United Nations TD/B/WP/234

United Nations Conference on Trade and Development

Distr.: General
27 June 2011

Original: English

Trade and Development Board
Working Party on the Strategic Framework and the Programme Budget
Fifty-ninth session
Geneva, 5–7 September 2011
Item 4 of the provisional agenda
Evaluation of UNCTAD activities: In-depth evaluation of UNCTAD's programme on science and technology for development

In-depth evaluation of UNCTAD's programme on science and technology for development*

Executive summary

This report presents the results of an external evaluation of UNCTAD's programme on science and technology for development (STD). In 2008, this area of UNCTAD's work was consolidated under sub-programme 4, which was placed under the responsibility of the Division on Technology and Logistics. The evaluation focuses on the three pillars of UNCTAD based on the mandates given mainly in the Accra Accord paragraphs 158-161.

The implementation of UNCTAD's programme on STD has followed its mandates but certain actions require further strengthening. The consolidation of work has mainly strengthened research and analysis and technical cooperation on STD. A few STD outcomes, in particular in technical cooperation, potentially have a long-term impact. However, the current intergovernmental bodies on STD are not satisfactory. A new institutional set-up should be agreed. UNCTAD should clarify its approach and internal organization on work pertaining to the transfer of technology. Likewise, UNCTAD should clarify its role on "science for development". The clarifications may call for more inter-divisional and inter-agency cooperation. Planning and reporting should increasingly include outcomes and impacts. Coordination and cooperation in STI should be strengthened, internally within UNCTAD and with other organizations. The planned preparation of STIP Review implementation guidelines should proceed. DTL should reflect on how to improve the attractiveness of its publications and interaction with member States.

* This evaluation was prepared by an independent evaluation team: Mr. Arto Valjas (Team Leader), Consultant; Ms. Judith Arrieta, Counsellor, Permanent Mission of Mexico to the United Nations in Geneva; and Mr. Marc Thunus, Counsellor, Permanent Mission of Belgium to the United Nations in Geneva.

Introduction

A. Background

1. The fifty-third session of the Working Party on the Strategic Framework and the Programme Budget requested the UNCTAD secretariat to conduct an independent evaluation of UNCTAD's programme on science and technology for development (STD).

2. The objective of the evaluation is to analyze and document the results and lessons learned from the implementation of activities that address UNCTAD's mandates in this area, and to provide recommendations aimed at strengthening this area of work.

3. The evaluation assessed the relevance, effectiveness (including impact), efficiency and sustainability of work implemented by the STD programme based on the mandates given by member States, in particular, the Accra Accord paragraphs 158-161.

4. In 2008, this area of work was consolidated under UNCTAD sub-programme 4, which was placed under the responsibility of the Division on Technology and Logistics (DTL). Within the DTL, the Science, Technology and ICT Branch was created, comprising a Policy Review Section, an ICT Analysis Section and a Science and Technology Section.

5. The evaluation focuses on the work of the Branch, covering its three pillars: research and analysis, intergovernmental consensus-building and technical cooperation. However, the evaluation takes into consideration other STD activities of UNCTAD, in particular complementarities between them and the work of the Branch.

6. The evaluation focuses on activities initiated or under implementation since 2008.

B. Methodology

7. The evaluation activities comprised the following:

(a) Desk review of a broad range of written materials;

(b) Interviews in Geneva and through teleconferences;

(c) Participation in and interviews in the margins of the fourteenth Commission on Science and Technology for Development (CSTD);

(d) Field visits to Addis Ababa, Ethiopia and to Accra, Ghana.

Some of the reviewed written materials are referred to in the text. Semi-structured interviews were conducted with UNCTAD staff, representatives of member States, international organizations and beneficiaries. An evaluation matrix with specific research questions was designed based on the evaluation questions of the Terms of Reference (ToR).

I. Overview of UNCTAD's STD activities

A. Activities of the Science, Technology and ICT Branch

8. There is no single organizational entity within UNCTAD which would bear the full responsibility for its entire programme on STD. Closest to such entity is the Science, Technology and ICT Branch. Its objective is to "provide intellectual leadership and serve as a source of expertise on Science, Technology and Innovation (STI) and Information and

Communications Technology (ICT) policies for development".[2] Its mission is to "develop effective, innovative approaches to leverage STI and ICT in development strategies, promote policy dialogue, provide sound policy advice and build capacity".[3] The activities of the Branch comprise the following.

9. The Policy Review Section undertakes evaluation of national science, technology and innovation policies (STIP) and assists developing countries to integrate STIP into their national development strategies through field missions and analytical reports. The section has one recurrent annual publication, the Technology and Innovation Report (TIR), issued for the first time in 2010. Other publications include current studies on salient STI issues. The section has managed the Network of Centres of Excellence (NOCE)-project. The section contributes to the discussions in the CSTD and the Commission on Investment and Enterprise Development. It services as secretariat a Multi-Year Expert Meeting on Enterprise Development Policies and Capacity Building in STI. The section organizes expert meetings in areas such as STI indicators, and other related topics.

10. The ICT Analysis Section undertakes policy-oriented research and analytical work on ICTs. Its recurrent annual publication, the Information Economy Report (IER) monitors global trends in ICT as they affect economic development. The section prepares recurrent reports on ICT and e-commerce issues. It also manages the E-Commerce and Law Reform Project and Capacity Building for ICT Measurement and Policy. The section engages in methodological and analytical work in these fields, and carries out annual global statistical surveys and maintains an Information Economy Database. The section serves as task manager for the implementation of World Summit on the Information Society (WSIS) action line on e-business and contributes to discussions in the CSTD. The section has so far conducted one ICT Policy Review.

