

March 1991

SURVEILLANCE PROCEDURE FOR LOW PRODUCTION MANUFACTURERS

For those manufacturers unable to comply with the HAR Rules for sampling, the provisions stated below should be applied.

1. The sampling of recognized national types of cables in addition to HAR types is allowed provided that the national types are of similar construction and made of the same material used for HAR cables.
2. Shortfall in samples in one year should be recovered as soon as possible during the following year.
3. In case the manufacturer foresees to give up a continuous production of HAR marked cables, in order to assess the quality level of the production, one of the following surveillance procedure should be followed, as decided by the A.O.:
 - put by sampling (see the following pages);
 - "On call" Procedure (see the following pages).
4. In any case, the number of visits to be yearly performed should be at least 4.
5. In the annual statistic each A.O. should declare the type of procedure applied to the manufacturer.

(item 9 of the meeting of 27.09.1988)

(item 9 of the meeting of 20.04.1989)

"PUT-BY" SAMPLING

A. Introduction

This paper describes the practical difficulties which can be encountered in trying to obtain the required surveillance sample quantities detailed in Table 2 of Appendix 5 to the "Agreement on the use of a commonly agreed marking for cables and cords complying with harmonized specifications as of 12th February 1974".

In order to overcome these difficulties, licensees shall be permitted, with the agreement of the Approval Organization (A.O.), to set aside ("put-by") samples of cable during production for subsequent collection by Inspectors for surveillance testing, but under carefully controlled conditions, as described in Section C below, to maintain the status of the approval scheme.

B. Sampling Problems which can be encountered

It is not always possible to obtain from some licensees the full quantities of surveillance samples required per annum by random sampling from the licensee's place of manufacture, due to one or more of the following reasons:

- B.1 Some licensees are in a "make to order" situation insofar as licensed cables are concerned. The ordered quantity of cable is manufactured and then immediately despatched to the customer. None is placed in the licensee's store.
- B.2 Some licensees do not maintain large stocks of cables at the factory, but within a few days of manufacture, all production is widely distributed to various warehouses.
- B.3 Some licensees operate at generally low stock levels which makes surveillance sampling difficult unless several samples off the same manufacturing length are selected, but the scheme states that this should be avoided as far as possible.
- B.4 Many licensees hold certification for cable types which are only manufactured very rarely, which makes it difficult in some cases to comply with the requirements that one sample of each type of insulation and sheath shall be F5 surveillance tested per year.

C. Put-by Sampling Procedures

If sufficient samples of licensed cables cannot be selected from a combination of:

- a) the licensee's store
- b) the manufacturing area**
- c) other stores owned by the licensee
- d) market sampling**

- then the following arrangements shall be implemented, unless advice to the contrary is
- received from the A.O.'s Inspectorate.

- C.1 The A.O. shall advise the licensee that it is necessary to make special arrangements for sampling from the licensee's production in order to comply with the requirements of the scheme. Under the circumstances, certain obligations and limitations of both the licensee and the A.O. which are described in the scheme are no longer applicable and alternative arrangements will apply as identified in C.2 - C.11 below.
- C.2 The licensee shall put-by one sample from each manufacturing length produced. A manufacturing length is regarded as approximately 5 km. Where a very small number of manufacturing lengths are produced, samples from each manufacturing length shall be put-by, separated from each other production-wise by approximately 5 km, such that at least 200 % of the samples required for surveillance testing each quarter are available for selection by the Inspector during each quarterly visit.
- C.3 Inspection visits shall be timed as far as possible to coincide with manufacture and/or high stock levels in the licensee's store.
- C.4 Details of all production since the previous visit shall be disclosed to the Inspector by the licensee, together with details regarding location of the cable concerned (e.g. in store on premises; in store 120 km away; sold to company "Z").
- C.5 The Inspector shall also obtain details of anticipated production during the following quarter. If this is much higher than the previous quarter, then he may decide to short sample during the current visit, with a view to recovering the shortfall during the next visit, thereby obtaining a better production spread.
- C.6 Having decided how many samples to select in light of C.5, the Inspector shall sample from non-put-by cable as far as possible and then select from put-by samples up to the total required. These two groups of samples shall be identified separately.
- C.7 The Inspector shall examine the licensee's complete production records since the previous inspection visit to confirm C.4, and also quality control records for all put-by samples. Selection of the put-by samples shall be made relative to total production quantities of individual manufacturing lengths and also steering a middle-course with respect to the licensee's own results (i.e. he shall not select with a bias towards lower levels of compliance, or vice versa). In particular he shall not select more than one sample covered by a full licensee test or more than four samples covered by F25 licensee tests, wherever possible.
- C.8 Following the selection of samples from the factory by the Inspector, the A.O. may, at its discretion, obtain additional samples from elsewhere (e.g. another store, market sampling) up to the total number of put-by samples taken. These samples will be substituted for the put-by samples and considered as non-put-by.
- C.9 The samples from C.6 and C.8, as appropriate, shall be tested and although all the results obtained shall be assessed together for the purposes of the scheme, a comparison shall be made between put-by and non-put-by results. Where a significantly higher level of compliance (i.e. fewer demerits) with respect to put-by samples is apparent, the comments of the licensee shall be sought.
- C.10 Other than in exceptional circumstances no more than 50% of all the samples tested from a licensee's production per annum shall have been put-by.

C.11 Similar arrangements shall be applied, where necessary, in order to obtain samples of specific insulation or sheath materials which are not normally available.

D. Alternative Procedures

D.1 An alternative to accepting put-by samples would be, by mutual agreement between the licensee and A.O., to increase the number of inspection visits to the licensee's premises to coincide with production of individual manufacturing lengths. However this could increase certification costs to the licensee concerned (who will normally be low production category) to an unacceptable level.

D.2 As an alternative in the case of C.11, the A.O. shall, with the agreement of the licensee, select a sample of unlicensed cable incorporating the material concerned for material testing only. This will be an additional sample to the normal surveillance requirement, but the demerit rules will still apply.

"ON CALL" PROCEDURE

The manufacturer engages himself to inform the A.O. of the periods when he intends to produce a lot of HAR marked cables and to wait for a visit of an inspector from the A.O., who will pick up samples from the lot, before delivering. The inspector's visit shall be planned in such a way not to introduce unbearable delays in manufacture or delivery of the products.

The number of samples picked up during each visit should be in line with item 4 of Appendix 5 of the HAR Agreement.

This procedure should be stopped if the period with no production exceeds three years.

The application of the on-call procedure should be mentioned in the annual report on surveillance, with the number of on-call inspections made.

In case a manufacturer had been permitted to operate the on-call procedure and obtained demerits which exceeded the maximum number permitted, the licence would be suspended. When HAR cables were next produced, the manufacturer would have to await the outcome of surveillance testing before delivering the cables, subject to the test results being satisfactory.