

COMMISSION OF THE EUROPEAN COMMUNITIES

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Proposal for a

COUNCIL DECISION

ON AN ACTION PLAN FOR THE INTRODUCTION
OF ADVANCED TELEVISION SERVICES
IN EUROPE

(presented by the Commission)

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A. EXPLANATORY MEMORANDUM

1. BACKGROUND AND STRATEGIC CONTEXT

On the 10th February 1991, the Council unanimously adopted a Common Position on a Council Directive on Standards for Satellite Broadcasting of Television Signals ⁽¹⁾ following a proposal from the Commission.

The main points of the Directive may be summarized as follows:

- i) only HD-MAC may be used for HDTV transmissions which are not fully digital;
- ii) only D2-MAC may be used for non-fully digital 625 line television transmissions by satellite in the 16:9 format;
- iii) all 16:9 television receivers must incorporate a D2-MAC decoder and all other television receiving equipment must incorporate at least a standardized socket;
- iv) provision is also made for the obligatory use of D2-MAC by 4:3 services starting after 1 January 1995, subject to the adoption by Council of a Commission proposal on financial support for such services.

This Directive, which sets the regulatory environment of standards for satellite television broadcasting in Europe is one part of a two pronged approach by the Community to encourage the orderly transition in Europe to advanced television services including HDTV.

The other element is an agreement, enshrined in a Memorandum of Understanding (MOU) between the involved economic actors in this field - broadcasters, equipment makers and cable and satellite operators - with a view to the provision in Europe of a wide range of advanced television services in the D2-MAC standard, particularly in its 16:9 format, in the period to 1996.

The strategic context is set by the recognition by the Community that it is in the best interests of the European consumers to follow a path toward HDTV based on the criteria of compatibility and evolution, together with the recognition that HD-MAC is the appropriate HDTV transmission standard in this regard and that D2-MAC offers the best available path towards the development of HDTV, with wide screen 16:9 D2-MAC as the main step in this direction.

During its meeting of 18 and 19 December 1991, the Council of Telecommunications Ministers, in giving its assent to the common position on the Directive, expressed its conviction that only a global strategy including accompanying measures together with appropriate financial means, will assure the success of European advanced television.

In this connection the Council took note of the intention of the Commission to submit to it and to the European Parliament, at the latest by 30th of April 1992, a set of measures, financial and otherwise, on the basis of an appropriate article of the Treaty in order to attain the objectives announced in articles 2 and 8 of the Directive.

(1) O.J.

At the same meeting the Council invited the Commission to intensify its negotiations in relation to the MOU with a view to having its signature simultaneously with the final adoption of the Directive.

Also, at the above meeting the Council invited the Commission to take, without delay, the necessary measures to facilitate the immediate implementation of the numerous initiatives which had already been announced for the satellite broadcasting of television programmes using D2-MAC 16:9.

The European Parliament, in its deliberations on the proposal of the Commission for the Directive also expressed its clear conviction that accompanying financial measures would be required for the successful achievement of the objective.

This present document incorporates a proposal for such a financial measure.

2. THE AIM OF THE PROPOSAL FOR A DECISION AND THE APPROACH TAKEN

Exhaustive consultations over an extended period of time with the concerned economic actors: the broadcasters, the equipment makers, the operators of cable and satellite infrastructure, and the programme makers, have identified a clear interest by many parties to move at the earliest time to the provision of advanced television services by satellite and cable in Europe using the D2-MAC standard, particularly in its 16:9 format, and the HD-MAC standard.

The television service chain begins with origination and ends with reception by consumers on their receivers. It is a complicated chain involving many creative and technical operations and several different industries. The approach must treat the whole chain of operations, not individual functions out of context, because the consumer commits to the outcome of the whole process, rather than any individual aspect. This has led to the adoption of a service perspective, since services embody the sum of operations. A television service consists of a schedule of individual programmes under the editorial control of a broadcaster.

2.1 Additional Costs

The above mentioned consultations have identified the additional costs to the parties which would be involved in the provision of these advanced services particularly in the start-up phase. These costs include:

i) **Costs of Broadcaster's Operations including Studio Upgrading and Satellite Transmission.**

Broadcasters, who have not already done so, may need to upgrade their studio equipment to the requirements of the new service.

Many operators, for commercial reasons, and in order to continue to serve their existing customers who have equipment working on another standard, will wish, at least for an initial period, to simulcast the advanced service in parallel with the conventional service. This will involve additional costs associated with satellite transmission. Other sources of additional costs include D2-MAC encoding and encryption, conditional access and subscriber management for subscription services.

ii) **Costs for Cable Redistribution.**

Operators of cable TV networks may wish to have the capability to offer advanced television services to their customers. In order for cable systems to use satellite received signals in this connection, the cable head-end must have additional equipment (per channel) which is capable of receiving the MAC satellite signal and transforming it in such a way as to be suitable for transmission through the cable network. Special facilities for decrypting, encrypting conditional access and subscriber management may also be required at the head-end. In addition certain upgrading of the cable network itself may be necessary in order to allow the 16:9 D2-MAC signals to be distributed to viewers.

