

## TL 9000 Product Categories R5.1 vs. Likely NACE Codes

NOTE: The following list is provided as an aid in selecting NACE codes. It is not an exhaustive list of all possible NACE codes for a given TL 9000 Product Category. The actual NACE code used by the organization should be selected after consultation between the organization and its certification body auditor.

| PRODUCT CATEGORY                            | NACE Code  | IAF/EA # |
|---|--|----------|
| <b>1 SWITCHING</b>                          |  |          |
| 1.1 Circuit Switch                          |  |          |
| <b>1.2 Packet Switch</b>                    |  |          |
| 1.2.1 Legacy Packet Products                |  |          |
| <b>1.2.2 Access Multi-Service</b>           | DL 32.2 Telephony mfg.<br>and/or                               | 19       |
| 1.2.2.1 Wireline                            |  |          |
| 1.2.2.2 Wireless                            | K 72.2 Software supply   | 33       |
| 1.2.3 Media Gateways                        |  |          |
| 1.2.7 Application Servers                   |  |          |
| 1.2.8 Service and Network Controller        |  |          |
| <b>1.2.9 Routers</b>                        |  |          |
| 1.2.9.1 Core                                |  |          |
| 1.2.9.2 Edge                                |  |          |
| 1.2.9.3 Access                              |  |          |
| <b>2 SIGNALING AND NETWORK CONTROL</b>      |  |          |
| 2.1 Service Control (SCP)                   |  |          |
| 2.2 Common Channel Signaling (STP)          | DL 32.2 Telephony mfg.<br>and/or                               | 19       |
| 2.3 Home Location Register (HLR)            |  |          |
| 2.4 Service Logic (SL)                      | K 72.2 Software supply   | 33       |
| 2.5 Protocol Server                         |  |          |
| 2.6 Network Access Control                  |  |          |
| 2.7 Network Security                        |  |          |
| 2.8 Mobility Management Entity              |  |          |
| <b>3 TRANSMISSION</b>                       |  |          |
| <b>3.1 Transmission Media and Structure</b> |  |          |
| <b>3.1.1 Transmission Medium</b>            |  |          |
| <b>3.1.1.1 Metallic Products</b>            |  |          |
| 3.1.1.1.1 Metallic Conductor Cable          | DL 31.3 Wire & cable mfg.                                      | 19       |
| 3.1.1.1.2 Metallic Conductors               | DL 31.2 Electricity distribution<br>and control apparatus mfg. | 19       |
| <b>3.1.1.2 Optical Fiber Products</b>       |  |          |
| 3.1.1.2.1 Optical Fiber                     | DL 33.4 Optical instruments and<br>photographic equipment mfg. | 19       |
| 3.1.1.2.2 Optical Connectors                |  |          |
| <b>3.1.1.3 Transmission Components</b>      |  |          |
| 3.1.1.3.1 Active Sub-systems                | DL 32.2 Telephony mfg.   | 19       |
| 3.1.1.3.2 Passive Optical Sub-systems       | DL 33.4 Optical instruments and<br>photographic equipment mfg. | 19       |
| 3.1.1.3.3 Ancillary Sub-systems             | DL 32.2 Telephony mfg.   | 19       |
| <b>3.1.1.3.4 Fixed Antenna Systems</b>      |  |          |
| 3.1.1.3.4.1 Radio Antenna Systems           | DL 32.2 Telephony mfg.   | 19       |
| 3.1.1.3.4.2 Satellite Antenna Systems       |  |          |
| 3.1.1.3.4.3 Optical Antenna Systems         |  |          |
| <b>3.1.2 Physical Structures</b>            |  |          |
| 3.1.2.1 Enclosures                          | DJ 28.1 Structural metal product<br>mfg.                       | 17       |
| 3.1.2.2 Support Structures                  |  |          |
| 3.1.2.3 Conduits                            |  |          |