11. The Science and Technology Section carries out intergovernmental consensus-building activities in the context of the CSTD. Working as CSTD technical secretariat, it prepares background documentation and reports for its annual sessions, including analytical reports and papers on priority themes. The section organizes expert meetings to assist the CSTD. It prepares the Secretary-General's reports to the Economic and Social Council (ECOSOC) and the General Assembly (GA). The section carries out analysis of progress in the implementation of the WSIS and reports on this progress to the CSTD. So far, the section has also taken the lead on the UNCTAD Current Studies series on Science, Technology and Innovation, which was launched in 2010. The topics of this series are predominantly related to the priority themes of the CSTD.

B. STD-related activities of other UNCTAD branches and divisions

12. Other branches of DTL work on knowledge sharing, training and capacity building as well as on trade logistics. They are in charge of the TrainForTrade programme, the ASYCUDA programme, the Virtual Institute and the courses on key issues on the international economic agenda (paragraph 166 training courses). The Science, Technology and ICT Branch supports their activities and uses their networks.

13. Other UNCTAD divisions which in one way or another deal with STD include the Division on Investment and Enterprise Development (DIAE), the Division on International Trade in Goods, Services and Commodities, and the Division on Africa, Least Developed Countries and Special Programmes. Examples of their involvement in STD comprise their

[2] DTL Activity Report 2010.

[3] Draft Strategy Paper of the Science, Technology and ICT Branch (March 2011).

work on climate change, biofuels, pharmaceuticals, e-tourism and the 2007 *LDC Report Knowledge, Technological Learning and Innovation for Development*.

C. Other international organizations and inter-agency collaboration

14. A great number of United Nations and other international organizations work on STD or look at related issues in relation to their specific competence areas. UNCTAD is the focal point in the United Nations for Science and Technology for Development-related work. For example, UNCTAD is a co-chair in the United Nations Group on Information Society (UNGIS)[4] which counts as its members FAO, IAEA, ILO, ITU, OECD, UNDESA, UNDP, UNECA, UNECE, UNECLAC, UNESCAP, UNESCO, UNESCWA, UNHABITAT, UNHCR, UNICEF, UNIDO, UNITAR, UNODC, UNRWA, UNWTO, UPU, WB, WFP, WHO, WIPO, WMO and WTO. The Partnership on Measuring ICT for Development is an example of more specific inter-agency collaboration. Its members are ITU, OECD, UNCTAD, UNESCO, the United Nations Regional Commissions, WB, UNDESA and EUROSTAT.

II. Findings

A. Relevance

15. The evaluation assessed UNCTAD's STD programme based on the mandates given in the Accra Accord paragraphs 158-161. Paragraph 158 inter alia calls for strengthening of research and analysis in the area of STI and ICT, enhancement of support to developing countries (in particular to LDCs), strengthening of North-South and South-South Cooperation, and provision of assistance through STIP Reviews. Paragraph 159 urges UNCTAD to contribute to consensus-building on STD, including ICTs and the CSTD, and to facilitate international discussions on transfer of technology and knowledge-sharing, including identification of policy options and best practice. Paragraph 160 calls for the continuation of technical assistance in ICT, including ICT policy reviews and through the Partnership on Measuring ICT for Development. Paragraph 161 gives UNCTAD a mandate to contribute to the WSIS implementation and follow-up, including through the CSTD. The full text of the mandates[5] also includes references to transfer of technology through foreign direct investment (FDI) and to technology transfer clauses in international agreements.

16. In the strategic frameworks 2008-2009 and 2010-2011, there is an overall orientation chapter for UNCTAD as a whole but no overall strategy. Strategies are defined by sub-programme, together with the objectives, expected accomplishments and indicators of achievements. The programme budget documents 2008-2009 and 2010-2011 further detail the logical frameworks per sub-programme, adding to the above elements performance measures, external factors, outputs and resources requirements. In 2008-2009, UNCTAD's work on STI and ICT was mainly carried out under two sub-programmes: STI under sub-programme 2 Investment, enterprise and technology and ICT under sub-programme 4 Services infrastructure for development, trade efficiency and human

[4] http://www.ungis.org/.

[5] http://www.unctad.org/en/docs/iaos20082_en.pdf.

resources development. A decision was made in 2008 to consolidate work on STI and ICT under a new sub-programme 4 Technology and Logistics.[6]

17. The 2010-2011 strategy of sub-programme 4 matches well with what is said on STI and ICT in the above-mentioned Accra mandates. While there is no mention of transfer of technology in the sub-programme 4 strategy, it is mentioned in the corresponding budget document. While the treatment of ICT is equal in the two biennium budget documents, STI is more visible in the strategy and budget document for 2010-2011. However, this is not reflected systematically in the budget documents e.g. the number of planned new actions/measures remains the same for STI and ICT in 2010-2011 as for ICT only in 2008-2009.

18. A number of interviewees made the point that, with the exception of science for development and transfer of technology, the Accra mandates in STD are clear, and being met by the Science, Technology and ICT Branch. Views on transfer of technology were divided: within UNCTAD, some interviewees saw it more closely related to investment than to STD. Within the member State community, there is no clear consensus with respect to the role UNCTAD should play on this issue. The Branch has started to collect best practice in transfer of technology that will be disseminated through a publication.

