

TA
1215
.C35



Industry, Trade
and Commerce

Industrie
et Commerce

TRANSPORTATION DIRECTION
SERVICES DES SERVICES
BRANCH DE TRANSPORT

SURVEY OF ISO ACTIVITIES AND POLICIES
PERTAINING TO THE NOVEMBER 20, 1978 MEETING
OF THE UNCTAD AD HOC INTERGOVERNMENTAL GROUP
ON CONTAINER STANDARDS.

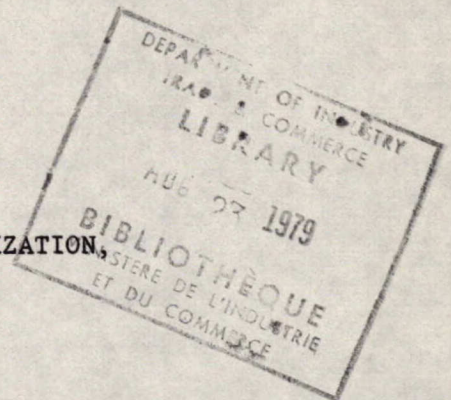
Distribution Section

Transportation Services Branch

Department of Industry, Trade and Commerce

NOVEMBER 3, 1978

REPORT ON
INTERNATIONAL ORGANIZATION FOR STANDARDIZATION



SURVEY OF ISO ACTIVITIES AND POLICIES
PERTAINING TO THE NOVEMBER 20, 1978 MEETING
OF THE UNCTAD AD HOC INTERGOVERNMENTAL GROUP
ON CONTAINER STANDARDS.

³Physical Distribution Section

²Transportation Services Branch

Department of Industry, Trade and Commerce

supplied by A. Staruch (59) 1979-08-23.

Canada.

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION	i
1.0 1978 UNCTAD Container Standards Issues	1
2.0 Container Standards	3
2.1 ISO Container Standards	3
2.2 Exceptions to ISO Standards	4
SECTION I	
<u>FEARS OF DEVELOPING COUNTRIES</u>	
3.0 Technological Obsolescence	10
3.1 Stability of ISO Standards	11
3.2 Sealand 35 Foot Container Length	13
3.2.1 History	13
3.2.2 ISO Proposal	14
3.2.3 Sealand/Brazil Issues	16
3.3 Increase in Gross Weights	20
3.4 Trend in Increased Container Heights	22
3.5 Increase in Container Widths	22
3.6 Comments	23
4.0 Suitability of Containerization for Developing Countries	25
4.1-ISO Container Designs	27

	<u>Page</u>
4.2 Shipping Services	27
4.3 Interface with National Transport Infrastructures	28

SECTION II

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

5.0 Developing Country Critisms of ISO	30
6.1 Organization of ISO's Work	31
6.1.1 Committees	31
6.1.2 Work Programs	34
6.1.3 Meetings	39
6.2 ISO Standards Writing Procedures	41
7.0 Participation of Developing Countries in ISO	45
7.1 ISO Initiatives to Improve Developing Country Participation in ISO	46
7.2 Regional Liason Officers	48
7.3 Assistance to Developing Countries	49
7.4 Assistance from Canada	52

	<u>Page</u>
8.0 Impact of ISO Standards	54
9.0 Conclusions	57
REFERENCES	59

(i)

UNCTAD CONTAINER STANDARDS

I - INTRODUCTION

The second session of the UNCTAD ad hoc Intergovernmental Group on Container Standards for Multimodal Transport will be held in Geneva on November 20 to Dec. 1, 1978. It will examine whether or not it is necessary to create an international instrument on container standards.

Developed economy countries (Group B) expressed the view at the 1st UNCTAD meeting in 1976 that ISO standards constitute in themselves a satisfactory international agreement, therefore, an international convention on container standards is not justified. Although developing countries (the Group of 77) support ISO, they do not share this view.

Proposals brought forth by the group of 77 at the 1976 UNCTAD meeting are based on the assumption that they can only realize the economic benefits of containerization through universal adherence to ISO standards. To this end, it is their view that an international instrument is necessary to maintain fundamental container dimensions and ratings in order to reduce the danger of premature obsolescence of capital investments in transport infrastructures. Such international regulation is considered to have trade facilitation benefits.

(ii)

Finding further ways for developing countries to participate more effectively in ISO's work may answer their concerns. The Group of 77's second resolution noted measures to rectify deficiencies in ISO. It raised questions on needs for further assistance and aid to standards bodies in developing countries, changes to ISO standards writing procedures and institutional structures, and integration of political/technical considerations in the formulation of ISO standards. This report provides background information on ISO activities pertaining to issues relevant to the November 20, 1978 UNCTAD AD HOC meeting on container standards. The question of whether Canada desires to pursue an international agreement on container standards has not been fully examined. This question is currently under review with Canadian industry.

1. 1978 UNCTAD CONTAINER STANDARDS ISSUES

The 1st UNCTAD container standards meeting made considerable progress in reaching a consensus on re-drafting the group of 77's resolution on deficiencies in ISO. However, an agreement could not be reached on the group of 77's desire for a container convention. Developing countries did not clearly specify the nature and content of the international instrument. Although Group B refused to recognize the need for an international Convention, recent information indicates a softening of this position among some European countries. In order to focus on issues of concern to developing countries, the UNCTAD Secretariat is preparing papers on the following topics:

1.01 The fears of developing countries regarding the application of container standards.

- Whether, and if so to what extent, the use of the containers with existing standards has and will have a negative impact on the developing countries.

1.02 Existing container standards and the needs of users, in particular of developing countries.

- (a) Whether the existing ISO standards are compatible with the needs of developing countries, and if not, whether they should be

amended and/or supplemented.

- (b) What, if any, are the negative effects of non-ISO standards on the developing countries.

1.03 Whether the procedure within the ISO and national standards bodies is satisfactory in updating and modifying container standards.

1.04 Remedies which may and should be applied in order to rectify the situation.

- (a) national measures (safeguards), including national legislation and national policy measures.
- (b) International action, inter alia, desirability of an international instrument on container standards.
- (c) Other measures (e.g. regional standards bodies, cooperative agreements between intergovernmental organizations and ISO).

2.0 CONTAINER STANDARDS

2.1 ISO CONTAINER STANDARDS

2.0 ISO freight container standards specify dimensions, structural strength, weight limitations and handling fixtures. Canadian Standard Association's (CSA), Committee on materials handling adopted ISO container standards in 1978. The following is a summary of these standards.

2.1.1 ISO/R-1161 specifies the design and location of corner fittings for the handling of containers (CSA-332.5)

2.1.2 ISO/R-668 Sets series one intercontinental freight container

dimensions at:

- (a) 8'-0" wide,
- (b) 9'-9.3/4 (10'), 19'-10 1/2 (20'),
29'-11 1/2 (30') and 40'-0" long, and
- (c) 8'-0" and 8'-6" high (8'-6" height
excludes 10' length).
- (d) Maximum Gross weights at: 67,200 lb for 40' lengths (30T)
56,000 lb for 30' lengths (25T)
44,800 lb for 20' lengths (20T)
22,400 lb for 10' lengths (10T)
(1 long ton = 2,240 lb)

2.1.3 ISO/R-1496 Specifies container floor stacking, wall, and roof strength, testing requirements. (CSA, B.332.6).

2.2 EXCEPTIONS TO ISO STANDARDS

ISO standards provide basic container design guidelines. The design and construction of ships, highway trailers, handling equipment and transportation infrastructures are based on these fundamental standards.

Freight containers with dimensions and ratings deviating from ISO standards exist. The following table identifies non-standard containers used by shipping services today. The asterisk identifies shipping lines entering Canadian ports by water or surface.

