**General Tariff Information**

| Service Provider Name | Ooredoo Qatar Q.S.C. (formerly (Qtel) Q.S.C) |
|---|---|
| License | Public Fixed Telecommunications Networks and Services |
| Tariff Number | B14-01 |
| Service Name | National IP VPN |
| Tariff Type | Business |
| Tariff Effective Date | 27 May 2012 |
| Tariff Version Number | B14-01 |

## 1. Definitions

**1.1** City Limit – Means area that falls under Doha and Rayan municipal city limits

**1.2** Delay (or Latency) Commitment - The Delay (latency) is the amount of time that IP Packet of fixed size takes to reach from customer's SLA site to a reference site within Ooredoo MPLS network. Delay is measured one way not for round trip.

**1.3** Demarcation point – the point of interface between the Subscriber-managed equipment and the Ooredoo-managed equipment. The Demarcation point is also referred to as the "Service Access Point" (SAP).

**1.4** End to End Client Network Availability- Service Unavailability shall mean a failure resulting in Customer being unable to connect to the Ooredoo Network from Customer's location. Service Unavailability shall not include failure as a result of Ooredoo Network planned/scheduled maintenance, other planned outages, packet loss, problems with Customer's applications, equipment or facilities, acts or omissions of Customer, any use or user of the service authorized by Customer, or Force Majeure.

**1.5** IP – Internet Protocol, a network-layer (OSI Layer 3) protocol

**1.6** IP VPN – MPLS based IP Virtual Private Network.

**1.7** Mean Time Between Failures (MTBF) is a measure of reliability of IP VPN service. It's measured as an average time between consecutive failures.

**1.8** Mean Time to Restore (MTTR) Service Commitment is the average time to restore the service after reporting an incident; this time includes the time to diagnose and locate the fault. The MTTR is measured from time when a Fault Ticket has been logged by Ooredoo Customer Services and to the Fault Ticket has been resolved, which is the time when the Service has been restored and is operational.

**1.9** MPLS – Multi Protocol Label Switching.

**1.10** Packet Loss - is a comparative measure of packets faithfully transmitted and received to the total number that were transmitted. Loss is expressed as the percentage of packets that were dropped. Packet loss is measured between Customer SLA site and a reference site within Ooredoo MPLS network.

**1.11** Ooredoo – Ooredoo Qatar Q.S.C. (formerly (Qtel) Q.S.C)

**1.12** Response Time Commitment is defined as the time taken for the Ooredoo support team to acknowledge the Incident trouble ticket within the response timescales defined in the SLA matrix. This acknowledgement will confirm receipt of the ticket, its Severity and indicate that diagnosis has commenced.

**1.13** Service Restoration Commitment- Service Restoration (SR) Commitment is the commitment from Ooredoo for the restoration of the service in the event of a fault. It is defined in terms of Response Time and Mean Time to Restore Service (MTTR). Service Restoration can include the provision of a Workaround.

**1.14**  Services – IP VPN network services provided by Ooredoo to the Subscriber.

**1.15**  Severity Priority 1 (P1) - Major Service affecting: Is an Incident when a Customer Site experiences a total loss of Service. If no correction is immediately available but a Workaround is created, the P1 Incident will be closed and a P2 Incident will be opened. The object is to neutralize a P1 Incident as soon as possible.

**1.16**  Severity Priority 2 (P2) – Partial Service Affecting: Is an Incident that results in a partial service degradation of performance or a loss of resilience or redundancy of the Site but which does not result in a total loss of Service.

**1.17**  Subscriber the person or entity that enters into an agreement with Ooredoo to receive and pay for the Service.

**1.18**  User – the natural person who actually uses the service.

**1.19**  Workaround – Means a temporary repair, neutralization of a fault, modification, alteration, enhancement or replacement to the Service made by Ooredoo pursuant to an Incident which enables the Customer to use the Service in accordance with the specification prior to full correction.

## 2. Tariff Terms and Conditions

**2.1**  This tariff is for a permanent standard service.

**2.2**  This tariff contains charges and conditions applicable to the provision of the National IP VPN service

**2.3**  This tariff will be effective as of the date established in this tariff and will automatically cease being effective if, Ooredoo publishes a new tariff for this service or publishes notification on it webpage that this tariff  is no longer effective subject to CRA approval, if required.

