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[Reports]

FINAL REPORT OF

THE INTERNATIONAL TUBERCULOSIS CAMPAIGN

JULY 1, 1948—JUNE 30, 1951

[v. 3]

Issued by

THE INTERNATIONAL TUBERCULOSIS CAMPAIGN
COPENHAGEN . DENMARK
OCTOBER 1951

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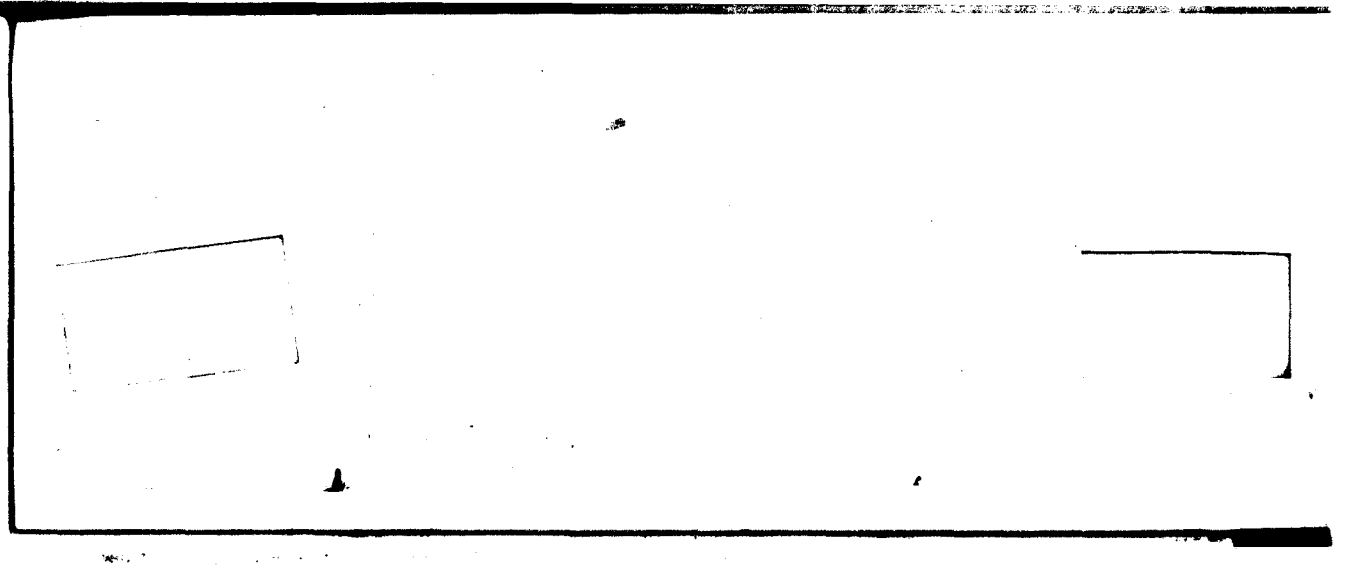
THE ITC IN SOUTH-EAST ASIA:
Dr. K. Arunachalam tuberculin-testing children of the village of Obeyesekera, Ceylon.

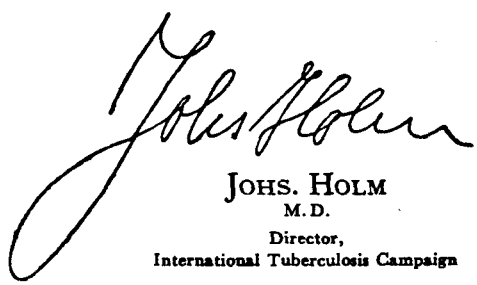


The International Tuberculosis Campaign ceased its field activities on June 30, 1951, after three years of operation. Activities during the first year were described in detail in "The Conference on BCG Programmes Conducted with the Assistance of the Joint Enterprise, Copenhagen, Denmark, 8th to 12th September 1949" and in the "Second Annual Report of the International Tuberculosis Campaign, July 1, 1949—June 30, 1950".

This Final Report is intended not merely to complete the record by describing the third year of operations, but also to summarize the entire programme.

On behalf of ITC Headquarters staff, and the Scandinavian and French personnel of the 23 different field missions which assisted national Ministries of Health in conducting the BCG mass vaccination campaigns, I should like to take this opportunity to extend cordial thanks to the national authorities of the different countries. We should also like to thank the United Nations International Children's Emergency Fund, the World Health Organization and other United Nations agencies, as well as the Danish Red Cross, Norwegian Relief for Europe and the Swedish Red Cross for their financial, technical and moral support during the programme.

In particular, ITC wishes to express its gratitude to the national doctors, nurses and technicians of the vaccinating teams whose loyalty and unceasing hard work made the programme possible.



JOHS. HOLM
M.D.
Director,
International Tuberculosis Campaign

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I.

GENERAL INTRODUCTION

A. INCEPTION AND ORGANIZATION OF ITC

Early in 1946 the Danish Red Cross and other Danish welfare organizations sent war-relief missions into Poland, Hungary and Austria to distribute food and medical supplies. Because of the desperate shortage of doctors and nurses, the Danes also sent mobile dispensaries to Poland and equipped a complete hospital at Makow.

The doctors found frightful misery and illness wherever they went in Poland and soon observed that many of their patients had tuberculosis in addition to other ailments. They reported these cases to local health authorities but the latter had no facilities for handling them and were able to do nothing. It was clear that there were countless severe cases of open tuberculosis which were daily infecting their families and neighbours.

The Danish doctors wrote back to Denmark appealing to the Danish authorities to do something about tuberculosis in Poland. Simultaneously, Polish health authorities appealed for help with X-ray and laboratory equipment and hospital supplies.

Meanwhile, in Yugoslavia there was an acute consciousness among Yugoslav and UNRRA doctors of the tuberculosis menace in that country. These doctors urged Danish health authorities to help the Yugoslavs with this problem. The Danish Red Cross thereupon sent a mission to Yugoslavia for a complete demonstration of Danish anti-tuberculosis methods — including X-ray equipment and specialists, laboratories, technicians, and BCG vaccination personnel. The demonstration was conducted first in Sombor in Northern Yugoslavia, and later in Novi Vrbas. The Danes soon found that there were difficulties in the way of local continuation of so ambitious a programme. Yugoslavia was in the first stages of post-war recovery; organization and administration were very difficult; there were no facilities for production of tuberculin and vaccine; lack of electric current in many areas and lack of spare parts rendered an X-ray programme impracticable. Moreover, it became clear that extensive public education was necessary for the success of this type of programme on a broad scale. The Danish mission therefore recommended a modified programme.

In the Autumn of 1946, increasingly occupied with the desire to assist in combating tuberculosis in Poland and Yugoslavia, the Danish Red Cross set up a Tuberculosis Committee consisting of leading tuberculosis and other medical authorities of Denmark and Red Cross officials. The Committee recommended that the Danish Red Cross should allocate funds for mass BCG vaccination campaigns in Poland, Yugoslavia and other countries where the tuberculosis problem was acute, since there was an almost complete lack of facilities for a full-scale attack on tuberculosis. Meanwhile, additional appeals for help in fighting tuberculosis had reached Denmark from Hungary and from the British military authorities in Germany.

After contacting the governmental and public health authorities, the Danish Red Cross committed itself to a mass BCG vaccination programme in Poland, Hungary and the British Zone of Germany, with an initial allocation of 3,000,000 Danish kroner for the programme.

The first Danish BCG missions began work in Poland and Germany in April 1947. In June 1947, work began in Hungary. Czechoslovakia requested similar assistance, and a demonstration team began work in that country in September 1947. Similar demonstration missions were offered by the Danes and were accepted by Italy in February 1948, by Greece in April 1948, and by Austria in May 1948.

NORWAY AND SWEDEN ENTER THE CAMPAIGN

As the BCG programme grew, the Danes found that the requirements for doctors and nurses were taxing their resources. For some time the three Scandinavian countries had been exchanging information and experiences in European relief work and at the end of 1947, Norwegian Relief for Europe and the Swedish Red Cross offered to assist in the BCG programmes. In January 1948, the Scandinavian Coordination Committee was created and the BCG programme became a joint Danish-Norwegian-Swedish affair with headquarters in Copenhagen. In the Spring of 1948, Norwegian doctors and nurses went to work in Poland and Swedes in Germany.

The Scandinavians soon encountered difficulties in their BCG programmes because of the lack of dollars and other hard currencies with which to buy vehicles, syringes and other equipment not available in their own countries. Contact was made with the World Health Organization Interim Commission, but since WHO was still in the process of organization it did not have the necessary funds nor was it able to participate in an operating programme of this nature. WHO, however, pledged technical guidance and support.

Meanwhile, UNICEF had approached the Scandinavian countries for financial contributions to its work on behalf of children in war-stricken countries. In the course of discussions with UNICEF, the Danish Ministry of Social Affairs suggested that the Scandinavian BCG programme might be in direct line with UNICEF's responsibility in the child health and welfare field.

On March 12, 1948, the Executive Board of UNICEF approved a resolution creating the Joint Enterprise. The Joint Enterprise was to be a partnership of UNICEF and the three Scandinavian voluntary organizations for the purpose of assisting countries in conducting mass BCG vaccination programmes. Administration of the programme was entrusted to the Danish Red Cross and its Norwegian and Swedish associates. Dr. Johannes Holm, Chief of the Tuberculosis Division of the Danish State Serum Institute, was designated Director. The initial sum allocated by UNICEF was $4,000,000, half for Europe and half for countries outside Europe.

For public relation purposes the Joint Enterprise has been known as the "International Tuberculosis Campaign".

ORGANIZATION

The Director of ITC has been responsible to the Executive Director of UNICEF and to the Scandinavian Coordination Committee. The World Health Organization, while not a participating partner in ITC operations, has provided technical guidance and assistance throughout. WHO also established in Copenhagen its Tuberculosis Research Office to evaluate the results of the ITC campaigns and to conduct other tuberculosis research projects.

(For further particulars on relations between ITC, UNICEF, the Scandinavian voluntary organizations, WHO, and national ministries of health, see "*The Conference on European B.C.G. Programmes Conducted with the Assistance of the Joint Enterprise, Copenhagen, Denmark, 8th to 12th September, 1949,*" and "*Second Annual Report of the International Tuberculosis Campaign, July 1, 1949—June 30, 1950.*")

The Copenhagen headquarters and staff of the earlier Scandinavian BCG campaigns were taken over by ITC and expanded for the enlarged programme. All ITC country programmes have been directed from this headquarters which performed the following main functions: recruitment of international field staff; supply of vaccine, tuberculin, and medical and transportation equipment; direction of the educational and publicity aspects of the campaigns; advice on the creation of national BCG laboratories; direction of the statistical work.

ITC Regional Directors were appointed for Europe, North Africa, the Middle East, and South-east Asia.

B. SUMMARY OF OPERATIONS

1. Countries in the Programme.

Countries became eligible for assistance from the ITC upon application to and approval by the Executive Board of UNICEF. ITC programmes were of two kinds:

a) Mass vaccination programmes in which all or a large part of the country was covered

Country	Date ITC agreement signed	Date ITC work commenced	Date ITC phase concluded
Finland	April 28, 1948	May 1948	June 1949
Poland	May 19, 1948	July 1948	Dec. 1949
Czechoslovakia	May 21, 1948	July 1948	July 1949
Yugoslavia	May 26, 1948	Aug. 1948	Dec. 1950
Hungary	July 2, 1948	Oct. 1948	April 1949
Greece	Oct. 1, 1948	Oct. 1948	Dec. 1950
India	Nov. 25, 1948	Feb. 1949	June 1951
Ceylon	Feb. 2, 1949	March 1949	June 1951
Austria	Feb. 14, 1949	May 1949	July 1950
Morocco	March 5, 1949	April 1949	May 1951
Lebanon	March 17, 1949	Oct. 1949	March 1950
Pakistan	April 5, 1949	August 1949	June 1951
Egypt	May 2, 1949	Dec. 1949	June 1951
Tunisia	May 31, 1949	Oct. 1949	April 1951
Algeria	July 12, 1949	Nov. 1949	[1]
Palestine Refugees Programme	—	Sept. 1949	Dec. 1949
Italy	Sept. 9, 1949	Nov. 1949	May 1950
Israel	Sept. 20, 1949	Nov. 1949	Nov. 1950
Syria	Dec. 17, 1949	March 1950	August 1950
Malta	Feb. 10, 1950	March 1950	July, 1950[2]
Tangiers	April 6, 1950	May 1950	June 1950
Mexico	April 21, 1950	July 1950	Nov. 1950
Ecuador	July 13, 1950	July 1950	June 1951

[1]) Special arrangements were made for continuing the programme under ITC auspices after the official ITC closure date, June 30, 1951. See Chapter III, Country Summaries, Algeria.

[2]) The delayed programme on the island of Gozo in the Spring of 1951 was also conducted with ITC aid. See Chapter III, Country Summaries, Malta.

systematically by national medical teams instructed and aided by ITC medical personnel. Most of the programmes undertaken by ITC were mass campaigns.

b) Demonstration programmes, covering selected areas of the country, designed primarily to instruct national personnel who could subsequently undertake mass campaigns at a time when the Ministry of Health deemed conditions appropriate. The countries in which ITC conducted demonstration programmes were Italy, Lebanon, Syria and Mexico. In Egypt, India and Pakistan, demonstration programmes were converted to mass campaigns during the ITC phase.

The above table shows chronologically the countries in which ITC has conducted its work, and the dates of the campaigns.

WORK ACCOMPLISHED

In the 23 ITC-aided programmes a total of 29,677,380 persons were tested and 13,874,709 were vaccinated during the ITC phase of the campaigns. Including the work outside the ITC programmes conducted by the Scandinavian organizations alone, a total of 37,694,983 were tested and 16,650,624 were vaccinated.[3]) See Chapter III—A, Table 1, for country-by-country figures, and Table 2, for month-by-month breakdown.

2. Headquarters Operations.

Details of the various phases of Headquarters operations of the ITC will be found in Chapter II and only highlights are given here.

The final expenditures for the entire ITC programme will not be available until the completion of closure operations at the end of 1952. Estimates on the basis of actual expenditures to June 30, 1951, plus outstanding obligations after that date will bring final total expenditures to approximately $3,201,000 and the equivalent of 9,897,000 Danish kroner. Dollar funds were provided by UNICEF, kroner funds were provided by Denmark, Norway and Sweden (in

[3]) These figures include pre-ITC work in ITC-aided countries, and Swedish and Danish Red Cross work in Germany.

their own currencies). These are "international expenditures" only, and do not include the national expenses which varied considerably from country to country.

The total cost to ITC of vaccine and tuberculin will be the equivalent of about $870,000 and the cost of medical equipment about $220,000. For the 23 campaigns, 315 vehicles of different types were purchased, and 52,000 syringes and 35,000 dozen needles were provided by ITC.

During the entire programme ITC employed a total of 205 doctors and 281 nurses in the field, mostly of Scandinavian and French origin. In addition, well over 1,000 national doctors, nurses, and "BCG technicians" (lay vaccinators) were employed in the campaign.

ITC provided equipment, chemicals, technical advice and staff-training to all the countries in the programme which were interested in establishing or improving laboratories for the production of BCG and tuberculin dilutions. New BCG vaccine laboratories were established in Egypt, Israel, Pakistan and Ecuador.

Public relations service from ITC Headquarters during the programme included films, printed material, loudspeaker units and assistance in organizing the public information and education aspects of the programme in the different countries of operation.

Statistical records of the programme were maintained at ITC Headquarters until early 1949 when they were taken over by the WHO Tuberculosis Research Office, which has also undertaken the statistical analysis and documentation of the campaigns.

C. ITC ASSISTANCE FOR CONTINUATION OF BCG PROGRAMMES

In all countries in which ITC assisted in mass vaccination programmes, and which presented a plan for the continuation of BCG work upon the completion of the ITC phase, ITC left vehicles and medical equipment for the continued programme, plus, where requested, tuberculin supplies, and laboratory equipment to assist in setting up a BCG production laboratory. Details of this assistance are described in Chapter II, Sections C. and E.

The countries in which BCG vaccination is being continued with the aid of ITC supplies are Algeria, Austria, Ceylon, Czechoslovakia, Ecuador, Egypt, Finland, Greece, India, Israel, Malta, Mexico, Morocco, Pakistan, Poland, Syria, Tunisia and Yugoslavia.

For details on plans for continuation after the ITC phase in the individual countries, see Country Summaries, Chapter III-B.