<u>Deviation</u>	<u>Dimensions</u>	<u>Shipping Service</u>
Length	<u>35'</u> x 8' x 8'	Co-ordinate Caribbean Transport Ltd., (United States East Coast - Central America)
	<u>24'</u> x 8' x 8'6"	Foss Alaska Line (United States West Coast - Alaska)

<u>Deviation</u>	<u>Dimensions</u>	<u>Shipping Service</u>
Height	<u>*25'3"</u> x 8' x 8'	: Whitepass & Yukon (Vancouver to Skagway, Alaska)
	<u>24'</u> x 8' x 8'6 1/2"	: Matson Navigation (United States West Coast -Hawaii/Guam)
	<u>35'</u> x 8' x 8'	: Navieras de Puerto Rico (United States East Coast - Puerto Rico)
	<u>*35'</u> x 8' x 8'6"	: Sealand Service (United States East Coast & Gulf - Puerto Rico, Central America, Caribbean, Red Sea/Persian Gulf, UK/ Continent/Scandinavia, Far East, Mediterranean) (United States West Coast - Far East/ Mid East) Surface: United States - Vancouver/ Montreal/ Toronto
	<u>*20'</u> x 8' x <u>9'6"</u>	: Farrell Line (Ex Toronto/Montreal & United States East Coast - West/South and East Africa) (Ex Vancouver & United States West Coast - Australia/New Zealand/Pacific Islands)

<u>Deviation</u>	<u>Dimensions</u>	<u>Shipping Service</u>
	24' x 8' x <u>8'6"</u>	Matson Navigation (United States West Coast - Hawaii/Guam)
	27' x 8' x <u>9'6"</u>	Matson Navigation (United States West Coast - Hawaii/Guam)
	40' x 8' x <u>6'</u>	Constellation Lines (United States East Coast - Mediterranean) (Algeria, Libya, Syria, Egypt, Greece, Lebanon)
	*40' x 8' x <u>9'</u>	ACL (Ex Montreal/Halifax/United States East Coast - Australia/New Zealand)
	*	ACL (Ex Montreal/Halifax/United States East Coast United Kingdom/Continent/ Scandinavia)
		: Combi Line (United States/Gulf - United Kingdom/ Continent/Sweden)
	*	Dart Container Line (Halifax/United States East Coast - United Kingdom/Continent) (feeder services to Scandinavia/Spain Portugal)

Deviation

Dimensions

Shipping Service

- * : Japan Line
(Ex Saint John/United States East Coast -
Japan)
(Hong Kong & Korea/South East Asia feeder
services)
(Ex Vancouver/U.S. West Coast -
Japan/Hong Kong)
- * : Johnson Scanstar
(Ex Vancouver/United States West Coast -
United Kingdom/Continent/Scandinavia)
- * : K Line
(Ex Saint John/United States East Coast -
Japan)
(Hong Kong/Korea/South East Asia feeder
services)
(Ex Vancouver/United States West Coast -
Japan)
(Hong Kong/Korea/South East Asia feeder
services)

<u>Deviation</u>	<u>Dimensions</u>	<u>Shipping Service</u>
		* : Seatrain (Ex Montreal - Red Sea/Persian Gulf) - (Ex United States East Coast - UK/Continent/ Scandinavia, Mediterranean/ Red Sea/Persian Gulf, Central America/ Caribbean/Puerto Rico/ Far East) : Matson Navigation
		* : Sealand
		* : United Arab Shipping Co. (Ex Saint John/United States East Coast - Persian Gulf)
		* : Farrell Lines - AEL (Ex Montreal - India/Bangladesh/Sri Lanka) (United States East Coast - U.K./ Continent/Scandinavia/Mediterranean/ North Africa/ Middle East)

The use of non-ISO containers is justified by special trade conditions or regional/national applications. The majority of container widths conform with United States road regulations (8'-0"). Deviations in container widths are:

- 40' x 9' x 6' (Constellation Line)
- CNR and CPR are currently investigating 8'6" wide x 44' long containers for domestic services, as an alternative to the piggy back transport of conventional trailers.
- Non-stackable freight containers (2.5 metres in width) known as demountable truck bodies are used in Europe. The 2.5 metre width (8'-2.4") conforms generally with world highway regulations.
- Australia uses 2.5 metre wide x 20' long x 9'-6" high containers for shipments to and from Europe and Japan.

(Australian and German railway 2.5 metre wide containers have their corner castings set at 8'-0" in compliance with ISO Standard R-1161).

Information on non-standard weights is not readily available. However, it is known that 24 ton 20 foot containers are entering Canada. These units require special handling and incur rail tariff penalties.

SECTION I

FEARS OF DEVELOPING COUNTRIES

3.0 TECHNOLOGICAL OBSOLESCENCE

The following proposals raised in ISO Technical Committee for Freight Containers, ISO/TC-104, contain potential technological obsolescence implications. They are:

3.0.1 Incorporation of the Sealand 35' long container in the ISO series 1 intercontinental freight container standard, and

3.0.2 Increasing the maximum weight for 20' containers from 20 tons to 24 tons in order to harmonize weight limits with European Rail systems.

It can be seen from section 2.2 of this report that specialized non-ISO containers are used today. They conform to ISO and IMCO structural strengths and ISO container handling requirements. They deviate from ISO standards by:

3.0.3 having greater heights at 9' and 9'-6", and,

3.0.4 having greater widths at 2.5 metres and 102" (=2.6m)

ISO standards recognize the minimum requirements of world transport regulations. Non ISO standard containers are used only where permitted by national legislation and economic factors. The use of non standard containers with ISO type containers in world trade places pressures on ISO to change existing standards. On one hand ISO must recognize current technological developments and on the other it must respect the technological obsolescence fears of developing countries and some Group B countries.

3.1 STABILITY OF ISO CONTAINER STANDARDS

Container systems may be vulnerable to technological obsolescence through rapid changes to fundamental ISO container standards. Sensitive standards include container sizes, weights and handling systems. At the first UNCTAD meeting, Group B assured the group of 77 that ISO procedures are designed to prevent this. Unanimity on this stand appears to be weakening as evidenced by proposals by Sweden and Belgium calling for the establishment of basic long-term ISO guidelines for fundamental container standards.

Sweden addressed this subject at the June 1978 Genoa meeting of ISO/TC-104. It noted that ISO container standards tend to change as a reflection of current practices. Citing the trend for increased container heights as an example, it proposed that ISO undertake a long range planning study to set forth policy on the upper limits for basic

dimensions, load ratings, stacking heights, and performance strengths. The proposal is an alternative solution to guarantees through an international convention.

On the other hand, Belgium appears willing to entertain the idea of a container convention. A letter of 23 May 1978 from Mr. Poppe of the Belgium Ministry of Communications to Mr. Descoteaux, Minister of External Trade indicated his country's concern about the trend towards larger containers and the desire to see a stabilization of existing container dimensions and gross weights. Belgium may not oppose an UNCTAD convention for compulsory adherence to ISO standards. However, a condition of acceptance could be the right of countries to forbid, due to special technical reasons, the entry of some ISO containers. Another qualification is the right to use containers in international trade that do not conform with ISO standards. A convention of this character would not appear to impose any real binding constraint on container dimensional and weight standards.

At the June 1978 TC-104 Genoa meeting, the United Kingdom brought forward a proposal aimed at ensuring greater permanency in fundamental ISO container standards. It was suggested that changes to ISO standards for container ratings (R668) and corner fittings (R-1161) should occur only at the end of five year periods. All other standards would stand for a minimum of five years except when TC-104 agrees to review a standard under exceptional conditions. The United Kingdom's proposal was adopted by TC-104.

