GENERAL AGREEMENT ON TARIFFS AND TRADE

RESTRICTED

TBT/W/28 26 May 1981

Special Distribution

Committee on Technical Barriers to Trade

TECHNICAL ASSISTANCE TO DEVELOPING COUNTRIES

Note by the secretariat

- 1. At its meeting of 4-5 February 1981, the Committee agreed that there was a need for more information on the present state of affairs regarding technical assistance, and that as a first step the secretariat should present a factual paper describing technical assistance already being offered.
- 2. Such assistance is being provided either by government bodies or other standardizing bodies and either bilaterally or multilaterally through specialized agencies of the United Nations or through the ISO and IEC.
- 3. This paper presents the information available to the secretariat under these headings. It does not, however, provide an exhaustive account of all the standards-related assistance given, as this is often not separately identifiable when included in broader-based development projects. For example, technical assistance associated with projects such as the construction of laboratories or testing stations is generally not classified as standards-related, although it may contribute to building up the recipient country's capacities in the field of standardization. While it was not possible to survey extensively the technical cooperation activities of international organizations in order to identify the standards-related elements in them, examples of such elements in the projects of some of these organizations are given below for illustrative purposes.

A. Bilateral Assistance

4. Most of the information available on this form of assistance by signatories is included in section 4 of document TBT/6, the relevant parts of which are reproduced below together with any updating supplied by delegations. Attention is also drawn to training opportunities listed in UNIDO's <u>Guide to Training Opportunities for Industrial Development (Ninth issue)</u>, September 1980, which includes a section on quality control and standardization listing training courses or seminars held in various signstories during 1981 (Annex 1). These facilities are open to participation by qualified

personnel from developing countries. The other courses of training listed in Annex 2 have been reported to the International Standardization Organization (ISO) in pursuance of resolution 3/1980 of the ISO Development Committee.

A.1. Governmental

Canada

5. The Standards Council of Canada, with financial assistance from the Canadian International Development Agency (CIDA), arranged a fourweek seminar in May/June 1980 for a number of invited participants from Thailand, Malaysia, Indonesia, the Philippines and Singapore. The purpose of the seminar was to assist participants to find solutions to standardization problems in their own countries by demonstrating how standards are prepared and applied in Canada.

Germany, Federal Republic of

6. In 1981 the Deutsche Stiftung fur Internationale Entwicklung (German Foundation for International Development) in Berlin will hold a seminar for trade experts from developing countries on the results of the Tokyo Round (MTN). Activities at the seminar will focus on the Agreement on Technical Barriers to Trade and the special benefits it holds for developing countries.

Hungary

7. In the framework of cooperation programmes providing for scientific and technological assistance to developing countries, Hungary has granted technical assistance in spheres defined by Article 11 to certain countries non-signatories of the Agreement on Technical Barriers to Trade.

Japan

- 8. Concerning technical assistance to developing countries in the fields of standardization, testing and certification system, Japan has undertaken programmes such as acceptance of trainees and despatch of experts. Details of such activities, which Japan intends to further promote in the future, are as follows:
- (a) Japan has accepted trainees from more than ten countries including Korea, the Philippines, and Singapore. The training courses, which lasted one to six months, covered such areas as quality control, industrial standardization, import and export food inspection.
- (b) Upon requests from developing countries, Japan has dispatched experts in the fields of quality control, standardization, metrology and so on.
- (c) As part of Japan's activities under the Pacific Area Standards Congress (PASC), it organized seminars in Singapore and Hong Kong concerning the situation of standardization of energy

conservation in Japan and the revision of the Industrial Standardization Law in order to meet the obligation under the Agreement on Technical Barriers to Trade (focussing, in particular, on the revision which enabled foreign manufacturers to apply for the Japanese Industrial Standards marking system). Japan intends to hold seminars of this kind in other member countries of PASC in 1981.

