

**Project:** Supply of services for the processing of TAG returns.

**Project Code:** DAT2009-01T

**Start Date:** 1 December 2009

**Completion Date:** 30 July 2011

**Overall Objectives:**

1. For The Species described below - to process information associated with the reporting of the capture of tagged fish, and in the case of rock lobsters the subsequent release of tagged fish, and to issue rewards for such reporting.

**Specific Objectives**

1. To ensure collection of (from fishers reporting recaptures of The Species, either commercially, recreationally, or during the course of research) detailed information describing the recapture of The Species.
2. To load this information into a database and check it for fisher and data processing errors.
3. To provide this information to the Ministry of Fisheries (MFish) Data Manager in an appropriate electronic format so that it can be loaded into the MFish “tag” database.
4. The issue of rewards for The Species as described in Table 1.

**Reporting Requirements:**

1. To submit to the Research Data & Reporting Team Leader (MFish), a monthly report in the format specified in appendix one, commencing 1 January 2010.
2. To submit to the Data Manager (MFish), in the months specified below, the Tag Returns and an electronic version (suitable for loading into the “tag database”) of the data collected from each Tag Return.
  - a. In January 2010 – data submitted for all Tag Returns reported before 31 December 2009 (that are not already in the “tag” database);
  - b. In July 2010 – data submitted for all Tag Returns reported between 1 January 2010 and 30 June 2010;
  - c. In January 2011 – data submitted for all Tag Returns reported between 1 July 2010 and 31 December 2010 (that are not already in the “tag” database);
  - d. In August 2011 – data submitted for all Tag Returns reported between 1 January 2011 and 30 July 2011;

To issue rewards (as described in Table 1) to fishers reporting tag recaptures off The Species, within 2 months of the report being made and before 30 July 2011.

**Data Reporting**

As described elsewhere in this document.

## **Rationale:**

### **General**

#### *Definitions*

For the purposes of this document the following definitions apply:

“The Species” means the list of species stated in table 1.

Table 1 – the species covered by this contract, and the nature of rewards to be issued

<b>Species Name</b>	<b>Species Code</b>	<b>Expected number for tag returns per annum based on last 5 years</b>	<b>Is a reward to be issued?</b>	<b>Type of reward</b>
<b>Rock lobster</b>	CRA	1000 - 1200 (approximately $\frac{3}{4}$ are re- released)	No	
<b>Rig</b>	SPO	1 – 5	Yes	T-Shirt (purchased and supplied by Tenderer)
<b>School shark</b>	SCH	15 -20	Yes	
<b>Tarakihi</b>	TAR	10 – 15	Yes	
<b>Blue cod</b>	BCO	15 – 20	Yes	
<b>Rough Skate</b>	RSK	1 – 5	Yes	
<b>Smooth Skate</b>	SSK	1 – 5	Yes	
<b>Giant Stargazer</b>	STA	1 – 5	Yes	
<b>Southern Bluefin tuna</b>	STN	1 – 3	Yes	Reward package supplied by CCSBT
<b>Albacore tuna</b>	ALB	0 – 1	Yes	T-Shirt (purchased and supplied by Tenderer)
<b>Bigeye tuna</b>	BIG	0 – 1	Yes	
<b>Skipjack tuna</b>	SKJ	0 – 1	Yes	
<b>Yellowfin tuna</b>	YFN	0 – 1	Yes	

“Tag Return” means :

- the report of a recapture of a tagged fish from The Species; and
- any associated information concerning the report of that recapture including the physical tag if supplied; and
- in the case of rock lobster - also means the report of the release of the rock lobster where this has occurred, together with any associated information concerning the report of that release.

#### *Background*

The recapture of tagged fish can sometimes occur long after the cessation of research projects originally established to conduct both tagging and recapturing of these animals. Despite the cessation of specific research projects, the information from later recaptures is often highly valuable and there is a need to collect and process the data from such recaptures. The purpose of the present project is to ensure that this information is obtained for Tag Returns

from The Species. Additionally, tagged rock lobsters are often returned alive to the sea by fishers. In the case of rock lobsters returned to the sea data on the release of the fish is also valuable.