**2.4**  From time to time Ooredoo may publish promotions and readjustments on its webpage or by other means.  Such promotions and readjustments will suspend or modify this tariff as specified by Ooredoo as of the date Ooredoo publishes such promotions or readjustments subject to CRA approval, if required.

**2.5**  These Service terms and conditions are in addition to the terms and conditions specified in Ooredoo's General Terms and Conditions for the Master Services Agreement for Business Telecommunications Services where referenced.

**3.    Service Description**

The IP VPN service provides a Subscriber with an MPLS based IP Virtual Private Network. Ooredoo IP VPN is an integrated networking solution combining IP capabilities and the security & reliability of private networking through Ooredoo's Gigabit IP backbone.

The Ooredoo IP VPN Service enables the convergence of voice, data and video applications over a single converged network, providing the Subscriber with a  secured, flexible and scalable connectivity to deliver intranet and extranet services, voice and other applications for example such as ERP and e-commerce.

**3.1    Physical Interfaces**

Depending upon customer's requirement and product availed, Ooredoo provide Optical and Electrical interfaces as detailed below:

**3.1.1    Optical Interfaces: Ooredoo support 100FX, 1000SX** and 1000LX interfaces.  Selections of fiber type include single-mode and multi-mode.  SC or LC connectors are supported.

**3.1.2    Electrical Interfaces:** Ooredoo support 1000BT interfaces.  Handoff is via an RJ-45 jack. Customer cable type should be minimum 5 or Cat 5e or Cat 6.

**4. Service Features and Charge Rates**

**4.1 IP VPN Standard Service**

**4.1.1 Description:** Ooredoo IP VPN is based on MPLS technology that allows prioritizing different types of traffic passing through the network. Ooredoo prioritize IP VPN traffic for various Classes of Service (CoS) which makes it possible to assign service classes to applications in order to prioritize network traffic and determine transmission quality in accordance with the applications' importance and sensitivity.

Ooredoo Traffic Prioritization is based on the Differentiated Service Code Point (DSCP). Differentiated Services Code Point (DSCP) is a field in an IP packet that enables different levels of service to be assigned to network traffic. This is achieved by marking each packet on the network with a DSCP code and appropriating to it the corresponding level of service. Differentiated Services Code Point (DSCP) is an internationally recognized standard and approved by IETF and IEEE.

Based on the IP VPN Traffic prioritization initiative Ooredoo introduced three IP VPN packages. These packages have the mix and match of the different class traffic class as per annex 1.

**4.1.1.1 IP VPN Silver Package:** This is the default Package, primarily for VPN using mail, web browsing and other non-critical applications. This package consists of a Class of Service mix comprising of 75% Best Effort and 25% Mission Critical.

**4.1.1.2 IP VPN Gold Package:** This package is designed for applications that are latency and packet loss sensitive like Business applications, database applications etc. This package consists of a Class of Service mix comprising of 75% Mission Critical and remaining 25% best Effort.

**4.1.1.3 IP VPN Platinum package:** Premium IP VPN package, suitable for applications where there is a requirement for Real time voice across VPN sites. This package consist of Class of Service mix comprising of 25% Real Time, 50% Mission critical and remaining 25% Best Effort.