There may therefore be additional capital costs for cable operators wishing to offer the advanced television services to their subscribers.

iii) **Cost of Programme Production and Conversion.**

The advanced services are capable of offering enhanced picture and sound quality compared with conventional services as well as the new wide-screen 16:9 format. In order to ensure that the full potential of the new system is realized therefore the advanced services will require to be fed with programme material of a higher quality in both picture and sound and in the new wide screen format. In order to achieve this higher quality both for D2-MAC but more particularly for HD-MAC transmissions, both in-house and independent production will have to progressively upgrade, technically, over the coming decade, and programme production techniques will have to develop to take full advantage of the potential of the new technical possibilities.

Programme makers and as a consequence broadcasters will therefore face increased costs, at least in the early stages, for original programme production or the conversion of existing material from another format.

2.2 Proposed Approach

The conclusion reached, following the above mentioned consultations, is that due to the fact that the European television service provision industry is suffering significant financial pressures at the present time, the transition from conventional to advanced services is likely to happen only slowly in the absence of a measure of financial incentive to cushion the start-up costs.

The proposal now made therefore is to adopt an Action Plan covering the period up to the end of 1996 and having the objective of accelerating the development of the market for advanced television services by satellite and cable based on the D2-MAC standard, particularly in its 16:9 format and the HD-MAC standard. Community funds, in the amount of 850 million ECU, would be made available to provide incentives for the achievement of this objective.

The funds would be directed towards covering part of the costs identified above, namely:

- i) costs relating to broadcasters's operations including studio upgrading and satellite transmission
- ii) costs relating to cable redistribution
- iii) costs relating to programme production and conversion, and

The allocation of these funds will be governed by the principle of *double degressivity* in the following sense:

- a) In order to encourage the early start-up of the targeted advanced services, those projects starting earliest will receive the greatest levels of funding.
- b) In line with the policy that Community funding is to cushion the economic consequences in the *start-up* phase, the funding allocated to projects will be progressively reduced each year the incentive is in place.

The Commission will be responsible for the execution of the Action Plan and for ensuring that Community funds are correctly spent and are directed effectively and efficiently towards the stated objective.

In this connection the Commission will establish close collaboration with the structure resulting from the signing by the market actors of the Memorandum of Understanding.

A set of general principles and criteria which must govern the implementation of the Action Plan are included in the Annex to ensure that relevant Community policies are followed.

It has also been considered appropriate to specify, in advance, indicative targets for the impact of Community funds as a guide-line for the implementation. These targets which require the achievement by the end of 1996 of:

- i) a critical mass of satellite television services, using the D2-MAC standard, particularly in its 16:9 format, or the HD-MAC standard;
- ii) a significant and constantly increasing number of cable TV networks carrying high quality 16:9 D2-MAC services to their customers;
- iii) a significant and increasing volume of programming in the 16:9 format and with high technical quality both in picture and sound. Such programming to be broadcast in the above mentioned services;

are considered to be achievable following the detailed consultations already conducted.

3. CONCLUSION

The attached Decision aims to prepare the way for the Europe-wide introduction of advanced television services during the next five years. The proposals are based on extensive dialogue with all the relevant actors in this field. The Council is invited to adopt the attached Proposal for a Decision.

**B. PROPOSAL FOR A COUNCIL DECISION
ON AN ACTION PLAN FOR THE INTRODUCTION
OF ADVANCED TELEVISION SERVICES
IN EUROPE**

**PROPOSAL FOR A
COUNCIL DECISION**

**on an Action Plan for the Introduction
of Advanced Television Services
in Europe**

The Council of the European Communities,

Having regard to the Treaty establishing the European Economic Community and in particular Article 235 thereof;

Having regard to the proposal from the Commission;

Having regard to the opinion of the European Parliament ⁽¹⁾;

Having regard to the opinion of the Economic and Social Committee ⁽²⁾;

Whereas the Community, through Council Decision 89/337/EEC ⁽³⁾, Council Decision 89/630/EEC ⁽⁴⁾ and Council Directive ⁽⁵⁾ recognized 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 Council Directive ⁽⁵⁾ set a regulatory framework of standards for satellite television broadcasting including HDTV.

Whereas it is in the best interest of European consumers to follow a path to HDTV, based on the criteria of compatibility and evolution, in order to avoid discontinuities and duplication of investments;

Whereas HD-MAC, which has been chosen as the European transmission standard for non fully digital HDTV, conforms to those criteria of compatibility and evolution and D2-MAC offers the best available path towards the development of HDTV, with wide screen 16:9 D2-MAC as the main step in that direction;

Whereas article 8 of Council Directive ⁽⁵⁾ requires that that Directive be accompanied by commercial measures based on the signing, by the parties concerned, of a Memorandum of Understanding (MOU) coordinating the actions of the various signatories and where

(1) O.J.