Another resolution was initiated by R. Middleton of the ISO Central Secretariat as a response to criticisms of ISO expressed at the 1976 UNCTAD Container Standard meeting. It proposes that the ISO Secretary General will draw to the attention of ISO members and competent bodies of the United Nations any proposals for substantial changes to ISO container standards. Substantial changes are interpreted to be revisions to dimensions and ratings (R-668) and corner fittings (R-1161). This resolution was endorsed by TC-104 for presentation to the September 1978 meeting of the ISO council.

3.2 SEALAND 35 FOOT CONTAINER LENGTH

3.2.1 History

The Sealand 35 foot container was one of the first container systems. It was introduced in 1956. At that time, lengths were limited by Eastern United States road regulations. Today, the Sealand container is used within a closed system in over 56 countries and territories. Between 1958 and 1963, over 40 vessels were converted to full containerships specifically designed to transport only 35 foot containers. This closed system represents an investment in containers, cranes, terminals and container-ships of over one billion dollars.

ISO series 1 freight container standards were established after the advent of the Sealand system. ISO standards did not incorporate the 35 foot length.

In the 1969-70 period, 12 large, modern containerships were ordered. These containerships transport primarily 35 foot containers, along with some 40 foot ISO type containers. The expected service life of these containerships is at least 30 years. Sealand is currently tendering for the purchase of 6 vessels of 1,700 TEU capacity for 1980 delivery. They will have 40 foot cells throughout; plugged so they can accommodate 35 foot sizes.

In light of the failure of recent United States proposals to have ISO adopt the Sealand size, Sealand has decided to phase out 35' containers and use largely 40 foot ISO units. However, the expected useful life of the 35 foot system is at least twenty-five years and this period is required to realize full amortization of costs.

3.2.2 ISO PROPOSALS

The United States proposed to have the 35' length incorporated into ISO standards at the 1976 Washington meeting of TC-104. The subject was reviewed in 1977 at a Paris sub-committee meeting of TC-104. Twelve countries including Canada (via a Canadian proxy to United Kingdom) opposed the standardization of the 35' length. Two countries favoured its inclusion and one country abstained. It was proposed to examine the matter further through a technical report. Seven countries felt that a report was not permissible under ISO

directives. Four countries considered this to be proper and four countries including Canada abstained from voting on the issue. It was decided by TC-104/SC-1 to recommend to TC-104 that the 35' length should not be adopted by ISO.

The plenary session of ISO/TC-104 met in Genoa, Italy in June 1978. Despite considerable lobbying efforts by Sealand seeking support, the meeting resolved not to add the 35' length to the ISO standards. The proposal was defeated in a vote with 13 against (including Canada) and two in favour.

The United States sought to have TC-104 develop a technical report on the 35' container. Technical reports contain further information on subjects to be considered for inclusion as a standards project in a technical committee's work program. In this case, ISO/TC-104 would be obliged to reconsider the 35' container length as a standard again in three years time. TC-104 decided after a vote of 11 for (including Canada), 8 against and 1 abstention to develop a technical report on the 35' container, "depending on a decision by ISO Council that such a procedure is permissible under Clause 6.5 of ISO Directives after a standards proposal has been rejected".

The ISO Central Secretariat decided to circulate the proposal for a technical report for comment by ISO council members. As a result, the issue was not raised at the ISO council meeting held in September, 1978. United States subsequently withdrew its proposal.

Canada was of the view that article 6.5 does not permit the publication of the technical report. This position is supported by Canadian rail and highway interests. Acceptance of the Sealand proposal, likely would have implication for the forthcoming UNCTAD, Container Standards Meeting. Developing countries, aware of Brazil's refusal to permit the entry of Sealand 35' containers, are watching ISO's decision on this matter closely. ISO would be severely criticized by the Group of 77 if there is evidence that it is being influenced by the lobbying action of a large multinational company. Canada, conscious of the likelihood of such a turn of events has not support the Sealand proposal.

Although the use of ISO standards are strictly voluntary, Sealand's main preoccupation in having ISO accept the 35 foot length is due to the recent tendency in some developing nations to adopt ISO standards as mandatory governmental decrees as witness the current Brazil problem.

3.2.3 SEALAND/BRAZIL ISSUE

In August 1977 Sealand announced plans to start a 35' container service from United States, Atlantic, Gulf and Pacific Coast, to Brazil. In September, 1977 it proposed a fortnightly service from the United States for transshipment to Brazil and Argentina through Puerto Rico. Three C-4 type ships were to be used to carry 600 x 35 ft. containers. In February 1978 Sealand proposed before the CIDETTI

(Brazilian Interministerial Commission for the Implmentation of Intermodal Transport) to operate three self unloading container ships between the United States and Brazilian ports of Rio de Janeiro, Salvador, Santos and Porangua. Sealand's proposal included the purchase of truck chassis manufactured in Brazil. As in all parts of the world, Sealand's operations would be self contained, thus obviating any need for Brazil to invest in container handling facilities. CIDETTI formally decided in February 24, 1978 to refuse entry into Brazil of the Sealand 35' containers in that they do not conform to ISO Freight Container Standards.

Initiatives to ban the 35' container came from a December 1977, meeting of Brazil's container transport interests, under the auspices of the Brazilian Chamber of Containers (Câmara Brasileira de Containers-BCC). Although BCC is a private organization, it works closely with the government to develop container infrastructures.

The Brazilian government has enacted legislation governing the transport of unitized cargoes and multimodal transport. Decree 80.145 of August 15, 1977 rendered regulatory provisions to law 6.288 of November 11, 1975 commonly known as the "container law." Article 4, paragraph 1 reads:

"Until such time that national standardization is promoted by the National Institute of Metrology, Normalization and Industrial Quality -

(INMETRO) of the Ministry of Industry & Commerce's Bureau of Industrial Technology, the standards to be applied are those edited by the International Organization for Standardization (ISO)."

This action means that containers not conforming to ISO specifications or dimensions are not considered to be containers and they are ineligible "to receive incentives and other favours prescribed by law."

Brazil has not yet adopted national container standards. The Brazilian Association of Technical Norms (ABNT) is reviewing the adoption of existing ISO standards for ratification by INMETRO.

The December 1977 BCC meeting recommended a legal amendment that:

- (a) 80.145 should recognize ISO freight container standards as they existed on August 15, 1977.
- (b) any other changes to ISO standards should not be accepted unless they are subject to approval by ABNT.

These recommendations restrict the use of not only Sealand containers, but containers with heights exceeding the ISO 8'-6" standard.

Although Brazil professes to be seeking stability in world container standards, its container law may be motivated by secondary issues.

Sealand's problems may rest in the overtonnaging fears of those U.S. and Brazilian shipping lines currently operating within bilateral pool agreements. Another roadblock is Brazil's Superintendancy of Merchant Marine (SUNAMAM) objection to Sealand's plans to tranship Brazilian cargoes via Puerto Rico. The Inter-American Freight Conference (IAFC) has agreed that Sealand's method of operation including transshipment through Puerto Rico and/or the U.S. Virgin Islands is acceptable to IAFC and all pool agreements. The IAFC resolution has been approved by the U.S. Federal Maritime Commission.

SUNAMAM may be concerned that its approval would undermine existing pool systems and Brazil's maritime aspirations in the areas of its overseas trade. Although Brazil agrees that the issue is essentially a conference matter, the transshipment question has strained the 1971 U.S./Brazil equal access agreement since U.S. authorities consider Brazil's actions to be an intervention in matters which are solely a United States concern.

To enter the Brazil trade, Sealand must become a shipping pool member. The U.S. carriers in the trade are somewhat disturbed about direct U.S. Government support of Sealand's proposal for transshipping since this method of operating provides Sealand with advantages they do not share. Nevertheless, in July 1978, Sealand was accepted in two pooling agreements (9847 and 10028) for trade between U.S. East Coast and Brazil (North and Southbound).

