- **Software Lifecycle:** Summarize how the software lifecycle has unfolded, and explain the differences between the actual software lifecycle and the software lifecycle processes originally proposed in the PSAA.
- **Software Lifecycle Data:** Describe any differences between the collected software lifecycle data and the lifecycle data proposed for collection in the PSAA. Also describe the relationship between lifecycle datasets as well as their relationships to other data defining the system; and describe how the data were made available to the approval authority. This section explicitly references, with configuration and version identifiers, the applicable SCI and SECI. Detailed information regarding configuration identifiers and specific versions of software lifecycle data are provided in the SCI.
- **Additional Considerations:** Summarize any specific considerations that may warrant the attention of the approval authority. Explain any differences from the proposals contained in the PSAA regarding such considerations. References should be made to data items applicable to these matters, such as contractual agreements or special conditions.
- **Supplier Oversight:** Describe how supplier processes and outputs comply with system plans and standards.
- **Software Identification:** Identify the software configuration by part number and version.
- **Software Characteristics:** State the EOC size, timing margins (including worst-case execution time), memory margins, resource limitations, and the means used for measuring each characteristic.
- **Change History:** If applicable, include a summary of software changes with attention to changes made due to failures affecting safety, and identify any changes in / improvements to the software lifecycle processes since the previous approval.
- **Software Status:** Summarize any PRs unresolved at the time of approval. The PR summary includes a description of each unresolved problem and any associated errors, functional limitations, operational restrictions, potential adverse effects on safety, justification for allowing the PR to remain open, and details of any mitigating action that has been or needs to be taken.
- **Compliance Statement:** Include a statement of compliance and a summary of the methods used to demonstrate compliance with criteria specified in the software plans. Address additional rulings made by the approval authority and any deviations from the software plans, standards, and the PSAA not covered elsewhere in the SAS.

The results of the SAS must be summarized in the System Safety Assessment Report.

4 Establishing the Contractual Requirement

The PO must establish the contractual requirements in the SOW to ensure that they have access to all the lifecycle data as well as a schedule to ensure the necessary documents are delivered in a timely manner. The SOW should also account for the review of the documents by all the approval organizations and consider that multiple revisions may be required before a document can be finally approved. RTCA DO-278A requires that all documentation be correct. Changes to the project may require updates to all impacted documents. The Data Item Descriptions (DIDs) for a PSAA, SCI, and SAS are available in the DID Library. The PO may tailor the DIDs as necessary.