

**Minutes of the Meeting of the Joint Steering Committee (Botswana, Zambia, Zimbabwe, Namibia) for the proposed Kazungula Bridge Project with Japan International Co-operation Agency held in Gaborone, Botswana 6<sup>th</sup> - 8<sup>th</sup> March 2001.**

<b>BOTSWANA DELEGATION</b>			
<b>NO.</b>	<b>NAME</b>	<b>DESIGNATION/ORGANISATION</b>	<b>TEL/FAX</b>
1	M. Modise	Permanent Secretary, Ministry of Works, Transport and Communications Leader of Delegation, Chairperson	358549/313303
2	K. Skelemani	Deputy Permanent Secretary, Ministry of Works, Transport and Communications	358505/313303
3	L.A. Nkaro	Director, Roads	313511/314278
4	Buhalo M. Mudongo	Assistant Director, Customs and Excise	3642100/563955
5	M.K. Sebolai	Director, Road Transport and Safety	308390/300930
6	B.F. Karata	Director, Traffic Police	357337/357453
7	Oscar Motswagae	Director, International Relations, Ministry of Foreign Affairs	3600733
8	J.S. Nwako	Principal Roads Engineer,	313511/314278
9	P.G. Alpajora	Bridge Engineer	313511/314278
10	J.T. Willie	Planning Officer, Ministry of Works, Transport and Communications	358577/313303
11	P.L. Phiri	Senior Immigration Officer	3611300/352996
12	D.M. Matlakala	Deputy A.G, Attorney General's Chambers	354765
13	E. Karkari	Principal Natural Resource Office, National Conservation Strategy Agency	302050/301051
14	T. Molotsi	Principal Engineer, Department of Architecture and Building Services	365700/374832
<b>ZAMBIAN DELEGATION</b>			
1	G.P. Nyirenda	Permanent Secretary, Ministry of Works and Supply - Leader of Delegation, Co-Chairperson	253447/254108
2	B. Nonde	Permanent Secretary, Ministry of Communications and Transport	254158/253260
3	Bupe Kaonga	Acting Director, Planning Monitoring, Ministry of Works and Supply	252321/2523108
4	P.C. Chisanga	Desk Officer, Regional Co-operation, Ministry of foreign Affairs	252666

5	B.S. Tilasi	Deputy Chief Immigration Officer, Department of Immigration, Ministry of Home Affairs	254384
6	N.M. Jere	Chief Architect, Buildings Department, Ministry of Works and Supply	251280
7	David P. Zulu	Senior Transport Economist, Ministry of Communications and Transport	2254063/253260
8	K. Chanda	Deputy Commissioner, ZRA Customs and Excise	222739/238731
9	L. Nyambe	First Secretary, Zambia High Commissioner, Gaborone	351951
<b>ZIMBABWEAN DELEGATION</b>			
1	N. Kudenga	Director of Roads, Ministry of Transport and Communications - Leader of Delegation	726726
2	T.G. Msusa	Director, Public Works, Ministry of Local Government, Public Works and National Housing	727539/742757
3	D. Musana	Chief Engineer - Bridges, Ministry of Transport and Communications	708863
4	G. Odhong	Principal Architect, Ministry of Local Government, Public Works and National Housing	704561-9
5	D. Manatse	Assistant Director, Customs and Excise, Western Region	70261, 70669
6	F. Bosha	Assistant Commissioner Customs and Excise Head Office	703154/790255
<b>NAMIBIAN DELEGATION</b>			
1	K.C. Kellerhals	Senior Engineer- Namibian Roads Authority	(061)2082064/(061) 226920
<b>JICA HQ</b>			
1	K. Tanaka	Officer of 1 <sup>st</sup> Social Development Study Division, Social Development Study Department, JICA HQ	81-3-5352-5201
<b>JICA ADVISORY TEAM</b>			
1	A. Nitta	Team Leader, JICA Advisory Team, Honshu- Shikoku Bridge Authority	81-78-291-1000
2	R. Nakatani	Advisory Team, JICA, Japan Highway Public Corporation	81-6-6344-9923
<b>JICA STUDY TEAM</b>			
1	K. Enomoto	Team Leader, JICA Study Team, Nippon Koei	81-3-5276-3871
2	M. Tatsumi	Study Team, JICA, Sub-structure of Bridge, Oriental Consultants	81-3-3409-7251
3	K. Matsuda	Economist, JICA Study Team, Tokyo	81-3-5276-3873
4	A. Morioka	Border Facility Planner, JICA Study Team	81-3-5276-3636
5	K. Arakawa	Administrator, JICA Study Team	81-3-5276-3866
<b>JICA BOTSWANA DELEGATION</b>			
1.	S. Miura	Resident Representative, JICA Botswana	312176
2.	B. Motshwari	Administrator, JICA Botswana	312176