Under the terms of the agreement, still subject to U.S./Brazil Government approval, Sealand cannot begin operation until a cargo sharing agreement for this trade (\$200,000,000 annually) is reached with Moore/McCormack.

Finally in August 1978, SUNAMAM approved Sealand's admission into Cargo Revenue Pool Agreement 9847.5 for southbound movements of goods. This action was taken following Sealand agreeing to stop litigation initiated in the United States and reaching an agreement in July 1968 with U.S. flag Moore/McCormack, and Brazil's Netumar and Lloyd Brasileiro. A condition of the agreement is that Sealand will use 40 foot containers and transport goods directly without transshipment at Puerto Rico.

3.3 Increase in Gross Weights

In 1977 a TC-104 Working Group examined a German proposal to increase the maximum gross weight of 20' containers to 24 long tons and 30' containers to 30 long tons. Existing ISO standards are 20 long tons for 20' units and 25 long tons for 30' containers. It is understood that this initiative was based on the desire of European rail interests to bring container weights into line with their carrying capacities.

Canada voted against this proposal with the majority of other countries (11 against, 2 for and 1 abstention) at the June 1977 Paris meeting of TC-104/SC-1. The proposal was defeated again at the plenary session of TC-104 in Genoa, June 1978 (12 opposed, 2 in favour, 1 abstention). Countries favouring the proposal were Germany and the Netherlands.

Approximately 6% of maritime traffic load 24 tons in 20 foot containers. Although Canadian railways have accepted these units with some reluctance, the SNCF and British Railways normally do not accept them.

The maximum gross weight carried by a Canadian rail car is 200,000 lbs. Existing ISO standards permit carriage of 4 x 20 foot units (179,200 lbs). The 24-ton proposal would not permit this configuration due to excessive weights (215,040 lb.). Canadian railways oppose the 24-ton proposal in that it would give use to the need for costly equipment modifications.

Similar restrictions exist for Canadian road operations. Two 24-ton units cannot be hauled on a highway trailer due to road weight limits. A change to 24 t. would require trailers to carry one container per load versus two as is the practice today.

3.4 Trend in Increased Container Heights

Non-standard freight containers with heights of 9'-6" are entering Canadian ports and being manufactured in Canada. This height exceeds the ISO standard's 8'-6" maximum. A number of European countries are concerned about the impact of this trend due to height limitations in existing bridges and tunnels.

Although there is currently no ISO proposal to increase container heights to 9' or 9'6", the existence of these sizes will undoubtedly make it necessary for TC-104 to consider the question at future meetings.

Canadian highway bridges with standard 13'-6" heights limit the movement of 9'-6" high containers on conventional road vehicles with average tailgate heights of 4'-3". High containers must be moved on gooseneck or low-bed trailers. The Hunter study* notes that these containers are being moved by special permits. The study found that low bed equipment is not common, therefore, these movements increase existing Canadian distribution costs.

3.5 Increase in Container Widths

There are no proposals in ISO to increase container widths. However, as shown in section 2.2, wider container systems exist in Canada and in some other countries. The majority of countries restrict

* Reference #1

highway trailer widths to 2.5 metres. Canadian regulations permit up to 2.6 m. (102.4").

Any change to container widths will not occur for some time due to present investments in cellular ships. United States regulatory restrictions may change. Adoption of the 102" vehicle width has been recommended by Federal Highway Administration studies. However, current safety proposals before Congress seek to restrict highway trailer sizes. One proposal will reduce trailer lengths from 45' to 40'.

The Hunter study* notes that Canadian domestic containers are wider and longer than ISO units. ISO freight containers do not have sufficient cube capacity to compete with conventional domestic transport systems. An example of the situation is the CNR decision to phase out container operations in favour of highway trailers on railways (piggyback).

3.6 Comments

Up till now, ISO has effectively moderated all proposals for substantial changes to basic ISO freight container standards. It should be noted, however, that the Hunter study* shows that certain changes to ISO container standards could benefit Canada. Action by UNCTAD to restrict the inherent flexibility in application of ISO standards may have a detrimental effect on the future development of containerization in Canada.

* Reference #1

There are adequate checks and balances in ISO institutional mechanisms and international trade to protect the technological obsolescence fears of developing countries. As pointed out by Sweden, ISO freight container standards tend to reflect the developments in non-standard containers. These container systems are introduced wherever national laws and economic conditions permit. Although they deviate from ISO standards, no fundamental changes have been made to the basic interface with container handling and transport infrastructures.

The current trend to change different aspects of the containers size and weight has positive and negative effects on Canada. On one hand the increase of heights and weights impinges on the upper limits of the Canadian transport infrastructure. On the other hand, an international instrument freezing container dimensions at present ISO standards would restrict benefits that can derive from increasing container cube capacity. Such modification could make the use of containers more competitive with existing road transport vehicles. Flexibility in container dimensions and weight capacity is critical to the future development of an integrated domestic and international container system.

4.0 Suitability of Containerization for Developing Countries

The introduction of containerization in developing countries is progressing at different rates throughout the world. Developed economy countries dominate the ownership of container vessels and containers. The United States and United Kingdom own over 40% of containers in use today.

Containerization among developing countries is most advanced in the Far East and Asia. Containership berths and cranes are installed in Hong Kong, Singapore, the Phillipines, Indonesia and India. Plans are being implemented for the expansion of existing container-berth and handling facilities in South Korea, Taiwan, and Malaysia.

In the Mid-East, there are container berth and crane facilities in Saudi Arabia. New container facilities are planned between 1978 to 1985 for Iran, Iraq, Jordan and Kuwait. Containers are handled with ships' gear in Jordan and the United Arab Emirates.

In the Caribbean and Central America, container berths and cranes are found in Jamaica, Honduras, El Salvador, Haiti, Netherlands, West Indies, Puerto Rico and Trinidad. Container handling with ships' gear

is used in the ports of Barbados, Guatemala, Bahamas and Panama. Investments in new facilities are scheduled for Barbados, Haiti, Dominican Republic, and Trinidad.

South America has container facilities in Argentina and Brazil. Both countries are investing in new cranes and terminal facilities. Chile, Colombia and Peru handle containers with ships' cranes.

The majority of African countries handle containers with ships' gear. These countries include Benin, Cameroun, Ivory Coast, Nigeria, Sierra Leone, Kenya and Mozambique. New container terminals are being built in Cameroun and Nigeria.

In 1976, nineteen per cent of world containerized port traffic passed through developing countries. It can be readily seen, from the foregoing summary of port facilities, why two-thirds of this traffic originated or terminated in the Far East.

Another indication of the importance placed on containerization by developing countries is the recent entry of Brazil, India and Thailand into container manufacturing. These countries join Hong Kong and Taiwan which have been producing containers for sometime.

Despite the general acceptance of containerization by developing countries, a number of impediments block future development, including problems with existing container designs, shipping services, and transport infrastructures.

4.1-ISO Container Designs

ISO containers are designed primarily to handle secondary manufactured goods. They are not generally suitable for the shipment of bulk primary products of developing countries. Further research is needed to resolve problems such as sweating in containers and product contamination.

Notwithstanding the need for developing countries to become involved they have not participated actively in work on freight container design and standards carried out in ISO/TC-104. Only India, Cuba and Egypt have attended TC-104 meetings. Developing countries participating by correspondence are Iran, Malaysia, Morocco.

4.2 Shipping Services

The nature of trade between developed and developing countries and consequently imbalance in use of containers may make containerization uneconomical for trade with developing countries. Containers bringing high value products to a developing country are not always suitable for the export of the developing country's low value primary products. As a result containers must be returned empty.

