Recommendation E.504

TRAFFIC MEASUREMENT ADMINISTRATION

1 Introduction

Traffic measurement administration includes the scheduling and control of traffic data collection, and production of reports for analysis. The data collected by means of traffic measurements performed by the exchange is output in a form suitable for on—line or deferred analysis.

It may be useful to consider the concept of a generic Traffic Measurement System (TMS) for purposes of administering traffic measurements. Such a system may comprise elements of an exchange working in conjunction with some combinations of remote data processors and associated devices for output of measurement reports.

In order to administer traffic measurements, a series of related man—machine activities (referred to as "tasks") will need to be performed through one or more man—machine interfaces, and supported by appropriate system functions. Details are given below.

The traffic measurement output should contain the measured data together with reference information about network conditions at the time of the measurement which would assist in the data analysis, for example the number of blocked devices on a route or temporary alternative routing in effect.

2 List of tasks

The following list of tasks is not intended to be complete; however, it aims to cover the essential activities in the area of the traffic measurements administration. The TMS will provide functions to support these tasks:

a) to create new measurements or measurement components and to modify old ones, by selecting the measurement types, schedules, object identities and parameters of the measurements (WHAT, WHEN and HOW to measure);

b) to delete measurements or measurement components which are no longer useful;

c) to define output routing and scheduling of measurement results (WHEN and WHERE the result will be output);

d) to activate and/or to deactivate the scheduling of the measurements that have been previously defined;

e) to retrieve the required categories of data related to the existing measurements.

3 List of system functions

To support the man—machine tasks, the TMS should offer the following functions:

a) a menu of traffic measurements;

b) scheduling of traffic measurement execution and results output;

c) management of measurement's description data;

d) retrieving of measurement's description data.

4 Man—machine functions

A preliminary list of man—machine functions needed to control the TMS functions previously given is listed below; the complete specification of such functions appears in the Z—Series Recommendations:

— create a measurement;

— create a measurement set;

— create an object list;

— create a time data list;

— create an output routing list;

— create a results output schedule;

— modify a measurement;

— modify a measurement set;

— modify an object list;

— modify a time data list;

— modify an output routing list;

— modify a results output schedule;

— delete a measurement;

— delete a measurement set;

— delete an object list;

— delete a time data list;

— delete an output routing list;

— delete a results output schedule;

— activate a measurement;

— deactivate a measurement;

— interrogate a measurement;

— interrogate a measurement set;

— interrogate a measurement type;

— interrogate an object list;

— interrogate a time data list;

— interrogate an output routing list;

— interrogate a results output schedule.