#### **DEDICATED ETHERNET SOLUTION - WEB MODULE**

#### Annex 1 - Definitions

- 1. <u>Definitions</u>. Terms used herein but not otherwise defined shall have the same meanings ascribed to them in the General Terms and Conditions for Delivery of Service(s) or the Master Services Agreement.
- 1.1 "Affected Service" refers to the Service experiencing a performance issue or Outage.
- 1.2 "Committed Bandwidth" refers to the maximum traffic Throughput of the Service, including Ethernet frame overheads. Bandwidth shall be managed at the IEEE 802.3 defined MAC layer immediately prior to ingress transmission into the Supplier Network. Throughput shall vary based on the ordered bandwidth amount, service frame size used by customer, and the port speed deployed.
- 1.3 "Committed Burst Size" or "CBS" is as defined by the Metro Ethernet Forum ("MEF"). Supplier limits the CBS at the ingress by setting the burst period, the time allowed for a customer to burst at the full line rate, to a maximum of 8 ms. Customer must use shaping on its traffic going into the Supplier Network.
- 1.4 "Committed Ready for Service Date" or "CRFS Date" refers to the date on which the Supplier has committed to deliver a service ready to be used by the Customer.
- 1.5 "Customer Premises Equipment" refers to any equipment not owned or provided by Supplier.
- "Ethernet Hub" is an aggregation port that enables the Customer to send multiple Services into a single port on the Supplier Network.
  The Ethernet Hub begins at the egress of the Customer port and ends at the egress of the Supplier port entering the Supplier Network.
- 1.7 "Ethernet Network" refers to the On-Net Services that comprise the total, Multipoint Ethernet Service network ordered by Customer.
- 1.8 "Excused Outage" refers to those items set forth in Part II of the Service Schedule.
- 1.9 "Facilities" means any and all property supplied by Supplier and used to deliver the Services, including but not limited to all terminal and other equipment, wires, fiber optic cables, lines, circuits, radio links, ports, routers and switches.
- 1.10 "In-Service Notification" means a written notice from Supplier to Customer that the Services ordered pursuant to an Order Form have been installed by Supplier and have been tested and are functioning properly in accordance with the Service Schedule.
- 1.11 "Individual Case Basis" or "ICB" refers to any Ethernet Service where a standard installation lead time is not provided in accordance with Section 4.4 below.
- 1.12 "Local Loop" means the connection between Customer Premises and a Supplier PoP owned or leased by Supplier or its Affiliates for the purpose of, among other things, locating and collocating communications equipment and to which the Supplier Network is directly connected.
- 1.13 "MEF 2.0 Compliant Service" means a Dedicated Ethernet Service which is provided in a network that has obtained the MEF CE 2.0 Certification.
- 1.14 "Month" refers to a time period that begins at 12:00AM Greenwich Mean Time ("GMT") on the first day of a calendar month and ends at 11:59PM GMT on the last day of the same calendar month. For the National Dedicated Ethernet Service, a month shall be deemed to begin at 12:00AM India Time ("IT") on the first day of a calendar month and end at 11:59PM IT on the last day of the same calendar month.
- 1.15 "MRC" refers to monthly recurring charge, and excludes governmental fees, taxes, surcharges, local access charges or any other charges.
- 1.16 "NID" or "Equipment" refers to a Network Interface Device installed at Customer Premises for the purpose of providing the Service.
- 1.17 "Off-Net Service" refers to an Ethernet Service that either originates and/or terminates at a location other than the Supplier Network.
- 1.18 "On-Net Service" refers to an Ethernet Service that both originates and terminates at a location which is on the Supplier Network.
- "Outage" refers to any event or circumstance (other than an Excused Outage) which results in a complete break in transmission of the Service. For Managed Services, an Outage occurs only when any two NID devices installed on Customer Premises fail to communicate with each other.
- 1.20 "Point of Presence" or "PoP" means a data center or similar space owned or leased by Supplier or any of its Affiliates for the purpose of, among other things, locating and collocating communications equipment and to which the Supplier Network is directly connected.
- 1.21 "Trouble Ticket Report" refers to when Customer notifies Supplier via Supplier's trouble ticket system of a performance issue or Outage with the Service.
- "Planned Maintenance" refers to any preventative, routine or scheduled maintenance which is performed with regard to the Ethernet Services, the Supplier Network or any component thereof, which Supplier or its agents reasonably believe is necessary in order to prevent or remedy a defect which may affect Customer's use or access to the Services. Supplier shall endeavor to give Customer at least seven (7) days' notice of any Planned Maintenance event.