A secondary factor is the substantial developing country investment in conventional break bulk ships and a reluctance to switch over to container ships until this investment is amortized. While they naturally fear the loss of national cargoes to the containerized services from developed countries, their merchant marine concerns are often safeguarded by national flag cargo preference measures.

4.3 Interface with National Transport Infrastructures

In the initial stages of containerization, the primary objective was to facilitate the port to port movement of goods and ships. Today, containerization entails intermodalism and a need for the integration of water and surface transport infrastructures. Canada, like the developing countries, is faced with a number of economic and technical anomalies.

A number of major surface transport infrastructure improvements are under way throughout the world. The Trans-Africa highway project includes five new road systems, affecting over forty countries. A similar project is being developed for a highway system from Europe to the mid-East. In South America, Brazil is spending \$114 million to improve 1500 kilometres of roads.

All of these projects will consume scarce resources. It is with some justification that developing countries wish to ensure that changes to ISO container standards will not make these investments obsolete.

Some surface transport infrastructures in developing countries cannot carry ISO containers. This is the case in India due to maximum 7'-6" wide road restriction and 1 metre gauge rail system. At this point in time, containers are carried inland only the India's wide gauge rail system.

As is the case in Canada and India, larger carrying capacities of national transport systems inhibit the inland movement of ISO containers due to economic factors (cube, weight, etc.). The significance of this factor was noted by Cuba at the November 30, 1977, ICHCA Container Conference that -

"Economic repercussions can be positive if the technical specifications of containers are based on rational technological criteria and adapt to the conditions and interests of the various countries which have to adopt them; they will be negative if these standards necessitate investments which do not correspond with the practical infrastructure, or if they imply exclusivity in commercial exchange in specific areas and trans-national monopolies which tend to promote the technological dependence of developing countries in this field."

SECTION II

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO)

5.0 Developing Country Criticism of ISO

The need for an international instrument on container standards depends largely on the confidence of developing countries in ISO. They are concerned that their lack of participation in ISO/TC-104 will hinder the development of container designs suitable for their shipping needs.

Focussing on this theme, a resolution of the Group of 77 at the 1976 UNCTAD Ad Hoc Group on Container Standards inferred that:

- 5.01 there is inadequate participation of LDC's in ISO work,
- 5.02 the needs of LDC's to ship their commodities have not been adequately considered by ISO;
- 5.03 national standards bodies in LDC's are non-existent or lack sufficient experience due to a lack of trained personnel;
- 5.04 there is a need to ensure that no detrimental influences are exerted on ISO's work by non-government sources (i.e. lobby groups)

5.05 there is a need for closer liaison between ISO and UNCTAD's Committee on Shipping.

6.1 Organization of ISO's Work

6.1.1 Committees

ISO standards writing work programs are developed through the activities of the General Assembly, ISO Council, and Technical Committees assisted by the Central Secretariat and number of Council Committees.

- (a) The General Assembly meets at least once every three years. It elects a president who presides over the General Assembly and ISO Council. It elects periodically member countries to serve on the 14-member ISO Council.
- (b) The ISO Council is the administrative organ of ISO. It is assisted by a Central Secretariat and several committees, such as EXCO, PLACO, STACO, CERTICO, DEVCO, Technical Division, etc.
- (c) The Central Secretariat acts as secretariat to the ISO Council and all committees responsible to the Council. It is the main administration body of ISO. ISO conducts its work through a secretariat system. The Council appoints the secretary general for the central secretariat (Mr. O. Sturen).

- (d) EXCO: Executive Committee consists of the vice president of ISO and 3 to 7 elected representatives from the General Assembly. It is a permanent committee undertaking administrative assignments from the Council.

- (e) PLACO Planning Committee advises the Council on matters related to the co-ordination and planning of ISO technical work by -
reviewing the scopes of technical committees - reviewing proposals for new ISO work - recommending action to Council for the creation or dissolution of technical committees.

- (f) Technical Division (TD) assist the Council and co-ordinate the work of technical committees (TC) in different fields; assess needs for the development of standards and advise the Council on the programming, planning of ISO's TC activities. Four technical divisions are: mechanical engineering (TD-1), agriculture (TD-2), Building (TD-3), and distribution of goods (TD-4).

TD-4 operates through a secretariat. Its membership is open to all interested countries. Inter-governmental organizations may attend meetings as affiliate members. Its planning is closely co-ordinated with PLACO. Recent developments have broadened the technical planning role of TD's in favour of long-term organizational planning. Future changes may incorporate TD's into Sub-committees of PLACO.

- (g) STACO, Standing Committee for the study of principles of standardization is concerned with methods to identify standardization needs, classification of type of standards, principles for preparing standards and method of education in standardization. Membership is open to all interested countries.
- (h) CERTICO, Committee on Certification is concerned with means of securing international acceptance of national and regional certification systems and marks. It promotes the acceptance of the ISO mark for the certification of products conforming to standards. Membership is open to all interested countries.
- (i) DEVCO, Development Committee is concerned with the study of developing countries' standardization needs and the means to meet these needs. Its membership is open to all interested countries.
- (j) INFECO Standing Committee for the Study of Scientific and Technical Information Standardization assists the development of information centers on standardization. Its membership is open to interested countries.

(k) Technical Committees conduct work necessary to prepare a standard.

This may be done by a technical committee (TC), an associated sub-committee (SC), or a Working Group (WG). Each committee co-ordinates its work through a secretariat maintained by one of the member countries. Technical committees are created by the ISO Council. SC and WG are created by their TC.

Any country may participate in the work either as a Participating member (P) or a non-voting observer (O).

6.1.2 Work Programs

The ISO constitution enables any country to initiate proposals for new standardization projects, if sufficient interest is indicated. A proposal for undertaking the preparation of an International Standard in a new field may be brought forth by one or more member bodies, by a technical committee, by a technical division, by a Council committee, by the Secretary General or by an organization outside ISO. It will be studied if supported by five ISO member countries.

A proposal is channelled through the ISO Central Secretariat to the Secretary General of ISO. In consultation with the PLACO chairman, he determines if the project is within the scope of any technical committee. If the subject is considered as being closely related to the scope of an existing technical committee, the Secretary - General in consultation with the technical committee secretariat in question

communicates the proposal to PLACO, which advises Council whether or not the subject should be taken up by the technical committee in question. Council's concurrence is communicated immediately to the originator, to the secretariat of the technical committee in question and to all member bodies.

If the project does not fall into the scope of existing technical committees (TC), Council may establish a new TC. Before the creation of a new technical committee, consultations will normally be initiated with those international organizations which can make an effective contribution to the implementation of International Standards in the field of competence of that technical committee, in order to seek their full support for the proposed programme.

If the subject is not closely related to the scope of an existing technical committee, the Secretary General solicits the views of all member bodies. The Central Secretariat then prepares a report in consultation with the originator of the proposal and submits it to PLACO. The recommendation of PLACO is then submitted to Council. Council's decision is communicated immediately to all member bodies.

Participating members of existing technical committees (e.g. ISO/TC-104 Containers) control work programs. Work Programs are established in co-operation with technical division (e.g. TD-4) as well as, requests for International Standards initiated by sources

outside the technical committee (i.e., other technical committees, technical divisions, Council committees, organizations outside ISO).

The work program must be within the TC's scope and agreed to by the Council. Each item included in a work program is voted on by correspondence to identify member countries wishing to participate in each activity. The work program after review by a plenary meeting of the technical committee, is sent to the Central Secretariat. It is then circulated to the relevant technical divisions.

Selection of work program items are subject to close scrutiny in accordance with the policy objectives and resources of ISO. Priorities are governed by economic, social and technical considerations. The social and economic long-term benefits of an International Standard must justify the total cost of developing, adopting and maintaining the standard. Technical considerations must demonstrate that the proposed standard is feasible, timely and that it is not likely to be made obsolete quickly by advancing technology or to inhibit benefits to users.