D. CONTINUATION OF INTERNATIONALLY-AIDED BCG PROGRAMMES, UNICEF/WHO

In October 1949, the Scandinavian Coordination Committee of the Joint Enterprise recommended that ITC, as constituted, should cease as soon after January 1951 as existing commitments had been met. It was recommended that BCG work should be integrated with other international tuberculosis control programmes of UN agencies. Subsequently, ITC.HQ recommended that the official closure date be extended to June 30, 1951, and this recommendation was accepted by the Scandinavian partners.

During 1950—51, negotiations have been underway between WHO, UNICEF and ITC to devise methods of continuing international aid to national BCG programmes; details of these discussions, up to mid-1950, were included in Chapter V of ITC's Second Annual Report.

As finally formulated between UNICEF and WHO, continued aid to BCG programmes will be provided by the two organizations, generally speaking in the same way as aid for other joint health projects, in accordance with directives from their Joint Committee on Health Policy.

Aid to BCG programmes is to be developed as an integral part of WHO's overall tuberculosis service and is to be integrated with the total tuberculosis programme in each area. Responsibility for technical policy and procedures rests with WHO; responsibility for the operating programme rests with the Government concerned, which develops its plan of operations with UNICEF and WHO representatives. UNICEF is responsible for procuring the necessary equipment and supplies, WHO for recruiting the necessary personnel. Technical guidance is the responsibility of the Tuberculosis Section of WHO.HQ, Geneva, and of the WHO Regional BCG Officer, in consultation with UNICEF Missions in the Region.

II.

HEADQUARTERS OPERATIONS

A. FUNDING

1. UNICEF Contribution.

Funds for ITC expenses were provided in part by UNICEF and in part by the Scandinavian partners in the Joint Enterprise.

In the course of the programme UNICEF allocated a total of $5,099,000. Of this sum approximately $3,201,000 were expended. The original allocations were:

Europe (including Algeria)	$2,000,000
India, Pakistan and Ceylon	$1,000,000
China	$ 500,000
Morocco	$ 300,000
Tunisia	$ 150,000
Lebanon	$ 50,000
Palestine Refugees	$ 139,000
Middle East (Israel, Syria, Egypt)	$ 500,000
Mexico	$ 160,000
Ecuador	$ 300,000
Total	$5,099,000

The difference of almost $1,900,000 between UNICEF sums allocated and actually expended is accounted for mainly by the following: no programme was undertaken in China; only about half of the India, etc. allocation was expended; about $600,000 of the European allocation was not expended.

2. Scandinavian contribution.

The basis of the division of contributions as between UNICEF dollar funds and Scandinavian kroner funds was an agreement with UNICEF that expenses for the campaigns in Europe would be met half from the dollar side and half from the kroner side. For campaigns outside Europe the Scandinavian organizations agreed to provide funds for field personnel salaries in certain areas; other outside-Europe expenses were to be met from the UNICEF dollar contribution.

a. Denmark.

In early 1948, the Danish Government contributed 2,000,000 Danish kroner to UNICEF, earmarked for BCG work. Further Danish contributions totalling 5,560,000 kroner came from proceeds of the UNAC drive in Denmark.

b. Norway.

Norwegian funds were contributed by Norwegian Relief for Europe from funds raised in the UNAC drive. There was no firm allocation for ITC campaigns but funds were made available for the country programmes on the basis of Norwegian personnel participation. Total Norwegian contributions will be approximately 1,351,000 Norwegian kroner.

c. Sweden.

There was no bloc allocation but funds were made available by the Swedish Red Cross as necessary to cover Swedish expenditures in certain of the country campaigns. The Swedish contribution will be about 768,000 Swedish kroner.

B. EXPENDITURES

A final tabulation of total expenditures in the ITC programme will not be available until the completion of closure operations on about January 1, 1952.

Annexes 1, 2, 3, 4, at the end of this report show total ITC expenditures as of June 30, 1951, with specifications by the various budget-lines for the different country campaigns. Kroner expenditures include all expenses in any of the three Scandinavian currencies but are reported uniformly in Danish kroner equivalent. The dollar expenditures, to a great extent, include dollar equivalents of other currencies

made available by UNICEF as necessary but chargeable to the dollar budget.

Costs of Headquarters administration up to December 31, 1950, were charged to the European accounts. These accounts were subsequently credited with 10 percent of the operational expenditures for campaigns outside Europe as the outside-Europe share of administration costs to that date. This was done in agreement with UNICEF because kroner funds (which were collected in Scandinavia primarily for assisting European countries) could not be used for administrative overhead costs in relation to campaigns outside Europe.

Although the date for cessation of ITC field activities was fixed as June 30, 1951, there will be additional expenses on various accounts after that date. Some expenses incurred during previous months were not actually paid until after June 30. In some campaigns there is a period of liquidation after this date and provision has been made for payment of expenses during the liquidation period. These delayed obligations will cover mainly BCG laboratory equipment, medical supplies and expenses in connection with closure operations.

Tables A, B, C, D, give a summary of total anticipated expenditures until final ITC closure. The kroner expenses after June 30, 1951, shown in Column 3 of Tables A and C, cover primarily unliquidated personnel expenses. Dollar expenditures after June 30, shown in Column 3 of Tables B and D will cover primarily the cost of laboratory equipment, medical equipment which is being supplied for the continuation of national campaigns, and supplies of tuberculin for a three-year period after the date of completion of the ITC phase.

The estimated final total expenditures of the ITC will amount to 9,896,867 Danish kroner[1]) and $3,201,133.

Per capita cost.

By comparison of the number of persons tested and the total expenses in each campaign it is possible to calculate the average cost per individual tested. Such a calculation will show a great difference in per capita cost from country to country; the comparison is not significant without taking into consideration a wide variety of economic factors which determine the operational expenses, for example: the cost and amount of medical and laboratory equipment furnished to each of the countries; distance from Scandinavia (travel costs, air and ocean freight); geographical, topographical and climatic conditions of work; cost of living of international staff (usually paid by ITC), etc.

It must also be borne in mind that the expenses here dealt with are only those defrayed by ITC and do not include the financial and personnel contributions by the individual Governments, which differ considerably from country to country. For example, in a country where ITC worked with a large number of international-staff vaccinators and where only a few national vaccinators were available, the ITC cost per individual tested was much higher than in other countries where the work was performed, in the main, by locally recruited personnel paid by the Government.

Even a comparison from country to country of per capita cost of tuberculin and vaccine per individual tested or vaccinated is of little significance. There was much greater waste in areas with difficult climatic and topographical conditions. Moreover, there was less waste when a large number of vaccinators worked in densely populated areas than when single teams of vaccinators worked in remote, thinly populated places.

Auditing.

The auditing of the ITC Accounts is carried out by the Danish Governmental Audit Department (Third Audit Department).

The auditing includes not only the figures but also a critical economic control. Most of the work is performed at ITC.HQ, and only occasional visits by the auditors have been made to Missions in Yugoslavia, Austria, Poland and to the ITC Regional Office for North Africa in Paris.

The auditors' reports are submitted to the United Nations Inspection Service.

[1]) Broken down as follows: From Denmark: 7,560,000 Danish kroner. From Norway: 1,351,000 Norwegian kroner, equivalent to 1,310,000 Danish kroner. From Sweden: 768,000 Swedish kroner, equivalent to 1,027,000 Danish kroner.

(Account 1)

Table A

ESTIMATED FINAL EXPENDITURES IN KRONER, EUROPEAN CAMPAIGNS

Item	Expenditures as of June 30, 1951[1])	Estimated Expenditures after June 30, 1951	Total
(1)	(2)	(3)	(4)
	Danish kroner	Danish kroner	Danish kroner
Poland	2,220,134		2,220,134
Czechoslovakia	1,212,828		1,212,828
Yugoslavia	1,138,714		1,138,714
Italy	71,510		71,510
Greece	938,426		938,426
Austria	743,135		743,135
Hungary	351,775		351,775
Bulgaria	2,854		2,854
Finland	67,130		67,130
Malta	33,818		33,818
BCG Vaccine Studies, Denmark	352,020	11,745	363,765
Miscellaneous	154,967		154,967
HQ. Administration	1,667,834	18,000	1,685,834
	8,955,145	29,745	8,984,890

[1]) See Annex 1 for specifications.

(Account 2)

Table B

ESTIMATED FINAL EXPENDITURES IN DOLLARS, EUROPEAN CAMPAIGNS

Item	Expenditures as of June 30, 1951[1])	Estimated Expenditures after June 30, 1951	Total
(1)	(2)	(3)	(4)
	$	$	$
Poland	252,139	7,853	259,992
Czechoslovakia	112,496		112,496
Yugoslavia	162,681	19,508	182,189
Italy	21,936		21,936
Greece	173,297	4,373	177,670
Austria	69,171		69,171
Hungary	35,353		35,353
Bulgaria	260		260
Finland	40,852	12,935	53,787
Algeria	171,377	82,763	254,140
Malta	11,389	770	12,159
BCG Vaccine Studies, Denmark	7,969	23,108	31,077
Miscellaneous	118,988	(13,760)[2])	105,288
HQ. Administration	66,619	6,723	73,342
	1,244,527	144,273	1,388,800

[1]) See Annex 2 for specifications.
[2]) Credit.

(Account 4) *Table C*

ESTIMATED FINAL EXPENDITURES IN KRONER, OUTSIDE-EUROPE CAMPAIGNS

Item	Expenditures as of June 30, 1951[1])	Estimated Expenditures after June 30, 1951	Total
(1)	(2)	(3)	(4)
	Danish kroner	Danish kroner	Danish kroner
India	387,858	19,749	407,607
Ceylon	29,395	6,000	35,395
Pakistan	122,010	3,871	125,881
Lebanon	20,776		20,776
Israel	25,950		25,950
Egypt	232,807	24,947	257,754
Syria	38,614		38,614
	857,410	54,567	911,977

[1]) See Annex 3 for specifications.

(Account 5) *Table D*

ESTIMATED FINAL EXPENDITURES IN DOLLARS, OUTSIDE-EUROPE CAMPAIGNS

Item	Expenditures as of June 30, 1951[1])	Estimated Expenditures after June 30, 1951	Total
(1)	(2)	(3)	(4)
	$	$	$
Morocco	254,482	10,193	264,675
Tunisia	83,748	3,600	87,348
India	267,804	51,583	319,387
Ceylon	34,519	6,899	41,418
Pakistan	99,988	14,593	114,581
Lebanon	19,271		19,271
Palestine Refugees	95,199		95,199
Israel	59,771	12,246	72,017
Egypt	162,676	44,769	207,445
Syria	37,521	3,632	41,153
China	27,971		27,971
Mexico	51,018		51,018
Ecuador	224,295	26,721	251,016
HQ. Administration	173,245	46,589	219,834
	1,591,508	220,825	1,812,333

[1]) See Annex 4 for specifications.

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Annex 1 see next pages.

(Account 1)

ITC EXPENDITURES IN DANISH KRONER

Item	Poland	Czechoslovakia	Yugoslavia	Italy	Greece	Co... programm... Aust...
(1)	(2)	(3)	(4)	(5)	(6)	(7)
HEADQUARTERS ADMINISTRATION MISCELLANEOUS[2])						
FIELD OPERATIONS						
Personnel expenses						
Salaries and allowances, international field staff	548,524.99	277,602.93	219,268.76	47,169.01	421,133	78,81
Salaries, locally recruited staff	1,133.45	47.37			2,309	79
Travel and representation	42,914.55	37,576.71	22,248.05	6,588.27	47,959	31,75
Clothing	19,292.60	4,198.62	3,236.14	2,548.90	14,187	9,04
Personnel insurance	30,742.78	20,254.00	12,357.92	2,645.51	27,688	21,62
Food	56,507.98	29,963.52	29,578.97	(113.17)	(613	3,55
Training of international teams	969.00				969	
Office Accommodation						
Rent						16
Office equipment	10.00	10.00				3,42
Stationery	3,245.93	1,516.09	3,257.69		2,188	5
Telephone and cables	417.07	61.42	19.22	16.86	45	11
Postage	71.81				2	1
Exchange differences	(4,830.43)	15.16			33	81
Sundry expenses	(275.50)	(5.53)	371.05	12.11	1,302	1,47
Other Expenses						
BCG vaccine and tuberculin	1,140,711.25	620,844.00	597,185.88	8,940.00	303,635	10,57
Drugs	2,277.41	3,219.84	1,917.97	25.84	2,223	
Medical equipment	50,300.65	53,053.12	30,575.16	93.02	20,914	15,01
Registration and vaccination cards	847.30	825.80	1,513.53		1,589	
Rail, ship, and vehicle freight	6,231.44	12,718.50	5,577.90	66.57	16,622	4,72
Air freight	100,462.70	46,951.05	90,091.91	1,443.98	21,280	20,60
Purchase of vehicles	95,913.26	50,325.25	65,319.55	1,635.61	28,777	17,52
Rent of Danish Red Cross vehicles	15,159.30		1,155.00			
Spare parts	24,492.61	9,298.20	16,579.26	149.55	4,874	4,90
Tyres	4,266.27	502.77	2,182.27		406	
Tools	3,106.80	1,673.89	3,192.25	85.23	683	20
Repairs	9,635.18	12,045.35	9,744.36	50.54	892	7,87
Petrol, oil, and lubrication	16,775.99	6,783.30	6,246.64	250.00	1,904	3,55
Third-party insurance	1,406.64	384.95	559.90	105.55	1,092	4,54
Vehicle taxes	51.36					1,30
Furniture and machines	24,605.98	3,181.89	4,432.82	(203.69)	1,231	
Printing, films, information	25,165.65	18,529.56	12,102.07		12,589	5
Laboratory equipment		1,250.74			2,501	
Total	2,220,134.02	1,212,828.50	1,138,714.27	71,509.69	938,425	13,1

NOTE: Entries in brackets represent credits.

[1]) And Danish kroner equivalent of Norwegian and Swedish kroner expenses.

[2]) Headquarters expenses which cannot readily be allocated against the individual country programmes.

[3]) Printing and information, reserve stocks of supplies, etc.

