

F. No. 528/43/2017- STO (TU)

Government of India

Ministry of Finance

Department of Revenue

Central Board of Excise & Customs

Room No. 229-A, North Block New Delhi,

15<sup>th</sup> January, 2018

To

All Pr. Chief Commissioners/Chief Commissioners of Customs/Customs (Preventive)  
All Pr. Chief Commissioners /Chief Commissioners of Customs and Central Excise  
All Pr. Commissioners/Commissioners of Customs/Customs (Preventive)/Customs and Central  
Excise

Madam / Sir,

**Subject: Classification of Telecommunication Antenna used at Base Transceiver Station/NodeB/eNodeB - reg.**

Board has received references regarding the classification of Telecommunication Antenna which are used at Base Transceiver Station/NodeB/eNodeB in wireless or cellular networks. A doubt has been expressed whether the said goods are classifiable under CTH 8517 62 90, 8517 69 90 or CTH 8517 70 90.

2. The issue has been examined by Board and in this regard it is informed that:

i) In a wired communication system, transmitter as well as receiver is connected by a wired channel and information is transmitted through that channel. However, in a wireless communication, available physical channel for communication is free-space. The information can travel only in the electromagnetic waveform. Therefore, in a radio/wireless communication system, the information at source is modulated and amplified in the transmitter and then passed on to the transmit antenna via a transmission line. The antenna radiates the information in the form of an electromagnetic wave in an efficient and desired manner to the destination, where the information is picked up by the receive antenna and passed on to the receiver via transmission line. The signal is demodulated and the original message is then recovered at the receiver. Thus, wireless communication gets established.

Therefore, antenna is an essential device of a wireless communication system, which can generate electromagnetic waves from currents and voltages and which can convert electromagnetic waves to currents and voltages when these waves impinge on it. In technical language, the antenna is a device that transforms time varying electrical signals (which are in the forms of voltages/current) into electromagnetic waves at transmit antenna and the electromagnetic waves induces voltage/current at receive antenna. Further, the antenna for wireless communication works as transmit antenna as well as receive antenna.



ii) The basic issue to decide for the classification of the Telecommunication Antenna is, whether it is a part of the device/machine/apparatus of heading 8517 and classifiable under CTH 8517 70 90 or it is a telecommunication apparatus classifiable under any other heading of heading 8517.

iii) The classification of parts of the goods of Chapter 85 is governed by rules enumerated in section Note 2 of section XVI read with general Explanatory Notes to this Section Note. According to rule (a), parts which are goods included in any of the headings of Chapter 84 or 85, are in all cases to be classified in their respective headings. In other words, the parts which in themselves constitute an article covered by a heading of this section, in all cases are to be classified in their own appropriate heading even if specially designed to work as part of a specific machine. Therefore, the goods under consideration would fall under CTH 8517 70 90 as a part of the machine/apparatus classifiable under CTH 8517, only in the situation when it is not covered by any other heading of the section.

iv) However, as discussed above, the telecommunication antenna being a complete device with a specified function i.e. conversion of electrical signals into electromagnetic waves and vice-versa in a wireless communication system, is appropriately covered by the single dash heading “- *Other apparatus for transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network):*” of heading 8517 as an ‘transmitting and receiving apparatus for radio-telephony’. Further, at double dash level, it is squarely covered by the heading “8517 62 - - *Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus:*”

v) In view of above and by application of General Rules for Interpretation 1 & 6, the Antenna used at Base Transceiver Station/NodeB/eNodeB in a wireless telecommunication network, merits classification under CTH 8517 62 90.

3. Difficulty faced, if any, may be brought to the notice of the Board.

Yours faithfully,



(Piyush Bhardwaj)  
STO, TU