- 1.23 "Protected Service" refers to a Service provisioned with an additional cable path in addition to the main path used to restore the Services to Customer in the event of a failure or performance issue in the main path. The Protected Service does not include protected access handoff (i.e., Supplier equipment to Customer equipment). A Service shall be designated as Protected or Unprotected in the Order Form.
- 1.24 "Service Flow" refers to the path Supplier provides for the Service through the Supplier Network, beginning with the ingress UNI at one Customer Premises and ending at the egress UNI at another of Customer Premises.
- "Service Availability" refers to the percentage of time in each Month Supplier commits to provide the Service without any performance issues. Service Availability is calculated from the ingress of the Supplier Network to the egress of the Supplier Network. For Managed Services, Service Availability is calculated from the ingress of the NID at the Customer Premises to the egress of the NID at the opposite Customer Premises.
- 1.26 "Service Credit" refers to the credit Supplier provides to Customer in the event the Service fails to meet a particular Service Level for a Service Level Metric provided under a Service Level Agreement.
- 1.27 "Service Level Agreement" refers to each set of Service Level Metrics, Service Level Targets, and Service Credits provided to Customer in the Service Schedule.
- 1.28 "Service Level Metric" refers to any of the Service performance criteria that Supplier can measure.
- 1.29 "Throughput" refers to the maximum throughput of the Service, also known as the Committed Information Rate. Ethernet frames shall be used for measuring Throughput. Throughput shall vary based on the ordered bandwidth amount, service frame size used by Customer, and the port speed deployed.
- 1.30 "UNI" refers to User Network Interface and is the logical demarcation that separates Customer from the Supplier Network.
- "Unprotected Service" refers to a Service provisioned with only one cable path. The Unprotected Service does not include protected access handoff (i.e., Supplier equipment to Customer equipment) or alternative path Services restoration for any Outage, regardless of the length of the Outage. A Service shall be designated as Protected or Unprotected in the Order Form. No restoration is provided for the Service by the Supplier. A Service shall be designated as Protected or Unprotected in the Order Form.

[End of Annex 1]



# Annex 2 Frame Delay (Latency) Standards for Dedicated Ethernet Services (Protected)

The following tables provide the Frame Delay (Latency) Standards for Dedicated Ethernet Services (Protected), by region. For all other Services, the Frame Delay (Latency) Standards shall be agreed to by the Parties in the Order Form.

## 1. India

India - Europe (via Mediterranean)											
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	AMS	Franktur	Pais	Margeill	Unite						
Ahmedabad	145	133	123	135		ĺ					
Bangalore / Chennai	159	147	137	149	151						
Calcuttta	175	163	153	165	167						
Cochin	168	156	146	158	160						
Hyderabad	147	135	125	137	139						
Mumbai / Pune	137	125	115	127	129						
New Delhi / Gurgaon / Noida	158	146	136	148	150						

India - North America (via Atlantic)		_						
	Hen Je	When the set worked	Toronto	Dallas	LOS AND	Santa jo	Seattle Seattle	
Ahmedabad	203	235	223	237	286	281	298	
Bangalore / Chennai	217	249	237	251	300	295	312	
Calcuttta	233	265	253	267	316	311	328	
Cochin	226	258	246	260	309	304	321	
Hyderabad	205	237	225	239	288	283	300	
Mumbai / Pune	195	227	215	229	278	273	290	
New Delhi / Gurgaon / Noida	216	248	236	250	299	294	311	

