



EUROPEAN COMMISSION

Directorate-General Information Society

Communications Services

Implementation/Committees

Brussels, 2 December 2002

DG INFSO/A2

COCOM02-31

FOR INTERNAL USE ONLY

COMMUNICATIONS COMMITTEE

Working Document

Subject: Implementation of standards and Interoperability of digital interactive television under the new regulatory framework

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1. IMPLEMENTATION STANDARDS UNDER THE NEW REGULATORY FRAMEWORK

The Framework Directive 2002/21/EC¹ establishes an industry-led approach to standardisation. The text of Art 17 of the Framework directive is shown in the annex.

- Under Article 17(1), the Commission publishes a list of standards in the Official Journal of the European Communities, to serve as a basis for encouraging the harmonised provision of electronic communication networks, services and associated facilities.
- Under Article 17(2), Member States are required to encourage the use of these standards. Similar obligations exist under the current ONP Framework Directive (Article 5.2 of the consolidated version of the 90/387/EC Directive as amended by directive 97/51/EC).
- Under Article 17(3) and (4), there is a comitology procedure whereby implementation of standards can be made mandatory, “to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users”.

The provisions of Art 17 must be transposed into national legislation, but leaves some kind of discretion to Member States to decide how to ‘encourage’ use of the listed voluntary standards. Measures to publicise such standards, assess the conditions for their adoption or to launch consultations on their suitability for use in a particular Member State could qualify as forms of encouragement, as could attempts to broker consensus around the future use of such standards, by defining for instance conditions to be met before such standards could be deployed etc.

Member States are invited to report on experiences / initiatives / actions that they have taken to encourage standards and/or specification for the provision of technical interfaces and/or network functions under the current framework.

One important issue is how far a Member State has the possibility to make implementation of standards compulsory. In this regard, national measures concerning electronic communications services or associated facilities which are not telecommunications services fall within the scope of the ‘transparency’ Directive 98/34/EC modified by Directive 98/48/EC. Making implementation of a standard compulsory within a Member State can create obstacles to the free movement of goods and services within the internal market, in breach of Article 28 and 49 of the EC Treaty.²

¹ Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) *Official Journal L 108*, 24/04/2002 P. 0033 – 0050.

² There is a relevant case concerning Directive 95/47/EC on the application of standards for the transmission of television signals, where a Member State sought to go beyond the standardisation requirements of the Directive and to require use of a particular standard. The Commission took the view that if a Member State were to mandate a standard that was not required by the provision of this Directive, such a measure would create a barrier to the operation of the single market. The Commission decision considered that the proposed measure would constitute a measure having equivalent effect to a quantitative restriction, in violation of Article 28 of the EC Treaty, as well as an obstacle to the free movement of services in breach of article 49 of the Treaty. In the framework of the notification 2000/394/A, the Commission issued a detailed opinion on the basis of
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2. INTEROPERABILITY OF DIGITAL INTERACTIVE TELEVISION SERVICES

Beyond the general standardisation procedures in Article 17 of the Framework Directive, Article 18 states that : “In order to promote the free flow of information, media pluralism and cultural diversity, Member States shall encourage (...):

providers of digital interactive television services for distribution to the public in the Community on digital interactive television platforms, regardless of the transmission mode, to use an open API ;

providers of all enhanced digital television equipment deployed for the reception of digital interactive television services on interactive digital television platforms to comply with an open API in accordance with the minimum requirements of the relevant standards or specifications”.

The full text of Art 18 of the Framework directive and the associated Recital 31 is shown in the annex.

The term interoperability, which appears in Art 17, Art 18 and recital 31 of the Framework Directive, is not formally defined. The term is also used – in a somewhat different manner - in Article 24 of the Universal service Directive 2002/22/EC³ and in the associated Annex VI (‘interoperability of the consumer digital television equipment’). Part 1 of the Annex VI requires pay TV receivers to include the common scrambling algorithm and to be able to display free to air signals. Part 2 addresses interoperability for analogue and digital television sets, and concerns the provision of open interface sockets to permit the simple connection of peripherals.

Encouraging the use of an open API

EP Resolution A5-0435/2001⁴ adopted on 12 December 2001, at the time that the regulatory package was agreed by the EP, calls upon “The Commission to communicate to the European Parliament as soon as possible the concrete steps the Commission will take to ensure the rapid adoption of an open European market for interactive digital television services, in line with the remarks made by Commissioner Liikanen, on behalf of the Commission, in the telecommunications debate held in the European Parliament in plenary session on 10 December 2001.” (...)

