HCL ANA ON CLOUD- SERVICE DESCRIPTION

This Service Description ("**Service Description**") describes usage of HCL ANA on Cloud Service ("**HCL ANA on Cloud**" or "**Service**"). Additional terms governing the Service are set-forth in the HCL ANA Cloud Services Agreement available at https://www.hclindustrysaas.com/legal or set forth in the applicable agreement between HCL and Customer ("**CSA**"). This Service Description, any applicable Attachments, Orders, and the CSA are the complete agreement regarding transactions under the CSA (collectively, the "**Agreement**"). Any capitalized terms used but not defined in this Service Description shall have the meanings given to such terms in the CSA or other applicable documents of the Agreement.

1. HCL ANA on Cloud

HCL ANA on Cloud is based on a closed-loop network automation model that continuously monitors and assesses real network conditions, traffic demands, and resource availability to determine the best placement of traffic for optimal service quality and resource utilization. HCL ANA on Cloud takes a snapshot of the radio access network (RAN), identifies the cell-site(s) that are sub-optimal, and classifies them based on the action required (tilt, power, PCI, and others, for example).

The corrective actions are delivered through the cell vendor's operational support system (OSS) and tracked via the feedback loop for constant monitoring and advanced actions.

Furthermore, Customers can utilize the Network Applications to manage and automate the RANs. HCL ANA on Cloud enables Customers to control the Application and Network Application via a Web GUI and monitor the activity of the Network Application. For the avoidance of doubt, the Customer must pay the appropriate fees specified in the Order for the applicable Network Application utilized by the Customer.

1.1 HCL ANA on Cloud Infrastructure services

HCL Infrastructure Service includes the hosting environment and infrastructure on which the HCL ANA on Cloud runs. It typically consists of the following:

- Production Environment
- Compute resources
- Virtual Private Network (VPN)
- Data Storage and Backup
- Application monitoring
- Security functionalities
- Networking (Firewalls, Load Balancers)

The exact details related to the provisioning and configuration of the infrastructure will be as specified in the Order.

If requested by the Customer and agreed to by HCL, HCL will provide implementation services, consulting services, integration services or other related services under a separate professional services contract.

1.2 HCL ANA on Cloud Infrastructure Capacity

HCL ANA on Cloud can scale on-demand, however understanding peak loads in advance is important for ensuring the Service can perform as desired during peak events. The Order will contain metrics for the following items.

- Number of total Customer Network Elements database records & Retention
- Number of Cells (RAN Network Size)

- Number of Network Applications

If these metrics are exceeded, the performance of the Service may degrade, and SLAs shall no longer apply.

1.3 HCL ANA on Cloud Infrastructure Usage Components
HCL ANA on Cloud infrastructure includes components which are charged based on usage. The maximum amount of these components a Customer can consume will be listed in the Order. Usage beyond such limits will be invoiced based on HCL's price in effect at that time. The following items or events bear usage limits:

- Additional Network Traffic – TB per Region
- Additional Storage – TB per Region
- Additional Environments
- Additional Custom Networking (e.g., VPNs, connecting to on-premise additional data sources/integrations)
- Additional Security Protections

2. HCL ANA on Cloud Service Features

2.1 Environments
The Service provides the infrastructure for running the Application for which HCL provides networking, compute and storage hardware. HCL provides one or both of the environments listed below based on the Service specified in the Order. Additional environments, or standalone environments are available upon request and for an additional charge.

2.1.1 Production Environment
The production environment comprises the Application, systems, and supporting systems infrastructure that allows the Customer to optimize and manage its RAN ("**Production Environment**").

Administrative access to the Production Environment is restricted to HCL's personnel & Customer's authorized users.

2.1.2 Non-Production Environment Staging (if part of the purchased Service)
Provides a single environment, which is a functionally equivalent instance of the Production Environment and the supporting infrastructure used for development testing, quality assurance, and functional testing of the Service ("**Non-Production Environment**"). The Non-Production Environment may use a different scale of resources compared to the Production environment.

The Non-Production Environment is not covered by the Service Level Agreement in section 3 of this Service Description. Administrative access to the Non-Production Environment is restricted to HCL personnel and Customer's authorized users. Additional Non-Production Environments are available upon request and for an additional charge.

2.2 Data Backup and Restore
HCL performs storage snapshot backup of data used by the Application . Daily snapshots are retained for 7 days and are stored securely. Storage snapshots enable restoration of system data from backup when necessary. Additional backup capacity and services are available upon request and for an additional charge.

Upon termination or expiration of the Agreement and/or this Service, HCL will not be required to remove copies of data from its backups until such time as the backup copies are scheduled to be deleted in the normal course of business of HCL or HCL's cloud infrastructure provider (whichever is later).

