

# Torres Strait Tropical Rock Lobster Resource Assessment Group

TRLRAG 14 Meeting Record

25-26 August 2015

Thursday Island

Note all meeting papers and record available on  
the AFMA and PZJA webpages:

[www.afma.gov.au](http://www.afma.gov.au)

[www.pzja.gov.au](http://www.pzja.gov.au)



Australian Government

Australian Fisheries Management Authority

# Contents

Meeting Participants.....	3
Record – TRLRAG 14 .....	5
Action Items .....	5
Agenda Item 1 - Preliminaries.....	7
1.1 Apologies / Adoption of Agenda .....	7
1.2 Ratification of TRLRAG 13 Meeting Record.....	7
1.3 Action Items from TRLRAG 13 .....	7
Agenda Item 2 – Updates .....	8
2.1 Outcomes PZJA.....	8
2.2 Queensland .....	8
2.3 PNG .....	8
2.4 Industry.....	9
2.5 Native Title .....	9
Agenda Item 3 – Stock Assessment and Catch Estimates .....	10
(A) Torres Strait rock lobster (TRL) fishery surveys and stock assessment. AFMA Project 2013/803. June 2015 Milestone report.....	10
(B) Use of TVH Logbook Data to construct an Annual Abundance Index for Torres Strait Rock Lobster – 2015 Update .....	10
(C) Use of TIB Docket-Book Data to construct an Annual Abundance Index for Torres Strait Rock Lobster – 2015 .....	11
(D) CSIRO Presentation - Spatial Distribution of Tropical Rock Lobster Catch and Effort Data .....	11
Agenda Item 4 – Recommended Biological Catch for 2015/16 .....	12
Agenda Item 5 – Revising a Harvest Strategy .....	12
5.1 Information Paper: Harvest Strategies.....	12
5.2 Revising a Harvest Strategy for TRL, including considerations for research surveys and forecasting ..	12
Agenda Item 6 – Future Research .....	15
6.1 Pre-season surveys .....	15
6.2 Industry Involvement in Research .....	15
6.3 TRL Research Priorities .....	15
Agenda Item 7 – 12 Month Free Diving Season .....	15
Other Business .....	16

## Meeting Participants

Name	Role	Declared Interest	Dates Attended
Ian Knuckey	A/g TRLRAG Chair	None	25 & 26 August 2015
Selina Stoute	AFMA Member	None	25 & 26 August 2015
Dean Pease	AFMA, Executive Officer	None	25 & 26 August 2015
Aaron Tom	Industry Member	TIB licence holder	25 & 26 August 2015
Brett Arlidge	Industry Member	MG Kailis	25 & 26 August 2015
Mariana Nahas	TSRA Member	None	25 & 26 August 2015
Terrence Whap	Industry Member	TIB licence holder	25 & 26 August 2015
Darren Dennis	CSIRO Scientific Member	Fishery research	25 & 26 August 2015
Eva Plaganyi	CSIRO Scientific Member	Fishery research	25 & 26 August 2015
Mark David	Industry Member	TIB licence holder	25 & 26 August 2015
Tom Roberts	QDAF Member	None	25 & 26 August 2015
Nokome Bentley	Independent Scientific Member	None	25 & 26 August 2015
Les Pitt	Industry Member	TIB licence holder	25 & 26 August 2015
Phillip Ketchell (Industry)	Industry Member	TIB licence holder	26 August 2015
<b>OBSERVERS</b>			
Kenny Bedford	TSRA Portfolio Observer	TIB licence holder	25 August 2015
Maluwap Nona	Malu Lamar RNTBC Observer	TIB licence	25 August 2015

		holder	
Roy Deng	CSIRO Scientific Observer	Fishery research	25 & 26 August 2015
Robert Campbell	CSIRO Scientific Observer	Fishery research	25 & 26 August 2015
Meremi Maine	PNG Industry Observer	PNG licence holder	25 & 26 August 2015
Ian Liviko	PNG NFA Observer	None	25 & 26 August 2015
Ray Moore	Industry Observer	TVH licence holder	25 & 26 August 2015
Chalz David	TSRA Observer	None	25 & 26 August 2015
Suzannah Salan	Industry Observer (Torres Strait Seafoods)	Fish processor	25 August 2015

