

1. 協議議事録 (M/D)


MINUTES OF DISCUSSIONS
ON THE AFTERCARE PROGRAM
FOR THE PROJECT ON PLASTICS TESTING
IN THE ORIENTAL REPUBLIC OF URUGUAY

The Japanese Aftercare Study Team (hereinafter referred to as "the Team") organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Mr. Makoto Yamashita, Deputy Director, First Technical Cooperation Division, Mining and Industrial Development Cooperation Department, JICA, visited the Oriental Republic of Uruguay from 26 July to 3 August 1999, for the purpose of working out the details of the Aftercare Program for the Project on Plastics Testing (hereinafter referred to as "the Program").

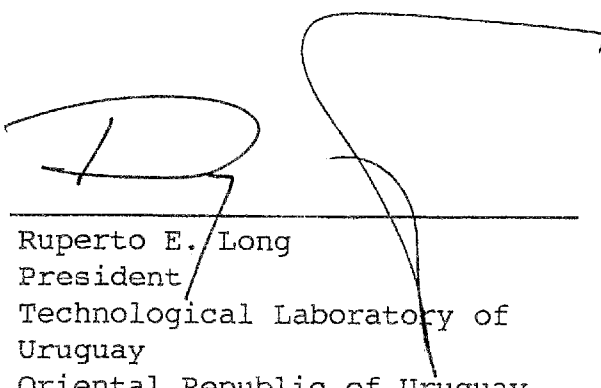
During its stay in the Oriental Republic of Uruguay, the Team exchanged views and had a series of discussions with the authorities concerned of the Government of the Oriental Republic of Uruguay (hereinafter referred to as "the Uruguayan side") on the details of the Program as well as the desirable measures to be taken by both Governments for successful implementation of the Program.

As a result of the study and discussions, both sides agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Montevideo, 3 August 1999



Makoto Yamashita
Leader
Aftercare Study Team
Japan International Cooperation
Agency
Japan



Ruperto E. Long
President
Technological Laboratory of
Uruguay
Oriental Republic of Uruguay

ATTACHED DOCUMENT

I COOPERATION BETWEEN BOTH GOVERNMENTS

- 1 The Government of Japan and the Government of the Oriental Republic of Uruguay will cooperate with each other in implementing the Program for the purpose of furthering the effect of the Project on Plastics Testing (hereinafter referred to as "the Project") through the Aftercare Program of technical cooperation, and thus contributing to the promotion of socio-economic development of the Oriental Republic of Uruguay.
- 2 The Program will be mainly implemented through dispatch of experts and provision of equipment.
- 3 The Program will be implemented in accordance with the Tentative Schedule of Implementation which is given in Annex 1.

II MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

1 DISPATCH OF JAPANESE EXPERTS

In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide, at its own expense, services of Japanese experts as listed in Annex 2 through the normal procedures under the technical cooperation scheme of the Government of Japan.

2 PROVISION OF EQUIPMENT

- (1) In accordance with the laws and regulations in force in Japan, the Government of Japan will take necessary measures through JICA to provide, at its own expense, necessary equipment, spare parts and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Program as listed in Annex 3 through the normal procedures under the technical cooperation scheme of the Government of Japan.

- (2) The Equipment will become property of the Government of the Oriental Republic of Uruguay upon being delivered C.I.F. to the Uruguayan authorities concerned for the implementation of the Program.

3 TRAINING OF URUGUAYAN COUNTERPART PERSONNEL IN JAPAN

Training of Uruguayan Counterpart Personnel in Japan is not included in the scope of the Program.

In this connection, the Uruguayan side understood the scheme of the Program, however, further requested the Team to allocate one (1) seat of training in Japan in the field of Laboratory Management, while the Team promised to take note of it, insisting on its difficulty.

III MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE ORIENTAL REPUBLIC OF URUGUAY

- 1 The Government of the Oriental Republic of Uruguay will take necessary measures to ensure that the self-reliant operation of the Project will be sustained during and after the period of Japanese technical cooperation, through the full and active involvement of all related authorities, beneficiary groups and institutions in the Program.

In this connection, the Team requested the Uruguayan side and the latter agreed that the following countermeasures should be taken by the latter before the commencement of the Program and bimonthly informed the Japanese side, through the Embassy of Japan in the Oriental Republic of Japan formally, of their progress, to enhance the effectiveness of the Program:

- (1) The periodical overhauling and test run of the Equipment;
- (2) The preparation of spare parts lists;
- (3) The preparation and regular entry of operational record of the Equipment;
- (4) The preparation of standard sample list and so on;



- (5) Factory visit for needs survey on the guidance extended by the forth-coming experts as well as for exposing the atmosphere of actual manufacturing.

The Team further drew the Uruguayan side's attention to the fact and the latter understood that the fulfillment of the said countermeasures would also be a prerequisite of the implementation of the Program.

- 2 In accordance with the laws and regulations in force in the Oriental Republic of Uruguay, the Government of the Oriental Republic of Uruguay will take necessary measures to provide, at its own expense, supply of machinery, equipment, instruments, vehicles, tools, spare parts and any other materials necessary for the implementation of the Program other than the Equipment provided through JICA under II-2.

- 3 In accordance with the laws and regulations in force in the Oriental Republic of Uruguay, the Government of the Oriental Republic of Uruguay will take necessary measures for tax exemption, customs clearance, storages, and internal transportation of the Equipment as mentioned II-2. upon their arrival at the ports and/or airports of disembarkation.

- 4 In accordance with the laws and regulations in force in the Oriental Republic of Uruguay, the Government of the Oriental Republic of Uruguay will take necessary measures to meet all running expenses necessary for the implementation of the Program.

- 5 The Government of the Oriental Republic of Uruguay will allocate the necessary numbers of suitably qualified personnel as shown in Annex 4 corresponding each Japanese expert for the effective and successful transfer of technology under the Program.

In this connection, both sides confirmed that the prior scheduling for the technology transfer would be inevitable for the smooth implementation of the Program, thus the Uruguayan side would enforce it rigidly in consultation with the Japanese experts.



