

DS-SDC-DDD-0002  
Date: 1994 August 2

Issue: 0  
Rev.: 0  
Page: i

Cluster Science Data System  
Detailed Design  
for the Scandinavian Data Centre  
Part 2 Component Design Specifications

Editor: Bengt H Nilsson  
Alfvén Laboratory  
Royal Institute of Technology  
Stockholm

January 18, 2000

| Document Status Sheet                                |             |          |                      |
|------------------------------------------------------|-------------|----------|----------------------|
| 1. Document Title: <b>SDC DDD Part 2</b>             |             |          |                      |
| 2. Document Reference Number: <b>DS-SDC-DDD-0002</b> |             |          |                      |
| 3. Issue                                             | 4. Revision | 5. Date  | 6. Reason for Change |
| Draft                                                | 0           | 94 Aug 2 | New document         |
|                                                      |             |          |                      |

---

## Contents

|                                           |          |
|-------------------------------------------|----------|
| <b>1 Reception</b>                        | <b>1</b> |
| 1.1 RDM reception . . . . .               | 1        |
| 1.1.1 RdmRegistration . . . . .           | 1        |
| 1.1.2 RdmVerify . . . . .                 | 1        |
| 1.2 RDM handling . . . . .                | 2        |
| 1.3 Retrieve from other sources . . . . . | 2        |
| <b>2 Interactive Processing</b>           | <b>2</b> |
| 2.1 EFW commanding . . . . .              | 2        |
| 2.2 EFW health control . . . . .          | 2        |
| 2.3 Calibration update . . . . .          | 2        |
| 2.4 Access control . . . . .              | 2        |
| <b>3 DB Server</b>                        | <b>2</b> |
| 3.1 DB mgr . . . . .                      | 2        |
| 3.2 Data base . . . . .                   | 2        |
| 3.3 ISDAT DBH . . . . .                   | 2        |
| <b>4 EFW DB Production</b>                | <b>2</b> |
| 4.1 Convert EFW PPD to CDF . . . . .      | 2        |
| 4.2 Convert EFW SPD to CDF . . . . .      | 2        |
| 4.3 Data reduction . . . . .              | 2        |
| 4.4 Retrieve data . . . . .               | 2        |
| 4.5 Validate EFW PPD . . . . .            | 2        |
| 4.6 Validate EFW SPD . . . . .            | 2        |
| 4.7 Validate EFW SPL . . . . .            | 2        |
| <b>5 SDC User Interface</b>               | <b>2</b> |
| 5.1 SDC user shell . . . . .              | 2        |

# 1 Reception

## 1.1 RDM reception

### 1.1.1 RdmRegistration

| 1.1.1    | Component ID | RdmRegistration                                                                                                                                                      |
|----------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.1.1.1  | Type         | process                                                                                                                                                              |
| 1.1.1.2  | Purpose      | SR-SDC-8 (partially)                                                                                                                                                 |
| 1.1.1.3  | Function     | To support the operator in the registration of the incoming CD-ROM<br>The process shall not accept unreasonable input<br>for example if the RDM is already registred |
| 1.1.1.4  | Subordinates | None                                                                                                                                                                 |
| 1.1.1.5  | Dependencies | Should normally be run after RdmVerify<br>A communication of info from RdmVerify should be considered                                                                |
| 1.1.1.6  | Interfaces   | SDC Operators Interface, RdmVerify                                                                                                                                   |
| 1.1.1.7  | Resources    | N/A                                                                                                                                                                  |
| 1.1.1.8  | References   | N/A                                                                                                                                                                  |
| 1.1.1.9  | Processing   | It shall be possible to start the process from the SDC operators interface<br>or from a command line<br>Only the operator shall have access                          |
| 1.1.1.10 | Data         | Data is fed in via keyboard by the operator                                                                                                                          |

### 1.1.2 RdmVerify

| 1.1.2    | Component ID | RdmVerify                                                                                            |
|----------|--------------|------------------------------------------------------------------------------------------------------|
| 1.1.2.1  | Type         | Process                                                                                              |
| 1.1.2.2  | Purpose      | SR-SDC-8 (partially)                                                                                 |
| 1.1.2.3  | Function     | To assist the operator in verifying a CD-ROM<br>Provide input data for RdmRegistration               |
| 1.1.2.4  | Subordinates | None                                                                                                 |
| 1.1.2.5  | Dependencies | None                                                                                                 |
| 1.1.2.6  | Interfaces   | RdmRegistration, SDC operators interface                                                             |
| 1.1.2.7  | Resources    | N/A                                                                                                  |
| 1.1.2.8  | References   | N/A                                                                                                  |
| 1.1.2.9  | Processing   | It should be possible to start the process from the operators interface<br>or from the command line. |
| 1.1.2.10 | Data         | In: CD-ROM, Out: Good or Bad flag                                                                    |

## **1.2 RDM handling**

## **1.3 Retrieve from other sources**

# **2 Interactive Processing**

## **2.1 EFW commanding**

## **2.2 EFW health control**

## **2.3 Calibration update**

## **2.4 Access control**

# **3 DB Server**

## **3.1 DB mgr**

## **3.2 Data base**

## **3.3 ISDAT DBH**

# **4 EFW DB Production**

## **4.1 Convert EFW PPD to CDF**

## **4.2 Convert EFW SPD to CDF**

## **4.3 Data reduction**

## **4.4 Retrieve data**

## **4.5 Validate EFW PPD**

## **4.6 Validate EFW SPD**

## **4.7 Validate EFW SPL**

# **5 SDC User Interface**

## **5.1 SDC user shell**