

STATUS REPORT ON THE FOLLOW-UP OF EC MANDATE M/313 ON EMC OF TELECOM NETWORKS

1 EC Mandate M/313

- During its meeting held in October 2001, the CENELEC Technical Board (CLC/BT) had noted the fact that EC Committee 98/34/EC had approved a Mandate to the ESOs for the preparation of EMC harmonised standards for telecommunication networks.
- With a letter dated 2001-10-15, the Commission circulated EC Mandate M/313 concerning EMC of Telecommunications Networks to CEN, CENELEC and ETSI.

2 ESO acceptance

- The Mandate was accepted by CLC/BT during its meeting in December 2001.
- The Mandate has also been accepted by the ETSI Board.
- CEN, from its side, expressed no interest in the Mandate.

3 Scope of M/313

3.1 Networks and not products

Following a query from CENELEC, the Commission has formally confirmed that M/313 envisages the preparation of harmonised standards on EMC of networks and not of products (which are covered by the more general Mandate for the preparation of harmonised standards under the EMCD).

It was pointed out in particular that neither M/313 nor the EMCD (in its present form i.e. Directive 89/336/EEC) covers electric cables or cord sets.

3.2 All ICT networks

During a CENELEC/ETSI co-ordination meeting (see 4.2 hereafter), the Commission has confirmed that M/313 envisages all telecom and all ICT (Information and Communications Technologies) networks, which means that e.g. residential and industrial communication networks are also included.

3.3 OJEC listing of harmonised standards

During a CENELEC/ETSI co-ordination meeting (see 4.2 hereafter), the Commission has confirmed that the deliverables of M/313, i.e. the harmonised standards, are intended to be listed under the (present) EMCD (89/336/EEC).

4 CENELEC/ETSI co-ordination

4.1 Proactive response of the ESOs

Already back in January 2000, as the result of a CENELEC/ETSI co-ordination meeting in the field of PLT (Power Line Telecommunications), a joint CENELEC/ETSI JWG had been set up with the task to develop EMC requirements for transmission networks (power line, coaxial, telephone). This group is now called the CENELEC/ETSI JWG on EMC of Conducted Transmission Networks and it is actually dealing with the intended single general EMC emission standard.

4.2 CENELEC/ETSI co-ordination on M/313

A CENELEC/ETSI co-ordination meeting was held on 2002-02-08 with the view to establish a jointly agreed CENELEC/ETSI work programme. The outcome was the following:

4.2.1 Recommendation for the execution of M/313

- A single general standard should be prepared covering emission limits and measurement methods for all types of telecommunication networks to ensure that the various technologies (e.g. power line communication networks, coaxial cable communication networks and telephone communication networks, LANs, HBES) are treated equally.

- Standards prepared for EC Mandate M/313 should be written so that they can be used in the case of complaints.

- The preparation of immunity standards for telecommunication networks should have a lower priority and will be assessed at a later moment.

- The emission limits for telecommunication networks should take account of the requirements for equipment to be connected to such networks as emission limits for equipment are covered by the relevant product standards whose references have been or will be published in the OJEC (under the existing Mandate for product EMC standards).

- The preparation of the single general emission standard should be allocated to the existing CLC/ETSI JWG on EMC of Conducted Transmission Networks in which the relevant CENELEC committees (TC 46X and its SCs, TC 205, SC 205A, TC 209, SC 210A and TC 215) and ETSI committees are invited to participate.

4.2.2 Work Programme for M/313 deliverables

The work programme, reproduced in Annex A, was agreed. It consists of three steps:

- First step (and urgent priority): a single general EMC emission standard for telecom networks. This task is being undertaken by the CENELEC/ETSI JWG on EMC of Conducted Transmission Networks. Target date for document ready for procedures: Autumn 2002. This target date largely depends on achieving a consensus on the present diverging views regarding emission limits (see NB 30, MPT 1570 and CEPT).