In response to this request from the EP, **the Commission undertook to put the MHP specification in the list of standards to be published in the OJ.** MHP has been designed to meet the need for interoperability and openness. It may not be the only way to achieve these

Directive 98/34/EC. See <http://europa.eu.int/comm/enterprise/tris/>
The notified measure aimed to impose the obligatory use of the common interface system at the expense of the “simulcrypt” system for achieving interoperability between conditional access systems.

³ Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) *Official Journal L 108* , 24/04/2002 P. 0051 - 0077

⁴ <http://www3.europarl.eu.int/omk/omnsapir.so/pv2?PRG=QUERY&APP=PV2&LANGUE=EN&TYPEF=A5&YEAR=01&NUMERO=0435&FILE=BIBLIO&PLAGE=1>

objectives, but at present it is the only candidate that has a recognised status in the European standards bodies. The Commission is encouraging the voluntary implementation of this standard by industry.

The Commission services have launched a number of actions to explore interoperability in interactive television :

- An initial action investigated how far an MoU on migration to MHP would be acceptable to all industry players as a way of achieving interoperability. However, it was not possible to reach a consensus-based MoU on migration to MHP. Industry is divided. Some consider that interoperability requires the adoption of a single standard. Others consider that interoperability between different technologies will be more appropriate.
- The Digital Video Broadcasting Group has been requested to clarify different types of interoperability and related issues including the practicalities and costs of authoring for multiple APIs.
- CENELEC has been requested to undertake a preliminary study on digital television and interactive television standardisation. This will survey the current legal and technical situation and produce recommendations.
- Prior to political agreement on the new Framework by the European Parliament and Council, DG INFSO had also launched a policy development study entitled *Interoperability, service diversity and business models in digital broadcasting*.⁵ This will provide independent analysis of interoperability issues by the end of the year, focusing on consumer welfare as the prime objective. Its scope is more far-reaching than the requirements of Art 17 and 18 of the Framework Directive, as it explores what forms of interoperability would be necessary to achieve horizontal markets for consumer equipment.

In accordance with Art 18(3) of the Framework Directive, the Commission will within one year after the date of application of the new framework (i.e. June 2004), examine whether interoperability and freedom of choice for users have been adequately achieved in the Member States. It is envisaged that the Commission will issue a consultation document on digital interactive TV in late 2003 / early 2004 to seek comments on :

- a) whether interoperability and freedom of choice for users have been achieved in the Member States;
- b) if not, whether mandatory implementation of one or more standards would achieve these objectives, and if so by whom;
- c) whether MHP is a suitable candidate to be so mandated.

The Commission may subsequently take action in accordance with the procedure in Art 17(3) and 17(4).

⁵ Terms of Reference are available at the following URL :

http://europa.eu.int/information_society/topics/telecoms/regulatory/digital_broadcasting/index_en.htm

In addition, EP resolution P5-TA-PROV (2002)0454⁶ adopted on 26 September 2002 on MHP and an EU action plan for the successful introduction of digital television in Europe also “urges **Member States** and the Commission to outline to the European Parliament, in line with Article 18 of the Framework Directive, the measures they intend to take in order to encourage the use of an open interoperable European standard for digital television and to facilitate the migration to an open API on the basis of MHP and its possible modifications, calls on the Commission to present a clear timetable for the steps it intends to take” (...)

Member States are invited to describe how they plan to encourage the use of open APIs, in accordance with Article 18 of the Framework Directive and taking account of the EP Resolution

Article 17 of the Framework Directive 2002/21/EC

Standardisation

1. The Commission, acting in accordance with the procedure referred to in Article 22 (2), shall draw up and publish in the *Official Journal of the European Communities* a list of standards and/or specifications to serve as a basis for encouraging the harmonised provision of electronic communications networks, electronic communications services and associated facilities and services. Where necessary, the Commission may, acting in accordance with the procedure referred to in article 22(2) and following consultation of the Committee established by Directive 98/34/EC, request that the standards be drawn up by the European standards organisations (European Committee for standardisation (CEN), European Committee for Electrotechnical Standardisation (CENELEC), and European Telecommunications Standards Institute (ETSI)).

