

System Development Plan for the KNEAD Example System DCN: KNEADSDP20231224-P1:100 Revision Date: 14 Mar, 2024

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DOCUMENT CHANGE HISTORY

The following table is a simple list of released revisions sent for review. Records of reviews and the review artifacts are saved with reviewer information in the The KNEAD Projectartifact repository.

Change Record

Date	Version	Author(s)	Change Reference
25 Dec 2023	P1	Lewis Collier	1st draft version

Each subsequent "section" outlines changes in each release.

Items in this version that are marked with change bars have been modified from the most recent previous version (e.g. P3 changes from P2) or are new as of the current revision. A list of all changed items may be found in the Index section under the heading "All Changes This Version".

Draft P1 Preliminary version of this document.

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Scope

ALL-1.0:: If applicable, each section has a summary of data item description (DID) information shown in this font. These are displayed in small capital font and are not part of the formal document. Display of these DID information notes can be turned off for formal releases, but are displayed here for reference.

This document provides the System Development Plan (SDP) for the UNDEFINED System. The system will be referred to as the Undefined-Sys.

1.1 Identification

ALL-1.1: This paragraph shall contain a full identification of the system to which this document applies, including, as applicable, identification number(s), title(s), abbreviation(s), version number(s), and release number(s).

The UNDEFINED System described in this document shall be known as Undefined-Sys version 1.

1.2 System Overview

ALL-1.2 :: This paragraph shall briefly state the purpose of the system to which this document applies. It shall describe the general nature of the system; summarize the history of system development, operation, and maintenance; identify the project sponsor, acquirer, user, developer, and support agencies; identify current and planned operating sites; and list other relevant documents.

The UNDEFINED System system is ...TBD....

Figure 1 shows the high-level architecture for the Undefined-Sys system. This diagram shows the major external interfaces that provide the capabilities of Undefined-Sys. As are shown, the Undefined-Sys can provide ...TBD....

The general concept of operations (CONOP) for this system is ...TBD....

1.3 Document Overview

ALL-1.3 :: This paragraph shall summarize the purpose and contents of this document and shall describe any security or privacy considerations associated with its use.

This section provides information about this document's security/privacy considerations, contents, structure, and version information.

1.3.1 Security and Privacy Considerations

This document is not subject to CUI restrictions.

This section provides information about the format of this document.

This document is a short description of the design documentation philosophy for this project. The normal SDP format is not followed.



Figure 1: System Overview

1.3.2 Document Version Information

This document was produced in LaTeX and BibLaTeX/Biber. The editing and document preparation were performed using MiKTeX version 2.9 with the build option [LaTeX \Rightarrow PS \Rightarrow PDF]. The LaTeX svn-multi package was used to glean SVN tracking information, when files are stored in an "SVN" version control system. The style KNEADdocument was used to provide the LaTeX and BibLaTeX/Biber formatting details.

This revision of this document has the following properties:

Tracking Item	Data
Repository	https://svn.riouxsvn.com/kneadlatxinputs/
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Date	

References

ALL-2.0.0 :: This section shall list the number, title, revision, and date of all documents referenced in this specification. This section shall also identify the source for all documents not available through normal Government stocking activities. It also shall include a list of acronyms and glossary terms so that they are defined before use.

This section provides a list of referenced items for this document.

2.1 Acronyms and Abbreviations

ALL-2.1.0 :: This section shall contain a full list of definitions for all acronyms and abbreviations used in this document. These are often included in an appendix but are included in Chapter 2 along with glossary terms and cited references to present the reader with the information before it is needed.

This section defines acronyms and abbreviations used in this and related documents.

Table 1: Acronym Definitions

Acronym	Definition							
ATV	Analog Television							
A/V	Audio / Visual							
	End of acronym definition table							

2.2 Glossary and Definitions

ALL-2.2.0 :: This section shall contain a full list of glossary definitions for all specialty terms used in this document. These are often included in an appendix but are included in Chapter 2 along with acronyms / abbreviations and cited references and glossary terms to present the reader with the information before it is needed.