## The Services

The services required to be performed are:

### Objective 1

- I. Receipt of the Tag Return data. Tag Return data may be communicated in many forms (letter, telephone call etc). The tenderer will have a set protocols for dealing with Tag Return information in whichever form it arrives and is expected to try and maximise the amount of information received from fishers. When important information for a Tag Return is not provided or is in doubt, the tenderer must attempt to contact the provider of that Tag Return to obtain the required information. Where practical, enough data should be collected from each Tag Return to populate at least the fields in the “tag” database that are specified in Appendix 3. Where this is not practical then an explanation must be provided of why these data could not be obtained.

### Objective 2

- I. Data entry of Tag Return data into an electronic format suitable for loading into the “tag” database.
- II. Checks on the quality/integrity of Tag Return data. The Tenderer must carry out quality/integrity checks adequate to ensure that the data is “fit for purpose”. The successful tenderer will be supplied with a copy of the tag release database to assist them in carrying out such checks. *The Tenderer must outline the procedures they will use to achieve the goals described in Appendix 2 (Goals for ascertaining high quality data).*

### Objective 3

- III. Provide the original Tag Return data, and the electronic version suitable for loading into the “tag” database, to the Data Manager (MFish). Data will be accepted in a variety of formats including fixed width columns, comma delimited, tab delimited, MS Excel, MS Access, and on a variety of media including CD, DVD and email. The data must match the table structure of the TAG database. The documentation for this database can be found on the Ministry of Fisheries’ website.

<http://www.fish.govt.nz/Database+Documentation>

- IV. If any data provided to the Data Manager (MFish) are rejected by the Research Data Manager (MFish) as unsuitable for loading into the “tag” database, the Tenderer must:
  - A. correct and re-submit the data to make it suitable for loading, within a month of being notified of the problem;
  - B. pay the Data Manager (MFish) any costs involved in re-validating and loading the data.

### Objective 4

- I. In those cases where table 1 requires the issuing of rewards, for each recapture reported the Tenderer must supply the reward specified to the fisher who reported the tag recapture. Rewards must be supplied within 2 months of the recapture being reported.
- II. Where the reward specified is a T-shirt, the T-Shirt must be of a good quality and include a design associated with Fish Tagging and include the Ministry of Fisheries logo. Any design must be approved by MFish prior to being used as a reward.
- III. In the case of recaptures of tuna tagged by the Commission for the Conservation of Southern Bluefin Tuna (CCSBT), the rewards will be supplied by the CCSBT to the tenderer. The tenderer must then issue these rewards to people reporting recaptures tuna tagged by the CCSBT. At the time of writing the CCSBT reward package included a small amount of cash, two shirts, two caps, two coffee mugs and a coffee plunger.

### **Evaluation of tenders**

Tenders will be evaluated according to the criteria set out in the Ministry's Research Requirements 2004-2008 document. The weighting factors assigned to the four attributes will not be those specified. The weightings will be:

Methodology	<b>0.4</b>
Resources	<b>0.1</b>
Data Management	<b>0.2</b>
Management Skills and Quality Management Systems	<b>0.3</b>

In particular, the evaluation of tenders will focus on the protocols to maximise the amount of information received from fishers (specific objective 1), and data quality/integrity checks (specific objective 2), proposed by the tenderer. It is important that tenderers address these points.

## **Appendix 1: Format for monthly report**

### MONTHLY REPORT

Month Ending:

Project Number: DAT2009-01T

Project Title: Supply of services for the processing of TAG returns.

Project leader:

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#### *Executive Summary*

A written narrative highlighting the key achievements to date and progress on the data collation.

#### *Critical Items*

A written narrative indicating programme critical items and items of concern, defining slippage on key activities, estimated effects, corrective action proposed and when this will be taken. Also a table summarising the actual figures of Tag returns processed (see below for example table).

