



Department of Energy
Washington, DC 20585

FEB 22 1993

Mr. Gerald F. Cranford
Director, Office of Information Resources Management
U.S. Nuclear Regulatory Commission
Washington, DC 20555

RE: Technical Data Access Protocols for LSS

Dear Mr. Cranford:

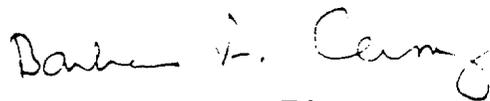
In response to your letter of February 5, 1993, we have reviewed the current information flows being used to manage technical data, packages, and other special handling (one-of-a-kind) materials within the Program. The current processes were developed in response to some of the observations in the CNWRA study and are, as a result, quite robust. At this point in time, the only protocols which would seem to need to be developed are those for identifying the number to be used in requesting access to non-imagable things such as core samples, etc. The majority of what has historically been categorized as "underlying technical data" or "data sets" will, in fact, be found in technical data packages as they are available as output products from InfoSTREAMS. The majority of that data will be header and image only. No special access to the underlying automated versions of the data would provide any additional information not found in the technical data records package cataloged and imaged for OCRWM's documentary records system.

Regarding the method for identifying and requesting access to non-imagable things, all an LSS user will need to do is to identify the DOE form known as the Technical Data Information Form (TDIF). The TDIF provides information on data resulting from data acquisition, that developed or derived from earlier sets, and, about data which has been transferred to other users. For each of these instances, there is a description of the technical data itself, the method of acquisition or development of the technical data, the identity of the source(s) of the developed data, and, information about the specifics of any transfer. Thus, if there was a core sample, air sample, or water sample that was used as part of a study, that information will be located on the TDIF forms within each records package.

Consistent with one of the CNWRA observations, our review did identify the need to provide finer granularity in unitization for a group of technical data packages generated during a two year period from approximately 1989-1991. This re-unitization and re-indexing is being performed as part of the recataloging effort to migrate from the current RIS system to the Interim RIS (I-RIS).

We have already directed our contractors to develop a presentation suitable for the interest level of the LSSARP; the attached presentation "YMP Technical Data Management Process" dated March 1993 represents the foundation of such a briefing for the LSSARP. As soon as it is determined that such a presentation for the ARP is worthwhile, we will be happy to have a final version developed, and, we will be happy to forward a copy for your consideration.

Sincerely,



Barbara A. Cerny, Director
Information Management Division
Office of Civilian Radioactive
Waste Management

Attachment

cc:

