

Appendix-K

Local supplier meeting the Minimum Local Content notified in Table-A, B & C of Department of Telecommunications(DoT), Ministry of Communications order dated 29.08.2018 on 'Public Procurement (Preference to Make In India) Order 2017 –Notification of Telecom products, Services or Works – regarding “

Table-A

List of Telecom Products, Services and Works with PMI and LC

| Sl. No. | Telecom Products, Services and Works | Year | | Year | |
|---------|---|---------|----|-----------------|----|
| | | 2018-19 | | 2019-20 onwards | |
| | | PMI | LC | PMI | LC |
| 1. | Encryption/UTM platforms (TDM and IP) | 100 | 65 | 100 | 65 |
| 2. | IP/MPLS Core routers/ Edge/ Enterprise Router | 50 | 55 | 50 | 60 |
| 3. | Managed Leased line Network equipment | 50 | 55 | 50 | 60 |
| 4. | Ethernet Switches (L2 and L3), Hubs | 50 | 55 | 50 | 60 |
| 5. | IP based Soft Switches, IMS, Unified Communication Systems | 100 | 55 | 100 | 60 |
| 6. | Wireless/Wireline PABXs / IP PBX & / Media Gateways | 100 | 65 | 100 | 65 |
| 7. | CPE (including Wi-Fi Access points and Routers, Media Converters), 2G/3G/4G/LTE Modems, Leased-line Modems, NFV/SDN CPE | 100 | 45 | 100 | 50 |
| 8. | Set-Top Boxes | 50 | 50 | 50 | 55 |
| 9. | SDH/Carrier-Ethernet/MPLS- TP/ Packet Optical Transport equipment/ PTN/ OTN systems | 100 | 65 | 100 | 65 |
| 10. | DWDM/CWDM systems | 50 | 55 | 50 | 60 |
| 11. | GPON / XGS-PON, NG-PON2 equipment (including ONT and OLT) | 100 | 55 | 100 | 60 |
| 12. | Optical/SDH/PDH Cross Connects/ OTN Cross-connects and optical MUX,OADM | 100 | 55 | 100 | 60 |
| 13. | Small size 2 G/3 G GSM based Base Station Systems, with its various derivatives including rural & disaster response, Macro & Micro BTS, Small Cells, NIB, C-RAN BBU and RRH | 100 | 55 | 100 | 60 |
| 14. | 2 G/3 G GSM based Base Station Systems, with its various derivatives including rural & disaster response, Macro & Micro BTS, Small Cells, NIB, C-RAN BBU and RRH | 50 | 55 | 50 | 60 |
| 15. | Small Size LTE/LTE-R Based Mobile Systems, with its various derivatives including rural & disaster communications, Macro & Micro eNodeB, Small Cells, EPC, NIB C-RAN BBU and RRH ,LTE/LTE-R/4.5 G/ 5 G based broadband wireless access systems (eNodeB, gNB, EPC, etc.) | 50 | 55 | 50 | 60 |
| 16. | LTE/LTE-R Based Mobile Systems, with its various derivatives including rural & disaster communications, Macro & Micro eNode B, Small Cells, EPC, NIB C-RAN BBU and RRH ,LTE/LTE-R/4.5 G/ 5 G based broadband wireless access systems (eNodeB, gNB, EPC, etc.) | 50 | 45 | 50 | 50 |
| 17. | Wi-Fi based broadband wireless access systems (Including Access Point, Aggregation Block, Core Block), Integrated Broadband system | 50 | 50 | 50 | 55 |