This section defines glossary terms used in this and related documents.

Table 2: Glossary Terms and Definitions

Glossary Term	Definition						
Communications	Communication is information transfer, among users or processes, according to agreed conventions.						
Glossary terms continue on next page							

Glossary terms – continued from previous page

Glossary Term	Definition					
Customer	The local government project lead who is acting as a general manager for the sponsor to ensure that the contractor team executes the project according to stakeholder goals.					
End of glossary terms table						

2.3 Referenced Documents

ALL-2.3.0 :: This section shall contain a full list of all artifacts referenced from within this document. These are often included in a final chapter/section or appendix but are included in Chapter 2 along with acronyms / abbreviations and glossary terms to present the reader with the information before it is needed.

This section lists the referenced documents for this document. The references are categorized into two categories:

External Documents not directly associated with this project.

Project Documents that are directly associated with this project.

2.3.1 External Documents

[1] DI-IPSC-81427-A. Data Item Description for Software Development Plan (SDP). Dec. 31, 1994.

2.3.2 Project Specific Documents

- [2] The KNEAD Project. Operational Concept Description for the KNEAD Example Project. Dec. 31, 2023.
- [3] The KNEAD Project. System Development Plan for the KNEAD Example Project. Dec. 31, 2023.
- [4] The KNEAD Project. System Performance Specification for the KNEAD Example Project. Dec. 31, 2023.
- [5] The KNEAD Project. System Subsystem Specification for the KNEAD Example Project. Dec. 31, 2023.
- [6] The KNEAD Project. System User Manual for the KNEAD Example Project. Dec. 31, 2023.
- [7] The KNEAD Project. Hardware Requirements Specification for the KNEAD Example Project. Dec. 31, 2023.

- [8] The KNEAD Project. Software Requirements Specification for the KNEAD Example Project. Dec. 31, 2023.
- [9] The KNEAD Project. Interface Requirements Specification for the KNEAD Example Project. Dec. 31, 2023.
- [10] The KNEAD Project. System-Subsystem Design Description for the KNEAD Example Project. Dec. 31, 2023.
- [11] The KNEAD Project. System Test Plan for the KNEAD Example Project. Dec. 31, 2023.
- [12] The KNEAD Project. System Test Specification for the KNEAD Example Project. Dec. 31, 2023.
- [13] The KNEAD Project. System Test Report for the KNEAD Example Project. Dec. 31, 2023.
- [14] The KNEAD Project. System Version Description for the KNEAD Example Project. Dec. 31, 2023.

Required Work Overview

SDP-3.0.0:: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information. It shall include, as applicable, an overview of: A. Requirements and constraints on the system to be developed; B. Requirements and constraints on project documentation; c. Position of the project in the system life cycle; d. The selected program/acquisition strategy or any requirements or constraints on it; e. Requirements and constraints on project schedules and resources; f. Other requirements and constraints, such as on project security, privacy, methods, standards, interdependencies in hardware and software development, etc.

This chapter is ...TBD....

3.1 Program Status

SDP-3.1.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

3.2 SDLC Situation

SDP-3.1.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

3.3 Requirement Plans

SDP-3.2.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

3.4 Documentation Plans

SDP-3.3.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

The following documents are listed here just to test reference generation. A "real" SDP would reference these as applicable for the project.

- The KNEAD Project, Operational Concept Description for the KNEAD Example Project [2] is the OCD, which outlines the project overall so, generally, it is created first.
- The KNEAD Project, System Development Plan for the KNEAD Example Project [3] is this document.

