This section describes the common understanding of operations on:

-the document as a whole;
-parts of document.
This section provides a narrative description of these operations.
At present two types of operations will be defined:
-partial document transfer;
-remote document update.
Any complete set of operations on a document using the operational structure should result in a document conforming to the rules of the T.410 Series of Recommendations.

5Operational profile information

An operational structure profile includes information concerning:

-the reference to a document or a document class;
-application dependent references;
-operational structure level;
-the type of the content.

6Operational data formats

This section describes the format of the datastream used to interchange operational structures.

The operational structure can be interchanged as a whole or in parts.
The datastream is described in terms of a set of operational interchange data units which represent the constituents (e.g. operational profile, object class descriptors, object descriptors, and content) of an operational structure.
The formats of the interchanged data units are defined using the abstract syntax notation one (ASN.1).

FIGURE 2/T.441

Operational structures provide the information for a structured interface between the document and the application

2Operational application profile rules

2.1General principles

This section specifies how operational application profiles can be implemented by using this Recommendation. Application defined usage of T.400 Series of Recommendations is specified in terms of application profiles. An application profile consists of a combination of:

-document application profiles according to the rules defined in T.411;
-communication application profiles according to the rules defined in T.431;
-operational structure application profiles according to the rules which will be defined in this Recommendation.

3Operational structures

This section describes the operational concept which is the basis for remote operation on a document. It facilitates access and manipulation to parts of a document through operations defined in T.430 Series of Recommendations.
The concept can be used to associate application defined attributes and content with constituents of documents. For example, it may be used to specify fields for data entry and actions on the content of these fields. In this example, the semantics for data entry and actions may be expressed by the application.
The operational structure follows in general the structuring principles typical of the document architecture as described in T.412.

The constituents of the operational structure reference the document constituents they are operating on.

Multiple operational structures may be defined referring to a single document class.

A document is defined in terms of logical and/or layout structure according to the specifica- tions of the T.410 Series of Recommendations.

The basic principle of the operational concept is to provide the means for the integration of telematic services requirements, not covered by the T.410 Series of Recommendations within the applications on the top of DTAM (see Figure 1/T.441).

FIGURE 1/T.441

Overview of DTAM (including operational structure)

Document handling, e.g. access to parts of a document and manipulation of a document requires detailed considerations; two aspects of document handling shall be distinguished:

a) In addition to the document, structural concepts need to be defined in T.400 Series of Recommendations; these concepts shall define the structural aspect of the document handling (as for example "forms for data entry").

Note - The definition of structural concepts is not in the scope of this Recommenda- tion. Specifications concerning such concepts require further detailed study.

b) In addition to the document, applications may require operational features which provide information for the interface between the document and the application. Interfaces are for example necessary for "Data Entry", "Spread Sheet", "Remote Editing", etc.

As an application on top of DTAM shall solely use DTAM service and protocol, this Recommendation provides the operational concept which allows to integrate operational features within the concept of DTAM.

The operational structure is introduced as a set of rules to structure the interface between a document and the application (see Figure 2/T.441). By defining a mapping onto the operational structure, the application integrates its operational features within DTAM. The mapping has to be specified within the appropriate Recommendation for the relevant application. The semantic of the interface is generally determined by the relevant application.

DOCUMENT TRANSFER AND MANIPULATION (DTAM) - OPERATIONAL STRUCTURE

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Scope

1Overview of operational concept
2Operational application profile rules
3Operational structures
4Operational reference model
5Operational profile information
6Operational data formats

Scope

This Recommendation has been established to cover the needs of videotex interworking. It will be further developed to cover the needs of other telematic services.

The operational structure should be developed as a set of rules for an interface between telematic applications based on T.400 Series of Recommendations and an ODA-document.