

SCHEDULE N: SERVICE DEFINITION FOR SMART ETHERNET PRIVATE LINE (EPL) SERVICE

1. Smart EPL Service Description

Exponential-e’s Smart EPL Service comprises an Ethernet-over-Fibre (EoF”) or an Ethernet-over-Copper (EoC) access circuit from a remote Site to an access port at an Exponential-e Point of Presence. It also includes either (as designated in the Order):

- (1) a backhaul virtual circuit across the Exponential-e core network to a defined point of handover, either a Carrier Network to Network Interface (NNI) or Carrier User to Network Interface (UNI) at a third party carrier-neutral facility (the “Handover Point”), configured to provide a point-to-point service to the Partner /End User ;
- (2) a Direct Internet Access (DIA) Virtual Circuit (VC) across the Exponential-e core network to the “Handover Point” with bandwidth speeds from 1Mbps to 10Gbps. IPv4 and IPv6 addresses will be assigned to the Partner / End User subject to the regulations of Reseaux IP Europeens (RIPE). These addresses remain under the exclusive control of Exponential-e and are not transferred to the Partner / End User. As standard the number of IPv4 addresses assigned is limited to a range of 8 with 5 useable IP addresses. Further IP addresses may be available subject to RIPE approval. If the Partner / End User requires their own independent IP addresses they must apply to RIPE via a Local Internet Registry such as Exponential-e. DIA VCs come with Distributed Denial of Service (“DDoS”) (an electronic attack involving multiple computers sending repeated requests to a web-site generating false traffic with the aim of rendering it inaccessible) black-holing (discarding all data destined for a particular IP address) as standard. The Exponential-e DDoS mitigation platform will examine the End User’s traffic and auto-generate a “normal” traffic profile. Certain types of packets detected by the DDoS mitigation platform in volumes outside of the “normal” traffic profile will trigger an alert. Once an alert is triggered, black-holing is automatically launched. **Exponential-e does not warrant or guarantee that the DDoS Black-holing service feature will prevent or mitigate all DDoS attacks.** The Partner shall:
 - (i) notify the Exponential-e Service Desk in advance of any impending activity that can reasonably be expected to result in or encourage additional traffic to its site that may or may not be malicious in nature, including but not limited to marketing campaigns, moral hacktivist attacks and other traffic outside of the normal traffic profile for the Internet Service; and
 - (ii) immediately inform Exponential-e if any threat is made, whether publicly, privately, intimated, inferred or directly, of any intention to initiate a DDoS or DoS attack at any time.

Smart EPL Services can be provided as “Wires-only”, or with an Ethernet Demarcation Device (“EDD”).

Access Circuit	Presentation	Port Speeds	VLAN Support via EDD if Provided
Up to 35Mbps EoC EFM	RJ45	Up to 35Mbps EoC EFM in 1Mbps steps	Multiple
100Mbps EOF	RJ45	11 to 100 Mbps in 1 Mbps steps	Multiple
1000Mbps EOF	Optical	101 to 1000Mbps in 1 Mbps steps	Multiple
10000Mbps EOF	Optical	1001 to 10000Mbps in 1 Mbps steps	Multiple

Services have a Maximum Transmission Unit (“MTU”) size of 1526 bytes. (>1526 available on request at additional charge).

End User Premises Equipment (EUPE)

The Smart EPL Service can be supplied with an Ethernet Demarcation Device (EDD), providing one WAN interface and multiple LAN interfaces depending on the model supplied. The EDD is loaned equipment; ownership will not pass to the Partner / End User. The Partner / End User is responsible for receiving the pre-configured EUPE and is responsible for carrying out installation in accordance with the written instructions provided by Exponential-e. Exponential-e will provide up to one hour of telephone support during installation.

2. Smart EPL Service Demarcation Point (SDP)

The Smart EPL SDP is the point up to which (i) Exponential-e’s service obligations apply and (ii) the Smart EPL Service Level Agreement covers. The LAN port(s) on the EDD is the SDP for the Smart EPL Service except where

the Wires Only option is taken in which case the SDP is the access circuit provider’s Network Terminating Equipment.

3. Target Service Commencement Date

Smart EPL 60 Working Days*

* From Order acceptance. It is assumed all comms rooms are ready.

4. Smart EPL Service Level Agreement

Target Availability

Service availability the Smart EPL Service is defined as the ability to send a data packet from the demarcation point of the Smart EPL Service at the remote Site to the NNI/UNI.

Service Option	Target Availability
Smart EPL Wires Only (EoC)	99.80%
Smart EPL with EDD (EoC)	99.85%
Smart EPL Wires Only (EoF)	99.85%
Smart EPL with EDD (EoF)	99.9%

Service Credits

	Measure	Service Credit*
Availability	>0.1 Below Target	5%
	>0.5 Below Target	10%

* The Service Credit is applied as a percentage of the Monthly Charge for the affected Smart EPL Service only.

5. Ordering Method

Smart EPL can be ordered via on Online Order, though order forms may be required to be signed for post-order changes such as Excess Construction Costs, B-End Shifts and upgrades.