

2. information processing systems including system design, knowledge engineering, advanced systems architectures, speech and image understanding, and multisensorial systems;
3. application technologies including CIM, integrated information systems and information technology application support systems.

ESPRIT's rules of operation require that each project has a minimum of two firms located in at least two different EC countries.

ESPRIT is open to non-EC European firms and research organizations. Canadian firms are not directly involved in the ESPRIT program although European-based subsidiaries are eligible.

RACE (Research in Advanced Communications in Europe) was formed to standardize telecommunication systems and to enable Community countries to develop integrated broadband communications. Applications include cable and pay television, telephones and videophones, data transmission and electronic mail.

RACE represents an investment equivalent to over \$650M from the EC Commission, matched by an equal contribution from the industrial participants in each project.

Forty-eight of 95 project submissions have received approval. In all cases, the work is being carried out by international consortia comprising anywhere between 3 and 30 participants, and linking academic and research institutions, industry and the network operators. About \$250M has been committed so far on these projects.

Contracts are awarded by open tendering procedure and involve the participation of at least two independent industrial partners from more than one Member state.

Despite being an EC project, non-EC participation is invited. For example, three US manufacturers, IBM, Hewlett Packard and AT&T, are heavily involved.

DELTA (Development of European Learning through Technological Advance) was developed to adapt equipment and systems devised for other uses into tools for advanced learning.

The technological advances relevant to DELTA include those expected in the fields of personal and business computers, artificial intelligence, and communications. Projects started March 1989.

Development is done on three levels:

1. R&D based on existing technological infrastructures;
2. Development of a new and enhanced generation of domestic and professional electronic products;
3. Gradual introduction of "fifth generation" features and the use of broad-band communications.

DRIVE (Dedicated Road Infrastructure for Vehicle Safety in Europe), a shared-cost action program, was designed to create the conditions for an integrated road transport environment in the field of information technology and telecommunications. The program includes RTI technologies, evaluation of strategic options and specifications, protocols and standardization proposals.

This program serves to assist R&D in computer aids for road traffic (route guidance, navigation systems, vehicle-to-vehicle communications, etc). Projects started January 1989.

BRITE/EURAM covers cost-shared research in advanced materials technology, design methodology and application for manufacturing and process technologies. Research aimed at the development of the European aeronautical base is also included.

The funds estimated as necessary for the execution of the program amount to over \$600M CDN. Participants may be industrial organizations, research institutes and universities established in the Community. The EC contribution will not exceed 50% of total expenditure, the remainder to be provided by the industrial participants.