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**Specification of the
BT Metallic Path Facility
Maintenance Code of Practice**

Issue 1

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http://www.ofcom.gov.uk/ind_groups/nicc/

Normative Information

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1. Introduction

This document describes the two-stage approach to MPF maintenance (see figure 1). This document concerns maintenance of Metallic Path Facility (MPF) pairs supplied under BT Licence Condition 83. The term LLU Operator is used here to describe the operator to whom the MPF is provided.

This document does not discuss detail of costs, as this discussion is proper to other fora. However it should be noted that a key part of this BT maintenance offer is that each part of the multi part MPF maintenance specification has associated with it a particular cost. This document is presented in good faith but nothing in it represents a binding offer by British Telecommunications plc.

2. Maintenance Responsibility

The service received by an end customer served using an MPF will depend amongst other things on the satisfactory operation of the MPF provided by BT and the correct design and operation of the equipment provided by the LLU Operator.

BT has responsibility for the MPF and will use reasonable endeavours to ensure that it meets the published specification.

If an LLU operator, having reported a fault and received the diagnosis (i.e. 'Right When Tested' (RWT) or repaired), believes that MPF is adversely affecting end user service they may escalate the fault to the second stage of maintenance. It is neither possible nor appropriate for BT to guarantee that the end customer service will operate satisfactorily. A code of practice will describe the reasonable endeavours that BT will undertake at this stage to assist the LLU Operator to restore the end user service.

The OPF LLU Operation and Maintenance group is defining a process for LLU Operators to follow when reporting faults. This document should be read as an extension to that process.

3. Multi Part MPF Maintenance Specification

The MPF maintenance specification proposed by BT comprises a single specification in three parts and a single optional parameter. The MPF specification is described in a separate document (available on the NICC public website at http://www.oftel.gov.uk/ind_groups/nicc/public.htm).

The basic specification applies to all MPFs. It consists of three parts:-

Part 1

Part 1 includes parameters that can be tested using BT's exchange based line test equipment. (voltage, insulation resistance, capacitance)

Part 2

Part 2 contains a single parameter, the maximum loop resistance that any MPF will exhibit.

Part 3

Part 3 contains a single parameter the maximum insertion loss that any MPF will exhibit.

Optional parameter

The only optional parameter relates the variation of insertion loss. In order to take advantage of the optional parameter the LLU Operator must order an insertion loss measurement at the time of ordering the MPF. The measurement will be taken by a BT person at a time close to the MPF provision time. BT will record the measurement. The MPF in question will be guaranteed not to deviate from the initial value by more than a specified amount (specified in the MPF specification document) in the absence of another network fault condition.

4. Fault Reporting

An LLU Operator reporting an MPF fault must include in the fault report a statement of the specification parts that he wishes to query. The report may be for part 1 only, parts 1 and 2, or for parts 1,2 and 3 together.

The optional loss variation parameter may be queried in addition to any of the above combinations but only for MPFs that have previously had an initial measurement taken.

When reporting a fault to BT the LLU Operator may if he so wishes supply such additional information as the LLU Operator considers will aid in understanding and diagnosis of the fault. BT will record the

information and may, if appropriate, use such supporting information in the initial handling of the fault report.

5. Fault Handling

BT will initiate tests to determine if the MPF meets the specification parts that the LLU operators has specified. If the tests indicate a fault then appropriate repair activity will be initiated.

6. Line Status Report

When any repair activity has been completed or if the pair is Right When Tested (RWT) the pair will be returned to the LLU Operator. BT will provide a brief report of the result of the tests conducted. This may state that the line was RWT or that it has been repaired and returned to within agreed specification limits. The report will include a statement of any relevant test results.

7. Escalation to the second Stage of Maintenance

In most cases the LLU operator will be satisfied with the result of the first stage of fault handling. If the LLU Operator believes that the MPF is the cause of end user problems despite a BT report that the MPF is within specification they will have two possible courses of action:-

1. They may issue a second fault report against the MPF. (perhaps specifying different test options)
or
2. They may escalate the situation to the second stage of fault handling.

8. Second Stage of Fault Handling

The maintenance code of practice is relevant to the second stage of fault handling. The LLU Service Management Centre (SMC) will administer this stage. The SMC responsibilities will include supervision of maintenance and fault repair activities for MPFs. The SMC will have access to experienced and skilled test technicians. Escalation to the second stage is only available after a first stage fault has been handled and the report back submitted.

At this stage the LLU Operator must indicate

- ◆ The reason why the LLU Operator believes that the pair is unsuitable for use as an MPF
- ◆ Whether or not the LLU Operator believes that the pair is within the agreed specification
- ◆ All additional information that the LLU Operator considers will aid in understanding and diagnosing any underlying fault in the MPF.

