The Efforts at European Integration

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Three Efforts at European Integration

The Administration of a Cartel: The European Broadcasting Union

From the beginning, European broadcasters collaborated with each other. In 1925, at the BBC's initiative, the International Broadcasting Union (IBU) was established. One of the early functions of the Geneva-based organization was to draft a frequency allocation plan. It also tried, unsuccessfully, to reduce commercial as well as propaganda broadcasting across national frontiers and initiated a program exchange, mostly of concerts (Eugster, 1983). During World War II, the IBU was largely dormant, but it was revived afterward along with a new organization, the International Broadcasting Organization (OIR) (Briggs, 1979). The OIR, however, was soon abandoned by the West European countries. It was renamed OIRT with the advent of television and headquartered in Prague. The West European broadcasters established in 1950 the European Broadcasting Union (EBU), to which broadcasters from middle-Eastern and North African countries were soon added. The EBU domiciled itself in Geneva and shortly thereafter absorbed the IBU. With the demise of the Eastern Bloc after 1989, it seemed likely that the EBU would absorb the OIRT.

The EBU is an association of thirty-nine European and Mediterranean broadcasting organizations, not of governments. There are fifty-five associate members in thirty-three other countries across the globe. Nineteen national languages are spoken in the active member countries. There are an estimated 168 million television households in the active member nations (Michael Type, communication). Commercial stations are not excluded in principle, but members must provide a national service, and regional broadcasters are not eligible. This therefore excludes Italian private stations or the various ITV companies, but the private Luxembourg RTL was an EBU member from the beginning (though the latter's predecessor, IBU, had tried to suppress it). After much resistance by the BBC, which had not reconciled itself to the loss of its exclusivity, the United Kingdom's independent broadcast authority (IBA) was eventually admitted.

The EBU established a program exchange through its Eurovision system. Eurovision has provided transmission for programs since 1954, with a technical coordination center in Lille, France, and a control center in Brussels. The guiding spirit behind its creation was Marcel Bezençon of Switzerland. The system was seen as a way of protecting public broadcasting from commercial television

by providing particularly the smaller public broadcasters with programs from other countries. The EBU also finances a fund that supports multilingual productions. (European Task Force, 1988) By a wide margin, sports events are the staple of Eurovision programming (80 percent); cultural programs trail far behind. Eurovision also provides an exchange of news footage. Its Eastern European equivalent is Intervision, and the two systems transmit programs to each other, though the eastward flow was vastly larger than the reverse flow, even before the democratic revolutions.

As discussed in Chapter 2, the EBU was used from the beginning to establish a common bargaining position against copyright holders such as music publishers. There are two main elements to the cartel powers of the EBU. First, it is the sole representative of all its members in international purchase negotiations for sports and other events. Second, it controls program distribution between member organizations. An example of its first power is provided by the bidding for the 1984 Summer Olympics games in Los Angeles. After competition among the three major networks for the American rights ABC paid $1.67 per household, whereas the EBU, having no competition, acquired the rights for $0.17 per household (Cryan et al., 1987).

EBU also requires that if one sells an event to one member country, one must deal only with EBU members in the other countries. The provisions of exclusivity were somewhat loosened in 1986 (European Task Force, 1988, p. 75).

These policies meant that the EBU could limit bidding for events and squeeze out potential buyers who sought rights for one country only. It was also able to limit the payment to the owner of the events.

The advent of cable television and satellite-transmitted channels undercut the need for Eurovision, because its program exchange functions could easily be undertaken by a satellite channel. Commercial television channels also raised again the difficult question of the admittance of multiple representation from countries. The EBU's problem is that it must either integrate the new program providers into its organization or be threatened by the emergence of a rival organization of commercial program providers. Many EBU members opposed admitting new categories of members who they believed would affect their "public service" orientation (and create competition in bidding for broadcast rights) (European Task Force, 1988, p. 66). Eventually, after broadcasters such as Berlusconi and Sat-1 were denied membership, the commercial broadcasters founded the Association of Commercial Television (ACT) in 1989. The EBU's program buying power began to weaken in the face of strong commercial competition. In 1989 the EBU for the first time lost the rights to broadcast the Wimbledon tennis tournament when a West German agent outbid them (Scharf, 1990). But it has continued to hold technical advantages when it comes to covering complex events such as the Olympics and the soccer World Cup.