| PRODUCT CATEGORY  | NACE Code   | IAF/EA #            |
|---|---|---------------------|
| <p><b>3.2 Transport Equipment</b></p> <p><b>3.2.1 Cross Connect Systems</b></p> <p>3.2.1.1 Manual Cross Connect Systems</p> <p>3.2.1.2 Digital Cross Connect Systems</p> <p>3.2.1.3 Optical Cross Connect Systems</p> <p><b>3.2.2 Carrier Systems / Multiplex</b></p> <p><b>3.2.2.1 Interoffice / Long Haul</b></p> <p>3.2.2.1.1 Metallic Carrier System</p> <p><b>3.2.2.1.2 Optical Carrier System</b></p> <p>3.2.2.1.2.1 SONET / SDH Transport System</p> <p>3.2.2.1.2.2 WDM / DWDM / Optical Amplification Products</p> <p>3.2.2.1.2.3 Reconfigurable Optical Add-Drop Multiplexer (ROADM)</p> <p>3.2.2.1.3 Microwave</p> <p>3.2.2.2 Loop Carrier</p> <p>3.2.3 Line Terminating Equipment / Distributing Frames</p> <p><b>3.2.4 Digital Subscriber Line (DSL)</b></p> <p>3.2.4.1 Legacy</p> <p>3.2.4.2 Symmetric</p> <p>3.2.4.3 Asymmetric</p> <p>3.2.4.4 IP</p> <p>3.2.5 Fiber to the User</p> <p><b>3.2.6 Video Transmission</b></p> <p>3.2.6.1 Cable Modem Termination Equipment</p> <p>3.2.6.2 Analog Video Transmission Equipment</p> <p>3.2.6.3 Digital Video Transmission Equipment</p> <p>3.2.6.4 Ad Servers</p> <p><b>3.3 Wireless Transmission</b></p> <p>3.3.1 Base Station Equipment</p> <p><b>3.3.2 Base Transceiver System (BTS)</b></p> <p>3.3.2.1 Basic</p> <p>3.3.2.2 Advanced</p> <p>3.3.2.3 4G</p> <p>3.3.2.4 Small Cell Radios</p> <p>3.3.3 Pilot Beacon Unit (PBU)</p> <p>3.3.4 WLAN Base Station Equipment</p> <p><b>3.4 Ancillary Products</b></p> <p>3.4.1 Location Services</p> <p>3.4.2 Lawful Intercept</p> | <p>DL 32.2 Telephony mfg. and/or</p> <p>K 72.2 Software supply</p>  | <p>19</p> <p>33</p> |
| <b>4 OPERATIONS &amp; MAINTENANCE</b>   |   |                     |
| <p><b>4.1 Test Systems</b></p> <p>4.1.1 Test Access Equipment</p> <p>4.1.2 Test Equipment Embedded</p>  | <p>DL 33.2 Mfg. of Instruments and appliances for measuring, checking, testing, etc.</p>  | <p>19</p>           |
| <p>4.1.3 Test Support Software</p>  | <p>K 72.2 Software supply</p>   | <p>33</p>           |
| <p><b>4.2 Operational Support Systems</b></p> <p>4.2.1 On Line Critical</p> <p>4.2.2 On Line Non-Critical</p> <p>4.2.3 Off Line</p> <p>4.3 Ancillary Operations and Maintenance</p>   | <p>DL 32.2 Telephony mfg. and/or</p> <p>K 72.2 Software supply</p>  | <p>19</p> <p>33</p> |
| <b>5 COMMON SYSTEMS</b>   |   |                     |
| <p>5.1 Synchronization</p>  | <p>DL 32.2 Mfg. of television and radio receivers, sound or video recording or reproducing apparatus and/or</p> <p>K 72.2 Software supply</p> | <p>19</p> <p>33</p> |
| <p>5.2 General Purpose Computers</p>  | <p>DL 30.0 Mfg. of computers</p>  | <p>19</p>           |
| <p>5.3 Power Systems</p>  | <p>DL 31.2 Mfg. of electricity</p>  |                     |