<b>JICA ZAMBIAN DELEGATION</b>			
1.	Koji Ota	Deputy Resident Representative	291075
2.	M. Takeuchi	Transport Policy Advisor, Ministry of Communications and Transport	291075
<b>JICA ZIMBABWEAN DELEGATION</b>			
1	A. Nakagawa	Assistant Resident Representative	252500

## **AGENDA**

1. Chairperson's Welcome and Opening Remarks
2. Remarks from Zambia
3. Remarks from Zimbabwe
4. Remarks from Namibia
5. Remarks from JICA Study Team
6. Adoption of the proposed Agenda
7. Adoption of the Previous Minutes
8. Brief Discussion on the Technical Transfer Seminar
9. Presentation of the Draft Final Report
10. Any Other Business

### **1. Welcome Remarks by the Chairperson**

The Chairperson called the meeting to order at 8:45 hrs. She apologized for the late start of the meeting. She welcomed all the delegates to the meeting particularly Namibia who were attending for the first time.

The Chairperson informed the meeting that she has been transferred to another Ministry.

2. Remarks from Zambia

The Delegation Leader expressed his thanks to the Botswana Government for hosting the meeting. He expressed the hope that the Chairperson's transfer would not in anyway hamper the progress of the project. He was also grateful that Namibia has been able to attend this time.

3. Remarks from Zimbabwe

The Leader of the Delegation thanked the Government of Botswana for the warm welcome. He also reaffirmed the Zimbabwean Government's support for the project. He reiterated that the presence of Namibia was a sign that the project had full support from all the four Governments.

4. Remarks from Namibia

The Namibian delegate also thanked the Botswana Government for hosting the meeting. He observed that although they were not a principal stakeholder since the bridge was not on Namibian Territory, the Namibian Authorities were interested in the development because it may have an impact on traffic volumes on Namibian roads and on other crossings over the Zambezi river. He stated that his presence was mainly to establish the findings of the feasibility study and to gauge the intentions of the Governments concerned.

5. Remarks from JICA Study Team

The delegation leader thanked all the leaders of delegations and was pleased to have the opportunity to present the Draft Final Report. The report was to concentrate on:-

- (a) Engineering part
- (b) Economic and Financial part
- (c) Conclusions and Recommendations

6. Adoption of the Previous Minutes

This item was not included on the Agenda in view of the fact that the minutes were adopted and signed in Livingstone.

7. Brief Discussion on the Technical Transfer Seminar

This item was to be treated outside the context of these minutes.

**8. Submission of the Draft Final Report**

The JICA Study Team submitted fifty (50) copies of the Draft Final Report to the meeting in accordance with the Scope of Works for the Feasibility Study on the Kazungula Bridge.

**9. Presentation of the Draft Final Report**

**(a) Engineering Report**

The JICA Study Team recommended the following:-

**(i) Bridge type**

Pre-stressed concrete Extra Dosed bridge; because of superiority in low construction and maintenance costs, vertical gradients, concrete works, and symbolic (aesthetic) appearance

**(ii) Alternative Route Study**

Route C; for technical and economic reasons in terms of shorter alignments and the least hydraulic issues involved.

**(iii) Tentative Implementation Schedule**

The implementation of the project was to take three years and three months, commencing January 2004 with planned completion being in March 2007 at the earliest.

