General Tariff Information

Service Provider Name	Ooredoo Qatar Q.P.S.C.
Tariff Number	B15-01
Marketing Name of the offer	National Ethernet VPN
Tariff Type	Standard Permanent Tariff
Duration	N / A
Customer Group	Business
Tariff Effective Date	29 November 2022
Tariff Version Number	005

Contents

1 Definitions

1. <u>City Limit</u> –Means area that falls under Doha and Rayyan municipal city limits

2. <u>Delay (or Latency) Commitment</u> **-**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.

3. <u>Demarcation point</u> – 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).

4. <u>End to End Client Network Availability</u> - Service Unavailability shall mean a failure resulting in the Customer being unable to connect to the Ooredoo Network from the Customer's location. Service Unavailability shall not include failure as a result of a 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.

5. <u>Ethernet</u> – Ethernet Protocol, a network-layer (OSI Layer 2) protocol

6. <u>Ethernet VPN</u> – MPLS based Ethernet Virtual Private Network.

7. <u>Mean Time Between Failures (MTBF)</u> is a measure of reliability of Ethernet VPN service. It is measured as an average time between consecutive failures.

8. <u>Mean Time to Restore (MTTR) Service Commitment</u> 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.

9. <u>MPLS</u> – Multi Protocol Label Switching.

10. <u>Packet Loss</u>- 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.

11. <u>Ooredoo</u> – Qatar Telecom (Q.P.S.C.).

12. <u>Response Time Commitment</u> 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.

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.

14. Services – Ethernet VPN network services provided by Ooredoo to the Subscriber.

15. Synchronous Digital Hierarchy - This is a standardized protocol that transfers multiple digital bit streams synchronously over optical fiber.

16. 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.

17. 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.

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

19. User – the natural person who actually uses the service.

20. 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

21. This Tariff is for a permanent standard service.

22. This Tariff contains rates and charges applicable to the provision of the National Ethernet VPN Service.

23. 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.

24. 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.

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

26.   Cancellation: If a Subscriber terminates the contract before the end of the minimum service period term, the Subscriber will be liable to pay the Early Termination Charges for duration for the minimum service period.

27.   Early Termination Charges: are calculated upon termination for the remaining of the minimum service period. Early Termination Charges exclude the "Bar by customer" period.

28.   Bar by customer: During this period customer is not charged and the service is not active

29.   Suspend by Credit Control: This happens is when customer is overdue with his Invoices and the system automatically disconnects him monthly changes are still charged but the service is blocked (cannot be used).

30.   Service Restoration: In case of Bar by customer restoration is manual (based on request). In case of Suspended by Credit Control the restoration is automation after payment.

31.   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

32.   The National Ethernet Service can be used to construct a Layer2 Private line or VPN. The National Ethernet VPN service provides a Subscriber with an MPLS based Ethernet Virtual Private Network. Ooredoo Ethernet VPN is an integrated networking solution combining Ethernet capabilities with the security and reliability of private networking through Ooredoo's Gigabit Internet Protocol backbone.

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

34.   Physical Interfaces - Depending upon the customer's requirements and product availability, Ooredoo will provide Optical and Electrical interfaces as detailed below:

34.1   Optical Interfaces: Ooredoo support 100FX, 1000SX and 1000LX interfaces. Selections of fiber types include single-mode and multi-mode. Both SC and LC connectors are supported.

34.2   Electrical Interfaces: Ooredoo support 1000BT interfaces. Handoff is via an RJ-45 jack. The customer cable type should be a minimum of Cat 5, Cat 5e or Cat 6.

35.   The Ethernet Services are used in two types:

35.1   E-Line Service: Ethernet Line Service (E-Line) provides a point-to-point Ethernet between two sites.

35.2   E-LAN Service-LAN provides multipoint Ethernet connectivity between two or more sites.

36.   A point to multipoint configuration ("hub and spoke") comprises a single aggregation point between the customer and Ooredoo. From this single point, data is then transmitted to multiple locations. In this configuration, the customer's primary site (the "hub") communicates with all other customer sites (the "spokes"). Communication between "spokes" is managed via the customer's primary location.

37.   A multipoint to multipoint configuration, also known as "any to any," creates a network in which any network site can communicate with any other network site without restriction. This configuration transforms a WAN into an extension of the LAN beyond the office building walls.