The EBU also set up the satellite-delivered sports channel, co-owned by seventeen of its members and Murdoch's Sky TV. This arrangement continued EBU's preferential access and control over sports programming. It was challenged by a rival channel, Sports Screen (owned by WH Smith 75% and ESPN 25%), and was struck down by the European Common as anti-competitive.

1992 and Television Without Frontiers

In the past the limited reach of electromagnetic signals allowed a state to regulate most of the television that could be received in its territory. Later advances in broadcast technology did not greatly affect national control because additional power did not increase range by much, and transmission tower height had its structural limits. In border regions, however, viewers were able to circumvent state control and receive programs from abroad.

The European Community does not include a number of states, such as Switzerland, Austria, Sweden, Norway, Iceland, and Finland. Yet broadcasting does not respect national frontiers. The Council of Europe, a broader grouping, is therefore often thought to be the geographically appropriate forum for European media policy. On the other hand, and in contrast to the EC, it has no executive powers and acts through "recommendations." In 1988 it passed a Broadcast Convention for member states' adoption, similar to the EC directive in that both consider the originating country's rules to be the binding law in transfrontier transmission. The convention's program standards and specific product advertising rules are more rigorous than those of the EC's directive. Both require the right of reply, but the convention does not address copyright or advise on quotas for European programs.

Perhaps most controversial in the EC's directive was the requirement that at least 51 percent of entertainment programming be of European origin. Although not formally aimed at any specific country, it was fairly obviously a measure to restrict Hollywood imports. Opposition by the United States was vociferous and was generated on several fronts. Several measures were proposed by Congress, including a retaliatory plan prohibiting the Corporation for Public Broadcasting (CPB) from buying European programs. The U.S. Commerce Department also filed a complaint with the GATT arguing that the directive was protectionist (Cate, 1990, p. 4).

The United Kingdom, Italy, Spain, West Germany, Denmark, and Belgium were also opposed, as were many members of the Association for Commercial Television (ACT) (Glenn, 1989). The Bavarian government challenged the EC's right to promulgate cultural laws, and other countries were uneasy about EC interference in cultural affairs. At first the French strongly supported the quotas. But eventually, French Minister of Culture Jack Lang proposed instead that the broadcasters devote a fixed percentage of revenues to domestic production.

In the face of this opposition, the EC Council of Ministers pulled somewhat back (Cate, 1990, p. 5) and adopted a vague, nonbinding clause recommending that European majority quotas should be met after 1992 "where practicable." Member states could thus practice their own policies. But those had frequently been restrictive. At the same time the EC approved $270 mil-

lion in subsidies for domestic film production (Greenhouse, 1989, p. A1).

The concept of formal film quotas was also rejected in the Council of Europe's 1989 Broadcast Convention (Margolies, 1989). But the reality was a different matter. Even in the U.K., the Independent Television Commission proposed a minimum of 75 percent European programming for Channel 3 licensees.

In 1986, the Commission established BABEL—Broadcasting Across the Barriers of European Language—a noncommercial association for promoting pan-European multilingual broadcasts. It is comprised of the E.C. Commission's media group, the EBU, and the Alliance Européenne pour la Télévision et la Culture. BABEL supported dubbing and subtitling.

In 1990, an "Action Programme to Promote the Development of the European AudioVisual Industry," known as the "Media" plan, was passed; it sought to develop three critical areas of European broadcasting: programming, regulation and market structure, and technology ("Europe," 1989, pp. 13–14).

To enhance market structure, the commission recommended that future national regulations take into account better than before the new European media industry. The commission recommended greater support of independent producers, especially in facilitating their access to major broadcasters as competition intensified for air time. A five-year, $260 million plan was approved. (Papathanassopoulos, 1990)

The EC also set a goal of introduction of high definition television by 1992 and recommended pushing the European-developed Eureka standard. It also tried unseccessfully to require the use of the D2-MAC standard on all European broadcast satellites.

Such varied activities and initiatives, in the aggregate, increasingly establish Brussels as a major regulatory presence in television.