Ratified

## Record – TRLRAG 14

1. The TRLRAG **ratified** the minutes of TRLRAG 13 as a true and accurate record of the meeting.
2. The TRLRAG **recommended**:
  - 2.1. the stock assessment model used for the Torres Strait Tropical Rock Lobster Fishery be accepted
  - 2.2. the data filtering process used for Torres Strait Tropical Rock Lobster Fishery be accepted.
  - 2.3. a preliminary TAC allocation of 568t for the 2016 season. This number represents the lower 75th percentile of the model estimated recommended biological catch (RBC) of 704t;
  - 2.4. CSIRO revises the preliminary TAC allocation of 568t with results from the pre-season survey to be conducted in November 2015; and
  - 2.5. CSIRO revise the preliminary TAC allocation of 568t with logbook records (available at that time) from 2015.
  - 2.6. to conduct a review of empirical harvest control rules and consider alternative possible options for the Torres Strait Tropical Rock Lobster Fishery; and
  - 2.7. development of a harvest strategy for the Torres Strait Tropical Rock Lobster Fishery which prescribes the data needs, data analysis and stock assessment procedures.

## Action Items

**Table1.** Action items from Tropical Rock Lobster Resource Assessment Group Meeting No. 14.

No.	Action Item	Agenda	Champion	Due Date
1.	AFMA to review the effectiveness of certain TIB licensing arrangements (in its 2016 licencing review) including: <ul style="list-style-type: none"> <li>• TIB licenses should share a common expiry date</li> <li>• licences to last for longer than the current 12 month period.</li> </ul>	1.3	AFMA	2016
2.	CSIRO to hold a science capability training workshop on 3-6 November 2015.	1.3	CSIRO	November 2015
3.	AFMA to create a new sub-heading in the Torres Strait Science Advisory Committee (TSSAC) Annual Operational Plan (AOP) regarding product quality as part of the AOP review for 2015	1.3	AFMA	2015
4.	AFMA to table the results of the finfish smartphone project at TRLRAG15 for further	1.3	AFMA	TRLRAG15

No.	Action Item	Agenda	Champion	Due Date
	discussion on the use of this technology in the Torres Strait Tropical Rock Lobster Fishery.			2016
5.	CSIRO to advise PNG NFA on potential TRL survey sites in PNG waters and sampling procedures to enable survey data from PNG waters to be included in future stock assessments.	2.3	CSIRO	Ongoing
6.	PNG NFA to provide AFMA with total TRL catches by trawl, hookah and other methods by PNG vessels when available.	2.3	PNG NFA	Ongoing
7.	AFMA to work with industry to develop a data catch summary that may be made available to the public taking into account AFMA's obligations to protect private information.	2.4	AFMA	TRLRAG15 2016
8.	AFMA to review the consultation process with industry members around the decision to not complete a mid-year survey for 2016.	3	AFMA	TRLRAG15 2016
9.	CSIRO to include the catch per unit effort data for 1+ and 2+ lobsters as an annual update in the review of the stock assessment paper at TRLRAG15.	3	CSIRO	TRLRAG15 2016
10.	AFMA follow up on the missing effort data for TVH sector and provide an update at TRLRAG15.	3	AFMA	TRLRAG15 2016
11.	AFMA and CSIRO prepare a timeline of key events that have occurred in the Torres Strait Tropical Rock Lobster Fishery (e.g. licence buy backs, weather events and regulation changes) and provide a paper to TRLRAG15.	3	AFMA CSIRO	TRLRAG15 2016
12.	CSIRO use the combination of vessel name and symbol as a new categorical variable for filtering TVH sector data and present the results at TRLRAG15.	3	CSIRO	January 2016
13.	AFMA prepare a one page information flyer on docket-book reporting for the TIB sector. The information flyer will be sent to TIB sector TRLRAG members for comment prior to sending to communities.	3	AFMA	TRLRAG15 2016
14.	CSIRO complete sensitivity tests with a	3	CSIRO	December