Annex 1

KRONER[illegible]UROPEAN CAMPAIGNS AS OF JUNE 30, 1951

	Co[illegible]rogramme						BCG Vaccine Studies Denmark	Undistributed Expenses[a])	Total
	Greece	Austria	Hungary	Bulgaria	Finland	Malta			
	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
								1,667,833.69	1,667,833.69
								154,966.97	154,966.97
.01	421,133.[illegible]	178,813.67	18,668.50			21,059.69	194,146.25		1,926,387.15
	2,309.[illegible]	792.96							4,283.09
.27	47,959.[illegible]	31,754.68	13,109.43			678.88	9,391.70		212,222.13
.90	14,187.[illegible]	9,048.48	602.29			(66.18)	888.50		53,936.67
.51	27,688.[illegible]	21,625.52	975.23			792.55	2,126.25		119,208.73
.17)	(613.[illegible]	3,557.68	2,812.00		38.52	189.96	103,665.29		225,587.25
	969.[illegible]					484.50			2,422.50
		163.82					1,721.00		1,884.82
		3,426.27							3,446.27
	2,186.[illegible]	59.50	373.11				1,670.88		12,310.10
.86	45.[illegible]	114.73				25.10	1,353.90		2,053.89
	2.[illegible]	16.91				46.27	636.32		773.44
	33.[illegible]	819.88	171.42			(0.54)			(3,790.52)
.11	1,302.[illegible]	1,473.93	(41.49)				68.39		2,905.32
).00	303,635.[illegible]	410,572.75	224,518.00		43,206.00	9,757.00			3,359,369.88
.84	2,223.[illegible]		716.17			4.00	2.40		10,387.36
.02	20,914.[illegible]	15,014.66	30,049.12		12,814.10	802.53	3,142.30		216,758.66
	1,589.[illegible]		109.47				230.95		5,116.88
5.57	16,622.[illegible]	4,725.90	2,918.02	244.35	1,940.46	38.86	1,171.50		52,255.85
3.98	21,280.[illegible]	20,603.74	16,019.77		394.36				297,248.22
5.61	28,777.[illegible]	17,526.85	12,405.50		7,271.00		913.85		280,088.69
							768.20		17,082.50
9.55	4,874.[illegible]	4,901.28	4,276.49		96.21	5.07	747.72		65,420.96
	406.[illegible]		103.76				(76.50)		7,385.33
5.23	683.[illegible]	204.28	211.87				359.70		9,517.68
0.54	892.[illegible]	7,875.36	5,471.18		349.57		6,229.89		52,294.36
0.00	1,904.[illegible]	3,551.43	1,015.90		872.00		21,672.44		59,072.68
5.55	1,092.[illegible]	4,546.52	567.65		147.40		970.25		9,780.86
		1,360.32							1,411.68
3.69)	1,231.[illegible]		3,337.17				219.25		36,804.82
	12,589.[illegible]	584.10	13,384.50						82,355.32
	2,501.[illegible]			2,609.67					6,361.88
9.69	938,425.[illegible]	743,135.22	351,775.06	2,854.02	67,129.62	33,817.69	352,020.43	1,822,800.66	8,955,145.11

(Account 2)

ITC EXPENDITURES IN DOLLAR

Item	Co					
	Poland	Czechoslovakia	Yugoslavia	Italy	Greece	Austria
(1)	(2)	(3)	(4)	(5)	(6)	(7)
HEADQUARTERS ADMINISTRATION MISCELLANEOUS[4])						
FIELD OPERATIONS						
Personnel Expenses						
Salaries and allowances, international field staff	18,743.06	10,888.75	2,520.00	807.39	11,992.52	4,142.5
Salaries, locally recruited staff	576.25		5.60			2.0
Travel and representation	6,529.67	2,718.45	4,580.25	4,532.97	17,387.51	4,769.6
Clothing	2,517.59	2,827.14	1,980.22	261.37	4,386.42	1,234.1
Personnel insurance						
Food	10,972.99	2,479.37	12,479.79	8,230.25	59,412.47	8,991.8
Office Accommodation						
Rent				413.89		
Heat and light			44.00			
Office equipment						
Stationery	179.21	248.14	215.21		213.79	153.4
Telephone and cables	224.78	22.76	27.20	6.80	25.33	9.1
Postage	0.71	4.98			30.08	1.2
Exchange differences	0.37	(112.54)	0.07	13.77	6,504.79	1,380.5
Sundry expenses	697.22	147.95	389.26	2.09	386.01	123.4
Other Expenses						
BCG vaccine and tuberculin	3,611.32	145.03	7,266.12		418.71	
Drugs		9.43	3.20	26.36	230.94	41.8
Medical equipment	6,880.08	9,261.51	13,813.92	346.03	7,341.70	6,208.4
Registration and vaccination cards	15,369.32	15,896.04	14,088.29	2,061.14	5,720.45	42.0
Rail, ship, and vehicle freight	2,133.17	639.35	5,993.18	1,289.76	2,616.44	976.0
Air freight	17,279.59	12,007.76	17,031.12	410.99	5,077.41	3,461.5
Purchase of vehicles	85,733.85	43,365.00	54,165.42	1,958.73	26,909.44	28,455.5
Spare parts	10,568.48	4,442.26	10,402.51	321.52	9,470.47	6,682.4
Tyres	5,363.14	1,714.47	6,118.30	161.90	2,901.94	1,202.2
Tools	75.63	6.01	575.75	3.91	432.26	(178.9
Repairs	7,846.55	7.88	470.63	913.32	1,768.61	505.7
Petrol, oil, and lubrication	46,947.82	88.56	923.98	36.71	107.96	43.8
Third-party insurance	793.28					
Furniture and machines	386.15	1,040.40	662.58	83.77	1,524.01	414.9
Printing, films, information			1,316.18	53.42	829.43	507.4
Laboratory equipment	8,709.10	4,646.89	7,608.01		7,608.61	
Total	252,139.33	112,495.59	162,680.79	21,936.09	173,297.30	69,171.0

NOTE: Entries in brackets represent credits.

[1]) And Dollar equivalent of other currencies.

[2]) Algeria, as a Department of France, was provided for in the ITC European budget.

[3]) Headquarters expenses which cannot readily be allocated against the individual country programmes.

[4]) Printing and information, reserve stocks of supplies, etc.

[5]) Included in above entry for "Salaries and allowances".

Annex 2

)OLLARS EUROPEAN CAMPAIGNS AS OF JUNE 30, 1951

Country Programme	Austria	Hungary	Bulgaria	Finland	Algeria[1])	Malta	BCG Vaccine Studies, Denmark	Undistributed Expenses[2])	Total
	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
								66,619.27	66,619.27
								118,987.53	118,987.53
	4,142.50	644.38			54,857.91	440.00			105,036.51
	2.00	157.71		22,295.23					23,036.79
	4,769.62	1,224.49	108.60		5,877.79	1,573.06			49,302.41
	1,234.14	223.31			5,011.80	163.52	142.69		18,748.20
					6,565.41				6,565.41
	8,991.83	915.95			[5])	3,629.71	0.77		107,113.13
									413.89
									44.00
	153.44	61.12				3.39			1,074.30
	9.10								315.97
	1.23								37.00
	1,380.50	14.73				16.23			7,817.92
	123.44	312.57			256.61	43.60			2,358.75
				1,740.39	22,234.32	613.48			36,029.37
	41.87				166.32	8.70			486.82
	6,208.48	5,003.05	151.80	7,750.67	3,116.63	676.22	707.33		61,257.42
	42.00	9,881.42			6,159.35	665.40			69,883.41
	976.09	644.54		49.11	6,327.44	137.41	0.13		20,806.62
	3,461.58	2,671.44		20.91	3,106.86	596.79			61,664.45
	28,455.56	10,540.00		8,940.00	30,531.60	2,709.16	6,358.20		299,666.96
	6,682.44	1,948.00		29.52	4,560.18	13.21	337.23		48,775.82
	1,202.29	310.16		24.00	12,417.18		271.27		30,484.65
	(178.96)	12.58		1.92	369.55	4.75	16.32		1,319.72
	505.79	457.73			3,683.96	(0.68)			15,653.79
	43.81				210.30				48,359.14
					1,898.42	30.74			2,722.44
	414.92	329.70			3,748.27	62.21	135.02		8,387.03
	507.40				277.06	2.10			2,985.59
									28,572.61
	69,171.07	35,352.88	260.40	40,851.75	171,376.96	11,389.00	7,968.96	185,606.80	1,244,526.92

(Account 4)

Annex 3

ITC EXPENDITURES IN DANISH KRONER,[1]) OUTSIDE-EUROPE CAMPAIGNS AS OF JUNE 30, 1951

Item	Country Programme							Total
	India	Ceylon	Pakistan	Lebanon	Israel	Egypt	Syria	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
FIELD OPERATIONS								
Personnel Expenses								
Salaries and allowances, international field staff	393,009.25	30,307.69	126,954.25	21,709.34	26,891.36	240,961.96	38,900.64	878,734.49
Personnel insurance	26,022.30	1,233.54	5,621.64	1,247.89	1,520.82	12,308.05	3,877.10	51,831.34
Salary deductions for living allowances[2])	(31,174.05)	(2,145.95)	(10,565.55)	(2,181.10)	(2,462.05)	(20,463.52)	(4,163.75)	(73,155.97)
Total ...	387,857.50	29,395.28	122,010.34	20,776.13	25,950.13	232,806.49	38,613.99	857,409.86

[1]) And Danish kroner equivalent of Norwegian and Swedish kroner expenses.

[2]) These items represent credits, i.e. salary deductions for living allowances paid to international staff in the currency of the country of operations.

Annex 4 see next pages.

(Account 5)

ITC EXPENDITURES IN DOLLARS,[1]) OUTSID

Item	Coun						Pro
	Morocco	Tunisia	India	Ceylon	Pakistan	Lebano	Pa
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
HEADQUARTERS ADMINISTRATION							
FIELD OPERATIONS							
Personnel Expenses							
Salaries and allowances, international field staff	88,112.40	30,717.12	14,442.34	2,928.00	3,840.00	840.00	1
Salaries, locally recruited staff							1
Travel and representation	13,830.12	3,110.38	41,678.83	11,758.13	9,853.52	2,342.06	1
Clothing	7,012.97	2,159.62	6,545.88	667.72	1,938.38	204.52	
Personnel insurance	2,611.13	598.06	27.21				
Food[3])	[4])	[4])	52,516.84	8,582.11	38,118.38	7,515.55	2
Training of international teams	3,973.78						
Office Accommodation							
Rent						95.82	
Heat and light							
Office equipment			214.60				
Stationery			343.92	40.62	55.99	43.61	
Telephone and cables			70.19	1.52	3.69	42.11	
Postage			45.42		35.33	14.04	
Exchange differences			(984.64)	(10.39)	39.23	0.27	
Sundry expenses	426.02	115.59	345.50	111.27	144.44	112.99	
Other Expenses							
BCG vaccine and tuberculin	38,946.88	7,910.19	3,779.88	96.39	11,047.06	1,626.53	
Drugs	2.09		878.29	35.48	191.47	40.02	
Medical equipment	4,851.53	2,403.28	24,061.76	1,641.96	3,402.46	816.20	
Registration and vaccination cards	9,433.57	4,543.59	4,901.04	124.85	551.44	1,826.99	
Rail, ship, and vehicle freight	7,321.56	2,499.68	14,643.76	1,312.37	1,502.38	197.16	
Air freight	3,891.07	1,503.41	1,234.96	142.97	3,873.44	461.26	
Purchase of vehicles	50,820.32	21,931.82	71,900.66	5,902.25	12,212.63	1,779.20	
Spare parts	997.41	611.88	1,378.48	84.43	103.99	30.28	
Tyres	5,764.71	1,375.36	246.67	24.22	122.91	72.12	
Tools	404.75	212.46	181.36	59.16	47.22		
Repairs	1,148.15	1,104.38	1,235.96	77.18	68.84	38.45	
Petrol, oil, and lubrication	324.28	32.63	363.33	11.78	7.25	23.45	
Third-party insurance	1,905.02	295.97	342.04	147.83	8.35		
Furniture and machines	12,537.21	2,373.53	1,173.25	152.81	659.87	156.56	
Printing, films, information	166.92	249.29	18,128.34	626.82	2,068.47	992.30	
Laboratory equipment			8,107.78		10,091.09		
Total	254,481.89	83,748.24	267,803.65	34,519.48	99,987.83	19,271.49	9

NOTE: Entries in brackets represent credits.

[1]) And Dollar equivalent of other currencies.

[2]) Headquarters expenses which cannot readily be allocated against the individual country programmes.

[3]) Against the dollar entries here shown, there were kroner credits as explained in Annex 3, Footnote 2.

[4]) Included in above entries for "Salaries and allowances".

Annex 4

OUTSIDE EUROPE CAMPAIGNS AS OF JUNE 30, 1951

Country / Programme	Lebanon	Palestine Ref.	Israel	Egypt	Syria	China	Mexico	Ecuador	Undistributed Expenses[a]	Total
	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
									173,244.97	173,244.97
	840.00	16,295.44	840.00	7,545.11	1,656.00		16,123.94	110,713.59		294,053.94
		13,166.90	5.62							13,172.52
	2,342.06	14,021.85	3,930.43	16,577.88	2,257.61		10,849.43	32,409.47		162,619.71
	204.52	927.59	129.68	2,396.58	85.03		501.36	3,091.19		25,660.52
		880.83					297.17	1,047.53		5,461.93
	7,515.55	28,345.85	9,858.02	40,350.92	13,249.68		425.00	42.06		199,004.41
				210.81						4,184.59
	95.82	545.22			26.40					667.44
		56.19		89.27						145.46
										214.60
	43.61	324.78	63.49	96.19	24.50		66.93	46.09		1,106.12
	42.11	718.68	8.58	15.57			23.02			883.36
	14.04	108.74			3.62		1.93			209.08
	0.27	(51.15)	107.20	15.33	25.39			27.32		(831.44)
	112.99	680.29	143.77	442.23	146.12		155.84	421.50		3,245.56
	1,626.53	4,937.28	11,664.37	20,087.14	3,592.12	362.58	232.04	14,251.04		118,533.50
	40.02	126.94	156.32	333.18	15.99		222.16	748.35		2,750.29
	816.20	1,439.57	4,256.29	8,530.42	1,619.83		2,055.69	4,811.31		59,890.30
	1,826.99	1,952.57	1,933.29	1,462.83	11.53		187.71	205.75		27.135.16
	197.16	1,435.29	922.87	3,146.79	392.52	3,469.17	4,326.51	1,918.89		43,088.95
	461.26	1,228.37	2,962.33	2,911.33	1,203.39	1,051.80	655.70	1,568.95		22,688.98
	1,779.20	3,067.82	11,547.58	38,381.04	10,688.77		7,923.80	31,834.77		267,990.66
	30.28	681.68	1,297.21	2,094.68	354.28		35.32	1,569.36		9,239.00
	72.12	78.12	492.05	699.04	416.78			1,550.42		10,842.40
		60.10	42.87	204.70	35.12		72.41	351.26		1,671.41
	38.45	1,125.36	148.10	274.30	11.35		1.74	50.70		5,284.51
	23.45	395.30	78.89	142.64	127.41		60.20			1,567.16
		285.63	769.12	544.74	370.47		14.90			4,684.07
	156.56	381.35	158.77	539.83	11.39		181.45	4,818.26		23,144.28
	992.30	1,982.63	874.88	3,698.31	147.58		1,819.46	5,075.35		35,830.35
			7,379.00	11,885.17	1,048.10	23,087.73	4,784.74	7,740.73		74,124.34
	19,271.49	95,199.22	59,770.73	162,676.03	37,520.98	27,971.28	51,018.45	224,293.89	173,244.97	1,591,508.13

C. SUPPLIES

All purchasing and supply operations for ITC Missions were coordinated by the Field Supply Service Office of ITC Headquarters, Copenhagen. The procurement offices of UNICEF European Headquarters, and UNICEF Headquarters, New York, assisted in purchasing.

The supplies provided by ITC to the various country Missions were in the following main categories:

BCG vaccine, tuberculin dilutions, stock solution of purified tuberculin, and tuberculin jelly.

Medical equipment.

Laboratory equipment for production of BCG vaccine and tuberculin dilutions.

Vehicles, spare parts and other requisites for cars.

BCG Vaccine, Tuberculin Dilutions, etc.

The total cost of vaccine and tuberculin provided to the different countries by ITC as of June 30, 1951, was $810,300 (including dollar equivalent of Scandinavian kroner expenditures). The fulfilment of the three-year tuberculin supply (after completion of the ITC phase in the different countries) will require an estimated additional expenditure of approximately $57,000.

Since these supplies are perishable, they were always sent by air, with the exception of large shipments of tuberculin jelly.

Vaccine and tuberculin dilutions were supplied mainly from the State Serum Institute in Copenhagen. Vaccine and tuberculin supplies for the North African campaigns were provided mainly by the Pasteur Institute, Paris; for Austria the supplies came from Sweden. After the establishment of the various laboratories for which ITC provided equipment, vaccine was also supplied by the BCG laboratories in Madras and Mexico City, and tuberculin dilutions by the laboratories in Athens, Cairo, Karachi, Madras, Mexico City, and Guayaquil. For details of shipments of vaccine and tuberculin, see Tables 1 and 2.

Medical Equipment.

The total cost of medical equipment provided by ITC was $220,500.

Equipment for the vaccination kits and station units used in the campaigns was purchased mainly in Denmark, with the exception of syringes, needles and adhesive plaster, all of which were purchased in England. During the early stages of the programme, there were great difficulties with the syringes, especially because of leakage. Syringes of American, English, German, Swiss and Czech manufacture were tried in the field. These trials showed that an English syringe (a 1 cc record syringe) leaked less than others. After the Summer of 1949, this syringe was used both for vaccination and Mantoux tests.

Table 3 shows a breakdown of the number of vaccination kits and station units provided by ITC to the various countries during the programme. Table 4 shows quantities of syringes, needles and adhesive tape, provided for the various country programmes.

Laboratory Equipment.

Equipment for production of BCG vaccine and tuberculin dilutions was sent to the following countries:

Country	Laboratory equipment shipped	
	For production of BCG vaccine	For production of tuberculin dilutions
China	×	
Czechoslovakia	×	
Ecuador	×	×
Egypt	×	×
Greece	×	×
India	×	×
Israel	×	×
Mexico	×	×
Pakistan	×	×
Poland	×	×
Syria		×
Yugoslavia	×	×

For details, see Chapter II—E, "Assistance to BCG and Tuberculin Laboratories".

Vehicles and spare parts.

ITC purchased a total of 315 vehicles of the following types:

47 sedans
222 panel-vans and carry-all suburbans
41 jeeps and jeep station wagons
5 trucks

Where possible the vehicles were sent directly from the factories in the United States to the various country Missions; otherwise they were transshipped from Copenhagen.

