



ICPC Recommendation

Recommendation No. 4

Recommended Co-ordination Procedures For Repair Operations Near In-Service Cable Systems

Note: Issue status suffix 'A' relates to minor format changes, not content.

Contact for Enquiries and Proposed Changes

If you have any questions regarding this document or suggestions for improving it, please contact:

International Cable Protection Committee Ltd
PO Box 150
Lymington
SO41 6WA
United Kingdom

Secretary: **Mr. Graham Marle**
Tel: **+ 44 1590 681 673**
Fax: **+44 870 432 7761**
E-mail: **secretary@iscpc.org**
ICPC Web-site: **www.iscpc.org**

DISCLAIMER

An International Cable Protection Committee Ltd ("ICPC") Recommendation ("Recommendation") implies a consensus of those substantially concerned with its scope and provisions. A Recommendation is intended as a guide to aid cable owners and other seabed users in promoting the highest goals of reliability and safety in the submarine cable environment. The existence of a Recommendation does not in any respect preclude anyone, whether he has approved the Recommendation or not, from laying or repairing undersea cables or employing procedures to these ends which may be required by the ordinary practice of seamanship or by the special circumstances of each case, but which may not be conforming to the Recommendation.

The ICPC does not develop standards and will in no circumstances give an interpretation of a Recommendation in the name of the ICPC. The ICPC and its members do not accept any liability for any errors in the Recommendation or for any consequences resulting from its use as a planning guide. Nothing in this Recommendation should be viewed as relieving anyone from the rights and obligations of seabed users under international law, including but not limited to the United Nations Convention of the Law of the Sea ("UNCLOS").

NB: ICPC Recommendations are subject to periodic review and users are cautioned to obtain the latest issues. This Recommendation may be revised or withdrawn at any time without further notice to the recipient.

TABLE OF CONTENTS

Disclaimer 2

Table Of Contents 3

1. Introduction 4

2. RECOMMENDED CO-ORDINATION AND OPERATING PROCEDURES 4

3. References 5

4. Definitions 5

5. Attachments..... 5

1. INTRODUCTION

Considering the cost of restoration and length of outage time for high capacity digital fibre optic submarine cable systems the following procedures are recommended with respect to any repair operations near in-service cable systems.

While damage to a cable resulting from repair operations on another cable is an extremely rare occurrence, strict adherence to the following recommended procedures will provide an additional level of protection. The recommended procedures apply to repair operations in the vicinity of any crossing or close parallel of active cable systems.

2. RECOMMENDED CO-ORDINATION AND OPERATING PROCEDURES

- i) Advanced notification of planned or emergency repair operations shall be made by the repair co-ordinator to maintenance authorities responsible for all cables crossed or in close parallel with the cable being repaired.

A minimum of two weeks advance notification shall be given to all involved parties prior to any planned operational activity that could affect the performance of working international telecommunications services.

Where an emergency repair is required, immediate notification shall be given to all of the involved parties.

The notification shall include essential details of the proposed repair operation procedure, including information on schedule, identification of repair ship, location of proposed grappling, cable pickup and cable laying activities, and the devices to be used for the repair work. As not all essential details may be immediately available, the initial notification shall give an indication as to when the remaining essential details will be made available.

- ii) Maintenance authorities shall respond promptly (within 24 hours) to the repair co-ordinator providing location details and any other information that would aid in avoidance of existing cables.

Cable location records shall be current and include any recent changes as a result of repairs etc. Uncertainties regarding the recorded cable positions shall also be clearly noted.

- iii) Maintenance authorities shall provide the repair co-ordinator with the name, business and home telephone numbers, Fax number(s) and e-mail address(es) of a representative to be the responsible point of contact during the repair operation so that any changes in plans can be communicated and/or problems resolved with a minimum of delay.

- iv) The repair co-ordinator shall promptly advise involved maintenance authorities of actual repair start and completion times/dates and any changes in the repair operation plans that could impact active cable systems in the repair area.

- v) For operations involving a crossing of a cable over a cable being repaired, under no circumstances shall attempts be made to pull a cable out from under an active cable. Such action poses a significant risk of inflicting damage to the insulation of the overlying cable by kinking and/or abrasive sawing action.

- vi) To avoid the possibility of damaging an overlying cable during pickup operations, and with due regard to any existing crossing agreement between the cable owners involved, cable and repeaters of the underlying system shall be abandoned in place and not disturbed for a distance either side of the crossing location to be recommended by the repair co-ordinator on case by case basis.

At a minimum, the recommended distance shall include consideration of water depth, repair methods, confidence in cable location information, available navigational control methods, and anticipated cable catenary. The latter is an effect whereby, depending on the cable size and speed of recovery, a cable will lift off the seabed a distance away from the recovery ship, which can equal several times the depth of the water.

- vii) Depending on the circumstances, the repair co-ordinator shall consider the possibility of utilising a Remotely Operated Vehicle (ROV) to assist in cable locating, cutting and recovery.
- viii) Following completion of a repair, the repair co-ordinator shall promptly inform maintenance authorities responsible for cables in the repair area with location details of the repaired cable section and any plant abandoned in place. Such details shall indicate whether the repaired cable is overlying or underlying cables at each crossing location in the repair area.

3. REFERENCES

| Document Number | Title |
|-----------------|-------|
|-----------------|-------|

4. DEFINITIONS

The following words, acronyms and abbreviations are referred to in this document.

| Term | Definition |
|--------------------------------------|---|
| <i>Close Parallel:</i> | Any parallel of cables which has the potential to affect maintenance of the cables involved. The safe separation distance between two cables will vary from case to case, depending on factors such as weather and sea conditions, water depth, proposed repair methods, confidence in cable location information, and available navigational controls. |
| <i>Repair Area:</i> | Area wherein grappling, cable recovery, or cable laying are planned in connection with a repair. |
| <i>Maintenance Authority:</i> | Administration(s) responsible for the maintenance of a particular cable system. |
| <i>Repair Co-ordinator:</i> | The party responsible for undertaking a particular repair operation. |

5. ATTACHMENTS

| Document Number | Title |
|-----------------|-------|
|-----------------|-------|