

CCP Colt IP Access Service Level Agreement



1 Introduction

This SLA:

- sets out the SLA metrics and service credit regime for Colt IP Services
- covers Off-Net Services only where specifically referenced

2 Service Delivery Agreement

The indicative lead time is an estimate of the time it will take us to deliver the Service from the date of our Order Confirmation. The indicative lead times for On-Net Services for connected premises are set out in Table A & Table C below. Following Order Confirmation, we will confirm to customers the Colt Promised Date (CPD) which is the date on which we will deliver the Service. If the CPD is not met, then the customer will have the right to claim service credits, as set out in Table B & Table D below.

Table A: Indicative lead times for the Service Delivery Agreement

Colt IP Access On-Net Services	Indicative lead times (working days) for connected premises	
	all countries except Singapore	Singapore
Existing Service Presentation Point, existing equipment, remote configuration	10	9
Existing Service Presentation Point, existing equipment, on-site configuration	20	10
Existing Service Presentation Point, new equipment	30	15
New Service Presentation Point	35	20
Building not yet connected to Colt network	90	90

Table B: Service credits for the Service Delivery Agreement (Colt IP Access On-Net Services)

Working days past CPD	Colt IP Access On-Net Services (service credit as % of installation charge)
≥ 1 & ≤ 5	5
> 5 & ≤ 10	15
> 10 & ≤ 20	25
> 20	100

Table C: Indicative lead times for add-on Services

Service	Indicative lead times (working days) for connected premises
Workforce Mobility	20

Table D: Service credits for the Service Delivery Agreement (add-on Services)

Working Days after CPD	add-on Services (service credit as % of installation charge)
≥ 1 ≤ 2	20
> 3 ≤ 10	50
> 10	100

Notes:

- Claims are subject to an upper limit of €8,000 per claim per Service for European contracted customers, ¥1,000,000 for Japanese customers and \$10,000 for all other locations.
- For all Off-Net Services, we can only provide a target completion date. Therefore, in the event of delay, no service credits will apply.
- Service credits are calculated as a percentage of the installation charge for the affected Service

3 Fault Handling Agreement

We offer a Target Time To Repair ('TTTR') for Service Affecting Faults as set out in Table E below. The TTTR is the target length of time from when the fault is logged by us opening a trouble ticket, either due to customer reporting the fault or due to us detecting the fault, until the time the fault is resolved. In the event that we fail to meet the TTTR for Service Affecting Faults the customer has the right to claim service credits for each specific Service as set out in Table F-1 and F-2 below. Repair times for Non-Service-Affecting Faults will be mutually agreed on a case-by-case basis. We will try to repair Non Service Affecting Faults within 3 working days.

Table E: Performance metrics for the Fault Handling Agreement

Access tier	Target Time To Repair for Service-Affecting Faults (hours)
On-Net, Fibre ULL (Japan)	1
On-Net (All countries except Japan)	4
Off-Net Tier 1, Premium DSL, Fibre ULL (All countries except Japan), FTTX Leased Fibre	8*
Off-Net Tier 2, Business DSL	12
Off-Net Tier 3, Standard DSL	24
Off-Net Tier 4	48

Notes:

- i. This SLA does not apply to any faults or outages caused by a malfunction in any third party-provided copper line
- ii. TTTR for IP Domain and DNS services is 8 hours
- iii. * Off-Net Tier 1, Fibre ULL TTTR for France is 4hours.
- iv. Off-Net SLAs are applicable for FTTX Leased Fibre Access

Table F-1: Service credits for the Fault Handling Agreement for all countries except Japan

Colt IP Access Services, IP Domain (hours past TTTR)	Service credits (% of monthly service charge)	
	On-Net, Off-Net Tier 1, Premium DSL Fibre ULL FTTX Leased Fibre	Off-Net Tier 2/3/4 Business DSL, Standard DSL
> 0 & ≤ 3	5	5
> 3 & ≤ 4	10	
> 4 & ≤ 6	15	
> 6	25	

Table F-2: Service credits for the Fault Handling Agreement (Japan)

Colt IP Access Services, IP Domain (hours past TTTR)	Service credits (% of monthly service charge)
> 0 & ≤ 1	10
> 1 & ≤ 3	20
> 3 & ≤ 5	30
> 5 & ≤ 7	40
> 7 & ≤ 47	50
> 47	100

4 Service Availability Agreement

We provide end-to-end Service Availability. The calculation used is based on the duration of recorded Service-Affecting Faults per Service logged by us within the given Service Measurement Period. If the performance level in respect of the Service falls below the levels set out in Table G below, then the customer will have the right to claim service credits for the affected Service as set out in Table H below.

