# Regional Development Organisation and Mining to Plant Enterprises Project

#### **Overview**

3.1 The economic sustainability of the Indian Ocean Territories (IOT) has been the subject of successive Joint Standing Committee on the National Capital and External Territories (JSCNCET) inquiries. Former public servant, Mr Julian Yates said that over the years a number of economic development organisations have been formed to support this objective, with mixed results:

Various iterations of the regional development organisations have operated in the islands over the years. ...there have been successes in improvements in local capability to build new business, but there has also been activity without result.<sup>2</sup>

3.2 The Regional Development Organisation (RDO) is the latest iteration. It was established in 2012, when separate economic development consultation groups for Christmas and the Cocos (Keeling) Islands were

<sup>1</sup> See Joint Standing Committee on the National Capital and External Territories, *Report on the visit to the Indian Ocean Territories*, 21-25 October 2012, pp. 19-33, *Inquiry into the changing economic environment in the Indian Ocean Territories*, March 2010, and *Current and future governance arrangements for the Indian Ocean Territories*, May 2006, pp. 31-38.

<sup>2</sup> Mr Julian Yates, Submission 4, p. 6.

- amalgamated, and a dedicated Economic Development Officer position was discontinued.<sup>3</sup>
- 3.3 It is important to note that the IOT does not have an operational chamber of commerce. This is unlike mainland Australia where most regions have a local organisation which communicates with the government and community on behalf of the local business sector. Chambers of commerce also foster a culture of free enterprise, investment and entrepreneurship.
- 3.4 Mr Russell Payne (former Christmas Island resident and President of the disbanded Christmas Island Chamber of Commerce) described various economic initiatives, including Commonwealth infrastructure projects, which were driven by the former CI Chamber of Commerce. He also noted that the former Chamber of Commerce took an active interest in local industries, such as the casino or mine. He said:

We had the rebuilding program over the 1990s, which was really good for the economy of the island. We upgraded all our services. All our water, electrical, hospitals, schools, power station and sewerage treatment got revamped – a \$167 million project. It was great stuff; it really worked well.

- ...We used to try and think things up in the chamber [like having the Korean Freedom League double the rooms at the casino before they opened or create a film studio to make an Asian soapie].<sup>4</sup>
- 3.5 The RDO is not a substitute for a chamber of commerce.

## **Chapter outline**

3.6 The chapter begins by outlining the structure and functions of the RDO before turning to an assessment of its contribution. The RDO is perhaps best known for its endorsement of the Mining to Plant Enterprises (MINTOPE) agricultural research project. The MINTOPE project was the subject of a dedicated chapter in the Committee's interim report<sup>5</sup> and will be revisited here, in light of recent moves to trial the cultivation of industrial cannabis, with a view to establishing commercial production.

<sup>3</sup> Mr Chris Su, Chairperson, Indian Ocean Group Training Association, *Committee Hansard*, Christmas Island, 9 April 2015, p. 20; Mr Raymond Marshall, *Submission* 29, p. 2.

<sup>4</sup> Mr Russell Payne, private capacity, Committee Hansard, Perth, 8 May 2015, p. 26-29.

Joint Standing Committee on the National Capital and External Territories, *Governance in the Indian Ocean Territories, Interim Report: Economic Development*, June 2015, pp. 37-45.

3.7 The chapter then examines suggestions to strengthen the RDO for better economic outcomes in the region.

#### **RDO structure and functions**

- 3.8 The RDO is an incorporated association under Western Australian (WA) law, meaning it is a legal entity in its own right, able to apply for grants and continue to operate regardless of changes to its membership.<sup>6</sup>
- 3.9 It is chaired by the IOT Administrator, Mr Barry Haase and its membership is drawn from local government and residents of the Christmas and Cocos (Keeling) Islands. The RDO can appoint its own members with approval from the Minister responsible for the territories, however its constitution requires it to include local government representatives from both territories:

The present constitution requires that the shires of Christmas and the Cocos [(Keeling) Islands] are represented on the RDO. Other members are there by appointment of the Committee, approved by the Minister.<sup>8</sup>