The technical committee determines priorities for work items. Priorities are decided upon by the majority vote of the members of the technical committee or sub-committee (on delegation of this authority by the technical committee). Proposals for priorities may come from one or more member bodies, another technical committee, technical division, a Council committee, the Secretary-General or an organization

outside ISO. The allocation of priority can be the subject of Council decision.

In deciding on priorities the following general criteria shall be applied:

- importance for ISO as basic and/or wide-ranging standard;
- importance for other ISO technical committees;
- importance for international exchange of goods and services;
- importance for industry;
- importance for the needs of the international scientific community;
- importance for intergovernmental organizations (ECE reference to standards);
- importance for application by developing countries;
- importance for consumer interests;
- importance for health and safety;
- importance as basis for certification schemes.

Although any one of these criteria might be important enough to allocate a priority, the application of several of the criteria would indicate a higher need.

All priority items are registered with PLACO which monitors progress. PLACO or the relevant technical division, is informed of conflicts arising when priorities requested by sources outside the technical committee have been refused.

The allocation of priority to work item means that the said item receives special attention at all stages in the ISO procedure for the preparation of an International Standard. Target dates are set.

Participating (P) members of a technical committee and sub-committees have an obligation to take an active part in the work of the technical committee or sub-committee and to attend meetings whenever possible.

A technical committee or sub-committee secretariat notifies the Secretary-General if any P-member of the technical committee or sub-committee persistently fails to make a contribution to meetings, either by direct participation or by proxy voting arrangement. The Secretary-General will inquire whether they wish to continue as P-members or have their status changed to that of an observer (O) member.

If a P-member of a technical committee fails to vote on a Draft International Standard at the technical committee or sub-committee stage, the secretariat will inform the Secretary-General of this fact.

The Secretary-General will notify Council of any continuing failure of a P-member to fulfil its obligation to vote. In such circumstances, Council has the authority to reclassify the P-member as an O-member for a period of twelve months.

If a member body has an interest in one field of a technical committee which has a particularly broad scope, without having interest or competence in all of the work items which may be dealt with by that committee, it may register as a P-member of that committee, inform the technical committee secretariat and the Central Secretariat of this fact and notify them that it will abstain from participation in the discussions and from voting at all stages on specific items. Such a position, established and recorded by the technical committee, shall entitle the P-member concerned to be absent from meetings and to abstain from voting on the relevant draft International Standards or draft technical reports.

6.1.3 Meetings

Although the majority of work is done by correspondence, meetings are held regularly in member countries. The selection of the meeting place follows upon an invitation from a potential host country and agreement between the Secretariat of the technical committee and the ISO Central Secretariat.

A meeting is called by the Central Secretariat when the secretariat concerned considers this necessary for the proper progress of the work or whenever a meeting is requested by more than one-third of the P-members. The secretariat is responsible for all arrangements for meetings, assisted by the host member body.

Any member body wishing to host a meeting of an ISO technical committee or sub-committee must first ascertain that there are no restrictions imposed by its country to the entry of representatives of all existing P-members for the purpose of attending the meeting. Information is submitted to the Secretary-General who, after consultation with the P-members involved, determines whether or not the meeting will be held in the country issuing the invitation.

P-members are given 4 month's notice of a meeting. They must inform the secretariat one month before the meeting whether they will attend. Only delegates or observers officially nominated by the member bodies and the representatives of other technical committees and international organizations in liaison may attend meetings. Each P-member has the right to be represented at the meeting by one or more delegates, but has only one vote. O-members, other technical committees and international organizations in liaison may nominate observers having the right to attend meetings and to participate in the discussions. They do not have the right to vote.

The Secretary-General or his representative has the privilege of taking part in all meetings. He has no vote. Governmental authorities are encouraged to nominate representatives to join national delegations to ISO meetings. When circumstances prevent representation, a P-member may arrange for another member attending the meeting to present its views in the course of the meeting. Any proxy arrangements must be notified to the secretariat in advance of the meeting. No member body may represent more than one other member body.

6.2 ISO Standards-Writing Procedures

Development of an ISO standard follows several precise steps after the subject is included in the technical committee's work program. Study of an item proceeds to the stage where a working draft proposal is completed. A copy of the draft is submitted to the Central Secretariat for registration as a draft proposal (DP).

The secretariat of the technical committee or sub-committee responsible for the draft proposal must ensure that it fully embodies the decisions reached by majority vote either at meetings or through postal inquiries. If a properly constituted editing committee has decided upon the text of a draft proposal, the secretariat may not alter that text without once again consulting the editing committee.

The technical committee or sub-committee secretariat circulates the draft proposal, together with information on sources used as a basis for it (i.e. the references of the documents serving as a basis for the study), the background and aim of the proposal, an outline of the technical justification of the draft proposal and a summary of the technological data on which it is based. The extent of liaison with other interested technical committees, sub-committees or international organizations is stated.

International organizations which can make an effective contribution to the implementation of International Standards in a given area are expressly invited to comment on all relevant draft proposals.

If a draft proposal is dealt with by correspondence, P-members of technical committees and, international organizations are asked to submit their comments (and P-members their votes in the case of a letter ballot). Comments (or votes) are sent to the secretariat of the technical committee or subcommittee within the period specified. Comments are summarized by the Secretariat and distributed. The secretariat also distributes a report clearly indicating action taken as a result of comments received, and, as appropriate, it circulates any further draft proposals.

When substantial support is obtained in a technical committee, the secretariat submits the draft proposal to the Central Secretariat for registration as a draft International Standard (DIS) and circulation to all ISO member bodies for approval.

ISO member bodies may reply in one of the following ways:

- (a) Approval of the technical content of the draft International Standard as presented (editorial or other comments may be appended).
- (b) Disapproval of the draft international Standard for technical reasons to be stated (acceptance of these technical objections will change this vote to approval after reference to and agreement of the member body concerned).
- (c) Abstention.
- (d) P-members have an obligation to vote.

The Central Secretariat makes a two-part count. First the votes of P-members of the technical committee are counted; if the majority of the P-members vote approval, with or without comments, the draft is considered to have been adopted by the technical committee. A P-member which has notified that it will abstain from participation in the discussions and from voting at all stages on specific work items is not counted as a P-member when counting votes for drafts relating to such items.

If the draft is adopted by the technical committee, a second count is taken of all votes (including those of P-members) and, if 75 percent of the votes cast approve the draft, this constitutes approval by member bodies. (For this purpose abstention is not counted as a vote).

The Secretary-General will make a special enquiry into cases where three or more negative votes have been cast, and will consult, when appropriate, the interested parties. A full report of the conclusions reached and action taken will be presented to Council by the Secretary-General when the draft International Standard is submitted for Council voting.

The Central Secretariat prepares a final report and submits it with the text of the draft International Standard to Council which then decides whether or not the DIS can be accepted for publication as an ISO standard.

In accepting a draft International Standard for publication, Council members act without regard to the individual viewpoint of the member body they represent in respect of technical considerations. In recording their acceptance they signify that the draft International Standard in question has been subjected to the proper procedures and does not diverge from any other accepted International Standard.

Council members consider in particular whether objections raised by

the member bodies inside and outside the technical committee have been given adequate consideration by the technical committee. If, however, a Council member considers that the publication of an International Standard would be contrary to the accepted policy of ISO or would not be in the interest of international standardization, either in view of the existence of an international standard formulated by another organization on the same subject, or that publication of the International Standard would adversely affect the prestige of ISO or that the draft International Standard diverges from an already existing International Standard, a negative vote may be recorded. In this case the Council member must clearly set out the reasons for recording the negative vote. In such voting, the Council members act in the capacity of guardians of the rights and privileges of all member bodies.

