

3.4.3. The research activities to be carried out under this sub-programme are closely linked to the work under the heading 'Technologies for Environmental Protection' in the STEP⁽¹⁾ programme. The Commission is urged to ensure that the activities under the two programmes are complementary so that maximum benefit can be obtained from the limited funds to be allocated to the REWARD sub-programme.

3.4.4. This recommendation also holds good for the 'Energy production from waste' programme, whose research activities are closely linked to the JOULE programme (non-nuclear energies)⁽²⁾ and its sub-programme 'Energy from biomass'.

⁽¹⁾ Science and Technology for Environmental Protection.

⁽²⁾ Joint Opportunities for Long Term Energy Supply.

Done at Brussels, 26 April 1989.

3.5. *Review and evaluation of the programme*

3.5.1. Article 4 of the draft Decision states that a review is to be carried out when the programme is in its second year. The outcome of the review will, if necessary, give rise to proposals to amend or extend the programme.

3.5.2. When the Commission was drawing up its present proposal, sufficient scientific results of research under the current 1986-1989 programme were in many cases not yet available. The Committee therefore considers that the final evaluation of the 1986-1989 programme should be taken carefully into account when reviewing the new programme.

3.5.3. The Committee would also reiterate its request that Article 4 be amended to make express provision for the Economic and Social Committee to be sent the findings of the review and of the evaluation of the results achieved.

*The Chairman
of the Economic and Social Committee*

Alberto MASPRONE

Opinion on the proposal for a Council Decision on High Definition Television⁽¹⁾

(89/C 159/12)

On 16 December 1988, the Council decided, in accordance with Article 198 of the Treaty establishing the European Economic Community, to consult the Economic and Social Committee on the abovementioned proposal.

The Section for Industry, Commerce, Crafts and Services was instructed to prepare the work on this topic and adopted its Opinion on 5 April 1989, in the light of the report by Mr Poeton, rapporteur.

The Economic and Social Committee, at its 265th plenary session, meeting on 26 April 1989, adopted the following Opinion with no dissenting votes and 3 abstentions.

1. Introduction

1.1. The Commission's proposal for a Council Decision to involve the EC in the funding and to assist in the development of high definition services in Europe has the full support of the Committee.

1.2. The development of High Definition Television (HDTV) possesses a dramatic potential by providing in

⁽¹⁾ OJ No C 37, 14. 2. 1989, p. 5.

the home and elsewhere a viewing experience similar to that of the wide screens of the cinema. It has been possible to achieve this by providing more detail in the picture which satisfies the technical relationship between visual acuity and viewing distance.

1.3. HDTV contains a lot more detail which, combined with a larger screen, allows a new viewing experience. Furthermore, the new technology can be used in new areas like printing, education, health, etc.

1.4. Twenty years ago colour was introduced in a manner such that although downward compatibility was maintained with existing black and white receivers, there was no international or indeed even European standard. As a result, two different systems (PAL and SECAM) developed and hindered the European consumer electronics industry for years.

1.5. At the 1986 International Radio Consultative Committee (CCIR) in Dubrovnik, the European Community succeeded in preventing the adoption of a Japanese proposal for a world HDTV standard and obtained an additional study period of 4 years, up to Summer 1990, for reaching world-wide agreement. The Japanese standard was incompatible with all existing TV sets and equipment and would therefore require new equipment throughout.

1.6. European industry under its 'EUREKA' R&D HDTV project (EU 95) has succeeded in demonstrating a new system, based on the MAC standard, which provides a complete HDTV service and is also at the same time fully compatible with existing normal TV sets and equipment. This demonstration met CCIR requirements.

2. Compatibility through standards

2.1. There are however still a number of technical problems to overcome.

2.2. The larger amount of detail contained within an HDTV picture demands a larger slice of the broadcast spectrum (bandwidth):

- it cannot therefore be transmitted over an existing terrestrial UHF television channel,
- the existing satellite channel bandwidths are also insufficient, without adopting bandwidth compression techniques. To obtain the necessary number of satellite channels new bandwidth reduction techniques (HD MAC) can and must be introduced simultaneously.

3. General comments

3.1. The Committee congratulates the EU 95 project team on the success so far achieved but stresses that the tight schedule up to now respected cannot be relaxed at this stage. This is not only in view of the CCIR deadline but also of the strong competition from the USA, Japan, South Korea (and soon other countries) where governments are working with industry to obtain the largest share of the world market.