2. Member States shall encourage the use of the standards and/or specifications referred to in paragraph 1, for the provision of services, technical interfaces and/or network functions, to the extent strictly necessary to ensure interoperability of services and to improve freedom of choice for users.

As long as standards and/or specifications have not been published in accordance with paragraph 1, Member States shall encourage the implementation of standards and/or specifications adopted by the European standards organisations.

In the absence of such standards and/or specifications, Member States shall encourage the implementation of international standards or recommendations adopted by the International Telecommunication Union (ITU), the International Organisation for Standardisation (ISO) or the International Electrotechnical Commission (IEC).

Where international standards exist, Member States shall encourage the European standards organisations to use them, or the relevant parts of them, as a basis for the standards they develop, except where such international standards or relevant parts would be ineffective.

3. If the standards and/or specifications referred to in paragraph 1 have not been adequately implemented so that interoperability of services in one or more Member States cannot be ensured, the implementation of such standards and/or specifications may be made compulsory under the procedure laid down in paragraph 4, to the extent strictly necessary to ensure such interoperability and to improve freedom of choice for users.

4. Where the Commission intends to make the implementation of certain standards and/or specifications compulsory, it shall publish a notice in the *Official Journal of*

the European Communities and invite public comment by all parties concerned. The Commission, acting in accordance with the procedure referred to in Article 22(3), shall make implementation of the relevant standards compulsory by making reference to them as compulsory standards in the list of standards and/or specifications published in the *Official Journal of the European Communities*.

5. Where the Commission considers that standards and/or specifications referred to in paragraph 1 no longer contribute to the provision of harmonised electronic communications services, or that they no longer meet consumers' needs or are hampering technological development, it shall, acting in accordance with the procedure referred to in Article 22(2), remove them from the list of standards and/or specifications referred to in paragraph 1.

6. Where the Commission considers that standards and/or specifications referred to in paragraph 4 no longer contribute to the provision of harmonised electronic communications services, or that they no longer meet consumers' needs or are hampering technological development, it shall, acting in accordance with the procedure referred to in Article 22(3), remove them from this list of standards and/or specifications referred to in paragraph 1.

7. This Article does not apply in respect of any of the essential requirements, interface specifications or harmonised standards to which the provisions of Directive 1999/5/EC apply.

Article 18 of the Framework Directive 2002/21/EC

Interoperability of digital interactive television services

1. In order to promote the free flow of information, media pluralism and cultural diversity, Member States shall encourage, in accordance with the provisions of Article 17(2):

(a) providers of digital interactive television services for distribution to the public in the Community on digital interactive television platforms, regardless of the transmission mode, to use an open API;

(b) providers of all enhanced digital television equipment deployed for the reception of digital interactive television services on interactive digital television platforms to comply with an open API in accordance with the minimum requirements of the relevant standards or specifications.

2. Without prejudice to Article 5(1)(b) of Directive 2002/19/EC (Access Directive), Member States shall encourage proprietors of APIs to make available on fair, reasonable and non-discriminatory terms, and against appropriate remuneration, all such information as is necessary to enable providers of digital interactive television services to provide all services supported by the API in a fully functional form.

3. Within one year after the date of application referred to in Article 28(1), second subparagraph, the Commission shall examine the effects of this Article. If interoperability and freedom of choice for users have not been adequately achieved in

one or more Member States, the Commission may take action in accordance with the procedure laid down in Article 17(3) and (4).

Recital 31

“ Interoperability of digital interactive television services and enhanced digital television equipment, at the level of the consumer, should be encouraged in order to ensure the free flow of information, media, pluralism and cultural diversity. It is desirable for consumers to have the capability of receiving, regardless of the transmission mode, all digital interactive television services, having regard to technological neutrality, future technological progress, the need to promote the take-up of digital television, and the state of competition in the markets for digital television services. Digital interactive television platform operators should strive to implement an open application program interface (API) which conforms to standards or specifications adopted by a European standards organisation. Migration from existing APIs to new open APIs should be encouraged and organised, for example by Memoranda of Understanding between all relevant market players. Open APIs facilitate interoperability, i.e. the portability of interactive content between delivery mechanisms, and full functionality of this content on enhanced digital television equipment. However, the need not to hinder the functioning of the receiving equipment and to protect it from malicious attacks, for example from virus, should be taken into account.”

⁷ Agreement on the European Economic Area, OJ L 1 of 3.1.1994, p.3