(2) O.J.

(3) O.J. N° L 142, 25.5.89, p. 1

(4) O.J. N° L 363, 13.12.89, p. 30

(5) O.J.

appropriate by simultaneous measures designed to support the creation of a European market for the D2-MAC and HD-MAC standards;

Whereas, following the widest possible consultation, a number of economic actors in the television service provision market intend to sign a Memorandum of Understanding in which they make commitments to offer advanced television services throughout Europe using D2-MAC in its 16:9 format;

Whereas the objectives of the strategy for the introduction of HDTV in Europe are an integral part of the Community audiovisual policy and whereas they must take into account other objectives of this policy within the perspective of the development of Europe's audiovisual capacity, which comprise structural objectives such as the development of the independent production sector or the development of production in countries or regions with more limited audiovisual capacity;

Whereas in order to ensure the introduction of European advanced television articles 2 and 8 of Council Directive require a global strategy including accompanying measures together with appropriate financial means and measures to encourage the production of programmes;

Whereas financial incentives are initially required to ensure the accelerated development of the advanced television service market in conformity with the strategy indicated above, by contributing to the reduction of the additional start-up costs involved;

Whereas it is appropriate to set targets for the impact of Community funding of the early market development of advanced television services;

Whereas it is appropriate to specify certain basic principles which must underlie the implementation of the Action Plan including criteria to be used in the selection of projects;

Whereas the Treaty does not provide, for the action concerned, powers other than those of Article 235;

HAS DECIDED AS FOLLOWS:

Article 1

An Action Plan to ensure the accelerated development of the market for advanced television services by satellite and cable based on the D2-MAC standard, particularly in its 16:9 format, and the HD-MAC standard, is adopted for a period commencing on the date of adoption of this decision and concluding on 31st December 1996.

The targets set for the Action Plan are the achievement during the period mentioned above of:

- i) A critical mass of satellite television services, using the D2-MAC standard, particularly in its 16:9 format, or the HD-MAC standard.
- ii) A significant and constantly increasing number of cable TV networks carrying high quality 16:9 D2-MAC services to their customers.
- iii) A significant and increasing volume of programming in the 16:9 format and with high technical quality both in picture and sound. Such programming to be broadcast in the above mentioned services.

Community funds will be directed towards the achievement of these targets by means of incentives covering parts of the additional costs incurred by broadcasters, programme makers and cable TV network operators, in the provision of the above mentioned advanced television services.

A summary of the Action Plan and its implementation procedures is set out in the Annex which forms an integral part of this Decision.

Article 2

1. The execution of the Action Plan will be undertaken by the Commission. In this connection the Commission will establish close collaboration with the mechanisms resulting from the implementation of Article 8 of Council Directive ⁽¹⁾.
2. Basic principles which must govern the implementation of the Action Plan including criteria to be used in the selection of projects are given in the Annex which forms an integral part of this Decision.
3. The Commission shall ensure, by means of appropriate control mechanisms, that the Community funds are properly allocated and are used to achieve Community objectives as specified in this Action Plan.

(1) O.J.

Article 3

An annual report will be submitted by the Commission to the European Parliament, to the Council and to the Economic and Social Committee, evaluating the implementation of the Action Plan and the allocation of Community funds.

A final report, in the same terms, will be submitted to the above institutions at the conclusion of the Action Plan.

Done in Brussels, (date)

For the Council

The President

C. ANNEX - SUMMARY OF THE ACTION PLAN AND ITS IMPLEMENTATION PROCEDURES

1. OBJECTIVE

The objective of the Action Plan is to ensure the accelerated development of the market for advanced satellite and cable television services in Europe using the D2-MAC standard, particularly in its 16:9 format, and the HD-MAC standard.

2. APPROACH ADOPTED

- i) Accelerated development of the market for advanced satellite and cable television services requires that all the elements necessary to bring those services into consumers' or viewers' homes be in place. Television is a complicated medium, encompassing and merging many technical and creative functions, with both cultural and commercial outcomes. Its functions are controlled by different sectors within the audiovisual, telecommunications or electronics industries. Their endeavours form a service chain stretching from origination to the receiver in the home.

Consumer commitment - whether of time or financial resources - is not to any of these individual functions or to the industries that support them, but to the end result, the services that are made possible by the chain of operations. These will be of different types, in the case of a general interest service, or of similar type if the service is a specialised, thematic one. They may be funded in different ways: by licence fee, advertising or by subscription.