6 The Government of the Oriental Republic of Uruguay will make any other necessary arrangements for the successful implementation of the Program including the services of transport as well as domestic and international communication for the experts.

IV CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Oriental Republic of Uruguay undertakes to bear claims, if any arises, against the Japanese experts mentioned in II-1 above engaged in the Program resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Oriental Republic of Uruguay except for those arising from the willful misconduct or gross negligence of the Japanese experts.

V MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with, this Attached Document.

VI TERMS OF COOPERATION

The term of the technical cooperation for the Program will be from 3 August 1999 to 31 March 2001.

VII OTHERS

- 1 The Program will be implemented according to the articles in the Record of Discussions for the Project signed on 21 March 1991, except for the matters stipulated in this Minutes of Discussions.
- 2 The Team pointed out that the review of the management of the laboratory in the Plastic Sector in LATU would be required to cope with the substantial increment of the numbers of entrusted tests including the consideration of the increment

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of the staff for the said Sector, taking into consideration to the fact that the requests for quick response were dominant among the plastics industries, which were confirmed by the Team on the occasion of the visit to the Uruguayan Association of Plastics Industries.

The Team further explained that such countermeasures would enhance the effectiveness of the Program and that contribute to the sustainable development of the said Sector.

3 The Team explained to the Uruguayan side and the latter understood that all inputs by the Japanese side for the Program would be confirmed possibly by the end of October 1999 and the former informed the latter of the outcome through the Embassy of Japan in the Oriental Republic of Uruguay.

4 The Team requested the Uruguayan side and the latter agreed that through the normal procedures under the technical cooperation scheme of the Government of Japan referred to in II above, the following documents would be submitted to the Embassy of Japan in the Oriental Republic of Uruguay:

(1) Form A1 for the Japanese experts
Form A1 for the respective short-term experts are to be submitted by the end of August 1999;

(2) Form A4 for the Equipment
Form A4 for the Equipment is to be submitted by the end of August 1999;

(3) Quotation of the Equipment
The Quotation of the Equipment which are to be procured in the Oriental Republic of Uruguay as earmarked in Annex 3 are to be submitted by the end of August 1999.

In this connection, the Team explained to the Uruguayan side that the result as to whether the said Equipment would be procured either in Japan or the Oriental Republic of Uruguay would be informed the latter through the Embassy of Japan in the Oriental Republic of Uruguay possibly by the end of October 1999.

VIII THE LIST OF THE ATTENDANCE

The List of Attendance of the discussions is shown in Annex 5.

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List of Annexes

- Annex 1 Tentative Schedule of Implementation
- Annex 2 Dispatch of the Japanese experts
- Annex 3 List of the Equipment provided by the
Japanese side
- Annex 4 Allocation of the Counterpart Personnel
- Annex 5 List of the Attendance

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Annex 1 Tentative Schedule of Implementation

Fiscal Year	1999												2000								
Calendar Year	1999						2000						2001								
Month	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Dispatch of the Aftercare Study Team																					
Submission of Form A1 & A4 by the Uruguayan side		*																			
Confirmation of the Inputs by the Japanese side																					
Countermeasures to be taken by the Uruguayan side (*)																					
Dispatch of Japanese experts																					
Provision of Equipment																					

Note

- 1 The Japanese fiscal year starts in April and ends in March.
- 2 The regular reporting of the progress of countermeasures will be bimonthly made and the first reporting will be the end of September 1999.
- 3 Actual schedule for dispatch of the Japanese experts and the provision of the Equipment is subject to change.

Annex 2 Dispatch of the Japanese experts

The following experts are scheduled to be dispatched.

The further information regarding the result of the discussions is listed in the following pages.

No.	Fields of Expertise	Duration	Number
1	Repair of the Equipment (Medium Volume Environmental Test Chamber)	1 month (to be confirmed)	1
	Repair of the Equipment (Differential Scanning Calorimeter)	1 month (to be confirmed)	1
2	Testing on Plastics (Compositions & Additives)	2 months	1
	Testing on Elastomers (Chemical Test)	2 months	1
3	Laboratory Management	1 month	1

Note :

- 1 The experts are listed in the order of priority.
- 2 The results as to whether the experts in the field of repair of the Equipment will be dispatched will be informed of the Uruguayan side, after the consultation of their manufacturers in Japan.

Once it is confirmed that the replacement of parts makes the Equipment operable and the said replacement can be implemented by the Uruguayan side, the experts will not be dispatched and only the provision of parts will be extended.

In this connection, the Team explained the Uruguayan side and the latter understood that the numbers, fields and terms of the said experts would be subject to change on the recruitment of the respective experts and that the former would be inform the latter of the results of the above recruitment in due course of the time, possibly by the end of October 1999.

Detailed Information regarding the discussions on dispatch of experts.

Requests from the Uruguayan side				Results from the Discussions				
No.	Fields of Expertise	Duration	Number	No.	Fields of Expertise	Duration	Number	Remarks (Countermeasure)
-	-	-	-	1	Repair of the Equipment (Medium Volume Environmental Test Chamber)	1 month (to be confirmed)	1	- During the survey, though the check up was made in line with the instruction by the manufacturer in 1995, the condition was not recovered. - Thus, the Team will report it to the manufacturer and find the countermeasures and inform the Uruguayan side of it. - In the long run, there is a possibility not to dispatch a short-term expert if the other countermeasure can recover the capacity of the said Chamber
					Repair of the Equipment (Differential Scanning Calorimeter)	1 month (to be confirmed)	1	- Furnace with sensor will be provided by the Japanese side and be installed by the Uruguayan side with the cooperation of local agent. - In case that the replacement is not handled by the Uruguayan side, the expert will be dispatched.
1	Identification and quantification of plastics compositions, fillers and additives	2 months	2	2	Testing on Plastics (Compositions & Additives)	2 months	1	- The following items are also covered by the experts: * The operation of GC, HPLC and FTIR * Laboratory Management * Factory Visit * Seminar
2	General tests in elastomers and rubbers, identification and quantification tests	2 months	1	3	Testing on Elastomers (Chemical Test)	2 months	1	- The following items are also covered by the experts: * Ozone Aging Test * Laboratory Management * Factory Visit * Seminar - Taking the period and budget of the Program as well as the present technical level of the counterpart personnel to be allocated for the Program into consideration, the physical test will be regarded as out of scope of the Program.
3	Physical and chemical tests in elastomers and rubbers	2 months	1					
-	-	-	-	4	Laboratory Management	1 month	1	- The expert will check the stability of the technology transferred by the experts among the C/P and wrap up the outcome of the Program with the C/P through seminars and factory visit.