2.3 Service integration with Customer systems

The following capabilities of secure transmission protocols and methods allow integration of HCL ANA on Cloud with the Customer's systems:

- ANA Application Interfaces - A set of protocols & interfaces that provide connectivity between the Service and the Customer's systems (E.g. EMS)
- Secure File Transfer Protocol (SFTP) or SSH File Transfer Protocol - provides file access, file transfer, and file management over a secure and reliable data stream. The Service uses SFTP/SSH protocol for inbound or outbound file transfers to the Service.

2.4 Network Integration

The following methods are supported for integrating with the Customer networks. Secure transport protocols and methods are supported and apply solely to HCL ANA on Cloud integrations (i.e. not to customer-side network integrations). The Customer shall be responsible for the configuration of all of its network components and protocols required for network integration, including: address translation, VPN configuration, firewall configuration, etc.

- Virtual Private Network (VPN)
- Virtual Private Cloud (VPC)
- Firewall configuration

2.5 Security Features

HCL ANA on Cloud implements the following security features:

- Data encryption in transit - The Service encrypts data using the current stable and secure encryption protocols during data transmission between the Service on the cloud infrastructure and the Customer endpoint networks or machines. The Customer is responsible for ensuring transfer of content is via a secure protocol (as an example SFTP or SSH File Transfer Protocol) while transmitting data.
- Firewall - HCL creates Service firewall policies to enable the relevant Customer systems to connect to the Service, while blocking any unnecessary and unauthorized access to the Service and the Environment. (and tests firewalls and networking components).

Additional security features that may be purchased by the Customer:

(A) Network Based Intrusion Detection & Prevention(IDS & IPS) – If this feature is purchased by the Customer, HCL will implement network-based intrusion prevention and intrusion prevention policies to monitor and prevent for malicious activities within the Environments. This functionality is subject to additional charges as specified by HCL in the applicable Order.

(B) File Integrity Monitoring (FIM) - If this feature is purchased by the Customer, HCL will implement file integrity monitoring by validating the integrity of operating system files and Application software files by comparing between current files states and a known baseline of these files. This functionality is subject to additional charges as specified by HCL in the applicable Order.

2.6 Clock Synchronization

Clocks of all servers provisioned as a part of rendering the Service are synchronized to the primary time source provided by the cloud provider, which hosts the Environment/s used to provide the Service.

2.7 Monitoring

If Customer has procured the High-Availability (HA) version of HCL ANA on Cloud, HCL will monitor the Environment to ensure that the Service provided via the Production Environment meets the SLA. The Customer would be responsible to report to HCL any fault observed with the Application according to the technical support process in this Service Description.

3. Service Level Agreement("SLA")

The High-Availability (HA) version of HCL ANA on Cloud has redundancy enabled. It operates by reducing single points of failure and triggering cross over to back-up components in case of a failed component. In case the Customer has procured the High-Availability (HA) version of HCL ANA on Cloud, HCL will use commercially reasonable efforts to ensure that the Production Environment has an Availability of 99.9% or higher ("Availability Commitment"). In the event HCL does not meet the Availability Commitment and provided a written claim for failure to meet the Availability Commitment is submitted by the Customer within three (3) business days after the end of the applicable calendar month and Customer or the applicable HCL Business Partner has made all the requisite payments with respect to the Service to HCL, Customer will be eligible to receive a service credit as described below. Service Credits will be applied against a future invoice for the Service.

Availability during a calendar month	**Service Credit* (% of monthly Service fee** for calendar month during which the claim arose)**
Less than 99.9%	0.5%
Less than 99%	2%
Less than 95%	5%

*The service credit will be applied to future invoices.
** If the Service was acquired from an HCL Business Partner, the monthly Service fee will be calculated on the then-current list price for the Service in effect for the calendar month which is the subject of a claim. HCL will provide the service credit directly available to Customer.

The total compensation with respect to any calendar month cannot exceed 10 percent of one twelfth (1/12th) of the annual charge for the Service.

For the purposes of the SLA, (A) Availability (expressed as a percentage) is calculated per calendar month and is calculated as the total number of minutes in a calendar month minus the total number of minutes of Downtime in a calendar month divided by the total number of minutes in the calendar month; and (B) Periods during which the Service is unavailable for use by the Customer is referred to as "Downtime". Downtime is measured from the time Customer reports the event until the time the Service is restored and will not include periods of scheduled maintenance, maintenance windows to rectify Service Vulnerabilities, unavailability caused by Customer's actions, inactions or omissions (including, utilization of the Service in excess of the authorizations acquired by the Customer, unsupported system configurations and platforms utilized by Customer or other Customer errors, Customer-caused security incident or Customer security testing), unavailability caused by factors outside HCL's control or the cloud platform provider's control (including, any force majeure event), unavailability caused by problems with Customer or third-party content or technology, designs or instructions, unavailability caused due to Customer's failure to follow the usage guidelines prescribed by HCL,

unavailability arising from the suspension or termination of Customer's right to use the Service in accordance with the Agreement or unavailability caused by connectivity loss or other networks or systems not under the control of HCL.