No.	Action Item	Agenda	Champion	Due Date
	hyperstability parameter at 1.0 for TVH sector and TIB sector and present the results at TRLRAG15.			2015
15.	AFMA to convene a TRLRAG teleconference to consider the outcomes of the revised recommended biological catch (RBC) for the 2016 season by 20 December 2015.	4	AFMA	20 December 2015
16.	AFMA and CSIRO to develop costed proposals for the Torres Strait Tropical Rock Lobster Fishery stock assessment options ( <b>Table 2</b> ) and to circulate these to the TRLRAG out-of-session (OOS) by mid December 2015.	5.2	AFMA	mid December 2015
17.	Individuals from the TIB sector to contact AFMA, TSRA or Darren Dennis (CSIRO) to register their interest in attending the workshop.	6.2	TIB sector	October 2015
18.	AFMA send a one page flyer to communities providing information on the minimum size limit of lobsters and the importance of only retaining legal size lobsters prior to lifting the temporal ban of free dive and lamp fishing.	7	AFMA	Prior to a season change 2015/16

## Agenda Item 1 - Preliminaries

### 1.1 Apologies / Adoption of Agenda

Apologies were received from John Pollock (chair), Trent Butcher (industry member), Daniel Takai (industry observer), Phillip Ketchell (industry member) day one, Maluwap Nona (Malu Lamar RNTBC observer) day two, Tom Roberts (QDAF member) late day one, Nokome Bentley (independent scientific member) late day one, Les Pitt (industry member) late day one.

The TRLRAG adopted the agenda.

### 1.2 Ratification of TRLRAG 13 Meeting Record

The TRLRAG **ratified** the minutes of TRLRAG 13 as a true and accurate record of the meeting noting not all members were present at the 13<sup>th</sup> meeting of the TRLRAG. Members noted that future meeting records would be finalised within weeks of the meeting out of session.

### 1.3 Action Items from TRLRAG 13

The TRLRAG was updated on action items from TRLRAG 13 as detailed in the paper provided.

An industry member noted there was no clear benefit to amend TIB licencing arrangements for licenses to share a common expiry date or licences to last for longer than 12 months (action item 1).

AFMA noted it will consult with industry before making any changes to TIB licencing arrangements.

## **Agenda Item 2 – Updates**

---

### **2.1 Outcomes PZJA**

The TRLRAG noted the outcomes from the 24<sup>th</sup> meeting of the Protected Zone Joint Authority (PZJA) as detailed in the paper provided.

### **2.2 Queensland**

The TRLRAG noted the following update from the Queensland Department of Agriculture and Fisheries (QDAF) member including:

- The transition of licencing functions from QDAF to AFMA has been completed;
- QDAF is reviewing its roles in domestic compliance activities. The review will identify if it is feasible for QDAF to transition domestic compliance roles to AFMA;
- QDAF is pursuing several prosecutions in the TRL fishery, mostly relating to breaches of licence conditions;
- In relation to the Queensland East Coast Tropical Rock Lobster Fishery:
  - new season dates applied this year meaning the fishery opened in January rather than February. Approximately 16 tonnes was taken in January
  - approximately 110 tonnes has been taken in the fishery for the season to date
  - the TAC of 195 tonnes has been in place since 1999 is considered conservative. In addition to the 195 tonnes, 5 tonnes is set aside for Indigenous Development Permits.

### **2.3 PNG**

The TRLRAG noted an update from the Papua New Guinea (PNG) National Fisheries Authority (NFA) official and industry representative including:

- The PNG NFA is planning to undertake scientific surveys to gather more information on the migratory pathways of TRL in PNG waters. Members welcomed this advice noting such information is critical for underpinning effective fisheries management.
- The PNG NFA is willing to undertake future tropical rock lobster dive surveys in PNG waters to complement the research surveys undertaken in Australian waters. Members welcomed this advice, noting that additional sampling coverage may reduce stock assessment uncertainties.
- PNG industry is now processing 80 per cent live TRL. Exports markets are down 30-35 per cent due the financial downturn in China and increased mortalities of live TRL being held at Daru. PNG industry noted there had been approval delays for the export of live tropical rock lobster from Daru. Lobster were now required to be approved from Port



Moresby before being exported and this had led to lower numbers of exports and a loss of product.

- Three cross-endorsed vessels remain interested in fishing in Australian waters.
- Trawlers caught TRL in 2014 which contributed to PNGs over-catch. Observers were deployed on three vessels. Confirmation of catches between sectors is being undertaken.
- TRL catches around the Yule Island area are lower compared to previous years.