| PRODUCT CATEGORY   | NACE Code  | IAF/EA # |
|--|--|----------|
|  | distribution and control apparatus<br>and/or<br>DL 31.4 Mfg. of accumulators, primary cells and primary batteries            | 19       |
| 5.4 Data Storage Systems                                 | DL 30.0 Mfg. of computers and/or<br>K 72.2 Software supply   | 19<br>33 |
| <b>6 CUSTOMER PREMISES</b>                               |  |          |
| 6.1 Enhanced Services                                    | DL 30.0 Mfg. of computers and/or<br>K 72.2 Software supply   | 19<br>33 |
| <b>6.2 Terminal Equipment</b>                            |  |          |
| <b>6.2.1 Voice Terminals</b>                             |  |          |
| 6.2.1.1 Wireless Telephone Sets                          | DL 32.3 Mfg. of television and radio receivers, sound or video recording or reproducing apparatus                            | 19       |
| <b>6.2.1.2 Wireless Subscriber User Terminals</b>        |  |          |
| 6.2.1.2.1 Simple   |  |          |
| 6.2.1.2.2 Complex  |  |          |
| 6.2.1.2.3 Radios   |  |          |
| 6.2.1.2.4 Wireless Terminal Software Applications        | K 72.2 Software supply   | 33       |
| <b>6.2.3 Data Modems</b>                                 |  |          |
| 6.2.3.1 Wired Modems                                     | DL 32.3 Mfg. of television and radio receivers, sound or video recording or reproducing apparatus                            | 19       |
| 6.2.3.2 Wireless Modems                                  |  |          |
| 6.2.4 Digital Data Service Units                         |  |          |
| 6.2.5 Passive Optical Network Termination Units          |  |          |
| 6.2.6 Set Top Box  |  |          |
| 6.2.7 CPE Router   |  |          |
| 6.2.8 Home Base Station                                  |  |          |
| 6.3 Automatic Call Distribution (ACD) Systems            | DL 30.0 Mfg. of computers and/or<br>K 72.2 Software supply   | 19<br>33 |
| 6.4 Private Branch Exchanges (PBX)                       | DL 32.2 Telephony mfg. and/or<br>K 72.2 Software supply  | 19<br>33 |
| 6.5 Small Communications Systems (Key Telephone Systems) | DL 32.2 Telephony mfg.<br>DL 32.3 Mfg. of television and radio receivers, sound or video recording or reproducing apparatus  | 19       |
| 6.6 Internet Security Devices                            | DL 32.2 Telephony mfg. and/or<br>K 72.2 Software supply  | 19<br>33 |
| <b>7 SERVICE PRODUCTS</b>                                |  |          |
| <b>7.1 Network Installation and Provisioning</b>         |  |          |
| 7.1.1 Installation                                       | F 45.2 Building of complete construction or parts thereof; civil engineering or the NACE code of the product being installed | 28       |
| 7.1.2 Provisioning                                       | I 64.2 Telecommunications  | 31       |
| 7.1.3 Construction Services                              | F 45.2 Building of complete construction or parts thereof; civil engineering   | 28       |
| <b>7.2 Engineering Services</b>                          |  |          |
| <b>7.2.1 Network Engineering Services</b>                |  |          |
| 7.2.1.1 Fixed Network                                    | K 74.2 Architectural and engineering activities and related technical consultancy  | 34       |
| 7.2.1.2 Mobile Network                                   |  |          |

