Recommendation Z.336

TRAFFIC MEASUREMENT ADMINISTRATION

1. General

This Recommendation has been developed in accordance to the methodology defined in Recommendations Z.332 and Z.333.

The main part of this Recommendation deals with the model of Traffic Measurement Administration ar glossary of the terms used is also included.

The list of operator jobs and the list of system functions to be controlled are contained in Annex A.

For each system function to be controlled by means of MML, one or more MML functions can be derived each of them can be described using the metalanguage defined in Recommendation Z.333, in order to detail relevant information structure.

Annex B contains a list of MML functions and information structure diagrams associated to each of them to used as guidelines.

2. Introduction

Traffic measurement administration functions are related to data production, collection and output.

These data are achieved by means of periodic and non-periodic traffic measurements carried out in telecommunications systems and are output by the systems in a suitable form.

The traffic measurement result outputs should contain the measurement results and general informat about the measurement itself and about the system which performed the measurement, in order to ease the res analysis. Moreover, they should contain information summarizing the production of output blocks for check purposes.

The traffic measurement model in section 4 is based upon a more general measuremnt model given in section 3.

3. General measurement model

A measurement is identified by three basic elements: time, entities, objects.

Time includes all the necessary information to define the start, the duration and periodicity of a certain measurement.

Entities describe the quantities for which data collection must be performed with a certain measurement, traffic flow, number of call attempts, congestion time.

Objects are intended as individual items within each object type on which the measurements are perform Examples of object types are subscriber lines, circuits, circuit groups, elements of switching networks, geograph areas with their corresponding dialled code. The definition of measurements is based on an abstract model wh contains the definition of a measurement matrix (see Figure 1/Z.336) in which each row represents one uniquely definable entity, e.g. number of call attempts, and each co represents a uniquely definable object type, e.g. incoming junction group (see Figure 2/Z.336).

A certain combination of entities and object types corresponds to certain entries in the measurement matri forms a measurement type. It is recognized that part of these measurement types may be standardized while the re them seem to be system and/or administration dependent. It should be noted that some of the entries in the measure matrix could be impossible (e.g. call congestion on an incoming trunk) and some others could be more or meaningless. A single object is defined by its type and/or its individual object identity. In some measurement types number of objects is fixed. In other types, one can choose for the actual measurement some or all of the allowed ob by means of MML commands. The chosen (selected) objects form an object list.

The structure of the division of object types and entities is open- ended, in such a way that any new object or entity may be added.