The approach for accelerating the development of the market for advanced satellite and cable television services must therefore have a service focus. It would be misguided to adopt a piecemeal approach, addressing individual parts of the television service chain independently in *ad hoc* style. They must all be addressed within a service perspective; this will condition the approach adopted in the Action Plan.

- ii) Proposals will be sought for offers to provide on the market television services in the D2-MAC standard, especially its 16:9 format, or the HD-MAC standard.

To validate the service approach, proposals must include all the elements in the service chain necessary to reach the consumer. They should embrace the following: satellite distribution means; cable distribution means (if necessary); access to suitable programme material and receiver availability in the target market. Proposals will therefore be integral service projects where all these aspects have been taken into account.

It is expected that each service proposal would be presented by a project consortium and led by a broadcaster, since broadcasters have editorial control over services. Consortia would include some or all of the following actors: satellite operators; cable television network operators; equipment manufacturers.

Members of a consortium would be expected to have signed a project contract between themselves to provide the proposed service, subject to the availability of Community funds. The acquisition or commissioning of programmes from

sources independent of the project broadcaster will be the object of separate contracts between that broadcaster and the programme maker or rights holder.

3. OUTLINE DESCRIPTION OF THE SERVICE CHAIN AND PRELIMINARY IDENTIFICATION OF POTENTIAL SOURCES OF COSTS

The introduction of advanced satellite and cable television services will impose additional costs upon participants along the Service Chain. Many of these costs relate to transition. For instance, broadcasters may for commercial reasons need to simulcast the advanced service in parallel with the conventional 4:3 PAL or SECAM service in the early stages of market development. Programme production may initially take longer or become more complicated, until staff adjust and improved equipment reaches the market. Despite their transitory nature, these costs are significant because they hold back market development. The costs have a collective dimension because of the complexity and interdependence implicit in the Service Chain.

The Service Chain and potential sources of additional costs are described under three general headings:

1. Broadcaster's operations including studio upgrading and satellite transmission
2. Cable redistribution
3. Programme production and conversion.

3.1 Broadcaster's Operations including studio upgrading and satellite transmission

In order to provide a broadcast service, the broadcaster needs to put together a schedule of programmes. These programmes may be produced in-house or commissioned or acquired externally (see section 3.3 below). For in-house production, the broadcaster may decide (if it has not already been done) to upgrade his studio to work in components (either analogue or digital). Furthermore he may wish to upgrade his equipment including cameras, recorders, telecines, etc., to cope with 16:9 D2-MAC requirements.

He may in addition wish to upgrade, to a dual aspect ratio environment, his signal processing and post production equipment such as vision mixing, special effects, editing equipment, "pan and scan" facilities (to derive 4:3 from 16:9), standards conversion equipment, etc..

Although there may well be "learning" costs due to the change of production practices in the transition from a 4:3 to a 16:9 environment, the broadcaster may find that once the necessary capital investment has been made, his actual costs per programme for in-house production are no higher than for a PAL 4:3 service. This situation is however unlikely to remain valid for HD-MAC services where the much higher picture quality levels will impose additional production costs.

Assuming the existence of a programme, either live or recorded, this section describes the additional processes the broadcaster and other relevant actor must employ in delivering it to the viewer.

- i) The signal must be encoded in D2-MAC using a dedicated encoder before transmission.
- ii) If necessary, for instance in the case of a subscription service, the signal is to be encrypted. This will occur at the encoder.

This encoder/encrypter may be located either adjacent to the broadcaster's studios or at the satellite uplink station depending on practice.

The acquisition of an encoder/encrypter (per channel) is a necessary cost entailed in the broadcasting of D2-MAC services.

For HD-MAC services HD-MAC encoders/encrypters will similarly be required.

- iii) Regardless of where the encoder is located, in the case of distribution by satellite, there will be costs incurred by the broadcaster in transporting the signal from the studio to the satellite uplinking station and for uplinking it to the satellite. Where the signal is to be distributed directly to the viewer by cable without the intermediate use of a satellite, these costs are for the transport between the studio and the cable head-end.
- iv) In the case of satellite distribution the next step is the access to a satellite transponder capable of delivering the uplinked signal either direct to the viewer's home for a DTH (direct to the home) service and/or to the cable head-ends for cable redistribution to the viewer's home. The cost incurred is the rental of a satellite transponder.
- v) Assuming that he is not already equipped to receive satellite television, the viewer will have to acquire a suitable dish antenna to receive the 16:9 D2-MAC services. He will also require either an add-on satellite tuner to convert the signals into a form that his existing 4:3 TV set can display or a new 16:9 TV set that is already suitable for DTH satellite reception. In both cases, decryption facilities and possibly other new consumer equipment (e.g. a VCR) may also be needed.

3.2 Cable Re-distribution

Cable systems can receive D2-MAC signals at their head-ends either from satellites or in some cases directly from the broadcasters' studios.

