

## DE-CIX GLOBEPEER SPECIAL SERVICE LEVEL AGREEMENT

### 1. Overview

- 1.1 This document contains the Special Service Level Agreement (Special SLA) for the GlobePEER product. The GlobePEER Special SLA is part of the DE-CIX contractual framework.
- 1.2 This GlobePEER Special SLA shall apply only to the GlobePEER 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 GlobePEER Service are detailed in the “GlobePEER 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 Notwithstanding any incident reports by the customer under the provisions of the Master SLA, DE-CIX operates equipment for the purpose of measuring the performance and availability relevant to this Special SLA in accordance with the following section.
- 3.2 Measurement boxes are connected to nodes which are configured in the same way as customer interfaces. Pursuant to the Master SLA, only the measurement created by these measurement boxes shall be authoritative to indicate actual performance and availability. The values gained from the measuring equipment are made available to customers online for four weeks.

### 4. Dissemination of customer usage measurement data

- 4.1 Pursuant to the DE-CIX Global Terms and Conditions, DE-CIX may elect to make available customer usage measurement data in accordance with this section 4.
- 4.2 Disseminated information:
  - 4.2.1 customer’s company name,
  - 4.2.2 customer’s GlobePEER region,
  - 4.2.3 customer’s physical connection location,
  - 4.2.4 whether or not the traffic load on the customer’s GlobePEER connection exceeded 90% of its agreed capacity at the time of the previous measurement, and
  - 4.2.5 the time of the previous measurement.

- 4.3 This information may be made electronically accessible (e.g. via a web-interface) to all DE-CIX customers within the same GlobePEER region.
- 4.4 Dissemination of this information shall help DE-CIX customers to recognize possible transmission bottlenecks, take measures to prevent transmission delays, and thereby optimize overall efficiency and performance of the GlobePEER service.
- 4.5 The customer may object to the dissemination of this information by email at any time.

## **5. Service definition and service levels: availability**

- 5.1 GlobePEER is a layer 2 multipoint to multipoint service for the exchange of (layer 2) frames between multiple customers.
- 5.2 GlobePEER consists of the three integral features described below in sections 5.2.1 to 5.2.3. For as long as either of the features is unavailable, the GlobePEER service shall be deemed unavailable.
  - 5.2.1 Availability of the reachability feature:

GlobePEER reachability feature is available as long as more than 50% of DE-CIX measurement boxes (one per edge node) can reach each other.
  - 5.2.2 Availability of route server feature:

The Route Server Feature consists of multiple route servers. The Route Server Feature is available as long as one route server is available. A route server is available as long as there is a BGP session to at least one customer.
  - 5.2.3 Availability of the blackholing feature:

The blackholing feature is available as long as the appropriate ARP responder response to the pre-defined IP Address and the packets marked with the pre-defined blackholing MAC Address are filtered. The availability of the feature will be measured by the SLA measurement server.
- 5.3 The service levels for availability of GlobePEER depend on the GlobePEER 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 GlobePEER depends on the GlobePEER region and the physical location of the customer's connection. The respective GlobePEER 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 GlobePEER regions

Service Side											
	FRA	HAM	MUC	DUS	BER	MRS	MAD	PMO	IST	NYC	DFW
FRA	99.99% 0.05% 1ms 0.1ms	99.99% 0.5% 14ms 3ms	99.99% 0.5% 9ms 3ms	99.99% 0.5% 8ms 3ms	99.99% 0.5% 14ms 3ms	99.99% 0.5% 20ms 3ms			99.99% 0.5% 80ms 8ms	99.99% 0.5% 140ms 10ms	
HAM	99.99% 0.5% 14ms 3ms	99.99% 0.05% 1ms 0.1ms	99.99% 0.5% 23ms 3ms	99.99% 0.5% 22ms 3ms	99.99% 0.5% 28ms 3ms	99.99% 0.5% 34ms 3ms			99.99% 0.5% 94ms 8ms	99.99% 0.5% 154ms 10ms	
MUC	99.99% 0.5% 9ms 3ms	99.99% 0.5% 23ms 3ms	99.99% 0.05% 1ms 0.1ms	99.99% 0.5% 17ms 3ms	99.99% 0.5% 23ms 3ms	99.99% 0.5% 29ms 3ms			99.99% 0.5% 89ms 8ms	99.99% 0.5% 149ms 10ms	
DUS	99.99% 0.5% 8ms 3ms	99.99% 0.5% 22ms 3ms	99.99% 0.5% 17ms 3ms	99.99% 0.05% 1ms 0.1ms	99.99% 0.5% 22ms 3ms	99.99% 0.5% 28ms 3ms			99.99% 0.5% 88ms 8ms	99.99% 0.5% 148ms 10ms	
BER	99.99% 0.5% 14ms 3ms	99.99% 0.5% 28ms 3ms	99.99% 0.5% 23ms 3ms	99.99% 0.5% 22ms 3ms	99.99% 0.05% 1ms 0.1ms	99.99% 0.5% 34ms 3ms			99.99% 0.5% 94ms 8ms	99.99% 0.5% 154ms 10ms	
MRS	99.99% 0.5% 20ms 3ms	99.99% 0.5% 34ms 3ms	99.99% 0.5% 29ms 3ms	99.99% 0.5% 28ms 3ms	99.99% 0.5% 34ms 3ms	99.99% 0.05% 1ms 0.1ms			99.99% 0.5% 100ms 3ms	99.99% 0.5% 160ms 3ms	
MAD							99.99% 0.05% 1ms 0.1ms				
PMO								99.99% 0.05% 1ms 0.1ms			
IST*1	99.99% 0.5% 80ms 8ms								99.99% 0.05% 1ms 0.1ms		
NYC*2	99.99% 0.5% 140ms 10ms									99.99% 0.05% 1ms 0.1ms	
DFW*2											99.99% 0.05% 1ms 0.1ms

<b>Legende:</b>	<b>Availability</b> = Availability of Service Level	
	<b>Frame Loss</b> =Performance: frame loss	
	<b>RTT</b> = Performance: round trip delay (for up to 97.5% of frames)	
	<b>Jitter</b> = Performance: Jitter (for up to 97.5% of frames)	
	<b>Access Side</b> = Customer physical connection location	<b>Service Side</b> = 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)	

**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 GlobePEER service.

10.2 Availability (per calendar month):

The provisions of the Master SLA shall apply.

10.3 Performance (per day):

Breach of performance level for a time period of up to 4 hours: 3% credit

Breach of performance level for a time period of more than 4 hours: 6% credit

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

**11. Credit claim procedure and dispute resolution:**

The provisions of the Master SLA shall apply.