India - North America (via Pacific)							
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Ahmedabad	338	353		260	267	284	
Bangalore / Chennai	304	319	258	226	233	250	
Calcuttta	340	355	294	262	269	286	
Cochin	315	330	269	237	244	261	
Hyderabad	312	327	266	234	241	258	
Mumbai / Pune	325	340	279	247	254	271	
New Delhi / Gurgaon / Noida	351	366	305	273	280	297	

India - Asia (via Singapore)	singadi	Hongko	Ind Total	Philippin	85 Yudali	Bardkok	
Ahmedabad	74		143	101	81	103	
Bangalore / Chennai	40	73	109	67	47	69	
Calcuttta	76	109	145	103	83	105	
Cochin	51	84	120	78	58	80	
Hyderabad	48	81	117	75	55	77	
Mumbai / Pune	61	94	130	88	68	90	
New Delhi / Gurgaon / Noida	87	120	156	114	94	116	



#### 2. North America

North America - Europe (via Atlantic)										
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	Arnsterd	Franktur	Paris	Margelly	United					
NY/NJ	86	89	80	105	78					
Montreal / Toronto	118	121	112	137	110					
Chicago	106	109	100	125	98					
Dallas	120	123	114	139	112					
Los Angeles	169	172	163	188	161					
Santa Clara / San Jose / Palo Alto	164	165	156	181	154					
Seattle	181	184	175	200	173					

North America - Asia (via Pacific)											
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NY/NJ	266	249		255		295					
Montreal / Toronto	299	282	234	288	306	328					
Chicago	246	229	178	235	253	275					
Dallas	220	203	152	209	227	249					
Los Angeles	188	171	120	177	195	217					
Santa Clara / San Jose / Palo Alto	195	178	130	184	202	224					
Seattle	212	195	147	201	219	241					

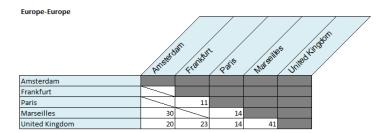
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New York/New Jersey								
Montreal / Toronto	36							
Chicago	24	56						
Dallas	38	70	26					
Los Angeles	86	119	58	32				
Santa Clara / San Jose / Palo Alto	82	114	72	46	14			
Seattle	99	131	89	63	31	21		

# 3. Europe

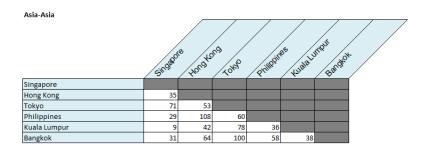
Europe-Asia (via Mediterranean)	Singapo	, Proud Ac	Jacon Jacon	Philippin	as Augusti	Pandrov Pandrov	
Amsterdam	193	227	260	221	200	223	
Frankfurt	181	215	248	209	188	211	
Paris	171	205	238	199	178	201	
Marseilles	167	201	234	195	174	197	
United Kingdom	185	219	252	213	192	215	

Europe-Asia (via Atlantic/Pacific)	/st	s Houst C	no /	Philippin	es Vuola Li	mour John	
	Singapor	Houd,	7apar	Philipp	Anala	Bandkox	
Amsterdam	350	333	285	339	357	379	
Frankfurt	353	336	288	342	360	382	
Paris	344	327	279	333	351	373	
Marseilles	383	366	318	372	390	412	
United Kingdom	342	325	277	331	349	371	





## 4. Asia



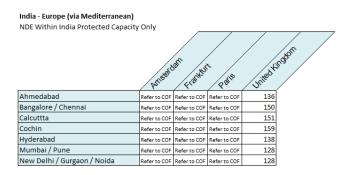
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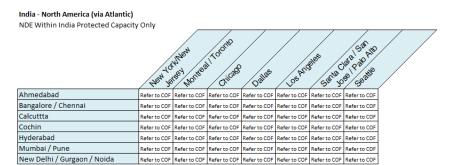


# Annex 3 Frame Delay (Latency) Standards for Dedicated Ethernet Services (Unprotected)

The following tables provide the Frame Delay (Latency) Standards for Dedicated Ethernet Services (Unprotected), by region. For all other Services, the Frame Delay (Latency) Standards shall be agreed to by the Parties in the Order Form.