S. Rousso, RW-10

C. Macaluso, RW-331

J. Gandi, YMP

YMP TECHNICAL DATA MANAGEMENT PROCESS

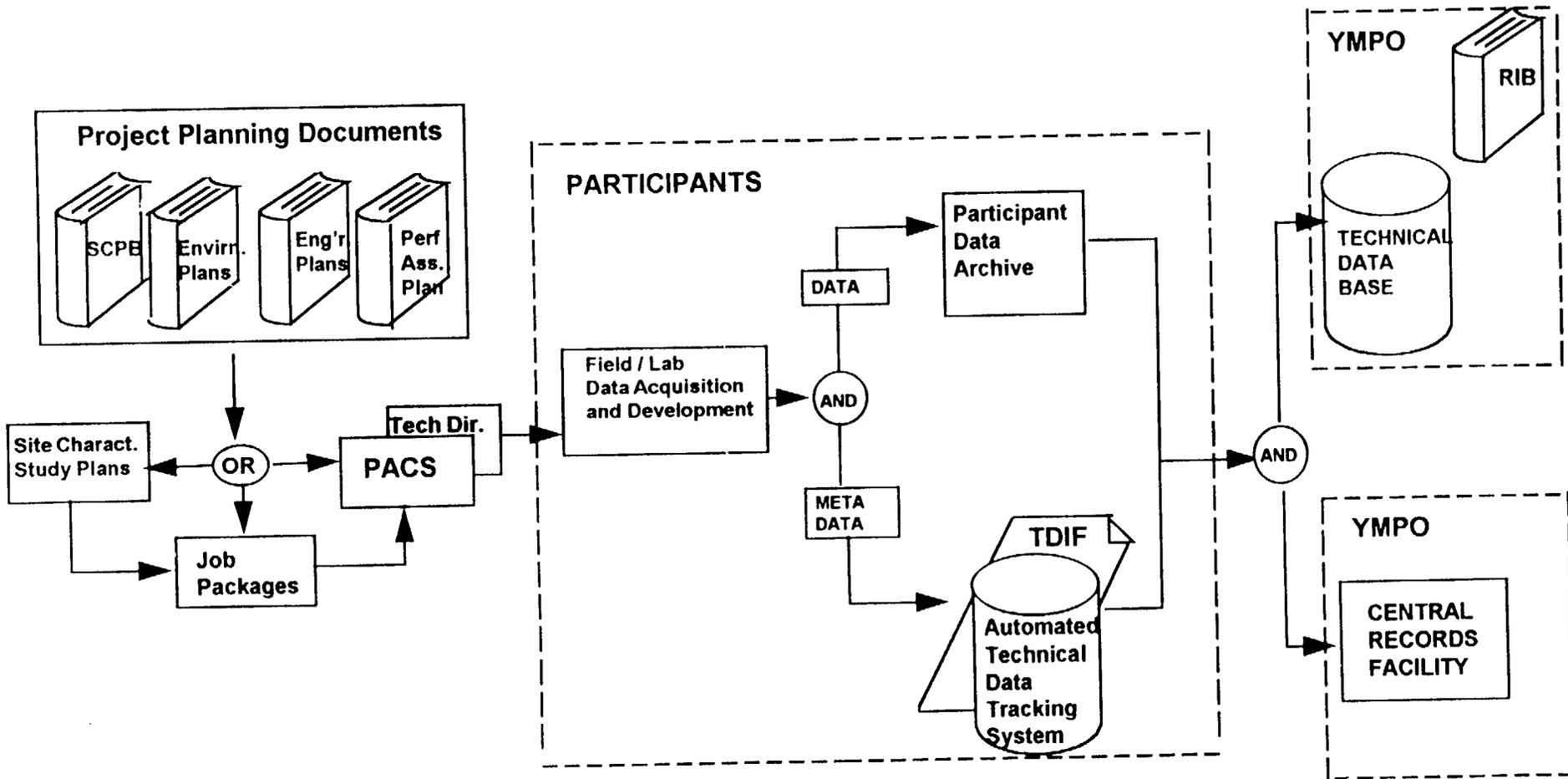
MARCH 1993

TECHNICAL DATA MANAGEMENT BRIEFING OVERVIEW

- **Technical Data Flow Overview**
- **Participant Activities**
 - **Technical Data Information Form (TDIF)**
 - **Technical Data Tracking Number (DTN)**
 - **Automated Technical Data Tracking System (ATDT)**
- **Technical Data Base Administrator Activities**
- **User/Technical Data Base Interface**
- **Central Records Facility Activities (CRF)**
- **Data Processing Example**
- **Data Base Connectivity Summary**