Species	Number of Tag Returns reported since last data submission	Number actual tags received since last data submission	Number of Tags Returns Data entered since last data submission	Number of rewards issued since last data submission
Rock Lobster				
Blue Cod				
School Shark				
Tarakihi				
Rough Skate				
Smooth Skate				
Giant Stargazer				
Southern bluefin tuna				
Albacore tuna				
Bigeye tuna				
Skipjack tuna				
Yellowfin tuna				

### *Missing data*

In the case of any Tag Return where all of the fields of information specified in Appendix 3 as “Must” or “Should” were not captured from the fisher, a brief explanation of why.

### *Other Issues*

A summary of any other important matters relating to the contract.

### **Appendix 2 – Goals for ascertaining high quality data**

- 1) Raw data, as received from the fisher, must be thoroughly checked to ensure that there are no obvious errors, unrealistic figures or gross omissions. Where errors, unrealistic figures or omissions are found attempts must be made to resolve this with the fisher.
- 2) Steps must be taken to ensure that the raw data is entered correctly so that the end result is data in the database that accurately records the data communicated by the fisher.
- 3) Data must be checked to ensure that the data fits the business rules of the “tag” database.
- 4) Data must be checked to ensure that the data is consistent with the relevant tagging data.

## **Appendix 3. Fields to be populated in 'tag' database**

### **1) Fields to be populated for Rock Lobster returns**

#### **For Tag Returns**

All attributes listed and classifies as: Must, should, or nice to have a value.

Attributes:	Allow Nulls	Species CRA
proj_id	No	Must. 'CRA1_TAG' thru 'CRA9_TAG' for respective QMAs
station_code		NA for CRA
vessel		Should
tag_type	No	Must
tag_no		Must
tag_type2		Must if tag_no2 present
tag_no2		Should if present
rec_date		Should
rec_date_err		Nice if applicable
rec_time		Nice to have
depth		Nice to have
dist		Nice to have
dir		Nice to have
rec_lgth		Nice to have
lgth_meth		Should - if rec_lgth populated
rec_width		Should
width_meth		Should - if rec_width populated
rec_weight		Nice to have
sex		Should
stage_meth		Should - if staged. Codes: RL for Catch sampling coding or CF for Commercial Fishers coding
stage		Should if possible
condition		Should if possible
method		Should. Codes: potting = 52 , diving = 71
rec_lat		Nice to have, expect from commercial
fishers		
N_S		Must if rec_lat populated (usually 'S')
rec_long		Nice to have, expect from commercial
fishers		
rec_E_W		Must if rec_long populated
pos_meth		Should, codes include: '08'=GPS, '09'=Local knowledge
pos_err		Nice to have (in units of nautical miles)
area		Should. Use rock lobster area 900 series
codes		
rec1 (old injuries for CRA)		Nice to have
rec2 (NA for CRA)		N/A
rec3 (any injuries for CRA)		Should
rec4 (landed ? for CRA)		Should if possible
rec5 (sub_area)		Nice to have
fisher_name		Should
fisher_addr		Nice to have
rec_comments		Nice to have if applicable
rec_comments2		Nice to have if applicable

Data for the below fields are expected to be populated by the tenderer in the event of a re-release of a Rock Lobster.

**For Tag Re-releases**

Comment: Table to hold information on individual animals/tags released.

