European Union

Points made on behalf of European Union and its member states at the structured Dialogue 1 on possible arrangements for a facilitation mechanism to promote the development, transfer and dissemination of clean and environmentally sound technologies (UN, New York 29th April 2014)

General points about transfer of technology

We are ready to engage in dialogue on how to avoid duplication of efforts, if any, and how to better utilize the existing infrastructure through increased coordination and synergies between technology transfer initiatives, programmes and mechanisms already operating within the UN system and under the Rio Conventions (e.g. LDC Technology Bank, the UNFCCC Technology Mechanism and technology transfer provisions under the UN Convention to Combat Desertification (UNCCD) and the UN Convention on Biological Diversity (UNCBD); In light of the above, important to build on existing initiatives (i.e. CTCN under the UNFCCC, WIPO Green, etc.);

In our dialogues on technology transfer for sustainable development we need to avoid a restrictive definition of TT - that of commercially available technologies from industrialised to developing countries — and take a broader look at the role of R&I cooperation. In this perspective, technology transfer has to be looked upon not only in terms of acquisition of technology, but also in terms of knowledge creation and sharing. International cooperation in R&I is a key aspect of the EU's global commitment and EU and its member states are providing considerably - and increasing - funding in this area.

Indeed, the acquisition by least-developed countries (LDCs) of a sound and viable technological base does not depend solely on the provision of physical objects or equipment, but also on the acquisition of know-how, on management and production skills, on improved access to knowledge sources as well as on adaptation to local economic, social and cultural conditions.

Technology transfer is often one component of a more complex project, rather than a stand-alone activity. Ensuring the transfer of modern technologies is – in our view – mostly a role for the private sector; but government can facilitate it for example by ensuring a good enabling and regulatory framework including IPR, and in general on Foreign Direct Investments.

Furthermore the transfer of knowledge calls for use to be made of that knowledge, in the relevant context and understanding the premises on which new knowledge builds. This in turn requires both education and relevant experience and in this context, research cooperation and capacity building play enormous roles as they stimulates knowledge circulation and sharing of STI, in particular at early stage of the technology transfer process.

The role of government in facilitating technology transfer

For all investors, political stability and the rule of law are prerequisites. There are various factors critical in terms of creating favourable conditions for technical transfers, including a viable and accessible local market, good economic governance, clear development priorities, effective

regulation, the availability of skilled workers, adequate capital markets, strong IPRs and effective enforcement. Multinational companies have been shown to be more active in engaging in transferring intangible assets (that might or not be protected by IPRs) to affiliates in a country, if the country has strengthened its IP legislation.

Through regulation and investment, governments can help to create the right conditions for technology markets to function. The most effective role for governments is one of creating optimal enabling conditions, linked to the country's overall economic policy objectives. A government's willingness to create optimal conditions to attract technology is a strong determinant of whether transfers will be directed towards their domestic industrial sector. Governments are taking an active role in encouraging the transfer of technology.

Importance of Science, Technology and Innovation generally

Science, technology and innovation (STI) play an important enabling and driving role in empowering developing countries to lift themselves out of poverty, whether through increasing productive capacity to trade, or to deliver more effective services at a lower cost. Technology transfer, innovation and intellectual property rights (IPR) are becoming increasingly relevant to developing countries.

International cooperation in STI

In international STI cooperation there is significant room for governmental action on both sides fostering win-win cooperation for example in research, which helps create favourable conditions for the fostering of capacities to comprehend, absorb, adapt and develop technologies in the developing countries. Important to understand that in particular emerging economies have a high innovation capacity and developed a strong technological base. They cannot be considered to be at the same level as lower income countries.

EU Funding for cooperation

International cooperation in research and innovation is a key aspect of the EU's global commitment and an important component of the technology transfer process, as it contributes to the co-creation of solutions as well as knowledge sharing. The EU framework programmes on R&I are open to third countries' participation to encourage knowledge circulation and the involvement of non-EU participants in the knowledge generation and technology development process. Under the previous (7th.) framework programme the EU has, as of mid-February 2014, provided EUR 611 million to partners outside of industrialised countries. The new R&I framework programme entitled Horizon 2020 is among the most open in the world and include cooperation with "industrialised", "emerging" and "developing" countries, while we also recognise "neighbourhood" countries. The cooperation with developing countries is geared towards promoting inclusive growth and progressing towards

the achievement of the Millennium Development Goals and other international goals agreed in the framework of sustainable development.

Example: Under the 7th framework programme, the EU and India launched a pilot initiative built on common EU, Member States and India interest on water related challenges and the need for strengthening coordination between the various actors. The European Commission coordinated a joint call for proposals with the Indian Department of Science and Technology (DST). The European participation is funded from the FP7 whereas the Indian participation is supported by the DST. Three joint projects resulted from this coordinated call.

The EU also provides support through its development cooperation instruments for a range of projects including technical assistance projects but also research projects. For example, the African Caribbean and Pacific Research for Sustainable Development Programme provided a total of EUR 20 million that have been allocated through several calls for proposals organised by both the African Union Commission (EUR 15 million) and the ACP Secretariat (EUR 5 million). Some 30 projects engage in collaborative applied research in the areas of agriculture, water and sanitation, energy and the environment on the basis of partnerships are exclusively composed of ACP institutions.

Furthermore the EU has provided EUR 5 million to the start-up of the "Climate Technology Centre and Network" (CTCN) of the United Nations Framework Convention on Climate Change. EU member states have provided comparable funding for the CTCN as well. This network will help developing countries make informed decisions about their technology needs, promoting accelerated transfer of technologies for climate change mitigation and adaptation consistent with national socio-economic and sustainable development priorities.

Open access to facilitate knowledge circulation

The question of access to knowledge needs to be tackled in a comprehensive manner, being key to effective scientific and technological cooperation between developed and developing partners.

With the objective of facilitating effective collaborative research and knowledge transfer, the EC has identified open access to the EU-funded research results (publications and on a pilot base data) as a mean to improve knowledge circulation and thus innovation. Open access will be mandatory for all scientific publications produced with funding from Horizon 2020. Beyond the EU, the Commission will continue working with its international partners and scientific communities to promote open access. A specific area in which EC policy will benefit the global scientific community is interoperability and sustainability of data infrastructures.

Intellectual property rights

The role of IPR is often identified as positive. On the technology development side, an efficient, affordable and effective system for the protection of intellectual property is important to foster innovation. To successfully attract imported technology and to build the necessary preconditions for adapting imported technology, countries need a supportive environment that includes strong

intellectual property protection and enforcement. Enforcement of any intellectual property laws and regulations already in force provides transparency and certainty for investors, licensees and customers.

IP may not play as important a role as some seem to think in the transfer of technology in the climate change alleviation context. In LDCs key technology is often not patent protected. Therefore, companies are free to use these inventions in these countries. Other factors have to be taken into consideration, especially for LDCs and the most vulnerable developing countries. Lack of financial resources, high investment costs, subsidies and tariffs are considered greater barriers to accessing technology than IP protection.