

motivation for Europe 1992, in general, and for far-reaching proposals to open up the telecommunications sector to competition, in particular.

The new wave of communications technologies is led by the digitization of telecommunications and the ability to manufacture increasingly complex integrated circuits. Together these technologies make possible the integration of voice, data and image transmittal services over common telecommunications networks. New technologies have also made possible increasingly "intelligent" network and terminal equipment. One implication of the technological revolution in communications is that it opens up a wide variety of new and future opportunities for many firms capable of supplying information products and services to their producers or ultimate users.

Before proceeding, it is useful to draw some distinctions or dividing lines. In telecommunications it is customary to distinguish between services and equipment, even if technology is blurring the boundaries between them. Within services, a further distinction is made between basic or "reserved" services (chiefly telephony and Telex), which will remain the domain of the mainly publicly owned (in Europe) natural monopolies, and "value-added network" (VAN) services (e.g., electronic mail, message storage, data processing and information retrieval), which Europe 1992 would open up to competition.¹ The equipment category can also be subdivided, the chief distinction being between central office switches, transmission, and customer premises equipment.²

With respect to the computer industry, the main distinction is between hardware and software services. The latter is further divisible into data processing, software packaging, and professional (information and management technology) services.