

ZIMBABWE RCMRD TECHNICAL COMMITTEE REPORT 2014

THE 48TH TECHNICAL MEETING OF THE RCMRD

ADDIS ABABA, ETHIOPIA

The Chairman of the Technical Committee,

The Director General of the RCMRD, Dr. H. Farah,

Members of the Technical Committee here present,

Distinguished guests, Ladies and gentlemen,

On behalf of my Ministry and Zimbabwe as a whole, it is my pleasure to express my gratitude in being accorded Membership of the RCMRD on 23rd of June 2014 when the Instrument of Accession was signed by my Minister in Harare, Zimbabwe during a visit that was made by The Director General of the RCMRD Dr. Hussein O. Farah together with Dr. K. Rwiza and Mr B. Anangwe. It is our sincere hope that by joining this RCMRD member states family, Zimbabwe will excel to greater heights in terms of geospatial information and capacity building through collaboration and interaction with the Centre and member States. We are therefore looking forward to a very bright future as we move together in this journey, knowing very well that together united we will stand.

INTRODUCTION

The Department of Surveyor General is the National Mapping Authority established in terms of the Land Survey Act(Chapter 20:12)(LSA). It falls within the Ministry of Lands and Rural Resettlement. The Surveyor General Department 's mandate is to carry out the following:

- (i) Examination and approval of cadastral survey records
- (ii) Cadastral survey of all state land in terms of section 25 of the LSA
- (iii) Production of topographic base maps and other thematic maps

- (iv) Densification and maintenance of the National geodetic control network
- (v) Commissioning and maintenance of Zimbabwe's International boundary.

In order to carry out the above mentioned tasks as mandated by the Land Survey Act(Chapter 20:12), the Department has been structured into three technical divisions, namely; the Cadastral branch, the Mapping branch and the Geodesy branch with the support services branches to assist in the delivery of its mandate. The support services sections being the Human resources, the IT and the Finance.

1) DENSIFICATION AND MAINTENANCE OF THE NATIONAL GEODETTIC CONTROL NETWORK

Zimbabwe's geodetic control network consists of Town Survey Marks (TSMs) and Trigonometrical beacons with the following classes: Primary, Secondary, Tertiary and Quaternary. The Network contains approximately: 357 primary, 1476 secondary, 675 tertiary and 45 quaternary stations. The Geodetic Control network in Zimbabwe needs to be strengthened in the peripheries of the country which include the boundary regions and areas such as Kariba on the west of the country and Victoria Falls.

The present geodetic network does not sufficiently cover the peripheries of Zimbabwe, which in this case includes boundaries that Zimbabwe shares with its neighbours. About 15% of the total land area is not adequately covered. Zimbabwe does not have CORS(Continuously Operating Reference Supply) and with this initiative the country has taken to join the RCMRD as a member state, we strongly hope that these CORS will be set up in the near future.

2) REAFFIRMATION OF THE ZIMBABWE'S INTERNATIONAL BOUNDARY

Zimbabwe shares its boundary with the following countries namely Botswana, Mozambique, South Africa and Zambia. Like other African states, Zimbabwe has also been busy on the reaffirmation of its

international boundary with its neighbouring countries so as to meet the AUBP deadline of 2017.

The Reaffirmation of Zimbabwe's International Boundary is spearheaded by a Technical Committee on International boundary which is chaired by Ministry of Foreign Affairs and is composed of the following stakeholders:

1. Ministry of Foreign Affairs as the Chair
2. Surveyor General –vice Chair
3. Ministry of Defence
4. Zimbabwe Republic Police
5. President's Department
6. Ministry of Local Government
7. Immigration Department
8. The Attorney General Department
9. Zimbabwe Revenue Authority(ZIMRA)
10. Zimbabwe National Parks and Wildlife Management

The progress of the Reaffirmation Exercise is as follows:

(a) The Reaffirmation of the Zimbabwe/Mozambique International Boundary

The Zimbabwe/Mozambique International boundary is 1 134 km long. The first demarcation of this boundary was done in 1901. The reaffirmation exercise of the whole boundary started in earnest in year 2001. The Zimbabwe/Mozambique boundary is defined by beacons and rivers at some areas.