Downtime and Availability will be measured and calculated using industry standard monitoring tools. HCL's records and data will be the sole basis for all SLA calculations and determinations. The SLA is not a warranty and the Service Credits provided to the Customer is Customer's sole and exclusive remedy in case of any unavailability, non-performance, or other failure by HCL to provide the Service (including, breach of the SLA). The SLA is available only to Customer and applies only to use in Production Environments.

The Non High-Availability (Non-HA) version of HCL ANA on Cloud does not have redundancy provisioned and therefore, in case the Customer procured Non High-Availability (Non-HA) version of HCL ANA on Cloud, the Availability Commitment described above is not applicable.

4 Technical Support

The technical support, level of support, escalation processes & guidelines, and issue tracking practices for HCL ANA on Cloud, are outlined in the HCL's "Industry Software Division Telecom Products Support Guide" available at https://support.hcltechsw.com/csm?id=industry_software_support. In the event of a conflict between the terms contained in the Agreement and the terms contained in the Industry Software Division Telecom Products Support Guide, the terms of the Agreement shall prevail and control.

The Customer agrees that the following terms apply to Technical Support provided by HCL:

- The Customer will ensure that a resource is assigned to work with HCL to provide information or verification on an ongoing basis, until the issue is resolved.
- In the event of multiple reported faults being worked-on concurrently, unless otherwise requested by Customer, HCL will prioritize based on the service level starting with Severity 1 (S1) and then based on the time the fault was reported starting with the oldest.
- In the event HCL response time to a fault is negatively impacted due to Customer's delayed response to HCL request for additional information to correct the fault, the response times provided below will be extended by an amount of time proportionate to such delay.
- Both parties may agree that due to technical dependencies and other factors, certain faults classified as Moderate and/or Minor may be resolved in an appropriate scheduled maintenance window. Customer acknowledges that HCL does not and cannot guarantee that all such faults can or will be corrected.
- Updates, Upgrades or System Patches will be applied during scheduled maintenance windows, unless it is required to restore system availability.

4.1 Severity level definition, Response Time

The severity level of a Customer-reported problem may be set in good faith by the Customer at the time the problem is reported according to the following criteria, but is subject to change based on the findings of HCL support team and the provision of a workaround for reducing the severity level of a problem:

Severity Level	Impact	Description
Severity 1 (S1)	Major Impact	The Service is completely unavailable, or there is a critical problem or error (i.e., non-functional) in the primary functionality of the Service.

Severity 2 (S2)	Moderate Impact	There is a serious error in the primary functionality of the Service.
Severity 3 (S3)	Minor Impact	There is a minor error or problem in a non-primary (e.g., reporting) component of the Service.
Severity 4 (S4)	Question or Request	Customer requires information or assistance regarding the Service capabilities, installation instructions, or configuration. Minor intermittent functionality or performance issue.

HCL will use commercially reasonable efforts to achieve the Response Time, Restore Time and Resolve Time objectives listed in the table below. For the avoidance of doubt, the parties agree that the objective listed in the table below are non-binding objectives and that HCL shall not be liable for any damages, costs, expenses, losses, or liabilities in the event it is unable to meet the objectives listed in the table below. In some cases, the assigned cases severity may be adjusted to align with the Programs Support Severity Guidelines provided in the table above.

Activity		**Premium * (& Hosted/aaS)**			
Access to Technical Support		**24/7**			
Severity Level		**S1**	**S2**	**S3**	**S4**
Technical Support	Response Time	15M	15M	1H	1H
	Target Restore Time	12H	24H	NT	NT
	Target Resolve Time	5D	20D	180D	NT
Software Updates		Included			
Software New Versions		Included			

BD = Business Day for HCL Support Center
NBD = Next Business Day for HCL Support Center
M = Minutes
H = Hours
D = Days
NT = No Target - reasonable effort to perform the corresponding activity. At HCL sole discretion

Target Restore Time = length of time from when HCL is contacted for a loss of service to the time when HCL provides a workaround suitable to return the system to operational status
Target Resolve Time = length of time from when HCL is first contacted to the time when HCL provides a solution to Customer. This may occur simultaneously with Restore Time if restore time fix is permanent fix.
The Response time is defined as the time from when a case has been submitted in the case management system by the Customer to the time when an HCL support engineer has made contact regarding the issue reported in the case.

4.2 Application Versions

The Service is based on a version/release level of the generally-available Application current as of the date of Customer's initial agreement for the Service. Support for the Service is available only while that version or release of the Application is under support in accordance with the HCL software support lifecycle policy, and support for the Service will no longer be available as of the announced end-of-support date for that version or release of the Application.