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**Annex 3 List of the Equipment provided by the
Japanese side**

The following equipment, spare parts and other materials are to be provided by the Japanese side within the limitation of the budget as well as their present availability.

The Uruguayan side explained to the Team that the former would like to share the burden for the Program as much as possible, especially in view of spare parts and consumables, thus, the former requested the latter the favorable consideration towards the new equipment.

The Team, on the contrary, requested the Uruguayan side and the latter agreed that the items to be provided by the latter as described in "Remarks" in the following pages would be realized and their progress would be reported bimonthly through the Embassy of Japan in the Oriental Republic of Uruguay, as the Program was implemented to enhance the sustainable operation of LATU.

The Team further explained to the Uruguayan side and the latter understood that once the provision of the respective items was to be confirmed, the former would inform the latter of the results without delay, possibly by the end of October 1999.



1 Provision of repair

Requests from the Uruguayan side			Results from the Discussions
No.	Item (Manufacturer)	Present Condition	
1	Medium Volume Environmental Test Chamber MS-110 (Tabai Espec)	- The temperature can't be set below room temperature.	- During the survey, though the check up was made in line with the instruction by the manufacturer in 1995, the condition was not recovered. - Thus, the Team will report it to the manufacturer and find the countermeasures and inform the Uruguayan side of it.
2	Differential Scanning Calorimeter DSC-50 (Shimadzu)	Furnace (1)	- Furnace with sensor will be provided by the Japanese side and be installed by the Uruguayan side with the cooperation of local agent. (Refer to the 2-3 below for further information.) - In case that the replacement is not handled by the Uruguayan side, the expert will be dispatched.

2 Provision of spare parts and consumables

Requests from the Uruguayan side				Results from the Discussions				
No.	Item (Manufacturer)	Name and quantities of spare parts & consumables	Reasons of necessity of spare parts & consumables (*1)	Specification	Quantity	Priority (*2)	Availability in the Oriental Republic of Uruguay (*3)	Remarks
1	Gas Chromatograph GC-14APF (Shimadzu)	Columns and accessories	C	Glass column 3.2 φ x 0.5m	1	D	○	The Uruguayan side
				Glass column 3.2 φ x 1.1m	1	D	○	The Uruguayan side
				Glass column 3.2 φ x 1.6m	1	D	○	The Uruguayan side
				Glass column 3.2 φ x 2.1m	3	D	○	The Uruguayan side
				Micro Syringe 10 μℓ	3	D	○	The Uruguayan side
				Micro Syringe 5 μℓ	4	D	○	The Uruguayan side
				Micro Syringe HSS 1 μℓ	2	D	○	The Uruguayan side
				Thermal chart paper for C-R1AD	6	B	○	
				Data Processor (10rolls/box)				
				Glass insert for packed column (5pcs./pkt)	3	D	○	The Uruguayan side
				Glass column joint	2	D	○	The Uruguayan side
				Graphite ferrule (4pcs/pkt)	3	D	○	The Uruguayan side
				Silicon rubber septum for injection port (20pcs/pkt)	3	D	○	The Uruguayan side
				Glass insert for split injection	2	D	○	The Uruguayan side
Glass insert for splitless injection	2	D	○	The Uruguayan side				

Requests from the Uruguayan side				Results from the Discussions				
No.	Item (Manufacturer)	Name and quantities of spare parts & consumables	Reasons of necessity of spare parts & consumables (*1)	Specification	Quantity	Priority (*2)	Availability in the Oriental Republic of Uruguay (*3)	Remarks
2	Liquid Chromatograph LC-10AD (Shimadzu)	Columns and accessories	C	-	-	-	-	LATU can cope with the outstanding demands by using the existing equipment.
3	Differential Scanning Calorimeter DSC-50 (Shimadzu)	Accessories	C	-	-	-	-	LATU can cope with the outstanding demands by using the existing equipment.
		Furnace (1)	A	Furnace (Replacement)	1	A	○	
		-	-	DSC-50 Sensor	1	A	○	
		Sample cells (5,000)	B	Crimp cell, Aluminum (50pcs/pkt)	100	A	○	
		-	-	Seal cell, Aluminum (50pcs/pkt)	100	A	○	
-	-	Pt sample cell with lid	20	A	○			
4	Fourier-Transform Infrared Spectrophotometer FTIR-8101 (Shimadzu)	Accessories	C	-	-	-	-	LATU can cope with the outstanding demands by using the existing equipment.
5	UV-VIS Spectrophotometer UV-2201 (Shimadzu)	Accessories	C	-	-	-	-	LATU can cope with the outstanding demands by using the existing equipment.
6	Universal Testing Machine (Autograph AG-2000 A) (Shimadzu)	Low range measuring cells (5, 20 and 100kg) (1 each)	C	Low range measuring cells	-	-	-	
				5kg unit	1	A	○	
				50kg unit	1	A	○	20kg is not available.
		100kg unit	1	C	○			
	Chart paper 340-41025 (100 rolls)	B	Chart paper 340-41025	100 rolls	D	○	The enough volume of stock are confirmed.	
7	Sunshine Xenon Weather Meter WEL-GXS-RC, B.Ec.S (SUCA)	Xenon Water cooled long life lamps and accessories (10set)	B	Xenon Water cooled long life lamps	10	A		
				Inner Filter	10	A		
				Outer Filter (φ 60)	10	A		

