## RIGHTS IN DATA AND COMPUTER SOFTWARE

**1.0 Data Rights:**

The Government retains full and unlimited rights to all artifacts (code, documents, materials) produced under this contract. All artifacts are the property of the Government with all rights and privileges of ownership/copyright belonging exclusively to the Government.

**1.1 Artifact Repository:** To facilitate the management, reporting, collaboration, and continuity of access of all government artifacts and deliverables produced under this contract as a single logical unit, all artifacts and deliverables shall be developed, version-controlled, stored, and delivered on a single industry-standard public Github repository (“Source Repository”) with clearly designated and appropriate licenses. Upon commencement of the contract period, the contractor shall establish the Source Repository, and provide a publically accessible URL of the Source Repository to the project manager, contracting representative, and relevant government stakeholders.

The Source Repository shall be the complete, authoritative, inclusive, primary source of all technical artifacts developed under this contract, reflecting in real-time all contributions of all members of the development team. Developers shall have full read-write (push-pull) privileges and share in real-time all development artifacts in progress in this collaborative environment The government, all necessary stakeholders, and the public shall have contemporaneous read and download access of the same developer artifacts at all times throughout the lifecycle of the contract. All periodic management reports and/or technical artifact submissions to the government shall be derived from, and include the URL link, to the primary source artifact in the Source Repository. By default all artifacts of the Source Repository shall be hosted on a public Github repository.

Should a subset of content in the Source Repository contain proprietary, protected, or sensitive information or content, then contractor may use a private repository for only this subset of content. A private repository shall be created and maintained as (a) either a private repository within the primary public Source Repository, or (b) within a secondary repository managed behind a government firewall on Github Enterprise. All repositories, whether private and public, shall be maintained consistent and up-to-date by fully automated means.

Contractor shall maintain an always-up-to-date list of any redacted artifacts, with associated documentation on the public Source Repository such that the scope and nature of all redactions are known at all times to the government and stakeholders. Any redaction must be fully documented and fully automated. Source code shall be clearly annotated inline to indicate any section planned for redaction, and the redaction scripts based on this annotation. The contractor shall provide the redaction and indexing script on the Source Repository. These shall be run on at minimum a weekly basis such that the private (unredacted), public (redacted), and published documentation of all redactions are complete, consistent, and up-to-date at all times. In all cases, government and authorized stakeholders shall have full access to all repositories, private and public, and an index of all content, private and public, that correctly lists and documents all contractually developed artifacts.

For purposes of this contract, independent of whether segments of the Source Repository are hosted on separate public and private repositories, the Source Repository shall be managed and considered as a single, inclusive logical unit comprehensively spanning all repositories and artifacts, and shall be considered Government Furnished Equipment (GFE) to eliminate any ambiguity surrounding ownership of said content.

The artifacts in the Source Repository shall have the following properties and data rights:

1.2 All data and metadata produced under this contract must be provided in nonproprietary industry-standard machine-processable, structured form on the Source Repository and carry a Creative Commons CC0 license. All data must include its corresponding, complete, correct, current operational metadata (schemes, data dictionaries) in machine-processable form, such that fully automated machine interpretation, extraction, translation, loading, and migration of all data to any future data storage system may be accomplished by a third party using industry-standard tools without any loss of information content or context. If the data is tabular, CSV is required; for all other data structures JSON-LD is required. For metadata JSON-LD is required.

1.3 All code (software) produced under this contract shall be developed, version-controlled, and delivered in source code form with associated documentation in the Source Repository, such that real-time, contemporaneous third-party review and validation of all code in progress is possible. The contractor shall clearly identify all source code as either original or derivative. All code that constitutes original works shall carry an Apache 2.0 license. All code that constitutes derivative works must carry an Open Source Initiative (OSI) approved free and open source license.

All source code, dependent code, libraries, or third-party code shall be in portable, industry-standard languages. If the source code requires compiling or assembling, these shall be either industry-standard open-source compilers or assemblers, or shall be provided with the software under an OSI-approved license.

All code must have corresponding documentation, version-controlled in markdown in the same repository as the source code, and contain at minimum an Installation Guide and a User Guide for the final delivered source code such that a third party may download, install and make full functional use of the delivered code as specified and intended. The Installation Guide must list all required third-party code, libraries or other dependencies.

1.4 All documentation and reports produced under this contract must be provided as machine-processable industry-standard markdown in version-controlled text files on the Source Repository and carry a Creative Commons CCO license. From the most recent version of the markdown source, contractor shall use a documentation generator to produce all documentation in required formats. At minimum contractor shall auto-generate HTML, Word, and PDF versions of all documentation from the markdown source. All edits, updates, and amendments to any documentation must be through changing the markdown source (not by editing the generated files), and then the documentation shall be regenerated in all required formats. All generated documentation shall reflect the most recent version of the markdown source. Approved markdown formats include Github Markdown and Docbook.