**(iv) Preliminary Cost estimates**

The preliminary costs were as follows

- Bridge and approach roads

Construction costs	US\$ 47.668 million
Other costs	US\$ 22.650 million
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Project costs	US\$ 70.318 million

- Border control facilities

Construction costs	US\$ 15.437 million
Other costs	US\$ 15.113 million
<hr/> Project costs	<hr/> US\$ 30.55 million

**(b) Discussion**

**(i) Pre-stressed concrete (PC) Cable-stayed Vs pre-stressed concrete (PC) Extra-dosed**

The meeting was of the view that the Cable Stayed Bridge was more symbolic as compared to the Extra Dosed one, given the fact that the project was located in a tourist area. However, after lengthy discussions it emerged that structural features, capital investment and maintenance cost considerations were the overriding factors in the choice of the bridge type, and finally PC Extra-dosed type was accepted as recommended by the Study Team.

**(ii) Proposed cross section of the bridge**

The proposed cross section of the bridge was accepted. However, it was observed that the proposed 1.0 meter width for the footpath on the bridge was narrow. It was requested that the width be reviewed, if necessary.

This matter was to be reconsidered during the detailed design stage.

**(iii) International Boundaries within the river**

The Study Team expressed concern that the clarity of international boundaries was defined on land as opposed to the waters.

All the parties to the project were requested to submit survey data to the Study Team in order to clarify the international boundaries. This data should be included in the final Feasibility Study Report

The Study Team was requested to provide fixing coordinates for the piers in the river, including the abutments.

**(iv) Border Control Facilities**

A question was raised as to why the estimated cost of the border facilities on the Botswana side was more than on the Zambian side.

In response, the Study Team pointed out that this was justified by the fact that there was more traffic concentrated on the Botswana side which was generated from both Zambia and Zimbabwe. In addition, the separated type of border control facilities with one-stop-border-control system was accepted as the result of the Study.

**(c) Economic and Financial Analysis**

Economic and Financial analysis was done in the following two cases:

**High traffic case**

Opening the bridge in 2007 is feasible, but opening the bridge in 2013 is more feasible. However, should the bridge open in 2013, it should be noted that the ferry would by then not be able to cope with the volume of traffic.

Operating the existing ferry until 2013 and opening the bridge in 2013 is recommended.

**Low traffic case**

Opening the bridge in 2007 is not feasible. The bridge will be feasible in case of opening in 2018.

Opening and improving the ferry until 2018 and opening the bridge in 2018 is recommended.

Further, the Study Team suggested that the introduction of bridge toll would greatly recover a substantial amount of project costs, based on simple revenue/cost analysis.

The Study Team also proposed the following two options of financing:

- (i) Separate financing to Zambia and Botswana
- (ii) Financing to one of the Governments that is representative of the project implementation body

(d) **Recommendations (see page S-60 of the Summary Economic and Financial report)**

(i) **Settlement of International Borders in the River**

It was proposed that a Joint Sub-Committee should be formed to resolve this issue, including the international boundaries of Zimbabwe and Namibia before the next stage of the Project.

(ii) **Formulation of Project Management Committee**

The Study Team further recommended the formation of a Joint Project Management Committee composed of high level Government Officials from Botswana and Zambia and also attended by officials from Zimbabwe and Namibia. It further proposed that this Committee should later be reconstituted into the Kazungula Bridge Authority responsible for the operation and maintenance of the bridge.

In response to this, the Committee advised that since this was a policy matter, the decision on creation of the proposed Kazungula Bridge Authority was to be made at a higher level.

(iii) **Special attention for construction of the bridge**

The report highlighted that consideration should be given to each country's legal system, regulations and guidelines, customs and culture during implementation of the project.

(e) **Conclusions of the Joint Steering Committee meeting**

Given that the Study Team found the Project both technically and economically feasible from 2007 and more feasible in 2013 under the high traffic scenario, the four countries nevertheless, concluded that the Project should be implemented without any delay. This conclusion takes care of both tangible and the enormous intangible benefits such as strengthening regional integration, promotion of local industries, inducement of community area development among others, analysed by the Study Team.

10. **Matters arising from the minutes of the meeting of 18<sup>th</sup> -19<sup>th</sup> October 2000,**

(a) **Page5: Item 6 - Maps**

The Study Team was to write to the Government of Zimbabwe to seek confirmation of the co-ordinate data of the international boundary between Botswana and Zimbabwe, which was received from Botswana.



