This document provides Authorized Users with instructions on how to use the Manufacturer Umbrella Contract ("Contract") to procure Cloud Solutions from Lot 3. These instructions assume Authorized Users have a working knowledge of procurement methodology. Authorized Users must adhere to the terms and conditions of the Contract when procuring Products from the Contract.

This How to Use the Manufacturer Umbrella Contract - Cloud Soultion Supplement document only includes specific information that applies to procurements involving Cloud Solutions from Lot 3 or procurements involving Cloud Solutions from Lot 3 or procurements involving Cloud Solutions from Lot 3 in conjunction with Products from one or more of the other Lots. This How to Use the Manufacturer Umbrella Contract - Cloud Solution Supplement document does not contain all of the information that an Authorized User would need to conduct a Request for Quote. Authorized Users must also refer to the Attachment 11 A – How to Use the Manufacturer Umbrella Contract for additional information on how to complete their procurements.

Example Procurement Scenarios involving purchases of Cloud Solutions from Lot 3 are described in Attachment 11 B, Part 2 – Examples of Procurement Scenarios – Cloud Solution.

TEMPLATES TO BE USED WHEN CONDUCTING AN RFQ

The Authorized User shall develop an RFQ using the RFQ Templates or their own document. If the Authorized User chooses to use their own RFQ document, it must reference Group 73600, Award 22802, Information Technology Umbrella Contracts – Manufacturer Based (Statewide) and conform to the requirements of Section 1.1 below and Section 2.5 in Attachment 11 A – How to Use the Manufacturer Umbrella Contract.

Request for Quote Templates

For any procurements that include purchasing Cloud Solutions from Lot 3 please refer to the following:

- The "Request for Quote Cloud Solution" may be used if the RFQ is basic or complex and only Cloud Solutions are included in the procurement, or the template can be used when Cloud Solutions are included along with Products from one or more of the other Lots.
 - The "RFQ Cloud Solution Checklist" should be used in conjunction with the RFQ template to ensure a comprehensive RFQ. The checklist it meant as baseline for a Cloud Solution procurement and is not necessarily an all inclusive list of requirements.

For procurements that do not include purchasing Cloud Solutions from Lot 3, please refer to Attachment 11 A – How to Use the Manufacturer Umbrella Contract.

RFQ Financial Response Templates

For any procurements that include purchasing Cloud Solutions from Lot 3 please refer to the following:

The "Cloud Solution RFQ Financial Response" (Excel) may be used when Cloud Solutions are included in the
procurement, or the template can be used when Cloud Solutions are included along with Products from one or
more of the other Lots.

For procurements that do not include purchasing Cloud Solutions from Lot 3, please refer to Attachment 11 A – How to Use the Manufacturer Umbrella Contract.

Section 1. LOT 3 – BASIC CLOUD CONCEPTS

The National Institute of Standards and Technology (NIST) defines Cloud Computing as a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g. networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. The NIST Cloud model is composed of five essential characteristics, various service models, and four deployment models.

Based on recommendations from The Center for Digital Government's *Best Practices Guide for Cloud and As-A-Service Procurements* (2016), OGS recommends that RFQs and the resulting Authorized User Agreements for Cloud Solutions include four well-defined, mutually exclusive sections, along with any other sections required under the Authorized User's established procurement procedures. These sections are:

- Contact details for the Authorized User Agreement which will contain the names and contact information of the individuals who represent the parties for operational purposes.
- A Statement of Work (SOW) which will formalize all functional requirements for the Authorized User Agreement. It will define services, technical requirements, schedules, any required reports, deliverables, etc.
- Terms and Conditions for the RFQ and resulting Authorized User Agreement which will include all terms and conditions of the Contractor's Manufacturer Umbrella contract, along with terms and conditions added by the Authorized User and any Contractor terms and conditions which have been agreed to by the Authorized User.
- Service Level Agreement (SLA) Metrics outline which contains expected service metrics and descriptions of consequences for unmet agreed expectations. A Service Level Agreement is the part of the Authorized User Agreement that is subject to the terms and conditions of the Authorized User Agreement and should include the technical service level agreement promises (i.e. metrics for performance and intervals for measurement), timeframes for response to operational problems and failures, and any remedies for performance failures.
 - It is very important to develop service level agreements (SLAs) and reporting requirements with the Cloud service provider. Cloud service levels will vary between all providers, and the Authorized User should agree to the service levels prior to Authorized User Agreement execution. The SLA will define the interactions between the Contractor and the Authorized User, this portion of the Authorized User Agreementshould clearly define how the services in scope will be provided. Examples of SLA components include security, quality, availability, performance, incident notification response, and business continuity. Reporting requirements should also be established prior to contract execution. Sample report deliverables that vendors may provide include SLA reports, Help Desk/Trouble Ticket reports, Service Orders and Sales, Service Utilization and Invoicing/Billing. Consider attaching appropriate, specific remedies for failures to meet specific service levels.