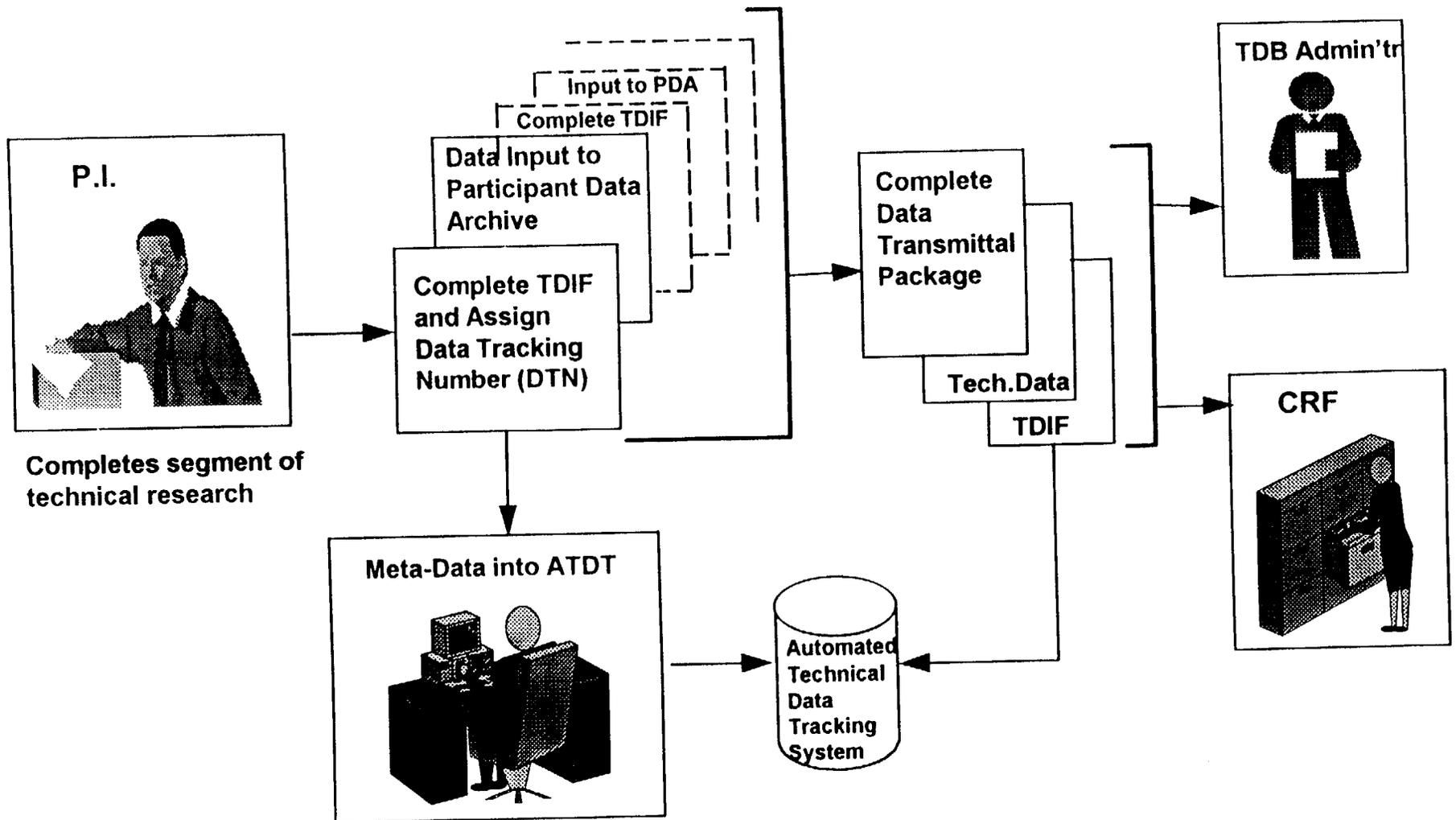
TECHNICAL DATA MANAGEMENT

TECHNICAL DATA FLOW OVERVIEW



TECHNICAL DATA MANAGEMENT

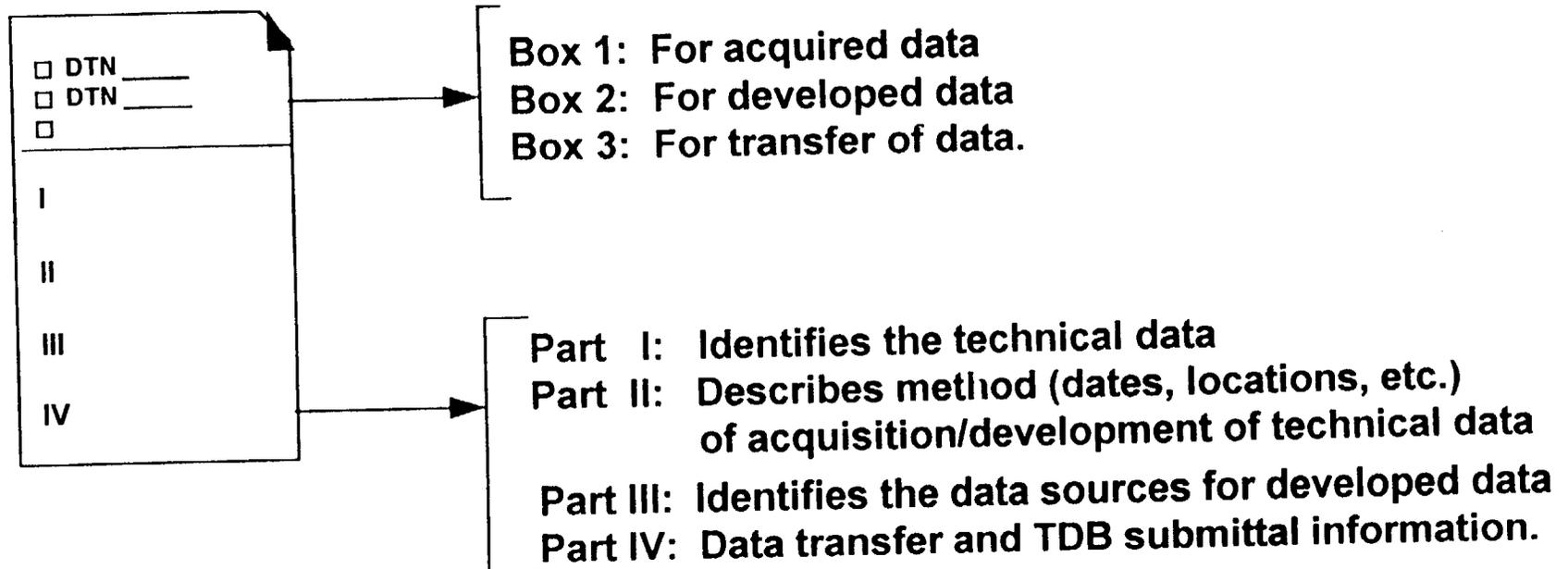
PARTICIPANT ACTIVITIES



TECHNICAL DATA MANAGEMENT

TECHNICAL DATA INFORMATION FORM (TDIF)

- THE TDIF IS A FORM WHICH PROVIDES REFERENCE INFORMATION (META-DATA) ABOUT TECHNICAL DATA



TECHNICAL DATA MANAGEMENT

DATA TRACKING NUMBER (DTN)

- **The Data Tracking Number is a unique identifier assigned to a technical data set.**
- **Assigned by each participant organization using a standard format. However, alpha-numeric descriptions differ between participants.**
- **The DTN for a data set is entered into:**
 - **ATDT**
 - **IRIS (Interim Records Information System; to be transitioned to InfoSTREAMS)**
 - **Project TDB**