4   Service Features

4.1 National Ethernet Standard Service

38.   Ooredoo National Ethernet VPN is a secure, reliable and cost effective connectivity solution. By extending the Ethernet standard for local area networking (LAN) to Wide Area Networking (WAN) corporate customers can connect multiple locations through Virtual private Networks based on native Ethernet Technology. Ethernet VPN is delivered over Ooredoo native Multi-Protocol label switching (MPLS) network infrastructure which provides any to any connectivity that allows customers to exchange voice, video and data directly between dispersed sites over a single network enabling customer to take advantage of converged applications.

39.   Ooredoo MPLS backbone is capable of supporting multiple time sensitive applications such as real-time voice and video. This allows Ooredoo to leverage the inherent benefits of the Internet Protocol network to offer customers a VPN solution that provides standard MPLS functionality as well a high level of performance, flexibility and geographic reach.

40.   Ooredoo offers the following three Ethernet over MPLS (EoMPLS) VPN Quality of Service levels:

40.1   **Ethernet 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

40.2   **Ethernet 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.

40.3   **Ethernet Platinum Package:** Premium Ethernet 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.

41.   Ooredoo also offers one Ethernet over SDH (EoSDH) VPN. This old protocol is supported mainly for the National leg of the Global Ethernet EoSDH VPN services.

4.2 Charging

42.   National Ethernet VPN service is charged at the following monthly rates:

ETHERNET VPN Bandwidth	Installation Fee- QR	Standard Service Monthly Rental			
		EoMPLS [1] Silver	EoMPLS Gold	EoMPLS Platinum	EoSDH [2]
256 KB	2,000	2,392	2,631	2,990	2,990
512 KB	2,500	2,990	3,290	3,738	3,738
1 MB	2,500	4,186	4,605	5,234	5,234
2 MB	2,500	4,830	5,314	6,038	6,038
4 MB	5,000	6,118	6,730	7,648	7,648
8 MB	5,000	7,498	8,248	9,374	9,374
16 MB	5,000	8,878	9,766	11,098	11,098
24 MB	5,000	10,258	11,284	12,823	12,823
32 MB	5,000	11,638	12,802	14,548	14,548

ETHERNET VPN Bandwidth	Installation Fee- QR	Standard Service Monthly Rental			
		EoMPLS[1] Silver	EoMPLS Gold	EoMPLS Platinum	EoSDH[2]
50 MB	5,000	14,398	15,838	17,998	17,998
100 MB	10,000	18,998	20,898	23,748	23,748
200 MB	10,000	22,080	24,288	27,600	27,600
500 MB	10,000	31,055	34,161	38,819	38,819
1 GB	10,000	39,063	42,970	48,830	48,830
2 GB	15,000	50,782	55,860	63,478	63,478
3 GB	15,000	58,399	64,239	72,999	72,999
5 GB	15,000	64,239	70,663	80,299	80,299
10 GB	15,000	80,299	88,329	100,374	100,374

1) Ethernet over MPLS (EoMPLS)
2) Ethernet over SDH (EoSDH)

43. **Upgrade Policy:** A Subscriber upgrading 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.

44. **Temporary upgrade:** This doesn't change the existing monthly charge (of the contracted speed). The physical speed is boosted for a limited time but doesn't change the price.

45. **Downgrade Policy:** If less than the minimum service period (3 months) then EDC (Early Downgrade Charges) will apply based on the monthly charge of the higher (contracted) speed for the remaining of the duration of the minimum liability.

46. **External Shifting:** The same charges apply as per the installation fee (based on the bandwidth).

47. **Equipment Charges:** Ooredoo will provide any customer premises equipment necessary for the provision of service free of charge.

48. **Change of Location:** Subject to feasibility, a Subscriber may change the location where the Service is provided and applicable installation fee as per paragraph 4.2.

49.   **Additional Charges:** Following a feasibility study of the Subscriber site, a Subscriber will be notified of any applicable additional installation fees due to the particular features of the Subscriber's site(s), such as civil works required due to distance between Subscriber sites.

