the relationship can be seen to be recursive. The figure shows that the driving forces are:

a) what the User wants or is prepared to purchase;

b) the availability of the necessary technology;

c) the economics of developing and enhancing services and the network capabilities.

FIGURE 3/I.110

**Basis of the I-Series approach**

In order to standardize all necessary aspects of ISDN the CCITT has divided the issues into a number of distinctive (but obviously related) areas (see Figure 2). Three of these areas are the following:

1) Services (I.200-Series of Recommendations);

2) Network aspects (I.300-Series of Recommendations);

3) User-network access and interfaces (I.400-Series of Recommendations).

Network aspects are further supported by other Recommendations both inside and outside the I-Series.

The I-Series Recommendations are directed at the following principles:

a) the standardization of services offered to subscribers, so as to enable services to be internationally compatible;

b) the standardization of user-network interfaces, so as to enable terminal equipment to be portable (and to assist in a));

c) the standardization of network capabilities to the degree necessary to allow user-to-network and network-to-network interworking, so as to achieve a) and b) above.

The distinction that has been made in this approach between services and network capabilities is perhaps the most important. In the past, each service which was a candidate for standardization was treated in isolation and the necessary standards developed. For the ISDN, a wide range of services has to be considered in a coordinated manner. In addition, there has not been a conscious decision in the past to separate the definition of standards required for services from the definition of the standards for the network capabilities to support these services.

The approach, in the development of the I-Series, has been, firstly, to establish the broad concepts of the two areas of standards, secondly, to uniquely define these two concepts, and thirdly, to show the relationship between them.

The fourth area shown in Figure 2, is user equipment. The I-Series includes reference configurations which identify key functional groupings and their physical relationship. The interfaces with the network are explicitly defined, however the I-Series does not provide a detailed description of any specific terminal element.

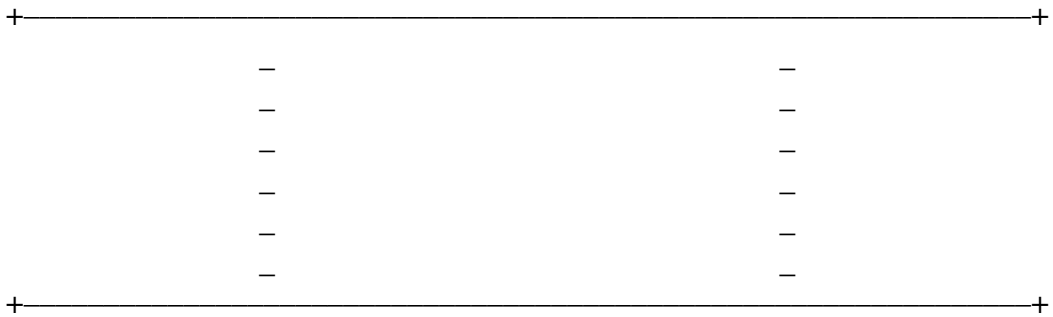

FIGURE 2/I.110

**PREAMBLE AND**

**GENERAL STRUCTURE OF THE I-SERIES RECOMMENDATIONS**

**FOR THE**

**INTEGRATED SERVICES DIGITAL NETWORK (ISDN)**

**PREAMBLE**

## Introduction

An ISDN is a network, in general evolving from telephony Integrated Digital Network (IDN), that provides end-to-end digital connectivity to support a wide range of services, including voice and non- voice services, to which users have access by a limited set of standard multi-purpose user network interfaces.

This concept requires a family of CCITT Recommendations.

The I-Series Recommendations will provide principles and guidelines on the ISDN concept, as well as a detailed specification of the User-Network and Internetwork interfaces. They will further contain suitable references so that the detailed Recommendations on specific elements within the network can continue to be developed in the appropriate Recommendation series.

Figure 1 produces a broad outline of the structure of the I-Series of Recommendations and their relationship to other Recommendations.

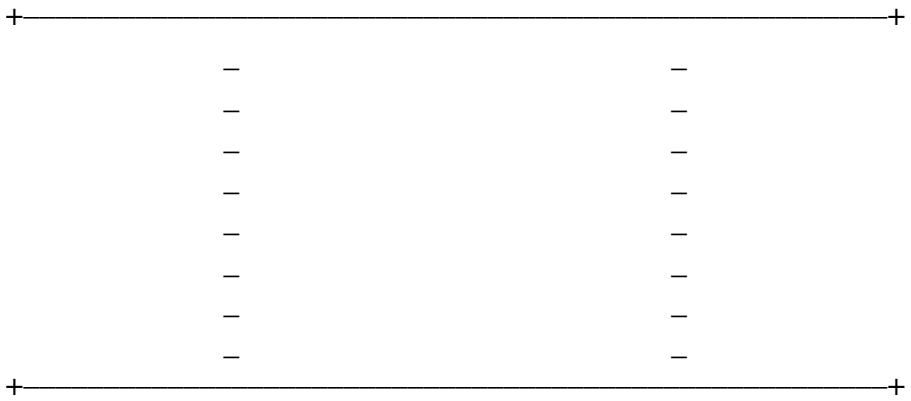

FIGURE 1/I.110

**Structure of I-Series Recommendations and their relationship with other Recommendations**

As shown in Figure 1 above, the current structure of the I-Series documentation is subdivided into seven major parts. Other I-Series documents may be added as the need arises. In addition, to support the implementation of the ISDN concepts, Recommendations have been produced and others will be produced in other Series by the appropriate specialist