|   |   |    |
|---|---|----|
| 7.2.2 Software Development Services<br>7.2.3 Hardware Development Services  | K 74.8 Other business activities  | 35 |
| 7.2.4 Telecom Network Integration   | I 64.2 Telecommunications<br>DL 32.2 Telephony mfg.   | 31 |
| 7.2.5 Metrology and Calibration<br>7.2.6 Telecom Test Laboratory  | K 74.3 Technical testing and analysis   | 35 |
| <b>7.3 Maintenance Services</b><br>7.3.1 Network Field Maintenance<br>7.3.2 Network Operations Center<br>7.3.3 Network Performance Services   | K 74.8 Other business activities  | 35 |
| 7.4 Repair Services   | Same NACE Code as manufacturer of hardware or systems being repaired  | 19 |
| <b>7.5 Customer Support Center</b><br>7.5.1 Technical Assistance and Customer Support Centers<br>7.5.2 End-customer Support Services<br><b>7.6 Purchasing Services</b><br>7.6.1 Procurement Services<br>7.6.2 Sourcing/Purchasing Services<br>7.6.3 Communications Services Acquisition | K 74.8 Other business activities  | 35 |
| <b>7.7 Manufacturing Services</b><br>7.7.1 Small Assemblies<br>7.7.2 Printed Circuit Board Assembly<br>7.7.3 Cable Assembly<br>7.7.4 Electromechanical Assembly   | DL 32.3 Mfg. of television and radio receivers, sound or video recording or reproducing apparatus                           | 19 |
| <b>7.7.5 Logistical Services</b><br>7.7.5.1 Logistical Services, Third Party<br>7.7.5.2 Logistical Services, Internal<br>7.7.5.3 Reverse Logistics  | K 74.8 Other business activities  | 35 |
| <b>7.8 Business Services</b><br>7.8.1 Financial Services<br>7.8.2 Contract/Temporary Staffing<br>7.8.3 Training<br>7.8.4 Fleet Logistics<br>7.8.5 Facility Management<br>7.9 General Support Services<br>7.10 e-Business Consulting<br>7.11 Customer Assistance                         | K 74.8 Other business activities  | 35 |
| <b>8 Components and Subassemblies</b>   |   |    |
| <b>8.1 Components</b><br>8.1.1 Discrete Semiconductors<br>8.1.2 Integrated Circuits<br>8.1.3 Passive Components<br>8.1.4 Electromechanical  | DL 32.1 Mfg. of electronic valves and tubes and other electronic components   | 19 |
| <b>8.2 Electronic Assemblies</b><br>8.2.1 Simple<br>8.2.2 Medium Complexity<br>8.2.3 High Complexity<br>8.2.4 Very High Complexity<br>8.3 Cable Assemblies<br>8.4 Electromechanical Assemblies  | DL 32.2 Telephony mfg.<br>DL 32.3 Mfg. of television and radio receivers, sound or video recording or reproducing apparatus | 19 |
| <b>8.5 Optical Fiber and Devices</b><br>8.5.1 Optical Fiber<br><b>8.5.2 Optical Devices</b><br>8.5.2.1 Opto-electronic Devices<br>8.5.2.2 Passive Optical Devices<br>8.5.2.3 Optical Subassemblies  | DL 33.4 Optical instruments and photographic equipment mfg.   | 19 |
| <b>8.6 Software Components and Tools</b>  |   |    |

|                                  |                           |    |
|----------------------------------|---------------------------|----|
| 8.6.1 Software Components        | K 72.2 Software supply    | 33 |
| 8.6.2 Software Development Tools |                           |    |
| <b>9 End-Customer Services</b>   |                           |    |
| 9.1 Voice                        | I 64.2 Telecommunications | 31 |
| 9.2 Wireless                     |                           |    |
| 9.3 Transport Networks           |                           |    |
| 9.4 Private Networks             |                           |    |
| 9.5 Internet Access              |                           |    |
| 9.6 e-Business & Content Hosting |                           |    |
| <b>9.7 Bulk Transport</b>        |                           |    |
| 9.7.1 Infrastructure             |                           |    |
| 9.7.2 Wholesale                  |                           |    |
| 9.8 Video Broadcast              |                           |    |
| 9.9 Emergency Service Network    |                           |    |

Accredited certification bodies require approval from their accreditation body for the scope category (NACE Code) associated with the product category of the supplier being assessed for TL 9000 conformance; these are summarized as follows:

| <b>NACE Code</b> | <b>TL 9000 Registration Specialty Options</b> |
|------------------|---|
| DJ 28.1          | TL 9000-H                                     |
| DL 30.0          | TL 9000-H                                     |
| DL 31.2          | TL 9000-H                                     |
| DL 31.3          | TL 9000-H                                     |
| DL 31.4          | TL 9000-H                                     |
| DL 32.2          | TL 9000-H<br>TL 9000-S                        |
| DL 32.3          | TL 9000-H<br>TL 9000-S                        |
| DL 33.2          | TL 9000-H<br>TL 9000-S                        |
| DL 33.4          | TL 9000-H                                     |
| F 45.2           | TL 9000-V                                     |
| I 64.2           | TL 9000-V                                     |
| K 72.2           | TL 9000-S                                     |
| K 74.2           | TL 9000-V                                     |
| K 74.8           | TL 9000-V                                     |

Note: Does not include consideration of component level product categories.

Note: For any Hardware registration option above, if repair is also offered then the TL 9000-V option could also apply.

Note: Product Categories listed in **Red** will be used for possible Data Aggregation only. Measurements must be submitted in the lowest Product Category listing.