Attributes:	Allow Nulls	For species CRA
proj_id	No	'CRA1_TAG' thru 'CRA9_TAG' for respective QMAs
station_code		Nice to have (pot number) if applicable
trip_code		Nice to have (sample_no) if applicable
vessel		Should
staff		Should (Fishers name)
min_depth		Nice to have, Should get from commercial
fishers		
max_depth		Nice to have, Should get from commercial
fishers		
area		Should
lat		Nice to have, Should get from commercial
fishers		
long		Nice to have, Should get from commercial
fishers E_W		Must if long not null
pos_meth		Should
pos_err		Nice to have
method		Should
tag_type		Should
tag_no		Should
tag_type2		Must if tag_no2 present
tag_no2.		Should if present
species		Must
rel_date		Must
rel_time		Nice to have
lgth		Nice to have (carapace length in mm)
lgth_meth		Must if lgth not null
rel_width		Should (tail width in mm)
width_meth		Must if rel_width not null
weight		Nice to have
sex		Should
stage_meth		Must if stage not null
stage		Nice to have
condition		Nice to have (new injuries)
rel1 (old injuries, # of)		Nice to have
rel2 (status)		Should always be '0' or null. '0' = not landed
rel3 (recapture)		Should . Codes: 0 = No, 1 = Yes ie rerelease
rel4 (any injuries, # of)		Should
rel5 (CRA sub-area)		Nice to have
comments		Nice to have if applicable

## 2) Fields to be populated for School shark

### **For Tag Returns**

Comment: Table to hold information describing recaptured animals or returned tags.

All attributes listed and classified as: Must, should, or nice to have a value.

Attributes:	Allow Nulls	Species
		SCH
proj_id	No	Must. 'SCH_TAG'
station_code		Nice to have if applicable
vessel		Should
tag_type	No	Must
tag_no		Must
tag_type2		Must if tag_no2 present
tag_no2		Should if present
rec_date		Should
rec_date_err		Nice if applicable
rec_time		Nice to have
depth		Nice to have
dist		Should
dir		Nice to have
rec_lgth		Should
lgth_meth		Should - if rec_lgth populated
rec_width		N/A
width_meth		N/A
rec_weight		Nice to have
sex		Should
stage_meth		Should - if staged.
stage		Nice to have, but don't expect it
condition		Nice to have
method		Should.
rec_lat		Nice to have
N_S		Must if rec_lat populated (usually 'S')
rec_long		Nice to have
rec_E_W		Must if rec_long populated
pos_meth		Should, if have lat & long. codes include: '08'=GPS, '09'=Local knowledge
pos_err		Nice to have (in units of nautical miles)
area		Nice to have, should if lat & long null.
rec1 (release trip_code)		Should
rec2 (NA for CRA)		Should
rec3 (Country, sector, FMA)		Should
rec4 (release length)		Should
rec5 (not used)		N/A
fisher_name		Should
fisher_addr		Nice to have
rec_comments		Nice to have if applicable
rec_comments2		Nice to have if applicable

### 3) Fields to be populated for blue cod

#### **For Tag Returns**

Comment: Table to hold information describing recaptured animals or returned tags.

All attributes listed and classified as: Must, should, or nice to have a value.

Attributes:	Allow Nulls	Species
		BCO
proj_id	No	Must. 'BCO_TAG'
station_code		Nice to have if applicable
vessel		Nice to have
tag_type	No	Must
tag_no		Must
tag_type2		Must if tag_no2 present
tag_no2		Should if present
rec_date		Should
rec_date_err		Nice if applicable
rec_time		Nice to have
depth		Nice to have
dist		Nice to have
dir		Nice to have
rec_lgth		Should
lgth_meth		Should - if rec_lgth populated
rec_width		N/A
width_meth		N/A
rec_weight		Nice to have
sex		Nice to have
stage_meth		Should - if staged.
stage		Nice to have, but don't expect it
condition		Nice to have
method		Should.
rec_lat		Nice to have
N_S		Must if rec_lat populated (usually 'S')
rec_long		Nice to have
rec_E_W		Must if rec_long populated
pos_meth		Should, if have lat & long. codes include: '08'=GPS, '09'=Local knowledge
pos_err		Nice to have (in units of nautical miles)
area		Nice to have, should if lat & long null.
rec1		Should
rec2 (not used)		N/A
rec3 (not used)		N/A
rec4 (not used)		N/A
rec5 (not used)		N/A
fisher_name		Should
fisher_addr		Nice to have
rec_comments		Nice to have if applicable
rec_comments2		Nice to have if applicable

**NB:** Definitions for these fields can be found in the database documentation or the information can be found in the matching release data fields which will be provided to the successful tenderer.