TRLRAG agreed for the following **actions**:

5. CSIRO to advise PNG NFA on potential TRL survey sites in PNG waters and sampling procedures to enable survey data from PNG waters to be included in future stock assessments.
6. PNG NFA to provide AFMA with total TRL catches by trawl, hookah and other methods by PNG vessels when available.

## 2.4 Industry

The TRLRAG noted the update from industry members and observers including:

- Catches have generally been lower than expected. The TVH sector is expected to catch 60-65% of its nominal allocation for 2015.
- Mixed views on the catch rates for the TIB sector. Some industry members advised catch rates appear normal while others advised catch rates have been low.
- Divers have reported seeing lots of undersize TRL but no significant amounts of shell (food for the TRL).
- Strong winds experienced this year have prevented TIB fishers from fishing as much as they normally would.
- Concern that QDAF did not utilise the opportunity to collect fishery data during the early season opening of the Queensland East Coast TRL Fishery.
- MG Kailis remains committed to providing length frequency data and did so for the Queensland East Coast TRL Fishery early opening in January.
- For the Queensland East Coast Tropical Rock Lobster Fishery:
  - significant amounts of TRL could not be found in January as hoped. Industry speculates that the spawning animals may be in deeper water.
  - the season more generally has been poor however catch rates have improved to normal levels over the last eight weeks. Earlier in the season catches were down by approximately 60 per cent. Total catch for the season is expected to be around 130 tonnes (down from 180 tonnes last season).

TRLRAG agreed for the following **actions**:

7. AFMA to work with industry to develop a data catch summary that may be made available to the public taking into account AFMA's obligations to protect private information.

## 2.5 Native Title

The TRLRAG noted the update on Native Title as detailed in the paper provided.

## **Agenda Item 3 – Stock Assessment and Catch Estimates**

---

The TRLRAG noted information provided by CSIRO on the stock assessment and revised recommended biological catches (RBCs) for 2014/15 fishing season. Four presentations were given by CSIRO representatives, the key points raised recommendations and actions arising from these presentations are provided below.

The TRLRAG **recommended:**

- the stock assessment model used for the Torres Strait Tropical Rock Lobster Fishery be accepted; and
- the data filtering process used for the Torres Strait Tropical Rock Lobster Fishery be accepted.

### **(A) Torres Strait rock lobster (TRL) fishery surveys and stock assessment. AFMA Project 2013/803. June 2015 Milestone report.**

The TRLRAG noted the catches of tropical rock lobster by the TIB sector and TVH sector are less than expected from the preliminary total allowable catch set for 2014-15.

One industry member noted they were not consulted on the decision to not complete a mid-year survey in 2016.

TRLRAG agreed on the following **actions:**

8. AFMA to review the consultation process with industry members around the decision not to complete a mid-year survey for 2016.
9. CSIRO to include the catch per unit effort data for 1+ and 2+ lobsters as an annual update in the review of the stock assessment paper at TRLRAG15.

### **(B) Use of TVH Logbook Data to construct an Annual Abundance Index for Torres Strait Rock Lobster – 2015 Update**

RAG members noted the introduction of a quota management system (QMS) often leads to a change in fisher behaviour and this may result in changes to the catch and effort data.

CSIRO noted it would be beneficial to continue pre-season and mid-year surveys through the transition to a QMS.

- The introduction of a QMS in the fishery may lead to changes in fisher behaviour and the fishing operation. As a result, the data reported for the fishery may change with the introduction of a QMS.
- The pre-season and mid-year surveys provide a long time series of information from the fishery. Continuing surveys through the transition period may help to account for changes to fisher behaviour and fishing operations.

CSIRO noted the TVH CPUE data contains several records with two and three shots per fishing day. This may have been when the fishery produced 'tailed lobster' and with the transition to a live lobster fishery the majority of operators are recording one shot per day.

The TRLRAG noted approximately ten per cent of TVH sector records are missing effort data.

TRLRAG agreed for the following **actions:**

10. AFMA follow up on the missing effort data for TVH sector and provide an update at TRLRAG15.
11. AFMA and CSIRO prepare a timeline of key events that have occurred in the Torres Strait Tropical Rock Lobster Fishery (e.g. licence buy backs, weather events and regulation changes) and provide a paper to TRLRAG15.
12. CSIRO use the combination of vessel name and symbol as a new categorical variable for filtering TVH sector data and present the results at TRLRAG15.

