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**SIGNATURE MEASUREMENT
STANDARDS GROUP**

**RCC SIGNATURE DATA BASE FUNCTIONAL
REQUIREMENTS DOCUMENT**

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TABLE OF CONTENTS

| | <u>Page</u> |
|---|-------------|
| A Data System Development | 1 |
| B Data Acquisition..... | 1 |
| C Data Archival | 1 |
| D Data Dissemination | 2 |
| E Customer Support | 2 |
| F Information System Management..... | 2 |

RCC SIGNATURE DATA BASE FUNCTIONAL REQUIREMENTS DOCUMENT

This document presents functionality requirements drafted by the Range Commanders Council's Signature Measurement Standards Group, Data Base Committee. The committee requests that these requirements be implemented by any signature data migration system such as the National Threat Signatures Data System (NTSDS) designated to incorporate test and evaluation (T&E) signature data centers. All T&E data centers connected to a distributed data system shall comply with, possess, or maintain the following.

A. DATA SYSTEM DEVELOPMENT

1. Consistent standard data definitions and units.
2. Local data center standards for collection, archival, and dissemination of signature data.
3. A capability to convert and load signature data having a nonstandard format.
4. A software/procedures development plan.
5. A distributed data system interface developed under data system guidance including all data system administrative functions.
6. A flexible data system upgrade capability that keeps data standards and procedures current.
7. On-line application and analysis packages (such as XDAT, XV, KHOROS, and signature models).
8. A capability to track the location of data base tables.
9. A data system designed for rapid retrieval of data and a measurement process (metric) to evaluate retrieval performance.

B. DATA ACQUISITION

1. A capability to track all data sets to ensure all required data are obtained by the user and all appropriate data standards are followed.
2. A data quality check for the local data loading process.
3. A local data loading process for data base population.
4. A capability to manage multiple data types (such as raw, calibrated, supporting, and comments) in the local data schema.
5. A data transformation capability.
6. A capability to transfer data from signature models.

C. DATA ARCHIVAL

1. Standard data definitions and units for the data elements in the local data loader.
2. Data storage and retrieval processes and capabilities adequate to handle anticipated volumes.
3. A capability to track data set status for receipt, storage, and dissemination.

4. A capability to convert nonstandard data to standard formats for archival.
5. A capability to periodically review data archival capabilities at the local level and to upgrade procedures and software where appropriate.

D. DATA DISSEMINATION

1. A capability to provide the customer with all pertinent information like comments and caveats associated with each data set.
2. An on-line data directory defining target type, instrumentation description, test reports, data type (modeled or field test), and point-of-contact information for the customer.
3. A capability to locally generate hard copy or electronic media retrievals of data not generally accessible to customers.
4. A data directory home page format using Hypertext Markup Language (HTML).
5. A capability to maintain and to update data directory home page documents at the local level.
6. A capability to provide sufficient information to permit conversion of data to the customer's data analysis process.

E. CUSTOMER SUPPORT

1. An on-line data directory available to the entire signature community including customers not requesting data transfer. Data directory information access restricted on a verified need-to-know basis.
2. A system to track the status of customer requests.
3. An on-line system to provide all data access protocols to the customer.
4. An on-line system to provide help to the customer.
5. Procedures for customer data system change requests, comments, and problem resolution.
6. On-line status reports of present and future target field tests and supporting information such as target and test conditions.

F. INFORMATION SYSTEM MANAGEMENT

1. Local data access control with customer's need to know verified through access lists.
2. A capability to monitor data quality (within expected format and bounds).
3. Frequent data back-ups according to established procedures.
4. An on-line security guide available to the customer for all data sets. A caution to users that merging data can increase classification levels.
5. A system to automatically monitor all data system functions and provide status reports to the system manager.
6. A system to track all data base table access and data set usage.

7. Periodic hardware and software maintenance and upgrades, and review of maintenance procedures.
8. A data system user's manual.
9. A periodic review of all data system maintenance procedures for security validation.

Secretariat

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