| | | | | | |
|-----|--|-----|----|-----|----|
| 18. | Microwave Radio systems (IP/Hybrid), Mobile Front haul BBU and RRH (CPRI, eCPRI, FlexE, RoE, NGFI) | 100 | 50 | 100 | 55 |
| 19. | Software Defined Radio, Cognitive Radio systems | 50 | 50 | 50 | 55 |
| 20. | Repeaters (RF/RF-over-Optical), IBS, and Distributed Antenna system | 100 | 55 | 100 | 60 |
| 21. | Satellite based systems –Hubs, VSAT Disaster Communication Systems etc. | 50 | 35 | 50 | 40 |
| 22. | Copper access systems (DSL/DSLAM), high-speed xDSL (G.fast) | 50 | 50 | 50 | 55 |
| 23. | Network Management systems (NMS) with its various derivatives | 100 | 65 | 100 | 65 |
| 24. | Security and Surveillance Communication Systems (video and sensors based) including Perimeter Security Systems | 100 | 35 | 100 | 40 |
| 25. | Optical Fiber | 50 | 50 | 50 | 50 |
| 26. | Optical Fiber Cable | 75 | 50 | 75 | 55 |
| 27. | Telecom Power System (Including Solar Power) | 50 | 50 | 50 | 55 |
| 28. | Telecom Batteries (Lead Acid & Li-ion) | 50 | 50 | 50 | 55 |
| 29. | IP audio phones / IP video Phones / Analog adaptor | 50 | 35 | 50 | 40 |
| 30. | SDN Software Controllers, NVF and CNF software | 50 | 50 | 50 | 55 |
| 31. | Telecom Cloud infrastructure, Telecom Data centers | 50 | 35 | 50 | 40 |
| 32. | 2 way Analog/Digital radio including Walkie-Talkie & Mobile Radio | 50 | 50 | 50 | 55 |
| 33. | Batteries of 2 way Analog/Digital radio including Walkie-Talkie | 50 | 40 | 50 | 45 |
| 34. | Fiber Monitoring System | 50 | 50 | 50 | 55 |
| 35. | M2M/IOT Subsystems | 50 | 50 | 50 | 55 |
| 36. | Telecom Services/Works | 100 | 70 | 100 | 70 |

PMI =Minimum preference in % (of total quantity being procured) for Make in India Telecom Products, Services or Works as indicated against each financial year

LC = Minimum Local Content as a percentage of total Bill of Material (cost of production) to qualify as Make in India Telecom Products, Services or Works as indicated against each financial year

-----END OF TABLE-A-----

Table-B

Main Inputs /stages for manufacture of telecom products & conditions for the inputs to be qualified as Local Content

| Main Inputs /stages for manufacture of telecom products * | Conditions for the inputs to be qualified as Local Content |
|--|---|
| 1) Design (a) Hardware design (b) Software Design & Development | The maximum Local Content (LC) percentage for Design which can be claimed by a Local manufacturer for the telecom products based on in-house/in country R&D costs incurred/amortized to create IPR in India are as per Table-C subject to the condition that: (a) The Intellectual Property Right (IPR) resides in India for Hardware Design, (b) The Copyright is in India for the software Design & Development. |
| 2) Components (a) Integrated chips (ICs) – Processor, Memory etc. (b) Active components – Transistors, Diodes etc. (c) Passive Components – Resistors, Capacitors, Inductors etc. | Manufactured in India |
| 3) PCBs (a) PCB Fabrication (b) PCB population using components | Manufactured in India |
| 4) Cables/Chassis etc. (a) Chassis (b) Cables (c) Racks (d) Heat sinks (e) Enclosures | Manufactured in India |
| 5) RF Components/Subsystem (a) Duplexers/Filters (b) Antenna | Manufactured in India |
| 6) Assembly/Integration/Testing [#] | The upper ceiling limit of Domestic Local Content (LC) for Assembly/ Integration/ Testing in respect of the telecom products listed in Table-C would be 10% of the total product Bill of Material (except S. No. 25,26 and 36) |
| * The product may include some/all of the input/stage as mentioned above. While calculating only those inputs/stages will be calculated which are involved in the manufacturing of these telecom products. | |
| # In case a system of its subsystem is merely assembled / integrated / tested, then actual Local Content shall be taken as up to 10% only of the cost of system / subsystem. | |