(b) **Page5: Item 6 - Counterpart Training**

Clarification was sought as to why counterpart training in Japan had not been effected as per agreed Scope of Works. The JICA official indicated that this was not possible because the duration of the study was short (just eight months).

The Study Team accepted to describe and stress the need for counterpart training in the Chapter of recommendations in the Final Report for future stages of the Project.

11. **Any Other Business**

(a) **Comments on the Draft Final Report**

The four countries would submit their comments within fourteen days from the date of signing the minutes. The comments should be forwarded to the Study Team through the current Chair of the Joint Steering Committee. The Final Report would be submitted by JICA to the recipient countries as the final accomplishment of the Study required in the Scope of Works.

(b) **Disclosure**

The Final Report would not be treated as confidential.

(c) **Clarification of Item 3.1.3, of paragraph 2 of the Agreed Minutes of Eleventh Session of the Joint Permanent Commission of Co-operation between Zambia and Botswana meeting held in Lusaka, Zambia from 4<sup>th</sup> to 7<sup>th</sup> December 2000**

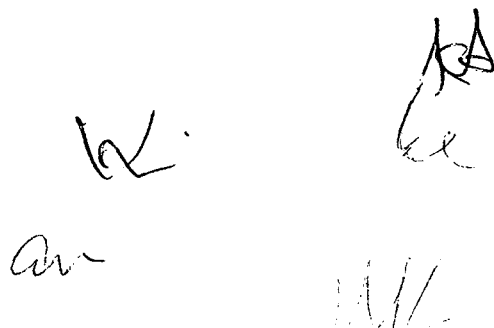
It was clarified that funds for the feasibility study for the proposed Kazungula Bridge were in the form of a grant to both Governments of Zambia and Botswana.

12. **Date and Venue of the next meeting**

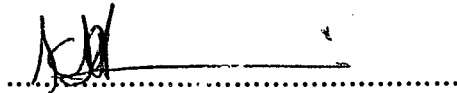
The next Joint Steering Committee meeting would be held in Zambia at a date to be advised.

13. **Close of meeting**

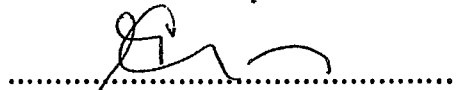
The meeting closed at 17:13hrs.



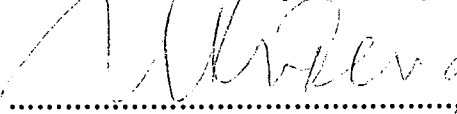
Signed



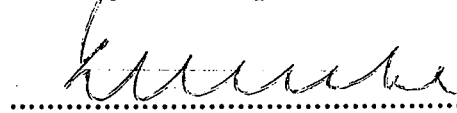
Mrs K. Skelemani  
Deputy Permanent Secretary, Ministry of Works, Transport and Communications  
Botswana



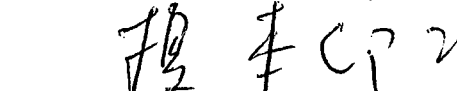
Mr. G. P. Nyirenda, Co - Chairperson  
Permanent Secretary, Ministry of Works and Supply - Zambia



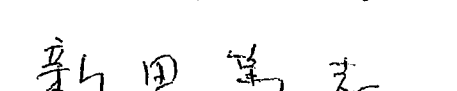
Mr. N. Kudenga  
Director of Roads  
Ministry of Transport and Communications - Zimbabwe



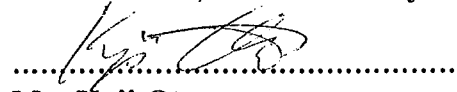
Mr. K.C. Kellerhals  
Senior Engineer  
Namibian Roads Authority - Namibia



Mr. Koji Enomoto  
Team Leader, JICA Study Team



Mr. Atsushi Niita  
Team Leader, JICA Advisory Team



Mr. Koji Ota  
Deputy Resident Representative, JICA - Zambia Office

Dated: This .....<sup>7<sup>th</sup></sup> Day of *March*.....2001

At Gaborone, Botswana.