### 4.1.2 Charging

**4.1.2.1** IP VPN standard service charges are set out below:

| IP VPN Bandwidth | Installation Fee- QR | Monthly Fee- QR | | |
|---|---|---|---|---|
| | | Silver | Gold | Platinum |
| 128KB | 2000 | 1,200 | 1,320 | 1,500 |
| 256 KB | 2000 | 2,600 | 2,860 | 3,250 |
| 512 KB | 2500 | 3,250 | 3,575 | 4,063 |
| 1 MB | 2500 | 4,550 | 5,005 | 5,688 |
| 2 MB | 2500 | 5,250 | 5,775 | 6,563 |
| 4 MB | 5000 | 6,650 | 7,315 | 8,313 |
| 8 MB | 5000 | 8,150 | 8,965 | 10,188 |
| 16 MB | 5000 | 9,650 | 10,615 | 12,063 |
| 24 MB | 5000 | 11,150 | 12,265 | 13,938 |
| 32 MB | 5000 | 12,650 | 13,915 | 15,813 |
| 50 MB | 5000 | 15,650 | 17,215 | 19,563 |
| 100 MB | 10000 | 20,650 | 22,715 | 25,813 |
| 200 MB | 10000 | 24,000 | 26,400 | 30,000 |
| 500 MB | 10000 | 33,755 | 37,131 | 42,194 |
| 1 G | 10000 | 42,460 | 46,706 | 53,075 |

**4.1.2.2 Upgrade/Downgrade Policy:** A Subscriber upgrading or Downgrading between packages will do so without paying any extra charge. A logical upgrade that doesn't require any physical installation will not incur a new term or minimum service period. However, a new term would commence for changes where a new physical installation is required.

**4.1.2.3 Equipment Charges:** Ooredoo will provide any necessary customer premises equipment free of charge to provision the IP VPN service.

**4.1.2.4 Change of Location:** Subject to feasibility, a Subscriber may change the location where the Service is provided and will be the applicable installation fee as per paragraph 4.1.2.

**4.1.2.5 Education Discount:** Educational Subscribers will receive a discount of 20% off the monthly fee.

### 4.2 Optional Add On: Redundancy with Diversity Service

**4.2.1 Description:** Subject to feasibility, a Subscriber may choose a redundancy with diversity service which duplicates the last mile access from two network points on the Ooredoo network. Redundancy is ensured by providing two fibers and diversity by ensuring two fibers do not share the same trench.

**4.2.2 Conditions:** The Subscriber must provide an additional duct from the Subscriber premises to the outside boundary wall of the site and all necessary links from inside the premises to the outside boundary wall.

**4.2.3 Charges:**

**4.2.3.1** Charges for redundancy and diversity services are set out below:

| Bandwidth of Redundant link | Installation Fee-QR | Monthly Fee-QR |
|---|---|---|
| 128 Kbps | 2,000 | 450 |
| 256 Kbps | 2,000 | 810 |
| 512 Kbps | 2,500 | 1,005 |
| 1 Mbps | 3,500 | 1,395 |
| 2 Mbps | 3,500 | 1,605 |
| 4 Mbps | 10,500 | 2,195 |
| 8 Mbps | 10,500 | 2,690 |
| 16 Mbps | 10,500 | 3,185 |
| 24 Mbps | 10,500 | 3,680 |
| 32 Mbps | 10,500 | 4,175 |
| 50 Mbps | 10,500 | 5,165 |
| 100 Mbps | 10,500 | 6,815 |
| 200 Mbps | 10,500 | 8,267 |
| 500 Mbps | 10,500 | 11,139 |
| 1 Gbps | 10,500 | 14,012 |

**4.2.3.2 Additional Charges:** Following a feasibility study of the Subscriber site, a Subscriber will be notified of any applicable additional installation fee due to the particular features of the Subscriber site, for example, civil works required due to distance between Subscriber sites.

### 4.3 Optional Add On: Burstable IP VPN

**4.3.1 Description:** Ooredoo offers a usage based Burstable IP VPN for customers having bursty traffic patterns. This option allows customer committing to a fixed capacity and have

option to burst up to the port speed, or to an agreed pre-set rate limit. Customers opting for the Burstable IP VPN are provided with an Ethernet port capable of supporting burst.

4.3.2 **Charging:** Burstable IP VPN has two charging element fixed port bandwidth and burst. The fixed port is charged for the committed capacity as per 4.1.2. The burst is charged based upon 95th percentile billing where the Incremental usage above the subscribed bandwidth is billed as per unit rate equivalent to Silver package for subscribed bandwidth. Refer to Annex 3 for further explanation and a diagram.