Progress to date

In order to simplify the reaffirmation exercise of the Zimbabwe/Mozambique boundary, it has been divided into four segments namely:

Segment 1: from Pafuri river to Save river, about 180 km

Segment 2: from Save river to Hondi river, about 400 km

Segment 3: from Hondi river to Mazowe river, about 203 km

Segment 4: from Mazowe river to Luangwa river, about 351km

- Segment 1 has already been reaffirmed in 2006 with the exception of reaffirming the Tripoint beacon Pafuri.
- Segment four has been partially reaffirmed, namely from beacon BB01 to beacon BB06, a stretch of 41.5 km. This was done in 2013.
- The rest of the other segments namely segments 2 and 3 and part of segment four cannot be reaffirmed due to the land mines infestation. Hence there is need to demine the areas where landmines occur before the reaffirmation exercise can be done.

Funding from AUBP cooperating partners

Due to the enormity of this Reaffirmation Exercise, a joint application for funding was made in January 2012 to one of the cooperating partners of AUBP(African Union Border Program) namely German Development Cooperation(GIZ) and to date, we have not got a response, although they had made an appraisal visit to Zimbabwe in April 2012. The cost of the budget for the reaffirmation exercise was US \$537 000,00 .

b) The Reaffirmation of the Zimbabwe/Zambia International Boundary

The Zimbabwe/Zambia international boundary is wholly formed by the Zambezi River and is described in the 1963 Order in Council and depicted on two sets of maps signed by both Surveyors General of the then Northern and Southern Rhodesia on 19 December 1963. These maps are filed in Zimbabwe and Zambia.

The Zimbabwe/Zambia joint technical committee meeting took place in Zambia from 19-23 February 2014 first in Livingstone and then being

concluded in Siavonga. The purpose of the meeting was to carry out a reconnaissance survey of the Zambezi river in areas where there were contested islands namely Manda, Sindabezi and Nyamuomba islands. The position of some of these islands namely sindabezi has been controversial since 1964, because the description of the boundary in the Order in Council of 1963 differs in some areas with the signed maps referred to above.

Purpose

The above meeting took place as a result of the directive that came from previous sessions of Joint Permanent Commissions on Defence and Security(JPCDS) of the Zimbabwe and Zambia which sighted some shootings happening on these islands, namely at Manda and Nyamuomba and due to unclear location of these islands along the common boundary as highlighted earlier. Incidences of poaching occasionally take place and these islands are sometimes used as launch pads for these crime activities. The reconnaissance survey culminated into the formulation of the work plan and budget of the reaffirmation exercise of the common boundary. It is also important to mention that, besides having the directive of reaffirmation of the boundary from the JPCDS, the African Union Border Programme(AUBP) has directed that all African States boundaries should be delimited or reaffirmed by year 2017. Hence this is in fulfilment of the AUBP directive. The location of these islands was done by making use of the signed boundary maps of 19 December 1963, the Order in Council of 1963 and the hand held GPS instruments.

The Work plan and Budget for the reaffirmation Exercise

After carrying out the reconnaissance exercise of the contested islands, a work plan and budget was then formulated for the reaffirmation exercise of the boundary. It was agreed that the reaffirmation should be done in phases. The first phase being from the quadripoint, where the four countries meet, namely Zimbabwe, Namibia, Botswana and Zambia up to Nyamuomba island, about 170km along the lower Zambezi River. The work plan covered the period from March 2014 to June 2016 and the main activities of this

workplan being: Procurement of the necessary equipment/materials, establishment of ground control points, procurement of satellite imagery, production of new maps covering the area of boundary in question, drawing of new maps and presentation of the new maps with the reaffirmed boundary and signing of the boundary maps and the new boundary Treaty.

The total budget of the above mentioned activities came to about **US\$1 130 245.00** for Zimbabwe and **US\$1 222 609.00** for Zambia. The difference in the two figures being due to difference on rates being used as daily subsistence allowances in both countries.