The disposition of ITC vehicles as of June 30, 1951, is shown in Table 5.

Provisions.

In the early stages of the European campaigns, because of food shortages in the countries in which ITC worked, ITC shipped full foodstuff rations for the international staff in Poland, Czechoslovakia, Hungary and Yugoslavia; partial rations were supplied to the Greek Mission.

Total Shipments.

During the existence of ITC, 2,046 consignments, totalling 562,269 kg, were shipped from ITC Headquarters, broken down as follows:

By rail and sea	352,978 kg
By ITC aeroplane	123,449 -
By commercial airlines	39,898 -
By truck	46,304 -

Warehousing.

In order to effect prompt delivery of supplies and equipment, ITC Headquarters maintained a warehouse in the Free Harbour in Copenhagen, for medical equipment and other supplies. At this warehouse, all vaccination kits and station units were assembled. The cardboard refrigerator-containers for vaccine shipment were also manufactured at this warehouse, 1,642 large and 910 small containers in all. A reserve stock of spare parts was maintained with a motor firm in Copenhagen.

Miscellaneous Comments.

During the height of the European programmes, ITC had its own aeroplane in service for the delivery of vaccine and other supplies. The plane was a C-47 loaned free of charge by the American Air Forces in Germany, which also provided all major servicing. The crew was procured from a private company, Zone-Redningskorpset, Copenhagen. The plane was in service from January 1949 until March 1950, at which time it was returned to the American Air Forces, after completing 52 flights, with a total of 780 flying hours and delivering about 123,000 kg of cargo. During the period when the ITC plane was in service, it was also utilized to deliver consignments of penicillin and streptomycin to UNICEF Missions for various UNICEF medical programmes.

Shipment of ITC medical supplies, frequently on urgent time schedules, was effected with relatively few difficulties as a result of the excellent cooperation provided by air transport, steamer and railway companies. The special refrigerator-containers for transport of vaccine became well-known in the large transit airports, where they were given priority treatment, refilled with fresh ice where necessary, and transshipped on schedule.

ITC Headquarters has also procured vaccination kits and medical equipment for the new UNICEF/WHO BCG programmes in Central America and in Asia.

ITC HEADQUARTERS SUPPLY OPERATIONS

Table 1

SUPPLY OF VACCINE, TUBERCULIN DILUTIONS, ETC., FROM ALL LABORATORIES, TO ITC MISSIONS, JULY 1, 1948—JUNE 30, 1951.

Laboratory	Vaccine (cc)	Tuberculin Dilutions (cc)						Old Tuberculin (cc)	Tuberculin Jelly (tubes)	Stock Solution of PPD (cc) [1]
		1. T.U.	5 T.U.	10 T.U.	33 T.U.	50 T.U.	100 T.U.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
EUROPEAN LABORATORIES:										
A. Pasteur Institute, Paris, France:										
For Algeria	428,950			850,500					9,420	
For Morocco and Tangiers	386,325			993,600					6,340	
For Tunisia	266,750			247,600					14,415	
B. Bacteriological Laboratory, Gothenburg, Sweden:										
For Austria	367,990	136,200	4,560	146,700		25,740			19,050	
For Finland	233,870									
C. Pasteur Institute, Athens, Greece:										
For Greece		136,000		125,800						
D. State Serum Institute, Copenhagen, Denmark:										
Total[2]	5,611,405	3,517,240	224,000	3,247,140	23,600		4,150	29,950	209,975	7,260
MIDDLE EAST LABORATORIES:										
Agouza Serum and Vaccine Institute, Cairo, Egypt:										
For Egypt		8,800	338,280	55,200						
ASIAN LABORATORIES:										
A. King Institute, Madras, India:										
For Ceylon	68,675		114,450	5,825						
For India	973,370	858,255	1,151,145	617,935		325	13,215			
For Pakistan	27,650	31,925		27,500			300			
B. Bureau of Laboratories, Karachi, Pakistan:										
For Pakistan		111,000	258,110	164,100						
LATIN AMERICAN LABORATORIES:										
A. BCG Laboratory, Mexico City, Mexico:										
For Ecuador	183,100									
For Mexico	42,132	3,500	95,700	8,000			2,550			
B. National Institute of Hygiene, Guayaquil, Ecuador:										
For Ecuador			282,300	26,470			2,940			
Grand Total...	8,590,217	4,802,920	2,468,545	6,516,370	23,600	26,065	23,155	29,950	259,200	7,260

[1]) 50,000 T.U. per cc.

[2]) See Table 2 for breakdown by country of destination.

ITC HEADQUARTERS SUPPLY OPERATIONS

Table 2

SUPPLY OF VACCINE, TUBERCULIN DILUTIONS, ETC., FROM STATE SERUM INSTITUTE, COPENHAGEN, TO ITC MISSIONS
JULY 1, 1948—JUNE 30, 1951

Country	Vaccine (cc)	Tuberculin Dilutions (cc)					Old Tuberculin (cc)	Tuberculin Jelly (tubes)	Stock Solution of PPD (cc)[1]
		1 T.U.	5 T.U.	10 T.U.	33 T.U.	100 T.U.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
EUROPE									
Austria								1,100	
Czechoslovakia	916,590	485,840		387,340				26,000	
Finland							18,000	8,800	
Greece	625,450	298,600	1,500	240,800			350	16,125	1,200
Hungary	226,820	285,200		273,600				10,900	
Italy	21,300	400		400		100	2,250	450	10
Malta	27,000	100		100			7,620		
Poland	1,730,340	1,580,000		1,597,500	23,600			56,425	1,300
Yugoslavia	965,450	668,600	86,400	430,800				64,575	500
MIDDLE EAST									
Egypt	313,805	42,000	4,550	81,600		650		12,500	800
Israel	180,500	93,100	87,000	172,800				3,650	
Lebanon	19,700	18,100		15,200				900	
Palestine Refugees	87,850	42,800		32,300		3,000		2,300	
Syria	65,750	2,500	33,400	14,000				1,300	250
NORTH AFRICA									
Morocco	175,850		7,750	700			300		
ASIA									
Ceylon								150	
India			3,400			400	200	2,000	
Pakistan	252,400						1,230	2,000	2,000
LATIN AMERICA									
Ecuador								650	600
Mexico	2,600							150	600
Grand Total...	5,611,405	3,517,240	224,000	3,247,140	23,600	4,150	29,950	209,975	7,260

[1]) 50,000 T.U. per cc.

ITC HEADQUARTERS SUPPLY OPERATIONS

Table 3

VACCINATION KITS AND STATION UNITS PROVIDED TO ITC MISSIONS
JULY 1, 1948—JUNE 30, 1951

Country	Vaccination Kits	Station Units
(1)	(2)	(3)
EUROPE		
Austria	28	2
Czechoslovakia	80	36
Greece	67	8
Hungary	18	
Italy	16	2
Malta	15	2
Poland	134	10
Yugoslavia	60	4
MIDDLE EAST		
Egypt[1])	265	8
Israel	35	3
Lebanon	10	2
Palestine Refugees	30	5
Syria	27	
NORTH AFRICA		
Algeria	36	
Morocco	34	
Tunisia	18	1
ASIA		
Ceylon	44	1
India[1])	554	27
Pakistan	46	6
LATIN AMERICA		
Ecuador	50	5
Mexico	50	5
Grand Total...	1,617	127

[1]) Part of the kits were shipped after June 30, 1951.

ITC HEADQUARTERS SUPPLY OPERATIONS

Table 4

SUPPLY OF SYRINGES, NEEDLES AND ADHESIVE TAPE TO ITC MISSIONS
JULY 1, 1948—JUNE 30, 1951

Country	Syringes	Steel Needles (doz)	Platinum Needles (doz)	Adhesive Tape (rolls)
(1)	(2)	(3)	(4)	(5)
EUROPE				
Austria	1,394	134	822	2,000
Czechoslovakia	4,429	1,092	744	29,902
Finland	1,750	3,430	1,090	6,200
Greece	2,297	899	676	8,930
Hungary	3,417	1,934		10,050
Italy	296	136	76	180
Malta	301	136	76	
Poland	4,605	1,676	97	34,010
Yugoslavia	5,165	2,436	770	43,460
MIDDLE EAST				
Egypt	2,748	1,921	759	15,394
Israel	950	411	456	2,670
Lebanon	260	130	70	2,500
Palestine Refugees	630	140	115	1,300
Syria	225	59	54	1,050
NORTH AFRICA				
Algeria	936	2,182	10	
Morocco	1,074	809	44	
Tunisia	604	492	22	
ASIA				
Ceylon	340	100	70	50
India[1])	17,717	5,449	3,571	6,505
Pakistan	1,192	444	386	1,000
LATIN AMERICA				
Ecuador	826	207	408	2,800
Mexico	868	405	214	50
Grand Total...	52,024	24,622	10,530	168,051

[1]) Part of the supplies were despatched after June 30, 1951.

ITC HEADQUARTERS SUPPLY OPERATIONS

Table 5

VEHICLES PROVIDED FOR COUNTRY PROGRAMMES JULY 1, 1948—JUNE 30, 1951

Country	Cars in Use at Height of Campaign					Transferred to the Government [1]	
	Sedans	Panel-vans and Carry-alls	Jeeps and Jeep station wagons	Trucks	Total	Total	Date of Transfer
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
EUROPE							
Austria	4	7	7	—	18	14	Aug. 1, 1950
Czechoslovakia	6	24	2	—	32	23	Aug. 1, 1949
Finland	6	—	1	—	7	5	Jan. 1, 1950
Greece	2	16	1	—	19	9	Dec. 31, 1950
Hungary	2	22	—	—	24	0	—
Italy	2	9	—	—	11	0	—
Malta	—	4	—	—	4	1	July 1, 1950
Poland	5	46	2	—	53	51	Apr. 1, 1950
Yugoslavia	3	29	3	—	35	31	Dec. 31, 1950
MIDDLE EAST							
Egypt	4	18	1	—	23	22	July 1, 1951
Israel	2	4	—	—	6	6	Dec. 1, 1950
Lebanon	—	3	—	—	3	0	—
Palestine Refugees	1	5	—	—	6	0	—
Syria	2	7	—	—	9	6	Aug. 2, 1951
NORTH AFRICA							
Algeria	3	14	2	1	20	20	June 30, 1951
Morocco	3	17	—	2	22	16	June 19, 1951
Tunisia	2	9	—	—	11	7	Apr. 19, 1951
ASIA							
Ceylon	—	3	—	—	3	3	Aug. 30, 1951
India	5	19	16	1	41	41	July 1, 1951
Pakistan	1	5	1	—	7	7	July 1, 1951
LATIN AMERICA							
Ecuador	2	6	8	—	16	15	Aug. 8, 1951
Mexico	4	6	2	—	12	2	Dec. 1, 1950
OTHERWISE DISPOSED OF [2]	—	—	—	—	—	36	—
Total	—	—	—	—	—	315	—

[1] Transferred upon completion of the ITC phase of the campaign. In the case of Egypt, India and Pakistan, title to the vehicles was retained by UNICEF as of July 1, 1951, the date of the commencement of the UNICEF/WHO BCG programme in these countries. The vehicles in Algeria remain under ITC title for the present. The 2 vehicles for Mexico are assigned to the BCG Laboratory; UNICEF retains title for the present.

[2] Of these vehicles, 3 were wrecked in the course of work; the remainder have been transferred or will be transferred to UNICEF for ultimate disposition.

ITC DOCTORS

BY COUNTRY OF ORIGIN AND PERIOD OF SERVICE

Period of Service	Total	Canadian	Danes	Finns	French	Norwegians	Swedes	Swiss
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Less than 6 months	93	—	32	8	6	8	39	—
6 to 12 months	56	—	26	—	10	11	9	—
1 to 2 years	44	1	20	—	9	12	1	1
2 to 3 years	9	—	9	—	—	—	—	—
More than 3 years	3	—	3	—	—	—	—	—
Total...	205	1	90	8	25	31	49	1

D. PERSONNEL

1) Field Personnel.

Doctors.

In the first stages of the Scandinavian BCG programmes an effort was made to recruit tuberculosis specialists as chief doctors in the campaigns. By the time ITC was created, however, it had become clear that tuberculosis specialists were not necessary and that, in general, younger doctors were more suitable. In most of the campaigns, therefore, the ITC team-leaders were young doctors a few years out of medical school. ITC chiefs of mission were older men or were selected from the team-leaders who had proved themselves most competent after substantial experience in the field. Competition for hospital posts and in private practice in Scandinavia at times made it difficult to recruit doctors for foreign service for extended periods of time, and it was therefore sometimes necessary to replace the doctors in the field more frequently than desirable. Similar problems were faced in the recruitment of French doctors for the campaigns in North Africa.

In all, during the existence of the ITC from March 1948 to June 1951, ITC employed a total of 205 doctors in the field, from the countries of origin and for the periods of service indicated in the above table.

Nurses.

There was considerably less difficulty in the recruitment of nurses for the field missions and it was possible to keep many of them in foreign service for longer periods than the doctors. As a result, the efficiency of the day-to-day practical work in the different countries rested largely on the shoulders of the ITC nurses. Preference in recruitment was given to nurses with experience in tuberculosis dispensaries. Women between the ages of 25—40 were usually recruited, after early experience showed that nurses above and below

ITC NURSES

BY COUNTRY OF ORIGIN AND PERIOD OF SERVICE

Period of Service	Total	Danes	French	Luxembourgeoises	Norwegians	Swedes
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Less than 6 months	56	20	5	—	12	19
6 to 12 months	98	35	32	1	16	14
1 to 2 years	87	37	20	1	20	9
2 to 3 years	36	29	1	—	5	1
More than 3 years	4	3	—	—	1	—
Total...	281	124	58	2	54	43

those age limits had greater difficulty in adjusting themselves to the frequently difficult conditions of work in strange climates.

During the existence of ITC, a total of 281 nurses were employed in the field from the countries of origin and for the periods of service indicated in the table on page 39.

Other field personnel.

In most countries administrative officers were assigned to the ITC Missions — usually men with training in accounting or business. The administrative officer was responsible for receiving and despatching supplies, management of mission accounts and dealing with customs, police, and other authorities of the country on non-medical matters.

In most of the countries an ITC statistical officer trained by the World Health Organization Tuberculosis Research Office served for a limited period of time in order to set up the statistical reporting methods of the campaign and to train nationals of the countries in continuing the work of the maintenance of records.

Laboratory technicians to assist in the preparation of tuberculin dilutions were assigned for limited periods of time to Pakistan, Ecuador and Mexico. Technicians to assist in vaccine production were assigned for limited periods to Egypt and Pakistan, and a doctor from the Pasteur Institute, Paris, was assigned to assist in Greece.

The drivers of ITC team cars were in all cases nationals of the country. In countries where there was a shortage of skilled mechanics and automobile workshops, mechanics were sent out to supervise the maintenance of vehicles. These countries were Austria, Greece, Yugoslavia and Egypt.

In all, a total of 125 non-medical personnel were employed in the field, 118 of them Scandinavian and 7 French.

National personnel.

The greater part of the testing and vaccination work during the campaigns was, of course, performed by national personnel. In all, well over 1,000 doctors, nurses, and "BCG technicians" (lay vaccinators) were trained by ITC personnel. The national personnel were appointed by the health authorities of the country, and were responsible to the Liaison Officer designated by the government. Ministries of Health in many countries encountered great difficulty in recruiting adequate numbers of competent persons. In many of the countries there was a shortage of doctors and nurses. The difficulty was often increased because inadequate funds were allocated for health purposes. The wage scales were in many cases too small to assure a competent staff interested in continuing in the work. The problem was to determine what inducements, salary and otherwise, were necessary to assure the maintenance of high technical standards despite the tediousness which was inevitable in the daily routine work of a mass campaign. In the face of these problems most of the countries did a remarkable job of recruitment.

The experience of ITC, and recommendations for recruitment and training of BCG campaign personnel will be treated extensively in the forthcoming publication "Mass BCG Vaccination Campaigns — A Practical Guide".

General personnel problems.

All Scandinavian medical personnel assigned to the field by ITC received a period of training in Scandinavia and on the job prior to final assignment to teams. French personnel were similarly trained by the North African Regional Office in Paris.

Where possible an effort was made to recruit international staff familiar with the language of the country to which they were to be assigned or familiar with a language that was common currency in the area. Many staff members proved to be exceptionally able in learning enough of the language of the country to facilitate their work. Not a few of the nurses returned home with a competent grasp of Arabic, Polish, Greek, and other languages.

