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September 19, 2022

Shri R K Pathak  
DDG (IC)  
Department of Telecommunications

**Subject: Request for confirming Technical Classification of Routers enabling Customs Field officials to assess correct duty structure or exemption**

Respected Sir,

**Greetings from MAIT!**

This bears reference to our meeting with **Shri Sandeep Kumar, Member, CBIC dated September 5, 2022**, regarding Classification of Routers where he had suggested us to work with DOT on Technical Classification of Routers and eliminating any ambiguities pertaining to the technical aspects basis which Customs shall also be clear on imposition of duties/exemptions on Routers.

Hence, basis that discussion, MAIT had worked with the industry and prepared a detailed technical document with photographs, description of technology, functionality and HSN Classification under which the product falls under.

The purpose of this technical document is to apprise DOT on various types of routers being imported/manufactured in India, technologies used, and functioning which we believe shall help DOT in the accurate classification. **This further may be shared by DOT with CBIC after incorporating its comments to formulate an official document and may be treated as a single stop reference document for Customs Field officials to identify and assess correct duty structure/exemption corresponding to the product being imported.**

Sir, this issue is critical as there are investigations being conducted by DRI, which are ongoing and, in some cases, have led to issuance of show cause notices, to several firms which are importing/manufacturing products like 4G LTE Router / 4G LTE MiFi Router, ONU/ONT Router, Wireless Router, and ADSL + Modem. In this regard, we have already written to Shri Tarun Bajaj, IAS, Secretary-Revenue with a copy to Shri Vivek Johri, IRS, Chairman, CBIC dated 12<sup>th</sup> August 2022 (**copy enclosed**).

Hence, **we request you to kindly have a look at the attached Technical Document and confirm industry's understanding on Routers to CBIC**




Look forward to your support.

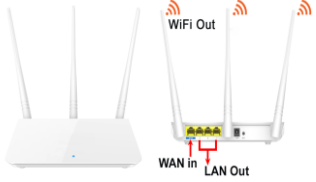

With regards,



Col. AA Jafri, Retd.  
Dy. COO  
(Acting Director General - MAIT)

CC: Shri Sandeep Kumar, Member (Tax Policy) - CBIC, Ministry of Finance  
CC: Ms. Limatula Yaden, Jt. Secretary (TRU II) – CBIC, Ministry of Finance  
CC: Shri Rakesh Dahiya, Deputy Secretary (TRU I) – CBIC, Ministry of Finance  
CC: Shri Vinay Kumar Nayak, Technical Officer (TRU) – CBIC, Ministry of Finance

**Types of Routers being Imported and their Technical Specifications**

<b>Product Type &amp; description</b>	<b>Description of Technology layer</b>	<b>Function</b>	<b>Photograph</b>	<b>Classification</b>	<b>MAIT Recommendation</b>
<b>Basic Router</b>	No Wi-Fi or LTE	Connect multiple sites. The internal network connectivity is provided by other device such as a dedicated wireless access points. For Lease line , Broad band/ MPLS link : we can connect ethernet cable directly to router		85176290	<b>MAIT Recommendation:</b> Should be Exempted  <b>Rationale:</b> It is under ITA-1
<b>Basic Router with Wi-Fi</b>	Old technology with inbuilt MIMO. <ul style="list-style-type: none"> <li>• not using the Wi-Fi even if we sell.</li> <li>• External access point is sold for Wi-Fi</li> </ul>	Connect multiple sites. The internal network connectivity is provided by other device such as a dedicated wireless access point. For Lease line, Broad band/ MPLS link : we can connect ethernet cable directly to router		85176290	<b>MAIT Recommendation:</b> Should be eligible for exemption.  <b>Rationale</b> The Router has old technology WIFI with MIMO technology. External device such as access point is needed for WIFI capability
<b>SD wan with integrated LTE</b>	9004 LTE P/N R3V90A	Connect multiple sites. Put a 4G sim and use it for connectivity.		85176290	<b>MAIT Recommendation</b> Should be exempted <b>Rationale: -</b>  The functionality is still Router