Technological Nationalism: The Struggle Over TV Standards

Technological nationalism is an important force retarding European integration. Color television standards provide a good historical illustration. The French color television system SECAM (Séquential à Mémoire) was promoted in the late 1950s by Henri de France (Crane, 1979). Patent rights were acquired by a joint venture between CSF and the glass manufacturer Saint Gobain, later joined by the conglomerate Floréat and the French government itself. A rival German system, PAL (Phase Alternation by Line), was developed by AEG-Telefunken in the early 1960s. PAL, like the North American National Television Subcommittee Standard (NTSC), uses AM modulation for the color subcarrier, whereas SECAM uses FM modulation. All three systems require three signals for color transmission, luminance, and chrominance information. Their sequencing, however, differs. PAL and SECAM both have 625 line pictures, as opposed to the 525-lines of the older (NTSC) standard used in the United States, Canada, Japan, Korea, and several other countries.

France traditionally maintained a policy of promoting "national champion" projects of high visibility, such as the first supersonic transport aircraft (with the United Kingdom), the first tidal power plant, and the largest solar energy furnace. *Le Monde* dubbed these projects the "new cathedrals." When SECAM was developed, the French broadcast institution ORTF gave it only a lukewarm reception. Its engineers viewed Henri de France as an outsider, and they stressed the importance of international compatibility and of selecting the most effective system. Soon, however, ORTF received orders from the "very highest levels" of the French government to support the SECAM system, whatever the comparative test results. Once this political decision had been made, the French government embarked on an international offensive. Its strategy included discrediting the American NTSC technology as inferior and presenting SECAM as a way of reducing European dependence on America. Unfortunately for the French, the German PAL could just as easily play this European role. AEG-Telefunken had orginally approached the French SCF with a proposal for cross-licensing patents to make it possible for the German firm to produce SECAM equipment. German public opinion was strongly in favor of a European solution, but the French declared the German terms for licensing unreasonable. Hence, the German company went ahead with its development of PAL, led by Walter Bruch.

The debate about which system to choose quickly became heated, with the French charging that NTSC stood for "never twice the same color," while Americans dubbed SECAM as the "supreme effort contra-America" (Crane, 1979, p. 53). It is difficult to rank the technical merits of the three systems, because each has some advantages and some disadvantages. Studies by the European Broadcasting Union concluded that no system was consistently superior to its competitors and that the average viewer could find little difference among them. PAL incorporated several of the features of both its rivals.

Some of the smaller European countries refused to be coerced by de Gaulle—a problem going far beyond television standards at the time—and France, therefore, forged a technological alliance with the Eastern European countries. If the Soviet Union adopted SECAM, surely the rest of Eastern Europe, particularly East Germany, would follow. Then, West Germany, sensitive to the ability to broadcast to East Germans, would fall into line. Furthermore, with both Soviet and French backing, SECAM would be adopted by many Third World countries.

Because the Soviet Union was reluctant, for political reasons, to adopt American or West German technology, the French plan was attractive. The French also offered economic incentives. In 1965 an agreement was reached. The Soviets were permitted to refer to SECAM as a Franco-Soviet development, in spite of their negligible contributions, which amounted to the addition of a few circuits. The French, while calling the Soviet modifications unnecessary, permitted the Soviets to use SECAM without royalty and to take out patent rights entitling them to royalties payments from East European licensees. This was ironic, because it was France's initial intransigence with German manufacturers on the issue of royalties that encouraged PAL as a rival. The

Franco–Soviet agreement was hailed by both countries as a great victory. Alain Peyrefitte, the French Minister of Information, called it a "glorious day for the human race" (Crane, 1979, p. 73).

But the joy did not last long. Most of the countries assembled for the subsequent CCIR (the International Consultative Committee on Radio) meeting in Vienna wanted to come to an agreement on standards. The Franco–Soviet accord, in effect, indicated that the French- and Soviet-influenced parts of Europe would proceed with SECAM regardless of the outcome of the CCIR conference. Yet even the French ORTF representatives preferred a single European standard to a specifically French technology. The Franco–Soviet agreement led to a counteralliance between PAL and NTSC backers. At the Vienna meeting, SECAM obtained twenty-one country votes, whereas the German–American coalition had eighteen. But the SECAM votes included the economically less important countries of Eastern Europe and several former French African colonies that had no television at all. Most of Western Europe preferred the PAL system. The conference ended in an impasse. A year later, in Oslo, a similar stalemate occurred. In the end, each country went its own way. French industry did not succeed in establishing international or European standards, but it had given some protection to its own market from imports.