There are a number of Cloud service models available. Examples of Cloud service models include but are not limited to Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS) and Anything as a Service (XaaS). Depending on the purpose and desired characteristics of given cloud services, one model may be a better fit than the other for the business requirements at hand.

The models differ in how much responsibility in managing the IT component stack (ranging from Facilities, Network, Storage, Servers, up to Application, its configuration and data) is assigned to the Authorized User as compared to the Manufacturer – Cloud Solution. Regardless of the type of Cloud service model utilized, the Authorized User is still responsible for their Data. The chart below offers a general illustration of which party is responsible for each layer/component of the IT component stack under various service models.

Group 73600 – Award 22802 Information Technology Umbrella Contracts – Manufacturer Based (Statewide) First Periodic Recruitment How to Use the Manufacturer Umbrella Contract – Cloud Solution

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CLOUD SHARED RESPONSIBILITY CHART

KEY:

MANAGED BY THE AUTHORIZED USER

DELIVERED BY THE CLOUD SOLUTION MANUFACTURER

NON-CLOUD IT:	INFRASTRUCTURE AS A SERVICE:	PLATFORM AS A SERVICE:	SOFTWARE AS A SERVICE:
APPLICATIONS	APPLICATIONS	APPLICATIONS	APPLICATIONS
DATA	DATA	DATA	DATA
RUNTIME	RUNTIME	RUNTIME	RUNTIME
MIDDLEWARE	MIDDLEWARE	MIDDLEWARE	MIDDLEWARE
OPERATING SYSTEM	OPERATING SYSTEM	OPERATING SYSTEM	OPERATING SYSTEM
VIRTUALIZATION	VIRTUALIZATION	VIRTUALIZATION	VIRTUALIZATION
SERVICE	SERVICE	SERVICE	SERVICE
STORAGE	STORAGE	STORAGE	STORAGE
NETWORKING	NETWORKING	NETWORKING	NETWORKING

There are a number of Cloud deployment models available. Examples of Cloud deployment models included but are not limited to Public, Private, Community, and Hybrid. The Authorized User must consider the Cloud deployment model they would prefer to use. In each of the Cloud deployment models it is important to distinguish who will have access to the Cloud infrastructure.

Public Clouds can be accessed by the general public. Private Clouds can be accessed by a single organization. Community Clouds can be accessed by a specific community of several organizations that have shared interests. Hybrid Clouds may be a combination of two or more cloud models (private, community, or public) so access will depend on the agreement between the Manufacturer and the Authorized User.

Section 2. LOT 3 SCOPE REQUIREMENTS THAT MAY BE APPLICABLE TO AN RFQ

The clauses contained in this Section may apply to an Authorized User's RFQ. An Authorized User is encouraged to read the below clauses and determine if the clause applies to its RFQ. If the clause applies to the Authorized User's RFQ then the Authorized User must incorporate that clause into their RFQ.

2.1 CLOUD SOLUTIONS (LOT 3)

For the duration of an Authorized User Agreement, the Cloud Solution shall conform to the Cloud Solution Manufacturer's specifications, Documentation, performance standards (including applicable license terms, warranties, guarantees, Service Level Agreements, service commitments, and credits).

The Authorized User Agreement shall specify the respective responsibilities of the Authorized User and the Contractor/Reseller.

Authorized Users may require, as part of an RFQ, Contractor compliance with applicable ITS policies found at: <u>http://www.its.ny.gov/tables/technologypolicyindex.htm</u>.

