PDR RID Report

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RID ID PDR 386
Review SDPS
Originator Ref
Priority 2

Section **Page** **Figure Table** MB 23, CG-13, 14

Category Name Design-Data Server **Actionee** HAIS
Sub Category
Subject Scheduling and planning of Storage Management and Ingest

Description of Problem or Suggestion:

It appears as though the scheduling and queuing of the Storage Management CSCI MB 23 performs independently of the processing services planning and scheduling activities. This independence of activities occurring on these two major SDPS subsystems can create conflicting demands on resources. Production requirements may create a conflict when accessing FSMS. At the same time a user order for data can be initiated. All of the aforementioned, if not coordinated, will result in suboptimal performance.

Scheduling and Planning of "Ingest" activity:
In anticipation of other components' needs, state how planning and scheduling will be integrated across all SDPS components. Furthermore should this point to possible replication of scheduling CSCIs, indicate the potential "saving" in providing system-wide scheduling and planning as indicated in "storage and ingest" CIs.

Originator's Recommendation

Include scheduling and planning approaches as used by the processing systems in this subsystem. Furthermore consider a single SDPS scheduler/planner.

GSFC Response by: **GSFC Response Date**

HAIS Response by: Eisenstein **HAIS Schedule** 5/22/95
HAIS R. E. D. Richardson **HAIS Response Date** 8/8/95

In the particular case mentioned in the RID, requests from production and user requests for data both go through a common scheduler, and thus are coordinated according to priorities and resource availability. However, the originator's point about the urgent need for a coordinated approach within the segment is well-taken and it is a point that we have been quite cognizant of.

The preliminary design of the Storage Management CI focused on defining the functions and interfaces which are needed to manage the storage resources of the Data Server. During our design efforts, it became apparent that the resource management and scheduling function performed by the Planning and Processing Subsystems are similar and related to those performed by the Data Server Subsystem. This has resulted in a common RFP for a common COTS job scheduling package for SDPS. The object model of the preliminary design has been used to determine COTS product requirements and will be used to establish the suitability of the candidate products for use in the design of the software.

Data Server and Data Ingest do not participate in the Processing/Planning design approach due to the delay in the selection/procurement of the processing COTS product. Due to this delay, Data Server and Data Ingest could not rely on the availability of the COTS product for the Release A design. Therefore, the Data Server and Ingest Release A design is not based on this COTS product. However, the Processing /Planning COTS product is being evaluated and considered for the Data Server and Ingest Release B design.

Status **Closed** **Date Closed** **8/9/95** **Sponsor** **Kobler**

****** **Attachment if any** ******