

**IMPLEMENTATION OF ARTICLE 66.2 OF THE TRIPS AGREEMENT:  
INFORMATION FROM DEVELOPED COUNTRY MEMBERS**

CANADA

At its meeting of 17-19 September 2002, the Council for TRIPS requested developed country Members to make information on their implementation of Article 66.2 of the TRIPS Agreement available for the Council's meeting scheduled for 25-27 November 2002 pursuant to paragraph 11.2 of the Doha Decision on Implementation-Related Issues and Concerns (WT/MIN(01)/17).

The present document reproduces the information which has been received from the Permanent Mission of Canada by means of a communication dated 7 November 2002.

Communications from other developed country Members will be circulated as addenda to this document.

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Developed country Members have undertaken to provide information regarding their activities relevant to Article 66.2 of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), namely, the provision of incentives to their domestic enterprises and institutions, to promote and encourage technology transfer to least-developed country Members (LDCs) in order to enable such Members to create a sound and viable technological base. The present document updates the report provided by Canada in 2000 (IP/C/W/132/Add.7) for consideration of the TRIPS Council.

In general, Canada provides domestic incentives for the transfer of technology in the form of (i) intellectual property embedded in transferred goods and services; (ii) management and business know-how to support production and distribution of goods and services; and (iii) human capacity-building. Several Canadian government departments, agencies and programmes are involved in providing incentives, either directly or indirectly, for Canadian enterprises and institutions to engage in activities involving technology transfer to developing country Members and LDCs.

The two Canadian agencies principally involved in technology transfer activities are the Canadian International Development Agency (CIDA) and the International Development Research Centre (IDRC). A number of other government departments, agencies and programmes such as Industry Canada, Export Development Corporation (EDC), the Department of Foreign Affairs and International Trade (DFAIT), and other volunteer programmes also contribute significantly to providing incentives for technology transfer. The present document is an illustrative list of such activities.

## **1. Canadian International Development Agency (CIDA)**

1.1. CIDA is the lead organization responsible for Canada's Official Development Assistance (ODA) Programme. CIDA, in cooperation with partners in the private and public sectors in Canada, developing country Members and LDCs, as well as with international organizations and agencies, to support sustainable development in over 100 developing country Members and LDCs. CIDA's activities are mainly directed to the Asia-Pacific, the Americas, Africa and Middle East regions. Technology transfer is a core element of CIDA's strategy, which includes key development goals of improving economic well-being, and strengthening environmental sustainability and regeneration. In co-operation with the private sector, one of the principal tools used to accomplish these goals is to make available the benefits of new technologies, especially in information and communications.

1.2. One of the principal CIDA initiatives is the Industrial Co-operation Division (CIDA-INC). CIDA-INC helps firms defray costs unique for doing business in the Asia-Pacific, Africa, Middle East and the Americas regions. It provides such assistance to Canadian firms that wish to build long-term business partnerships in order to promote and support sustainable socio-economic development. CIDA-INC also works to help reduce the risks of firms participating in such business activities with a view to supporting specific elements of investment projects in the area of training, social development, the participation of women and a clean environment. These activities aim to strengthen the knowledge, practical skills and technical know-how of local populations of developing country Members and LDCs.

1.3. CIDA also sponsors an Education Institutions Programme (EIP) that works with Canadian universities, colleges and other institutions that specialize in human resources training to establish the capacity of educational and training institutions in developing countries to handle their respective development priorities. The Programme financially supports two key partnerships between Canadian educational institutions and counterparts in developing countries in order to promote the exchange of knowledge and expertise; namely, the University Partnerships Cooperation Programme and the Canadian College Partnership Programme. Financial incentives for student and internship programmes through funding scholarships, fellowships and other grants are also provided through the EIP. The EIP also supports specialized training institutes such as the Canadian Petroleum Institute, an organization of industry-leading experts and professionals, that has delivered Canadian expertise and technologies to many partner companies and institutions in LDCs, including Angola, Bangladesh, Ethiopia, Niger and Tanzania.

1.4. Another key initiative supported by CIDA is the International Youth Internship Programme (IYIP) which gives young Canadian graduates an opportunity to contribute to grass-roots cooperation in developing Members and LDCs. The sectors which benefit include communications, environment, health, industry, natural resources and water/sanitation. Examples include the following: (i) a clean water project in Laos involving the transfer of certain technology from a Canadian non-governmental organization to a local partner; (ii) a water/sanitation project in Uganda for the transfer of gravity-flow methods to a local technical service organization; (iii) the transfer of pedal-powered technology for pumps and tile making machines; and (iv) solar power techniques and proper use of composting toilets, from a Canadian sustainable living institute to Friends of the Earth Sierra Leone.

