

## IX. Science and Technology

Enterprises should:

1. Endeavour to ensure that their activities are compatible with the science and technology (S&T) policies and plans of the countries in which they operate and as appropriate contribute to the development of local and national innovative capacity.
2. Adopt, where practicable in the course of their business activities, practices that permit the transfer and rapid diffusion of technologies and know-how, with due regard to the protection of intellectual property rights.
3. When appropriate, perform science and technology development work in host countries to address local market needs, as well as employ host country personnel in an S&T capacity and encourage their training, taking into account commercial needs.
4. When granting licenses for the use of intellectual property rights or when otherwise transferring technology, do so on reasonable terms and conditions and in a manner that contributes to the long term sustainable development prospects of the host country.
5. Where relevant to commercial objectives, develop ties with local universities, public research institutions, and participate in co-operative research projects with local industry or industry associations.

### Commentary on Science and Technology

93. In a knowledge-based and globalised economy where national borders matter less, even for small or domestically oriented enterprises, the ability to access and utilise technology and know-how is essential for improving enterprise performance. Such access is also important for the realisation of the economy-wide effects of technological progress, including productivity growth and job creation, within the context of sustainable development. Multinational enterprises are the main conduit of technology transfer across borders. They contribute to the national

innovative capacity of their host countries by generating, diffusing, and even enabling the use of new technologies by domestic enterprises and institutions. The R&D activities of MNEs, when well connected to the national innovation system, can help enhance the economic and social progress in their host countries. In turn, the development of a dynamic innovation system in the host country expands commercial opportunities for MNEs.

94. The chapter thus aims to promote, within the limits of economic feasibility, competitiveness concerns and other considerations, the diffusion by multinational enterprises of the fruits of research and development activities among the countries where they operate, contributing thereby to the innovative capacities of host countries. In this regard, fostering technology diffusion can include the commercialisation of products which imbed new technologies, licensing of process innovations, hiring and training of S&T personnel and development of R&D co-operative ventures. When selling or licensing technologies, not only should the terms and conditions negotiated be reasonable, but MNEs may want to consider the long-term developmental, environmental and other impacts of technologies for the home and host country. In their activities, multinational enterprises can establish and improve the innovative capacity of their international subsidiaries and subcontractors. In addition, MNEs can call attention to the importance of local scientific and technological infrastructure, both physical and institutional. In this regard, MNEs can usefully contribute to the formulation by host country governments of policy frameworks conducive to the development of dynamic innovation systems.