Following the development of PAL and SECAM in the 1960s, engineering improvements overcame some of the systems' initial technical problems. A remaining weakness was that both interweave color information with brightness information, causing a shimmering effect known as "cross-color" on finely detailed picture areas.

Audio signal quality was another shortcoming of the existing systems, and one becoming increasingly irritating to users accustomed to high-quality stereo sound. As satellite transmission of television emerged, sound tracks in different languages became important. Similarly, capability for data transmission, teletex, and subtitles also became desirable. All this suggested the need for updated television transmission standards that would incorporate advances in signal processing. Beyond the technical reasons, the introduction of new, Europe-wide standards was sought partly to reconstitute the protection that the PAL and SECAM patents had provided to West European television set manufacturers from cheaper Asian imports. The expiration of those patents created an incentive for a new patent round (Snoddy, 1986, p. 15). In the United Kingdom, for example, the loss of the PAL patent threatened 20,000 jobs in color television manufacturing (Dornan, 1984, p. 24). A British government commission report acknowledged that more sophisticated sets featuring decoders for videotex, teletex, cable, and direct brocast satellites (DBS) would be particularly useful in protecting British television set manufacturers against cheap imports (ITAP, 1982). During the discussions of a new standard, several variants of so-called MAC (Multiplexed Analog Components) were considered. One variant of MAC (C-MAC) provides a "group" sound system using the EBU specifications.[1]

C-MAC requires greater bandwidth than some of its alternatives. A variant, D2-MAC, achieves compression of the bandwidth at the cost of some picture clarity and a smaller number of sound channels, though the compressed bandwidth enables programs to be broadcast in the four major West European languages. To transform the D2–MAC signal into a signal compatible with existing PAL television sets, a converter is necessary, costing some $300 when produced in quantity.

In 1984 several European manufacturers, including Philips and Thompson, advocated a version of C-MAC as a standard. However, the German and French governments, whose direct broadcast satellites TDF-1 and TV-SAT were the first scheduled for launch, agreed among themselves in 1985 instead to support D2-MAC (with HD-MAC for future high definition) and furthermore to use initially their own PAL and SECAM standards in their respective satellites. The British, on the other hand, supported C-MAC partly because its independent broadcasting authority and several British companies had been active in the development of the chip technology for C-MAC. This threatened to result in four different satellite broadcast standards in Western Europe alone. Eventually, negotiations led to a 1985 agreement in which EBU declared C-MAC as its preference but also approved D2-MAC.

In 1988, the British direct broadcast satellite operation BSB agreed to employ the D2-MAC. Thus, it seemed that this standard had been generally agreed upon. However, D2-MAC did not attain the success expected in the marketplace. Political decisions could not substitute for consumer decisions. Also, there were coordination problems. Terrestrial broadcasters had little use for the new transmission standards. TV-SAT's broadcasters refused to pay the German Bundespost Telecom's rental fee because of the absence of viewers. For them, improved and compatible variants (e.g., "Super-PAL") were quite enough. Television equipment manufacturers, who had to develop conversion devices and entirely new receivers, were slow in their R&D and blamed many of their problems on an even slower chip manufacturing industry. In 1989, when the first direct broadcasts were becoming operational (TV-SAT 1 had failed in 1987 TDF 1 and 2 were ailing), D2-MAC reception equipment was just being introduced, retarding the standard's evolution and shifting users to the German PAL-satellite Copernicus (with low-power transmission). Also, the success of the Astra satellite and its PAL transmissions proved to both public and private broadcasters that D2-MAC was not worth waiting for. Consumers were not familiar with D2-MAC devices and the D2-MAC television sets were quite expensive. Cable systems, a primary distributor of satellite signals, were also not yet D2-MAC compatible.