## 4.4 Optional Add On: Service Level Agreement

4.4.1 **Description:** Ooredoo provides the IP VPN services in compliance to standard Leased Line QoS performance obligations stipulated in the license for Public Fixed Telecommunications Networks and Services. The performance obligations measure the average performance of the leased line services. The standard IP VPN service is offered without any specific Service Level Agreement. A Subscriber may enter into a Service Level Agreement which defines service and support levels provided by Ooredoo to the Subscriber for IP VPN. A Subscriber may enter into one of the following SLA's;

4.4.1.1 **The standard** (basic IP VPN) has no SLA but complies with the License for Public Fixed Telecommunications Networks and Services issued to Ooredoo.

4.4.1.2 **Business Class SLA:** Business class SLA option where in the objectives are defined for selective key parameters like availability of the IP VPN.

4.4.1.3 **First Class SLA:** First Class SLA is offered with more stringent objectives and comprehensive parameters as tabulated in 4.4.2. The First Class SLA is a premium service wherein Ooredoo guarantee the high availability by ensuring the redundancy and diversity as package solution.

**4.4.2 SLA Features –** Ooredoo Service Level Agreement provide commitment on various performance, availability, reliability and incident management parameters which differ on the type of SLA Package as per the table below.

| Service Domain | SLA Parameter | Applicability | |
|---|---|---|---|
| | | Business Class | First Class |
| Availability | End to End Client Network Availability | 99.0% | 99.5% |
| Incident Management | Average Response Time - All Faults | 1 hours | 30 minutes |
| Incident Management | Average MTTR - P1 Incidents (within city limit) | 8 hours | 4 hours |
| Incident Management | Average MTTR - P1 Incidents(outside city limit) | 12 hours | 8 hours |
| Incident Management | Average MTTR - P2 Incidents | 12 hours | 8 hours |
| Reliability | Average MTBF | ✖ | 15 days |
| Performance* | Average Delay(Latency) * | ✖ | 50 ms |
| Performance* | Average Packet Loss* | ✖ | 0.5% |

\* Performance parameter commitment may not be applicable when the diversity is on wireless media such as 3G. The customer will be clearly informed if the diversity is supplied via wireless media.

**4.4.3 Charges:**

**4.4.3.1 Monthly Fee:** Customers are charged an additional monthly fee (after any applicable discounts set out in paragraph 4.1.2) as follows;

| Product | Business Class SLA | First Class SLA |
|---|---|---|
| IP VPN | 15% of the applicable monthly fee (as per paragraph 4.1.2) | 40% of the applicable monthly fee (as per paragraph 4.1.2) |

**5. Service Provider obligations**

**5.1** Commencement of Service: The service shall commence from the date of activation of service.

**5.2** Responsibility for service: Ooredoo is responsible for service only up to the Customer Premises Equipment and shall not be responsible for any quality of service, continuity of service or other matters impacted by subscriber cabling, equipment or other facilities (not provided by Ooredoo) beyond this point.

**5.3** Service Provisioning Time: If the customer location is feasible from a network perspective, Ooredoo endeavor to provision the services within a lead time of 4-6 week from the date of release of Purchase Order.

**5.4** Service availability and limits: Certain factors, such as network changes, traffic volume, transmission limits, service outages, technical limitations, signal strength, customer device, terrain, structures, weather, or other conditions that may arise from time to time, may interfere with actual service quality and availability. IP VPN service may not be available in the subscriber's area, their specific location.

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## 6. Subscriber obligations

**6.1** Equipment: The Subscriber shall comply with any reasonable request by Ooredoo concerning the configuration of their devices and/or the use of the service.

**6.2** Minimum service period: The service will be provided for a minimum service period of three (3) months from the date of activation.

**6.3** Cancellation: If a Subscriber terminates the contract before the end of the minimum service period term, the Subscriber will be liable to pay the full charges for duration for the minimum service period.

**6.4** Equipment: Importation of suitable, type-approved equipment may be undertaken following approval by Ooredoo.

**6.5** Assignment of service: The subscriber undertakes to use the service personally and for their private interest, and shall not transfer the service or assign it to a third party without obtaining Ooredoo's prior written consent.

**6.6** Unlicensed Services: The Subscriber may not use the Service to provide any kind of telecommunications services that require a license from CRA. Failure to comply with this provision may result in immediate cessation of service without notice.