Netherlands

9. The Netherlands University Foundation for International Cooperation (NUFFIC) has published a leaflet: "Basic Data on International Courses offered in the Netherlands (1980/81)" which contains a survey of the international courses held each year in English. Most of these courses have been specially organized for post-graduate candidates from developing countries (ISO Bulletin, November 1979).

United States

- 10. The U.S. Government, through the National Bureau of Standards participates in a wide range of technical activities. For example, NBS is involved in bilateral cooperative efforts (under special funding arrangements) with Israel, Yugoslavia, Poland, India, Spain, Pakistan and Egypt, including the exchange of standards and carrying out of specific research projects and technical NBS has also been involved in specific technical assistance programs, including: Protocol on Cooperation in the fields of metrology and standards with the State Bureau of Metrology of the Peoples Republic of China; exchange of scientific cooperation under a Memorandum of Cooperation between NBS and the USSR Academy of assistance Egypt develop its institutional Sciences; to to infrastructure for metrology, standardization, and quality control; assistance to the Korean Standards Research Institute; and providing opportunities for Mexican scientists to work in NBS laboratories.
- 11. NBS maintains a "Guest Worker Program" under which faculty and graduate student scientists and engineers from foreign universities may be invited or permitted to undertake a technical project using the Bureau's equipment and facilities in both Washington and Boulder, Colorado. In a typical year, NBS hosts approximately 65 guest workers.
- 12. In the recent past, NBS has held workshops and training courses in the United States on standardization and measurement services which were attended by standards officials from 44 developing countries; has held several international seminars in the United States to provide a forum on topics of metrology and standardization in less developed countries, and has sponsored regional seminars on special topics related to standards and metrology in Bolivia, Singapore and Korea. Upon request, NBS has aided ten developing countries in conducting surveys on standardization and measurement services.

Yugoslavia

13. Yugoslavia is ready, if requested, to advise developing countries on standardization matters and grant them technical assistance on mutually-agreed terms.

A.2. Non-governmental

- 14. The courses in standardization and related activities to be run in 1981 by standardizing bodies members of ISO are listed in Annex 2.
- 15. In addition, the United States delegation has notified that the United States private sector provides technical assistance in several ways and through various means: for instance, the American Society for Testing and Materials (ASTM) a private sector U.S. standards developer provides each year to a university in a developing country a complete set of its standards, representing an extensive body of technology. Such gifts have recently gone to Zaire and Venezuela. In addition, in response to a recent request from UNIDO, ASTM located experts in the iron and steel field for the Government of Brazil.

B. Multilateral Assistance

- 16. The technical cooperation programmes of several United Nations specialized agencies having activities in the area of standards include courses dealing with the establishment of product specifications and their application in their respective areas of competence.
- 17. The International Telecommunications Union (ITU) provides training courses and assistance in the field in the preparation of technical specifications for telecommunication equipment and services.
- 18. The World Meteorological Organization (WMO) includes in many of its country projects, training in the preparation of specifications for meteorological instruments.
- 19. The World Health Organization (WHO) organizes workshops and training programmes for specialists from developing countries in various aspects of quality control and quality assurance of drugs and vaccines. It also provides international reference materials for biologicals, promotes the development of public health laboratories and services at different levels, etc. The WHO Food Safety Programme includes training courses and field projects in the area of food control.
- 20. The United Nations Industrial Development Organization (UNIDO) organizes group training programmes for technical and managerial personnel in industry and industrial institutions in developing countries, in cooperation with governments, firms and organizations having specialized knowledge and experience in a particular field. The following three programmes relating to standardization are currently implemented or planned for 1981:

3-4 weeks

arranged, in French.

date to be

Field of study General description Venue Quality improvement Modern developments of Association for of industrial products industrial products. **Overseas** standardization at inter-Technical national, national and Scholarship plant level, quality Tokyo, Japan control and assurance, 8 weeks product design and starting improvement, packaging. January, in In-plant training in English selected mechanical, electrical and metalworking plants and study tours. Standardization and Methodology, quantitative Agence pour la Quality control control, qualitative Cooperation control, non-destructive Technique testing, statistical tools Industrielle of quality, means to et Economique improve quality, quality (AFNOR) management, practical Association training in industrial Interenterprises or professionelle de France, Paris institutions. Lille. 8 weeks, date to be arranged, in French. Standardization and General information con-Agence de quality control cerning standardization, Cooperation of industrial products national and regional Culturelle et institutions dealing with Technique, Ecole standardization and Internationale quality control, quality de Bordeaux and standardization at France.

