

Appendix C

EUCLID PROGRAM

Funds approved for the EUCLID program will serve to finance projects concerning one or the other of the 11 strategic technologies (Common European Priority Areas [CEPA]) thus far identified by the IEPG:¹⁰⁷

- modern radar technology, concentrating principally on airborne radars (Federal Republic of Germany);¹⁰⁸
- silicon micro-electronics, complementing the large effort currently being undertaken in the civilian sector under the Joint European Semiconductor Silicon Initiative (JESSI), the focus chiefly on military circuits, technologies and applications (France);
- composite materials, i.e., material behaviour under operational conditions, detection of damage/failure, repairs under operational conditions, increased high-temperature resistance for hyper-velocity missiles applications, electromagnetic windows and structures for protection (Netherlands);
- modular avionics, complementing the joint effort currently being undertaken by France, the Federal Republic of Germany, the U.K. and the U.S. (the Group of Four) and concentrating on concept and systems studies, components for a central core and general characteristics of the modules for the purpose of future integration of avionic

packages currently available in the cockpit (Federal Republic of Germany);

- electromagnetic guns, i.e., rail guns, reel guns, thermo-electric guns and problems associated with the storage of high levels of electrical energy and the switching of large currents (United Kingdom);
- artificial intelligence, i.e., intelligent cockpits, applications to training and simulation, decision aids and autonomous systems (France);
- signature processing, i.e., radar signatures and optical, infrared and acoustic signatures (Spain);
- optronics, i.e., night vision, lasers, image processing, fibre optics networks and detectors (Italy);
- surveillance satellite technology, i.e., hardened sensors, hardening of ground-based systems and real-time data processing (Norway and France);
- underwater acoustics, i.e., long-range active sonar, short-range active sonar and passive sonar (United Kingdom and the Netherlands); and
- simulation, the recently introduced CEPA that still remains to be defined.¹⁰⁹