3.2. The following points are, in the Committee's opinion, of particular relevance:

- a) Obsolescence of the TV receivers currently in use must be prevented at all costs, and the European approach makes this possible.
- b) The fact that the Japanese have recently produced a convertor from their MUSE system to NTSC (the existing American/Japanese standard) must not create uncertainty in the market place. The 'inherent compatibility factor' achieved by EUREKA, which should be emphasised at every stage, makes such a convertor unnecessary.
- c) Every incentive must be given to maintain and expand Europe's consumer electronics sector, not least to avoid job losses such as those which occurred 20 years ago; in tandem with this public commitment, every effort should be made to prevent substantial production being transferred to areas outside the Community and countries of the European Free Trade Association (EFTA).
- d) The Committee observes that it is already commercially possible for 'Japan Incorporated' to manufacture and market their own HDTV 'MUSE' system (video-disc recorders and monitors) independently of any CCIR decisions and therefore establish *de facto* their own standards in the market place. Conversely no one can prevent European industry doing likewise: it should be given every encouragement to do so as soon as possible.
- e) Progress with the technical work on equipment needs to be accompanied by similar development of production techniques for software (programme material, films, etc.) and an increase in funding of programme production.
- f) Projections of market penetration are a real hazard and may well be over-optimistic: different estimates place the value of the HDTV technology market (production, transmission and reception equipment) between 25 and 52 billion dollars in the USA alone; considering the European and Japanese markets, the figures could reach 150 billion dollars in the 10 years after the launch of services.
- g) The US consumer electronics industry, although ossified, is reported to be mobilizing itself with federal government assistance to develop HDTV technology and manufacture HDTV products.
- h) Patient long term, strategic, investment and financial planning backed substantially by the financial instruments of the Community is essential.

- i) In the short term, the Community should continue to contribute to the funding of pilot projects that include studio and demonstration equipment such as OB vans, giant screens, etc. which need every encouragement and support.

3.3. Funding has been allocated within the RACE (Research and Development in advanced telecommunication technologies for Europe) programme. Its estimated cost of 45 million ECU (of which 15 million ECU would be provided by Community funds) represents 4,1% of the total RACE budget (1 100 million ECU); the 15 million ECU are 2,73% of the RACE costs in charge of the Community (550 million ECU).

4. Specific comments on the objectives of the European HDTV strategy

4.1. The Committee endorses the 4 objectives.

4.1.1. Article 1

The European success in securing a 4 year breathing space on the CCIR (the world TV governing body) was crowned with a EURO R&D technical advance. Vigorous diplomatic activity throughout the rest of the world is most important to promote European industry and standards in this field. With a view to meeting the Summer 1990 deadline, all Member States, the EC institutions and the relevant interested parties should be actively involved: in particular, it is vital that the public and private broadcasting networks provide strong commitment to help the industry in its efforts, increasing substantially the number of programmes conforming to Objective 2 of Article 1.

4.1.2. Article 2

4.1.2.1. In view of the importance of the subject, the widest consultation is needed and must involve the social partners, both through consumer (e.g. viewers organizations), worker and employer organizations and through the Economic and Social Committee.

4.1.2.2. Comprehensive support to all the professional 'users' (broadcasters, programme makers, etc.)

of the new equipment is the top priority. The major structural changes now taking place, as direct satellite broadcasting is introduced, places HDTV lower on the list of these broadcasting organizations' priorities. This imperils development and thus employment in the manufacturing industries.

The Committee demands that the action plan foreseen in Article 3 include a specific programme of professional training. This programme must ensure that all the people employed in the industry at all levels and sectors (programming, broadcasting, etc.) are ready to accept and technically prepared to use the new technology successfully. Equally it would be very beneficial to link, right away, the world of audio-visual artistic productions with this proposal, e.g. through coordination with the programmes to aid the European film industry. Consultation of the Economic and Social Committee should be officially foreseen.

5. Conclusion

The Committee has already expressed its strong support for the development of European standards in HDTV⁽¹⁾. The EUREKA EU 95 project presents the opportunity to establish the only fully compatible standard capable of introducing HDTV without making existing sets and equipment obsolete.

The Council Decision is therefore urgently needed to provide a framework of support for the final stages required to demonstrate that the European standard is technically the most suitable to be adopted as the world standard.

In conclusion, the Committee lays the greatest possible stress on the vital importance of the economic and social issues at stake and calls on the Community to mobilize all its forces unreservedly and with the utmost vigour in support of the efforts pursued by European industry in this field.

⁽¹⁾ ESC Opinion on the Communication from the Commission on a fresh boost for culture in the European Community, point 3.3.3 (High Definition Television programmes (European standards), dated 28 april 1988) (OJ No C 175, 4. 7. 1988, p. 40).

Done at Brussels, 26 April 1989.

*The Chairman
of the Economic and Social Committee*

Alberto MASPRONE