21. The United Nations Food and Agriculture Organization (FAO) pursues activities complementary to the work of the Codex Alimentarius Commission to assist Member countries, particularly developing countries, in strengthening food control systems and to enable full utilization of Codex work in protecting consumers. This includes training, studies, the issuance of guidelines for the establishment and operation of adequate systems and special projects involving, inter alia, the establishment of food centres and the strengthening of existing laboratory facilities.

assisting institutions.

enterprise level, promotion of quality by specialized

- 22. Technical assistance covering standards-related work in their respective fields of competence is also provided, in certain cases in cooperation with other United Nations agencies, but the International Atomic Energy Agency (IAEA), the Intergovernmental Maritime Consultative Organisation (IMCO) and the International Labour Office (ILO).
- 23. The UNCTAD/GATT International Trade Centre (ITC) offers advisory services aimed, inter alia, at helping developing countries to policies, legislation, organizations establish appropriate services to secure acceptable quality levels of export products. ITC's services on quality control of export products take the form of consultancy, training, information, research and publications. are coordinated with a number of institutions at international and national levels. The International Trade FORUM, ITC's quarterly publication, serves the purpose of dissemination of information on The ITC has collaborated with the International quality control. Standardization Organization (ISO) to prepare the recent publication "Certification: principles and practices", which summarizes inspection and certification procedures currently applied in different countries.
- 24. Also relevant in this context is the technical assistance provided by the GATT secretariat through missions to and participation in seminars in developing countries wishing to acquaint themselves with the Agreement on Technical Barriers to Trade and its operation. The secretariat also provides assistance to developing countries in accordance with Article 10.4 of the Agreement.
- C. Assistance provided through the International Organization for Standardization (ISO) or the International Electrotechnical Commission (IEC)
- 25. The Development Committee of the ISO (ISO/DEVCO), which determines general policy in relation to developing country members of ISO, has established a long-range work programme of assistance to developing countries for which it is seeking regular financing. The elements of the programme are as follows:
 - (a) Identification and accommodation of needs
 - (b) Preparation of guides
 - (c) Training
 - (i) Regional training seminars
 - (ii) Training of technical officers for NSB operations
 - (iii) Training of technical officers for ISO/TC/SC secretariat functions
 - (d) Study tours by senior officers of NSBs
 - e) Participation in technical meetings
 - (f) Development of standards related to products
- 26. On the basis of voluntary contributions from ISO member bodies, the ISO has organized general training seminars in standardization on a regional basis. Three such seminars are planned for 1981. ISO also plans to organize specialized courses in various aspects of

standardization in 1982 and 1983. Three such courses, to be held in different developing regions, are currently in preparation.

27. The IEC provides assistance as required through special training seminars. One such seminar was held in Algiers in November 1980. The IEC also published a list of IEC standards which are of special interest to developing countries.

