

**United Nations Conference on Trade and Development**

**SCIENCE AND TECHNOLOGY DIPLOMACY**  
**Concepts and Elements of a Work Programme**



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## NOTE

The UNCTAD Division on Investment, Technology and Enterprise Development serves as a focal point within the United Nations Secretariat for all matters related to foreign direct investment, transnational corporations, enterprise development, and science and technology for development. The current work programme of the Division is based on the mandates set at the Tenth Conference of UNCTAD held in Bangkok in 2000 as well as on the decisions by the United Nations Commission on Science and Technology for Development, which is serviced by the UNCTAD Secretariat. In its work in the area of science and technology, the Division aims at furthering the understanding of the relationship between science, technology and development, contributing to the elucidation of global issues raised by advances in science and technology; promoting international cooperation on science and technology among Governments, enterprises and academic sectors, particularly between those of developed and developing countries and transitional economies; and promoting technological capacity-building and enhancing entrepreneurship and competitiveness in developing countries, particularly the least developing among them.

This publication seeks to contribute to exploring current science and technology issues with particular emphasis on their impact on developing countries.

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## **PREFACE**

This paper elaborates the conceptual basis and elements of a programme of work on science and technology diplomacy for the United Nations Conference on Trade and Development (UNCTAD). This programme is being developed in accordance with resolution 2001/31 of the United Nations Economic and Social Council (ECOSOC), adopted in July 2001, following recommendations of the United Nations Commission on Science and Technology for Development (UNCSTD) and consultations with the Secretary-General of UNCTAD.

This paper has been prepared in consultation and collaboration with Calestous Juma, Professor of the Practice of International Development and Director of the Science, Technology and Innovation Program at Harvard University's Kennedy School of Government.

# **SCIENCE AND TECHNOLOGY DIPLOMACY**

## Concepts and Elements of a Work Programme

## INTRODUCTION

The aim of this paper is to elaborate the conceptual basis and elements of a programme of work on science and technology diplomacy for the United Nations Conference on Trade and Development (UNCTAD).<sup>1</sup> The term “science and technology diplomacy” is used to mean the provision of science and technology advice to multilateral negotiations and the implementation of the results of such negotiations at the national level. It therefore covers activities at the both international level and national level pursuant to international commitments. This programme is being developed in accordance with resolution 2001/31 of the United Nations Economic and Social Council (ECOSOC), adopted in July 2001, following recommendations of the United Nations Commission on Science and Technology for Development (UNCSTD) and consultations with the Secretary-General of UNCTAD.

More specifically, the decision asked UNCTAD to “develop special programmes and organize workshops... to contribute to ongoing programmes for training scientists, diplomats and journalists in science and technology diplomacy, policy formulation and regulatory matters to assist developing countries, in particular least developed countries, in international negotiations and international norms and standard-setting”. The aim of this paper is to outline the concepts that underlie this programme, identify areas of focus for the organization and detail strategies for carrying out its activities.

This document is based on the view that advances in science and technology have become key drivers in international relations, and knowledge of trends in key fields is an essential prerequisite to effective international negotiations. Knowledge of trends in science and technology is also a key element for the successful national implementation of international agreements.

There are two key features of the growth of scientific and technological knowledge that are central to international negotiations. Firstly, scientific knowledge is becoming increasingly specialized and therefore demands greater expert input into international negotiations. Secondly, the application of science and technology to development requires the ability to integrate the divergent disciplines that are needed to solve specific problems. International diplomacy now demands that government negotiators deal with both specialization and integration.

This paper is divided into three sections. The first section provides an overview of relationships between technology and diplomacy and of functions within the United Nations and uses these as a basis for advancing the case for science and technology diplomacy. The second section outlines the objectives and activities of the initiative in focusing upon areas of current diplomatic attention, as well as prospective importance at both the international and national levels. The third section presents options for the mobilization of the resources required to implement these activities. Although the paper

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<sup>1</sup> This paper focuses on elaborating the conceptual basis and elements of the work programme since the requisite decisions on its activities have already been made. This paper, however, is not a project document with specific operational details, which will be presented separately.

focuses on activities that will be carried out by UNCTAD and the Science, Technology and Innovation Program (STIP) at Harvard University's School of Government, it is open to participation by other institutions.<sup>2</sup>

### 1. SCIENCE, TECHNOLOGY AND GLOBAL DIPLOMACY

#### 1.1 Science and technology in international relations

##### *1.1.1 Knowledge and diplomacy*

New, emergent forms of international diplomacy are developing to deal with a number of emerging issues in which science and technology play a central role. The influence and effectiveness of diplomats and international civil servants increasingly depend upon the extent to which they can mobilize scientific and technical expertise in their work. In order to assist these decision makers acquire the requisite knowledge needed to participate effectively in international negotiations, the United Nations is well positioned to tap advisory services to identify, mobilize, and use the best available expertise.

Although a large number of UN agencies, programmes and treaties rely on scientific and technological expertise for their work, they are not designed to receive systematic science advice as a key basis for effective performance. The UN was founded and grew to prominence in the era of the Cold War, when much of diplomacy was devoted to dealing with threats arising from external aggression. Today, attention is turning to issues such as infectious diseases, environmental degradation, electronic crimes, weapons of mass destruction, and the impacts of new and emerging technologies, which in the past would have been the concern of individual nations but have now grown in scale and importance to require international recognition and coordinated responses. The UN's capacity to deal with these questions has grown and continues to grow correspondingly.

National bodies that provide scientific advice often do not have a clear focal point in the UN system. However, as scientific and technological issues increasingly dominate global affairs, ways must be found to provide a forum for global consensus building on scientific issues, and the UN's ability to convoke States and other actors makes it a good candidate for the task. Such a forum will not be a substitute for the activities carried out under the

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