

## SECTION 1.

# INTRODUCTION

### 1. GENERAL.

1.1 These Design Instructions which cover the various phases of planning equipment layouts in communication buildings have been prepared to assist:-

- (i) The Planning Engineer, the Design Engineer and the Installing Engineer to prepare functional details for new building projects, or in planning equipment layout in a new building.
- (ii) The Engineer in the field in interpreting the planners' and the designers' requirements.
- (iii) The orderly step-by-step arrangement of the equipment.
- (iv) In allotting and co-ordinating the location of various types of equipment.
- (v) With the subsequent operation and maintenance of the plant.

1.2 The various design and planning phases are dealt with in the following order:-

- (i) General principles for co-ordinating various classes of plant in communication buildings in both metropolitan and country areas.
- (ii) Layouts of individual classes of equipment in single, dual or multi-purpose buildings of normal, prefabricated or temporary type structure. The layouts provided cover metropolitan, main and co-main, branch and minor exchanges, and also automatic and C.B. exchanges in country areas.
- (iii) Floor planning of the various types of communication buildings for the location of Pre-2000 and 2000 Type equipment, Manual exchanges, Trunk Switching equipment, Telegraph and Long Line equipment is also considered in the use of multi-purpose buildings. Floor planning embraces:-
  - (a) width of buildings
  - (b) aisle spacing
  - (c) passageways
  - (d) location of columns
  - (e) holes in floors
  - (f) location of duct systems
  - (g) pneumatic tube systems, etc.

The possible effects of future trends in equipment design are outlined with particular reference to building space requirements, etc.

- (iv) The preparation of installation details for overhead ironwork, power distribution, runway systems and cabling practices.
- (v) Typical method of preparing an Installation Specification for 2000 Type equipment.

1.3 The instructions will be added to and amended from time to time.