

COMMISSION OF THE EUROPEAN COMMUNITIES

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Brussels, 15 November 1993

PROPOSAL FOR A
DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
ON THE USE OF STANDARDS FOR THE TRANSMISSION
OF TELEVISION SIGNALS

(INCLUDING REPEAL OF DIRECTIVE 92/38/EEC)

(PRESENTED BY THE COMMISSION)

EXPLANATORY MEMORANDUM

1. INTRODUCTION

Council Directive 92/38/EEC of 11th May 1992 had the objective of facilitating Europe's transition from standard definition (as delivered by today's PAL and SECAM television systems)* to high definition television (HDTV). The compatible evolutionary approach, using the D2-MAC and HD-MAC transmission systems**, developed for satellite and cable distribution, was the chosen way forward. It was considered at the time that a window of opportunity of some years existed for this strategy to be successfully implemented.

The Directive itself, however, foresaw the need to keep the strategy under constant assessment. It requires the Commission to review, report on, and if necessary, adapt the Directive in the light of current and probable market changes, evolution in technology, and use of Community funding. The review is required before 1 January 1994.

2. CHANGES IN THE MARKET

There can be little doubt that the explosion in the number of satellite television services in Europe is now providing a wider range of diversity and choice of programming for viewers than was the case 5 years ago. Service concepts have also developed as experience has been gained of viewers' likes and dislikes. Increasingly important to the financial success of many television service providers are subscription revenues, and the near prospect of on-demand pay-per-view services, most notably exemplified by the film channels.

Economic and other factors (including technical - see Section 3) have contributed to a general reluctance on the part of many broadcasters to invest in new technologies, in new equipment, in refurbishing studios, in programme making in HDTV. In short the start-up costs for HDTV were perceived to be off-putting particularly in the critical area of production of programmes.

* The characteristics of the PAL and SECAM television systems are defined in CCIR Report 624-4, 1990.

** ETSI standards references : D2MAC - prETS 300 250 ; HDMAC - prETS 300 352

With the continued growth of satellite television services in the period it transpired that there was a greater immediate need for quantity in programmes rather than an emphasis on improving the technical quality of the image. This need for programmes and establishing a market presence in standard definition was a more commercially necessary activity to the satellite broadcasters than introducing visually better services than their terrestrial competition.

However in the consultations that the Commission has held with the satellite broadcasters over the past year or so a consensus emerged that wide-screen (16:9 aspect ratio)^{***} TV was both an attractive feature for viewers and also commercially attractive to the broadcasters. Furthermore, to shift the emphasis to wide-screen 16:9 services was a useful and reasonably manageable step towards HDTV.

Terrestrial broadcasters also shared this view (seeing wide-screen 16:9 TV either as an opportunity for improving the appeal of their own services or as a threat to their market share from the prospect of wide-screen 16:9 satellite services) but felt largely excluded from the European policy since D2-MAC and HD-MAC are only suitable for satellite and cable systems.

3. CHANGES IN TECHNOLOGY

Given the exclusivity of D2MAC/HDMAC applicability to the satellite and cable environment it was not surprising that the terrestrial broadcasters should undertake research into how to improve the standard definition (with 4:3 aspect ratio) television systems to which they were wedded, PAL and SECAM. That effort has been accelerated and wide-screen 16:9 variants should be available in 1994/95.

The period has also seen a rapid rate of development in digital technologies and systems. Already, thanks to advanced digital compression techniques, the multi-channel capability (4-5 standard definition TV channels in the same bandwidth as a single analogue channel) is a very commercially attractive proposition. This is especially so for pay-per-view channels. Rapid

^{***}The aspect ratio is the width to height ratio of the displayed image. Standard definition systems such as PAL and SECAM have a 4:3 aspect ratio whilst advanced TV systems will have a 16:9 aspect ratio.

advances in digital coding and multiplexing, as well as compression, are now showing promising results in the goal of achieving fully digital HDTV systems.

Another significant factor has been the growing credibility attaching to the work being done in the USA on digital HDTV systems designed for the US terrestrial broadcasting environment. It is now widely believed that the FCC process for selecting a digital terrestrial HDTV system will lead to the introduction of such services by the end of the decade.

From all of these technical developments we can conclude that Europe's D2-MAC/HD-MAC strategy for the introduction of HDTV is not the only possible one. It is important to recognise, however, that despite the promise of digital technologies, D2-MAC and HD-MAC are still judged by experts to have excellent performance and they are available today for those broadcasters requiring wide-screen 16:9 and HDTV service capability.

4. THE EUROPEAN RESPONSE

In the light of these market and technical developments the debate in Europe has focussed increasingly on wide-screen 16:9 TV and digital TV.

In order to accelerate the introduction of wide-screen 16:9 TV services the Community has recently adopted the Action Plan for the introduction of advanced television services in Europe. The Action Plan provides for 228MECU of Community funding (of an estimated total budget requirement of 405MECU) to be distributed over the period upto 30 June 1997. The Action Plan is neutral from the technology viewpoint requiring only that advanced TV services adopt the 16:9 wide-screen format (625 or 1250 lines) irrespective of the European TV standard used and irrespective of the broadcasting mode (cable, satellite, terrestrial).

