line systems" in the text of heading 85.17 stems from a Swiss proposal sent to the Secretariat for the Review Sub-Committee's Second Session; that proposal was based on an optical-system apparatus for the public telecommunication of digital data. In other words, the proposal was not based on an apparatus of the type used in the networks currently at issue.
13. In the light of the foregoing, the Secretariat feels that heading 85.17 should be confined to apparatus for telecommunication over telephone lines, provided, however, that telecommunication constitutes the principal function of such apparatus.
14. Consequently, the Secretariat feels that the apparatuses in paragraphs 2 (a) to 2 (c) above are classifiable in subheading 8471.80, whereas the optical fibre converter falls in subheading 8517.50.

*

* *

Extract from Doc. 41.100/H1

DECISIONS OF THE HARMONIZED SYSTEM COMMITTEE

1. The Committee examined the classification of various items of networking equipment on the basis of Docs. 40.140, 40.695 and 40.926.
2. The Delegate of the EC agreed that these were units which ensured communication between the various units of a data processing system, and that there were two possible classifications, namely in heading 84.71 or in heading 85.17. He also drew the Committee's attention to paragraph 7 of Doc. 40.140, where it was stated that, with effect from 1 January 1996, heading 85.17 covered telecommunication apparatus for digital line systems.
3. He agreed with the Secretariat that the optical fibre converter was classifiable in heading 85.17, but added that the other units also fell in that heading. Heading 84.71 was a residual heading for automatic data processing machines insofar as its scope was determined, inter alia, by Note 5 to Chapter 84, particularly Note 5 (B) subject to Note 5 (E). The latter excluded from heading 84.71 all machines performing a specific function other than data processing. The question was, therefore, whether these items of networking equipment did, in fact, have a specific function other than data processing. In this respect, a network ensured communication between the various units : consequently, the networking equipment at issue did have a specific function, namely digital telecommunication. That function was mentioned in the text of heading 85.17, which covered not only apparatus for telephony or telegraphy, but also other telecommunication apparatus such as those used for digital line systems. He emphasized that the apparatus at issue performed the function of transmitting signals and that this transmission corresponded to the definition of telecommunication. There were more appropriate definitions than the one taken from the French dictionary Grand dictionnaire encyclopédique Larousse which, moreover, the Secretariat seemed to have interpreted too restrictively. He cited the definition provided by a specialized reference work which stated that telecommunication covered the transmission of texts, sounds, images or data in the form of electronic or electromagnetic signals or pulses.

*

* *

Extract from Doc. 41.309

(1) Scope of the term “telecommunication” within the meaning of heading 85.17

5. From the past discussions on the classification of networking equipment, the Secretariat considers that, broadly speaking, three ideas have so far been put forward :
 - (1) The term “telecommunication” means the transfer of information by electromagnetic systems (see Doc. 40.140, paragraph 9);
 - (2) The term “telecommunication” covers transmission of texts, sounds, images or data in the form of electronic or electromagnetic signals or pulses (see Doc. 41.100/H/1, paragraph 3);
 - (3) Heading 85.17 covers telecommunication apparatus for telephony systems. An ADP system, including a LAN (Local Area Network), is not a telephony system (see Doc. 41.000/H/1, paragraph 6).
6. On 29 May 1997, the Secretariat received, from the UIT (Union Internationale des Télécommunications), the following definition of telecommunication (UIT Constitution 1012) :

“Any transmission, emission or reception of signs, signals, writing, images and sounds or intelligence of any nature by wire, radio, optical or other electromagnetic systems”.
7. It could be argued that this definition can be construed as supporting the first idea since it employs the expression “other electromagnetic systems”. However, that idea has met with objections from several administrations (see Docs. 40.695, 40.926 and 41.100/H/1, paragraph 5) and has not so far received any explicit support from HSC members.
8. The definition in subparagraph 5 (2) above seems to be more or less in line with definitions found in technical literature (see, for example, Annex II hereto). However, this definition does not clarify the meaning of “telecommunication” within the meaning of heading 85.17 or with regard to the distinction between heading 85.17 and heading 84.71.
9. Heading 85.17 reads “electrical apparatus for line telephony or line telegraphy, including ...telecommunication apparatus for carrier current line systems or for digital line systems; ...”. Thus, it is clear that “telecommunication”, in the sense of heading 85.17, should be interpreted as being limited to that for line telephony or line telegraphy. Accordingly, the Secretariat takes the view that the term “telecommunication” in the context of heading 85.17 should be interpreted in a more restrictive sense, i.e. to mean the transfer or transmission of information in the form of signals or pulses in a line telephony or line telegraphy system.
10. It is the Secretariat’s understanding that a private computer network or a local area network (LAN) is not included in the “line telephony or line telegraphy” category. The Secretariat it also understands that what distinguishes between these two categories of network (i.e. private computer network/LAN, on the one hand, and a public telephone

network within the meaning of heading 85.17, on the other hand) is a modem or other boundary or transitional equipment(*). In other words, the distinguishing criterion for the purposes of the classification of apparatus in one of these headings is whether the apparatus in question is to be linked to the private or local area network before the modem or other boundary or transitional equipment, or to the telephone network beyond such equipment.