#### 1. India



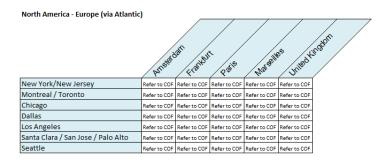


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Ahmedabad	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	
Bangalore / Chennai	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	
Calcuttta	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	
Cochin	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	
Hyderabad	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	
Mumbai / Pune	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	
New Delhi / Gurgaon / Noida	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	

India - Asia (via Singapore) NDE Within India Protected Capacity Only											
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Ahmedabad	74	107	143	Refer to COF	Refer to COF	Refer to COF					
Bangalore / Chennai	40	73	109	Refer to COF	Refer to COF	Refer to COF					
Calcuttta	76	109	145	Refer to COF	Refer to COF	Refer to COF					
Cochin	51	84	120	Refer to COF	Refer to COF	Refer to COF					
Hyderabad	48	81	117	Refer to COF	Refer to COF	Refer to COF					
Mumbai / Pune	61	94	130	Refer to COF	Refer to COF	Refer to COF					
New Delhi / Gurgaon / Noida	87	120	156	Refer to COF	Refer to COF	Refer to COF					



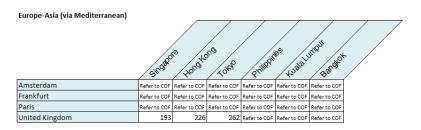
#### 2. North America



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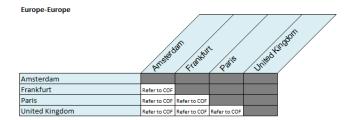
North America - North America								
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New York/New Jersey								
Montreal / Toronto	Refer to COF							
Chicago	Refer to COF	Refer to COF						
Dallas	Refer to COF	Refer to COF	Refer to COF					
Los Angeles	Refer to COF	Refer to COF	Refer to COF	Refer to COF				
Santa Clara / San Jose / Palo Alto	70	Refer to COF	Refer to COF	Refer to COF	Refer to COF			
Seattle	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF	Refer to COF		

#### 3. Europe

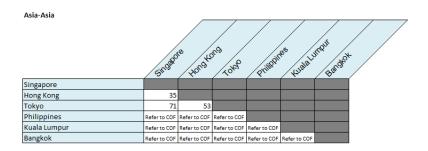


Europe-Asia (via Atlantic/Pacific)							
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Amsterdam	Refer to COF						
Frankfurt	Refer to COF						
Paris	Refer to COF						
United Kingdom	Refer to COF						





# 4. <u>Asia</u>



[End of Annex 3]



# Annex 4 Frame Delay (Latency) Standards for Low-Latency Ethernet Services

The following table provides the Frame Delay (Latency) Standards for Low Latency Ethernet Services in milliseconds, as measured between Supplier's PoPs, using an Ethernet frame size of 1518 bytes:

RTD In ms	Stratford, London	Paris	New Jersey	Chicago	Tokyo	Hong Kong	Singapore	Mumbai
Stratford, London	-	See COF for measurement	See COF for measurement	See COF for measuremen t	See COF for measurement	See COF for measurement	See COF for measurement	See COF for measurement
Paris		-	See COF for measurement	See COF for measuremen t	See COF for measurement	See COF for measurement	See COF for measurement	See COF for measurement
New Jersey			-	See COF for measuremen t	See COF for measurement	See COF for measurement	See COF for measurement	See COF for measurement
Chicago				-	See COF for measurement	See COF for measurement	See COF for measurement	See COF for measurement
Tokyo					-	See COF for measurement	See COF for measuremen t	See COF for measurement
Hong Kong						-	See COF for measuremen t	See COF for measuremen t
Singapore							-	See COF for measuremen t
Mumbai								-

For all other Services, Frame Delay (Latency) Standards shall be as agreed to by the Parties in the Order Form.