- i) In order for a cable system to distribute a signal broadcast by satellite to its subscribers, the satellite signal will have to be received by a satellite dish at the cable head-end and normally demodulated from F.M., which is the modulation system used in the satellite links, and subsequently remodulated to A.M. which is normally used on cable networks. In addition, depending on practice, it may be necessary to decrypt and reencrypt a received encrypted signal prior to transmission through the cable. There may also be a requirement for conditional access/subscriber management system at the cable head-end. The acquisition of the necessary head-end equipment required to perform the above tasks will be a cost to the cable operator.
- ii) Even when the television signals at the head-end (whether they come directly from the studio or via satellite), are prepared for distribution through the cable, there may be a requirement for reconfiguring the cable system itself in order to distribute the signals. This requirement, if any, will vary from cable system to cable system depending on the practices in operation and the technology used in the system. The costs of such reconfiguration, necessarily incurred in order to distribute the D2-MAC signal, will correspondingly vary.
- iii) The subscribers to cable TV networks distributing D2-MAC 16:9 signals will have to acquire either an add-on adapter to convert these signals into a form that their existing 4:3 TV set can display or a new 16:9 TV set that already has an input suitable for these signals. In both cases, decryption facilities and possibly other new consumer equipment (e.g. a VCR) may also be needed.

3.3 Programme Production and Conversion

The broadcaster assembles a schedule of programmes to provide a service. This will consist of programmes produced in-house, using the broadcaster's own facilities and programmes sourced externally. Externally produced programmes may be simple acquisitions of finished programmes or new programmes commissioned by the broadcaster.

All broadcasters will draw on these programme sources, with wide variation in the balance between internal and external sources. Completing a programme schedule suitable for a 16:9 D2-MAC service will present different cost implications to the broadcaster, depending on whether the programme is produced in-house or sourced externally.

3.3.1 Existing Programmes

Broadcasters will have access to certain existing programmes which are already in a form suitable for a high quality 16:9 D2-MAC (e.g. post-1952 feature films made after effective introduction of wide screen aspect ratios in the cinema).

The additional costs relate to copying the production in the 16:9 format on to video tape using a telecine machine (this is known as the "re-mastering" process).

3.3.2 New Programmes from External Sources

Where a broadcaster commissions an external (independent) programme maker to produce a programme, there will initially be some additional costs incurred by producing that programme in 16:9 and to a higher technical quality specifications. These will be transitional and relate to production techniques and practices, currently adapted to 4:3 production and exploitation.

3.3.3 New Programmes Produced In-house

A broadcaster wanting to produce programmes in-house may, depending on the sophistication of his studio equipment, incur additional costs as above, on a programme by programme basis.

3.4 Framework Conditions

It should be emphasized at this point that nothing in the above description of the Service Chain, including its production element, should be taken as implying a prior preference, in the context of the Action Plan, between options available to broadcasters. Broadcasters must themselves, in preparing projects to be incorporated into the Action Plan, take their own decisions on the matter in the light of their own perception of requirements. There will, of course, be requirements of the Action Plan itself, apart from the overriding objective of launching a significant number of new advanced services. These include: a high and growing amount of 16:9 programmes per service, and high technical quality of picture and sound. But how the broadcasters achieve this is left to them.

4. TARGETS TO BE ACHIEVED

In the context of the objective stated in paragraph 1 above, it is appropriate to set indicative targets for the impact of the Community funding which will be used to accelerate the market development, as follows:

the achievement during the life of the Action Plan of:

- i) A critical mass of satellite television services, using the D2-MAC standard, particularly in its 16:9 format, or the HD-MAC standard.
- ii) A significant and constantly increasing number of cable TV networks carrying high quality 16:9 D2-MAC services to their customers.
- iii) A significant and increasing volume of programming in the 16:9 format and with high technical quality both in picture and sound. Such programming to be broadcast in the above mentioned services.

5. THE FUNDING APPROACH TO BE ADOPTED

- i) The funding will go to projects which will provide a complete service as described in section 2 above. In other words, it is not intended to fund, separately, individual elements of the Service Chain in the case where such elements are not an integral part of the complete chain.
- ii) No funding will be made available for consumer equipment, either for satellite or cable reception. This is a matter for the market and it will be in the interests of equipment makers themselves to price their offerings sufficiently attractively to stimulate consumer demand.
- iii) In relation to cable TV networks, the most obviously fundable element is the necessary head-end equipment as described in section 3.2 above. Certain other elements of cost in the reconfiguring of networks may also be included in the scope of the Action Plan provided that such investments are :
 - a) cost effective
 - b) specifically required for the targeted advanced service, and
 - c) where the impact of such investments is judged to be of major importance to the achievement of the Action Plan objective
- iv) Broadcaster's costs as indicated in section 3.1 above and including encoding/encryption, signal transport and up-linking and satellite transponder rental, are, in principle, included in the scope of the Action Plan. The amounts paid will be a portion of the costs, additionally incurred by broadcasters providing the advanced services.