ISO Council decisions are taken by majority vote of members present. Ten members constitute a quorum. Voting by proxy is not allowed. The president votes only on divided issues.

7.0 Participation of Developing Countries in ISO

ISO consists of 65 member countries and 19 correspondent members. Correspondent members participate in technical committee work as observers. Developing countries represent 54% of ISO member bodies and the majority of correspondent members.

A survey of ISO members from developing countries indicates that the highest proportion of developing country members from the Mid-East, Asia, and South America. Out of 13 Mid-East countries 9 are members of ISO. Thirteen countries out of 17 in Asia are represented in ISO. In South America only three countries are not members of ISO. They are Argentina, Uruguay and Paraguay.

ISO representation for the Caribbean and Central America and Africa is limited. Out of 23 countries only 4 are in ISO (Cuba, Haiti, Jamaica, Barbados). Similarly, only 17 of Africa's 46 countries are members of ISO.

7.1 Initiatives to Improve Developing Country Participation in ISO

Participation of developing countries in ISO standardization programs is limited by financial, educational and political constraints. Such impediments are regarded as sufficiently serious to restrict their ability to join ISO, attend or host technical meetings, and contribute to discussions within ISO technical committees.

In some countries, national standards bodies do not exist or lack support from industry and/or government. ISO country annual membership fee is graduated on an ability-to-pay basis. Fees range from 7,000 Swiss francs (\$5,000) to 700,000 Swiss francs (\$500,000). Canada pays ISO \$276,000. Nevertheless, the membership can be a problem. Argentina, for example, lost its ISO membership because it did not pay the ISO fee.

Developing countries, in general, find it difficult to participate in ISO's work because of the educational and financial constraints. In an effort to ease this situation, ISO endeavours to hold meetings, whenever possible, in developing countries. For example, ISO/TC-104 will meet in India in 1984. Political differences between some developing countries, which give rise to entry restrictions to their territories of nationals of certain countries can create difficulties for ISO in selecting host countries. As stated previously, the host country is required to permit attendance by all ISO members.

As an initiative to support the national standards bodies of developing countries, the June 23-24, 1977 DEVCO meeting adopted a Development Program to this end. The plan contains a number of initiatives,

- (a) the appointment of ISO regional liaison officers to work with national and regional standards bodies, and
- (b) action to raise the recognition of ISO with a view to making ISO standards known and used. This includes seminar programs and cooperative agreements with Intergovernmental Organizations.

7.2 Regional Liaison Officers

In the first part of 1978 the ISO Council appointed regional liaison officers for: Africa, excluding Arab countries, (Dr. A. Banjo - Nigeria); Caribbean, (Dr. A.S. Henry - Jamaica); South Asia and Iran, (Dr. A.K. Gupta - India); Arab Region, Cyprus & Turkey, (Dr. M. Salma - Egypt); East & South East Asia, (C. Sangriiji - Thailand). ISO was unsuccessful in recruiting a liaison officer for South America. These officers met in Geneva in September, 1978 in conjunction with an ISO Seminar entitled "To Make Standards Known and Used".

ISO is seeking to strengthen its links with regional standards bodies. Established regional standards bodies for developing countries are the African Regional Standards Organization (ARSO), Asian Standard Advisory Committee (ASAC), Arab Organization for Standardization & Metrology (ASMO), Pan American Standards Commission (COPANT).

ISO does not favour the direct participation of regional standards bodies in its work. It does, however, recognize the desirability of regional co-operation. One way to ensure wider participation of developing countries is to have ISO member countries that belong to a regional standards body represent several countries at ISO Technical Committee Meetings.

ISO wishes to promote further co-operation and co-ordination between the activities of ISO and regional standards bodies. Initial efforts were based on guidelines of Council Resolution 5(1972) which requires the regional standards organization to:

- have at least 50 per cent of its members belong to ISO;
- accept ISO standards as the basis for harmonizing its members standards;
- invite ISO to attend general meetings.

In return, ISO provides technical information.

While this resolution led to an increase of information exchange, particularly with European organizations, it did not strengthen the participation of developing countries in ISO work. In light of this result, ISO is now focussing on the expanded use of regional liaison officers.

7.3 Assistance to Developing Countries of ISO

ISO standards are mainly high technology performance standards. Developing countries, not as technologically advanced, prefer product standards that can be put to use by a work force that is not highly skilled. This position is reflected in an April 30, 1976 letter to ISO from COPANT which states that the reasons preventing South America's active participation in ISO are:

- (a) the marked differences in technological development compared with the leading standards institutions in ISO,
- (b) high subscription fees of ISO,
- (c) high cost of maintaining ISO secretariat system,
- (d) the long time required to create an ISO standard which cannot be afforded by requirements of developing countries for their technological and industrial development.

The ISO Development Committee, DEVCO, through a survey identified the most important needs for assistance to be:

- (a) consultants in the field of quality control, certification, administration and standardization,
- (b) general consultants for the formation of a standards organization,
- (c) training courses on standardization subjects, and
- (d) translation of ISO standards in additional languages.

Another ISO effort to support developing countries is focussed on enhancing its image among intergovernmental organizations with a view to gaining support for the use of ISO standards.

Following the 1976 UNCTAD Ad Hoc container meeting, ISO proposed that an international seminar on standardization of containers should be jointly sponsored by ISO, IMCO, UNCTAD and the United Nations

Regional Economic Commissions. Favourable responses were received from the Regional Commissions of Africa (ECA), and Asia and the Pacific (ESCAP). ISO is currently seeking financial assistance from the United Nations Industrial Development Organization (UNIDO) for sponsorship of general training seminars on standardization for developing countries.

At the same time, the ISO Central Secretariat is discussing the establishment of formal co-operative agreements with intergovernmental organizations. The first draft agreement included a seminar and training sponsorship request to UNIDO. The draft is now being reviewed. The ISO Council encouraged by UNIDO's attitude requested the ISO Central Secretariat to establish similar agreements with the Economic Commission for Europe, International Telecommunications UNCAN, UNCTAD, UNIDO World Health Organization, and World Intellectual Properties Organization.

Further assistance for seminar programs is being sought by ISO from Swedish and Danish International Development agencies. Canadian assistance to developing countries is administered by the Canadian International Development Agency.

7.4 Assistance from Canada

United Nations aid can be classified into three categories: independently-administered programs, special purpose funds, emergency relief operations.

All activities included in these categories except the UNCTAD are financed totally or in part by voluntary contributions. UNCTAD is financed almost entirely through the regular budget of the United Nations. Canada has been one of the major supporters of these multilateral voluntarily-financed activities.

The United Nations includes seven major independently-administered programs, six of which deal with social and economic problems or provide relief to the destitute. The seventh provides training and research in multilateral organizational affairs. Each operates like a separate organization with its own budget and secretariat. The six programs to which Canada makes voluntary contributions are: UNDP (Development Program), UNHCR (for refugees), UNICEF (for children), UNRWA (for Palestine refugees), UNITAR (Institute for Training and Research), and UNCTAD.

Canada helps defray the costs of the UNCTAD Secretariat through assessment under the regular budget of the United Nations. In the 1978/1979 fiscal year CIDA granted \$600,000. to the UNCTAD-GATT International Trade Center. The only organization to which Canada has not made voluntary contributions is the United Nations Industrial Development Organization (UNIDO). Canada, contributes to UNIDO's development assistance programs indirectly through UNDP.

The United Nations Development Program (UNDP) is the world's largest multilateral source of technical and pre-investment assistance for economic and social development in low-income countries. The UNDP is financed by voluntary contributions, and the countries that receive the assistance contribute local "counterpart" costs of the development projects. Approved UNDP projects are carried out by "executing agencies" which include specialized agencies (except the GATT), UNIDO and the United Nations itself. The UNDP does not execute any of its projects, but it coordinates them and provides funds. Canada has been a major supporter of the UNDP programs from their inception, and its contribution in 1978-79 was \$39 million.