ANNEX 1

QUALITY CONTROL AND STANDARDIZATION

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Stan da rdizati on	Standardization and the enter- prise: analysis techniques; quality management, etc.	AFNOR Association Française de Normalisation Tour Europe Cedex 7 92050 Paris La Défense France	1-5 weeks throughout the year	Engineers and technicians. French	- ; ,	To be arranged
Metrology I	Introduction to and participation in precision measurement activities in laboratories; licensing tests of measuring equipment; participation in conferences, exhibitions etc., and special courses approved by PTB. Visits to standards bureaus and plants.	Carl Duisberg- 3 Gesellschaft and the Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit in co-operation with the Physikalisch- Technische Bundesanstalt (PTB) CDG P.O. Box 190 325 D-5000 Köln 1 Federal Republic of Ger	and 4 months language training	Professional qualification and experience in metrology. German	-	To be arranged
Metrology II	Mechanics, electricity, heat, optics and acoustic covers: introduction to the techniques of and participation in precision measurement at PTB laboratories; licensing tests of measuring equipment. Visits to standards bureaus and plants.	Carl Duisberg- Gesellschaft and the Zentralstelle für Arbeitsvermittlung der Bundesanstalt für Arbeit in co-operation with the Physikalisch- Technische Bundesanstalt (PTB) CDG P.O. Box 190 325 D-5000 Köln 1 Federal Republic of Ge	To be arranged 17 months including 1 month introduction and 4 months language training ermany	Technicians with experience in metrology. German	-	To be arranged

QUALITY CONTROL AND STANDARDIZATION (Cont'd)

Course or Seminar	General description	Organizer: Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	
		0.84250.)	<i>Dui</i> 2020	1 oqual omones	applicacions	
Quality control	Certification and inspection system.	Agency of Industrial Science and Tech- nology, Japanese Standards Association in collaboration with Japan Internations	8 January 1981 8 weeks	Professional qualification. English	. <u>-</u>	To be arranged
		Corporation Agency (JIC Shinjuku-ku, Tokyo 160	CA), P.O. Box	216, Mitsui Building	, 2-1 Nishi Sh	iinjuku
Quality control in foundry and die casting	Study of quality control and foundry and die casting industry in Japan.	Asian Productivity Organization, 4-14 Akasaka 8-chome Minato-ku, Tokyo 107 Japan	Date in 1982 to be decided 6 weeks	Technical consul- tants of National Productivity Organizations or similar institutes	and engineers	\$US 200
		or vapan	(tenta- tive)	foundry and die cas of APO member count	ting industry,	
Quality control	Study of fundamental quality control techniques and their implementation through lectures and in-plant practices.	The Association for Overseas Technical Scholarship 2-12-13 Honkomagome Bunkyo-ku, Tokyo Japan (Osaka, Japan)	July 1981 6 weeks	Professional qualification and experience in quality and production control. English		Y 413,000 (\$US 1,700)

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	Fee
Metrology, quality assurance and standardization	Course relevant to those wishing to establish or extend national metrological and standardization services.	Cranfield Institute of Technology Cranfield, Bedford United Kingdom	February 1981 13 weeks	Professional qualification. English	-	£3,000
Metrology, quality assurance and standardization	Training in metrology and quality assurance.	Department of Trade, Metrology, Quality Assurance and Standards Division Legal Metrology Branch 26 Chapter Street London SWIP 4NS, United Institution and the Cra			- ne British Stan	£3,000
Quality assurance	Course provides up-to-date appraisal of quality assurance.	Scottish School of Non-Destructive Testing, Paisley College, High Street Paisley PA1 2BE United Kingdom	June 1981 To be arranged	Professional qualification and industrial experience. English	-	£85
Non-destructive testing	Training in basic non-destructive techniques.	The Unit Inspection Company, Sketty Hall Swansea SA2 8QE United Kingdom	April and October 1981 26 weeks	University degree. English	1 February and 1 August 1981	To be arranged

QUALITY CONTROL AND STANDARDIZATION (Cont'd)