- v) In the case of in-house programme production it should be emphasized that whereas the complete re-equipping of television studios is not included in the objectives of the Action Plan, nevertheless, certain studio investments could be within its scope provided that they are :

a) cost effective

b) specifically required by the broadcaster providing the advanced services for the purpose of such service provision.

c) where the impact of such investment is judged to be of major importance to the achievement of the Action Plan objectives.

Broadcasters with plans for in-house production who choose to seek Community funds for the upgrading of their studio facilities to 16:9 working must recognize that this choice will limit their scope to be funded for making individual programmes.

- vi) Concerning independent producers, the aim is to ensure they can respond adequately to broadcasters' requirements for a wide range of attractive programmes in adequate volume, made to the appropriate technical quality. Independent producers will in many cases incur additional costs to meet the broadcasters' requirements for quality and format. These additional costs are within the scope of the Action Plan and a portion of such costs may be reimbursed.

Some existing television programmes and most feature films are exploitable in 16:9 but are currently available only in 4:3 versions. These must be converted to 16:9 if they are to be acquired for widescreen D2-MAC transmissions by broadcasters. These additional costs are within the scope of the Action Plan and a portion of such costs may be reimbursed either to the rights holder, if he undertakes the task, or to the broadcaster.

- vii) Summarizing the above, the broad areas at which Community funding will be targeted are identified to be:

a) Broadcaster's operations including studio upgrading and satellite transmission

b) Cable Redistribution

c) Programme Production and Conversion

- viii) The allocation of these funds will be governed by the principle of *double degressivity* in the following sense:

a) In order to encourage the early start-up of the targeted advanced services, those projects starting earliest will receive the greatest levels of funding.

b) In line with the policy that Community funding is to cushion the economic consequences in the *start-up* phase, the funding allocated to projects will be progressively reduced each year the incentive is in place.

6. INDICATIVE INTERNAL ALLOCATION OF FUNDS

The indicative percentage breakdown of Community funding is as follows:

- | | |
|---|-----------|
| i) Broadcaster's operations including studio upgrading and satellite transmission | 60 - 70 % |
| ii) Cable Redistribution | 5 - 15 % |
| iii) Programme Production and Conversion | 25 % |

It is intended to retain a certain level of flexibility to vary these percentages should the requirements of the Action Plan, as it evolves, dictate it.

7. PRINCIPLES AND CRITERIA FOR IMPLEMENTATION

Project proposals will be evaluated using procedures with an independent element which will take account, *inter alia*, of the following general and specific conditions.

7.1. General Principles - Equitable Distribution

The set of successful projects must:

- i) show a spread of projects between entities to avoid undue concentration or the creation of monopolies or cartels;
- ii) have a wide geographic distribution in order to ensure the Community dimension;
- iii) involve, to a reasonable degree, programme producers independent of the broadcasters in the projects;
- iv) comply with Community competition rules.

7.2. Specific Criteria for Selection

Other things being equal, priority for Community funds should be given to commercially viable projects which fulfil the following criteria:

- i) a high percentage of 16:9 content;
- ii) a large audience;
- iii) high technical quality levels;
- iv) scope for transfrontier services;
- v) scope for the reasonable involvement of programme producers independent of the broadcasters.

7.3 Criteria for Programme Support

Both in-house production by broadcasters and external production are within the scope of the Action Plan.

Community support for programme production and conversion will be closely linked to the new 16:9 services, but able to benefit the whole sector.

To qualify for Community support on a programme by programme basis, producers of new programmes, and rights holders of certain existing programmes exploitable in 16:9 but requiring re-mastering, must have an order for the programme from at least one of the broadcasters involved in implementing the Action Plan, who undertakes to broadcast the programme in 16:9 D2-MAC or HD-MAC. The technical quality of these programmes must be such as to allow their exploitation in 16:9 D2-MAC services in the short term and also in HD-MAC services in the medium term.

Flexible mechanisms will be set up to respond to the specific needs of different kinds of programmes, including additional production costs for "stock" programmes with an extended life (e.g. drama series; cultural events etc.) and conversion or remastering of existing programmes exploitable in 16:9.

These will be open mechanisms which will operate on the general criteria set out above together with specialised selection and funding criteria for each mechanism. The detail of these specialist criteria remains to be developed and will be published in the Official Journal within three months of the adoption of the present decision. They will function automatically and without any value judgements on the creative approach. Nothing in this Action Plan shall interfere with normal relationships prevailing between broadcasters and external rights holders on these matters.

FINANCIAL STATEMENT

FINANCIAL IMPLICATIONS

1. **Title** : HDTV - Action Plan for the introduction of advanced television services in Europe.