- The KNEAD Project, System Performance Specification for the KNEAD Example Project [4] is the SPS, which should come from the customer or end user, but often is generated by the developer with customer approval.
- The KNEAD Project, System Subsystem Specification for the KNEAD Example Project [5] is the SSS that is the developer's design specification to meet the SPS requirements.
- The KNEAD Project, System User Manual for the KNEAD Example Project [6] is the SUM that acts somewhat like part of the SSS since it illustrates the UI design part of the SSS, but in a separate artifact that also can be used as a standalone users' manual.
- The KNEAD Project, Hardware Requirements Specification for the KNEAD Example Project [7] is a HRS, which often is not used for smaller projects but can have multiple instances for large projects to more fully detail hardware design.
- The KNEAD Project, Software Requirements Specification for the KNEAD Example Project [8] is a SRS, which often is not used for smaller projects but can have multiple instances for large projects to more fully detail software or firmware design.
- The KNEAD Project, Interface Requirements Specification for the KNEAD Example Project [9] is the IRS, which often is not use but may be needed, even if HRS or SRS artifacts are not, to fully document detailed interfaces such as Application Programming Interfaces (API) or other detailed mechanical or electrical interfaces.
- The KNEAD Project, System-Subsystem Design Description for the KNEAD Example Project [10] is the SSDD that provides a road map to the design and other design details needed to understand the hardware and software design.
- The KNEAD Project, System Test Plan for the KNEAD Example Project [11] is the STP that highlights the planning for system testing.
- The KNEAD Project, System Test Specification for the KNEAD Example Project [12] is the STS, which is sometimes called a test procedure. There could be multiple of these based on the overall project size.
- The KNEAD Project, System Test Report for the KNEAD Example Project [13] is an STR that documents the results of a given test. Multiple instances are expected

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based on the test plan. And, there could be multiple versions of a given test plan to document repeated occurrences of a given test specification/procedure.

• The KNEAD Project, System Version Description for the KNEAD Example Project [14] is an SVD that documents a given release of a system. Multiple versions of these "release notes" are expected, with one SVD issued for each system release cycle.

3.5 Schedule and Resource Constraints

SDP-3.4.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

3.6 Other Constraints

SDP-3.5.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

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System Development Plans

SDP-4.0.0 :: This section shall be divided into paragraphs as needed to establish the context for the planning described in later sections.

This chapter is ...TBD....

4.1 Hardware Development Plans

SDP-4.1.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

4.2 Firmware Development Plans

SDP-4.2.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

4.3 Software Development Plans

SDP-4.3.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

4.4 Integration Plans

SDP-4.4.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

4.5 Testing Plans

SDP-4.5.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

4.6 Other Development Activities

SDP-4.6.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

System Transition Plans

SDP-5.0.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This chapter is ...TBD....

5.1 Configuration Management Plans

SDP-5.1.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

5.2 Release Plans

SDP-5.2.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

5.3 User Support Plans

SDP-5.3.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

5.4 Other Transition Plans

SDP-5.4.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

Management and Control Activities

SDP-6.0.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This chapter is ...TBD....

6.1 Technical Review Events

SDP-6.1.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

6.2 Skills and Resources Needed

SDP-6.2.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

6.3 Scheduled Development and Monitoring

SDP-6.3.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

This section is ...TBD....

6.4 Other Management and Control Activities

SDP-6.4.0 :: This chapter provides an overview of the required work for development of UNDEFINED System. See reference [1] for more information.

Notes

ALL-Notes:: This section shall contain any general information that aids in understanding this artifact (e.g., background information, rationale, etc.)

This chapter is ...TBD....

7.1 Note Area 1

ALL-Notes:: This section shall contain any general information that aids in understanding this artifact (e.g., background information, rationale, etc.)

This section is ...TBD....

7.2 Note Area 2

ALL-Notes:: This section shall contain any general information that aids in understanding this artifact (e.g., background information, rationale, etc.)

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System Development Plan

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Other Info

ALL-APPENDIX :: This section shall contain any general information that aids in understanding this artifact (e.g., background information, rationale, etc.)

This section provides other information, as necessary, to document the system development plan.

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