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Requests from the Uruguayan side				Results from the Discussions				
No.	Item (Manufacturer)	Name and quantities of spare parts & consumables	Reasons of necessity of spare parts & consumables (*1)	Specification	Quantity	Priority (*2)	Availability in the Oriental Republic of Uruguay (*3)	Remarks
8	Sample Machine MD No. 618 (Toyo Seiki)	Plain cutter steel (2 sets)	B	Plain cutter steel	2 sets	A		
9	Constant Temperature Bath for Viscosimeter ND-1 (Taitec)	Ubbelohde viscosimeter 2613-001 (4 sets) (SIBATA)	A	Ubbelohde viscosimeter 2613-001 2 ~ 10 cSt	4 sets	A		
10	Bygrothermograph AURORA-90-III (SATO KEIRYOKEI)	Chart paper 3L 100-2050 III	B	Chart paper 3L 100-2050 III	50 rolls	A		
11	Beat Distortion Temperature Tester No533 (Toyo Seiki)	Silicon oil for HDT-Toyoseiki No 533 (18kg/can) 2cans	B	Silicon oil	2 cans	D	○	The Uruguayan side

(*1) A: Because of termination of life span and/or damage
B: Because of the shortage of the stock
C: Because of upgrading

(*2) A: Must
B: Necessary
C: If possible
D: Canceled

(*3)
○: Possible

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3 Provision of new machinery and equipment

No.	Item	Specification	Quality	Priority (*1)	Availability in the Oriental Republic of Uruguay (*2)	Remarks
Plastic Films and Packages						
1	Gas Permeability Tester	Lyssy type, fast measuring Manometric Gas Permeability L-100 (ASTM Standard D 1434)	1	C	○	- The submission of the details of usage by the end of August 1999 will be the prerequisite for the consideration of provision. - If provided, the installation will be implemented by the Uruguayan side.
Construction Materials						
1	Thermal Conductivity Analyser	TCA Point 2 (ANACON) Measuring Range : 0.014 - 0.058 W/mK	1	A	○	
2	Glow wire flammability tester	IEC 695/2/1	1	B		
3	Refrigerated water cooled bath (1kw)		1	C	○	
Elastomers						
1	Pinholes	for gloves and condom	1	D		- Physical test is out of the scope of the Program.
2	Test Mixing Roll Machine	Capacity : 3 - 4kg	1	D		- Physical test is out of the scope of the Program.
3	Extensometer	-	1	D		- A scale can be substituted for this equipment.
4	Eccentric clamps and accessories	-	2	D		- The expert will instruct the proper testing method.
5	Load cell (50kg) for Shimadzu Autograph	Load cell (50kg)	1	D		- This item is provided as the spare part for the plastic testing.
6	Moulds and punches for elastomers	-	2	D		- The expert will provide only the information.
7	Volume and filling pressure of gloves, preservatives, etc.	-	1	D		- The Physical test is out of the scope of the Program.
8	UVc Ozone Aging Tester	Density of Ozone : 0 - 200 pphm Temperature : 10 - 60 °C	1	A		

(*1) A:Must
B:Necessary
C:If possible
D:Canceled

(*2)
○: Possible

Annex 4 Allocation of the Counterpart Personnel

The following personnel are to be nominated as the counterpart personnel for the Program.

No.	Name	Age	Sex	Present Position	Qualification	Assignment	Remarks (*)			
							Plastics	Fluoropolymers	Repair & Maintenance	
1	Stotz, Fernando	49	M	- Chief of Plastics Sector (Plastics Packages & Plastic Products Sections)	Management of Sector	Chemical Engineer	Mar. 1991	-	-	- DSC - Test Chamber
2	Remersaro, Jorge	42	M	- Chief of Plastics Packages Section	Managing tests on raw materials for films, plastic films and packages	Pharmaceutical Chemist	Oct. 1991	70%	70%	- DSC
3	Ono, Andres	33	M	- Chief of Plastic Products Section - Quality Coordinator of Sector	Managing tests on raw materials and plastic products, coordination of the ISO 9000 quality process in the Sector	Chemical Engineer	Aug. 1992	50%	70%	- Test Chamber
4	Abe, Nelson	36	M	- Technical Assistant raw materials	Tests on plastics raw materials, assistant for the implementation of the ISO 9000 quality process	Bachelor in Chemistry	Sep. 1993	70%	70%	-
5	Silva, Dilvar	53	M	- Maintenance, technical assistant	Maintenance & Physical tests	Mechanician	Oct. 1991	-	-	- Test Chamber
6	Medina, Daniel	26	M	- Assistant, plastic films & packages	Tests on plastic films and packages	Student of Chemistry	Apr. 1997	50%	50%	-
7	Venturini, Andres	26	M	- Assistant, plastic films & packages	Tests on plastic films and packages	Student of Chemistry	Dec. 1996	60%	60%	-
8	Gazezian, Nazaret	35	M	- Electrical Technician, Maintenance & Engineering Division	Maintenance of electronic equipment	Electronic Engineer	Aug. 1989	-	-	- DSC
9	Bartoli, Anibal	37	M	- Refrigerating Technician, Maintenance & Engineering Division	Maintenance of refrigerator & air-conditioning	Refrigeration & Air Conditioning Technician	Oct. 1990	-	-	- Test Chamber

Note : (*) The percentage in the column shows how much time the respective C/P will spare for the technology transfer when the experts are dispatched.

The C/P who is earmarked with shadow will be responsible for the respective technology transfer item.