4.3 HCL Initiated Updates

HCL performs the required maintenance and updates of the Service which includes implementing System Patches and Upgrades (collectively, "HCL-Initiated Updates").

HCL-Initiated Updates are performed during scheduled maintenance windows, except when an HCL-Initiated Update is necessary to: (a) address an emergency, or risk of harm to the Services (including, a high severity security vulnerability), (b) respond to claims, litigation, or loss of license rights related to third party intellectual property rights, or (c) comply with law (collectively (a), (b) and (c) shall be referred to as “Service Vulnerability”). HCL-Initiated Updates for addressing a Service Vulnerability will be performed as per HCL’s discretion. Scheduled maintenance is announced at least five business days in advance. Should a Service Vulnerability occur and HCL decides to perform an HCL-Initiated Update, HCL will provide Customer with as much prior notice as is reasonably practicable under the circumstances.

If HCL determines that an HCL-Initiated Update (other than one that is required to address a Service Vulnerability) requires Customer testing of the Service or there is a negative effect of an HCL-Initiated Update on the Service, prior to implementation within the Production Environment, HCL and Customer will develop a mutually agreeable schedule for deployment of such HCL Initiated Update.

Configuration changes or code changes required to ensure that the Service operates with the HCL-Initiated Update is the responsibility of the Customer.

If HCL determines that as a result of an HCL-Initiated Update not being implemented within the Production Environment, a Service Vulnerability exists or potentially exists, HCL may immediately suspend the Service until that HCL-Initiated Update has been implemented.

Should the HCL-Initiated Update remain unimplemented in the Production Environment because of Customer’s acts or omissions, then:

(A) Customer will indemnify, defend and hold HCL and its Affiliates harmless against any claims, damages, losses, liabilities or expenses arising out of or resulting from the use of the Service, to the extent such claim could have been avoided by implementing the HCL-Initiated Update,

(B) HCL shall not be liable for any claims, damages, losses, liabilities, or expenses incurred by the Customer; and

(C) Availability Commitment and security provisions will not apply and additional fees will result.

5. Enabling Software

Any software that may be used by the Customer in order to connect to the Service, to browse the system GUI or functions or to administer its use of the Service is at the Customer's discretion and financing/cost, and is not part of the Service.

6. Term and Renewal Options

The term of HCL ANA on Cloud begins on the effective date specified in the applicable Order. The Order will specify whether the Service renews automatically or terminates at the end of the term provided in the Order.

7. Data Protection

Customer will not submit PII to the Service or process or store PII using the Service.

Any PII processed by HCL as a data controller for purposes of managing the contractual relationship will be handled in accordance with our Privacy Statement found here: https://www.hcl-software.com/legal/privacy.

To the extent Customer provides PII to HCLSoftware for purposes of using the Service, or for receiving Technical Support or related services (including information contained in a support ticket or file attachment), such information shall be processed by HCLSoftware as a data processor. PII processed by HCL as a data processor will be processed in accordance with the terms and conditions of the Agreement and the HCL Data Processing Agreement located at: https://www.hcltechsw.com/resources/master-agreements.

Customer is aware and agrees that HCL, its Affiliates or their respective contractors may, as part of the normal operation and support of HCL ANA on Cloud, utilize the Network Data (such as configuration management, performance management and fault managements) to gather usage statistics and information about effectiveness of HCL ANA on Cloud, for the purpose of improving customer's user experience and /or Service performance. The Customer provides its consent to allow HCL, its Affiliates and their respective contractors to utilize the Network Data for the above purpose

8. Definitions

ANA – Augmented Network Automation Platform.

Application – refers to the HCL software products that provide the base functionality for the Service, including the original and all whole or partial copies: 1) machine-readable instructions and data, 2) components, 3) visual content (such as images, text, Graph, or pictures), 4) related licensed materials, and 5) license use documents or keys, and documentation, which are provided by HCL and which Customer may access through the Service.

Disaster – is a natural or human-induced event which disrupts the operations of vital technology infrastructure and systems creating a complex or irreversible disruption to the Service.

Environment – refers to the infrastructure necessary to support the Application for its intended use, and refers to the Production Environment, Non-Production Environment (if is part of the purchased Service), as the context requires

Network Application – software add-ons to the Application (see above) which are used to automate and optimize the operation of the Customer's RAN. Several Network Applications can be utilized along with one instance of the Application.

Network Data – is data that represents the configuration, activity and performance of the Customer's network, for which the Service is used, and does not contain PII Data

Personally Identifiable Information (PII) – is any information which relates to an identified or identifiable individual.

Terabyte (TB) – a unit of measure for network traffic or storage.

System Patch – is a fix for an error that affects the Application.

Upgrade – is a new version or release of the base Application that replaces an earlier version or release, and typically includes new features and functions.