Salaries paid by ITC to doctors and nurses were normally in line with salaries for people of similar age and experience in their countries of origin. In general these salaries were somewhat lower than those paid to similar personnel by such international organizations as WHO and UNICEF. With the assumption of BCG work by these two organizations, salaries are being brought into line.

There were a few cases of "misfits" among the doctors and nurses assigned to the field, but in general they performed exemplary services. ITC Headquarters frequently followed the policy of shifting doctors and nurses to another country after long periods of service (i.e. one or two years) in a single country. Experience showed that too long a period in a country resulted in a drop in efficiency. In general, the international staff adjusted readily to unfamiliar climates and customs, and were interested in remaining in the work as long as possible despite arduous working conditions and a high incidence of intestinal and tropical infections.

2) *Headquarters Personnel.*

ITC Headquarters consisted of a number of different sections as follows:

1. Director's Office — responsible for overall planning, organization, administration and supervision of the work of ITC.
2. Personnel Office — for recruitment and training of medical personnel.
3. Public Relations Office — responsible for information service to the field and for preparation of Headquarters informational materials.
4. Field Supply Service Office — responsible for procurement, warehousing, and despatch of equipment and supplies for the field.
5. Motor Transport Office — responsible for directing the use, procurement, modification and service of ITC vehicles.
6. Accounting Office.

During the early stages of the ITC programme a Statistical Office was also maintained at Headquarters, but beginning in early 1949, statistical compilation was taken over by the staff of the WHO Tuberculosis Research Office.

Total personnel employed at Headquarters varied with the progress of the programme, as indicated by the following figures:

Total ITC.HQ Staff.

July 1, 1948	27
July 1, 1949	54
July 1, 1950	42
July 1, 1951	18
October 1, 1951	10

All staff will have left by January 1, 1952.

E. ASSISTANCE TO BCG AND TUBERCULIN LABORATORIES

1) GENERAL COMMENTS

Laboratories for production of BCG vaccine.

Many of the countries to which ITC gave assistance in carrying out mass vaccination campaigns also received assistance in setting up or improving laboratories for national production of BCG vaccine for intracutaneous administration. The purpose of this assistance was to assure that when the ITC phase of the campaign ended, the countries would have a source of vaccine to continue the programme. In order that the countries might obtain the best results from such assistance, ITC required that the laboratory premises conform to the requirements laid down by the WHO Expert Committee on Biological Standardization.

For the four European countries in the ITC programme which already had a BCG laboratory (Czechoslovakia, Greece, Poland, Yugoslavia) the assistance rendered consisted chiefly of: (a) Advice on changes in the existing laboratories which would enable them to meet the WHO requirements; and (b) Provision of supplementary laboratory equipment and chemicals to ensure continued production of BCG vaccine. Supplementary equipment consisted of such items as: sterilamps, special BCG production apparatus, incubators, microscopes, sterilizers, autoclaves, plus glassware, packing materials, and chemicals. The items supplied by ITC varied from country to country, depending upon what was lacking in the laboratory that could not be readily procured in the country.

There were four countries in the programme outside Europe which had no BCG laboratory and which were interested in constructing one (Ecuador, Egypt, Israel, and Pakistan). In these countries, ITC assisted in all aspects of planning and equipping the laboratories, as follows:

(a) Aid in developing the plan, design, layout, etc. for the laboratory. Efforts were made to ensure that they would not only be up to the requirements of WHO, but also that they should be model laboratories.

(b) Supply of complete equipment and chemicals. This included, in addition to the supplementary equipment described above, all

apparatus and supplies necessary in connection with the production of vaccine.

(c) Provision of fellowships for bacteriologists to be trained in vaccine production at European BCG laboratories.

(d) Assignment of a European bacteriologist and technician to assist in setting up the laboratory and in training the local personnel in vaccine production.

ITC also assisted the BCG laboratories in India and in Mexico by supplying supplementary equipment and chemicals.

Laboratories for production of tuberculin dilutions.

In most of the countries which conducted ITC-aided mass vaccination campaigns, the same tuberculin as that supplied by the State Serum Institute in Copenhagen was used, in order to make it possible to compare the results of tuberculin testing in the different countries. In the early stages of the ITC programme, tuberculin dilutions ready for use were sent from Copenhagen to the different countries. Later, it was found less expensive to send tuberculin stock solution for the preparation of the tuberculin dilutions at national bacteriological institutions. However, this procedure was followed only when it was determined that these locally prepared tuberculin dilutions could be made in exactly the same way as those made in Copenhagen. To assure such uniformity, ITC at times found it advisable to send out technicians to prepare the dilutions; in other cases the dilutions were made by national bacteriologists previously trained in Copenhagen. The equipment and chemicals for the preparation of these dilutions were supplied by ITC when necessary, including glassware, scales, filling apparatus, vessels, packing supplies, etc. The countries which received such equipment for local laboratories are: Greece, Yugoslavia, Israel, Syria, Pakistan, Ecuador, Mexico, and to a lesser extent, Poland and Egypt.

In general, upon the completion of the ITC phase in a country, ITC made arrangements to supply tuberculin (and in some cases tuberculin jelly) for a period of three more years.

Special refrigerator-containers.

From the time that ITC began work in tropical climates, special arrangements were necessary to ensure that the vaccine would be kept properly cold from the time of production until it was used in vaccination. For this purpose ITC experimented with the construction of suitable containers and devised a satisfactory one. These containers were reinforced and insulated cardboard boxes containing refrigerating units for ordinary ice. (For details of the construction of the containers, see ITC's Second Annual Report, Chapter II, Report B-7, Annex 7).

At the production centre, the vaccine was stored in a refrigerator immediately after production. The special containers were then used to transport vaccine from the production centre to the ITC Missions, usually by air. Where the delivery time exceeded 20 hours, special arrangements were made with the airlines to reice the containers. As soon as the vaccine reached the Mission, the temperature inside the container was checked (it was almost always below 4° C.) and the vaccine was stored in the Mission refrigerator. For transport from Mission Headquarters to the different team centres in a country, whether by train, plane or road, the cardboard refrigerator-containers were again used. The teams in the field used either these containers or thermos flasks containing crushed ice, to store the ampules until the moment of use.

In the section following, a brief summary of ITC aid to laboratories is given, country by country. For details of the assistance given up to June 30, 1950, reference should be made to Chapter XV of the "Conference on European BCG Programmes Conducted with the Assistance of the Joint Enterprise, Copenhagen, Denmark, 8th to 12th September, 1949", and Chapter II, Report B-3 of "The Second Annual Report of the International Tuberculosis Campaign".

2) LABORATORIES IN EUROPE

Czechoslovakia.

Vaccine.

After consultation with ITC the Ministry of Health decided, in August 1949, to enlarge the BCG laboratory at the Institute of Health in Prague to ensure that it would meet the requirements of the WHO Expert Committee on Biological Standardization. The necessary supplementary equipment and chemicals were despatched by ITC in December 1949, and further supplies at a later date. The laboratory was

completed in 1950, and is producing vaccine for the continuing campaign in Czechoslovakia.

Tuberculin.

As in the case of other countries which ITC assisted in vaccination campaigns, ITC offered Czechoslovakia a three-year supply of tuberculin upon conclusion of the mass campaign. Czechoslovakia requested only a supply of PPD powder, which was provided. Tuberculin dilutions are being prepared by a doctor trained in Copenhagen.

Total ITC aid.

ITC aid to Czechoslovakia in laboratory equipment and chemicals totalled $4,647 and 1,250 Danish kroner.

Greece.

Vaccine.

During the Summer of 1949, the ITC Laboratory Consultant visited the BCG laboratory at the Pasteur Institute, Athens. He reported that the laboratory met WHO technical requirements, and arranged for the provision of certain items of equipment and chemicals which were lacking. In November 1949, a French doctor from the Pasteur Institute, Paris, was sent to Athens by ITC for a six-month period to assist in the training of Greek personnel and in the production of vaccine for intracutaneous use.

In April 1950, the laboratory was inspected by the Chairman of the WHO Expert Committee on Biological Standardization who reported that the laboratory met WHO technical requirements. However, formal action on approval was not taken by WHO because of financial and administrative factors (cf. UN Document JC4/UNICEF-WHO/4, 19 April 1950).

Since the completion of the ITC phase at the end of 1950, vaccine for the continuing programme in Greece has been supplied by the Pasteur Institute, Athens.

Tuberculin.

The necessary equipment and chemicals for making tuberculin dilutions from tuberculin stock solution were sent to Athens by ITC at the end of 1949, since which date the Greek Pasteur Institute has prepared the dilutions from stock solution sent from Copenhagen. ITC has made arrangements for the continued supply of stock solution for a three-year period after the close of the ITC phase, i.e. up to December 31, 1953. The necessary quantity of tuberculin jelly for the Moro patch test is also being provided for three years.

Total ITC aid.

ITC aid to Greece in laboratory equipment and chemicals for production of BCG vaccine and tuberculin dilutions totalled $7,609 and 2,500 Danish kroner.

Poland.

Vaccine.

After consultation with ITC the Polish health authorities decided to make extensions and improvements in the BCG laboratory at the State Institute of Hygiene's affiliated institute in Lublin. Equipment and chemicals for this purpose were provided by ITC at the end of 1949 and again in 1950. Since the conclusion of the ITC phase of the campaign in Poland in December 1949, vaccine for the continuing programme has been provided by the Lublin laboratory.

Tuberculin.

Since the Spring of 1950, ITC has provided stock solution of purified tuberculin every second month and tuberculin jelly every six months under the usual ITC three-year arrangement which will continue until April 30, 1953.

Total ITC aid.

ITC aid to Poland in laboratory equipment and chemicals totalled $8,709.

Yugoslavia.

Vaccine.

In the Summer of 1949, after consultation with ITC the Ministry of Health decided to enlarge the BCG laboratory at the Institute of Hygiene in Belgrade. Supplementary equipment and chemicals for the laboratory were despatched by ITC at the end of 1949. Since the conclusion of the ITC phase in December 1950, vaccine for the continuing programme has been supplied by the laboratory in Belgrade.

Tuberculin.

Chemicals and equipment for a small laboratory for the preparation of tuberculin dilutions at the Institute of Hygiene in Zagreb were despatched by ITC in September 1950. ITC arranged for the training in Copenhagen of the doctor who took charge of this work.

Stock solution of tuberculin and tuberculin jelly are being provided to Yugoslavia under ITC arrangements until December 31, 1953.

Total ITC aid.

ITC aid to Yugoslavia in equipment and chemicals for the BCG and tuberculin laboratories totalled $7,608.

Finland.

Vaccine.

In the Autumn of 1950, the Finnish health authorities requested ITC assistance in the establishment of a laboratory for the production of BCG vaccine. The plan for the laboratory was received in April 1951 by ITC, which submitted comments and informed the national authorities that equipment and chemicals would be ordered upon notification that actual construction of the building had begun. As of June 30, 1951, ITC had not received such notification.

Vaccine for the continuing programme since the conclusion of the ITC phase in June 1949, has been supplied by the Sahlgrenska Institute, Gothenburg, Sweden.

Tuberculin.

ITC has arranged to provide the necessary quantities of Old Tuberculin and tuberculin jelly for Finland's continuing programme, until December 1, 1952.

3) LABORATORIES OUTSIDE EUROPE

a) Middle East.

Egypt.

Vaccine.

In late 1949 and early 1950, ITC assisted the Egyptian health authorities in planning a BCG laboratory for which one of the existing buildings at the Agouza Serum and Vaccine Institute, Cairo, was to be adapted. Construction of the laboratory began in the Autumn of 1950, and was completed in April 1951. Complete equipment and chemicals for the laboratory were despatched by ITC in 1950.

In April 1951, the ITC Laboratory Consultant and a technician from the Danish State Serum Institute arrived in Cairo to assist in installing the equipment, in starting vaccine production, and in training national staff. Vaccine production began in May. In order to provide as much training as possible for the staff, the vaccine was produced twice a week (instead of once, as normally) and the batches of vaccine during the first three months were used for guinea-pig checks only. Preliminary comparison checks with Danish vaccine, on human beings, were to begin in August 1951. Preparations have been made by the Egyptian Government for inspection of the laboratory by the WHO Expert Committee on Biological Standardization.

Tuberculin.

Since July 1950, tuberculin dilutions have been prepared at the Agouza Serum and Vaccine Institute from tuberculin stock solution provided every second month by ITC. Some equipment and chemicals to assist in preparing tuberculin dilutions were provided by ITC in the Spring of 1950. ITC has arranged to provide a continued supply of tuberculin stock solution and tuberculin jelly until June 30, 1954.

Total ITC aid.

ITC aid to Egypt in BCG and tuberculin laboratory equipment and chemicals totalled $11,885.

Israel.

Vaccine.

The Ministry of Health originally planned to build a BCG laboratory in Jerusalem but subsequently selected a site in Jaffa, on the grounds of the Dajani Maternity Hospital. Construction of the laboratory began in February 1951. Complete equipment and chemicals for the laboratory were despatched by ITC during the Summer of 1951. It is expected that the laboratory will be completed by the end of the year.

During the Spring and Summer of 1951, a bacteriologist from Israel was on an ITC fellowship in Scandinavia and France to study the production of BCG vaccine.

Since the end of the ITC phase of the BCG campaign in Israel, the Government has purchased vaccine from the State Serum Institute, Copenhagen, for its continuing programme, pending completion of the national BCG laboratory.

Tuberculin.

A small laboratory for the production of tuberculin dilutions was established in December 1950, at the Government Central Pharmacy in Tel-Aviv. The manager of the Pharmacy was given instruction by ITC's Laboratory Consultant and equipment and chemicals for the laboratory were despatched by ITC in February 1951.

ITC has arranged to supply Israel with tuberculin for the usual three-year period.

Total ITC aid.

ITC aid to Israel in BCG and tuberculin laboratory equipment and chemicals will total approximately $13,500.

Syria.

Vaccine.

Since the conclusion of the ITC phase of the campaign at the end of August 1950, Syria has received freeze-dried vaccine from the Pasteur Institute, Paris, for the continuing programme.

Tuberculin.

ITC assisted the Institute of Hygiene, Damascus, with equipment and chemicals for a small laboratory for the production of tuberculin dilutions. Instruction was given to the doctor who was to be in charge of this work. The value of equipment and chemicals for this laboratory was $1,048.

Since January 1, 1951, Syria has prepared its own tuberculin dilutions from stock solution sent from Copenhagen every month. Under the usual ITC three-year arrangement, supply of tuberculin stock solution and tuberculin jelly will be continued until September 1, 1953.

b) Asia.

Pakistan.

Vaccine.

During 1950, ITC assisted Pakistan in planning a BCG laboratory, to be set up in one of the buildings of the Bureau of Laboratories in Karachi. Construction began towards the end of the year and complete equipment and chemicals were despatched by ITC during the Spring of 1951. During 1950—51, a Pakistani doctor studied BCG vaccine production at laboratories in Scandinavia and France on a WHO fellowship.

The ITC Laboratory Consultant and a Danish technician arrived in Karachi in July 1951 to assist in installing the equipment, starting the vaccine production and training the national staff. Pending the commencement of production, vaccine for the continuing programme in Pakistan is being provided from the State Serum Institute, Copenhagen, under special arrangements by the ITC and UNICEF/WHO.

Tuberculin.

Since December 1949, the Bureau of Laboratories has produced tuberculin dilutions from stock solution provided by ITC. From December 1949 to December 1950, a bacteriological technician from the Danish State Serum Institute was in charge of this work. After that date the dilutions were prepared by national staff. Equipment and chemicals for the tuberculin dilutions laboratory were provided by ITC in December 1949.

Stock solution will be provided to Pakistan under the usual ITC three-year arrangement, until June 30, 1954.

Total ITC aid.

ITC aid to Pakistan in BCG and tuberculin laboratory equipment and chemicals will total approximately $15,500.

India.

Vaccine.

The Government of India BCG Laboratory at the King Institute of Preventive Medicine, Guindy, Madras, was established in 1948, with WHO assistance. The laboratory was approved by the WHO Expert Committee on Biological Standardization early in 1949. Vaccine and tuberculin dilutions for the BCG campaign in India were produced at the Madras laboratory, which also supplied the vaccine and tuberculin dilutions for the ITC programme in Ceylon and for the UNICEF/WHO programme in Singapore/Malaya. ITC supplied the laboratory with equipment and chemicals during 1949, 1950

and 1951. Special cardboard refrigerator-containers for shipment of vaccine were also provided by ITC. Vaccine for the continuing programme in India and Ceylon is being provided by the Madras laboratory.

