LAMBDA λ

Service description

The LAMBDA λ is a point-to-point DWDM service, which can replace the Dark Fiber service and eliminate the need of repeaters between the service end-points.

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lambda λ</td>
<td>Capable of transmission of any type of upper layer protocols (for example Ethernet, SDH, etc.)</td>
</tr>
</tbody>
</table>

Features
- Predictable QoS
- Nx1 lambdas
- 1/10/100 Gbps capacities
- Standardized
- Reliable

Sample applications
- Line services (Point-to-Point)
  - Ethernet
  - SDH

Synonymous service names
- Transponder

RFI/RFP input details
- SERVICE speed
- Interface type
- UNI location (city, street, etc.)
- Contact person (name, mobile phone, E-mail)

Service Provisioning process
- Inquiry > Quotation > Order > Provisioning

To place an order/request for information, please contact
- Phone +359 (2) 490 3211
- E-mail sales@telehouse.bg
- Internet www.telehouse.bg
- Address Ovche Pole 122 str., fl.2, Sofia 1303, BULGARIA

SERVICE DIAGRAM

TECHNICAL DESCRIPTION

ISO OSI – Layer-1
Mode – SM

Network Quality Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backbone availability</td>
<td>Per year</td>
<td>99.999 %</td>
</tr>
<tr>
<td>Network type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Latency</td>
<td>Per 150 km</td>
<td>2 ms</td>
</tr>
<tr>
<td>Jitter</td>
<td>Per 150 km</td>
<td>2 ms</td>
</tr>
<tr>
<td>Frame loss</td>
<td></td>
<td>0 %</td>
</tr>
</tbody>
</table>

Supported rates
- Ethernet: 1/10/100 Gbps
- SDH: STM-16/STM-64/STM-256

Acceptable wavelengths
- 1310 nm
- 1550 nm

Service Demarcation Point
- UNI (ODF)
- DWDM transponder port

Optical UNI interfaces
- LC/PC

Details
- Provisioning (RFS date) within 30 days (meantime, ask for exact)

SERVICE PROVIDER BACKBONE DETAILS

- Ultra-fast (<10ms) protection switch
- ROADM carrier-grade devices
- Dual-ring protection
- Head-end located in the cutting-edge colocation center www.TelePoint.bg
- PoPs located in specialized Telco colocation facilities

DICTIONARY

CPE – Customer Premises Equipment
DF – Dark Fiber
DWDM – Dense Wavelength Division Multiplexing
EPL – Ethernet Private Line
IRU – Irrevocable Right of Use
ISO – International Standardization Organization
MRC – Monthly Recurring Charge
MTTR – Mean Time to Recover
NNI – Network to Network Interface
NRC – Non Recurring Charge
ODF – Optical Distribution Frame
OSI – Open System Interconnect 7 layer model
PoP – Point of Presence
QoS – Quality of Service
RFS – Ready for Service
SDH – Synchronous Digital Hierarchy
SLA – Service Level Agreement
SM – Single Mode
TT – Trouble Ticket
UNI – User Network Interface
WDM – Wavelength Division Multiplexing

SERVICE level agreement

24x7 Helpdesk available with TT system
Service availability 99.5%/yearly
Service outage MTTR
- Equipment failure
  - Business hours: <2h
  - Non-business hours: <4h
- Cable failures
  - Business hours: <6h
  - Non-business hours: <12h
  - Stolen cabling and natural disasters: <2 days