Table G: Target Service Availability

Access Tier	Resilience option	Target Service Availability(%)
All	Managed Dual Access**	99.99
On-Net	DSL Backup	99.95
On-Net (Japan)	None or Resilient Multi ISP	99.95

Fibre ULL (Japan)		
On-Net (All countries except Japan)	None or Resilient Multi ISP	99.90
Off-Net Tier 1, Premium DSL, Business DSL, Fibre ULL FTTX Leased Fibre	DSL Backup	99.90
Off-Net Tier 1, Premium DSL, Fibre ULL (All countries except Japan) FTTX Leased Fibre	None or Resilient Multi ISP	99.85
Off-Net Tier 2, Business DSL	None	99.80
Off-Net Tier 3, Standard DSL	None	98.50
Off-Net Tier 4	None	98.00

Notes:

- i. This SLA does not apply to any faults or outages caused by a malfunction in any third party-provided copper line
- ii. Availability of IP Domain and DNS services is 99.9%
- iii. **Dual Access is a fully managed service with two managed routers and two access connections. Any of On-net, Fibre ULL, OLO, or EFM can be used in primary connection. Secondary connection can use any of On-net, Fibre ULL, OLO, EFM, DSL, or 3G/4G wireless.
- iv. For backup connection using 3G/4G wireless, it is the Customer's responsibility to ensure good mobile radio signal quality and strength at the exact location where the Colt CPE router (including SIM/antenna) will be installed. Any SLA metric given for 3G/4G wireless backup is for parts owned and provided by Colt.
- v. Off-Net SLAs are applicable for FTTX Leased Fibre Access

Table H: Service credits for the Service Availability Agreement.

Colt IP Access Services, IP Domain (% points below target Service Availability)	Service credits(% of monthly service charges)	
	On-Net, Off-Net Tier 1, FTTX Leased Fibre, Premium DSL, Fibre ULL, All Resilience options	Off-Net Tier 2/3/4, Business DSL, Standard DSL
> 0 & ≤ 0.5	5	5
> 0.5 & ≤ 1.0	10	
> 1.0 & ≤ 1.5	15	
More than 1.5	20	

5 Service Quality

Packet loss agreement

Targets for packet loss and round-trip delay apply only where the customer is operating within the recommended network load parameters:

- Access link load: if the customer offers greater than 100% of the access link capacity for an instantaneous period, then the SLA shall not apply during the period where utilization is greater than 100%
- Service quality parameters apply only to the primary access and not on any backup circuits

The packet loss ratio targets are shown in the table below. If the Packet Loss Ratio value of the measured samples taken over a calendar month exceeds the target listed, the customer is entitled to claim service credits for the affected services as shown.

Table I: Packet Loss Ratio Target and service credits

Access tier	Target packet loss ratio	Service credits (% of monthly service charges)
On-net, Off-Net Tier 1/2/3/4 (uncontended),	<0.01%	5%

Premium DSL, Fibre ULL FTTX Leased Fibre		
Business DSL	<0.1%	5%
Offnet Tier 1/2/3/4 (contended), Standard DSL, Internet Access Resell (Tier 1/2/3/4)	<1.0%	Not applicable

Round Trip Delay

A round trip delay (RTD) is the time taken for a 32-byte packet to traverse from Colt network termination point to the destination on the Colt Network and back to Colt network termination point. Round trip delays are calculated as an average on a monthly basis. The SLA applies to

- 95% of the PoP to PoP measurements
- 85% of the end-to-end measurements between customer service interface and the reference destination on Colt IP backbone

Table J: Round Trip Delay Agreement - Inter-regional SLA

Inter-regional SLA				
	Europe	Asia	America	Middle East
Europe	60ms			
Asia	160ms	75ms		
America	80ms	120ms	75ms	
Australia	275ms	130ms	250ms	
Middle East	120ms	280ms	260ms	10ms

Table K: Round Trip Delay Agreement - Intra-regional SLA

Intra-regional SLA	
Northern Europe	20ms
Eastern Europe	60ms
Western Europe	35ms
Southern Europe	40ms
Japan	15ms
Asia	80ms
America	85ms
Australia	10ms
Middle East	10ms

Notes:

- The definition of regions can be found in section 8 of this document.
- RTD from region A to region B can be calculated as per this principle:
Intra-regional RTD region A + inter-regional RTD + intraregional RTD region B
- Colt can guarantee roundtrip delays only for infrastructure under direct Colt control, that means Colt On-Net and Fibre ULL services
- Inter-regional SLAs are measured between the edge routers between each region

Table M: Service credits for Round Trip Delay Agreement

Average monthly round trip delay	Service credits (% of monthly service charge)
More than 10% above the target round trip delay averaged over a calendar month	1% per point exceeding 110% of the target RTD for the affected premises where the ratio is exceeded. Maximum of 20% of monthly rental of the affected premises

Bandwidth Measurements

Bandwidth measurements should be executed with a commercial throughput analyzer.

Analyzers measure bandwidth on OSI Layer 4, that means the actual throughput will be lower than the nominal bandwidth of the underlying circuit due to Ethernet, IP and TCP protocol overhead.

The theoretical maximum throughput at MTU size 1500 is 94.15% of the nominal circuit bandwidth.

Colt therefore considers a measured throughput of 92% of the nominal bandwidth at MTU size 1500 as acceptable result.

Laptop or browser based tools are generally not suitable for reliable bandwidth measurement and are not accepted as a proof for insufficient bandwidth available.

Round Trip Delay and Packet Loss for Cloud Prioritisation

The following SLA table applies to customers who have ordered the “Colt Cloud Prioritisation” feature.