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	
Non-destructive testing	Course covers industrial radiography, welding inspection and industrial applications of non-destructive techniques.	Singapore Institute of Standards and Industrial Research (SISIR), 179 River Valley Road Singapore 0617	April 1981 4 weeks	University degree. English	-	To be arranged
Quality control and certification	Quality control techniques.	Singapore Institute of Standards and Industrial Research (SISIR), 179 River Valley Road Singapore 0617	July 1981 8 weeks	Technical diploma and experience in quality control. English	-	To be arranged
Quality management and control	Series of five seminars: quality management planning; statistical methods; reliability; quality control of suppliers and manufacture; quality control in the development of new products.	Instituto Nacional de Racionalización y Normalización Zurbano 46, Madrid España (in co-operati la Calidad)	To be discussed on with the	University degree Spanish Asociación Español		Ptas 12,000 trol de
Organization of standards work	Course covers the whole process of standardization in the context of constitution and industrial establishment of a country. No specialized training.	British Standards Institution (BSI) 80 Park Lane London WIA 2BS United Kingdom	4 July 1981 5 1/2 weeks	University graduates working at a national standards organization. English	Application is advised before 30 April 1981	£603

Course or Seminar	General description	Organizer; Venue	Commencing date; Duration	Qualifications: Language requirements	Last date for receipt of applications	
Certification and inspection system (including export inspection)	Operation of Japanese certification system and JIS licensed factories, study of various certification systems (self-certification, third party etc.). Technical visits.	Japan International Cooperation Agency (JICA) Agency of Industrial Science and Technology, and Japanese Standards Association P.O. Box 216, Shinjuku Mitsul Building, No. Japan	January 1981 and 1982 Approx. 2 months	University graduates. English ahi Shinjuku, Shinju	- ku-ku, Tokyo 1ć	To be arranged
Industrial standardization and quality control	Fundamentals in industrial standardization; various aspects of standards work and certification; quality control incl. sampling methods, inspection etc.	Japan International Cooperation Agency (JICA) Agency of Industrial Science and Technology (AIST) Japanese Standards Association P.O. Box 216 Shinjuku Mitsui Building No. 1-2 chome Nishi Shinjuku Shinjuku-ku Tokyo 160 Japan	Summer 1981 summer or winter 1982 Approx. 3 months	University graduates at present engaged in standards engineering works at National Standards Bodies (NSB).	-	To be arranged
Industrial metrology	Practical training in the calibration of industrial measuring instruments.	Singapore Institute of Standards and Industrial Research (SISIR), 179 River Valley Road Singapore 0617	To be arranged 8 weeks	Professional qualification. English	•	To be arranged

ANNEX 2

COURSES IN STANDARDIZATION AND RELATED ACTIVITIES TO BE RUN IN 1981

Organizing body	Title of course	Duration	Place	Language	Further information to be requested from
BSI (United Kingdom)	The organization of standards work	1 July to 7 August	London	English	Steward Sanson Education section, BSI
DIN Cederal Kepublic of Germany)	Company standard- ization	-	Ragensburg Mannheim Stuttgart Cologne	German	DIN
ON (Austria)	Basic principles of company standard-ization	3 days	Vienna	German	M. Machek, ON
SISIR (Singapore)	Quality control (awareness)	8 hours	Singapore	English	The Controller SISIR
SISIR (Singapore)	Basic quality control	40 hours	Singapore	English	The Controller SISIR
SISIR (Singapore)	Statistical design of experiments	40 hours	Singapore	English	The Controller
SISIR (Singapore)	Reliability engineering	30 hours	Singapore	English	The Controller SISIR
SNV (Switzerland)	Standardization	3 days	-	German	-
Japan Inter- national Co- operation Agency	Quality control	November to May	Tokyo	Japanese	-
					

Idem	Production management in mechanical industry	October to December	Tokyo	English	-
Idem	Quality control in plastic products industry	October to November	Idem	Idem	-
Idem	Electrical and electronic measurement standards	September to December	Idem	Idem	- 6 -
Idem	Industrial stand- ardization and quality control	August to November	Idem	Idem	-
Idem	Metrology and measurement standards	June to December	Idem	Idem	<u>-</u> ·
Idem	Quality improvement of industrial products	January to March	Idem	Idem	-
Idem	Certification systems	January to March	Idem	Idem	-