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Annex 5 List of the Attendance

1 Japanese side

(1) The Aftercare Study Team

Makoto Yamashita	Leader
Tadao Takano	Testing on Plastics
Ryuichiro Yoda	Testing on Elastomers
Yuko Mitsui	Cooperation Planning
Muhen Fujisono	Interpreter

(2) Embassy of Japan

Kazuhiro Yoshida	First Secretary
Takehiko Imazu	Staff

2 Uruguayan side

(1) Technological Laboratory of Uruguay (LATU)

Ruperto E. Long	President
Walter Rodriguez	Secretary
Maximo A. Saavedra	Treasurer
Esteban Marchelli	General Manager
Jorge Fontana	Director, Analysis and Testing Division
Anibal Martirena	Deputy Director, Analysis and Testing Division
Fernando Stotz	Chief of Plastics Sector (Plastics Packages & Plastic Products Sections)
Jorge Remersaro	Chief of Plastics Packages Section
Andres Ono	Chief of Plastic Products Section & Quality Coordinator of Sector
Nelson Abe	Technical Assistant raw materials
Dilvar Silva	Maintenance, technical assistant
Daniel Medina	Assistant, plastic films & packages
Andres Venturini	Assistant, plastic films & packages

(2) Uruguayan Chamber of Industries

Gualberto Rocco	President
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(3) Uruguayan Association of Plastic Industries

Hugo A. Donner	President
Hector de los Santos	Executive Secretary



QUESTIONNAIRE FOR THE AFTERCARE PROGRAMME
ON THE TECHNICAL COOPERATION PROGRAMME
FOR THE PROJECT ON PLASTICS TESTING
IN THE ORIENTAL REPUBLIC OF URUGUAY

I CONCEPT OF THE AFTERCARE PROGRAMME

The Aftercare Programme is one of the Technical Cooperation Programmes implemented by Japan International Cooperation Agency (hereinafter referred to as "JICA") in order to promote the output of a project, which has already terminated, by extending supplementary technical cooperation within the following scope:

The said scope is subject to change within the limitation of the budget as well as the availability of the personnel dispatched as the experts.

- 1 Taking additional care of the machinery and equipment already provided by the Government of Japan;
 - (1) by dispatching short-term experts for repair and maintenance
 - (2) by providing necessary spare parts and consumables
- 2 Supplementary technical cooperation within the scope of the Record of Discussions (hereinafter referred to as "R/D");
 - (1) by dispatching short-term experts
 - (2) by providing necessary machinery and equipment
- 3 Training of counterpart personnel in Japan is not included within the scope of the Aftercare Programme in principle;
- 4 The Aftercare Programme for the Project will be extended from the date of the signing of the Minutes of Discussions for the Programme for the duration stipulated in the said Minutes.

II Questions for the Implementation of the Aftercare Programme on the Project.

With reference to the Article I mentioned above, JICA is planning to implement the Aftercare Programme on the Technical Cooperation for the Project on Plastics Testing in the Oriental Republic of Uruguay (hereinafter referred to as "the Project") and to send an Aftercare Study Team in July or August 1999.

The Purpose of the Team is to study the present situation of the Project, judge the feasibility and necessity to extend the Aftercare Programme, and work out the details of the Aftercare Programme on the Project through a field survey and a series of discussions with the authorities concerned of the Government of the Oriental Republic of Uruguay (hereinafter referred to as "Uruguay"), if it is regarded as feasible and necessary.

In this connection, the fields requested to be covered in the Aftercare Programme (refer to your proposal dated August 1998), especially elastomer and rubber are not categorized as the ones directly included within the scope of the R/D at present, thus such fields may not be covered by the Programme, unless the Study Team finds their necessity during its stay in Uruguay.

Furthermore, you are requested to understand that as two fields are the major components of your proposal, substantial cooperation may not be extended in the Programme, in case that two fields are not covered by the Programme.

In order to make the activities of the Study Team as effective as possible, JICA needs to get relevant data and information on the present situation of the Project by asking some questions mentioned below.

It would be highly appreciated if the authorities concerned of the Government of Uruguay prepare the answers and send them back through Embassy of Japan at its earliest convenience not later than 02 July 1999.

Please also understand that before the dispatch of the said

Team, additional questionnaire might be sent to you for the supplementary information.

Thank you for your kind cooperation in advance.

1 Organization and the other related items about Technological Laboratory of Uruguay (hereinafter referred to as "LATU") since the termination of the Project

(1) Organization and staff allocation

a Ministry in charge of LATU

(a) Please specify the transition of restructuring of Ministry of Industry, Energy and Mining in charge of LATU since the termination of the Project in view of the relationship with LATU, if any

(b) Present Organization chart of Ministry of Industry, Energy and Mining and its description with staff allocation

Note: The organization chart at the time of final evaluation on the Project is attached as Annex 01 for reference

b LATU

(a) Please specify the transition of restructuring of LATU since the termination of the Project, if any

(b) Present Organization chart and its description with staff allocation and detail function of each department of LATU

Note: The organization chart at the time of final evaluation on the Project is attached as Annex 02 for reference

(c) Present position and activities of the former counterpart personnel of The Project including the ones retired/resigned from LATU

* Please fill in the attached document (Annex 03)

(2) Function, placement and activities

a Function and placement

(a) Function and placement of LATU in Ministry of Industry, Energy and Mining

(b) Basic guidelines of activities of LATU

- (c) Relation with Present Government Development Policy
- (d) Relations with other governmental organizations in Uruguay
- b Activities

Number of Factories visited, Test and Inspection Service, Information service, Seminar, Inter-laboratory Test and any other activities held by LATU from Uruguayan fiscal year 1995 to 1999 and the their details

* Please fill in the attached document (Annex 04)

- c Present condition of equipment provided by the Japanese side

* Please fill in the attached document (Annex 05)

- d Relations with other bi-lateral and multi-lateral aid agencies, which have assisted, assists and will assist LATU

* Please fill in the attached document (Annex 06)

(3) Budgetary condition

- a Settlement account of LATU and Plastics Section from Uruguayan fiscal year 1995 to 1999 respectively with breakdown of both expenditure and income

- b Budget of LATU and Plastic Section from Uruguayan fiscal year 2000 to 2002 respectively with breakdown of both expenditure and income, if possible

- c Main equipment provided by the Uruguayan side from 1995 to 1999 and the projection of providing new equipment by the Uruguayan side from 2000 to 2002

* Please fill in the attached document (Annex 07)

2 Contents of the Aftercare Programme

- (1) Taking Additional care of the machinery and equipment already provided by JICA

* Please fill in the attached document (Annex 08)

- (2) Supplementary technical cooperation within the scope of R/D

a The fields within the scope of R/D which need supplementary technical cooperation by the Japanese short-term experts and the contents of the activities in detail