Product Type & description	Description of Technology layer	Function	Photograph	Classification	MAIT Recommendation
<b>Single Band Router</b>	Routers operate on the third layer (Network Layer) of the OSI Model (Open Systems Interconnection)  <u>Interface -</u> <u>Input</u> <ul style="list-style-type: none"> <li>1 Fast Ethernet WAN Port on RJ45 Cable</li> </ul> <u>Output –</u> <ul style="list-style-type: none"> <li>3 Fast Ethernet LAN Port on RJ45 Cable</li> <li>Wi-Fi with MIMO Antenna</li> </ul>	Single band Router is designed to setup more easily for the home user. It complies with IEEE802.11b/g/n, delivers wireless speeds of up to 300 Mbps.		85176290	<b>MAIT Recommendation</b> Should be eligible for exemption.  <b>Rationale: -</b> MIMO is a technology used to enhance performance of the product. Its use in a product does not result in product being defined as MIMO product. As long as a device continues to offer the router functionality, the addition of Wi-Fi MIMO does not change the device classification. Product will continue to remain a Router which is primary function of the product.  MIMO (multiple input, multiple output) is an antenna technology for wireless communications in which multiple antennas are used at both the source (transmitter) and the destination (receiver). The antennas at each end of the communications circuit are combined to minimize errors, optimize data speed and improve the capacity of radio transmissions by enabling data to travel over many signal paths at the same time. MIMO creates a more stable connection and less congestion.
<b>Dual Band Router</b>	Routers operate on the third layer (Network Layer) of the OSI Model (Open Systems Interconnection)  <u>Interface -</u> <u>Input</u> <ul style="list-style-type: none"> <li>1 Fast / Giga Ethernet WAN Port on RJ45 Cable</li> </ul> <u>Output –</u> <ul style="list-style-type: none"> <li>3/4 Fast/Giga Ethernet LAN Port on RJ45 Cable</li> <li>Wi-Fi with MIMO Antenna</li> </ul>	Dual-band routers support both the 2.4 GHz and the 5 GHz frequencies, It complies with IEEE802.11b/g/n and IEEE802.11ac standards. Dual-band router provide faster speed and flexibility helps avoid connection issues or interferences and offers stability.		85176290	These Routers are being imported availing benefit of exemption for Routers under Sr No 13N, Notification No. 24/205-Customs dated 1st March 2005 and amended via Notification No. 36/2019-Customs dated 30th December 2019.

Product Type & description	Description of Technology layer	Function	Photograph	Classification	MAIT Recommendation
<b>ADSL/VDSL Modem Router</b>	Routers operate on the third layer (Network Layer) of the OSI Model (Open Systems Interconnection)  <u>Interface - Input</u> <ul style="list-style-type: none"> <li>1 WAN Port (RJ-11 Cable)</li> </ul> <u>Output –</u> <ul style="list-style-type: none"> <li>4 Fast Ethernet LAN Port on RJ45 Cable</li> <li>Wi-Fi with MIMO Antenna</li> </ul>	ADSL / VDSL modem router refers to asymmetric digital subscriber line or Very high-speed digital subscriber line technology that provide faster data transmission. These Modem Routers uses telephone signal to provide data transmission.		85176290	<b>MAIT Recommendation</b> Should be eligible for exemption.  <b>Rationale: -</b> MIMO is a technology used to enhance performance of the product. Its use in a product does not result in product being defined as MIMO product. As long as a device continues to offer the router functionality, the addition of Wi-Fi MIMO does not change the device classification. Product will continue to remain a Router which is primary function of the product.  MIMO (multiple input, multiple output) is an antenna technology for wireless communications in which multiple antennas are used at both the source (transmitter) and the destination (receiver). The antennas at each end of the communications circuit are combined to minimize errors, optimize data speed and improve the capacity of radio transmissions by enabling data to travel over many signal paths at the same time. MIMO creates a more stable connection and less congestion.  These Routers are being imported availing benefit of exemption for Routers under Sr No 13N, Notification No. 24/205-Customs dated 1st March 2005 and amended via Notification No. 36/2019-Customs dated 30th December 2019.
<b>Mesh Router</b>	Routers operate on the third layer (Network Layer) of the OSI Model (Open Systems Interconnection)  <u>Interface - Input</u> <ul style="list-style-type: none"> <li>1 Fast / Giga Ethernet WAN Port on RJ45 Cable</li> </ul> <u>Output –</u> <ul style="list-style-type: none"> <li>1/2 Fast/Giga Ethernet LAN Port on RJ45 Cable</li> <li>Wi-Fi with MIMO Antenna</li> </ul>	A mesh Wi-Fi router system joins two or more devices together to create and share a single and seamless Wi-Fi network that can be expanded to cover larger areas. With a mesh Wi-Fi router, one-unit acts as a router or base station and connects to WAN (Service provider) to get internet access. Other nodes act as Client AP, receiving internet access from the base unit and rebroadcasting it to nearby devices. This device comes set of two or three devices and are ideal for large homes and offices.		85176290	MIMO (multiple input, multiple output) is an antenna technology for wireless communications in which multiple antennas are used at both the source (transmitter) and the destination (receiver). The antennas at each end of the communications circuit are combined to minimize errors, optimize data speed and improve the capacity of radio transmissions by enabling data to travel over many signal paths at the same time. MIMO creates a more stable connection and less congestion.  These Routers are being imported availing benefit of exemption for Routers under Sr No 13N, Notification No. 24/205-Customs dated 1st March 2005 and amended via Notification No. 36/2019-Customs dated 30th December 2019.