2.1.1 Cloud Risk Assessment by Authorized Users

Due to the nature of Cloud services, there is an inherent risk in placing Authorized User Data off-premise. Each Authorized User environment and project is unique and requires risk analysis and customized risk mitigation strategies, developed and implemented at the Authorized User level.

The NYS Office of Information Technology Services (ITS) advises that the acquisition of all forms of Cloud computing, including SaaS, are governed by the Secure System Development Life Cycle requirements as set forth in NYS-S13-001 or successor. Accordingly, in order for an Authorized User that is supported by ITS to acquire any product under Lot 3 - Cloud, it must first work collaboratively with ITS and the ITS Enterprise Information Security Office to ensure that such Executive Agency has complied with the Secure System Development Life Cycle requirements as set forth in NYS-S13-001 or successor and any other requirements so designated by such office.

2.1.2 Data Categorization Study

It is REQUIRED that prior to a Request for Quote, the Authorized User complete a Data categorization study, consistent with NYS-S14-002 Information Classification Standard (or successor standard) available at: http://www.its.ny.gov/tables/technologypolicyindex.htm that applies to ITS, all State Agencies that receive services from ITS, staff and affiliates of same which have access to or manage information and serves as recommended practice for the State University of New York, the City University of New York, non-Executive branch agencies, authorities, NYS local governments and third parties acting on behalf of the same to determine the following:

- the level of Data risk;
- the required Breach Notification Procedures; and
- the required Cloud service security measures for incorporation.

Authorized User must make a business decision, based on their Data categorization results, as to the appropriateness of a Cloud solution. The Authorized User must include, as part of the RFQ process:

- the Data categorization elements (not actual Data);
- the overall risk determination; and
- applicable statutory requirements (See Contract Appendix F Primary Security and Privacy Mandates).

2.1.3 Attestation of Cloud Service Types and Description

It is essential that Authorized Users fully understand the nature of the Product being offered or provided by Contractors under the Contract prior to issuing an RFQ. Accordingly, Contractor is required to fully answer any questions an Authorized User may have regarding the services and upon request in a RFQ, provide a full written description of the services to be provided.

2.1.4 Data Transfer

Except as required for reliability, performance, security, or availability of the services, the Contractor will not transfer Data, unless directed to do so in writing by the Authorized User.

2.1.5 Disaster Recovery and/or Business Continuity Services

If the Authorized User determines that it requires Disaster Recovery and/or Business Continuity Services it must specify these requirements in the RFQ in order to ensure that is required in the Authorized User Agreement.

2.1.6 Areas with Flexibility

It is essential that Authorized Users fully understand there are specific terms and conditions under Lot 3 – Cloud Solutions that should be addressed by the Authorized User in the RFQ and the resulting Authorized User Agreement. These terms and conditions can be found within in the Section of the Contract Lot 3 – Cloud Specific

Terms and Conditions. Terms and conditions which allow an Authorized User flexibility will include the following language "as agreed by the Authorized User" or "as provided in the Authorized User Agreement." Areas that require additional attention by the Authorized User because they allow an Authorized User flexibility include, but are not limited to, the following:

- Cloud Service Model;
- Cloud Deployment Model;
- Data Classification / Level of Risk;
- Modification to Cloud Solution;
- Additional Lots;
- Legal / Policy Compliance;
- Possible Site Visits;
- Additional Terms and Conditions;
- Additional Goals for SBs, MBEs, WBEs and/or SDVOBs;
- Security;
- Service Level Agreement Terms;
- Pricing;
- Increase / Decrease of Usage;
- Managed Services;
- Data Access;
- Data Encryption;
- Security Incident;
- Data Breach;
- Business Continuity / Disaster Recovery;
- Data Transfer / Return;
- Data Destruction;
- Environmental / Recycling;
- Maintenance / Support Agreement;
- Service Reports;
- Contractor Security;
- Contractor's Associates;
- Contractor Performance;
- Dispute Resolution;
- Expiration, Termination or Suspension of Services;
- Statement of Work.

Please refer to the Contract and Attachment 12C Part 1 – RFQ – Cloud Solution Checklist for more details.