4.3 Optional Add On: Burstable Ethernet VPN

50.   Ooredoo offers a usage-based Burstable Ethernet VPN for customers having irregular surging traffic patterns. This option allows customers committing to a fixed capacity to have the option to burst up to the port speed or to an agreed pre-set rate limit. Customers opting for Burstable Ethernet VPN are provided with an Ethernet port capable of supporting such speed bursts. Subscribers to any Ethernet VPN service products above 2Mbps can subscribe to a burstable Ethernet VPN plan.

51.   Burstable Ethernet VPN has two charging elements; fixed port bandwidth and burst. The fixed port is charged for the committed capacity as per 4.2. The 'burst' is charged based upon 95th percentile billing where incremental usage above the subscribed bandwidth is billed at the unit rate equivalent to the Silver package for subscribed bandwidth. Refer to Annex 3 for further explanation and a diagram.

4.4 Optional Add On: Service Level Agreement

52.   A Subscriber may enter into a Service Level Agreement which defines service and support levels provided by Ooredoo to the Subscriber for Ethernet VPN. A Subscriber may enter into one of the following SLA's:

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

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

53.   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	99.5%	99.9%
Incident Management	Average Response Time - All Faults	1 hour	1hour
Incident Management	Average MTTR - P1 Incidents (within city limit)	6 hours	4 hours
Incident Management	Average MTTR - P1 Incidents(outside city limit)	12 hours	8 hours

Service Domain	SLA Parameter	Applicability	
		Business Class	First Class
Incident Management	Average MTTR - P2 Incidents	12 hours	8 hours
Reliability	Average MTBF	✕	15 days
Performance*	Average Delay(Latency) *	✕	20 ms
Performance*	Average Packet Loss*	✕	0.5%
* Performance parameter commitment may not be applicable when the diversity is on wireless media such as 3G etc. The customer will be clearly informed if the diversity is supplied via wireless media.			

54. Customers are charged an additional monthly fee (after any applicable discounts set out in paragraph 4.2) as follows;

Product	Business Class SLA	First Class SLA
Ethernet VPN	15%	40%

4.5 Optional Add On: Local Loop Redundancy

55. First Class SLA comes redundancy. However, when used as the national leg (Local Loop) in conjunction with the Global VPN there is an additional option to have Redundancy.

56. Customers are charged an additional monthly fee (after any applicable discounts set out in paragraph 4.2) as follows:

Product	Additional Charges
Global VPN , Local Loop	40%

5 Service Provider obligations

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

58. **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.

59. **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.

60. **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. Ethernet VPN may not be available in the

subscriber's area, their specific location or may not be compatible with their specific landline connection.

6 Subscriber obligations

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

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

63.   **Resale:** The Subscriber cannot resell the service if (s)he does not qualify as an Eligible Person, within the framework set by the Class License for the Resale of Retail Telecommunications Services issued by the Communication Regulatory Authority (CRA) (https://www.cra.gov.qa/en/document/class-license-for-the-resale-of-retail/telecommunications-services) and without a prior written approval by Ooredoo. Failure comply with the above provision will result in the Services being immediately terminated and in the Subscriber being held responsible for the legal, regulatory and financial consequences of his/her behavior.

Annex 1   National Ethernet VPN Package Options
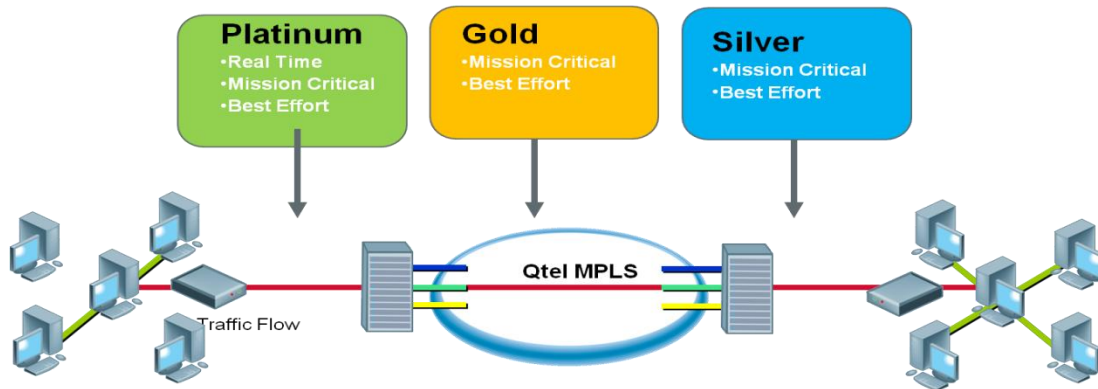
64.   **Ethernet   VPN   Silver**
Package: This is the default package; primarily meant for VPN using mail, Client Server and web browsing applications. The existing Ethernet VPN customers shall be mapped to the default package.