19. The evaluators looked for qualitative signs to judge whether and how the emerging policy trends were reflected in UNCTAD's STD work. According to the 2008-2009 Programme performance report.[7] UNCTAD has addressed many emergent issues such as the food, energy, financial crises and climate change through its publications, meetings and events. The Branch has continued such work thereafter, e.g. through the 2010 TIR which focused on food security in Africa and the 2011 TIR which will focus on renewable energy technologies in the context of the climate change. UNCTAD's current studies on STD have dealt with issues such as renewable energy, water for food and financing mechanisms for ICT. A single year expert meeting was organized on green and renewable technologies. The 2010 IER focused on the link between ICTs and enterprises and poverty alleviation, highlighting the strength of mobile telephony to narrow the digital divide. The 2011 IER will address how ICTs can enable private sector development.

20. One of the specific research questions was whether the attention paid and resources allocated to STI and ICT were balanced. In research and analysis, while work on STI has been done mainly in-house, on ICT it has benefited more from external expertise. Funds allocated to ICT activities through ICT trust funds, United Nations regular programme and by UNDP exceed the funding for STIP Reviews, from the United Nations Development Account, United Nations regular programme and UNDP. The CSTD agenda, although divided between two priority themes, one on STI and another on ICT, is dominated by ICT. As a consequence, CSTD participants coming from capitals have become more ICT-oriented. Moreover, other CSTD participants seem not to be the same as those participating in the sessions of the Trade and Development Commission and the Investment, Enterprise and Development Commission of UNCTAD, established by paragraph 202 of the Accra Accord, that consider STD matters.

21. Within the Branch, the Policy Review section is the only one that has been servicing the Investment, Enterprise and Development Commission over recent years. However, the section has had to struggle to get more items on the agenda of the commission as other

[6] Paragraph 10.5 of the June 2008 Working Party document TD/B/WP/L.130: "In order to strengthen the work of UNCTAD in science and technology – a sine qua non for development today – and to better draw on synergies with work on ICT, this area of work is consolidated under sub-programme 4, which will be under the responsibility of the renamed Division on Technology and Logistics".

[7] A/65/70, 1 April 2010.

programmes and initiatives have taken most of the allocated time. Consequently, STI topics have had limited space for discussion. The situation seems to be more balanced in the Multi-Year Expert Meeting on Enterprise Development Policies and Capacity-Building in STI where divisions share the agenda.

22. The evaluators assessed the role of UNCTAD in STD vis-à-vis other United Nations organizations and development partners. Many are active in ICT as demonstrated in paragraph 14. The evaluators perceive that compared to UNCTAD, ITU focused more on ICT infrastructure, United Nations Regional Commissions had a regional mandate, specialized United Nations agencies focused on ICT applications in their competence areas etc. The UNCTAD approach in combining global policies for ICT for development with economic development issues (enterprise, trade, commerce) culminates in its technical cooperation niche: measuring ICT for economic development and legal aspects of e-commerce.

23. In STI, there are fewer actors but the roles are less clear and coordination mechanisms are not institutionalized like in ICT. For example, UNESCO, UNECA, NEPAD, WB and UNCTAD carry out STIP Reviews (or surveys) in Africa. Their approaches may be somewhat different e.g. UNESCO is perceived to focus more on science and education. In Africa, UNCTAD has cooperated in STIP Reviews with UNESCO and WB, and in Latin America with ECLAC. Other organizations which conduct STIP Reviews include the OECD which undertakes them in its member countries and certain non-member countries (it has carried out 11 reviews since December 2006). UNCTAD has started to reflect on its STIP Review approach and methodology, e.g. through an ad-hoc expert meeting organized in December 2010 with participation from academia and other international organizations. As a follow-up, a set of structured STIP review implementation guidelines are planned to be elaborated during 2011.

B. Effectiveness (including impact)

24. The evaluation looked into what has been implemented in STD, in particular in comparison with the Accra mandates 158-161. The relevant paragraphs of the Evaluation and Review of UNCTAD's implementation of the Accra Accord,[8] the Performance Report 2008-2009, annual technical cooperation reports, the IMDIS[9] system, project reports etc. provide a wealth of data on implementation at the output and activity levels. In broad terms, the data confirms that the planned meetings on STD were organised, publications were issued and trainings were undertaken. Based on the data, it is much more difficult to conclude what outcomes have been produced and what their impact has been.

25. Some worst and best practices from the current framework for reporting on programme performance demonstrate the situation. In the logical framework of the sub-programme, performance measurement is based on the number of new actions/measures. For 2008-2009, the fact that 64 countries sent national officers for training was reported as 64 new actions, making the total number of actions/measures achieved 77 (planned 28). Requests for assistance are also often counted as actions/measures by UNCTAD. As best practice, the following examples can be mentioned: passing of a national law on digital copyright, revision of the national STI policy based on a STIP Review, and inclusion of ICT indicators in business surveys carried out by national statistical offices. The latter kind

[8] TD/B/57/7, 7 July 2010.

[9] The Integrated Monitoring and Documentation Information System (IMDIS) is the online tool for planning, monitoring and reporting of results-based programme performance in use at the United Nations Secretariat.

of outcome (or result) indicators are however rarely used, which makes evaluation of effectiveness difficult.

26. IMDIS forms the basis for preparing the performance reports which include implementation rates and highlights of results. As a consequence of the above kind of weaknesses, the performance reports however lack data on outcomes. Logical frameworks are prepared and monitored for externally funded projects. They seem to be of relatively good quality, also because certain donors insist on the quality of logical frameworks for the projects they finance. In the absence of equally well prepared logical frameworks for regular activities, the evaluators have had to rely on qualitative and quantitative signs in the written materials and statements of interviewees that allowed the identification of STD outcomes and outputs.