-----END OF TABLE-B-----

Table-C

Maximum ceiling for Design as Local Content out of total LC for Telecom Equipment

| Sl. No. | Telecom equipment Description | Maximum ceiling for Design as Local Content out of total LC |
|---------|--|---|
| 1 | Encryption/UTM platforms (TDM and IP) | 55 |
| 2 | IP/MPLS Core routers/ Edge/ Enterprise Router | 40 |
| 3 | Managed Leased line Network equipment | 40 |
| 4 | Ethernet Switches (L2 and L3), Hubs | 40 |
| 5 | IP based Soft Switches, IMS, Unified Communication Systems | 40 |
| 6 | Wireless/Wireline PABXs / IP PBX & / Media Gateways | 45 |
| 7 | CPE (including Wi-Fi Access points and Routers, Media Converters), 2G/3G/4G/LTE Modems, Leased-line Modems, NFV/SDN CPE | 30 |
| 8 | Set-Top Boxes | 35 |
| 9 | SDH/Carrier-Ethernet/MPLS- TP/ Packet Optical Transport equipment/ PTN/ OTN systems | 45 |
| 10 | DWDM/CWDM systems | 40 |
| 11 | GPON / XGS-PON, NG-PON2 equipment (including ONT and OLT) | 40 |
| 12 | Optical/SDH/PDH Cross Connects/ OTN Cross-connects and optical MUX,OADM | 40 |
| 13 | Small size 2 G/3 G GSM based Base Station Systems, with its various derivatives including rural & disaster response, Macro & Micro BTS, Small Cells, NIB, C-RAN BBU and RRH | 40 |
| 14 | 2 G/3 G GSM based Base Station Systems, with its various derivatives including rural & disaster response, Macro & Micro BTS, Small Cells, NIB, C-RAN BBU and RRH | 40 |
| 15 | Small Size LTE/LTE-R Based Mobile Systems, with its various derivatives including rural & disaster communications, Macro & Micro eNode B, Small Cells, EPC, NIB C-RAN BBU and RRH ,LTE/LTE-R/4.5 G/ 5 G based broadband wireless access systems (eNodeB, gNB, EPC, etc.) | 40 |
| 16 | LTE/LTE-R Based Mobile Systems, with its various derivatives including rural & disaster communications, Macro & Micro eNode B, Small Cells, EPC, NIB C-RAN BBU and RRH ,LTE/LTE-R/4.5 G/ 5 G based broadband wireless access systems (eNodeB, gNB, EPC, etc.) | 35 |
| 17 | Wi-Fi based broadband wireless access systems (Including Access Point, Aggregation Block, Core Block), Integrated Broadband system | 35 |
| 18 | Microwave Radio systems (IP/Hybrid), Mobile Front haul BBU and RRH (CPRI, eCPRI, FlexE, RoE, NGFI) | 35 |
| 19 | Software Defined Radio, Cognitive Radio systems | 35 |
| 20 | Repeaters (RF/RF-over-Optical), IBS, and Distributed Antenna system | 40 |
| 21 | Satellite based systems –Hubs, VSAT Disaster Communication Systems etc. | 25 |

| | | |
|----|--|-----|
| 22 | Copper access systems (DSL/DSLAM), high-speed xDSL (G.fast) | 35 |
| 23 | Network Management systems (NMS) with its various derivatives | 50 |
| 24 | Security and Surveillance Communication Systems (video and sensors based) including Perimeter Security Systems | 30 |
| 25 | Optical Fiber | NIL |
| 26 | Optical Fiber Cable | NIL |
| 27 | Telecom Power System (Including Solar Power) | 30 |
| 28 | Telecom Batteries (Lead Acid & Li-ion) | 30 |
| 29 | IP audio phones / IP video Phones / Analog adaptor | 15 |
| 30 | SDN Software Controllers, NVF and CNF software | 15 |
| 31 | Cloud infrastructure, Data centers | 20 |
| 32 | 2 way Analog/Digital radio including Walkie-Talkie & Mobile Radio | 30 |
| 33 | Batteries of 2 way Analog/Digital radio including Walkie-Talkie | 30 |
| 34 | Fiber Monitoring System | 35 |
| 35 | M2M/IOT Subsystems | 35 |
| 36 | Telecom Services/Works | NIL |

-----END OF TABLE-C-----

-----END OF APPENDIX-K-----