TECHNICAL DATA MANAGEMENT

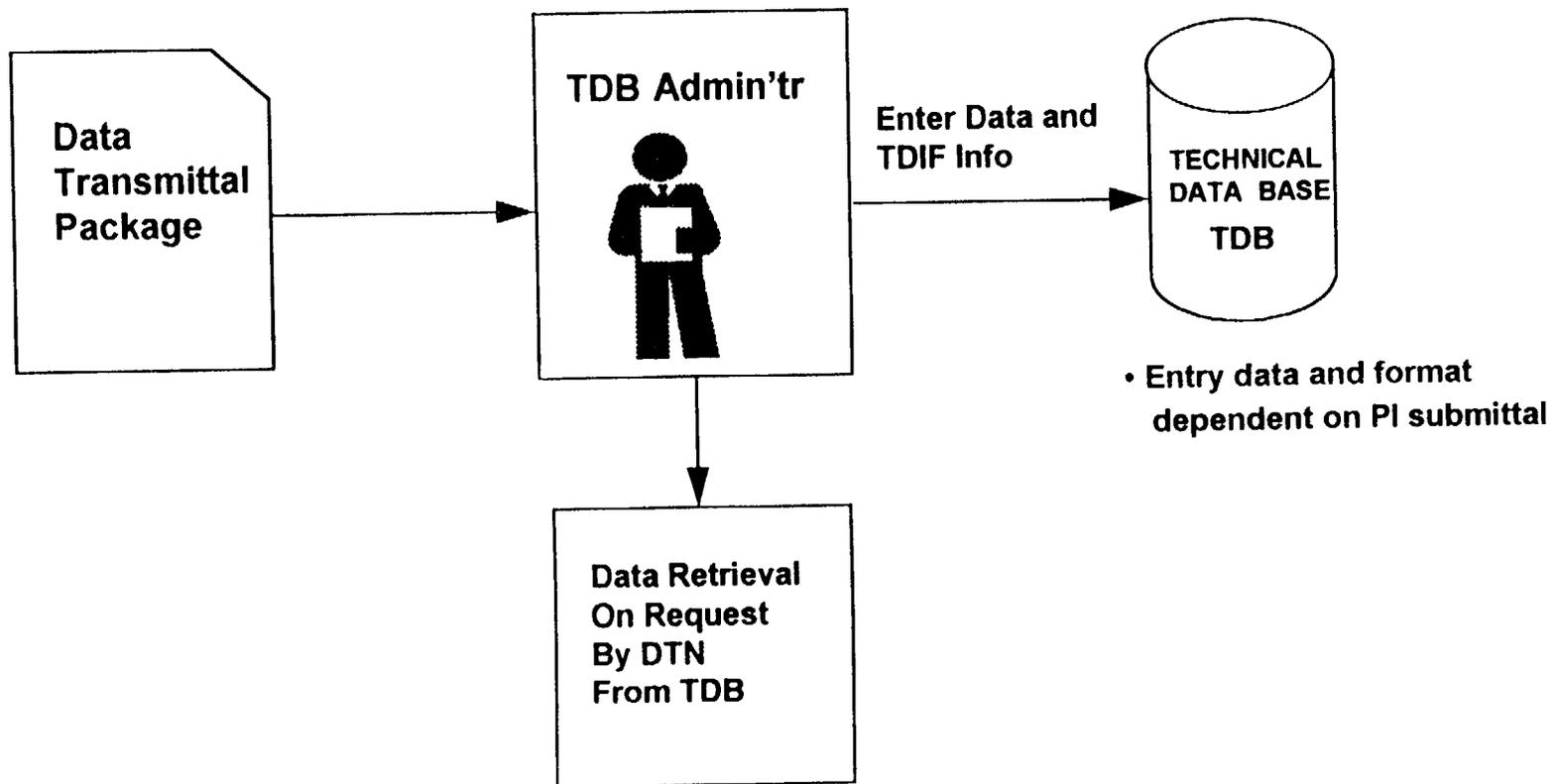
AUTOMATED TECHNICAL DATA TRACKING SYSTEM

■ The ATDT System Stores The Information (Meta-Data) Entered on the TDIF

- **Provides descriptions of technical data acquisitions and developments**
- **Identifies data sources used for data development**
- **Identifies technical data submitted to the Project Technical Data Base and CRF**
- **Tracks the transfer of technical data between participants and the Project TDB**
- **Tracks the transfer of all technical data used from the Project TDB for quality affecting activities**
- **Provides information for producing the Quarterly Data Catalog**