27. There are signs of strengthened research and analysis, namely the first Technology and Innovation Report (TIR) of 2010, the 2010 Information Economy Report (IER) which with its thematic approach aims to be more analytical than its predecessors and the E-Commerce Report, and the non-recurrent publications and ad-hoc reports which respond well to the emerging policy trends. The two "flagship" reports, TIR and IER, are launched through international events and presented at international conferences. More than 230 articles have been noted on the 2010 IER by UNCTAD's press unit.[10] All DTL publications are also available on its website.

28. Although UNCTAD undertakes readership surveys periodically, the differences in ratings from one year to another, between the attributes used and between different reports, are too small to provide a basis for judgements on the publications. Hence, the evaluators asked comments on the 2010 TIR and IER from some UNCTAD staff, representatives of member States and international STI and ICT experts. The number of replies is not big enough for the sample to be considered representative but a few replies may provide some interesting insights.

29. One interviewee was of the opinion that in general too much importance is given to research publications by UNCTAD management whilst the main activity of UNCTAD should be in transferring knowledge to developing countries through capacity building and training. A few interviewees, including UNCTAD staff, stated that instead of bulky recurrent publications, shorter reports would be more useful for developing countries. UNCTAD staff acknowledged that the 2010 TIR, as a new publication, did not have a lot of media attention. It was felt that to make it more attractive at least a core set of comparable STI-indicators should be developed. A member State representative compared the IER with the World Investment Report and the LDC Report, saying that while the latter two are awaited in the capital, the IER is acknowledged when received. Two international experts called for making the IER more distinctive from the numerous other ICT for development reports in the market. Representatives of developing countries were in general positive on the publications but tended to focus more on technical cooperation in their comments.

30. In technical cooperation, seven STIP Reviews have been implemented since 2008. This is more than the number of STIP Reviews undertaken during the preceding 10-year-period. Three out of the seven STIP Reviews have taken place in LDCs: in Angola, Lesotho and Mauritania. The other beneficiary countries have been Ghana, El Salvador, the Dominican Republic and Peru. The last three STIP Reviews in Latin America are on-going or there is still at least a final stakeholders' workshop to be organised. Representatives from the above countries, except for Angola and Mauritania, were interviewed face-to-face and/or through questionnaires. In general, the feedback was very positive from the

[10] Activity Report 2010, the Science, Technology and Innovation Branch.

countries in which the reviews had already been completed. The feedback from the countries where the process was on-going was more reserved but in broad terms also positive. Shortcomings raised by the interviewees are presented in paragraph 34 below, together with other constraints identified in specific UNCTAD STD projects.

31. Impact of an STIP Review seems to vary a lot from one country to another. In Mauritania, the evaluators perceive that the review seems to have had very little or no impact, due to a series of factors, among them a coup d'état during the review process. In Ghana, the STIP Review laid the ground for a revised national STI policy and funding from the World Bank for its implementation. Some lessons learned from the Ghana STIP Review are presented below.

Box 1.
The **Ghana STIP Review** was carried out in 2008 through active cooperation between UNCTAD and WB staff, consultants and local counterpart experts. It came up with a number of recommendations at a time when a new Government was sworn in. The recommendations became a "guide" for the preparation of a national STIP, an implementation plan for it and a WB financed skills and technology development project. While the UNCTAD involvement in the STIP Review follow-up diminished, WB support to national authorities increased, leading to the approval of a 70 Million US Dollar credit in early 2011. The new project combines a) institutional strengthening of skills development and b) institutional strengthening of science and technology development with c) funding for training and technology upgrading projects. According to Government and WB representatives, the science and technology part of the new project would not have materialised without the initial STIP Review. Lessons learned from the process confirm the importance of strong participation of country representatives and of direct engagement of UNCTAD and WB staff. The broad, nationally-led process of consultations created strong local commitment and ownership and close relationships between the national and international experts and organisations. Equally important was the Government commitment not only to include science and technology in its political manifesto but also to implement concrete actions such as the creation of the Ministry of Environment, Science and Technology (MEST). There are challenges in making the new project a success but it can potentially make an important contribution to the acceleration of growth and economic diversification. A WB representative already welcomed UNCTAD participation in its 2013 mid-term review. UNCTAD should take the opportunity of the project to enhance its contacts with the national authorities and the WB. UNCTAD should assess the implementation of the recommendations of the initial STIP Review within the mid-term review of the project.

32. In their assessment of technical cooperation in ICT, the evaluators took into account the recent project evaluations of the *E-Commerce and Law Reform Project* and *Capacity Building for ICT Measurement and Policy* project, as well as evaluation reports of training courses for the production of ICT statistics. The first confirmed that cyber laws are either enacted or ready for endorsement in the selected target countries. The second concluded that the project had added to the skills of the producers of internationally comparable ICT indicators, i.e. met its objectives. The evaluations of training courses showed positive feedback from the participants. The reports however fell short of demonstrating the impact of the projects e.g. in terms of the increasing number of developing countries producing comparable ICT statistics. This may be explained by the time lag between the acquisition of skills and knowledge through training and their application in producing new statistics. The interviews and annual technical cooperation reports however confirmed that this number is on increase, with Lesotho and Senegal having become the first LDCs to be included in

UNCTAD's database. Compared with the previous years, fewer training courses were however held in 2010, due to budgetary constraints.

