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Z.332

MAN-MACHINE LANGUAGE

METHODOLOGY FOR THE SPECIFICATION OF THE MAN-MACHINE INTERFACE - GENERAL WORKING PROCEDURE

ITU-T Recommendation Z.332

(Extract from the *Blue Book*)

NOTES

1 ITU-T Recommendation Z.332 was published in Fascicle X.7 of the *Blue Book*. This file is an extract from the *Blue Book*. While the presentation and layout of the text might be slightly different from the *Blue Book* version, the contents of the file are identical to the *Blue Book* version and copyright conditions remain unchanged (see below).

2 In this Recommendation, the expression “Administration” is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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**METHODOLOGY FOR THE SPECIFICATION
OF THE MAN-MACHINE INTERFACE
GENERAL WORKING PROCEDURE**

1 Introduction

Recommendation Z.331 provides a summary of the functions which are to be controlled by means of MML. Each functional area in this list is to be specified in detail to allow the generation of function-related semantics.

The use of such semantics in conjunction with the features provided by the Recommendations in Sections 2 and 3 allows the specification of the man-machine interface.

In order to produce a detailed specification, a formal method of working that provides a common approach is necessary. This Recommendation provides a methodology for such purposes.

In order to assign properly the responsibility for the application of the methodology, its application can be viewed as a two-stage process.

The first stage involves the generation of function-related semantics. This stage is aimed primarily at those experts working in CCITT Study Groups who are responsible for developing Recommendations associated with functions to be controlled by MML. However, it is recognized that the repertoire of such functions considered in CCITT Recommendations cannot cover the requirements of all Administrations or of all SPC systems. Therefore this stage is also aimed at Administrations, private operating agencies and scientific/industrial organizations who may find it necessary to specify functions peculiar to their individual needs.

The second stage of the application of the methodology involves the derivation of the actual man-machine interface using the semantics and the relevant features of Sections 2 and 3. This stage is the responsibility of Administrations, private operating agencies, and scientific/industrial organizations.

2 Orientation of the methodology: Administration centred and system centred

The methodology for the specification of the man-machine interface must be based on a common understanding of the concept of function.

Three different classes of system functions may be defined as follows:

1) *Class A functions or man-machine language (MML) functions*

Those system functions which provide the MML user with the means of control of other system functions. The word "control" is assumed to include all types of inputs and outputs.

Any Class A function can be subdivided into a general part which relates to e.g. the syntax check, information transmission control, etc., and an application part which relates to the job in hand.

Example: Create a traffic measurement.

2) *Class B functions*

Those system functions which can be controlled at least partially by the MML user by means of MML functions.

Example: Performing measurements of traffic parameters.

3) *Class C functions*

Those system functions which are not at all controlled by the MML user in a given system during operation. Class C functions are not referred to in the following methodology.

The relationship between the concepts of "job" and the different types of functions is shown in Figure 1/Z.332.