The Director of the laboratory and a bacteriologist were trained in Scandinavia in vaccine production and in the preparation of tuberculin dilutions in 1948, on WHO fellowships.

Tuberculin.

For the production of tuberculin dilutions, ITC supplied the Madras laboratory with purified tuberculin powder and arrangements have been made to continue the supply for the usual three-year period after the ITC phase.

Total ITC aid.

ITC aid to India in laboratory equipment and chemicals will total approximately $8,500.

China.

During 1948 it seemed probable that an ITC-aided BCG campaign would be undertaken in China. It was intended to assist in starting a large-scale BCG production centre in Peiping. During the Summer and Autumn of 1948, ITC despatched equipment and chemicals to China for this purpose, and subsequently a supply of purified tuberculin powder. During 1948, two Chinese bacteriologists were trained in the production of BCG vaccine and tuberculin in Europe and the USA, on WHO fellowships.

It was not feasible to start the usual kind of ITC-aided BCG programme in China. From incomplete reports received at ITC Headquarters, it appears that a BCG production centre is functioning in Peiping.

ITC aid to China in laboratory equipment and chemicals totalled $23,088.

c) Latin America.

Mexico.

Vaccine.

The BCG Laboratory in Mexico City was inspected in January 1950 by the Chairman of the WHO Expert Committee on Biological Standardization and was subsequently approved.

During 1950, supplementary equipment and chemicals for the laboratory were supplied by ITC, as well as the special cardboard refrigerator-containers for vaccine shipments. The BCG Laboratory in Mexico supplied vaccine for the ITC-aided campaign in Ecuador as well as for the campaign in Mexico, and additional equipment was provided to enable the laboratory to cope with the increased production necessary.

Tuberculin.

Complete laboratory equipment for the preparation of tuberculin dilutions from stock solution were provided by ITC, and in June 1950, the ITC Laboratory Consultant trained national staff in the preparation of the dilutions.

Total ITC aid.

ITC aid to Mexico in BCG and tuberculin laboratory equipment and chemicals totalled $4,785.

Ecuador.

Vaccine.

In late 1950 and early 1951, plans for a new BCG laboratory at the National Institute of Hygiene in Guayaquil were submitted to ITC.HQ for advice and comment. Construction of the building began in January 1951, and it is expected that the laboratory will be completed during the year. Complete equipment and chemicals for the laboratory were despatched by ITC during the first half of 1951.

During the Summer of 1951, an Ecuadorean bacteriologist was on an ITC fellowship in Copenhagen, Paris, and Mexico City for training in vaccine production at the BCG laboratories.

For the ITC phase of the campaign in Ecuador, vaccine was supplied by ITC from the BCG Laboratory in Mexico City. Since June 30, 1951, Ecuador has purchased vaccine from the same source.

Tuberculin.

Tuberculin dilutions for the campaign were prepared at the National Institute of Hygiene, Guayaquil, from stock solution provided by ITC. In June 1950, a Danish bacteriological technician was sent to Guayaquil by ITC to prepare tuberculin dilutions and train national personnel. Equipment and chemicals for the preparation of dilutions were supplied by ITC.

ITC has arranged to supply Ecuador with tuberculin stock solution until June 30, 1954.

Total ITC aid.

ITC aid to Ecuador in BCG and tuberculin laboratory equipment and chemicals will total approximately $13,000.

F) PUBLIC RELATIONS

The earlier experience in the pre-ITC Scandinavian BCG campaigns revealed that it was difficult, if not impossible, to conduct an effective campaign without an adequate education and information programme for the medical profession, civic groups and the general public. All too often extensive organizational and technical preparations were made by the missions and the teams, only to find that people did not appear for testing and vaccination.

In order to assure the success of its operating programmes, the ITC created a Public Relations Office. This office concentrated its efforts on aid to the operating campaigns in the field.

In the early stages of planning a campaign, the Public Relations Office assisted the authorities of a country and the ITC Mission in planning the detailed educational and publicity programme. Wherever it was possible for the national authorities to appoint special BCG information officers, the latter were trained in the methods and techniques which had been successful in other countries, and were aided in devising new methods to fit the special conditions of the country. Where it was not possible to secure the appointment of special information personnel, assistance was given to the campaign leaders in the country.

To facilitate the educational work, information materials were prepared and supplied to all of the countries by ITC.HQ, where possible in the language of the country. This material included:

An instruction film, "BCG Mass Vaccination Against Tuberculosis", for training doctors and nurses; issued in 11 language versions.

A popular film, "Your Enemy — Tuberculosis", for showing to the public in theatres, schools, etc; issued in 10 language versions.

A brochure in colour, "Tuberculin Testing and BCG Vaccination", showing the techniques; issued in 4 languages.

A brochure, "Protective Value of BCG Vaccination", summarizing scientific studies on results of vaccination; issued in 4 languages.

A semi-technical pamphlet, "BCG Vaccination Against Tuberculosis", describing the techniques of tuberculin testing and vaccination in detail; issued in 3 languages.

Press and radio material for the general public.

Possibly the most successful of the information services provided by ITC (particularly in countries with a high degree of illiteracy) were the loudspeaker units which were mounted on the vaccinating teams' cars. These were employed before the beginning of a team's work and during its course to arouse the people to an awareness of the danger of tuberculosis and to urge them to show up for vaccination and testing. In a few countries which could not provide their own, ITC also provided film projectors for use in mobile publicity vans.

Until the end of 1950, when the ITC Public Relations Office was closed, continuous contact was maintained with the press in countries receiving assistance, and in the countries which had contributed funds for the programme, to keep the public informed on progress of the campaign.

(For further details on the information activities of ITC, see ITC's previous Annual Reports).

Recommendations for an information programme and techniques useful in connection with mass BCG campaigns will be included in the forthcoming publication, "Mass BCG Vaccination Campaigns — A Practical Guide".

G) STATISTICS

In order that the results of the BCG campaigns might be recorded systematically for later analysis and follow-up and for international comparisons, standard statistical forms were designed at outset to assure proper and uniform compilation of records from country to country. After its creation in February 1949, the WHO Tuberculosis Research Office assumed the responsibility for direction and supervision of the statistical work, as well as the training and direction of ITC Mission statisticians.

Vaccination cards and statistical forms were provided by ITC.HQ for each country programme. All vaccinating teams, whether national, international or mixed, utilized these forms. The records were then sent to Mission Headquarters where a monthly report was prepared for ITC Headquarters, showing numbers tested, reactors, non-reactors, and vaccinated. The detail work of maintaining these records and compiling the summary reports was performed by nationals of the country, with ITC Mission assistance.

Statistical documentation of ITC's work has been undertaken by WHO.TRO in order to present systematically the results of the campaigns for use in the tuberculosis control programme of the country and for public health research in general. Complete statistical documentation on the mass vaccination campaigns in Czechoslovakia and Poland has already been published. It is expected that before the end of the year further reports will be published on Greece, Malta, Israel, Syria and Tunisia. Similar reports will be issued on each of the countries in which mass campaigns were conducted. These reports include comprehensive tables and graphs on tuberculin testing, tuberculin sensitivity and BCG vaccinations in the campaign.

In Finland, WHO.TRO made special arrangements with the health authorities for setting up a national roster of those tested and vaccinated for follow-up studies on the effect of mass BCG vaccination.

The "Second Annual Report of ITC" contains reproductions of all forms used in the campaign and of the instructions for statistical work in the field. Statistical procedures recommended for use in mass BCG vaccination campaigns will be covered in detail in the forthcoming publication, "Mass BCG Vaccination Campaigns — A Practical Guide."

Research projects jointly undertaken by WHO.TRO and ITC in connection with comparison studies of BCG vaccine, studies in tuberculin testing, vaccination procedures, etc., will be described in a report to be issued by WHO.TRO as a *WHO Bulletin* Monograph.

III.

FIELD OPERATIONS

A. GENERAL INTRODUCTION

While the BCG programmes from one country to another differed in many details, certain principles and procedures were identical in all countries. These are described in this Introduction; a description of the campaign in each country will be found in III-B, Country Summaries. (Greater detail on the programme in each country up to June 30, 1950, will be found in ITC's previous Annual Reports).

Although ITC provided most of the equipment and supplies for the campaigns, the concept of the work was not that of a supply programme but of an operating programme with the active assistance of ITC.

At outset it was decided to set up a special campaign organization in each country, including specially trained full-time mobile teams, rather than to work out of the country's existing permanent health institutions. This made it possible for the campaign personnel to devote their time exclusively to the BCG programme and to complete the campaign in a far shorter period than would otherwise have been possible, with consequent savings in expenses. It also facilitated instruction and training, public education, and organization of the day-to-day work.

Most of the country programmes were nation-wide mass campaigns. In a few countries, however, ITC conducted only a demonstration programme, either because of a limitation of national funds for an over-all programme, or because the country could carry on by itself after the demonstration period, or because it became evident after initiation of work that an over-all mass campaign was not feasible in the country at the time. In the overall campaigns ITC gave assistance with personnel and supplies until the entire population of the country in the age-groups specified had been covered. In demonstration programmes ITC provided personnel and supplies for work among limited groups only, for a limited period of time, during which national personnel were trained for an eventual mass campaign at some later date In some countries, programmes which originally started as demonstrations subsequently became broad-scale mass campaigns.

The period of time during which medical personnel of ITC remained in a country varied considerably, depending upon a number of factors: size of the country, availability of national personnel, their facility in assuming direction of the campaign, and the speed with which the programme could be executed.

Division of responsibilities between the Government and ITC.

In each country, the Ministry of Health was responsible for the actual execution of the programme while the ITC Mission assisted by advising on the methods of organization and the medical procedures, and by instruction and training of national personnel.

The country pledged itself to follow ITC's medical, organizational and statistical methods, thus assuring the maintenance of international standards which had been set by ITC in cooperation with WHO and UNICEF.

The Government appointed a Liaison Officer to serve as national chief of the programme, which he developed jointly with the ITC Chief of Mission. The Government also made available national doctors, nurses and administrative personnel. In general the expenses of the campaign incurred in the currency of a country were paid by the Government; these normally included:

Salaries and expenses of national personnel.
Headquarters for the ITC Mission.
Transportation costs within the country of national and international personnel.

Costs in connection with internal distribution of supplies.

Fuel and maintenance for the team cars used in the campaign.

Educational and publicity materials produced locally.

Housing costs of international personnel.

The ITC in general provided the following:

Doctors and nurses to train national personnel, plus administrative and statistical staff, and laboratory technicians, where necessary.

Vaccine, tuberculin and medical equipment for the campaign.

Vehicles for the teams.

Living expenses (except for housing) of the international personnel.

Films, pamphlets and other educational and publicity material, plus loudspeaker units for the team cars.

Laboratory supplies and equipment for national BCG laboratories.

Personnel.

The ITC staff in all countries consisted of trained doctors and nurses, usually with experience in mass campaigns. The national medical personnel in most countries also consisted of doctors and nurses. However, in some countries where there was a shortage of such medical personnel it became necessary to use "BCG technicians" (lay vaccinators). This was particularly true in India and Pakistan. These technicians were health inspectors, semi-trained nurses, or other para-medical personnel; the results obtained by their employment were normally very satisfactory.

In general, a vaccination team consisted of 1 doctor and 2 nurses, usually national and international personnel mixed. The make-up of a team, however, varied, and in some cases it consisted of 1 doctor supervising 6 "BCG technicians", depending upon the availability of doctors.

Organization of the campaign.

Wherever possible ITC sought to work by concentrating all teams in one part of the country at a time (e.g. province or county), then proceeding progressively to the next area until the entire country had been covered. This method of work had great advantages from the point of view of public education, programme administration and supply. Normally in a town the schools were taken first, followed by work in public vaccination centres for pre- and post-school age persons. It was frequently found that the school children were the best propagandists for assuring a good turn-out of the rest of the population.

The commencement of testing and vaccination was preceded first by general national publicity, then by educational work among medical and civic organizations, followed by intensive local publicity through the local authorities, newspapers, films, posters and the loudspeaker units on the team cars.

Tuberculin testing.

In the European campaigns, the Moro patch test was generally used for children up to and including 12 years of age; for persons over 12, two pre-vaccination Mantoux tests of 1 T.U. and 10 T.U. In the later campaigns, particularly in the countries outside Europe, a simplified procedure was adopted whereby a single pre-vaccination tuberculin test of Mantoux 5 T.U. was given. In many of the countries outside Europe, especially in tropical climates, the Moro patch test was found unreliable and was not used; in other countries it was used only for the smallest children.

Source of vaccine and tuberculin.

It was an ITC rule throughout the programme that the vaccine and tuberculin used in the campaign had to come from laboratories approved by the WHO Biological Standardization Committee. Therefore, until other BCG laboratories were set up, the vaccine was provided from existing laboratories, mostly from the State Serum Institute, Copenhagen, and the Pasteur Institute, Paris; from the Sahlgrenska Institute, Gothenburg, Sweden, for the programmes in Austria and Finland. In order to assure uniformity of tuberculin and the comparability of tuberculin testing results, the tuberculin used in the campaign was supplied from the same sources.

Retesting.

One way of measuring the effect of vaccination is to determine the degree of allergy of vaccinated persons by means of a tuberculin test some time after vaccination. Retesting was attempted employing the regular teams of the mass campaigns. This proved to be difficult and was abandoned. Subsequently a special retesting programme was organized by WHO.TRO, employing specially trained teams, in Ecuador, Egypt, Greece, India and Syria. (See Country Summaries, and Chapter IV—B.)

Statistics.

In order to assure the maintenance of records for statistical documentation of the campaign in each country and to permit international comparisons, uniform statistical procedures were devised for ITC by WHO.TRO, Copenhagen. In most countries a central statistical office was established by the national authorities, with ITC assisting in the maintenance of records and the training of local statistical staff. In general it was the responsibility of the national authorities and the ITC to compile the basic statistics, of WHO.TRO to analyse them and prepare the statistical documentation.

For each of the countries in which an ITC campaign was conducted WHO.TRO is preparing complete statistical documentation, to be published by ITC. The first two of these reports, on Czechoslovakia and Poland, have already been issued.

Table 1 and Table 2, appended to this section, show a statistical summary of all campaigns assisted by ITC, by country, and month by month. At the end of each Country Summary will be found a detailed statistical breakdown, month by month, for the entire campaign in the country. These are ITC's final statistics and include corrections of previously published figures where later data became available.

BCG vaccination after ITC phase.

ITC encouraged all countries in which it worked to develop a plan for continuation of tuberculin testing and BCG vaccination as a permanent feature of the country's tuberculosis control programme. Where such plans were formulated and approved, ITC left in the country vehicles, medical equipment and supplies to equip vaccination centres and mobile teams for continuation of the work. BCG vaccination is being continued in 18 of the countries: Algeria, Austria, Ceylon, Czechoslovakia, Ecuador, Egypt, Finland, Greece, India, Israel, Malta, Mexico, Morocco, Pakistan, Poland, Syria, Tunisia and Yugoslavia.

ITC also assisted countries which were interested in setting up a BCG laboratory. Aid was given in designing laboratories, equipment and chemicals were supplied, and laboratory staff were trained. At the conclusion of the ITC phase in each country, arrangements were made by ITC to provide tuberculin for the continuing national programme for a period of three years.

ITC assistance to national laboratories is described in detail in Chapter II-E.