- 3.10 Secretariat services are provided by the Office of the IOT Administrator.<sup>9</sup> The Department of Infrastructure and Regional Development (DIRD) said that the RDO was designed to be independent in the long term, supported by grant funding, however this has not occurred. In the absence of funding, the RDO has not been able to employ dedicated staff.<sup>10</sup>
- 3.11 The RDO was established to facilitate economic development in the IOT:

It will work with local businesses, community organisations and individuals to develop strategic priorities for economic diversification, proposals for economic development and funding applications.<sup>11</sup>

- 6 Department of Infrastructure and Regional Development, Submission 36, p. 3; Western Australian Department of Commerce, What is an Incorporated Association, https://www.commerce.wa.gov.au/consumer-protection/what-incorporated-association, viewed 7 October 2015.
- 7 Mr Barry Haase, Administrator, Committee Hansard, Cocos (Keeling) Islands, 8 April 2015, p. 8.
- 8 Councillor Gordon Thomson, President, Shire of Christmas Island, *Committee Hansard*, Christmas Island, 9 April 2015, p. 11.
- 9 Mr Barry Haase, Administrator, Committee Hansard, Christmas Island, 9 April 2015, p. 29.
- 10 Department of Infrastructure and Regional Development, Submission 36, p. 3.
- 11 Office of the Administrator Indian Ocean Territories, *Community Bulletin No: A50/2012*, New Regional Development Organisation for the Indian Ocean Territories, 10 September 2012,

3.12 DIRD said founding members of the RDO envisaged that it would be the peak body for economic development in the IOT. However, the Department acknowledged that achieving these objectives has been difficult:

[the RDO] has...struggled to find a role and deliver cogent outcomes.

There is concern amongst a number of parties about the RDO's lack of focus, defined role and outcomes. Many argue that the lack of focus stems from a lack of clarity about the RDO's purpose.<sup>12</sup>

3.13 Mr Alan Bradley, Executive Officer, Regional Development Australia Midwest Gascoyne said that the RDO is 'not a self-autonomous body, it is simply an advisory group to the Administrator:'

This diminishes its ability to provide services and generate its own sustainable future.<sup>13</sup>

## **RDO and the Community Development Grants Program**

- 3.14 The Committee received little detailed evidence on the RDO. However, during the inquiry, there was recurrent criticism that the RDO has deviated from its original aim to develop and deliver 'strategic priorities for economic diversification.' Witnesses claimed that its sole function appears to be to prioritise applications to DIRD's Community Development Grants Program (CDGP).<sup>14</sup>
- 3.15 Cocos (Keeling) Islands resident and RDO member, Mr Raymond Marshall said that the RDO's involvement in the CDGP is superfluous:

At present the RDO has no other role than to ease the Government's load by prioritising [CDGP] submissions, a job that

http://www.indianoceanterritories.com.au/Assets/Documents/A50-2012\_New\_Regional\_Development\_Organisation\_for\_the\_Indian\_Ocean\_Territories.pdf, viewed 7 October 2015.

<sup>12</sup> Department of Infrastructure and Regional Development, *Submission 36*, p. 3.

<sup>13</sup> Regional Development Australia Midwest Gascoyne, Submission 16, p. 3.

<sup>14</sup> Christmas Island Tourism Association, *Submission 26*, p. 8; Mr Raymond Marshall, *Submission 29*, p. 2; Mr Barry Haase, Administrator, *Committee Hansard*, Cocos (Keeling) Islands, 8 April 2015, p. 8; Regional Development Australia Midwest Gascoyne, *Submission 16*, p. 3.

is scrutineered by bureaucrats in Canberra anyway. This is a complete and utter waste of my time as a community volunteer. <sup>15</sup>

3.16 The Christmas Island Tourism Association (CITA) was also critical:

When the latest iteration to support economic and community development was set up there were hopes that [RDO] would be able to make a broad positive impact. This has not occurred and the whole purpose of the organisation appears to be providing input to the Minister on priorities for the \$1.5 [million CDGP]. This program is significant to the community, is a financial enabler and it is important that there is local input. But the key role of the community and economic development is missing.<sup>16</sup>

3.17 Others argued that the RDO's involvement in the CDGP process is essential. DIRD said:

The [RDO] plays an important role in reviewing and providing advice on the relative priorities of projects seeking funding from the [CDGP].<sup>17</sup>