## **2. International Development Research Centre (IDRC)**

2.1. IDRC is a Canadian public corporation mandated to initiate, encourage, support and conduct research into the problems of developing regions of the world, and into the means for applying and adapting scientific, technical and other knowledge to the economic and social advancement of those regions. IDRC has been promoting technologies for managing and sharing technology for the past 30 years through funding partnerships with other donors, including the private sector. The following is an illustrative list of other programmes including IDRC's technology transfer activities.

## **2.2. Information and Communications Technologies for Development**

2.2.1. Bridging the north/south "digital divide" remains a central objective of the IDRC. This work provided the foundation for further contributions of the IDRC through the G8's Digital Opportunity Task Force (Dot-Force) to improve the lives of people in developing country Members and LDCs. Indeed, Canada took a leading role in the Dot Force, Industry Canada chaired the task force and IDRC and Telesystem Ltd., a Canadian telecommunications company, served as members. The Dot-Force officially ended on June 25 2002, when Canada presented a report card of the initiative's progress to the G8 leaders meeting in Kananaskis.

2.2.2. IDRC's Information and Communications Technologies Programme also includes a number of other complementary initiatives. First, IDRC supports Bellanet, an international initiative designed to facilitate inter-agency collaboration through using information and communications technologies (ICTs) more effectively, which includes the African Networking Initiative and the African Information Society Initiative. Second, IDRC continues to sponsor the major undertaking of the Communities and ICTs for Africa (ACACIA) programme with a view to empowering African communities with an ability to apply ICTs to their own social and economic development. IDRC has sponsored the establishment of a Centre for Connectivity in Africa and continues to support community telecentres in countries such as Mali, Mozambique, Senegal, Tunisia and Uganda in order to accelerate their participation in the information economy. The Canadian telecommunications company Nortel Networks has been an integral partner with IDRC in helping to establish these networks and centres. Third, the Pan Americas initiative has helped poor countries such as Haiti, as part of capacity development for internet use in Latin America and the Caribbean. Fourth, IDRC's Pan Asia initiative has focused on countries such as Nepal, where the ICRC assisted in the elaboration of a participatory process for formulating the country's information technologies policy, as well as in its implementation.

## **2.3. Environment and Natural Resource Management**

2.3.1. IDRC's Environment and Natural Resource Management initiative comprises several programmes aimed at generating innovations within local communities of developing country Members and LDCs to manage their resources sustainably. Such innovations may be technical (e.g. improved production techniques), institutional (e.g. decision-making or planning processes) and/or policy-focused.

## **2.4. Broad-based Alliances**

2.4.1. IDRC fosters the building of broad-based alliances between Canadian and developing country Members and LDCs with the aim of helping to bridge the developing world's scientific and technological gap. A good example is the collaborative community-based natural resource management project in Laos linking York University (Canada), the University of Sydney (Australia), Chiang Mai University (Thailand), and the National University of Laos (NUOL). With parallel funding from other international groups, the alliance seeks to build research capacity at the NUOL through undertaking small projects on natural resource management and food security, both of which are critical issues for Laos.

## **3. Industry Canada**

### **3.1. Telecommunications**

3.1.1. Industry Canada sponsors several programmes for the transfer of technology by Canadian institutions and enterprises to developing country Members and LDCs. In the field of telecommunications, through its "Connecting Canadians" initiative, which includes "Connecting

Canada to the World", Industry Canada promotes global interconnectivity and inter-operability of broadband networks, applications and services (e.g. telehealth and telelearning). This work aims to improve the domestic and international investment climate in order to create incentives to global markets, including developing country Members and LDCs, by spurring companies to make their products and services export-ready. It also supports international collaboration for Canadian research institutions in emerging high-growth areas of electronic commerce, genomics, environmental technologies and advanced engineering.

3.1.2. In addition, the Telecommunications Policy Branch (TPB), in collaboration with the IHAB Office of International Partnerships (OIP), leads the advancement of the Connectivity Agenda for the Americas through the Summit of the Americas process and the Inter-American Telecommunications Commission (CITEL) work programme. The TPB continues to promote global connectivity through its work at the International Telecommunication Union (ITU) and in preparations for the World Summit on the Information Society (WSIS).

3.1.3. Industry Canada's Information and Communication and Technologies and the Telecommunications Policy Branch are particularly active in the technology transfer area. The Branch has organized seminars and workshops on ICT policy and regulatory issues for and in developing country Members and LDCs, hosted incoming study missions, and fostered discussion on viable pro-competitive regulatory options through its work in the Asia Pacific Economic Cooperation Telecommunications Working Group. In its participation to the CITEL, Industry Canada takes every opportunity to promote common frequency bands and services so that our industry can benefit from new radio equipment markets.