[END OF ANNEX 4]



# Annex 5 Ciena Software Right to Use License

By ordering and using the Services that include Ciena equipment and Software, Customer agreed to the following Software License:

Software and Document Licenses. Ciena Communications Inc (or its relevant affiliated entities) ("Ciena") grants Customer (and Customer's Affiliates) a non-exclusive, perpetual, non-transferable (except as otherwise set forth herein), irrevocable, fully paid up right and license to use (i) the software provided by Ciena on the Ciena's hardware for which it is designated, and for its intended purposes ("Software"), and (ii) documentation provided by Ciena to Customer in connection with the Software, solely for Customer's internal use in the operation of the Software ("Documentation"). Customer may make two copies of the Software solely for backup and archival purposes, provided that Customer shall include on each copy all original notices and legends embedded in the Software and/or affixed to its medium and container.

Restrictions; Beneficiaries. No transaction regarding Software shall be deemed a sale of goods, and Ciena grants Customer no license or right to any Software or other Ciena's intellectual property except as expressly granted in this Annex. Customer shall not, without Ciena's prior written consent, sublicense, assign or otherwise transfer any license granted hereunder. Customer acknowledges that any license granted hereunder is subject to Section 365 of the US Bankruptcy Code, and requires Ciena's consent to any assignment and in connection with a bankruptcy proceeding. Customer shall not decompile, disassemble, reverse engineer or otherwise attempt to derive the source code of the Software or grant any rights in the Software or Documentation not expressly authorized herein. Customer shall not, without Ciena's prior written consent, make any changes, modifications or improvements to the Software Customer shall treat the Software and Documentation as confidential information subject to the confidentiality obligations in the Agreement. To the extent the Software includes software licensed to Ciena by third parties, those third parties are third party beneficiaries of, and may enforce, the applicable provisions of this Annex. Ciena's consent shall not be unreasonably withheld.

Customer and Customer's Affiliates shall use the Ciena's equipment, Software and Documentation furnished hereunder solely for the purposes in which it was intended and neither Customer nor a Customer's Affiliate shall disengage or disassemble any components or parts of the Ciena's equipment for use with other equipment/software not furnished by Ciena.

[End of Annex 5]



#### Addendum 1

#### PART I. ADDITIONAL TERMS AND CONDITIONS

This Addendum is part of the Service Schedule for Dedicated Ethernet Solution ("DES") and describes certain applicable additional terms.