The BT SMC will use all reasonable endeavours to discuss the situation with the LLU Operator and recommend a suitable course of action. BT will use LLU operator provided additional information where it is found to be relevant.

The BT SMC may recommend that the LLU Operator carry out some further tests on their own equipment or that of the customer. This work will be the sole responsibility of the LLU Operator.

If during the course of the discussion the BT SMC person believes that further investigative work by BT is justified they will be able to initiate it. The decision in this matter will rest solely with the BT SMC.

In the case where the BT SMC does not believe that further investigation by BT is warranted then the LLU Operator will have the opportunity to request some further investigation on the understanding that it will be paid for in full by the LLU Operator. Limits may be defined on the amount of additional maintenance work that can be requested.

9. Additional Maintenance Work

One or more defined packages of additional maintenance activity will be available. These will comprise activities that are within the capabilities of the BT field force. A package may be expected to include activity such as field inspection or test of cable plant and MPF connections at flexibility points.

10. Action in the event of an MPT1570 Enforcement Order

In the special case where a service provided by means of an MPF in BT's network is the subject of an MPT1570 disconnection order by the Radiocommunications Agency (RA) the BT SMC must be informed as soon as possible. Where appropriate BT will deploy a specialist test and investigation team to work alongside the LLU Operator people and the RA Investigation Service (RAIS) to address the situation.

11. Possible Future Enhancements

This MPF Maintenance specification will be used at the time of service launch. BT will discuss with LLU Operators possible enhancements to this specification and hence this specification may be revised following agreement on any such enhancements.

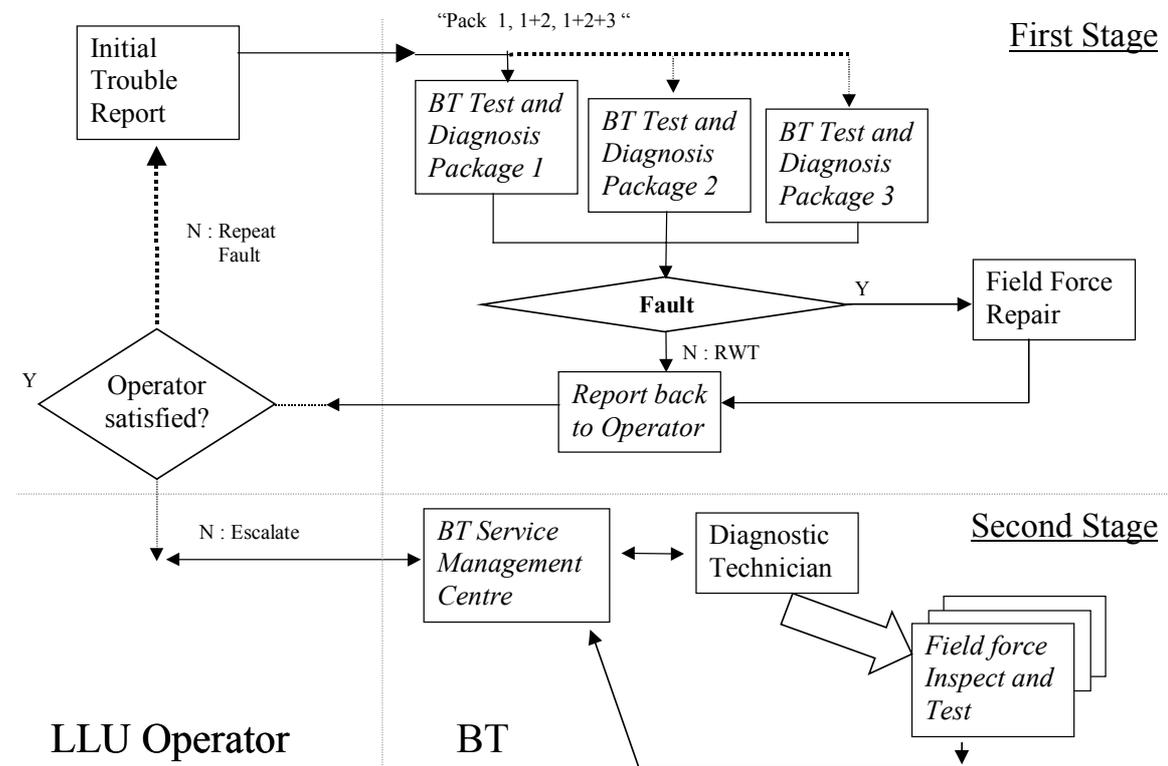


Figure 1 : Maintenance Flowchart

12. History

Issue No.	Date	Comments
1	6/00	First Issue

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