## **3.2. Information Technologies**

3.2.1. Industry Canada's Office of International Partnerships (OIP) provides a single portal to the Canada's state-of-the-art information and communication technology skills and products for any country or foreign organization wishing to build its own electronic learning network. The OIP links foreign governments, agencies and companies with Canadian companies, organizations and entrepreneurs for developing and applying information and communication technology to the learning and training environment. The OIP offers a vehicle for the exchange of technical knowledge and the co-development of learning materials and applications for Internet.

3.2.2. Another Industry Canada unit involved in technology transfer is the Spectrum Engineering Branch (DGSE), which is responsible for the technical integrity and quality of the engineering planning which is the basis for the orderly regulations, management and exploitation of the radio frequency spectrum. The DGSE is responsible for the technical and strategic planning which underpins Canadian telecommunication regulations, testing, certification and accreditation procedures. It is also responsible for international negotiations, treaties, agreements and arrangements associated with its spectrum management obligations. DGSE is specifically involved in technology transfer activities through the Technology Transfer and Support office (DTT). DTT provides training to foreign governments of developing and least developed countries (LDC). DTT's goal is to promote Canadian spectrum management technologies and know-how through technology transfer activities through Canadian private sector partners.

## **3.3. International Marketplace Innovation**

3.3.1. The National Research Council's Industrial Research Assistance Program (IRAP) encourages and supports Canadian small and medium-sized entities to develop international technology-based partnerships with both developed and less developed economies. IRAP, in partnership with Canada's Department of Foreign Affairs and International Trade, supports group missions to explore

opportunities for partnerships. IRAP and NRC have been active in developing technology-based partnerships in the Asian-Pacific region, in part through the Industrial S&T Working Group of APEC.

3.3.2. The Natural Sciences and Engineering Research Council (NSERC) operates two dedicated multi-million dollar programs to foster international S&T cooperation anywhere in the world; namely, the International Opportunities Fund and the Collaborative Research opportunities Fund. In addition, all NSERC research grants may be used for international collaboration at the discretion of the researcher. The Canada Foundation for innovation (CFI) is in the final stages of deciding on the successful proposals to their International Joint Ventures Fund and the International Access Fund which will include technology transfer activities.

#### **3.4. Volunteer Programmes**

3.4.1. Canada funds a number of volunteer programmes where skilled Canadians are sent to developing country Members and LDCs to help support the development of a viable technology base in those countries. For example, Canada's NetCorps Canada International (NetCorps) programme provides internships for Canadians to work abroad in the area of information and communication technologies, which operates as a complement to Industry Canada's "Connecting Canada to the World" strategy. NetCorps is funded through the Human Resources Department's Youth Employment Strategy, and is overseen by Industry Canada's Information Highway Applications branch in coordination with the NetCorps Coalition of Canadian volunteer organizations, including Canada World Youth (lead), Alternatives, Canadian University Service Overseas, Oxfam-Québec, Volunteer Services Overseas Canada, Canadian Crossroads International, Canadian Society for International Health and Human Rights Internet. The focus on show-casing the information technology expertise of young Canadian and establishing partnerships with local private, public or non-profit entities in locally-tailored human capacity-building and infrastructure-building projects in such fields such as health, education and agriculture. NetCorps' programmes benefit host organizations in developing country Members and LDCs, including Ethiopia, Senegal and Malawi. By October 2002, NetCorps will have placed over 1000 volunteers abroad and Canadians returning from the field are asked to share their experiences with program sponsors.

#### **4. Export Development Corporation (EDC)**

4.1. As Canada's foremost institution for supporting the export and investment of Canadian firms overseas, the EDC plays a key role in facilitating trade to the developing world. The EDC continues to provide trade finance services and help reduce the risks associated with doing business in developing and LDCs in the areas of ICTs and infrastructure-building, among others. One shining example is a Canadian company that exports low-cost water and sanitation system technologies to developing country Members and LDCs such as Bangladesh and Malawi. Local companies are contracted for the work to reduce costs and the systems are implemented with grass-roots training programs so as to ensure the long-term and sustainable success of the exported technology.

#### **5. Multilateral Level Activities**

5.1. At the multilateral level, Canada continues to actively contribute to many international financial institutions (IFIs) which, in turn, foster initiatives providing incentives for technology transfer to developing country Members and LDCs. In this respect, Canada's continuing contribution to the WTO's technical assistance fund, the Inter-American Development Bank, the African Development Bank and the Asia Development Bank all help to encourage the transfer of technology supported by human-capacity building for the foundations upon which may be built a sound and viable technological base.

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