A more detailed situation report on this activity is reproduced in Annex B.

- Second step: possible specific aspects for emission. To be undertaken as soon as the draft of the first step is sufficiently stable.

- Third step: immunity aspects

A question has been launched to the concerned CENELEC technical bodies (target date for replies: end of 2002).

EMC consultant

Proposal of programme for standardisation work under the mandate M313 on telecom networks

The following programme of work is suggested for discussion. It includes the three following steps:

1) First step (and first urgent priority): **single general EMC emission standard for telecom networks.**

Establish a draft for an intended EMC harmonised EN standard for electromagnetic emission, applicable in principle to all types of telecommunication networks (general approach, technologically neutral, as requested by the mandate).

Note: As specified in the mandate, this standard will cover the networks viewed globally as fixed installations, in the sense of the EMC directive. This standard will not constitute a product standard for the assessment (CE marking) of terminal or other equipment placed on the market.

The draft for this standard shall be established in collaboration between ETSI and CENELEC, by the ETSI/CLC Jointed WG on conducted transmission networks, which had already been created proactively on this issue, before the mandate was issued.

Experts of all concerned parties are invited to participate in the work.

The possible contents of such a single emission standard are given in an appendix as a guideline.

Approval procedure of the EN: to be discussed between the management authorities of CENELEC and ETSI

2) Second step: **possible specific aspects for emission**

Once a preliminary draft, sufficiently mature, has been received from the Jointed WG, it should be examined whether more specific harmonised standards are needed complementarily for some types of particular telecom networks.

Note: one example of such a particular European standard exists already for CATV networks: EN 50083-8

This matter should be examined in an ad-hoc co-ordination meeting of ETSI and CENELEC, with the officers or representatives of all the concerned technical committees of both organisations.

3) Third step: **immunity aspects**

It is necessary to examine carefully the feasibility of harmonised standards for the immunity of telecom networks.

This basic issue should be addressed by a questionnaire sent to the Jointed ETSI/CLC WG on conducted transmission networks but also to the TC's in CENELEC and ETSI dealing with specific telecom networks, as specific aspects may be more relevant in immunity.

An answer on the possibility of providing a general or more specific immunity harmonised standards should be given by all the interested parties, within a given delay (6 months?).

The survey of these answers should be examined in an ad-hoc jointed ETSI/ CENELEC co-ordination meeting, which could then possibly prepare a real programme and repartition of work.

If it does not appear realistic to prepare consistent harmonised standards for immunity for telecom networks, alternative suggestions could be proposed to the European Commission (such as a guidance document for example).

R. De Vré

**First step of the execution of M/313
CENELEC/ETSI JWG on EMC of Conducted Transmission Networks
Situation report (beginning of June 2002)**

The preparation of the single emission standard for telecom networks has been entrusted to this group which is now actively engaged in this task.

The JWG has had two meetings since the official acceptance of the mandate M/313 and of the work programme.

During the last meeting in May 2002, a detailed draft for a single emission standard was already discussed. A limited drafting group, with M. Sisoletsky (REG TP -Germany) as convenor, had prepared this first draft, following a decision taken by the JWG during its previous meeting.

Many basic questions of principle relevant to the draft were resolved during the May meeting of the JWG, although some are still pending.

It is to be noted that the JWG intends to prepare in the first stage only an enforcement standard (to be used exclusively for the treatment of complaints) including measurement methods and target limits and dealing only with radiated emissions in the frequency range from 9 kHz up to 3 GHz.

The main contentious issue remains the question of the radiated limits for which various proposals have been submitted with a relatively large dispersion.

The next meeting of the JWG is planned for 2 and 3 September 2002, to go further with the discussion of the draft emission standard (which has in between been returned to the drafting group for adaptation to the JWG decisions and for preparation of proposals on the contentious issues).

During the next meeting of the JWG in September 2002, it is planned in particular to examine how to deal with the limits issue.