33. The only ICT-policy review carried out so far was considered a very useful exercise by the country representatives (Egypt). There had been some difficulties in applying the agreed methodology and with consultants who were technically competent but lacked country knowledge. However, the recommendations of the review were fed into the preparation of a new national ICT-policy for 2011-2014, i.e. the review led to immediate national action.

34. Shortcomings and constraints in specific UNCTAD STD projects were identified in the areas of national commitment and ownership, implementation methodology and follow-up. For example, although a request for a STIP review came from the mission of a member State in Geneva, this did not imply that there was a commitment to it in the capital. In some cases, the interviewees' comments on UNCTAD work concentrated on the work of consultants, giving the impression that the STIP Review had been rather consultant-driven. Another short-coming is the lack of follow-up, both in terms of funding for the implementation of recommendations and through continued contacts and networking between the beneficiaries, experts and UNCTAD staff. The latter applies also to the ICT projects. A common short-coming mentioned in the interviews is limited participation of local experts in project activities that would enable more transfer of skills and knowledge from UNCTAD staff and experts to national personnel.

35. The complexities of the intergovernmental machinery in STD (paragraph 21) have hindered the achievement of outcomes in that pillar. The Science and Technology Section has so far managed to produce the necessary documentation and reports (outputs) with very limited human resources and, according to some interviewees, with limited inputs from the other sections. The ECOSOC and GA resolutions emanating from the CSTD, although in principle binding for UNCTAD (as part of the United Nations Secretariat), are not backed up by decisions on funding. This can make it difficult for UNCTAD to undertake the requested actions (e.g. a request to carry out more STIP Reviews). The Investment, Enterprise and Development Commission, amongst its conclusions, has made some calls for action that pertain to STI, but the limited discussion time allocated to these issues has not allowed thorough discussions and decisions on follow-up to STI themes. Apart from this situation, according to some interviewees, there is scope for improvement in DTL's responsiveness to and engagement with member States, e.g. in how comments are taken into account and in how results of work are presented (more briefings on the work done by DTL were suggested).

36. In UNCTAD's annual reviews of the technical cooperation activities, STD has been divided into two clusters: cluster XIII *ICT Policies and Applications for Development* and cluster XV *Science, Technology and Development*. Each represents 1% of the total UNCTAD technical cooperation budget. In terms of volume of technical assistance, UNCTAD as whole is a minor actor at the country level. Resident United Nations agencies such as UNDP, UNESCO and UNIDO, as well as the World Bank and other donors, such as the EU, dominate in-country technical assistance on STD. United Nations organizations involved in STI/ICT technical cooperation at the country level include the United Nations Regional Commissions. The case of the United Nations Economic Commission for Africa (UNECA) is presented below.

Box 2.
UNECA's STI-programme is managed by its ICTs, Science and Technology Division (ISTD). ISTD engages in policy research and analysis, and outreach and advocacy in ICTs, STI and geo-information. The ICT section undertakes formulation of ICT policies, strategies and plans at the country level, including development of e-commerce laws and sectoral e-strategies, and reviews of national ICT-policies. The ICT section implements a capacity building programme for ICT measurement in Africa (Scan-ICT) and leads the Task Group on e-Government indicators within the Partnership on Measuring ICT for Development. The STI section provides assistance in STI policy formulation at national and sub-regional levels, including STIP-reviews. It promotes knowledge sharing and networking, and provides business development support services. In intergovernmental consensus building, the ISTD reports to the Committee on Development Information, Science and Technology (CODIST) and the Science with Africa Conference, among others. Worth mentioning is also ISTD's contribution to the work of the African Union. Due to the similarities between the work of UNCTAD and UNECA ICT sections, they cooperate closely e.g. in ICT measurement. Joint UNECA, ITU and UNCTAD training sessions are organised. Moreover, ISTD has provided inputs to the IER and the ICT Analysis Section has financed participants to CODIST. Cooperation between the UNCTAD and UNECA STI sections is however limited. Through strengthened cooperation with ISTD, the Science, Technology and ICT Branch could take benefit of ISTD's networks in African countries.

37. According to a number of interviewees, the inclusion of STD in the national development strategies of developing countries, and as a consequence, in assistance frameworks such as UNDAF, is still a challenge. Although the number of developing countries that have placed STI and ICT high in their national development priorities is on increase, the countries that have taken concrete steps in this direction are still relatively few. Assistance measures of specialized organizations concentrate on these countries, risking cause duplication and overlapping. Waning interest among some donors in ICT for development was also mentioned as a challenge.

38. UNCTAD has carried out more Investment Policy Reviews (IPRs) than STIP Reviews. The Division on Investment and Enterprise Development (DIAE) is responsible for the IPRs which are seen by many beneficiary countries as a way to attract FDI. The implementation of their recommendations is followed up through reviews. Although IPRs focus more on international aspects, they also touch upon national issues, such as the policy framework for STI which is the focus of STIP Reviews. UNCTAD has introduced some inter-divisional mechanisms, e.g. the Project Review Committee in 2008. The views on having more inter-divisional mechanisms and/or task forces are however mixed. At present, most inter-divisional cooperation seems to take place informally, through colleagues at levels other than the management ones.

C. Efficiency

39. Each of the three sections of the Science, Technology and Innovation Branch has in theory up to 5-6 posts, including the Head of Section and one general service level post. However, there are vacancies and, consequently, the Branch risks losing posts in the future. The Science and Technology Section is already reduced to 2-3 staff and its staff turnover is high due to the structure of the section (in addition to the Head of Section, there are two P2-posts, one of which is temporary). The existing human resources of the Branch are

stretched and up-scaling of activities would necessitate their strengthening. Staff profiles seem adequate for managing the current activities the same way they have been managed until now.