3.18 The RDO Chair and Administrator Mr Barry Haase emphasised the value of local input in prioritising community grant applications:

[The RDO's] contribution to the appraisal of all the grant applications and their advice on local priorities was a very important part of the assessment process [for the CDGP].<sup>18</sup>

## RDO and MINTOPE - developing agriculture

- 3.19 Established in 2012, the MINTOPE project is a research partnership between Murdoch University and Phosphate Resources Limited which seeks to evaluate the scientific merit of establishing agriculture on exhausted mining leases on Christmas Island.<sup>19</sup>
- 3.20 The CDGP, informed by the RDO, has been a significant source of funding for the MINTOPE project with grants for \$170,000 and \$147,800 awarded

<sup>15</sup> Mr Raymond Marshall, Submission 29, p. 2.

<sup>16</sup> Christmas Island Tourism Association, *Submission* 26, p. 8.

<sup>17</sup> Department of Infrastructure and Regional Development, Submission 36.2, p. 6.

Office of the Administrator Indian Ocean Territories, *Community Bulletin A41/2015*, 8 September 2015, p. 1.

<sup>19</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34, pp. 1-3.

- in 2014 and 2015 respectively.<sup>20</sup> MINTOPE reported that the community development grants assisted in the collection of preliminary results that indicate agricultural opportunities on exhausted mining leases exist.<sup>21</sup>
- 3.21 Calmy Planning and Design indicated that the MINTOPE project was one RDO initiative that had 'a tangible prospect in advancing economic development in the IOT.' 22
- 3.22 The mining company Phosphate Resources Limited agreed:

MINTOPE has been the only project with the objective of advancing some alternative economic development that has been recently funded.<sup>23</sup>

### Trial cultivation of industrial hemp and medicinal cannabis on Christmas Island

3.23 The cultivation of industrial hemp<sup>24</sup> is something that MINTOPE has had a long standing interest in trialling. Professor John Howieson, Research Director, MINTOPE stated:

MINTOPE, from its inception, has proposed the evaluation of high value pharmaceutical crops on [Christmas Island]. One of these we considered to be a likely candidate was industrial hemp, along with perfumes and other crops such as vanilla. We intended to evaluate the agronomy of industrial hemp, and this might be used as a guide to whether the cultivation of [medicinal marijuana] might also be successful, as they are all selections out of Cannabis sativa.<sup>25</sup>

3.24 Professor Howieson indicated that he applied for a license to grow industrial hemp in November 2015 and is awaiting ministerial approval:

I applied for a research license together with Neil Ballard under the WA *Industrial Hemp Act* 2004. This covers the cultivation and harvesting of hemp for experimental purposes. It may not be a sufficient piece of legislation to cover growing medical marijuana...The Act covers hemp cultivars that carry less than 0.2

<sup>20</sup> The Hon Jamie Briggs MP, Assistant Minister for Infrastructure and Regional Development, 'IOT Community Grants Programme Delivered', *Media Release*, June 2014; Office of the Administrator Indian Ocean Territories, *Community Bulletin A41/2015*, 8 September 2015, p. 1.

<sup>21</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34, pp. 2-3.

<sup>22</sup> Calmy Planning and Design, Submission 20, p. 4

<sup>23</sup> Phosphate Resources Limited, Submission 1, p. 4.

Industrial hemp is the fibre of the cannabis plant, extracted from the stem and used to make rope, strong fabrics, fibreboard and paper. Source: Oxford Dictionaries online.

<sup>25</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, p. 1.

per cent of [tetrahydrocannabinol] THC, which is the hallucinogenic chemical. Other chemicals in both [medicinal marijuana] and industrial hemp have pharmaceutical properties.<sup>26</sup>

3.25 According to Professor Howieson, industrial hemp trials would take place on the rehabilitated mining land on Christmas Island:

The trials would take place on lands available to the MINTOPE program, which are 10 ha of old mining leases that have been rehabilitated by the MINTOPE program to agricultural purposes, and zoned accordingly. These sites have been levelled and contoured, deep ripped by a chisel plough, with stones and sticks then removed, and had their chemical fertility improved during 2015 by the cultivation of legumes and the addition of key limiting nutrients. The trials will be surrounded by other broad acre crops.<sup>27</sup>