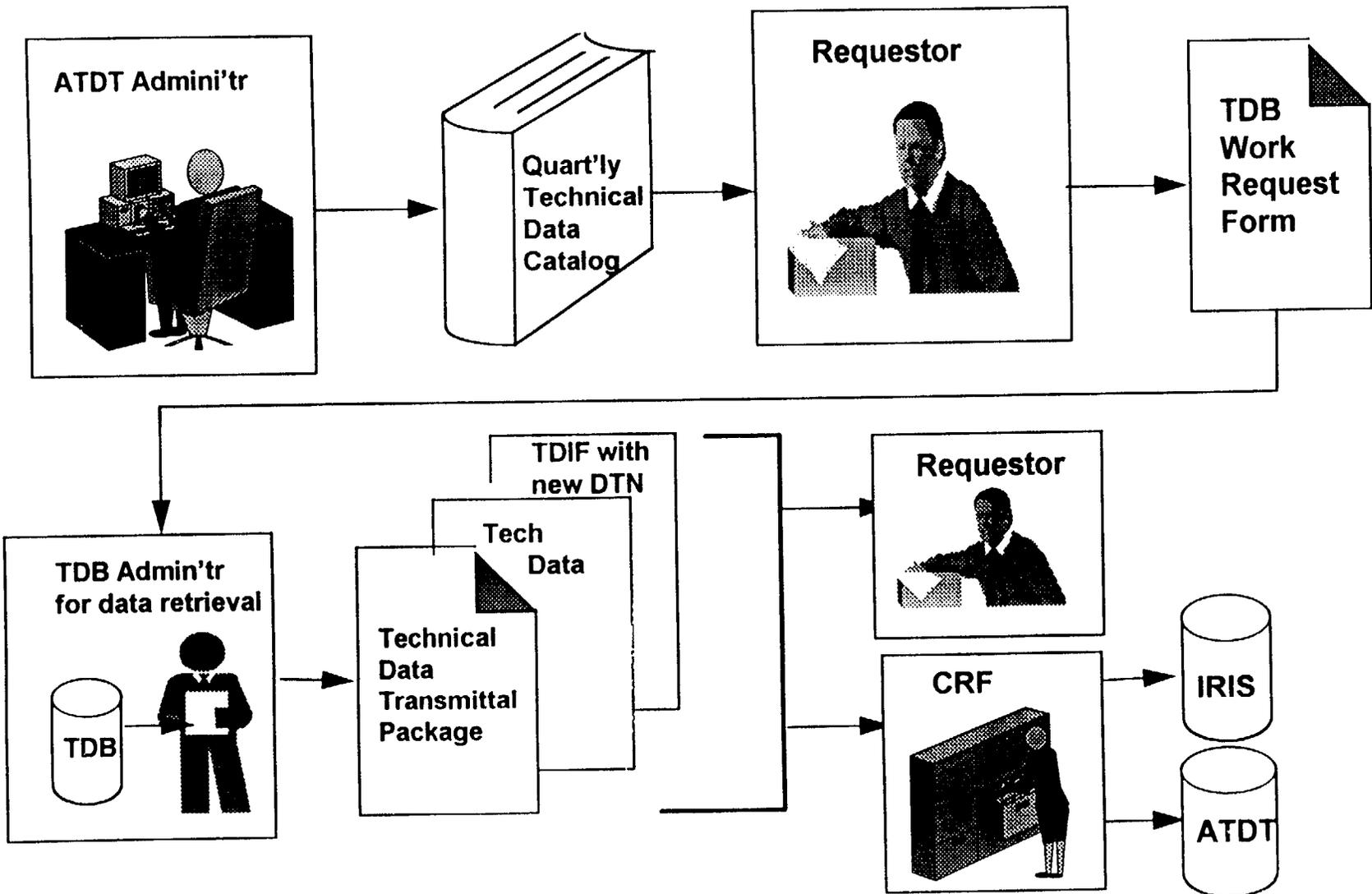
TECHNICAL DATA MANAGEMENT

TDB Administrator Activities



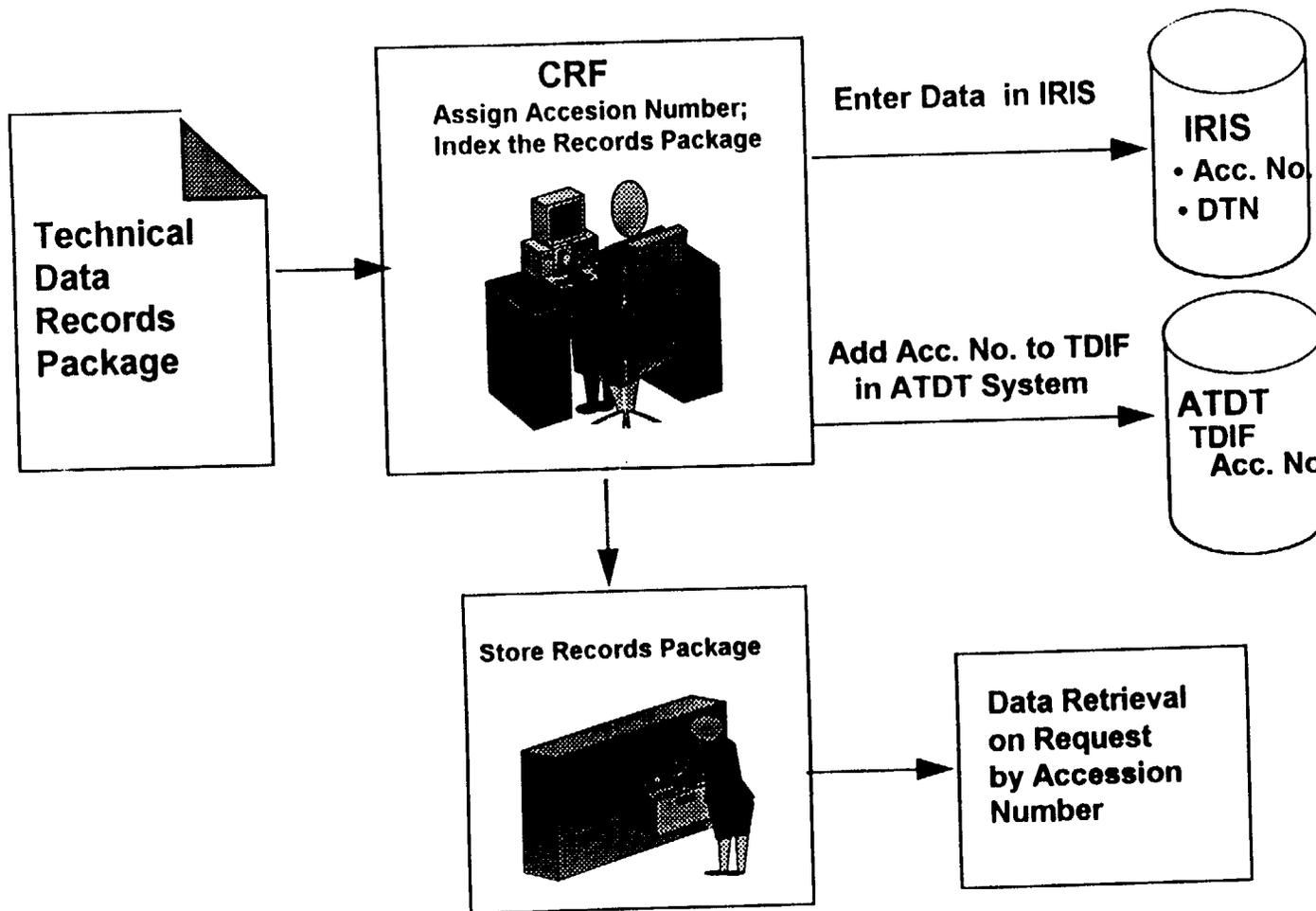
TECHNICAL DATA MANAGEMENT

USER/TDB INTERFACE



TECHNICAL DATA MANAGEMENT

CRF ACTIVITIES



TECHNICAL DATA MANAGEMENT

DATA PROCESSING EXAMPLE

■ FIELD ACTIVITIES

▲ CORING

- **Initiated by Job Packages**
- **Provides Samples to the Sample Management Facility (SMF)**

▲ SAMPLE MANAGEMENT FACILITY

- **Assigns Sample ID Numbers**
- **Stores Samples**
- **Provides Samples and Logged Meta-Data to PI's**

TECHNICAL DATA MANAGEMENT DATA PROCESSING EXAMPLE (Cont'd)

■ PRINCIPAL INVESTIGATOR ACTIVITIES

▲ DATA ACQUISITION

- **Extract Data From Samples**
- **Submit Data to Participant Data Archive (PDA)**
 - **Generate “Acquired Data” TDIF (Includes Sample ID No’s)**
 - **Assign TDIF Data Tracking Number (DTN)**
 - **Enter TDIF into ATDT System**
- **Submit Data with TDIF to Project TDB**
- **Submit Data and TDIF to CRF as a Records Package**

TECHNICAL DATA MANAGEMENT DATA PROCESSING EXAMPLE (Cont'd)