40. There have been delays in project implementation and completion but these have been mainly due to factors external to UNCTAD, such as political impediments in the national STIP Review approval process. Representatives of the donor countries interviewed by the evaluators expressed their general satisfaction with the project planning, management and reporting capacity of the Branch and the Technical Cooperation Service. The same applies to budget execution. For example, when a donor had raised the level of its quality requirements for project plans and reports, the Branch had reacted well to the request. More critical comments were made on the visibility of projects and on the lack of prioritization within UNCTAD. On this last subject, when a donor had indicated that it could finance a new project, it received 19 proposals without a pre-selection or prioritization by UNCTAD.

41. A minor administrative impediment which in practice can become a major issue is the incapacity of UNCTAD to edit, format and print reports quickly enough. There is a backlog and any report or publication which is required for a certain event takes precedence over publications that are not linked to an event with a date. Hence, the printing of a STIP Review is overdue for several months. This is hard to explain to beneficiary countries which need the reports for domestic purposes or to negotiate funding for implementation from donors.

D. Sustainability

42. Most signs of sustainability identified in the written materials and statements of interviewees relate to institutional sustainability: incorporation of ICT policies in the national development strategies, enactment of national and regional cyber laws and regulations, manuals and improved skills for the production of ICT statistics, passing of the revised national STI policies through the parliament, etc. There were some signs of financial sustainability, e.g. a contribution percentage paid by the private sector or allocated from the State budget to STI. Environmental sustainability has been addressed in terms of research and analysis and intergovernmental discussions rather than within technical cooperation activities.

43. A common statement by interviewees was that all UNCTAD technical cooperation activities are demand driven. One could therefore assume that the needs and wishes of cooperating partners and/or final beneficiaries would be reflected in the design and implementation of projects. Indeed, this is the case for a number of projects. Cooperating partners e.g. determine the thematic areas of the STIP Reviews and decide whether to prioritize skills development (Latin America) or drafting of legal texts (East Africa) in the ICT and Law Reform-project. The short-comings in commitment, methodology and follow-up, referred to in paragraph 34 above, however undermine the sustainability of certain projects. The NOCE-project, which was considered a successful one by those interviewees who had been involved in it, is on hold and has an uncertain future since the donor funding ceased after a five-year implementation period (2005-2010) and over 1 Million US Dollars spent on it. The project has been one of the few concrete examples of North-South and South-South Cooperation, thus responding well to Accra paragraph 158.

44. In the Policy Review and ICT Analysis Sections most staff shares their time between research and analysis and technical cooperation. The CSTD is seen by several staff as a stand-alone activity with limited relevance for the rest of their work. The staff of the Science and Technology Section devotes their time to analyses on the CSTD priority themes, and in support of the intergovernmental consensus building in the context of the

CSTD. The section collects inputs from the other sections but bears the responsibility for the CSTD outputs alone. Some interviewees felt that not all the sections of the Branch take full benefit from the CSTD. Due to the complexities associated with the Investment, Enterprise and Development Commission (paragraphs 21 and 35), they provide limited support to the research and analysis and technical cooperation work of the Science, Technology and ICT Branch.

45. MDGs and other global priorities are visible in UNCTAD's STD programme and the work of the Science, Technology and ICT Branch. Poverty alleviation, food security and gender equality have been prominent themes in research and analysis and in the intergovernmental discussions. The relationship between the MDGs and the technical cooperation activities on STD is indirect: it can be traced e.g. through the selection of agriculture as one of the thematic focus areas of several STIP Reviews. However, in technical cooperation there are no project outcomes that contribute directly to poverty alleviation or gender equality. Within the execution of project activities such as training, no specific measures have been undertaken to increase the participation of women.

III. Conclusions

46. The implementation of UNCTAD's programme on STD has followed the Accra Accord mandates but certain actions require further strengthening. The Science, Technology and ICT Branch is fully implementing paragraphs 160 and 161. As far as the Branch is concerned, the implementation of paragraphs 158 and 159 is partial, as the mandates given in them are very wide and comprise issues such as policy, best practice and international discussions on transfer of technology. More than one UNCTAD division works on them, either on policy or, as it is the case for the Branch, on best practice. Within the member State community, there is no clear consensus with respect to the role UNCTAD should play on this issue. Under these circumstances, it is impossible for the Branch to fully implement all the mandates given in the Accra Accord paragraphs 158-161.

47. The consolidation of UNCTAD's work on STI and ICT under sub-programme 4 has strengthened its research and analysis and technical cooperation in STI. Research and analysis in ICT has also been sharpened but it is not clear to what extent this can be attributed to the reorganization. Views on the recurrent publications are mixed, raising a question on what their objective is. If the objective is to raise the profile of STI and ICT or to influence policy on them, some interesting data (rankings, indicators) and basic analysis could be enough. Presentation of the publications in a high-profile way (a road show, press release, dedicated interactive website, etc) is also important.

48. In the intergovernmental consensus building, both STI and ICT are yet to have an effective consultative mechanism, capable of coming up with meaningful joint resolutions and composed of representatives of all member States, who are not only technical experts. Emerging policy trends have been well reflected in UNCTAD's intergovernmental consensus building work, as well as in its research and analysis. They are less noticeable in technical cooperation activities, which is natural as it takes time to launch new technical cooperation activities, particularly on STI.

