EUROPEAN COMMISSION
ENTERPRISE DIRECTORATE-GENERAL

Single Market, regulatory environment, Industries under vertical legislation
Conformity and standardisation, new approach, industries under new approach

Brussels, 7 August 2001

M 313 EN

STANDARDISATION MANDATE ADDRESSED TO CEN, CENELEC AND ETSI CONCERNING ELECTROMAGNETIC COMPATIBILITY (EMC)

TELECOMMUNICATIONS NETWORKS

1 Title

EMC harmonised standards for telecommunication networks.

2 Content

This mandate concerns the preparation of harmonised standards covering EMC aspects of wire-line telecommunication networks including their in-house extensions. These standards should cover the types of networks, which are currently operational or which are under development, including, but not limited to those using power lines, coaxial cables and classical telephone wires. This mandate does not concern the preparation of harmonised standards relating to the electromagnetic compatibility of equipment to be connected to the networks.

3 Legal basis

This is a standardisation mandate within the framework of Directive 89/336/EEC on the approximation of the laws relating to EMC[1].

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[1] Where (sub-)networks are terminal equipment in the sense of Directive 1999/5/EC, the standards will also be recognised as harmonised standards under that Directive.

4 Previous mandates

The following mandates have been issued to CEN, CENELEC and ETSI requesting the production of harmonised standards under Directive 89/336/EEC:

BC-T-353	Development of harmonised standards for telecommunication terminal equipment, satellite earth station equipment and radiocommunication equipment
BC/CLC-03/88	Development of EMC product standards
BC/CLC-02/92	Supplementing BC/CLC-03/88
BC/CLC/03/0000/98-3	Supplementing BC/CLC-02/92
BC-IT-82	EMC aspects of IT and Telecommunications equipment
M/038	Supplementing BC-IT-82 by introducing the concept of harmonised standard in the context of the New Approach
M/282	Aircraft and aeronautical equipment

5 Description of the mandate

Since the entry into force of the EMC Directive, a number of harmonised standards have been produced covering the electromagnetic compatibility of electrical and electronic appliances. No harmonised standards, however, have been developed covering the electromagnetic compatibility of fixed installations, such as, for instance, telecommunication networks. While this situation so far may have been satisfactory, such installations increasingly cause interference to radio services, and are in some case experiencing interference. Several workshops, organised by the European Commission during the years 2000 and 2001, with wide participation of users of the radio spectrum, industry and regulators, have highlighted this situation.

Harmonised standards for telecommunication networks would simplify the application of the EMC Directive to all parties involved and provide a level playing field, as far as EMC is concerned, for the development of new telecommunication technologies. In this context the already achieved electromagnetic compatibility of wired broadband networks is to be maintained.

Therefore, the European Commission requests CEN, CENELEC and ETSI:

- to prepare and adopt harmonised standards covering the electromagnetic compatibility requirements (emission and immunity) for telecommunication networks using:
  - power lines
  - coaxial cables
  - telephone wires (e.g. using xDSL technology)
- to consider the feasibility of harmonised standards covering the electromagnetic compatibility requirements (emission and immunity) for other types of telecommunication and data networks, and, when pertinent, to prepare and adopt such harmonised standards.

These harmonised standards shall lay down the limits and the test methods needed to allow presumption of conformity with the essential requirements of Directive 89/336/EEC. They should take into account, whenever possible, existing European

and international technical specifications already developed in this area (for instance, the values defined in EN 50083-8, Germany's NB 30 or the United Kingdom's enforcement standard MPT 1570). They shall especially take into account the need to protect frequencies used by safety and emergency services.

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These standards should, be coherent with generic standards. They should take into account any other harmonised standards (produced under either Directive 89/336/EEC or Directive 99/5/EC) relating to the electromagnetic compatibility of equipment to be connected to the networks.

The standards produced under this mandate should form a comprehensive, technology-neutral set. A coherent approach, in particular in terms of electromagnetic emission, must be sought. In this respect, it should be considered to initiate the work by identifying generic limits applicable to all wire-line telecommunication networks.

6 Execution of the mandate

The Commission hereby entrusts CEN, CENELEC and ETSI this mandate.

CEN, CENELEC and ETSI will provide by [*date of sending of mandate to the ESOs + 6 months*] a programme with the standards that will cover the mandate and the target date for their availability.

CEN, CENELEC and ETSI are, at regular intervals, to inform the European Commission, which in turn will inform the Committee established under Directive 98/34/EC, of any new draft standard covered by this mandate.

Within six months of their adoption, the European standards produced under this mandate are to be transposed into national standards, and the conflicting national standards are to be withdrawn from the catalogues of the EU national standards organisations. CEN, CENELEC and ETSI will provide the Commission with the titles of the standards in the Community languages.

CEN, CENELEC and ETSI are advised to co-ordinate their activities with the relevant European or international bodies.

The standstill period referred to in Article 7 of Directive 98/34/EC of 22 June 1998 shall start when the relevant European standards body accepts this standardisation mandate.