Note: You are allowed to include elastomer and rubber in the answer to this question, if you understand the prerequisite in the Article II mentioned above

* Please fill in the attached document (Annex 09)

b Name, quantity, specification, manufacture, reasons of necessity and availability in the Uruguay including collection of the quotations of the machinery and equipment needed to be provided in order to transfer the technology on the said fields

* Please fill in the attached document (Annex 10)

c Plan for assignment of the Uruguayan counterpart personnel for the Aftercare Programme including number, name and age, sex, their present position and their qualification

* Please fill in the attached document (Annex 11)

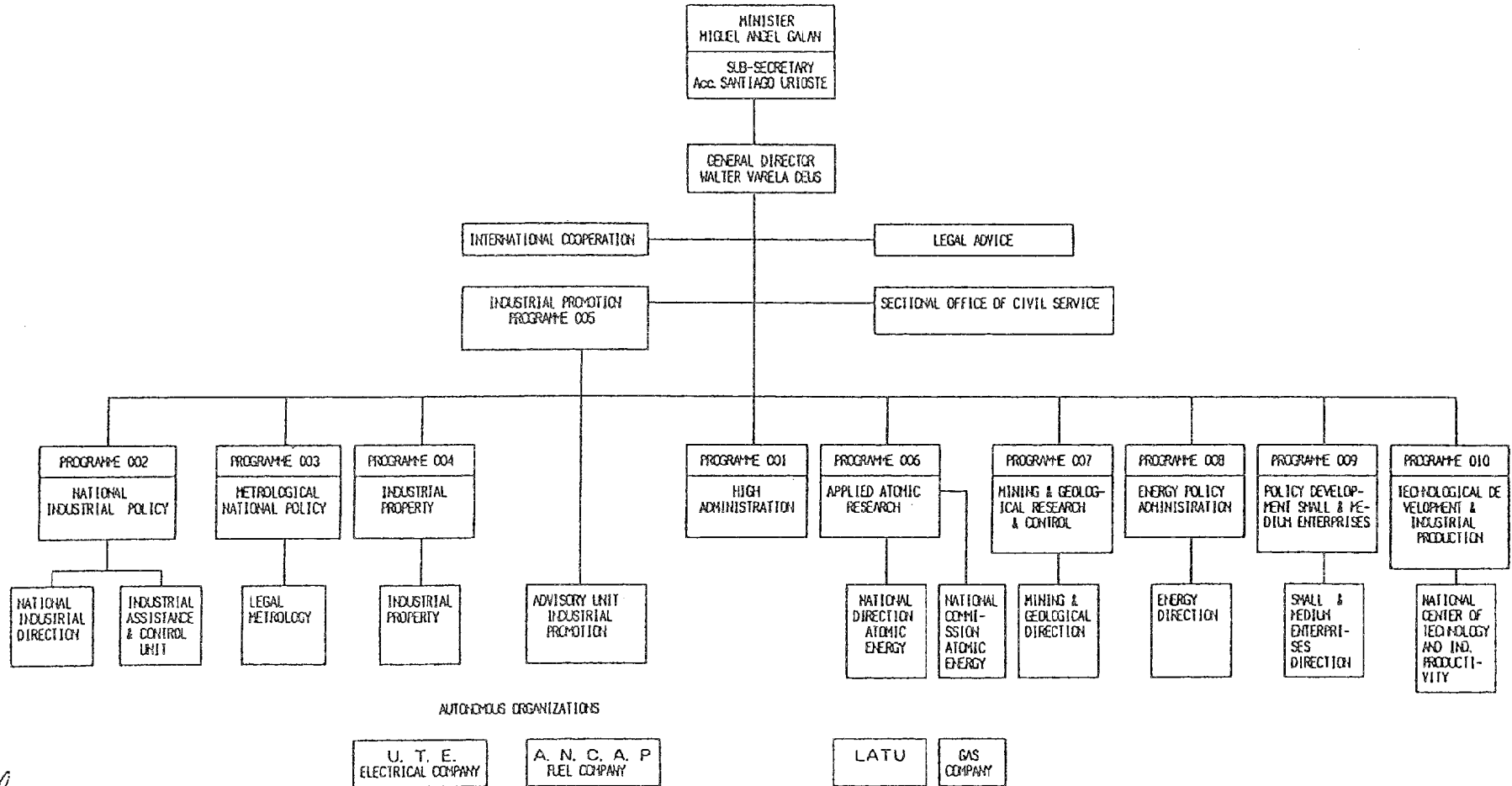
(3) Allocation of the budget for local cost expenses for the implementation of the Aftercare Programme

Note: We understand that the information on this question may be covered by the answer to the question shown in Article II (3) b mentioned above

3 Other relevant information

Provide any information which will facilitate our understanding of the activities of LATU