65.   **Ethernet VPN Gold Package:** This package is meant for latency and packet loss sensitive applications, video and other real-time non-voice applications.

66.   **Ethernet VPN Platinum Package:** Ethernet VPN Platinum package is the fastest and is suitable if the customer requires real time voice across VPN sites.

67.   Port Profile (Different CoS as % of port B/W)

QoS Option	Real Time	Mission Critical Business	Best Effort
Silver		25%	75%
Gold		75%	25%
Platinum	25%	50%	25%

| QoS Option	Real Time	Mission Critical Business	Best Effort
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 -

Annex 2   Annexure 2:   CoS explanation

68.   Ooredoo's Ethernet VPN network offers end-to-end Class of Service (CoS) capabilities.

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

70.   **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.

71.   **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.

72.   **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.

Annex 3   Burstable Ethernet VPN

73.   Ooredoo offers a burstable Ethernet 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.

74.   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.
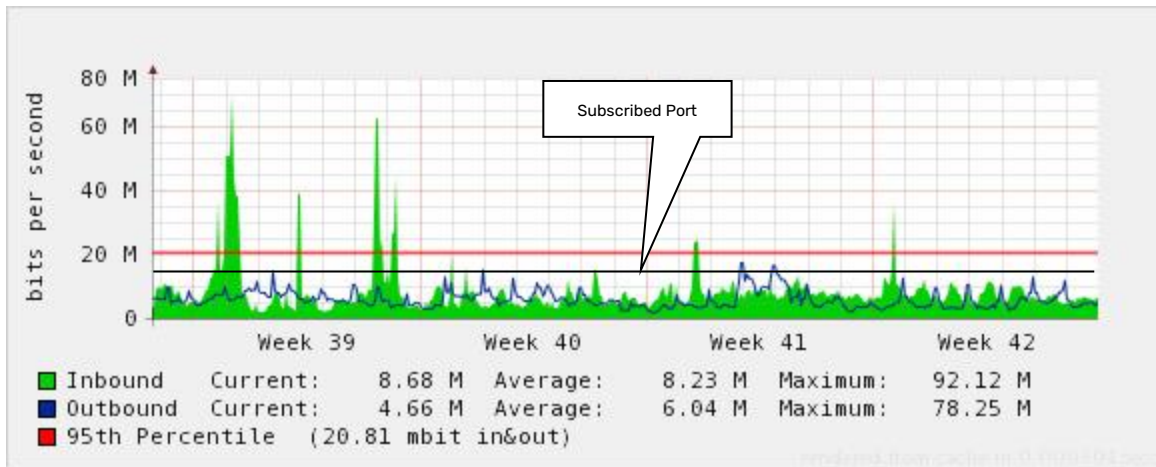
75.   In this example, the red line shows the 95% billing marker. The black line shows the subscribed Ethernet VPN base Plan (16 Mbps). All bandwidth measurements above the red line are considered and the highest 5% will be discarded and not billed. Bandwidth below the red line indicates the lowest 95% of the traffic. Bandwidth between black and red lines is billable burst. The burst is billed as per the unit rate for the base Ethernet 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 * * *

Tariff Version Control

Tariff Version Number	Approval Date	Effective Date	Tariff Modifications
01		1 July 2013	Original version.
02		8 August 2016	Updated as part of the CRM upgrade, this does not specifically change the Tariff, but part of the process to define the existing services and to align the Tariff document with the actual services provided.
003	2 October 2019	15 October 2019	Revamp of tariff portfolio.
004	25 October 2020	30 November 2020	Higher bandwidth (4.1.2.)
005	29 November 2022	29 November 2022	Class License for the Resale of Retail Telecommunications Services