A CIDA project in the field of standardization assistance is the training of personnel for the Jamaican Bureau of Standards. This project initiated in 1975 is now nearing completion.

The Canadian International Development Agency is assisting developing countries to improve road, rail and water infrastructures. Projects range from engineering studies to the building of bridges, roads, rail equipment and port facilities.

Countries receiving Canadian aid for the development of systems in Central America and the Caribbean are Belgium, Cuba, Jamaica, Nicaragua, Trinidad & Tobago. In South America they are Bolivia, Guyana and Paraguay. South East Asia countries are Indonesia,

Thailand, & Nepal. African countries are Zambia, Tanzania, Lesotho, Kenya, Sudan, Ghana, Cameroun, & Botswana.

Canada is providing assistance for the establishment of rail systems to El Salvador (Central America); Peru (South America); Bangladesh, India, Malaysia, Mali, and Pakistan (South East Asia); Zambia, Niger, Tanzania, Botswana, Congo, Ghana, Kenya, Mauritania (Africa).

Water infrastructure aid for the development of port facilities is being provided to Barbados, Dominica, El Salvador, St-Vincent, Trinidad and Tobago in Central America and Caribbean; Singapore in South East Asia; and Monserrat and Nigeria in Africa.

8.0 Impact of ISO Standards

ISO Council decided in 1976 to change ISO recommendations to standards. ISO, a non-governmental organization, has no authority to impose its standards. However, a trend exists to promote world acceptance of ISO standards through initiatives of governments and intergovernmental organizations. Three intergovernmental decisions have influenced the international acceptance of ISO container standards. They are the IMCO Container Safety Convention, the recommendations of the ECE committee of Government Officials for Standardization Policies, and the GATT Code on Standardization.

The IMCO Container Safety Convention (CSC) details safety performance and strength characteristics necessary for freight containers. A plaque placed on the container indicates that the container meets CSC requirements. Countries party to the CSC convention permit CSC containers to enter their ports with minimum of delay. Containers without plaques may be delayed or barred entry. The Convention's requirements parallel ISO standards.

The ECE meeting of Governmental Officials for Standardization Policies, in collaboration with ISO, IEC, and regional standards bodies has developed principles intended to enhance technological co-operation and harmonization of international standards with a view to removing technical barriers to international trade.

The ECE recommendations recognize that the increasing number of sources of standards are causing problems. ECE governments have been requested to designate a single focal point to co-ordinate governmental standardization policies and to adopt, wherever possible, existing standards of recognized international standards bodies such as ISO. They are urged to use references to the existing national, regional, or international standards in legislation. ISO strongly supports the principle of reference to standards.

The GATT code on standardization is similar to ECE Standardization policies. The Code calls upon nations to adopt international standards for products or to explain why they cannot do this. The GATT code is aimed at the elimination of national standards that discriminate against the import of foreign products.

In light of the GATT code, ISO is endeavouring to ensure that ISO standards accepted by a country have been thoroughly reviewed by its national standards-writing bodies. The ISO Central Secretariat requests every country to respond to a questionnaire on the suitability of draft international standards for national implementation when it accepts an ISO standard (partially or totally).

These recent trends have raised the importance of international standards and their impact on international trade. In the case of containers, the ECE and GATT standardization policies might be used by developing countries to support their demands for the elimination of non-standard containers. This would be based on the premise that there is a need to standardize world transport systems.

9.0 CONCLUSIONS

Canada's decision to accept an international agreement on container standards depends largely on our confidence in ISO. If ISO container standards continue to be the dominant characteristic of international container systems, there would seem to be no need for an international instrument. However, the continuing of the trend to develop non-ISO containers which deviate radically from ISO standards might justify a convention coming into force. This question is currently being assessed through consultation with Canadian industry.

Participation is the key factor affecting any country's influence on ISO standards. Assuming Canadian industry will favour the inherent flexibility of ISO container standards over rigid restrictions of an intergovernmental agreement, it can be argued that other intergovernmental agreements such as the IMCO safety convention, and GATT Code on Standardization will encourage universal adoption of ISO container standards. Acceptance of this premise leaves only the issue of finding ways and means to improve the participation of developing countries in ISO.

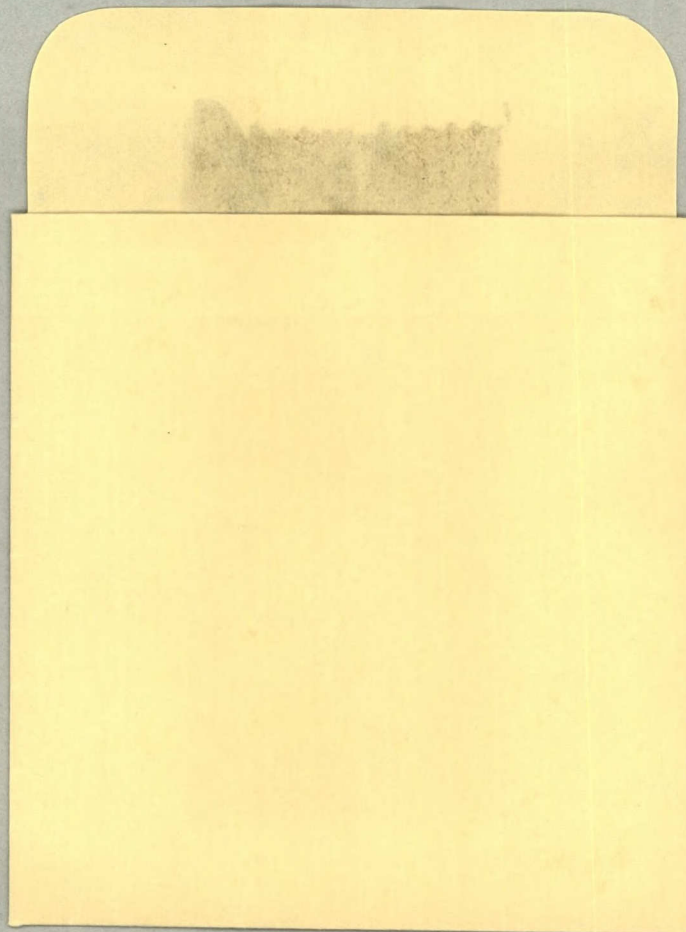
A point of particular concern to Canada is our limited participation in ISO work dealing with physical distribution standards. It is doubtful that Canada can effectively influence future developments of ISO container systems unless industry gives its full support to Canadian participation.

As noted earlier in this report, there may be some desire in Canada to limit, via an international agreement, the maximum height and gross weight of containers. However, action in this direction would probably freeze other dimensions of the containers. This, in turn, limits the future development of economically viable container systems in Canada that are competitive with domestic transport systems (i.e. cube capacity of road and rail equipment).

Considering these alternatives, Canada's continued opposition to an international agreement on container standards appears to be the best option. This option should be pursued with due consideration of the valid need to assist developing countries to participate fully in the physical distribution standardization activities of the international organization for standardization.

REFERENCES

1. Study of the technical and economic impacts on Canada of an international convention for freight container standards, May 1977; Transportation Development Centre - Transport Canada - P. Hunter.
2. Modular distribution standards, January 1977; Transportation Services Branch, Department of Industry, Trade & Commerce.
3. ISO Constitution - 1976
4. Directives for the technical work of ISO
5. Report of the June 1978 ISO technical committee on freight containers CTSO/TC-104.



INDUSTRY CANADA/INDUSTRIE CANADA



63032