■ PRINCIPAL INVESTIGATOR ACTIVITIES (Cont'd)

▲ DATA DEVELOPMENT

- **Analyze “Acquired Data” and Report Results**
- **Submit Report to Participant Data Archive (PDA)**
 - **Generate “Developed Data” TDIF (Includes Source Data DTN’s)**
 - **Assign TDIF Data Tracking Number**
 - **Enter TDIF into ATDT System**
- **Submit Report with TDIF to Project TDB**
- **Submit Report with TDIF to CRF**

TECHNICAL DATA MANAGEMENT DATA PROCESSING EXAMPLE (Cont'd)

■ PROJECT OFFICE ACTIVITIES

▲ TDB ADMINISTRATOR

- Format Data Submission**
- Enter Data into TDB**
- Tag Data with TDIF DTN**

▲ CRF

- Process Data Records Package Submissions**
- Assign Accession Numbers to Package and Data**
- Enter Data Accession Numbers into ATDT**
- Enter Accession Numbers and TDIF DTN into IRIS**

TECHNICAL DATA MANAGEMENT

DATA BASE CONNECTIVITY SUMMARY

- IRIS Contains:
Data Accession Numbers
Data Tracking Numbers

- ATDT Contains:
Data Accession Numbers
Data Tracking Numbers
Sample ID. Numbers

- Project TDB Contains:
Data Tracking Numbers

