“VIRTUALPNI” SPECIAL SERVICE LEVEL AGREEMENT

1. **Overview**
   1.1. This document contains the Special Service Level Agreement (Special SLA) for the VirtualPNI product. The VirtualPNI Special SLA is part of the DE-CIX contractual framework.
   1.2. This VirtualPNI special SLA shall apply only to the VirtualPNI product, and – within its scope – its provisions shall override any contradicting or diverging provisions in the Master Service Level Agreement (Master SLA).
   1.3. The technical specifications of the VirtualPNI Service are detailed in the “VirtualPNI Technical Service Description” document, which is hereby included by reference.

2. **Scope of application of service levels**
   The provisions of the Master SLA shall apply.

3. **Measurements and incident reporting**
   3.1. Due to the point-to-point characteristic of the VirtualPNI product, DE-CIX does not measure any of the service levels specific to the VirtualPNI product.
   3.2. All service levels specific to the VirtualPNI product are therefore dependent on accurate measurements by the customer, and immediate reporting of any incidents to the DE-CIX customer support service.
   3.3. The determination of whether a service level specific to the VirtualPNI product is breached shall thus be based solely on the time periods starting with the incident report to the DE-CIX customer support service.

4. **Dissemination of customer usage measurement data**
   Due to the point-to-point characteristic of the VirtualPNI product, no customer usage data is disseminated to other customers.

5. **Service definition and service levels: availability**
   5.1. VirtualPNI is a layer 2 point-to-point service for the exchange of (layer 2) frames. The VirtualPNI service is available as long as frames are forwarded between the two endpoint of the connection.
   5.2. The service levels for availability of VirtualPNI depend on the VirtualPNI region and the physical location of the customer’s connection. The service level for availability shall be
calculated according to the Master SLA. The respective service level values are compiled in the table in section 7.

6. **Service definition and service levels: performance**

6.1. The performance of VirtualPNI depends on the VirtualPNI region and the physical location of the customer’s connection. The respective VirtualPNI performance service levels are compiled in the table in section 7.

6.2. Frame loss, jitter and round-trip delay on the DE-CIX platform are calculated based on an hourly average.
7. Service levels for different VirtualPNI region

<table>
<thead>
<tr>
<th>Service Side</th>
<th>Access Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRA</td>
<td></td>
</tr>
<tr>
<td>HAM</td>
<td></td>
</tr>
<tr>
<td>MUC</td>
<td></td>
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<tr>
<td>DUS</td>
<td></td>
</tr>
<tr>
<td>BER</td>
<td></td>
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<tr>
<td>MRS</td>
<td></td>
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<tr>
<td>MAD</td>
<td></td>
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<tr>
<td>LIS</td>
<td></td>
</tr>
<tr>
<td>PMO</td>
<td></td>
</tr>
<tr>
<td>IST*1</td>
<td></td>
</tr>
<tr>
<td>NYC*2</td>
<td></td>
</tr>
<tr>
<td>DFW*2</td>
<td></td>
</tr>
</tbody>
</table>

### FRA
- **99.99%**
- **0.05%**
- **1ms**
- **0.1ms**

### HAM
- **99.99%**
- **0.5%**
- **14ms**
- **3ms**
- **99.99%**
- **0.5%**
- **1ms**
- **0.1ms**

### MUC
- **99.99%**
- **0.5%**
- **23ms**
- **3ms**
- **99.99%**
- **0.5%**
- **17ms**
- **3ms**

### DUS
- **99.99%**
- **0.5%**
- **28ms**
- **3ms**
- **99.99%**
- **0.5%**
- **22ms**
- **3ms**

### BER
- **99.99%**
- **0.5%**
- **28ms**
- **3ms**
- **99.99%**
- **0.5%**
- **22ms**
- **3ms**

### MRS
- **99.99%**
- **0.5%**
- **20ms**
- **3ms**
- **99.99%**
- **0.5%**
- **28ms**
- **3ms**

### MAD
- **99.99%**
- **0.05%**
- **1ms**
- **0.1ms**

### LIS
- **99.99%**
- **0.05%**
- **10ms**
- **3ms**

### PMO
- **99.99%**
- **0.05%**
- **1ms**
- **0.1ms**

### IST*1
- **99.99%**
- **0.5%**
- **80ms**
- **8ms**

### NYC*2
- **99.99%**
- **0.5%**
- **140ms**
- **10ms**

### DFW*2
- **99.99%**
- **0.05%**
- **1ms**
- **0.1ms**
8. **Service definition and service level: DE-CIX customer support service:**
The provisions of the Master SLA shall apply.

9. **Breach of service level, credit system:**
The provisions of the Master SLA shall apply.

10. **Credit amounts:**
10.1. The following credit amounts shall apply to breaches of service levels for the VirtualPNI service.
10.2. Availability (per calendar month):
The provisions of the Master SLA shall apply.
10.3. Performance (per day):

<table>
<thead>
<tr>
<th>Breach of performance level for a time period of up to 4 hours:</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>3% credit</td>
<td></td>
</tr>
<tr>
<td>Breach of performance level for a time period of more than 4 hours:</td>
<td>6% credit</td>
</tr>
</tbody>
</table>

10.4. Credit percentages are in relation to the monthly recurring fee payable to DE-CIX for use of the VirtualPNI service.

11. **Credit claim procedure and dispute resolution:**
The provisions of the Master SLA shall apply.

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**Legende:**
- **Availability** = Availability of Service Level
- **Frame Loss** = Performance: frame loss
- **RTT** = Performance: round trip delay (for up to 97.5% of frames)
- **Jitter** = Performance: Jitter (for up to 97.5% of frames)

**Access Side** = Customer physical connection location

**Service Side** = GlobePEER Service Side

*1 Customers connected from outside Istanbul city SLA is reduced to 99.70%. Performance and availability +0.1% (Packet Loss) +5ms (Jitter) +100ms (Latency) (according to the list of DE-CIX Istanbul on net locations)

*2 Customer connected from outside MetroRegion SLA is reduced to 99.90%. Performance and availability is 0.1% (Packet Loss), 2ms (Jitter), +100ms (Latency)