49. There is an imbalance in favour of ICT in the work of the Science, Technology and ICT Branch. This might be explained as follows: while in ICT UNCTAD's niche is clear, also to other organizations with which effective coordination mechanisms exist, in STI UNCTAD's role is less obvious. There is very little "science for development" in what the Branch does, and much more "technology and innovation". This might be explained by its target audience who are policy makers, directly or indirectly through experts. Coordination with UNESCO, whose focus is on science and education, and with other organizations,

which have a more technology and innovation oriented approach similar to that of UNCTAD, is weak. It is easier to attract donor funding in areas where the roles are clear and coordination mechanisms exist.

50. Within DTL, the Division's internal six-monthly activity plan is the main management tool. Weekly and ad-hoc meetings take place at different levels. While planning and reporting seem to occur mainly at the level of outputs and activities, outcomes and impacts are reported occasionally, e.g. in the annual technical cooperation reports and IMDIS. Weaknesses in the plans and reports of regular activities under sub-programme 4 (paragraphs 24-26 above) hint to more general deficiencies in UNCTAD's planning and reporting practices. To some extent, these deficiencies may be attributed to the planning and reporting templates imposed on UNCTAD. However, there is scope for improvement in how these templates are utilized. Among other consequences, the general deficiencies may cause extra work when UNCTAD has to undertake major one-off reviews like the 2010 Evaluation and Review of UNCTAD's implementation of the Accra Accord.

51. The evaluators identified a few STD outcomes, in particular in technical cooperation, which potentially have a long-term impact at the national or regional level (paragraphs 24 and 30-33 above). UNCTAD as a whole is however a minor provider of technical assistance at the country level and STI/ICT represents 2% of its technical cooperation budget. Thus, the ICT Analysis Section has rightly concentrated on a narrow niche area in its technical cooperation activities. Working in a narrow niche area, coordination and collaboration with other organizations is a must, to avoid duplication and overlapping with targeted assistance of other specialized organizations and with wider programmes of more generalist organizations. Coordination of UNCTAD's ICT technical cooperation activities with those of the United Nations Regional Commissions, UNCITRAL and ITU seems to have been functioning well.

52. Considering the limited resources of the ICT Analysis Section, the rationale for its engagement in ICT policy reviews, apart from the reference in the Accra Accord paragraph 160, does not seem obvious. Technical cooperation and research and analysis in the Section's niche area, as well as its tasks associated with the WSIS implementation, have already kept its staff fully occupied. Moreover, the section will continue to benefit from external funding in these areas.

53. The preparation of the STIP review implementation guidelines (paragraph 23) is an opportunity to develop further the conceptual framework of UNCTAD's STIP Reviews, and to explain how UNCTAD's approach and methodology differ from similar exercises of other organizations, so that the differences are clear to potential beneficiary countries before they decide which organization to approach for assistance. Furthermore, the guidelines should define follow-up mechanisms and procedures to evaluate the impact of the STIP Reviews, similarly to what is in place for the follow-up of Investment Policy Reviews.

54. The shortcomings and constraints identified in specific UNCTAD STD projects call for a closer engagement of UNCTAD staff at the country level, in particular before a decision is taken to start a project, in its formulation, at the early stages of its implementation and in follow-up after the implementation of immediate project activities (review, training, etc.). The availability of funding should not be a limiting factor for a closer engagement of staff as it would only imply more communication and travel costs. Such costs are normally built in project budgets. Through the closer engagement, UNCTAD staff, acting as project managers, should be able to prevent and/or rectify the short-comings and constraints experienced in specific UNCTAD STD projects (paragraph 34).

55. If the staff engaged more in policy advice e.g. in the implementation of STIP Reviews, and less in managing the work of consultants, this could call for changes in the staff profiles (or for additional staff). More engineering and technology knowledge would be needed, to balance the current standard economist background. More in-house work on the STIP reviews could lead to lower overall expenditure through less dependency on external consultants.

56. Another way to achieve the same or better results with the same or lower expenditure is to draw on the synergies between different parts of UNCTAD. For example, Investment and STI Policy reviews could be implemented together. This would require more inter-divisional cooperation, and leadership that encourages, facilitates and, if necessary, enforces it.

57. The picture concerning the sustainability of outcomes is mixed. There are positive examples (paragraphs 24, 30-33 and 42) but they are overshadowed by a few cases where weaknesses have been identified. The NOCE-project is one of them. DTL seems not to have implemented a proper action plan, with an assessment of donor priorities and a communication and funding strategy, to foresee and address the termination of the specific single-donor trust fund. The need to establish an exit strategy has also been raised in the evaluation of the *E-Commerce and Law Reform Project*. In that context, clear criteria should be established for determining how to prioritize between ongoing and new projects. The external funding of the project continues so there is time to address the issue.

58. In the areas of STI and ICT for development, research and analysis and technical cooperation support well one another. Due to the complexities of the intergovernmental machinery in STD, its contribution to the other two pillars and vice-a-versa is not ideal.

59. The contribution of UNCTAD's STD programme to the MDGs is indirect but the MDGs are visible in the programme activities. Gender and environment have been addressed in research and analysis, and in intergovernmental discussions. However, within technical cooperation, no specific measures have been undertaken.

IV. Recommendations

60. The management of UNCTAD, DTL and the Science, Technology and ICT Branch should continue their strategic reflection on the role of the Branch, in particular on "science" for development and vis-à-vis other United Nations organizations. Although "science" is mentioned explicitly in the Accra Accord and in the name of the Branch, "technology and innovation" have been dominating its work (and "science" does not appear in the name of the Division). In view of UNCTAD XIII, there should be a further reflection on how better address "science" within the work of UNCTAD, e.g. through increased cooperation with other organizations such as UNESCO, or on what other options are available. One of them could be an inter-divisional task-force on STD, led by DTL, and incorporating relevant parts of UNCTAD. One of its tasks could be to liaise with other organizations on STD. The outcome of the UNCTAD reflection should be discussed with member States and taken into account in UNCTAD XIII resolutions.