The aim is to help cushion the start-up costs for broadcasters and programme makers and the target is for tens of thousands of hours of wide-screen 16:9 broadcasting by the end of the Action Plan period. The intention is to lay down a broad infrastructure of wide-screen reception capability and to facilitate programme makers in moving to wide-screen production in order to pave the way for HDTV in the longer term .

At the same time as the adoption of the Action Plan, the Council invited the Commission to bring forward the review of Directive 92/38/EEC by some months in order to ensure the coherence of Community policy. In addition the Commission offered to bring forward in the immediate future a Communication to the Council on Digital Television.

5. REVIEW OF DIRECTIVE 92/38/EEC - RESULTS

Following all the consultations with the involved economic actors over the last two years - including a formal consultation on 13 July 1993 - it is clear that:

- i) it is necessary to repeal Directive 92/38/EEC and to issue a new Directive to respond to the changed circumstances;
- ii) the new Directive should be such as to support the evolving Community policy and should on the one hand provide for an orderly regulatory environment while on the other hand avoiding unnecessary restrictions on operators and costs on consumers;
- iii) the immediate scope of application of the new Directive should be limited, particularly since the range and potential of digital technology is still unclear;
- iv) it should however be capable of responding to digital developments as required.

The provisions of the new Directive therefore address the following issues:

5.1 Transmission Standards

All television services in wide-screen format will have the 16:9 aspect ratio. This will apply no matter how the services are transmitted to the viewer - whether by cable, by satellite or by terrestrial means.

Service providers will be able to choose which European television system standard suits them best, whether this is analogue , fully digital or indeed hybrid. This means for standard definition services : the current D2MAC; or any new analogue system fully compatible with PAL or SECAM; or any new fully digital system standardised by a recognised European standardisation body. For high definition services : either HDMAC can be used; or a fully digital system standardised by a recognised European standardisation body.

5.2 Standard connector in television sets

This is a minimum requirement on consumer products manufacturers. It should ensure flexibility by allowing the range of decoders now likely to be on the market to connect into the television set. This should reassure customers that their decision to purchase a new advanced TV set will be easier knowing that it will have the necessary means to accommodate a range of television signals. The inclusion of an open interface socket (as standardised by a recognised European standardisation body) in TV sets over a certain screen size should guarantee this, without unduly penalising either the manufacturers or the customers of smaller, simpler models.

5.3 Cable TV Networks

The intention here is to ensure that there is an obligation on cable TV networks' operators throughout the Community, when they decide to redistribute television services, to re-transmit received wide-screen television services in wide-screen 16:9 format regardless of the European television standard selected by the broadcaster.

5.4 Review

This provides that the Community's TV strategy is kept current with developments both in terms of the market and in terms of technological evolution and in particular those in the digital domain. The review period is every 2 years.

6. SUBSIDIARITY

- a) What are the aims of the envisaged action with respect to the Community's obligations?

The aim of the action is to ensure an internal market for wide-screen 16:9 format television production, transmission and receiving equipment, and broadcast services throughout the Community by harmonising the format for transmission (articles 57(2), 66 and 100a).

- b) Is the envisaged action within the exclusive competence of the Community, or is it also within the member-States' competence?

The envisaged action falls exclusively within the competence of the Community (internal market).

- c) What means of action are available to the Community (recommendation, financial support, regulation, mutual recognition...)?

In order to achieve the internal market for broadcasting in wide-screen 16:9 format a Council Directive is the most appropriate instrument.

- d) Is uniform regulation necessary or would a Directive stating the general objectives, and leaving the implementation to the member-States, be sufficient?

In order to exclude the possibility of diverging formats in wide-screen television services developing in the member-States a Directive harmonising the 16:9 format is required.

7. CONCLUSIONS

The Commission has reviewed Council Directive 92/38/EEC and concluded that change is essential to reflect the changed market and technology realities of today. The Commission urges the Council, the European Parliament and the Economic and Social Committee to adopt the proposed new Directive repealing Directive 92/38/EEC within the shortest time possible.

The Commission is confident that with the twin instruments of the new Directive and the Community's Action Plan funding programme for advanced television services in place that broadcasters, satellite service providers, consumer products manufacturers, cable network operators, TV production and facilities houses can all build on a steady base to offer new wide-screen services to viewers and customers more assured of that market stability.