**Annexure 1 – IP VPN Package Options**
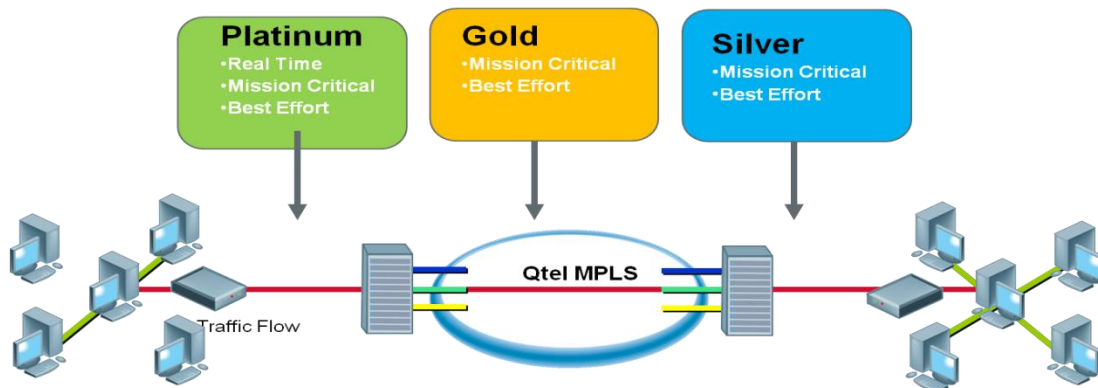


- **IP VPN Silver Package:** This shall be the default package; primarily meant for VPN using mail, Client Server and web browsing applications. The existing IP VPN customers shall be mapped to the default package.
- **IP VPN Gold Package:** This package shall be meant for latency and packet loss sensitive applications, video and other real-time non-voice applications.
- **IP VPN Platinum Package:** IP VPN Platinum package would be the most premium package and would be suitable if client require real time voice across VPN sites.

**IP VPN Packages**          **Port Profile( Different CoS as % of port B/W)**

| | Real Time voice | Mission Critical Business | Best Effort |
|---|---|---|---|
| Silver | | 25% | 75% |
| Gold | | 75% | 25% |
| Platinum | 25% | 50% | 25% |

| Application Type | Real-Time traffic | Mission-critical traffic that is latency and packet loss sensitive ; Important business data traffic | Non time-sensitive applications Basic LAN-to-LAN traffic |
|---|---|---|---|
| Examples | Real time application e.g. Voice applications | Enterprise Resource Planning (ERP), video streaming ; Intranet applications, client/server technologies, Lotus Notes, messaging | LAN to-LAN data transfer, email, File Transfer Protocol (FTP), browsing - |

**Annexure 2:  CoS explanation**

Ooredoo's IP VPN network offers end-to-end class of service (CoS) capabilities.

Ooredoo offers 3 Classes of Service (CoS); Real Time, Mission Critical and Best Effort.

The **Real Time CoS** is a strict priority queue. When this queue is active it will be serviced until the queue is completely empty. Once the Real Time queue is empty the remaining two CoS will be serviced. Due to the Real Time CoS having a higher precedence and being serviced until it is completely empty, it is generally used for time sensitive applications like voice and video. This CoS has a "hard ceiling", meaning when this CoS is active it cannot take available bandwidth from the remaining two CoS's. While this CoS is active and if the customer's router attempts to send more bandwidth that what is currently allocated, the excessive bandwidth is discarded. For example, if the size of this CoS (hard ceiling) is set at 500 kilobits and the network needs to send 600 kilobits of real time data, the excess of 100 kilobits is completely discarded.