### **(C) Use of TIB Docket-Book Data to construct an Annual Abundance Index for Torres Strait Rock Lobster – 2015**

RAG members noted that improvements can be made in TIB docket-book reporting and improved reporting would decrease uncertainty in the stock assessment.

CSIRO noted that on average:

- 9 per cent of TIB records are not attributed to method
- 6 per cent of TIB records are not attributed to area
- 4.4 per cent of TIB records are not attributed to days fished
- 9.5 per cent of TIB records are not attributed to crew numbers
- 70.3 per cent of TIB records are not attributed to vessel symbol

Nokome Bentley noted that TIB plots should not have trimmed residuals as it is potentially introducing bias into the standardisation of TIB sector data.

Nokome Bentley noted a hyperstability parameter at 1.0 for TVH sector and TIB sector should be provided in the presentation.

TRLRAG agreed for the following **actions**:

13. AFMA prepare a one page information flyer on docket-book reporting for the TIB sector. The information flyer will be sent to TIB sector TRLRAG members for comment prior to sending to communities.
14. CSIRO complete sensitivity tests with a hyperstability parameter at 1.0 for TVH sector and TIB sector and present the results at TRLRAG15.

### **(D) CSIRO Presentation - Spatial Distribution of Tropical Rock Lobster Catch and Effort Data**

RAG members noted the plots of catch and effort data demonstrated a lack of reporting the fishing area by both the TVH and TIB sectors.

CSIRO noted some data in spatial plots appeared to be anomalous (for example Turu Cay). The proposed CSIRO Brisbane workshop (Agenda Item 6) may help with identifying anomalous data and may also help to improve TIB docket-book reporting.

## Agenda Item 4 – Recommended Biological Catch for 2015/16

---

The TRLRAG noted advice from the scientific member and presentation based on the paper titled '2015 Preliminary assessment of the Tropical Rock Lobster (*Panulirus ornatus*) Fishery in the Torres Strait' and **recommended:**

- a preliminary TAC allocation of 568t for the 2016 season. This number represents the lower 75th percentile of the model estimated recommended biological catch (RBC) of 704t;
- CSIRO revises the preliminary TAC allocation of 568t with results from the pre-season survey to be conducted in November 2015; and
- CSIRO revise the preliminary TAC allocation of 568t with logbook records (available at the time) from 2015.

TRLRAG agreed for the following **action:**

15. AFMA to convene a TRLRAG teleconference to consider the outcomes of the revised recommended biological catch (RBC) for the 2016 season by 20 December 2015.

The TRLRAG noted a 2016 mid-year survey is not currently funded for the 2016 fishing season.

## Agenda Item 5 – Revising a Harvest Strategy

---

### 5.1 Information Paper: Harvest Strategies

The TRLRAG noted information from the AFMA member on the *Commonwealth Fisheries Harvest Strategy Policy and Guidelines 2007* as detailed in the paper provided.

### 5.2 Revising a Harvest Strategy for TRL, including considerations for research surveys and forecasting

The TRLRAG noted the key drivers for revising the fishery's harvest strategy are to:

- ensure RBC advice is available before the start of future fishing seasons which will be requirement under a quota management system; and
- develop a tiered assessment approach that reflects variances in available stock assessment information. Assessment options will inform future research priorities and guide industry and management investment in data collection and assessment.

The TRLRAG noted advice provided by the scientific member and the independent scientific member on the use of empirical harvest control rules and agreed that the use of an empirical harvest control rule, supported periodically (e.g. every 3 years) by results from the integrated stock assessment, could be an efficient and cost-effective harvest strategy approach for the fishery.

CSIRO presented a cost benefit analysis of conducting both a pre-season and mid-season surveys against only conducting a pre-season survey and setting a more conservative TAC. CSIRO advised that:

- uncertainty in the stock assessment is reduced if both pre-season and mid-season surveys are completed and often the TAC for the fishery increases; and
- that the TAC would only need to increase by approximately 12 tonnes to recover the cost of conducting a mid-year survey.

Noting the cost-catch trade-off between research/data collection investment and potential total allowable catches members:

- identified five data/assessment options for the fishery (Table 2). These options could form the basis of a tiered harvest strategy;
- noted that industry may choose to invest directly in research; and
- agreed it was necessary to cost each data/assessment option as soon as possible as some industry members would like to explore options for directly investing in research, including a possible mid-year survey in 2016.