MINISTRY OF INDUSTRY, ENERGY AND MINING



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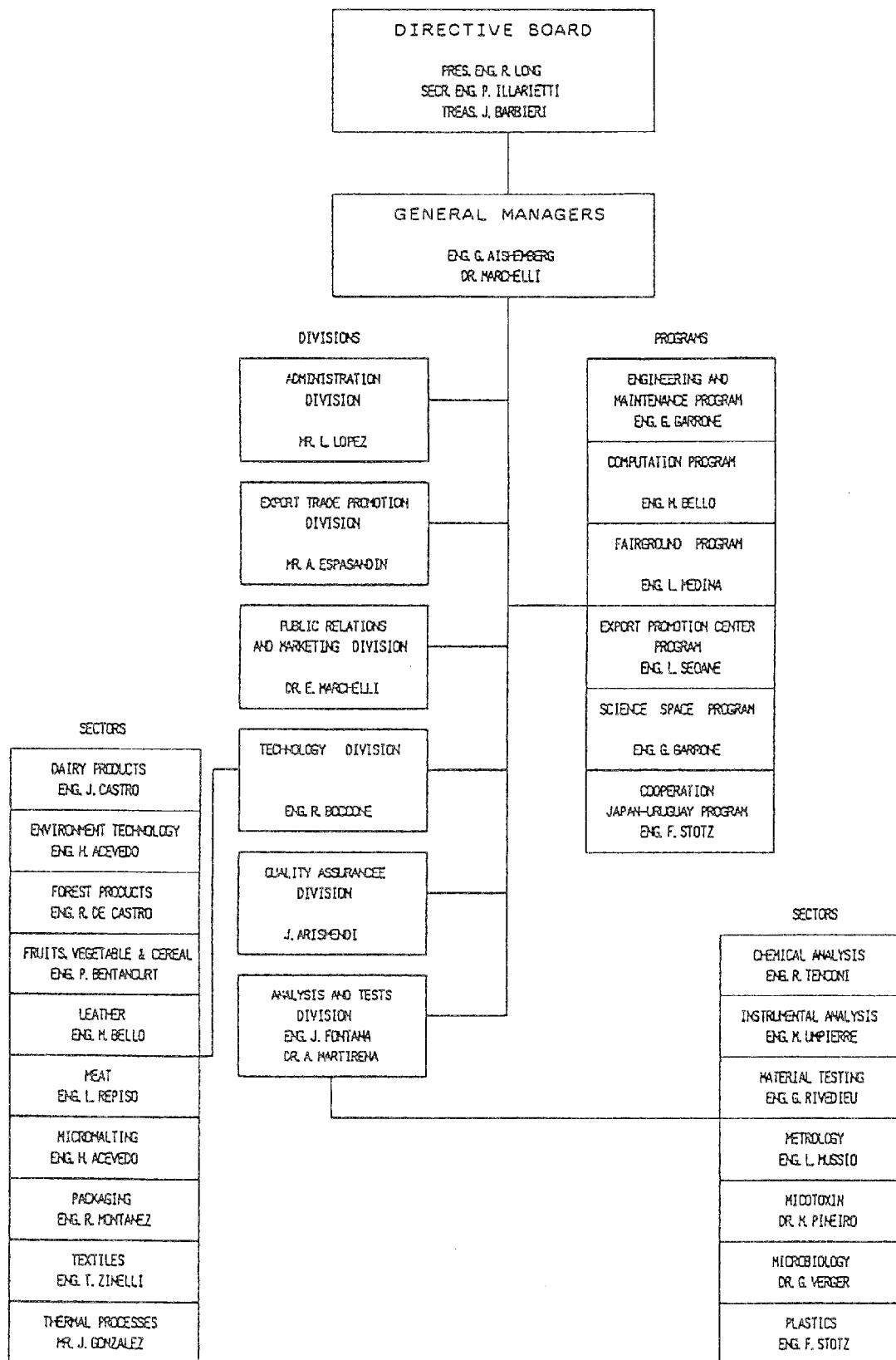
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Annex 02

ORGANIZATION OF LATU



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Annex 03 Present Position and Activities of the Former Counterpart Personnel of The Project

No	Name	Age	Sex	The Position at the termination of The Project	Present Position	Present Activities

Annex 04 Activities

2 Number of Test and Inspection Service

(1) Types of Test Method

Types of Test Method	1995	1996	1997	1998	1999	Total
Chemical and Physical						
Mechanical						
Thermal						
Resin						
Electric						
Film and Sheet						
Sanitation						
Total						

(2) Types of Material Tested

Types of Material Tested	1995	1996	1997	1998	1999	Total
PVC						
PE						
PP						
PUR						
PC						
PET						
PA						
PS						
Films						
Elastomers						
Rubbers						
Total						

Annex 04 Activities

4 Seminar

No	Date/Venue	Main Theme	Sub Theme	Lecturer	Attendees		
					Number (Total)	Occupation	
						Government	Private company

Annex 04 Activities

5 Inter-laboratory Test

No	Date	Name and Type of Test	Material	No. of Sample

6 Others if any

Annex 05 Present Condition of Equipment provided by the Japanese side

Name of Equipment	Date of Provision	Specification	Manufacturer	Quantity	Section	Operation(*1) Problems if any	Maintenance(*2) problems if any	Remarks
1 Mechanical Test								
1 Universal Testing Machine AG-2000A	13/06/92			1 Set	Plastics			
2 Charpy Impact Tester 4J	13/06/92			1 Set	Plastics			
3 Charpy Impact Tester 300J (not for plastics)	13/06/92			1 Set	Plastics			
4 Izod Impact Tester No.158	13/06/92			1 Set	Plastics			
5 Universal Impact Tester UF	13/06/92			1 Set	Plastics			
6 Falling Ball Impact Tester No.183	13/06/92			1 Set	Plastics			
7 Dart Impact Resistance Tester No.574	13/06/92			1 Set	Plastics			
8 Rockwell Type Hardness Tester No. 566 DXT-1	13/06/92			1 Set	Plastics			
9 Shore Hardness Tester D	13/06/92			1 Set	Plastics			
10 Clash-Berg Torsion Flexibility Tester No.515	13/06/92			1 Set	Plastics			
11 Scott Type Folding & Abrading Tester No.433	13/06/92			1 Set	Plastics			
12 Rubbing Meter FR-II	13/06/92			1 Set	Plastics			
2 Electric Test								
1 Breakdown Voltage Tester HAT-300-100R	13/06/92			1 Set	Material Testing			
2 Arc Resistance Tester HAT-100	13/06/92			1 Set	Plastics			
3 Ultra High Resistance / Micro Current Meter R8340A	13/06/92			2 Set	Plastics			
4 Dielectric Loss Measuring Set TRS-16T	13/06/92			1 Set	Plastics			
3 Thermal Test								
1 Constant Temperature Testing Chamber PR-1FP	13/06/92			1 Set	Plastics			
2 Median-Volume Environmental Test Chamber MS-110	13/06/92			1 Set	Plastics			
3 Differential Scanning Calorimeter DSC-50	13/06/92			1 Set	Plastics			
4 Thermogravimetric Analyzer TGA-50	13/06/92			1 Set	Plastics			
5 Thermogravimetric Analyzer TMA-50	13/06/92			1 Set	Plastics			
6 Oxygen Index Type Flammability Tester ON-1	13/06/92			1 Set	Plastics			
7 Flammability Vertical Test Instrument CS-1S	13/06/92			1 Set	Plastics			
8 Flammability UL-94 Test Instrument UL-94V	13/06/92			1 Set	Plastics			
9 Flammability MVSS Test Instrument MVSS-2	13/06/92			1 Set	Plastics			
10 Heat Distortion Temperature Tester No.533, S3-FH	13/06/92			1 Set	Plastics			
11 Brittleness Temperature Tester No.121	13/06/92			1 Set	Plastics			
4 Optical Test								
1 S&M Color Computer SM-6-IS-2B-H2-GV5	13/06/92			1 Set	Plastics			
2 Digital Haze Computer HGM-2K	13/06/92			1 Set	Plastics			
3 Digital Variable Gloss Meter UGV-5K(D)	13/06/92			1 Set	Plastics			