61. UNCTAD should clarify its internal division of tasks and responsibilities with regard to transfer of technology: whether a particular division and/or branch is/are responsible for the full implementation of Accra Accord paragraphs 158 and 159, or, if the responsibilities for the two paragraphs are divided, how this division is organized. Likewise, UNCTAD should clarify how this work is undertaken with respect to its three pillars of work. One of the options for the internal division of tasks would be to define the responsibilities by these areas. That would require more inter-divisional cooperation than what is currently the case.

62. UNCTAD should improve its planning, monitoring and reporting practices, so that planning and reporting would not focus too much on immediate outputs and activities, but would also comprise systematic planning, monitoring and reporting of outcomes. In the future, this would enable proper evaluation of effectiveness and of long-term impacts.

63. Coordination and cooperation mechanisms in STI should be strengthened, internally within UNCTAD and with other organizations. If the Branch on its own cannot establish formal STI coordination mechanisms, comparable with UNGIS or the Partnership on Measuring ICT for Development, it should thrive to create more informal yet well structured networks, with a wide range of members and regular electronic communications. Cooperation with the United Nations Regional Commissions should be extended to STI. At the country level, UNCTAD should systematically consult UNDP, UNESCO, UNIDO and WB resident offices, in particular before any decision is taken on new STD in-country technical cooperation activities.

64. Due to the complexities of the current intergovernmental bodies on STD, and in view of the negotiations leading to UNCTAD XIII, UNCTAD should first agree internally on its preferred options for an intergovernmental body capable of satisfying its needs on STI and ICT. To be pragmatic, a new commission should not be considered as one of the options. There are several alternatives to it: a permanent item on the TDB agenda, a multi-year expert meeting dedicated to STI and ICT, increasing and highlighting of elements on the CSTD agenda that pertain to UNCTAD's direct areas of work, etc. One of the preferred options should be agreed with member States and confirmed in UNCTAD XIII resolutions.

65. In research and analysis, the Branch should reflect on how to make its recurrent publications more attractive to policy makers. Inclusion of more ratings and indicators and less in-depth analysis should be considered. More high-profile presentations of the publications might be one solution, with road shows and a web-site with better visibility. The Branch website would benefit from an overhaul, to upgrade it to a level commensurate with an organization working on innovation and ICTs. Moreover, the Branch should take a more proactive stance in its interaction with Geneva based member State representatives, e.g. sending them regular briefs and up-dates, and organizing side events, such as information sessions, lunch debates and workshops, in the margins of bigger events.

66. Within technical cooperation, UNCTAD should make an additional effort to revitalize the NOCE-project and extend its network. The extended network should be used for multiple purposes, including the promotion of North-South and South-South Cooperation in STI. Alternatively, or in addition, the Branch should use the Virtual Institute and the TrainForTrade programme to promote North-South and South-South Cooperation on STD through capacity building and dissemination.

67. With regard to STIP Reviews, the evaluators believe that improved coordination and cooperation mechanisms, with clear UNCTAD approach and methodology and closer staff involvement, including in the provision of policy advice, would facilitate the availability of external funding in the future. These conditions being met, UNCTAD should reinforce its fund-raising for new STIP Reviews. Development partners should consider supporting them as part of their contribution to the technical cooperation activities of UNCTAD.

68. In ICT for development, the Science, Technology and ICT Branch should continue focusing on its niche technical cooperation area of measuring ICT for business and legal aspects of e-commerce. In this regard, once the first ICT policy review will have been published, the UNCTAD constituency should ponder carefully the added value of the Branch undertaking broader ICT policy reviews, especially considering the current work being done by other international organizations with greater experience and resources to employ on the subject.

69. UNCTAD should ensure that the work of the Science and Technology Section is well balanced between its mandate as the CSTD technical secretariat and other STD activities such as the recently created *UNCTAD Current Studies series on Science, Technology and Innovation* in which the section has taken the lead. With more resources of its own and more inputs from other sections and divisions, the Science and Technology Section could play a role on STD issues that go beyond the CSTD.

70. The conceptual framework of UNCTAD's STIP Reviews should be reviewed in the context of the preparation of the STIP Review implementation guidelines (paragraph 23). This exercise should help UNCTAD define the role its staff in the implementation of STIP Reviews. The guidelines should describe the necessary closer engagement of UNCTAD staff at the country level (paragraph 55). If the role of staff in the implementation of STIP Reviews were to become more policy-oriented, UNCTAD should reflect on how to strengthen the human resources of the Branch.

71. Furthermore, in addition to describing what is distinctive in UNCTAD's STIP Review approach and methodology, the guidelines should address issues such as scope of adaptation, local commitment and participation, implementation of recommendations and follow-up. Consideration should be given to the inclusion of a financial provision in the STIP Review budget for not only follow-up but also for the implementation of some specific recommendations. Measures to test beneficiary country commitment should include its willingness to make a financial contribution, in cash or in case of LDCs in kind, and its capability to swiftly set up a high-level multi-stakeholder steering group. The guidelines should be completed before the Branch engages in new STIP Review processes. Lessons learned from the most recent STIP Reviews in Latin America should be fed into the process.