Table 1

STATISTICAL SUMMARY OF BCG CAMPAIGNS, COUNTRY TOTALS AS OF JUNE 30, 1951

Country	ITC Totals as of June 30, 1949		ITC Totals for the year July 1, 1949—June 30, 1950		ITC Totals for the year July 1, 1950—June 30, 1951		Totals during entire ITC phase		Grand total, including pre-ITC work	
	Tested	Vaccinated	Tested	Vaccinated	Tested	Vaccinated	Tested	Vaccinated	Tested	Vaccinated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Austria	94,278	63,674	551,550	383,000	8,465	5,700	654,293	452,374	748,164	513,241
Czechoslovakia	3,112,812	1,900,427	294,506	183,844	—	—	3,407,318	2,084,271	3,421,876	2,088,446
Finland	750,000	362,000	—	—	—	—	750,000	362,000	1,322,000	592,523
Greece	346,378	211,424	715,354	521,863	402,895	276,517	1,464,627	1,009,804	1,498,220	1,028,697
Hungary	1,952,024	771,853	—	—	—	—	1,952,024	771,853	3,095,146	1,081,391
Italy	—	—	12,550	6,576	—	—	12,550	6,576	50,401	28,636
Malta	—	—	54,968	38,770	—	—	54,968	38,770	54,968	38,770
Poland	3,370,591	1,650,935	1,358,442	633,894	—	—	4,729,033	2,284,829	5,514,036	2,535,026
Yugoslavia	1,024,669	535,729	1,374,074	727,035	611,495	292,098	3,010,238	1,554,862	3,010,238	1,554,862
Egypt	—	—	297,499	82,129	1,806,812	578,999	2,104,311	661,128	2,104,311	661,128
Israel	—	—	296,821	176,772	68,477	32,079	365,298	208,851	365,298	208,851
Lebanon	—	—	43,463	28,311	—	—	43,463	28,311	43,463	28,311
Syria	—	—	166,676	75,386	98,609	40,196	265,285	115,582	265,285	115,582
Palestine Refugees	—	—	211,323	148,137	—	—	211,323	148,137	211,323	148,137
Algeria	—	—	591,638	201,048	1,079,027	474,616	1,670,665	675,664	1,670,665	675,664
Morocco	414,727	199,891	846,652	370,325	946,128	439,373	2,207,507	1,009,589	2,207,507	1,009,589
Tangiers	—	—	21,089	7,493	—	—	21,089	7,493	21,089	7,493
Tunisia	—	—	274,649	123,757	326,853	141,926	601,502	265,683	601,502	265,683
Ceylon	14,690	932	56,402	13,672	235,615	108,160	306,707	122,764	306,707	122,764
India	136,123	40,357	1,361,895	410,979	2,570,497	900,210	4,068,515	1,351,546	4,068,515	1,351,546
Pakistan	—	—	232,226	69,252	717,761	215,248	949,987	284,500	949,987	284,500
Ecuador	—	—	—	—	646,702	346,242	646,702	346,242	646,702	346,242
Mexico	—	—	2,709	1,539	177,266	82,341	179,975	83,880	179,975	83,880
Germany (not ITC-aided)										
Swedish Red Cross	—	—	—	—	—	—	—	—	3,678,737	1,367,999
Danish Red Cross	—	—	—	—	—	—	—	—	1,658,868	511,663
Total...	11,216,292	5,737,222	8,764,486	4,203,782	9,696,602	3,933,705	29,677,380	13,874,709	37,694,983	16,650,624

Table 2

STATISTICAL SUMMARY OF BCG CAMPAIGNS, MONTHLY TOTALS ALL COUNTRIES[1]) MAY 1948—JUNE 1951

Month	Number Tested	Number Vaccinated	Cumulative Total	
			Tested	Vaccinated
(1)	(2)	(3)	(4)	(5)
May 1948	53,571[2])	25,857	53,571	25,857
June	53,571[2])	25,857	107,142	51,714
July	206,241	105,552	313,383	157,266
August	349,454	179,552	662,837	336,818
September	527,433	282,720	1,190,270	619,538
October	1,066,004	511,764	2,256,274	1,131,302
November	1,166,144	582,216	3,422,418	1,713,518
December	889,481	424,432	4,311,899	2,137,950
January 1949	933,218	469,240	5,245,117	2,607,190
February	1,061,762	533,116	6,306,879	3,140,306
March	1,289,745	657,308	7,596,624	3,797,614
April	1,069,859	558,677	8,666,483	4,356,291
May	1,166,954	635,149	9,833,437	4,991,440
June	1,230,730	673,406	11,064,167	5,664,846
July	919,021	510,582	11,983,188	6,175,428
August	609,533	310,193	12,592,721	6,485,621
September	611,152	314,525	13,203,873	6,800,146
October	763,762	405,423	13,967,635	7,205,569
November	759,714	382,182	14,727,349	7,587,751
December	738,644	360,417	15,465,993	7,948,168
January 1950	482,455	227,659	15,948,448	8,175,827
February	592,664	278,105	16,541,112	8,453,932
March	935,247	401,794	17,476,359	8,855,726
April	842,712	353,878	18,319,071	9,209,604
May	869,375	375,070	19,188,446	9,584,674
June	792,330	358,326	19,980,776	9,943,000
July	627,539	269,423	20,608,315	10,212,423
August	957,171	394,181	21,565,486	10,606,604
September	853,858	381,952	22,419,344	10,988,556
October	907,105	382,872	23,326,449	11,371,428
November	1,021,582	460,366	24,348,031	11,831,794
December	760,562	315,911	25,108,593	12,147,705
January 1951	763,795	313,477	25,872,388	12,461,182
February	726,670	294,589	26,599,058	12,755,771
March	836,088	313,756	27,435,146	13,069,527
April	853,529	348,935	28,288,675	13,418,462
May	760,910	264,152	29,049,585	13,682,614
June	627,795	192,095	29,677,380	13,874,709
Total under ITC auspices, as of June 30, 1951	29,677,380	13.874,709		

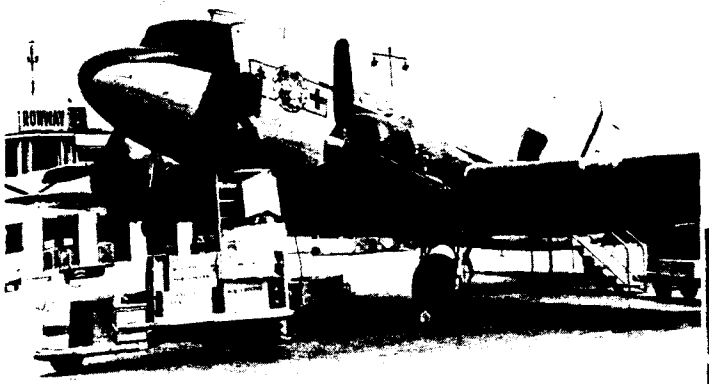
[1]) Only the ITC phase of the programmes is included in this Table. For statistics including BCG work by the Scandinavian member organizations of ITC under their own auspices, outside the ITC programme, see Table 1, Columns (10) and (11).

[2]) Finland only.

NOTE: In a number of cases, only lump-sum figures were reported to ITC. HQ (or supplementary figures) for certain periods covering a number of months. Since it has not been possible to make a breakdown of these figures for their proper months, they have been averaged over the months covered. The figures so treated and the countries and periods involved are as follows:

Country	Number		Period covered
	Tested	Vaccinated	
Algeria	94,069	31,654	Nov. 1949—Feb. 1950
„	312,325	109,888	Mar.—April 1950
Ceylon	79,250	24,148	Jan.—Dec. 1950
Finland	750,000	362,000	May 1948—June 1949
Hungary	774,638	290,790	Oct.—Nov. 1948
India	136,123	40,357	Feb.—June 1949
„	25,328	3,579	Oct. 1949—April 1950
„	3,706	598	May 1950—Jan. 1951
Mexico	2,709	1,539	May—June 1950
Morocco	962,876	467,556	Apr. 1949—Feb. 1950
„	35,708	15,593	July—Aug. 1950
Palestine Refugees	140,122	98,296	Nov.—Dec. 1949
Tunisia	123,587	58,872	Sept. 1949—Feb. 1950

EUROPE



← The ITC plane (a C-47 lent by the American Air Forces in Germany) loading in Copenhagen with vaccine and tuberculin for ITC Missions in Europe and penicillin and streptomycin for UNICEF medical programmes.

→ Doctors from Asia and Europe learning the technique of BCG vaccine production at the Danish State Serum Institute.

← ITALY: Norwegian Dr. Bjorn Moe and an Italian medical team prepare to vaccinate children of Genoa, Italy.

→ CZECHOSLOVAKIA: A team of Slovaks and Danes head for the town of Spisska Stara Ves in the High Tatra mountains of Slovakia.

← YUGOSLAVIA: The population of the Macedonian village of Kazlovac assembles to meet the ITC team.

AUSTRIA

BACKGROUND

Interest in BCG vaccination in Austria dates from 1926, at which time a special committee to study BCG was set up under the public health office of the city of Vienna. In the years immediately after World War II the Austrian Government decided to extend its work in this field.

In the Spring of 1948 a demonstration campaign was conducted in Vienna under the auspices of the Danish Red Cross. The Swedish Red Cross conducted a BCG vaccination campaign in the province of Kärnten between December 1948 and April 1949.

The agreement between the Government of Austria and the ITC was signed in February 1949. The staff of the Swedish Red Cross Kärnten campaign was taken over by ITC for the country-wide campaign, beginning in May 1949. The programme was a mass campaign to cover the entire population from 1—18 years. The ITC Mission completed its work in July 1950.

Directing the campaign for the Government of Austria was Dr. F. Puntigam, Chief of the Epidemiological Department, Ministry of Social Affairs.

PROGRESS OF THE CAMPAIGN

The campaign was conducted successively in each of eight provinces of Austria (the ninth, Vor-Arlberg, conducted no campaign, for administrative and financial reasons). The campaign in the city of Vienna was conducted under Austrian auspices entirely, since a sufficient number of doctors and nurses had been trained during the earlier Scandinavian demonstration campaign, and international personnel were therefore unnecessary for the mass campaign in the city.

At peak during the ITC phase of the campaign, there were 70 national and 8 international vaccinators at work.

A total of 748,164 persons were tested and 513,241 persons were vaccinated, most of them during the ITC phase. (For month-by-month breakdown, see Table 1).

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

During the entire ITC phase the Moro patch test was the only tuberculin test for children up to and including 12 years of age; Mantoux 1 T.U. and Mantoux 10 T.U. were used for persons over 12.

Tuberculin jelly and tuberculin dilutions ready for use in Mantoux testing, made from Old Tuberculin, were provided by the Swedish Red Cross from the State Bacteriological Institute in Stockholm. Vaccine was provided by the Swedish Red Cross from the BCG Laboratory at the Sahlgrenska Institute, Gothenburg, Sweden.

CONTINUATION

In Austria provision is made by law for BCG vaccination on a voluntary basis (Federal Act of February 23, 1949, BGBL-89). Upon the conclusion of the international phase of the campaign in July 1950, ITC left in Austria vehicles and equipment for continuation of BCG work on the basis of the plans submitted by the government at that time, which called for mass vaccination of persons up to 18 years of age during the Spring of each year, regular tuberculin testing, and revaccination where necessary. In addition to these special campaigns it was planned to vaccinate throughout the year at official tuberculosis stations and provision was made for mobile teams.

The Swedish Red Cross continued to provide vaccine for some months after the conclusion of the ITC phase at which time the new BCG production laboratory at the State Institute for the Production of Vaccines took over. The Swedish Red Cross assisted this laboratory with equipment. Tuberculin is provided from national sources.

AUSTRIA

Table 1

STATISTICAL SUMMARY OF BCG VACCINATION CAMPAIGN MAY 1948—JULY 1950

Based on Monthly Reports (C-Forms)

Month	Monthly Total		Cumulative Total		Number of vaccinators	
	Number of persons		Number of persons			
	Tested	Vaccinated	Tested	Vaccinated	National	International
(1)	(2)	(3)	(4)	(5)	(6)	(7)
May 1948[1]	11,377	5,333	11,377	5,333		
June[1]						
December	7,842	5,532	19,219	10,865		
January 1949	8,792	6,353	28,011	17,218		[4]
February [2]	12,250	8,364	40,261	25,582		
March	11,629	7,608	51,890	33,190	[4]	
April	34,379	23,291	86,269	56,481		
May	55,452	38,888	141,721	95,369		9
June	44,400	27,964	186,121	123,333		9
July [3]	41,581	29,442	227,702	152,775		7
August	—	—	227,702	152,775	—	—
September	6,826	5,311	234,528	158,086	21	7
October	66,101	46,705	300,629	204,791	24	7
November	48,710	34,057	349,339	238,848	40	7
December	49,492	33,324	398,831	272,172	51	7
January 1950	37,517	22,939	436,348	295,111	43	8
February	55,660	37,921	492,008	333,032	37	8
March	99,426	69,765	591,434	402,797	49	8
April	50,622	36,282	642,056	439,079	70	8
May	44,667	31,461	686,723	470,540	67	8
June	52,976	37,001	739,699	507,541	64	8
July	8,465	5,700	748,164	513,241	64	8
Grand Total including pre-ITC work	748,164	513,241	—	—	—	—
Total during ITC phase only	654,293	452,374	—	—	—	—

[1]) Pre-ITC work by Danish Red Cross in Vienna.

[2]) Pre-ITC work by Swedish Red Cross in Kärnten.

[3]) The figures include the following numbers tested and vaccinated in the final stages of the Swedish Red Cross campaign in Kärnten:

	Tested	Vaccinated
May	3,292	2,305
June	2,282	873
July	1,362	717
September	666	491

[4]) Not available.

CZECHOSLOVAKIA

BACKGROUND

BCG vaccination began in Czechoslovakia in 1927, with vaccine produced at the State Health Institute in Prague. The oral method was used.

A mass vaccination demonstration programme was conducted by the Danish Red Cross in the Fall of 1947, in one county of North-east Bohemia.

The agreement between the Government of Czechoslovakia and the ITC was signed on May 21, 1948, and the campaign began soon afterwards.

The campaign in Czechoslovakia was a country-wide mass vaccination campaign, compulsory for age-groups from 1 to 20 years in accordance with the national law of March 20, 1948. The mass campaign was originally scheduled for one year and was actually completed in one year and a few weeks. The ITC Mission was withdrawn at the end of July 1949.

Government Liaison Officers in the campaign were Dr. I. Gonda, Chief of the Tuberculosis Control Division of the Department of Public Health of Slovakia, and Dr. J. Bouzova, Deputy Chief of the Tuberculosis Control Division of the Ministry of Health in Prague.

PROGRESS OF THE CAMPAIGN

The vaccinating teams were in general concentrated in one area of the country at a time, and moved from province to province until the entire country had been covered.

The greatest number of national vaccinators at work in one month was 121; the greatest number of international vaccinators was 40. The vaccinating teams at peak were testing more than 350,000 persons per month. The organization and execution of the programme in Czechoslovakia were so efficient that ITC sent doctors from other countries in which programmes were to be undertaken to Czechoslovakia to study the methods.

In all a total of 3,421,876 persons were tested, of whom 2,088,446 were vaccinated. (For month-by-month figures, see Table 1). Complete statistical documentation on the programme has been prepared by the WHO Tuberculosis Research Office and published by ITC in "Mass BCG Vaccination in Czechoslovakia, 1948—49", issued by ITC in August 1950.

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

The tuberculin testing method was Moro patch test up to 12 years of age, Mantoux 1 T.U. and 10 T.U. for persons over 12.

Tuberculin and vaccine for the campaign were provided by ITC from the State Serum Institute, Copenhagen.

CONTINUATION

Tuberculin testing and vaccination have been continued by the Ministry of Health after the conclusion of the ITC phase. A permanent BCG centre was established in each of the 19 counties, in conjunction with the tuberculosis dispensaries; mobile teams were also set up. Vehicles and medical equipment for the continued programme were left in Czechoslovakia by ITC.

Equipment and chemicals for a new BCG laboratory in Prague were provided by ITC. This laboratory is producing the vaccine for the continued programme in Czechoslovakia. PPD powder for tuberculin dilutions has been provided by ITC.

CZECHOSLOVAKIA

Table 1

STATISTICAL SUMMARY OF BCG VACCINATION CAMPAIGN SEPTEMBER 1947—JULY 1949

Based on Monthly Reports (C-Forms)

Month	Monthly Total		Cumulative Total		Number of vaccinators	
	Number of persons		Number of persons			
	Tested	Vaccinated	Tested	Vaccinated	National	International
(1)	(2)	(3)	(4)	(5)	(6)	(7)
September-November 1947[1]	14,558	4,175	14,558	4,175	[2]	[2]
July 1948	45,714	26,971	60,272	31,146	33	9
August	94,286	53,029	154,558	84,175	50	19
September	211,412	128,835	365,970	213,010	56	18
October	269,447	163,445	635,417	376,455	70	29
November	345,395	222,679	980,812	599,134	70	29
December	150,223	95,187	1,131,035	694,321	71	30
January	254,798	153,570	1,385,833	847,891	70	32
February	313,344	190,126	1,699,177	1,038,017	59	40
March	352,835	219,105	2,052,012	1,257,122	59	40
April	380,031	225,175	2,432,043	1,482,297	73	37
May	333,780	201,308	2,765,823	1,683,605	117	32
June	361,547	220,997	3,127,370	1,904,602	121	6
July	294,506	183,844	3,421,876	2,088,446	113	6
Grand total including pre-ITC work	3,421,876	2,088,446	—	—	—	—
Total during ITC phase only	3,407,318	2,084,271	—	—	—	—

[1]) Pre-ITC work by Danish Red Cross.
[2]) Not available.