The **Mission Critical CoS** is a class based queue. A class based queue allocates a specific amount of bandwidth per the agreed upon markings. During times of congestion traffic that meets the agreed upon markings are guaranteed this minimum amount of bandwidth. The Mission Critical CoS can use available bandwidth from the Real Time and Best Effort CoS, thus it is possible this CoS can transmit above the minimum defined value. For example, if 500 kilobits are allocated to the Real Time CoS and 500 kilobits to the Mission Critical CoS and there currently isn't any traffic in the Real Time CoS, the Mission Critical CoS can use the entire 1 megabit of CoS purchased bandwidth.  In this example the Mission Critical CoS can also take from the Best Effort CoS if excessive bandwidth exists. However, traffic taken from the Best Effort CoS it isn't guaranteed a specific amount of bandwidth. Only traffic within the Real Time and Mission Critical CoS are guaranteed. Excessive bandwidth taken from the Best Effort CoS will not be discarded if the bandwidth is available, it just won't be guaranteed.

The **Best Effort CoS** treats all data allocated to this queue as the same. The queue is a "catch all" for traffic that doesn't adhere to the Real Time and Mission Critical markings. The customer should ensure the Best Effort CoS is large enough to provide service to applications that aren't assigned to the Real Time and Mission Critical CoS.

**Annexure 3: Burstable IP VPN**

Ooredoo offers a burstable IP VPN utilizing the 95th percentile method of billing. Burstable billing is based on peak usage and allows usage to exceed bandwidth commitment levels for brief periods of time without having to purchase a higher commitment level than needed.

With 95th percentile billing, network usage is measured and logged every 15 minutes throughout the month. At the end of the month, the log of usage samples is sorted in descending order and the highest 5% is disregarded. The next highest usage sample is the 95th percentile value and is the bandwidth usage for the month. This essentially gives a non-penalized bursting period of approximately 36 hours a month.
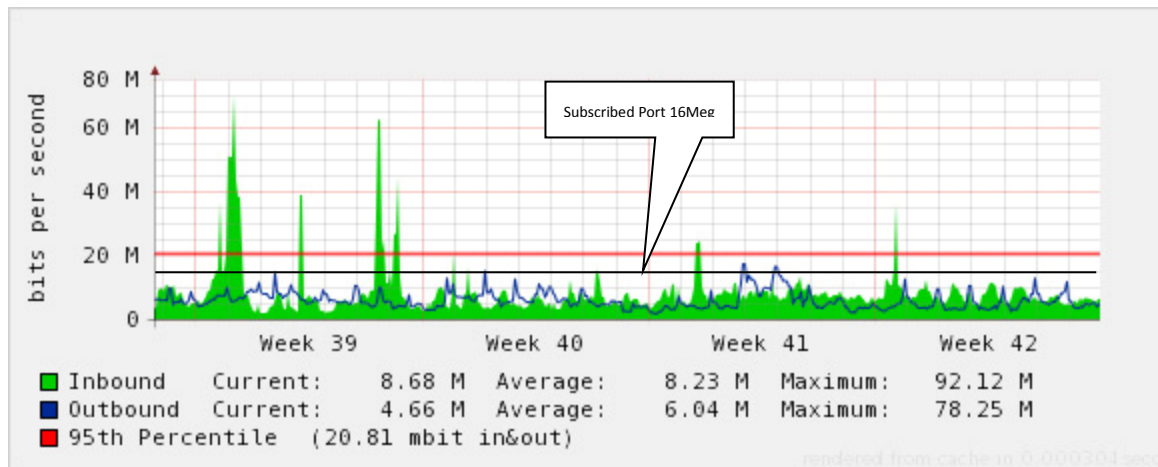


In this example, the red line shows the 95% billing marker. The black line shows the subscribed IP VPN base Plan (16 Mbps). All bandwidth measurements above the red line are considered and the highest 5% will be discarded and not billed. Bandwidth below the red line indicates the lowest 95% of the traffic. Bandwidth between black and red lines is billable burst. The burst is billed as per the unit rate for the base IP VPN plan. 95% percentile billing gives the benefit of burstable bandwidth. This example shows network usage upwards of 92 Mbps while 95th percentile is at 20.81 Mbps and burst charging remains as 4.81Mbps (20.81-16). In this example if the customer is on a silver plan, the monthly fee for a 16Mbps plan is QR9,650 per month which is divided by 16 to calculate the per unit MB rate which equals QR603. i.e. the Unit rate is equal to the Subscribed Base plan charge divided by the Subscribed base capacity (20.81-16).

**\* \* \* END OF TARIFF \* \* \***