Recommendations/Way forward

The following were recommendations from the Joint Technical Committee:

- 1. There is need for the two governments to provide adequate resources for the re-affirmation exercise.**
- 2. The boundary reaffirmation exercise requires sufficiently skilled manpower in the stakeholder institutions. In this regard, there is need for the two governments to increase technical staff levels.**
- 3. Owing to the cost implications, it is recommended that the two countries undertake efforts to attract support from cooperating partners.**
- 4. It was proposed that the reaffirmation exercise progresses according to the agreed joint work plan.**

Reaffirmation of Zimbabwe/Botswana International boundary

The reaffirmation of the Zimbabwe/Botswana international boundary started in 1998. The progress has been very slow due to difficulties in outsourcing for funding for this exercise, especially on the Zimbabwe side. To date about 70 km of the total 842 km of the boundary has been reaffirmed. However, Reconnaissance of the whole boundary was

carried out. Efforts are being pursued to look for funding from cooperating partners through the African Union Border Program(AUBP). The boundary has no major obstacles and we are racing with time so as to make sure that we meet the AUBP deadline of 2017.

Reaffirmation of Zimbabwe/South Africa International boundary

The Zimbabwe/South Africa boundary is wholly the Limpopo River. There are no major issues with this boundary except the reaffirmation of the Pafuri Tri-point beacon downstream, where three countries meet namely, Zimbabwe South Africa and Mozambique. The survey of this Tri-point beacon was done, and what is now left is to finalise on the calculations of its position in order to replace it because the beacon was destroyed. We are hoping that this should be done before end of year 2015.

3) REVISION OF OUR NATIONAL MAP SERIES(SCALE 1:50 000)

The National base maps of Zimbabwe are laid out in series from 1:5 000-1:1000 000. The 1:5 000 base map covers all areas that were established as urban areas from 1979.It also covers some peri-urban areas of significance. Maps in the 1:50 000 series cover the whole country. This is the national base map scale. There are 571 map sheets in this class. The 1:1000 000 map series covers the whole country. The themes in the 1: 1 000 000 map series include: general relief, land classification, natural farming regions or ecological zones, general road map and aeronautical chart.

However due to the economic challenges the country has been facing over the years the National Map series have not been updated over the past twenty five(25) years. This has hampered progress in many areas including the Land Reform program and national Tourism. As future plans, the Department would want to update these base maps and other thematic maps

of relevance as well as capacitating the relevant sections within the Department to enable them to carry out these activities.

4) THE LAND REFORM PROGRAM AND CADASTRAL SURVEYS OF A2 MODEL FARMS(COMMERCIAL) FOR 99 YEAR LEASES

Zimbabwe embarked on the fast track Land Reform programme in year 2001 as a way of redressing imbalances in Land ownership between the white minority and the black majority. In this exercise, over 18 000 A2 model farms(commercial farms) and over 400 000 A1 model farms(small scale farms) were planned and parcelled out to new beneficiaries of the Land Reform Programme. The Surveyor General Department has been engaged in carrying out title surveys of the A2 farms in order for beneficiaries of this program to get 99 year leases. To date, due to resource constraints the Department is facing, only 5 200 A2 farms have been surveyed for purposes of issuance of 99 year leases. We hope that with the setting up of CORS in the near future, the use of GPS equipment in the survey of these farms will help to expedite the cadastral survey of these farms. In this vein, my Ministry has already engaged UNDP so as to capacitate the Department in the procurement of Surveying equipment and the setting up of cors(Continuous Operating Reference Stations) around the country. The procurement process has already started and we hope that all things being equal, the project should start early next year 2015.

5) CAPACITY BUILDING/TRAINING AND INTERNATIONAL COOPERATION

I am glad to mention that the Department has so far within the past one year, sent three staff members to RCMRD and one staff member to

KISM(Kenya Institute of Surveying and Mapping) for training. This has boosted the morale of our staff and we hope the training courses will continue in order to keep the staff abreast of current developments happening in the geospatial information field. We have also been sending our staff members to other international institutions like ITC in Netherlands and the National Institute of Entrepreneurship and Small Business Development(NIESBUD) in India.

The Department has also been involved in UN-GGIM forums that recently took place in South Korea and China where our Minister has made presentations. The participations have helped a lot in terms of collaboration and sharing of experiences with various countries and organisations. Some of these organisations have expressed interest in working with the Surveyor General Department in areas of geospatial information in the near future.

I thank you