3.26 When questioned on the anticipated success of the trials, Professor Howieson commented:

There is anecdotal evidence that hemp grows well on Christmas Island, but that is growing under shaded and very well-cared for circumstances. To grow hemp under broad acre, rain fed conditions, exposed to other biological agents is a different question altogether, but I am mildly optimistic we can do so successfully.<sup>28</sup>

3.27 If the trial proceeds it will involve extensive assessments:

We need to evaluate whether the plant can grow in the soil as prepared by MINTOPE, whether it can flower and set seed under the prevailing day length and rainfall intensities, tolerate insects and be harvestable. We will then assess the correct time to plant, and the impact of the environment on the chemical make-up of the plant and its reproductive parts.<sup>29</sup>

3.28 In 2015 Australian company AusCann expressed interest in growing medicinal cannabis on Christmas Island, owing to favourable climate and security aspects. AusCann stated:<sup>30</sup>

<sup>26</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, p. 2.

<sup>27</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, pp. 2-3.

<sup>28</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, p. 2.

<sup>29</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, p. 2.

<sup>30</sup> AusCann, Submission 52, p.1.

In particular we note that the amount of available daylight hours is critical to triggering cannabis plant flowering. Christmas Island experiences minimal changes to its daylight hours, so it is feasible that we could produce two crops a year.<sup>31</sup>

- 3.29 AusCann said it has an arrangement with a Spanish plant breeding company, Phytoplant Research S.L., which specialises in the breeding of medicinal plants. This arrangement provides AusCann with exclusive access to high quality medicinal strains of cannabis. AusCann and Murdoch University in WA are collaborating to undertake a breeding program with these plants.<sup>32</sup>
- 3.30 While this is separate to the MINTOPE research being conducted at Murdoch University, MINTOPE said AusCann had contacted them:

AusCann were made aware of the potential for agricultural crops on Christmas Island following the MINTOPE trials in 2015. Specifically, there was some press coverage of the field day... we ran on [Christmas Island] in late May [2015], and AusCann contacted me on July 24. We met the following week. Prior to this, they were considering Norfolk Island as a site for the cultivation of medicinal marijuana.<sup>33</sup>

3.31 AusCann noted commonalities with some of MINTOPE's work:

Our interest was originally developed with the Administrator of the Island who advised that Christmas Island was looking at enabling new industries that could bring benefit to the island. He advised that Murdoch as also undertaking growing trials under the MINTOPE project. This fitted nicely with our plans as some of the strains we are keen to develop and test the growing abilities of are cannabis strains that have little or no THC. These strains could be classified as hemp and grown under a hemp license. Murdoch's hemp license is currently pending. Once this has been finalised we can progress with the necessary import and quarantine permits.<sup>34</sup>

<sup>31</sup> Business Insider Australia, *This Australian medicinal cannabis company plans to grow marijuana on Christmas Island*, http://www.businessinsider.com.au/this-australian-medicinal-cannabis-company-plans-to-grow-marijuana-on-christmas-island-2015-12, 9 December 2015, viewed 21 January 2016.

<sup>32</sup> AusCann, Submission 52, p. 1.

<sup>33</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, p. 1.

<sup>34</sup> AusCann, Submission 52, p. 1.

3.32 MINTOPE emphasised that its trials of industrial hemp will be independent of AusCann, or any other companies' intentions to grow medicinal cannabis:

We have not undertaken to grow industrial hemp specifically for AusCann, nor for anyone else other than the MINTOPE stakeholders, but I have alerted AusCann to our intentions and that the outcomes could be useful to their planning. Other companies have shown interest since the press reports during late 2015 and early 2016.<sup>35</sup>

3.33 AusCann said that if its growing trials are successful it would commercially grow medicinal cannabis strains in conjunction with the Hidden Garden Sustainable Farm project on Christmas Island. The Hidden Garden project is on 22 hectares of Crown land and aims to supply lower cost fruit and vegetables to residents. According to AusCann, local Mark Bennett (whose company has been granted a 21 year agricultural lease to undertake the Hidden Garden project) advised that an arrangement with AusCann would benefit the Christmas Island community:

... by enabling his Hidden Garden project to provide cheaper fruit and vegetable faster than currently projected.<sup>38</sup>

3.34 The Australian Government introduced the *Narcotic Drugs Amendment Bill* 2016 in February 2016 to legalise growing cannabis for medicinal and scientific purposes. AusCann said it would plant its first crop for the domestic market in late 2016 if the bill is passed:<sup>39</sup>

Our ability to cultivate will obviously be subject to the Commonwealth passing the necessary amendments to the Narcotic Drugs Act, establishing the regulatory regime and granting AusCann a license.<sup>40</sup>

3.35 The media reported some residents' concerns about the proposal to grow medicinal cannabis on Christmas Island. AusCann Managing Director, Ms

<sup>35</sup> Mining to Plant Enterprises (MINTOPE) Project, Submission 34.2, p. 1.

<sup>36</sup> AusCann, Submission 52, p. 1.

<sup>37</sup> Department of Infrastructure and Regional Development, *Submission 36*, p. 3.

<sup>38</sup> AusCann, Submission 52, p. 2.

<sup>39</sup> Sydney Morning Herald, *Australian Company AusCann to grow medicinal marijuana on Christmas Island*, http://www.smh.com.au/business/australian-company-auscann-to-grow-medicinal-marijuana-on-christmas-island-20151209-glj7xg.html , 9 December 2015, viewed 12 January 2016; The Hon Sussan Ley MP, Minister for Health, Aged Care and Sport, 'Medicinal cannabis to be cultivated through single national scheme', *Media Release*, 2 December 2015.

<sup>40</sup> AusCann, Submission 52, p. 2.

Elaine Darby indicated the company would fully consult the community and that it was investigating ways to deliver financial benefits back to the community:

If our commercial plans proceed as expected, we will create local employment and provide a vital boost to the local economy.<sup>41</sup>

#### 3.36 AusCann added:

If AusCann and Hidden Garden were given a licence to cultivate there would be numerous benefits to the Christmas Island community, including engagement of local businesses, direct local employment and upskilling associated with setting up the project as well as ongoing activities...We are planning to head up to Christmas Island February [2016] to discuss the project further with the community.<sup>42</sup>

3.37 In another media report, AusCann Chairman, Dr Mal Washer said the local community was supportive of medicinal cannabis cultivation. He also noted that the Administrator had been proactive:

...he's been doing a lot of work with the health department (Federal Health Minister, Sussan Ley's Office) and the Department of Infrastructure...<sup>43</sup>

#### Committee comment

- 3.38 In its interim report, the Committee endorsed the MINTOPE project's success to-date and its prospects for further economic development and diversification.
- 3.39 The Committee acknowledges the RDO's contribution to-date helping secure community grants, be it for MINTOPE or others, to benefit the communities on Christmas Island and the Cocos (Keeling) Islands.<sup>44</sup>

<sup>41</sup> Sydney Morning Herald, *Australian Company AusCann to grow medicinal marijuana on Christmas Island*, http://www.smh.com.au/business/australian-company-auscann-to-grow-medicinal-marijuana-on-christmas-island-20151209-glj7xg.html , 9 December 2015, viewed 12 January 2016; Sydney Morning Herald, *Christmas Island medical cannabis plan: community expresses concern*, http://www.smh.com.au/federal-politics/political-news/christmas-island-medical-cannabis-plan-community-expresses-concern-20151228-glw2nj.html, 2 January 2016, viewed 21 January 2016.

<sup>42</sup> AusCann, Submission 52, p. 2.

<sup>43</sup> AAP, Cannibis hub plans for Christmas Island, http://www.skynews.com.au/news/national/2015/10/18/cannabis-hub-plans-for-christmas-island.html, 18 October 2015, viewed 21 January 2016.

- 3.40 The Committee notes that the Administrator and others support proposals like MINTOPE and AusCann's, to trial the cultivation of industrial and medicinal cannabis products on Christmas Island. These are interesting proposals.
- 3.41 The Committee notes that much research remains to be undertaken in order to establish the scientific and commercial viability of commercial crops, by MINTOPE, AusCann and any others. Notwithstanding that, enabling legislation and regulatory requirements, together with community support needs to be part of any of these proposals moving forward.