EUROPEAN COMMISSION
ENTERPRISE DIRECTORATE-GENERAL

Single Market : regulatory environment, standardisation and New Approach
Director

Brussels, 000042 08.01.2004
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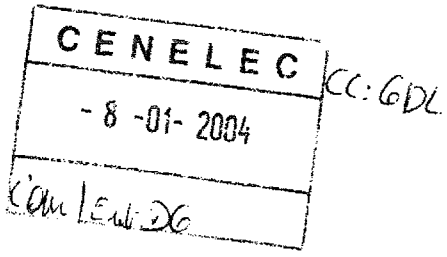


Elena Santiago
European Committee for
Electrotechnical Standardisation
(CENELEC)
35, rue de Stassart
1050 Brussels

Subject: Request to develop a technical specification under Mandate M313

Dear Mrs. Santiago,

In August 2001, the Commission mandated CENELEC and ETSI to prepare standards covering EMC aspects of wire-line telecommunication networks including their in-house extensions, with a view to be harmonized under Electromagnetic Compatibility Directive 89/336/EEC (the EMC Directive).

Due to the inherent complexity of the subject and the apparent divergent views of various stakeholders, no standard has been developed to-date.

In the absence of such standards providing an agreed technical expression for the essential requirements of the EMC Directive for telecommunications networks, these essential requirements may be interpreted differently between Member States.

As a consequence, this regulatory uncertainty may prevent the deployment of alternative telecommunication infrastructures, such as powerline communications.

After having consulted the Member States and considering the results of experiments performed to-date, the Commission is of the opinion that a cautious and controlled roll-out of powerline communication infrastructure with close interference reporting should be encouraged.

In order to achieve this goal, the Commission intends to issue a recommendation on broadband communications through powerlines. One of the objectives of this recommendation will be to make available to the European Standardisation Organisations any relevant data with respect to conducted and radiated disturbance levels, interference problems and unwanted emission levels related to powerline communications networks. This approach will allow the gathering of necessary data in order for CENELEC and ETSI to converge towards the development of a stable and widely accepted standard.

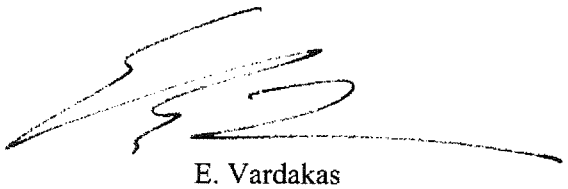
This recommendation needs to be based on a sound technical specification reflecting the current state of the art of telecommunication networks, and in particular, powerline communications networks. This technical specification should be based on the technical work performed to-date by the Joint Working Group set up by CENELEC and ETSI in the framework of the mandate M/313 issued by the Commission.

Therefore, the Commission requests CENELEC and ETSI to:

- Define a technical specification providing test methods and limits for radiated disturbance (and possibly consistent conducted disturbances limits) compatible with state of the art powerline communication infrastructure. This technical specification should be made available by 31/03/2004

- Take due account of the data made available by the Member States during the deployment and operation of such networks, if and when proposing to revise the technical specification and proposing a standard for harmonisation.

Yours sincerely,



E. Vardakas

c.c.: MM. Mingasson, Colasanti, Langenheine, Montoya, Scott, Anselmann Bogers, Koolen, Brefort

CENELEC

BT119/DG5563/DC
January 2004

Document contents for discussion only
and still to be approved

119 BT – Item 5.2.2

SUBJECT
EC MANDATE M/313 ON EMC OF TELECOM AND ICT NETWORKS
Additional request from the Commission

BACKGROUND

Upon the reception of EC Mandate M/313 on EMC of telecom and ICT networks a formal coordination meeting had been held between CENELEC and ETSI the main outcome of which was the agreement on a work programme. The development of the prime deliverable i.e. the general emission standard was given to the CENELEC/ETSI JWG on EMC of Conducted Transmission Networks (see in particular 111 BT, item 5.2.1 and associated decisions). It is to be noted that different CENELEC technical bodies are represented at the level of the JWG: CLC/SC 205A, TC 209, TC 210, TC 215.

Bearing in mind the involvement – and diverging interests - of different parties (network operators, application providers, national authorities, broadcasting institutes), the JWG is facing political pressure (which is not always enhancing their consensus building).

At different occasions the Commission put forward that the intention of the mandate is to prepare a harmonized standard, intended to be listed under the EMCD which is to reflect the state of the art and therefore, if complied with, ensures presumption of conformity to the ERs of the EMCD. This principle was also confirmed during a special meeting called by the Commission back in January 2003 where ways and means to achieve this goal had been evaluated.

The above situation led finally to the attached message from the Commission, asking for additional work i.e. the rapid publication of a Technical Specification "providing test methods and limits for radiated disturbance (and possible consistent conductive disturbances limits) compatible with the state of the art powerline communication infrastructure".

Having noted the urgency of the request and in agreement with the Chairman of CLC/TC 210, CS has referred the Commission request to the JWG, asking that feedback on the outcome of their forthcoming meeting should be received for 119 BT consideration.

An initial remark, promptly confirmed by the Chairman of CLC/TC 210 and the Convenor of the JWG – and supported by the provisions of the IR Part 2: TS requires at least 3 months of proceeding – is the fact that the target date is not realistic and should be shifted. All this under the condition that further debate within the JWG would show that the requested deliverable by the Commission can be extracted "immediately" from the present consensus-building draft.

PROPOSAL

BT to decide on the additional request (Technical Specification) from the Commission in the context of EC Mandate M/313 on the basis of the expected input from the CENELEC/ETSI JWG on EMC of Conducted Transmission Networks which would most likely be to accept the request, however pointing out the non-feasibility of the target date.
BT to ask CS to liaise with ETSI regarding the procedural provisions for the Technical Specification (CENELEC and/or ETSI?).

JPV/IS/040101