layers of the Recommendation X.200 reference model that allows a TE1 or TE2 terminal to be served by the digital PLMN. It may also include rate adaptation and flow control.

4Physical realization of reference configurations

4.1Mobile station implementations may require that the S, R, Xm and Sm reference points be combined into a single physical entity, as in the case of a fully integrated mobile equipment.

Figure 2/Q.1062 shows possible realizations and/or configurations of the reference points mentioned earlier. The examples shown are not exhaustive, but only serve to illustrate possible configurations of the respective functional blocks.

FIGURE 2/Q.1062

Examples of physical realizations

4.2Example a) of Figure 2/Q.1062 illustrates a fully integrated equipment where the Xm and Sm reference points are logically identifiable, but physically do not exist.

4.3Example b) of Figure 2/Q.1062 illustrates the S reference point with respect to a CCITT TE1. In this example the PLMN call control adaptation function is integrated with the remaining blocks as in a). As before the Xm and Sm reference points only bear logical significance.

4.4Example c) of Figure 2/Q.1062 illustrates the same configuration as in b), but now a CCITT TE2 is provided at reference point R. The PLMN call control adaptation procedures are distinct with respect to the one identified in b), but nonetheless the functionality is the same as mentioned earlier.

3.3The list of functions for each functional group is given below.

3.3.1The RF transmission management block may perform functions similar to those of NT1, or combined NT1 and NT2 of the CCITT I-Series Recommendations.

It may include functions for:

- radio transmission termination(s); and

- upper layer protocol capabilities for radio transmission channel management.

3.3.2The mobility management block may perform functions associated with:

- location updating/registration;

- handover coordination; and

- upper layer protocol capabilities for coordination functions between terminal equipment and RF transmission management.

3.3.3A TEm may perform functions similar to those of the TE of the I-Series Recommendations. It may include functions for:

- Layer 1 (physical) interface;

- Layer 2 (data link) protocol handling;

- Layer 3 protocol handling, and call control;

- maintenance functions; and

- switching and concentration (if applicable).

tions of call control and mobility management. Similarly, the Xm signalling reference point is the demarcation between call control and mobility management.

The mobile station - base station Recommendations apply to interfaces at reference point Um. These Recommendations are dependent on the pertaining RF transmission capabilities and will not be dealt with in this document.

At the reference point S, ISDN installations in accordance with I-Series Recommendations may be used. At reference point R, physical interfaces in accordance with other CCITT Recommendations (e.g. the X-Series interface Recommendations) may by used.

DIGITAL PLMN ACCESS SIGNALLING REFERENCE CONFIGURATION

1General

This Recommendation provides the access signalling reference configuration for the digital PLMN.

2Definitions

2.1**reference configurations**

Reference configurations are conceptual configurations useful in identifying various possible physical access arrangements to the PLMN. Two concepts are useful in defining reference configurations: reference points and functional groups.

2.2**functional groups**

Functional groups are sets of functions which may be needed in PLMN access arrangements. In a particular access arrangement, a specific function in a functional group may or may not be present. Note that a specific function in a functional group may be performed in one or more pieces of equipment.

2.3**reference points**

Reference points are the conceptual points dividing functional groups. In a specific access arrangement a reference point may correspond to a physical interface (e.g., Um) between pieces of equipment or there may not be any physical interface corresponding to the reference point.

3Signalling reference configurations

3.1The reference configurations for the PLMN access define reference points and types of functions that can be provided. Figure 1/Q.1062 shows some of the signalling reference configurations.