## **Future of the RDO**

- 3.42 Administrator and RDO Chair, Mr Barry Haase suggested that the RDO should operate independently of the office of the Administrator:
  - ...just as it ought to be independent of government and the [DIRD].<sup>45</sup>
- 3.43 Mr Haase emphasised the need for adequate funding 'to create that function.' 46
- 3.44 The Shire of Christmas Island similarly wants to see additional funding, and economic expertise at the helm:

We think reform of the RDO may be very useful, but it will not be at all useful if it is not a fully funded regional development organisation—fully funded by the Commonwealth and staffed by a professional economist as executive director with necessary support staff.<sup>47</sup>

3.45 Mr Herve Calmy, Director of Calmy Planning and Design also argued that the RDO requires an operational budget and 'a permanent secretary with economic background and qualifications.' 48 Mr Calmy emphasised that the RDO should only be concerned with economic development and not

<sup>44</sup> Details on the latest Community Development Grants Program round can be obtained from the website of the Department of Infrastructure and Regional Development, http://regional.gov.au/territories/indian\_ocean/iot\_grants.aspx, viewed 18 January 2016.

<sup>45</sup> Mr Barry Haase, Administrator, Committee Hansard, Christmas Island, 9 April 2015, p. 29.

<sup>46</sup> Mr Barry Haase, Administrator, Committee Hansard, Christmas Island, 9 April 2015, p. 29.

<sup>47</sup> Councillor Gordon Thomson, President, Shire of Christmas Island, *Committee Hansard*, Christmas Island, 9 April 2015, p. 11.

<sup>48</sup> Calmy Planning and Design, Submission 20, p. 5.

- the allocation of community grants, something he said should be left to the shires, in collaboration with DIRD.<sup>49</sup>
- 3.46 Mr Calmy added that the RDO would benefit from a more 'balanced and economically focussed' membership including:
  - ... [DIRD] and other relevant agencies' officials, shire representatives, heads of local organisations, captains of industry and qualified economic experts thus allowing better interaction between government representatives and non-government representatives.<sup>50</sup>
- 3.47 RDO member, Mr Marshall argued that the RDO's responsibilities should be expanded to incorporate ongoing community consultation, and even direct involvement in tourism and the negotiation of Service Delivery Arrangements (SDA).<sup>51</sup>
- 3.48 DIRD reported that the RDO intends to review its structure and functions, with a view to enhancing its contribution to economic development. This is something that DIRD endorses:

The RDO proposes to review its scope, structure and focus, with a view to improving its effectiveness and enhancing its contribution to the growth of the IOT. The Department supports this work, and notes that the RDO has considerable potential to engage with the community and Department, provide informed advice on economic development opportunities and support the sustainability of the local economy.<sup>52</sup>

#### Committee comment

- 3.49 It remains to be seen whether factors such as moving away from its focus on the CDGP, additional dedicated funding, economic expertise, independence and revised membership, are key determinants for enhancing the RDO's economic impact in the IOT, beyond prioritising community grant applications.
- 3.50 The Committee supports the RDO's proposal to review its scope, structure and functions. Community engagement in the review is imperative.

<sup>49</sup> Calmy Planning and Design, Submission 20, p. 4.

<sup>50</sup> Calmy Planning and Design, Submission 20, p. 4.

<sup>51</sup> Mr Raymond Marshall, Submission 29, p. 2.

<sup>52</sup> Department of Infrastructure and Regional Development, *Submission 36*, p. 3.

## **Recommendation 5**

The Committee recommends that the Department of Infrastructure and Regional Development review the scope, structure and functions of the Regional Development Organisation and publish the outcomes of the review on the Department's website.

If the review reveals that the organisation has merit in continuing, dedicated funding should be provided to support its scope, structure and functions.

- 3.51 While the Committee received little evidence on the merits of reestablishing a chamber of commerce on Christmas Island, it may be that is at least as important as having the RDO in its current or future forms.
- 3.52 The Committee is of the view that sustainable economic growth is better driven by the private sector with assistance from the RDO. Economic development in the territories would benefit from the re-establishment of a chamber of commerce on Christmas Island to provide some private sector leadership and to collaborate with the RDO.