2. **Budget article** : B6-8105 (part of)
B6-8106
B3-3
Part A

3. **Legal basis**: Article 235 of EEC Treaty

4. **Description**

4.1. Objectives

The objective of the Action Plan is to ensure the accelerated development of the market for advanced TV services by satellite and cable based on the D2-MAC standard, particularly in its 16:9 format and the HD-MAC standard. Community funds will contribute within the period up to the end of 1996 to achieve the rapid transition from conventional services to a fully functioning market for advanced TV services by covering parts of the additional costs incurred by broadcasters, programme makers and cable TV network operators in the provision of these advanced TV services.

The general targets set for the Action Plan are the achievement during the above-mentioned period of :

- i) A critical mass of satellite television services, using the D2-MAC standard, particularly in its 16:9 format, or the HD-MAC standard.
- ii) A significant and constantly increasing number of cable TV networks carrying high quality 16:9 D2-MAC services to their customers.
- iii) A significant and increasing volume of programming in the 16:9 format and with high technical quality both in picture and sound. Such programming to be broadcast in the above mentioned services.

The quantitative targets set per annum are :

	1993	1994	1995	1996
1. Cumulative number of services by the end of each year	15	20	25	30
2. Cumulative hours of supported programming by the end of each year	8,000	15,500	22,000	26,000

The notion of a critical mass of services as mentioned above relates to the point in the market development from which one may expect rapid self sustaining growth. It is estimated that 15 services with wide audience potential could provide such a critical mass.

4.2. Duration : From adoption of the present Decision to end of 1996.

4.3. Economic operators (to whom the funds are directed)

Exhaustive consultations over an extended period of time with a number of economic actors in the television service provision market - broadcasters, equipment and programme makers, cable and satellite operators - have identified additional costs to those parties which could be involved in the provision of these advanced services based on D2-MAC, particularly in its 16:9 format and HD-MAC.

5. Classification of expenditure

5.1. Non compulsory expenditure (NCE)

5.2. Dissociated appropriations (DA)

6. Nature of expenditure

6.1. Cofinancing

Community financial incentives are intended to ensure the accelerated development of the advanced television service market in conformity with the strategy set out in the Council Decision, by contributing to the reduction of the additional start-up costs involved. In other words, Community funding will compensate a part of the additional costs incurred by the concerned economic actors to achieve this rapid transition from conventional services to the advanced television services, using D2-MAC, particularly in its 16:9 format and HD-MAC.

The economic operators launching new services will make large investments and will carry the entire commercial risks associated. The philosophy governing Community financial involvement relates to covering part of the additional costs incurred in connection with the new services, up to a ceiling per area of expenditure (see 7.2 below). Ceilings are judged to be more appropriate than percentages due to the wide variation of potential costs which in many cases could greatly exceed the Community resources available. Furthermore, the principle of double degressivity (see 7.1. below) will ensure that these ceilings will progressively be reduced each year.

It will be ensured that in each contract covering a project the amount of Community fundings will be clearly established together with the contribution of the project members in order to provide an adequate basis for effective financial control.

7. Estimate of financial implications and method of calculation

7.1. The Action Plan governing the allocation of Community funding is set for a period commencing on the date of adoption of this Decision and concluding on 31st December 1996. Community funds during this period amount to 850 MECUS.

Broad areas at which Community funding will be targeted are identified to be :

- (a) Broadcasters operations including studio upgrading and satellite transmission
- (b) Cable redistribution
- (c) Programme production and conversion

The allocation of the funding will be governed by the principle of double degressivity in the following sense :

- a) In order to encourage the early start-up of the targeted advanced services, these projects starting earliest will receive the greatest level of funding.
- b) In line with the policy that Community funding is to cushion the economic consequences in the start-up phase, the funding allocated to projects will be progressively reduced each year the incentive is in place.

7.2. Indicative internal allocation of funds

a) Because of the expected great variation in requirements from project to project it is impossible to be definitive as to the necessary Community contribution required to meet the objective. The following table provides an estimate of the ceilings for the Commission contribution to each element of cost identified.

AVERAGE UNIT COSTS FOR COMMUNITY FINANCE	1992	1993	1994	1995	1996
Studio upgrading (MECU)	3	3	3	2	2
Transponder cost/year (MECU)	2,5	6	5	5	4
Cable network upgrading (KECU)	50/ 500	50/ 500	40/ 400	40/ 400	30/ 300

The wide range indicated with respect to cable is a reflection of the very large variation between different cable systems.

For the programming element the following average lump sum support is relevant.