TRLRAG agreed for the following **action**:

16. CSIRO to develop costed proposals for the Torres Strait Tropical Rock Lobster Fishery stock assessment options (**Table 2**) and to circulate these to the TRLRAG out-of-session (OOS) by mid December 2015.

Ratified

**Table 2.** Torres Strait Tropical Rock Lobster Fishery stock assessment options identified by the Torres Strait Tropical Rock Lobster Resource Assessment Group.

<b>Data/Assessment</b>	<b>Need</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>	<b>Option 4</b>	<b>Option 5</b>
Catch and effort data from the TIB and TVH sectors	Mandatory	Annual ✓	Annual ✓	Annual ✓	Annual ✓	Annual ✓
Length frequency data from processors	Mandatory	Annual ✓	Annual ✓	Annual ✓	Annual ✓	Annual ✓
Pre-season survey	High priority for setting a total allowable catch		Annual ✓	Annual ✓	Annual ✓	
Mid-season survey	Understanding of the relative biomass		Annual ✓		Annual ✓	Annual ✓
Data summary (review of the catch per unit effort data)	Indicator for how the fishery is tracking	Annual ✓		Annual ✓	Annual ✓	
Full assessment	Setting a total allowable catch and estimate of biomass.	Every 3 years ✓	Annual ✓	Every 3 years ✓	Every 3 years ✓	Annual ✓
Harvest Control Rule	Pre-agreed decision rule for setting a total allowable catch	Annual ✓		Annual ✓	Annual ✓	

## Agenda Item 6 – Future Research

---

### 6.1 Pre-season surveys

The TRLRAG noted the update provided by CSIRO regarding the 2015-16 pre-season survey including:

- an abbreviated pre-season survey (sampling across 74 sites) is due to be completed on 16-29 November 2015. Historically the pre-season survey sampled across 150 sites;
- that CSIRO were planning to include two qualified Traditional Inhabitant divers in the survey however had been recently advised that the divers are no longer available due to workplace insurance constraints; and
- if the November 2015 pre-season survey sampled across the baseline of 150 sites it would reduce uncertainty in the assessment by 30 per cent. There is not sufficient funding to cover this.

### 6.2 Industry Involvement in Research

The TRLRAG noted the update provided by CSIRO and the opportunities for six people from the TIB sector to travel to Brisbane to complete a CSIRO Science Capability Training Workshop on 3-6 November 2015. Members welcomed the CSIRO initiative as an important opportunity for industry to build their understanding of the stock assessment process and for CSIRO to harness industry knowledge.

The TRLRAG agreed for the following **action**:

17. Individuals from the TIB sector to contact AFMA or Darren Dennis (CSIRO) to register their interest in attending the workshop.

### 6.3 TRL Research Priorities

The TRLRAG **recommended** the following research priorities:

- to conduct a review of empirical harvest control rules for the Torres Strait Tropical Rock Lobster Fishery; and
- development of a harvest strategy for the Torres Strait Tropical Rock Lobster Fishery which prescribes the data needs, data analysis and stock assessment procedures.

Some industry members reiterated their preference to conduct a mid-year survey in 2016.

## Agenda Item 7 – 12 Month Free Diving Season

---

The TRLRAG noted the scientific advice provided by CSIRO as detailed in the paper provided on the likely impacts of removing the temporal ban of free-diving and lamp fishing for TRL and agreed that:

- removing the ban does not pose a significant risk to the sustainability of the fishery on the basis that:

- the current size limit protects that take of 1+ lobsters; and
- the primary fishing grounds do not overlap with the likely spawning areas in the east of the Protected Zone.
- Subject to compliance levels, there may be higher catch rates of undersize lobsters due to higher numbers of 1+ (undersize) lobster being present during November and December.

TRLRAG agreed for the following **action** if the temporal ban is to be removed:

18. AFMA send a one page flyer to communities providing information on the minimum size limit of lobsters and the importance of only retaining legal size lobsters prior to lifting the temporal ban of free dive and lamp fishing.

## Other Business

---

Fishing industry representatives noted the importance of logbook reporting. Mark David offered to help with consultation with communities to encourage improved logbook reporting.

Ratified