A round trip delay (RTD) is the time taken for a 32-byte packet to traverse from the Colt router to the next Microsoft peering point and back to the Colt router. Round trip delays are calculated as an average on a monthly basis.

Table N: SLA for Cloud Prioritisation

Parameter	SLA for Cloud Prioritisation
Round Trip Delays to nearest Microsoft peering point – Northern, Southern, Western Europe & Asia	<30ms

Notes:

- Network delay in the customers local area network or in the Microsoft cloud are not covered by this SLA
- SLA is only valid for Colt On-Net and Fibre ULL services
- The same service credit schema as in section “Packet loss agreement” applies
- Service credits can be claimed only once, either against standard RTD SLA or against Cloud Prioritisation SLAs

6 General

We are not responsible for failure to meet this SLA where such failure is due to a planned outage or outside of our reasonable control, including, for example:

- a Force Majeure event(s);
- absence of appropriate power or there is a power failure at the site;
- faulty Customer Equipment;
- where we or our authorized representatives are not granted access to the site;
- the fault is due to your actions or the actions of your employees or agents;
- where external Internet conditions such as distributed denial of service attacks impact Internet access;
- Any Fault which is a result of your not having amended the Service in accordance with our advice or that of an independent third party (for example, refusing to apply a recommended patch);
- Failure of elements of the services which are within the Customer control, such as expiration of encryption certificates, or attributed to the Customer's Equipment, network or external telephone lines;
- Suspension of Services/ disconnection of Services due to Customer's non-payment;
- Colt is not responsible for issues associated with the cloud provider's platforms, for example – log login / authentication issues, faults within the IaaS/PaaS/SaaS platform or the cloud provider's network.

In the event that a fault on one of our Services causes us to miss SLAs for other Services provided the customer will only be entitled to claim service credits against the Service that is the root cause of the fault.

The total of all credits under this SLA for all service except DSL service shall not exceed 40% (100% for Japan) of the monthly service charge for the affected Service. For DSL Services the total of all credits under this SLA shall not exceed 5% of the annual service charge for the affected Service.

7 Maintenance works

In order to ensure performance and security for all Customers, Colt occasionally performs maintenance works. Colt will endeavour to ensure that such works have minimum impact on Customer's service.

The following guidelines applies to maintenance works:

- For Service affecting works, Customer will be notified at least ten (10) calendar days in advance for planned works.
- For non-service affecting maintenance works, where customer services are not impacted, notification may not be issued.
- For any emergency maintenance work, Colt will endeavour to notify Customer as soon as Colt has determined to conduct emergency maintenance. If critical intervention is required, no advance notification will be issued.

- d) If there are planned works to be undertaken by third parties, Colt will aim to give as much notice as possible, depending on when Colt is made aware of such works.
- e) Colt will endeavour to ensure that maintenance works occur during non-working hours, unless a critical intervention is required.
- f) As Colt network is shared by multiple Customers, it will not be possible to accommodate Customer specific requirements such as preferred maintenance window, requests to reschedule, change or cancel maintenance works, and any other similar requirements.
- g) Colt is not responsible for failure to meet SLA, where such failure is due to a maintenance works outage.

8 Definitions

Existing Service Presentation Point

Premises connected to our network where we have already connected to the customers location or floor and no additional cabling is required.

New Service Presentation Point

Premises connected to our network but where additional cabling is required to connect to the customers location or floor.

Non-Service-Affecting Fault

Any fault or condition which is not a Service-Affecting Fault.

Fibre ULL

A connection type where Colt facilitates a 3rd party dark fibre element.

FTTX Leased Fibre

A dedicated point to point Access service which is leased from a local Fibre Network Operator. The passive infrastructure is lit by Colt equipment for the last mile connection between retail building and IQ Network-enabled Data Centre or Node

Off-Net

A Service provided wholly or partly using other licensed operators' network or a Service which includes DSL Services. We will confirm to customers at the point of order whether the Service has an Off-Net component.

On-Net

Service provided wholly using our network.

Colt PoP

The Colt Node

Wireless backup

A backup circuit using a tunnel through public mobile internet to connect to Colt IP backbone network. This is offered as one of variants of resilient dual access with managed router.

Internet Access Resell

A service provided completely by a 3rd party with no parts of the service provided by Colt

Service-Affecting Fault

Any failure of our fibre, transmission or terminating Equipment, which causes full or partial loss of signals to the customers Service in one or both transmission directions.

Service Availability

The time for which a Service is available, expressed as a percentage of the total time in a Service Measurement Period.

Service Measurement Period

The measurement period is one month, starting from the Service activation date and each subsequent month.

Regional Definition for Colt regions:

Colt defines different regions as following:

Northern Europe	Denmark, Finland, Norway, Sweden
Eastern Europe	Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Slovakia
Western Europe	Austria, Belgium, France; Germany, Ireland, Luxembourg, Netherlands, Switzerland, United Kingdom
Southern Europe	Italy, Portugal, Spain
Asia	Japan, Hong Kong, Singapore
America	USA, Canada
Australia	Australia
Middle East	United Arab Emirates