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Annex 05 Present Condition of Equipment provided by the Japanese side

Name of Equipment	Date of Provision	Specification	Manufacturer	Quantity	Section	Operation (* 1) Problems if any	Maintenance (* 2) problems if any	Remarks
5 Physical Test								
1 Automatic Decimeter No.265, D-H100	13/06/92			1 Set	Plastics			
2 Digital Thickness Tester No.201	13/06/92			1 Set	Plastics			
3 Rotational Viscometer Model BH	13/06/92			1 Set	Plastics			
4 Constant Temperature Bath For Viscometer ND-1	13/06/92			1 Set	Plastics			
6 Degrading Test								
1 Sunshine Xenon Long-Life Weather Meter WEL 6XS-HC-B	13/06/92			1 Set	Plastics			
2 ACR Gear Type Oven No.270	13/06/92			1 Set	Plastics			
3 Stress Cracking Instruments No.539	13/06/92			1 Set	Plastics			
7 Processing Capability Test								
1 Melt Indexer No.522, T-01	13/06/92			1 Set	Plastics			
8 Chemical Test								
1 High Temperature Electric Furnace FJ-41	13/06/92			1 Set	Plastics			
2 Gas Chromatograph GC-14APF	13/06/92			1 Set	Plastics			
3 Gas Chromatograph (Gas Permeability Tester) GC-14BPTF	27/06/94			1 Set	Plastics			
4 Liquid Chromatograph LC-10A	27/06/94			1 Set	Plastics			
5 UV-Vis Recording Spectrophotometer UV-2201	13/06/92			1 Set	Plastics			
6 Fourier-Transform Infrared Spectrophotometer FTIR-8101	13/06/92			1 Set	Plastics			
7 Water Vapor Transmission Rate Test System P Permatran W-6	07/10/92			1 Set	Plastics			
8 Oxygen Transmission Rate Measurement System OX-Tran 2/20 M	10/09/93			1 Set	Plastics			
9 Others								
1 Profile Projector V-12A	13/06/92			1 Set	Plastics			
2 Laboratory Plastomill No.655, ME-25	13/06/92			1 Set	Plastics			
3 Laboratory Press No.594	13/06/92			1 Set	Plastics			
4 Pneumatic Punching Machine No.213	13/06/92			1 Set	Plastics			
5 Sample Machine MD No.618	13/06/92			1 Set	Plastics			
6 Notch Cutting Device No.529N	13/06/92			1 Set	Plastics			

(* 1) A : Operation ; many times in effective
 B : Operation ; a few times in effective
 C : Operation ; no time since the termination

(* 2) A : Maintenance ; good
 B : Maintenance ; necessary to repair (operating now)
 B : Maintenance ; necessary to repair (stopping now)

Annex 06 Relations with other bi-lateral and multi-lateral aid agencies

No	Name of Agencies	Title of the Project	Duration	Mode of Inputs (e.g. experts, training abroad, equipment, etc.)	Contents

Annex 07 Main Equipment provided and the projection of providing New Equipment by the Uruguayan side

(1) Present

Name of Equipment	Date of Provision	Specification	Manufacturer	Quantity	Section Installed	Operation (*1) problems if any	Maintenance (*2) problems if any	Remarks

(2) Plan

Name of Equipment	Scheduled Date of Provision	Specification	Manufacturer	Quantity	Section to be installed	Remarks

(*1) A : Operation ; many times in effective
 B : Operation ; a few times in effective
 C : Operation ; no time since the termination

(*2) A : Maintenance ; good
 B : Maintenance ; necessary to repair (operating now)
 C : Maintenance ; necessary to repair (stopping now)

Annex 08 Necessity of Repair, Spare Parts and Consumables of Machinery and Equipment provided by JICA

(*1) No	Name	(*2) Necessity (Priority) of repair and the detail	(*2) Necessity (Priority) of spare parts and consumables and the detail	(*3) Availability of spare parts and consumables in Uruguay and the quotations	(*4) Remarks

(*1) Fill in the above form in order of priority

(*2) A: Must
B: Necessary
C: If possible

(*3) A: Available
B: Not available

(*4) any relation with supplementary technical cooperation (refer to Annex 09)

Annex 09 Themes which need Supplementary Technical Cooperation by the Japanese short-term experts

(*1) Theme No	Fields of the Japanese experts	Background of Request (Necessity and Urgency)	Duration of Assignment			Detail Subjects to be covered by experts	Required qualification of experts
			from	to	total months		

(* 1) If you have more than 2 themes to request, Theme No should reflect the order of priority

Annex 10 List of the Machinery and Equipment needed to be provided in order to transfer the technology on the said fields

(*1) Theme No	(*2) No	Name of Machinery and Equipment	Quantity	Specification	Manufacturer (Price unit \$)	Reasons of necessity	(*3) Availability in Uruguay

- (*1) The said Theme No should correspond to the ones in Annex 09
- (*2) Fill in the above form in order of priority each theme
- (*3) If this equipment is available in Uruguay, provide the quotation

Annex 11 Uruguayan Counterpart Personnel for the Aftercare Programme

No	Name	Age	Sex	Present Position	Qualification	Remarks