

industries or sectors  
(88/178/EEC).

- 10) Proposals for more unified laws relating to intellectual property (IP). There is recognition that existing differences between EC Member States in the treatment of IP (patents, trademarks, copyrights, protection for microcircuits) could act as a barrier to a single market in the development and production of many high-tech goods and services. The treatment of IP is also a matter of great concern to extra-EC countries wishing to penetrate EC markets (85/844/EEC).
- 11) Agreement on a common future telecommunications technology for Europe. In April 1989, the telecommunication authorities of Cyprus and all EC and EFTA countries except for Iceland signed a memorandum of understanding (MOU) which provides that several services and features will be available in Europe on a standardized basis by the end of 1992. The MOU is a step towards the idea put forward in the Green Paper to promote development of value-added services throughout Europe. The document follows the recommendations of the ETSI European Telecommunications Standards and is part of the harmonization efforts necessary to promote value-added services. The MOU is not subject to enforcement procedures as it is not a directive of the Council. Further it involves a number of countries that are not parties to the Treaty of Rome (86/659/EEC).

**b) Adoption of a Common Technology (ISDN)**

The EC has adopted the digitally based ISDN (integrated services digital network) technology. An ISDN telecommunications network allows voice, data, and image signals to be sent

digitally along the same telephone line in a configuration called 2B+D. (The two B channels are high speed -- 64 kilobits per second -- channels for voice and data respectively. The D channel permits static image transmission and various kinds of message-monitoring services such as call-waiting.) ISDN will also allow transmission of very large amounts of data, for which capacity can be adjusted to user needs.

ISDN opens up a variety of uses for the typical telephone subscriber, dispensing with the need to lease dedicated lines if one wishes to transmit data or image. For example, ISDN will allow the family telephone line to accommodate a facsimile machine and transmit images for television home shopping. A common telecommunications technology in Europe not only increases the number of firms that can compete to supply equipment to the national telecommunications administrations (TAs), but also will allow firms to reduce costs by lengthening production runs and greatly increase the scope for niche firms to supply new products that interface with the ISDN technology.

**c) Liberalization of the Intra-EC Telecommunication Equipment Market**

Beyond agreeing on a future technology, how far has the EC proceeded in achieving agreement among Member States to dismantle barriers to the free flow of trade and investment in telecommunications and computer goods and services? There is acceptance of a liberalization of the intra-EC telecommunications equipment market by 1991, facilitated by directives calling for the harmonization of standards and certification procedures. Less clear is how the common EC approach to standards and certification procedures will apply to non-EC states. There is also agreement in principle on a liberalization of government procurement policies. However, proposed requirements