

Digital Advisory Services Professional Service Description

Software Defined Networking Design

1. Description of Services.

1.1 Software Defined Networking Design.

Verizon will provide a Software Defined Network (SDN) Design, as further described below (the “Engagement”).

2. Scope of Work.

Verizon will perform the Engagement activities listed in this section and these activities are “in scope” for the SDN Design. Any items or actions not specifically identified in this section are out of scope.

2.1 Methodology. Verizon will perform the Engagement according to the stages set forth in this section. As shown below, Verizon will draft a “Resulting Deliverable” for certain stages, which are subject to Customer’s review and approval in accordance with “Deliverable Acceptance” as defined below.

- **Engagement Initiation**
- **SDN Design**
 - Orientation and requirements gathering
 - High level design
 - Low level design
 - Final design review

2.2 Engagement Initiation. The Verizon Engagement Project Manager, as defined below, will coordinate the engagement kick-off meeting in accordance with “Engagement Management” as defined below.

2.3 SDN Design. Verizon will provide the following SDN Design as part of this Engagement:

2.3.1 Orientation and Requirements Gathering. Verizon will work with Customer to capture the relevant requirements to develop the SDN Design which may include standard site types, key location identification, network protocols, network traffic prioritization, convergence, network security, site resiliency, scalability, hardware, network functionality, network peering, regulatory compliance, IP addressing plan, and application path selection.

Resulting Deliverable – the statement of requirements (SOR)

2.3.1.1 Scope Validation. Upon SOR acceptance, Verizon will conduct an Engagement scope validation to confirm that the SOR conforms to the scope of this Engagement, and whether the SOR represents a change in scope. Any changes in scope to this Engagement are subject to execution of a new Engagement Letter documenting the change.

2.3.2 High Level Design. Verizon will develop a high level design document (HLD Document) which will summarize the proposed SDN infrastructure and concepts to ensure the design achieves the requirements captured in the Customer approved SOR as well as validating the compatibility of the individual components within the overall network system. The HLD Document will be delivered in a network diagram format, and may include additional documentation if deemed necessary by Verizon.

Resulting Deliverable – the HLD Document

2.3.3 **Low Level Design.** Verizon will develop a low level design (LLD) package (the “LLD Package”) that will translate the Customer approved HLD Document into the functional technical specifications required for implementation of the proposed network. The LLD Package will consist of an LLD document and LLD network diagrams as described below. Verizon may provide additional documentation if necessary due to the design complexity and requirements.

- The LLD document will provide technical detail on the specification, functionality, and resulting operation of the components of the SDN Design including such information as network components, utilized features, network protocols, protocol interactions, enterprise configuration standards, standard site type identification and definition, key site identification and definition, site-specific deviations from the standard, logical addressing, macro and micro network functions, and application path selection.
- The LLD network diagrams will provide graphical technical depictions of logical and physical network functions and components including such information as network infrastructure, network protocols, protocol interactions, traffic forwarding, network component functionality, key site design, and standard site type design, and macro and micro network functions.

Resulting Deliverable – the LLD Package

2.3.4 **Final Design Review.** Verizon will provide a detailed design review session, to participants of the Customers choosing, including items such as an orientation on the SDN Design, a deep dive into the technical details, and a review of the supporting LLD Package. The review session will be delivered on Customer Site or remotely, as requested by Customer and shown in the Engagement Letter.

Resulting Deliverable – the Design Review Presentation

2.4 Engagement Management. Verizon will designate an “Engagement Project Manager” who will act as the single point of contact throughout the Engagement. The Engagement Project Manager is also responsible for managing the change control process. Should the Engagement’s requirements change during the course of the Engagement, the Engagement Project Manager will ensure that any modifications to the Engagement are agreed to and documented in writing.

Verizon will work with Customer to schedule a kick-off discussion to initiate the Engagement. Verizon and Customer will collaborate to determine required stakeholders and other attendees, agenda, and kick-off meeting location (i.e. on site or virtual). At or before the kick-off discussion, Customer shall provide a list of appropriate contact personnel with contact numbers, and appropriate on-site authorization documentation (where applicable). As an output of the discussion, Verizon will confirm the resources, date, time, and location for the Engagement with Customer.

All Engagement Management activities and duties will be delivered remotely.

3. **Deliverables and Documentation to be produced by Verizon.** Deliverables are intended for Customer and Verizon use only. Customer may disclose a Deliverable to a third party pursuant to the Agreement’s confidentiality terms. Verizon will provide:

3.1 The SOR;

3.2 The HLD Document;

3.3 The LLD Package; and

3.4 The Design Review Presentation.

All documentation will be delivered to the Customer electronically in the Adobe Portable Document Format (“PDF”) or a Microsoft Office format. The LLD Package will be provided electronically in an editable format once Customer provides approval and acceptance of the PDF version.

4. Documentation to be produced by Customer and Customer Obligations. Delivery of this Engagement by Verizon is dependent on Customer’s performance of the following:

4.1 General Obligations.

- 4.1.1 Provide the necessary commitment of resources and timely response to requests for information to achieve the delivery of the SDN Design within the mutually agreed timeframes.
- 4.1.2 Designate, prior to start of the Engagement, a project manager who will function as the single point of contact (SPOC) to Verizon and must be involved throughout the duration of the Engagement.
- 4.1.3 Actively participate in all Engagement related meetings and discussions and mutually collaborate with the SPOC designated by Verizon to resolve issues and changes to plan.
- 4.1.4 Make available, as required, all necessary contacts and stakeholders for input and participation in this Engagement.
- 4.1.5 Provide the assistance as defined under Customer Obligations section of the SOW.

4.2 Engagement Prerequisites. Customer will provide the following:

- 4.2.1 Current Customer network architecture to include physical architecture, network components, network protocols, functionality, technologies, identification of existing issues or areas for improvement, and current network documentation; and
- 4.2.2 Customer future state network vision to include physical architecture, network components, business continuity requirements, capabilities, functionality, technologies, and features.

5. Assumptions. In addition to the (i) above-stated obligations, policies, and parameters and (ii) the assumptions stated in the Assumptions section of the SOW, the following assumptions and considerations shall apply. Verizon’s provision of the Engagement is based on the following assumptions. Should any of these assumptions prove to be incorrect or incomplete then Verizon may modify the price, scope of work, or milestones:

- 5.1 Engagement will be performed during the hours defined in the Engagement Letter.
- 5.2 Any Assumptions under the applicable Engagement Letter will also apply to this Engagement.

6. Acceptance Criteria for the Engagement or Deliverable(s).

6.1 Deliverable Acceptance.

- 6.1.1 Customer will have 5 Business Days after receipt of a Deliverable to evaluate that Deliverable (the “Evaluation Period”). Customer may request changes via an email to the Verizon Engagement Project

Manager, who will evaluate the request, make any mutually agreed changes, and resubmit any modified Deliverable.

- 6.1.2 Customer must accept each Resulting Deliverable prior to the start of the next Engagement stage by Verizon, as detailed in section "Methodology". Customer will send an e-mail to Verizon Engagement Project Manager, with the specified Deliverable attached, stating acceptance of attached deliverable.
- 6.1.3 If Customer has not provided acceptance or a requested change within the Evaluation Period, the Deliverable shall be deemed accepted by Customer.
- 6.1.4 Scope changes may be identified during the development of the Deliverables. Required adjustments will be made per the mutual execution of a new Engagement Letter documenting the change.