Support from France and Germany began to wane. The French government chose to put pay-TV services, including Canal Plus over its TDF-1 satellite, instead of using it for general broadcasts, thus reducing the audience for D2-MAC transmissions. This sharply reduced French demand for any D2-MAC devices. In West Germany sales of the expensive D2-MAC receivers were minimal, and concern rose about the difficulty of supplying German audiences. By 1990, both German and French officials who supported D2-MAC were beginning to mourn its death, although many were still promoting the development of a future high definition standard (HD-MAC) (*Funkschau*, 1990, pp. 24–26).

Peter Glotz, the media spokesman of the German Social Democrats, pronounced "D2-MAC is dead." The European Commission tried hard to make the standard a requirement for satellites.

A related standards battle was waged over high-definition television (HDTV). The Japanese broadcasting authority, NHK, supervised the development of the Japanese "MUSE" HDTV standard with 1125 lines. Several other MUSE variants were also offered. Europeans, however, were reluctant to agree with that standard, and in the 1986 CCIR meeting they managed to postpone decisions for four years. European manufacturers feared that if the Japanese standards were adopted, they would be without protection against the lower-priced and often higher-quality Asian products. Therefore, they decided to develop HDTV with the MAC-packet standard as the basis for various forms of television transmission.

Europe (and similarly the United States) was unprepared for HDTV, and sought delays when it realized the potential commercial implications of the Japanese standards. In Europe the primary focus for HDTV has been DBS, not terrestrial broadcasting. HDTV development began on a pan-European scale in 1986 with the Eureka project. It involves thirty-three companies from nine European countries, including non-EC countries. The main industrial participants are Bosch, Philips, Thompson, and Thorn-EMI. The EC's RACE Program (Research and Development in Advanced Communications Technologies in Europe) also conducted research on HDTV standards development, especially on digital HDTV technology and the transmission of signals through integrated fiber-optic broadband networks. HD-MAC broadcasts were expected by 1994 (OTA, 1990).

Thus, for all the national and supranational efforts, European standards setting was in disarray. The early PAL versus SECAM controversy involved questions of national prestige that could not be overcome. But even when, in the next standards round, Germany and France reached agreement at the highest levels of government, its viability was challenged in the marketplace. This demonstrates the difficulty of creating standards by fiat, when the industry is composed of several heterogenous segments (broadcasters satellite operators consumer electronics manufacturers and component makers) resident in several countries. In the United States, the HDTV trend was to an all-digital format, which would permit a greater openness to variation, and reduce the need for complex agreements.

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Direct Satellite Broadcasting

Introduction to DBS

One form of broadcasting that threatens to overcome national boundaries is high-powered direct broadcast satellites (DBS). DBS as a concept goes back to 1977, when a World Administrative Radio Conference (WARC), in a contentious meeting pitting the United States against the rest of the world, established the basic framework (Pool, 1991). At the time, European officials saw DBS as imminent. They regarded it as a wide-open field where no country had yet achieved technological dominance and where the potential existed to develop domestic electronic strength. It was also viewed as a way to establish the traditional national broadcast institutions in space, since DBS's large power requirements permitted only a small number of channels, thus causing little disruption to the existing national systems. To achieve high-power beam required a small "footprint" of coverage; thus, the scarcity of channels in the sky would match the scarcity of channels on the ground.

Despite these early hopes, DBS soon ran into problems. Cost estimates rapidly escalated. A typical DBS plan included three satellites of great complexity and expense: two in the sky, one of which served primarily as a standby, and one spare on the ground. Without the redundancy, a small malfunction in a vital component of this expensive technology could cause tens of millions of subscribers to be stranded for a year or more. Thus, the cost estimate for the space segment alone climbed to well above $500 million, and because the life expectancy of a satellite is only about ten years or less, the annual anticipated cost of space hardware was enormous. Launch and insurance costs also mounted, as several telecommunications satellites were lost in highly publicized rocket mishaps. On top of that, there were the considerable expenses of ground stations, program supply, marketing, administration, and subscriber services.

As the projects were considered, technological progress changed the discussion; the need for high-powered satellites was increasingly questioned in favor of medium-powered ones. When DBS was originally conceived in 1977, WARC agreed on a necessary signal power of 230 watts, requiring a receiving antenna of 0.9 meters. To transmit with such power required new and untested technology. (In comparison, regular low-power telecommunications satellites reach around 10 watts of power.)

However, the efficiency of antennas soon improved rapidly. At the 1977