11. The Secretariat is, of course, aware that the ISDN (Integrated Services Digital Network), which reportedly is becoming a world wide digital communication network, is now evolving from existing telephone services to replace current telephones lines. Thus, there is a risk that it might become difficult to make the distinction between headings 84.71 (computers, etc.) and 85.17 (telephone apparatus, etc.), because the apparatus of both headings use digital signals.
12. Consequently, the next question to be answered is how to make the distinction between the two categories of the apparatus of these headings. In this connection, it was pointed out at the HSC's 19th Session that "these headings [84.71 and 85.17] provided for apparatus of two different systems, both of which had specific protocols and designs for the systems (see Doc. 41.100/H/1, paragraph 10). If this is the case, the distinction can be made by reference to specific protocols and designs which the apparatus in question uses. The Secretariat understands that the LAN uses protocols and designs which are different from those used in the "telephone network". The technical information available to the Secretariat seems to indicate that such distinction is possible to make.

*

* *

Extract from Doc. 42.430

53. Concerning the Notes and headings mentioned in paragraph 6 above, the Secretariat feels that the problem at issue can be solved by reference to Notes 5 (B) and (E) to Chapter 84 and headings 84.71 and 85.17. It should be noted that (with the possible exception of central processing units) Note 5 (A) to Chapter 84 does not define the different types of units of ADP machines and, therefore, the units at issue (which are not central processing units) need not fulfil the criteria set out in Note 5 (A) to Chapter 84. Furthermore, Note 4 to Section XVI does not seem to apply in this particular case because four separate articles do not constitute a functional unit nor does it apply to automatic data processing machines in the form of systems.
54. In paragraph 13 above, the EC makes a distinction between **signal** processing and **data** processing. The Explanatory Note to heading 84.71, page 1402, Part (I), first paragraph, reads that "Data processing consists in handling information of all kinds, in pre-established logical sequences and for a specific purpose or purposes". The "Computer Dictionary" (Microsoft Press) defines the term "data processing" as an umbrella term for the work performed by computers, more specifically, the systematic manipulation of data to transform it in some way in order to achieve a desired goal. However, no definition of "signal processing" is found in this dictionary. The Secretariat understands that in the actual case, binary formatted data must necessarily be converted into digital signals in order to be processed by the automated data processing machine. The Secretariat therefore wonders whether such a distinction is really valid.
55. Note 5 (E) to Chapter 84 excludes "machines performing a specific function other than data processing". The Secretariat understands that the term "data processing" should not be interpreted in such a restrictive manner as to cover the function performed only by a central processing unit (or processor). Display units, keyboards, storage units, X-Y co-ordinate input devices, printers and control/adaptor units, which contribute to, and perform part of, the overall data processing function of an ADP system, are classified in heading 84.71 as ADP units provided that they meet the requirements in Note 5 (B) to Chapter 84.
56. The Secretariat understands that the LAN products in question satisfy the requirements of Note 5 (B) to Chapter 84 and contribute to, and perform part of, the overall data processing function of an ADP system when linked to other units of the system in local area network.
57. In paragraph 37, the EC concludes that "largely on account of the common ground between digital communications and telegraph systems, the network products in question were classified under heading 85.17 even prior to 1996; from 1 January 1966, the position was clarified and formalized with the amendment". In this connection, the Secretariat has to point out that heading 85.17 covers "electrical apparatus for line telephony or line telegraphy, including ... telecommunication apparatus for carrier-current line systems or for digital line systems; ...".
58. The LAN is certainly not part of "line telephony". It is separated from telephone line network (or system) by modem or DSU. As regards "line telegraphy", the Explanatory Note to heading 85.17 refers to traditional telegraphic transmitters/receivers, picture telegraphic transmitters, special "telecomposing" apparatus and facsimile machines. The LAN equipment is certainly not machines used in this context (i.e., "line telegraphy").

The Secretariat therefore finds it difficult to justify its classification in heading 85.17 by analogy with apparatus for line telegraphy. Similarity is not legally sufficient to justify classification in heading 85.17.

59. The Secretariat takes the view that apparatus which are designed to ensure interconnections of other ADP units within LAN systems according to special protocols, which are not used for telephony or telegraphy, should remain classified in heading 84.71. In this connection it should be noted that the Explanatory Note to heading 84.71, page 1046, Item (4) reads as follows : "(4) **Control and adapter units** such as those to effect interconnection of central processing unit to other digital data processing machines or to groups of input or output units which may comprise". This text supports the classification of the LAN products in question in heading 84.71. Thus, it seems clear that, if the Committee wishes to exclude the LAN products in question from heading 84.71, this part of the Explanatory Note will have to be amended.

*

* *

Extract from Doc. 40.464E, paragraph 2

The “ENW-9500-F Fast Ethernet Adapter” consists of a slot-in card comprising essentially a printed circuit on which are mounted various electronic components. It is not placed in housing or presented in a “drawer”. However, the adapter is designed to be inserted as an integral part in an automatic data processing machine in order to connect the latter to other units in an Ethernet network. Once installed, it enables digital signals to be transmitted in the Ethernet network