#### 1. Disclaimers and Restrictions.

- 1.1 The Service shall not be shared, sublet or assigned by Customer or used for any purpose other than those approved by Supplier. The granted service shall benefit and used by Customer alone, except specified in Article 4 of the General Terms and Conditions.
- **1.2** Supplier shall not be liable for any service failures or delays (including, delays in provisioning and implementation) resulting from inaccurate or incomplete data or information provided by Customer.
- 1.3 Restriction to Use: For use in India, Customer shall comply with following conditions:
- 1.3.1 The Service shall be used only for the purposes specified by the Customer in its application and shall not be used for or connected to any telecommunication service including Public Switched Telephone Network (PSTN) or Public Land Mobile Network (PLMN) or any other services unless permitted by Governmental Authority with specific approvals/ licenses. If the Service is found to have terminated on a PSTN/PLMN at either end other than as above, Supplier shall be entitled to terminate the Service and collect financial penalty levied by the Governmental Authority. Such charges shall become due and payable by the Customer to Supplier within 5 (five) working days of the termination of the Service coming to the knowledge of Supplier. Supplier shall also, at its sole discretion, be entitled to disconnect the circuit with immediate effect.
- 1.3.2 The Service shall be subject to the security regulations established by the Governmental Authority.
- 1.3.3 Changes to any circuit(s) used for Service provision shall require Supplier's prior approval and submission of requisite documents.
- 1.3.4 Pursuant to Department of Telecommunications' notification vide No18-1/BS II dated 19th April, 2006, it is permissible to do logical partitioning of EPABX for termination of leased lines /PSTN /PLMN network to ensure there is no misuse including bypass of International Long Distance Traffic between customer's private network & Basic Service Operator (BSO)/Mobile Service Operator (MSO) PSTN and Access Deficit Charges thereof. If Customer desires to terminate a Leased Line to a EPABX with PSTN connectivity under the above referred notification it shall comply with the following terms and conditions:
- (i) Customer shall, at all times, ensure that logical partitioning of the EPABX remains effective so as to totally prevents cross flow of any calls between the Customers public and private network;
- (ii) Customer shall ensure that no voice call from the private network enters PSTN or vice versa or otherwise violates any requirements as may be laid down by the Department of Telecommunications or any other Indian regulatory body from time to time;
- (iii) Customer shall get the logical partitioning of the EPABX through EPABX equipment Vendor and furnish a certificate confirming: i) that the infrastructure is capable of logically bifurcating the common infrastructure into two separate and independent environments for the PSTN and the Private Network, and ii) that the said Vendor has effected logical partition in the EPABX equipment installed at the Customer's premises;
- (iv) Customer shall furnish a copy of the permission letter from Basic Service Provider permitting Customer to conduct a logical partition of the EPABX;
- (v) Customer shall make its network and related equipment available to Supplier and representatives of the Indian regulatory body for inspection to ensure that the logical partitioning continues to be effective;
- (vi) Customer shall maintain soft copies of all Station Meter Detailed Recordings (SMDR) and furnish it on demand for inspection by Supplier or Indian regulatory body;
- (vii) Customer shall ensure that the SMDR's are adequately protected through password protection & audit trails to ensure no modifications to the SMDR's are possible. Customer shall demonstrate to Supplier upon demand that adequate care is taken through password protection & audit trails to ensure that no changes are incorporated at any point in time on the EPABX that shall allow call flow between the private and public network;
- (viii) Customer agrees to be solely and fully responsible for any breach of any conditions contained herein or contained in any undertakings given by the Customer;
- (ix) If Indian Government authorities/regulatory body disallows use of a single EPABX equipment with logical, Customer shall immediately ensure compliance with such directives and indemnify Supplier in that regard. Supplier shall not be called upon to bear any liability on any account of Customer's non-compliance with India regulatory requirements;
- 1.3.5 Pursuant to Department of Telecommunications' notification vide No.820-1/04-LR dated 7th February, 2007, Services cannot be used for Call Centre/ Other Service Provider (OSP) operations without registration with the Department of Telecommunications as a Call Centre/ OSP. If Customer wants to use the services for Call Centre/ OSP operations it must first submit its Call Centre/ OSP license or registration copy to the Supplier;
- 1.3.6 Customer shall not employ bulk encryption equipment in the network. With the exception of such encryption software use of which is permitted by the Governmental authorities, any encryption equipment to be deployed for specific requirements Customer shall do so with the prior evaluation and approval of Governmental Authority specifically designated for the purpose and in compliance with the Applicable laws. Customer shall use such software layer encryption in the network as permitted under such Applicable Laws.

#### 2. <u>Service Schedule Change:</u>

Supplier may change, amend or revise the terms and conditions of this Schedule as and when necessary to comply with statutory, legal or regulatory requirements and Customer agrees to abide by such modified terms. Such changes or revisions shall be deemed effective upon posting an updated and duly dated service level agreement to the Customer via email, fax and/or posting on Supplier's website

[End of Addendum]