	1992	1993	1994	1995	1996
KEY FOR COMMUNITY FINANCE					
16:9 Production/hour (KECU)	40	35	25	22	18
Programme conversion/hour (KECU)	2.2	1.9	1.5	1	1

- b) Taking into account the quantitative targets set out in section 4.1. above and the ceilings identified in 7.2 a), together with the operation of the double degressivity principle the indicative breakdown of the Community funding for the period of the Action Plan, in MECUS is:

1992 : 33 (B6-8105 part of) presently in reserve BO-40

1993 : 145 (B6-8106) + 32.5 (B3-3) = 177.5

1994 : 175 (B6-8106)^(*) + 70 (B3-3) = 245

1995 : 150 (B6-8106)^(*) + 59.5 (B3-3) = 209.5

1996 : 131 (B6-8106)^(*) + 54 (B3-3) = 185

A detailed breakdown is given in Tables 1 and 2 below.

- c) Indicative percentage breakdown of Community funding between the areas :
- i) Broadcasters operations including studio upgrading and satellite transmission : 60 - 70 %
 - ii) Cable redistribution : 5 - 15 %
 - iii) Programme acquisition and production : 25 %

^(*) This activity must clearly be integrated into the Fourth Framework Programme in principle from 1994 as laid down in the communication from the Commission to the Council and the European Parliament : "Research after Maastricht : an Assessment. A Strategy" (DOC.SEC.(92)682 final, para 155).

ACTION PLAN FOR THE INTRODUCTION OF ADVANCED TELEVISION SERVICES IN EUROPE

Detailed quantitative targets and Community Support

	1992	1993	1994	1995	1996	Subtotal	Total
Broadcasting							
1. Transmission							
Cumulative number of Channels	10	15	20	25	30		
MECU	25	90	100	125	120	460	
2. Studio upgrades							
Studios	--	8	10	2	--		520
MECU	--	24	30	6	--	60	
Production (Hours supported)							
3. Production of programmes							
	1820	6150	7580	6520	3950		
	--	630	2580	2520	2950	193	
4. Conversion of programmes							
	1820	5520	5000	4000	1000	27	
MECU	4	32.5	70	59.5	54		220
Retransmission							
5. Cable networks							
MECU	4	30	45	19	12		110
TOTAL	33	176.5	245	209.5	186		850

Table 1

This table shows the result of a scenario developed in order to evaluate the financial needs for the Action Plan. Most of the figures represent average estimations and forecasts that may vary widely depending on the type of project and the evolution of the market. For this reason these figures are to be seen as purely indicative and should not be interpreted as constituting a commitment of the Commission.

DETAILED BREAKDOWN OF PROGRAMME ELEMENT

	1st year	2nd year	3rd year	4th year	5th year	Total
REFORMATTING :						
Standard amount (ECU/hr)	2200	1900	1500	1000	1000	
Hours supported	1820	5520	5000	4000	1000	17390
Hours required (15 services)	4250	8000	7000	4900	1600	25750
Percentage requirements covered	43	70	71	82	62	67
Budget expenditure (MECU)	4	10,5	7,5	4	1	27
NEW PRODUCTS :						
Standard amount (KECU/hr)		35	25	22	18	
Hours supported		630	2580	2520	2950	8680
Hours required (15 services)	700	3400	7770	11600	13800	37270
Percentage requirements covered	0	19	33	22	21	23
Budget expenditure (MECU)	0	22	62,5	55,5	53	193
TOTALS :						
Hours supported	1820	6150	7580	6520	3950	26070
Hours required (15 services)	4950	11400	14770	16500	15400	63020
Percentage requirements covered	37	54	51	40	26	41
Budget expenditure	4	32,5	70	59,5	54	220

Table 2

7.3. Commitments of the Economic Operators (as entered into in the Memorandum of Understanding)

i) Commitments of Broadcasters

- To launch on the market one or more television services using the D2-MAC standard, particularly in its 16:9 format, or the HD-MAC standard, in conformity with Community policy.
- Ensure that where software is available in 16:9 (tape or film), broadcasts of this software shall, to the greatest extent practicable, be in 16:9 D2-MAC format.
- Ensure full exploitation in 16:9 D2-MAC of suitable existing programme material.
- Produce programmes or have programmes produced suitable for 16:9 D2-MAC broadcasts.

ii) Commitments of Industrial Manufacturing Companies

- Ensure the availability in the market of 16:9 D2-MAC receivers at such times and in sufficient quantities in order to meet the requirements of the new services.
- Ensure continued compatibility with existing transmission standards of the 16:9 D2-MAC receivers distributed.
- Ensure improved availability of programme production equipment suitable for 16:9 D2-MAC format.

iii) Commitments of Satellite Operators

Make available, on an equitable basis, transponder capacity according to the needs of the Broadcasters for their 16:9 D2-MAC services.

iv) Commitments of Cable Network Operators

Retransmit to subscribers 16:9 D2-MAC originated programmes in the 16:9 D2-MAC format.

8. Type of Control

The Commission will be responsible for the execution of the Action Plan. It will be assisted in this regard on the technical aspects by the experts group mentioned in part 3 section 3.2 ii). The administrative aspects will be controlled by the administration departments of DG XIII and DG X.

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