FINLAND

BACKGROUND

BCG vaccination began in Finland in 1941 under the auspices of the Finnish National Anti-Tuberculosis Association; by 1948 a total of about 170,000 persons had been vaccinated.

The agreement between the Government of Finland and the ITC was signed on April 28, 1948. It was a country-wide mass vaccination programme for persons up to 18 years of age. (The Finnish Government extended the programme to persons up to 25 years of age).

The ITC phase of the campaign ended in June 1949.

Directing the campaign for the Government of Finland was Dr. S. Savonen, Chief of the Tuberculosis Section of the National Health Service.

PROGRESS OF THE CAMPAIGN

Since the Government of Finland had already planned a mass vaccination campaign through the National Anti-Tuberculosis Association, which had adequate skilled personnel available, ITC's role was primarily to furnish supplies.

During the ITC phase 750,000 persons were tested and 362,000 were vaccinated. (Month-by-month figures are not available).

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

The tuberculin testing method was a modification of Trambusti's method (i.e. a drop of tuberculin was placed on the forearm and an injection needle was thrust into the skin through the drop). For children up to 10 years of age, the Moro patch test was also used.

BCG vaccine for the campaign in Finland was provided free of charge by the Sahlgrenska Institute, Gothenburg, Sweden. Tuberculin (Old Tuberculin) for the Trambusti test and tuberculin jelly for the Moro patch test were provided by ITC from the State Serum Institute, Copenhagen.

CONTINUATION

Tuberculin testing and BCG vaccination have been continued in Finland as a regular part of the tuberculosis control programme. Testing and vaccination are conducted in tuberculosis dispensaries, maternity hospitals, welfare centres and schools, and by special mobile units. In general, persons up to 25 years of age are covered.

It is estimated that about 350,000 persons are being tested annually.

ITC provided the Government of Finland with vehicles and medical equipment for the continued programme and arranged for a supply of tuberculin stock solution and ointment until December 1952.

The supply of vaccine from Gothenburg, Sweden, has continued.

The Government expressed an interest in setting up a BCG production laboratory and ITC indicated its readiness to help with equipment for this laboratory. As of June 30, 1951, negotiations between the Government and ITC for this assistance were continuing.

The WHO.TRO, in cooperation with the Finnish Anti-Tuberculosis Association and ITC, has assisted in setting up a national roster of persons tuberculin tested and BCG vaccinated. This roster is to be used for follow-up studies on the results of BCG mass vaccination.

GREECE

BACKGROUND

BCG vaccine has been produced in Greece since 1925 by the Greek Pasteur Institute in Athens. Vaccinations were given in Hellenic Red Cross dispensaries over a period of many years, by the oral method and by scarification.

The Danish Red Cross conducted a demonstration mass vaccination programme in the Spring and Summer of 1948, primarily in the public schools in Athens.

The agreement between the Government of Greece and the ITC was signed on October 1, 1948. The programme was a nation-wide mass campaign covering persons from 1—18 years of age.

The ITC Mission was originally scheduled to work in Greece from October 1948 until the end of June 1949; this was subsequently extended and the ITC Mission was withdrawn in December 1950.

Directing the campaign for the Ministry of Hygiene was Dr. T. Triantaphyllou.

PROGRESS OF THE CAMPAIGN

At outset there were six Greek and five international teams. In the early stages, work started on the mainland in the vicinity of Athens and in other areas where the war did not preclude the possibility of work. Conditions in Greece made it difficult to concentrate the teams in one area and work systematically over the entire country; at times, therefore, work was conducted simultaneously at widely distant points and on the islands.

The greatest number of national vaccinators at work in one month was 19; the greatest number of international vaccinators was 20.

A total of 1,498,220 persons were tested and 1,028,697 were vaccinated. (For month-by-month breakdown, see Table 1).

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

The technique of tuberculin testing during the entire campaign was Moro patch test for children up to and including 12 years of age, Mantoux 1 T.U. and 10 T.U. for older persons.

Vaccine and tuberculin jelly for Moro patch tests were provided by ITC from the State Serum Institute, Copenhagen. Until early 1950, tuberculin dilutions ready for use were provided by ITC from Copenhagen; thereafter the dilutions were prepared by the Pasteur Institute, Athens, from stock solutions provided by ITC.

CONTINUATION

BCG vaccination is being continued in Greece as a permanent feature of the public health programme of the Ministry of Hygiene. The Ministry plans ultimately to set up a permanent vaccination centre in each of the 52 districts of Greece and a number of them are already functioning. Six mobile units have also been provided. Vehicles and medical equipment have been left in the country by ITC for this continued programme; arrangements have also been made by ITC for the supply of tuberculin jelly and tuberculin stock solution until the end of 1953.

Since the beginning of 1951, vaccine has been provided by the BCG laboratory of the Pasteur Institute in Athens. Equipment and chemicals to assist in the production of vaccine and tuberculin dilutions were provided by ITC.

RETESTING

A retesting programme was undertaken by ITC and WHO.TRO in the Autumn—Winter 1950—51, with trained special teams. Some 58,000 persons were retested in selected towns and rural districts in all parts of the country. For results, see Chapter IV-B.

GREECE

Table 1

STATISTICAL SUMMARY OF BCG VACCINATION CAMPAIGN APRIL 1948—DECEMBER 1950

Based on Monthly Reports (C-Forms)

Month	Monthly Total		Cumulative Total		Number of vaccinators	
	Number of persons		Number of persons			
	Tested	Vaccinated	Tested	Vaccinated	National	International
(1)	(2)	(3)	(4)	(5)	(6)	(7)
April 1948 [1]	2,935	1,450	2,935	1,450	[2]	[2]
May [1]	11,166	6,393	14,101	7,843		
June [1]	6,432	3,181	20,533	11,024		
July [1]	1,455	668	21,988	11,692		
August [1]	3,486	1,594	25,474	13,286		
September [1]	2,592	1,563	28,066	14,849		
October [1]	5,527	4,044	33,593	18,893		
November	12,565	6,966	46,158	25,859	4	6
December	13,819	7,164	59,977	33,023	6	5
January 1949	19,286	10,366	79,263	43,389	10	10
February	37,793	21,610	117,056	64,999	15	11
March	63,435	35,302	180,491	100,301	15	10
April	46,945	23,725	227,436	124,026	19	12
May	75,711	52,064	303,147	176,090	14	18
June	76,824	54,227	379,971	230,317	14	18
July	63,295	46,281	443,266	276,598	18	20
August	56,617	34,691	499,883	311,289	14	20
September	65,861	51,030	565,744	362,319	14	16
October	48,372	36,085	614,116	398,404	14	16
November	22,523	18,307	636,639	416,711	14	16
December	36,797	25,326	673,436	442,037	6	17
January 1950	46,144	30,912	719,580	472,949	15	13
February	66,011	49,576	785,591	522,525	17	17
March	69,739	52,507	855,330	575,032	16	16
April	48,169	35,219	903,499	610,251	16	18
May	88,525	60,999	992,024	671,250	18	16
June	103,301	80,930	1,095,325	752,180	18	16
July	69,910	48,244	1,165,235	800,424	17	16
August	57,939	42,132	1,223,174	842,556	17	16
September	78,556	54,406	1,301,730	896,962	17	16
October	45,741	30,133	1,347,471	927,095	17	19
November	103,571	69,019	1,451,042	996,114	17	19
December	47,178	32,583	1,498,220	1,028,697	17	16
Grand Total including pre-ITC work	1,498,220	1,028,697	—	—	—	—
Total during ITC phase only	1,464,627	1,009,804	—	—	—	—

[1]) Pre-ITC work by Danish Red Cross.

[2]) Not available.

HUNGARY

BACKGROUND

The Danish Red Cross began BCG work in Hungary in June 1947.

The agreement between the Government of Hungary and the ITC was signed on July 2, 1948.

The Hungarian Government felt that all vaccinators should be nationals. In light of the fact that Scandinavian vaccinators had been working in Hungary for many months, it was felt that the programme could proceed with national vaccinators only, even though ITC was reluctant to work on this basis. It was finally agreed that there would be an ITC Chief of Mission only, to represent the Joint Enterprise.

The programme was to be a nation-wide mass campaign, in Budapest for persons up to 25 years of age, elsewhere up to 30 years of age.

The Government Liaison Officer was Dr. A. Havas, Director of the State Institute for Hygiene.

PROGRESS OF THE CAMPAIGN

The Government designated 18 national doctors to serve as instructors but most of these served for only one to two months and were then replaced by other doctors who had been trained in the meantime. The plan was for these instructors to train the county health doctors who would carry out the actual programme.

In late November 1948, about two months after the campaign had started, the ITC representative notified ITC.HQ that the programme was proceeding at too rapid a pace, with insufficient instruction and direction and that satisfactory technical standards were not being maintained. There were also administrative difficulties between the Government and the ITC Mission. The Director of ITC discussed these matters with the Hungarian authorities in December and the Government representatives gave assurances that the situation would be remedied.

Nonetheless, in the early months of 1949 there was little improvement either in the instruction of the vaccinators, in organization and inspection, or in the statistical reporting to ITC, as had been agreed. In March 1949, the Medical Sub-Committee of UNICEF authorized the ITC to halt the programme in Hungary if, upon further negotiation with the Government, no improvement in the work was effected. On April 28, 1949, the Government of Hungary informed the ITC that it was unilaterally cancelling the agreement. The ITC Mission and vehicles were withdrawn from Hungary during May—June 1949. Vaccination kits, syringes, needles, etc., which had been used in Hungary, were left with the Government by the ITC.

Including the previous Danish Red Cross work, a total of 3,095,146 persons were tested and 1,081,391 were vaccinated. (For month-by-month breakdown, see Table 1).

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

Tuberculin testing method was Moro patch test up to 12 years of age and Mantoux 1 T.U. and 10 T.U. above that age.

Tuberculin and vaccine for the programme were provided by ITC from the State Serum Institute, Copenhagen.

HUNGARY

Table 1

STATISTICAL SUMMARY OF BCG VACCINATION CAMPAIGN JUNE 1947—MARCH 1949

Based on Monthly Reports (C-Forms)

Month	Monthly Total		Cumulative Total	
	Number of persons		Number of persons	
	Tested	Vaccinated	Tested	Vaccinated
(1)	(2)	(3)	(4)	(5)
June-December 1947 [1]	440,801	121,752	440,801	121,752
January 1948 [1]	25,857	3,787	466,658	125,539
February [1]	54,323	16,270	520,981	141,809
March [1]	125,671	34,223	646,652	176,032
April [1]	238,652	66,810	885,304	242,842
May [1]	257,818	66,696	1,143,122	309,538
October	774,638	290,790	1,917,760	600,328
November				
December	418,354	164,779	2,336,114	765,107
January 1949	261,994	111,164	2,598,108	876,271
February	253,074	111,505	2,851,182	987,776
March	243,964	93,615	3,095,146	1,081,391
Grand total including pre-ITC work	3,095,146	1,081,391	—	—
Total during ITC phase only	1,952,024	771,853	—	—

NOTE: Figures on number of vaccinators are not available; See Country Summary Text.

[1]) Pre-ITC work by Danish Red Cross; ITC phase began in October.

ITALY

BACKGROUND

Limited BCG demonstration programmes were conducted by the Danish Red Cross in the Spring of 1948 in Rome, Florence and Naples, and by Norwegian Relief for Europe in the Genoa area from October 1948 to June 1949.

An agreement between the Government of Italy and the ITC was signed on September 9, 1949; the ITC Mission arrived at the end of October. The programme was to be a mass vaccination campaign for children between 1—18 years of age in specified provinces of Sicily and Liguria with a total population of five to six million.

PROGRESS OF THE CAMPAIGN

A counter-propaganda campaign waged by certain groups of the medical profession, particularly the adherents of vaccination with Petragnani-Salvioli "bacilli-uccisi", caused great difficulties almost from the outset. There were also disagreements and conflict of opinion between the ITC representatives and the local health authorities with respect to the speed and extent of the campaign.

During the Winter of 1949, officials of the High Commissariat for Hygiene and Public Health indicated that they would like to convert the programme into a scientific study rather than a mass campaign, and stated their opinion that a BCG mass vaccination programme was impossible in Italy at the time. After a further trial period of about two months during which the cooperation of the authorities and the response of the public continued inadequate, and during which the counter-propaganda was intensified, the ITC Regional Director for Europe recommended that the work in Italy be continued as a demonstration programme for one more month, and that it should then be terminated. By mutual consent between the Italian Government and the ITC, the programme was thereupon terminated on May 1, 1950, and the Mission was withdrawn shortly afterwards.

At the height of the programme, there were 24 national and 5 international vaccinators at work.

Totals during the ITC demonstration were 12,550 tested and 6,576 vaccinated. (For month-by-month figures, see Table 1).

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

At the beginning of the ITC programme, only the Adrenalin-Pirquet tuberculin test was used. This was subsequently changed in Liguria for children under 12, who were first tested with Moro patch and when this was negative, by the Adrenalin-Pirquet test. In Sicily only the Adrenalin-Pirquet test was used.

Vaccine and Old Tuberculin were provided by ITC from the State Serum Institute in Copenhagen.

CONTINUATION

There is little likelihood of mass BCG vaccination campaigns in Italy at the present time. While some members of the medical profession — particularly in the vicinity of Genoa where the ITC worked — are interested in continuation, there appears to be little possibility of national sponsorship of a mass vaccination campaign in the face of strongly divided opinion in the medical profession.

ITALY

Table 1

STATISTICAL SUMMARY OF BCG VACCINATION CAMPAIGN MARCH 1948—APRIL 1950

Based on Monthly Reports (C-Forms)

Month	Monthly Total		Cumulative Total		Number of vaccinators	
	Number of persons		Number of persons			
	Tested	Vaccinated	Tested	Vaccinated	National	International
(1)	(2)	(3)	(4)	(5)	(6)	(7)
March-June 1948[1]	10,545	5,135	10,545	5,135	[3]	[3]
December 1948-Oct. 1949[2]	27,306	16,925	37,851	22,060	[3]	[3]
November 1949	211	144	38,062	22,204	[3]	3
December	498	318	38,560	22,522	8	3
January 1950	954	562	39,514	23,084	8	3
February	2,464	1,390	41,978	24,474	21	5
March	6,425	3,328	48,403	27,802	24	5
April	1,998	834	50,401	28,636	[3]	0
Grand total including pre-ITC work	50,401	28,636	—	—	—	—
Total during ITC phase only.	12,550	6,576	—	—	—	—

[1]) Pre-ITC work under auspices of Danish Red Cross.
[2]) Pre-ITC work under auspices of Norwegian Relief for Europe.
[3]) Not available.

MALTA

BACKGROUND

An agreement between the ITC and the Government of the United Kingdom on behalf of Malta was signed on February 10, 1950; the ITC Mission arrived in March 1950.

The programme was a mass vaccination campaign covering age-groups 1—18 in all Malta.

The Maltese Government's Liaison Officer for the campaign was Dr. V. Z. Tabona of the Ministry of Health.

PROGRESS OF THE CAMPAIGN

Work was conducted district by district until the entire island of Malta was covered by the end of June 1950. Because of an outbreak of polio, work on the island of Gozo (population about 28,000) was postponed until a later date. The ITC Mission left Malta in July 1950.

There were 14 national and 2 international vaccinators at work in the campaign.

In all, 54,968 persons were tested and 38,770 were vaccinated. (For month-by-month breakdown, see Table 1).

TECHNIQUE; SOURCE OF VACCINE AND TUBERCULIN

The Adrenalin-Pirquet test was used for the entire campaign.

Vaccine and Old Tuberculin were provided by ITC from the State Serum Institute, Copenhagen.

CONTINUATION

Upon termination of the ITC phase, the Ministry of Health of Malta established a BCG vaccination centre and in connection therewith a permanent mobile BCG team. Equipment for the vaccination centre and the mobile team was left on Malta by ITC.

Vaccine was supplied by ITC for the delayed programme on the island of Gozo during the Spring of 1951. Thereafter Malta purchased vaccine from the State Serum Institute, Copenhagen, for its continuing programme.

ITC has arranged to supply Malta with Old Tuberculin for the Adrenalin-Pirquet test until the end of February 1954.