Proposal for a
Directive of the European Parliament and of The Council
on the use of standards for the transmission
of television signals

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community, and in particular Articles 57(2), 66 and 100a thereof,

Having regard to the proposal from the Commission¹,

Having regard to the opinion of the Economic and Social Committee²,

Whereas the Community, through Council Decisions 89/337/EEC³ and 89/630/EEC⁴, recognised the strategic importance of High Definition Television (HDTV) for the European consumer electronics industry and for the European television and film industries and established the strategy framework for the introduction of European HDTV;

Whereas the objectives of the strategy for the introduction of HDTV in Europe are an integral part of the Community audio-visual policy, and whereas they must take into account other objectives of this policy within the perspective of the development of

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³ O.J. No L 142, 25.05.1989, p. 1

⁴ O.J. No L 363, 13.12.1989, p. 30

Europe's audio-visual capacity, which comprise structural objectives such as the development of production in countries or regions with more limited audio-visual capacity;

Whereas Council Directive 92/38/EEC on the adoption of standards for the transmission of television signals⁵ set a regulatory framework of standards for advanced television broadcasting services for television programmes based on HD-MAC⁶ as the European satellite and cable transmission standard for non-fully digital HDTV and the D2-MAC⁷ standard for other not completely digital satellite and cable transmission in the wide-screen 16:9 aspect ratio format;

Whereas Council Decision 93/424/EEC on an Action Plan for the introduction of advanced television services in Europe⁸ aims at promoting the wide-screen 16:9 format (625 or 1250 lines), irrespective of the European television standard used and irrespective of the broadcasting mode (terrestrial, satellite or cable);

Whereas Article 7 of Council Directive 92/38/EEC on the adoption of standards for the transmission of television signals calls on the Commission to report on the effects of the application of that Directive, on the evolution of the market, in particular on market penetration measured by objective criteria, the use of the Community funding, and make proposals to the Council to adapt that Directive to these developments if necessary;

Whereas, in order to reach Community goals as set out in the above-mentioned Decisions and to contribute to the achievement of an internal market, as provided for in Article 8(a) of the Treaty, in the broadcasting of television signals, it is necessary to take steps to adopt a common format for wide-screen transmissions;

⁵ O.J. No L 137, 20.05.1992, p. 17

⁶ ETSI standard reference : prETS 300 352

⁷ ETSI standard reference : prETS 300 250

⁸ O.J. No L 196, 5.08.1993, p.48

Whereas the wide-screen 16:9 aspect ratio has been adopted at world level by the International Telecommunication Union (ITU)⁹ for HDTV and it is desirable and possible to develop the market for advanced television services and products having the same wide-screen 16:9 aspect ratio;

Whereas television services are currently delivered to the home by terrestrial systems, by satellite systems and by cable systems and it is essential that advanced wide-screen services should be made available to the largest possible number of viewers;

Whereas there is a need to establish common digital standards for the transmission of television signals whether by cable, or by satellite, or by terrestrial means as an enabling element for effective free-market competition and this is best achieved through the activities of a recognised European standardisation body;

Whereas it is appropriate to repeal Council Directive 92/38/EEC and to issue a new Directive in the light of these developments in the market and technology;

Whereas technologies for advanced television services are developing rapidly and a common approach to their development is necessary; whereas separate and multiple actions by the Member States could lead to undesirable fragmentation of the market for products and services and to duplication of efforts; and whereas consequently such actions could be better achieved at Community level;

⁹ CCIR Recommendation 709 defines "picture characteristics" including the wide-screen 16:9 aspect ratio

HAVE ADOPTED THIS DIRECTIVE:

Article 1

Member States shall take all appropriate measures to promote and support the accelerated development of television services in the wide-screen 16:9 format and using 625 or 1250 lines;

Article 2

All television services transmitted to viewers in the Community whether by cable, satellite or terrestrial means shall:

- i) if they are in wide-screen format, only use a transmission system having the 16:9 aspect ratio;
- ii) if they are in wide-screen format and 625 lines, and are not fully digital, use the D2MAC transmission system, or a transmission system which is fully compatible with PAL or SECAM;
- iii) if they are in high definition, and are not fully digital, use the HDMAC transmission system.

Article 3

Completely digital television systems must use a transmission system which has been standardised by a European standardisation body but are otherwise not covered by this Directive.

Article 4

Any television set with an integral viewing screen of visible diagonal greater than 42 cms, which is put on the market for sale or rent in the Community shall be fitted with at least

one standardised (by a recognised European standardisation body) open interface socket permitting simple connection of additional decoders or peripherals.

Article 5

Any wide-screen 16:9 television service which is received by and re-distributed on cable television systems shall be re-distributed on such systems in the wide-screen 16:9 format.

Article 6

Before 1 January 1996 and every 2 years thereafter the Commission shall review this Directive and submit a report to the European Parliament, to the Council and to the Economic and Social Committee on market and technological developments, in particular relating to developments in digital technology. If necessary, the Commission shall make proposals to the Council to adapt this Directive to these developments.

Article 7

Directive 92/38/EEC is hereby repealed with effect from the date six months after the date of notification of this new Directive.

Article 8

1. Member States shall bring into force no later than 6 months after the date of its notification the laws, regulations and administrative provisions necessary to comply with this Directive. They shall forthwith inform the Commission thereof.
2. When Member States adopt these provisions, these shall contain a reference to this Directive or shall be accompanied by such reference at the time of their official publication. The procedure for such reference shall be adopted by Member States.
3. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive

Article 9

This Directive is addressed to the Member States.

Done at Brussels, (date)

For the European Parliament

For the Council

The President

The President

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DOCUMENTS

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